

December 31, 2020

Vista Work Order No. 2002434

Ms. Delaney Peterson Anchor QEA, LLC 720 Olive Way, Suite 1900 Seattle, WA 98101

Dear Ms. Peterson,

Enclosed are the results for the sample set received at Vista Analytical Laboratory on November 10, 2020 under your Project Name 'GascoSiltronic: US Moorings'.

Vista Analytical Laboratory is committed to serving you effectively. If you require additional information, please contact me at 916-673-1520 or by email at mmaier@vista-analytical.com.

Thank you for choosing Vista as part of your analytical support team.

Sincerely,

Martha Maier Laboratory Director



Vista Analytical Laboratory certifies that the report herein meets all the requirements set forth by NELAP for those applicable test methods. Results relate only to the samples as received by the laboratory. This report should not be reproduced except in full without the written approval of Vista.

Vista Analytical Laboratory 1104 Windfield Way El Dorado Hills, CA 95762 ph: 916-673-1520 fx: 916-673-0106 www.vista-analytical.com

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Vista Work Order No. 2002434 Case Narrative

Sample Condition on Receipt:

Thirteen sediment samples were received and stored securely in accordance with Vista standard operating procedures and EPA methodology. The samples were received in good condition and within the method temperature requirements.

Analytical Notes:

EPA Method 1613B

These samples were extracted and analyzed for tetra-through-octa chlorinated dioxins and furans by EPA Method 1613B using a ZB-DIOXIN GC column.

Holding Times

The samples were extracted and analyzed within the method hold times.

Quality Control

The Initial Calibration and Continuing Calibration Verifications met the method acceptance criteria.

A Method Blank and Ongoing Precision and Recovery (OPR) sample were extracted and analyzed with each preparation batch. No analytes were detected above the quantitation limits in the Method Blanks. The OPR recoveries were within the method acceptance criteria.

As requested, a laboratory duplicate was performed on sample "USMPDI-021SC-A-04-05-201107". The RPDs were out of the acceptance criteria for 1,2,3,4,6,7,8-HpCDD; OCDD; 1,2,3,7,8,9-HxCDF; 1,2,3,4,6,7,8-HpCDF and OCDF.

Labeled standard recoveries for all QC and field samples were within method acceptance criteria.

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Sample Inventory Report

Vista Sample ID	Client Sample ID	Sampled	Received	Components/Containers
2002434-01	USMPDI-021SC-A-01-02-201107	07-Nov-20 11:00	10-Nov-20 10:08	Amber Glass, 120 mL
2002434-02	USMPDI-021SC-A-02-03-201107	07-Nov-20 11:00	10-Nov-20 10:08	Amber Glass, 120 mL
2002434-03	USMPDI-021SC-A-03-04-201107	07-Nov-20 11:00	10-Nov-20 10:08	Amber Glass, 120 mL
2002434-04	USMPDI-021SC-A-04-05-201107	DUP07-Nov-20 11:00	10-Nov-20 10:08	Amber Glass, 120 mL
				Amber Glass, 120 mL
2002434-05	USMPDI-023SC-A-01-02-201107	07-Nov-20 08:45	10-Nov-20 10:08	Amber Glass, 120 mL
2002434-06	USMPDI-023SC-A-02-03-201107	07-Nov-20 08:45	10-Nov-20 10:08	Amber Glass, 120 mL
2002434-07	USMPDI-023SC-A-03-04-201107	07-Nov-20 08:45	10-Nov-20 10:08	Amber Glass, 120 mL
2002434-08	USMPDI-023SC-A-04-05-201107	07-Nov-20 08:45	10-Nov-20 10:08	Amber Glass, 120 mL
2002434-09	USMPDI-1023SC-A-02-03-201107	07-Nov-20 00:00	10-Nov-20 10:08	Amber Glass, 120 mL
2002434-10	USMPDI-056SC-A-01-02-201107	07-Nov-20 13:30	10-Nov-20 10:08	Amber Glass, 120 mL
2002434-11	USMPDI-056SC-A-02-03-201107	07-Nov-20 13:30	10-Nov-20 10:08	Amber Glass, 120 mL
2002434-12	USMPDI-056SC-A-03-04-201107	07-Nov-20 13:30	10-Nov-20 10:08	Amber Glass, 120 mL
2002434-13	USMPDI-056SC-A-04-05-201107	07-Nov-20 13:30	10-Nov-20 10:08	Amber Glass, 120 mL

Vista Project: 2002434 Client Project: GascoSiltronic: US Moorings

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ANALYTICAL RESULTS

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Sample ID: Method	l Blank							EPA Me	thod 1613B
Matrix: Solid Sample Size: 10.0 g		QC Batch: Date Extracted:	B0L0016 03-Dec-2020 14:13			ab Sample: B0L0016-BLK1 ate Analyzed: 11-Dec-20 18:21	Column: ZB-DI	OXIN	
Analyte Conc.	(pg/g)	DL	ЕМРС	Qualifiers		Labeled Standard	%R	LCL-UCL	Qualifiers
2,3,7,8-TCDD	ND	0.0160			IS	13C-2,3,7,8-TCDD	108	25 - 164	
1,2,3,7,8-PeCDD	ND	0.0360				13C-1,2,3,7,8-PeCDD	115	25 - 181	
1,2,3,4,7,8-HxCDD	ND	0.0408				13C-1,2,3,4,7,8-HxCDD	122	32 - 141	
1,2,3,6,7,8-HxCDD	ND	0.0443				13C-1,2,3,6,7,8-HxCDD	112	28 - 130	
1,2,3,7,8,9-HxCDD	ND	0.0423				13C-1,2,3,7,8,9-HxCDD	113	32 - 141	
1,2,3,4,6,7,8-HpCDD	ND	0.0429				13C-1,2,3,4,6,7,8-HpCDD	106	23 - 140	
OCDD	0.331			J		13C-OCDD	80.7	17 - 157	
2,3,7,8-TCDF	ND	0.0143				13C-2,3,7,8-TCDF	108	24 - 169	
1,2,3,7,8-PeCDF	ND	0.0305				13C-1,2,3,7,8-PeCDF	111	24 - 185	
2,3,4,7,8-PeCDF	ND	0.0265				13C-2,3,4,7,8-PeCDF	111	21 - 178	
1,2,3,4,7,8-HxCDF	ND	0.0277				13C-1,2,3,4,7,8-HxCDF	110	26 - 152	
1,2,3,6,7,8-HxCDF	ND	0.0268				13C-1,2,3,6,7,8-HxCDF	99.6	26 - 123	
2,3,4,6,7,8-HxCDF	ND	0.0302				13C-2,3,4,6,7,8-HxCDF	105	28 - 136	
1,2,3,7,8,9-HxCDF	ND		0.0422			13C-1,2,3,7,8,9-HxCDF	105	29 - 147	
1,2,3,4,6,7,8-HpCDF	ND	0.0375				13C-1,2,3,4,6,7,8-HpCDF	79.9	28 - 143	
1,2,3,4,7,8,9-HpCDF	ND	0.0333				13C-1,2,3,4,7,8,9-HpCDF	94.9	26 - 138	
OCDF	ND	0.0584				13C-OCDF	78.3	17 - 157	
					CRS	37Cl-2,3,7,8-TCDD	107	35 - 197	
						Toxic Equivalent Quotient (TE	EQ) Data (pg/g dr	y wt)	
						TEQMinWHO2005Dioxin	0.000099		
TOTALS									
Total TCDD	ND	0.0160							
Total PeCDD	ND		0.0403						
Total HxCDD	ND	0.0443							
Total HpCDD	ND	0.0429							
Total TCDF	ND	0.0143							
Total PeCDF	ND	0.0305							
Total HxCDF	ND		0.0566						
Total HpCDF DL - Sample specifc esti	ND	0.0375				CL- Lower control limit - upper control lim			

DL - Sample specifc estimated detection limit

EMPC - Estimated maximum possible concentration

LCL-UCL- Lower control limit - upper control limit

The results are reported in dry weight. The sample size is reported in wet weight.

Min-The TEQ is calculated using zero for the concentration of congeners that are not detected.

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Sample ID: OPR								EPA Method 1613B
Matrix: Solid Sample Size: 10.0 g			B0L0016 03-Dec-2020) 14:13		Lab Sample: B0L0016-BS1 Date Analyzed: 11-Dec-20 12:04	Column: ZB-DIOXIN	
Analyte	Amt Found (pg/g)	Spike Amt	%R	Limits		Labeled Standard	%R	LCL-UCL
2,3,7,8-TCDD	20.3	20.0	101	67 - 158	IS	13C-2,3,7,8-TCDD	86.7	20 - 175
1,2,3,7,8-PeCDD	104	100	104	70 - 142		13C-1,2,3,7,8-PeCDD	90.2	21 - 227
1,2,3,4,7,8-HxCDD	100	100	100	70 - 164		13C-1,2,3,4,7,8-HxCDD	105	21 - 193
1,2,3,6,7,8-HxCDD	101	100	101	76 - 134		13C-1,2,3,6,7,8-HxCDD	101	25 - 163
1,2,3,7,8,9-HxCDD	99.1	100	99.1	64 - 162		13C-1,2,3,7,8,9-HxCDD	101	21 - 193
1,2,3,4,6,7,8-HpCDD	95.3	100	95.3	70 - 140		13C-1,2,3,4,6,7,8-HpCDD	93.7	26 - 166
OCDD	207	200	103	78 - 144		13C-OCDD	71.5	13 - 199
2,3,7,8-TCDF	17.8	20.0	89.2	75 - 158		13C-2,3,7,8-TCDF	82.6	22 - 152
1,2,3,7,8-PeCDF	99.3	100	99.3	80 - 134		13C-1,2,3,7,8-PeCDF	87.1	21 - 192
2,3,4,7,8-PeCDF	99.5	100	99.5	68 - 160		13C-2,3,4,7,8-PeCDF	88.4	13 - 328
1,2,3,4,7,8-HxCDF	93.9	100	93.9	72 - 134		13C-1,2,3,4,7,8-HxCDF	92.3	19 - 202
1,2,3,6,7,8-HxCDF	93.5	100	93.5	84 - 130		13C-1,2,3,6,7,8-HxCDF	87.6	21 - 159
2,3,4,6,7,8-HxCDF	93.5	100	93.5	70 - 156		13C-2,3,4,6,7,8-HxCDF	93.5	22 - 176
1,2,3,7,8,9-HxCDF	94.9	100	94.9	78 - 130		13C-1,2,3,7,8,9-HxCDF	105	17 - 205
1,2,3,4,6,7,8-HpCDF	94.6	100	94.6	82 - 122		13C-1,2,3,4,6,7,8-HpCDF	72.5	21 - 158
1,2,3,4,7,8,9-HpCDF	94.7	100	94.7	78 - 138		13C-1,2,3,4,7,8,9-HpCDF	87.6	20 - 186
OCDF	194	200	97.2	63 - 170		13C-OCDF	77.1	13 - 199
					CRS	37Cl-2,3,7,8-TCDD	93.8	31 - 191

LCL-UCL - Lower control limit - upper control limit

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Sample ID: Method	Blank							EPA Me	thod 1613B
Matrix: Solid Sample Size: 10.0 g		QC Batch: Date Extracted:	B0L0154 22-Dec-2020 6:43		1	ab Sample: B0L0154-BLK1 ate Analyzed: 30-Dec-20 14:16	6 Column: ZB-D	DIOXIN	
Analyte Conc.	(pg/g)	DL	EMPC	Qualifiers		Labeled Standard	%R	LCL-UCL	Qualifiers
2,3,7,8-TCDD	ND	0.128			IS	13C-2,3,7,8-TCDD	87.0	25 - 164	
1,2,3,7,8-PeCDD	ND	0.181				13C-1,2,3,7,8-PeCDD	89.2	25 - 181	
1,2,3,4,7,8-HxCDD	ND	0.180				13C-1,2,3,4,7,8-HxCDD	95.7	32 - 141	
1,2,3,6,7,8-HxCDD	ND	0.183				13C-1,2,3,6,7,8-HxCDD	92.7	28 - 130	
1,2,3,7,8,9-HxCDD	ND	0.178				13C-1,2,3,7,8,9-HxCDD	93.0	32 - 141	
1,2,3,4,6,7,8-HpCDD	ND	0.231				13C-1,2,3,4,6,7,8-HpCDD	74.1	23 - 140	
OCDD	ND	0.314				13C-OCDD	58.4	17 - 157	
2,3,7,8-TCDF	ND	0.0947				13C-2,3,7,8-TCDF	87.3	24 - 169	
1,2,3,7,8-PeCDF	ND	0.150				13C-1,2,3,7,8-PeCDF	84.4	24 - 185	
2,3,4,7,8-PeCDF	ND	0.139				13C-2,3,4,7,8-PeCDF	86.1	21 - 178	
1,2,3,4,7,8-HxCDF	ND	0.0908				13C-1,2,3,4,7,8-HxCDF	90.9	26 - 152	
1,2,3,6,7,8-HxCDF	ND	0.0887				13C-1,2,3,6,7,8-HxCDF	87.2	26 - 123	
2,3,4,6,7,8-HxCDF	ND	0.0971				13C-2,3,4,6,7,8-HxCDF	91.4	28 - 136	
1,2,3,7,8,9-HxCDF	ND	0.127				13C-1,2,3,7,8,9-HxCDF	88.6	29 - 147	
1,2,3,4,6,7,8-HpCDF	ND	0.114				13C-1,2,3,4,6,7,8-HpCDF	75.9	28 - 143	
1,2,3,4,7,8,9-HpCDF	ND	0.116				13C-1,2,3,4,7,8,9-HpCDF	76.3	26 - 138	
OCDF	ND	0.243				13C-OCDF	60.2	17 - 157	
					CRS	37Cl-2,3,7,8-TCDD	91.1	35 - 197	
						Toxic Equivalent Quotient (TI	EQ) Data (pg/g d	lry wt)	
						TEQMinWHO2005Dioxin	0.00		
TOTALS									
Total TCDD	ND	0.128							
Total PeCDD	ND	0.181							
Total HxCDD	ND	0.183							
Total HpCDD	ND	0.231							
Total TCDF	ND		0.137						
Total PeCDF	ND	0.150							
Total HxCDF	ND	0.127							
Total HpCDF	ND	0.116			LOLIN	T - Lower control limit - unner control lin	•.		

DL - Sample specifc estimated detection limit

EMPC - Estimated maximum possible concentration

LCL-UCL- Lower control limit - upper control limit

The results are reported in dry weight. The sample size is reported in wet weight.

Min-The TEQ is calculated using zero for the concentration of congeners that are not detected.

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Sample ID: OPR								EPA Method 1613B
Matrix: Solid Sample Size: 10.0 g			B0L0154 22-Dec-2020	0 6:43		Lab Sample: B0L0154-BS1 Date Analyzed: 30-Dec-20 11:57	Column: ZB-DIOXIN	
Analyte	Amt Found (pg/g)	Spike Amt	%R	Limits		Labeled Standard	%R	LCL-UCL
2,3,7,8-TCDD	21.0	20.0	105	67 - 158	IS	13C-2,3,7,8-TCDD	92.4	20 - 175
1,2,3,7,8-PeCDD	102	100	102	70 - 142		13C-1,2,3,7,8-PeCDD	87.1	21 - 227
1,2,3,4,7,8-HxCDD	101	100	101	70 - 164		13C-1,2,3,4,7,8-HxCDD	93.1	21 - 193
1,2,3,6,7,8-HxCDD	98.2	100	98.2	76 - 134		13C-1,2,3,6,7,8-HxCDD	94.4	25 - 163
1,2,3,7,8,9-HxCDD	96.1	100	96.1	64 - 162		13C-1,2,3,7,8,9-HxCDD	90.5	21 - 193
1,2,3,4,6,7,8-HpCDD	105	100	105	70 - 140		13C-1,2,3,4,6,7,8-HpCDD	74.0	26 - 166
OCDD	203	200	102	78 - 144		13C-OCDD	60.8	13 - 199
2,3,7,8-TCDF	19.3	20.0	96.6	75 - 158		13C-2,3,7,8-TCDF	97.4	22 - 152
1,2,3,7,8-PeCDF	105	100	105	80 - 134		13C-1,2,3,7,8-PeCDF	87.8	21 - 192
2,3,4,7,8-PeCDF	111	100	111	68 - 160		13C-2,3,4,7,8-PeCDF	90.2	13 - 328
1,2,3,4,7,8-HxCDF	104	100	104	72 - 134		13C-1,2,3,4,7,8-HxCDF	94.7	19 - 202
1,2,3,6,7,8-HxCDF	106	100	106	84 - 130		13C-1,2,3,6,7,8-HxCDF	90.5	21 - 159
2,3,4,6,7,8-HxCDF	105	100	105	70 - 156		13C-2,3,4,6,7,8-HxCDF	93.4	22 - 176
1,2,3,7,8,9-HxCDF	106	100	106	78 - 130		13C-1,2,3,7,8,9-HxCDF	88.2	17 - 205
1,2,3,4,6,7,8-HpCDF	103	100	103	82 - 122		13C-1,2,3,4,6,7,8-HpCDF	80.3	21 - 158
1,2,3,4,7,8,9-HpCDF	99.8	100	99.8	78 - 138		13C-1,2,3,4,7,8,9-HpCDF	78.8	20 - 186
OCDF	219	200	109	63 - 170		13C-OCDF	64.4	13 - 199
					CRS	37Cl-2,3,7,8-TCDD	97.1	31 - 191

LCL-UCL - Lower control limit - upper control limit

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Sample ID: USMPI	DI-021SC-A-01-02-201107						EPA Me	ethod 1613
Project: Gasco	or QEA, LLC oSiltronic: US Moorings ov-2020 11:00	Sample Data Matrix: Sediment Sample Size: 15.0 g % Solids: 67.1		Lab QC	boratory Data 2002434-01 E Batch: B0L0016 te Analyzed: 12-Dec-20 16:5		cted: 03-Dec-2020	
Analyte Conc.	. (pg/g)	DL EMPC	Qualifiers		Labeled Standard	%R	LCL-UCL	Qualifiers
2,3,7,8-TCDD	ND	0.189		IS	13C-2,3,7,8-TCDD	92.7	25 - 164	
1,2,3,7,8-PeCDD	0.335		J		13C-1,2,3,7,8-PeCDD	104	25 - 181	
1,2,3,4,7,8-HxCDD	0.357		J		13C-1,2,3,4,7,8-HxCDD	109	32 - 141	
1,2,3,6,7,8-HxCDD	2.61				13C-1,2,3,6,7,8-HxCDD	103	28 - 130	
1,2,3,7,8,9-HxCDD	0.945		J		13C-1,2,3,7,8,9-HxCDD	105	32 - 141	
1,2,3,4,6,7,8-HpCDD	63.1				13C-1,2,3,4,6,7,8-HpCDD	111	23 - 140	
OCDD	879		В		13C-OCDD	95.5	17 - 157	
2,3,7,8-TCDF	10.9				13C-2,3,7,8-TCDF	89.9	24 - 169	
1,2,3,7,8-PeCDF	13.9				13C-1,2,3,7,8-PeCDF	107	24 - 185	
2,3,4,7,8-PeCDF	8.22				13C-2,3,4,7,8-PeCDF	104	21 - 178	
1,2,3,4,7,8-HxCDF	19.9				13C-1,2,3,4,7,8-HxCDF	101	26 - 152	
1,2,3,6,7,8-HxCDF	4.89				13C-1,2,3,6,7,8-HxCDF	95.2	26 - 123	
2,3,4,6,7,8-HxCDF	1.61		J		13C-2,3,4,6,7,8-HxCDF	102	28 - 136	
1,2,3,7,8,9-HxCDF	0.690		J		13C-1,2,3,7,8,9-HxCDF	99.6	29 - 147	
1,2,3,4,6,7,8-HpCDF	16.6				13C-1,2,3,4,6,7,8-HpCDF	84.8	28 - 143	
1,2,3,4,7,8,9-HpCDF	3.88				13C-1,2,3,4,7,8,9-HpCDF	101	26 - 138	
OCDF	33.1				13C-OCDF	90.3	17 - 157	
				CRS	37Cl-2,3,7,8-TCDD	93.9	35 - 197	
					Toxic Equivalent Quotient (TE	Q) Data (pg/g	dry wt)	
					TEQMinWHO2005Dioxin	8.52		
TOTALS								
Total TCDD	1.75	2.05						
Total PeCDD	2.38	3.50						
Total HxCDD	23.9							
Total HpCDD	146							
Total TCDF	33.0	33.3						
Total PeCDF	43.1							
Total HxCDF	44.0							
Total HpCDF DL - Sample specifc esti	41.2							

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EMPC - Estimated maximum possible concentration

The results are reported in dry weight. The sample size is reported in wet weight.

Min-The TEQ is calculated using zero for the concentration of congeners that are not detected.

Sample ID: USMPI	OI-021SC-A-02-03-201107						EPA Me	ethod 1613
Project: Gasco	or QEA, LLC Siltronic: US Moorings ov-2020 11:00	Sample Data Matrix: Sedir Sample Size: 13.5 % Solids: 74.2		Laboratory Lab Sample: QC Batch: Date Analyzo	2002434-02 B0L0016		cted: 03-Dec-2020	
Analyte Conc.	(pg/g)	DL EMPC	Qualifiers	Labeled	l Standard	%R	LCL-UCL	Qualifiers
2,3,7,8-TCDD	ND	0.0627		IS 13C-2,3	,7,8-TCDD	94.8	25 - 164	
1,2,3,7,8-PeCDD	ND	0.0423		13C-1,2	,3,7,8-PeCDD	103	25 - 181	
1,2,3,4,7,8-HxCDD	0.325		J	13C-1,2	,3,4,7,8-HxCDD	106	32 - 141	
1,2,3,6,7,8-HxCDD	ND	0.0748		13C-1,2	,3,6,7,8-HxCDD	101	28 - 130	
1,2,3,7,8,9-HxCDD	0.220		J	13C-1,2	,3,7,8,9-HxCDD	102	32 - 141	
1,2,3,4,6,7,8-HpCDD	9.70			13C-1,2	,3,4,6,7,8-HpCDD	106	23 - 140	
OCDD	125		В	13C-OC	CDD	88.2	17 - 157	
2,3,7,8-TCDF	1.17			13C-2,3	,7,8-TCDF	94.2	24 - 169	
1,2,3,7,8-PeCDF	32.1			13C-1,2	,3,7,8-PeCDF	98.5	24 - 185	
2,3,4,7,8-PeCDF	11.1			13C-2,3	,4,7,8-PeCDF	100	21 - 178	
1,2,3,4,7,8-HxCDF	102			13C-1,2	,3,4,7,8-HxCDF	100	26 - 152	
1,2,3,6,7,8-HxCDF	21.1			13C-1,2	,3,6,7,8-HxCDF	92.4	26 - 123	
2,3,4,6,7,8-HxCDF	4.89			13C-2,3	,4,6,7,8-HxCDF	100	28 - 136	
1,2,3,7,8,9-HxCDF	5.17			13C-1,2	,3,7,8,9-HxCDF	98.2	29 - 147	
1,2,3,4,6,7,8-HpCDF	14.7			13C-1,2	,3,4,6,7,8-HpCDF	81.8	28 - 143	
1,2,3,4,7,8,9-HpCDF	5.37			13C-1,2	,3,4,7,8,9-HpCDF	98.7	26 - 138	
OCDF	8.09			13C-OC	CDF	86.4	17 - 157	
				CRS 37Cl-2,	3,7,8-TCDD	95.9	35 - 197	
				Toxic E	quivalent Quotient (TE	Q) Data (pg/g	dry wt)	
				TEQMin	nWHO2005Dioxin	18.1		
TOTALS								
Total TCDD	0.519	0.697						
Total PeCDD	0.530	0.831						
Total HxCDD	4.34							
Total HpCDD	22.8							
Total TCDF	3.80	3.91						
Total PeCDF	70.4							
Total HxCDF	158							
Total HpCDF DL - Sample specifc esti	29.5				ontrol limit - upper control limit			

The results are reported in dry weight. The sample size is reported in wet weight.

Min-The TEQ is calculated using zero for the concentration of congeners that are not detected.

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Sample ID: USMPI	DI-021SC-A-03-04-201107					EPA Me	ethod 1613
Project: Gasco	or QEA, LLC oSiltronic: US Moorings ov-2020 11:00	Sample Data Matrix: Sediment Sample Size: 14.0 g % Solids: 71.9		Laboratory Data Lab Sample: 2002434-03 QC Batch: B0L0016 Date Analyzed: 12-Dec-20 18	Date Rece Date Extra :28 Column: ZB	cted: 03-Dec-2020	
Analyte Conc.	. (pg/g)	DL EMPC	Qualifiers	Labeled Standard	%R	LCL-UCL	Qualifiers
2,3,7,8-TCDD	ND	0.595		IS 13C-2,3,7,8-TCDD	99.5	25 - 164	
1,2,3,7,8-PeCDD	0.616		J	13C-1,2,3,7,8-PeCDD	105	25 - 181	
1,2,3,4,7,8-HxCDD	0.190		J	13C-1,2,3,4,7,8-HxCDD	109	32 - 141	
1,2,3,6,7,8-HxCDD	1.28		J	13C-1,2,3,6,7,8-HxCDD	102	28 - 130	
1,2,3,7,8,9-HxCDD	0.812		J	13C-1,2,3,7,8,9-HxCDD	102	32 - 141	
1,2,3,4,6,7,8-HpCDD	41.8			13C-1,2,3,4,6,7,8-HpCDD	106	23 - 140	
OCDD	573		В	13C-OCDD	84.1	17 - 157	
2,3,7,8-TCDF	6.11			13C-2,3,7,8-TCDF	98.4	24 - 169	
1,2,3,7,8-PeCDF	10.8			13C-1,2,3,7,8-PeCDF	105	24 - 185	
2,3,4,7,8-PeCDF	7.13			13C-2,3,4,7,8-PeCDF	105	21 - 178	
1,2,3,4,7,8-HxCDF	15.5			13C-1,2,3,4,7,8-HxCDF	101	26 - 152	
1,2,3,6,7,8-HxCDF	3.83			13C-1,2,3,6,7,8-HxCDF	93.7	26 - 123	
2,3,4,6,7,8-HxCDF	1.54		J	13C-2,3,4,6,7,8-HxCDF	99.7	28 - 136	
1,2,3,7,8,9-HxCDF	0.443		J	13C-1,2,3,7,8,9-HxCDF	101	29 - 147	
1,2,3,4,6,7,8-HpCDF	18.0			13C-1,2,3,4,6,7,8-HpCDF	82.0	28 - 143	
1,2,3,4,7,8,9-HpCDF	2.65			13C-1,2,3,4,7,8,9-HpCDF	98.3	26 - 138	
OCDF	35.7			13C-OCDF	82.5	17 - 157	
				CRS 37C1-2,3,7,8-TCDD	98.1	35 - 197	
				Toxic Equivalent Quotient (T	EQ) Data (pg/g	dry wt)	
				TEQMinWHO2005Dioxin	6.86		
TOTALS							
Total TCDD	4.17	5.01					
Total PeCDD	4.42	4.98					
Total HxCDD	14.6						
Total HpCDD	95.6						
Total TCDF	19.6	20.0	P				
Total PeCDF	38.5						
Total HxCDF	36.7						
Total HpCDF DL - Sample specifc est	44.9						

The results are reported in dry weight. The sample size is reported in wet weight.

Min-The TEQ is calculated using zero for the concentration of congeners that are not detected.

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Sample ID: USMPI	OI-021SC-A-04-05-201107	,					EPA Me	ethod 1613
Project: Gasco	or QEA, LLC Siltronic: US Moorings ov-2020 11:00	Sample Data Matrix: Sediment Sample Size: 11.7 g % Solids: 86.3		Lab QC I	oratory Data Sample: 2002434-04 Batch: B0L0016 e Analyzed: 12-Dec-20 19:12		ted: 03-Dec-2020	
Analyte Conc.	(pg/g)	DL EMPC	Qualifiers		Labeled Standard	%R	LCL-UCL	Qualifiers
2,3,7,8-TCDD	ND	0.0201		IS	13C-2,3,7,8-TCDD	104	25 - 164	
1,2,3,7,8-PeCDD	ND	0.0304			13C-1,2,3,7,8-PeCDD	114	25 - 181	
1,2,3,4,7,8-HxCDD	ND	0.0454			13C-1,2,3,4,7,8-HxCDD	114	32 - 141	
1,2,3,6,7,8-HxCDD	ND	0.0464			13C-1,2,3,6,7,8-HxCDD	107	28 - 130	
1,2,3,7,8,9-HxCDD	ND	0.0451			13C-1,2,3,7,8,9-HxCDD	108	32 - 141	
1,2,3,4,6,7,8-HpCDD	1.20		J		13C-1,2,3,4,6,7,8-HpCDD	111	23 - 140	
OCDD	14.2		В		13C-OCDD	91.3	17 - 157	
2,3,7,8-TCDF	0.0979		J		13C-2,3,7,8-TCDF	105	24 - 169	
1,2,3,7,8-PeCDF	0.121		J		13C-1,2,3,7,8-PeCDF	116	24 - 185	
2,3,4,7,8-PeCDF	ND	0.0687			13C-2,3,4,7,8-PeCDF	111	21 - 178	
1,2,3,4,7,8-HxCDF	0.166		J		13C-1,2,3,4,7,8-HxCDF	108	26 - 152	
1,2,3,6,7,8-HxCDF	0.0555		J		13C-1,2,3,6,7,8-HxCDF	98.8	26 - 123	
2,3,4,6,7,8-HxCDF	ND	0.0354			13C-2,3,4,6,7,8-HxCDF	107	28 - 136	
1,2,3,7,8,9-HxCDF	0.0400		J		13C-1,2,3,7,8,9-HxCDF	106	29 - 147	
1,2,3,4,6,7,8-HpCDF	0.258		J		13C-1,2,3,4,6,7,8-HpCDF	86.6	28 - 143	
1,2,3,4,7,8,9-HpCDF	ND	0.0407			13C-1,2,3,4,7,8,9-HpCDF	106	26 - 138	
OCDF	0.432		J		13C-OCDF	90.9	17 - 157	
				CRS	37Cl-2,3,7,8-TCDD	101	35 - 197	
					Toxic Equivalent Quotient (TEC	Q) Data (pg/g d	ry wt)	
					TEQMinWHO2005Dioxin	0.0585		
TOTALS								
Total TCDD	0.140							
Total PeCDD	0.174							
Total HxCDD	0.989							
Total HpCDD	3.02							
Total TCDF	0.273							
Total PeCDF	0.302	0.370						
Total HxCDF	0.477	0.521						
Total HpCDF DL - Sample specifc esti	0.258	0.560						

The results are reported in dry weight. The sample size is reported in wet weight.

Min-The TEQ is calculated using zero for the concentration of congeners that are not detected.

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Sample ID: Du	plicate							EPA Met	hod 1613B
Source Client ID: Source LabNumber: Matrix: Sample Size:	USMPDI-021SC-A-04-05-201107 2002434-04 Solid 11.6 g		QC Batch: Date Extracted:	B0L0016 03-Dec-2020 14:13	Lab San Date An	•	ımn: ZB-DIOXIN		
Analyte	Conc. (pg/g)	DL	EMPC	Qualifiers		Labeled Standard	%R	LCL-UCL	Qualifiers
2,3,7,8-TCDD	ND		0.0348		IS	13C-2,3,7,8-TCDD	105	25 - 164	
1,2,3,7,8-PeCDD	0.0536			J		13C-1,2,3,7,8-PeCDD	112	25 - 181	
1,2,3,4,7,8-HxCDD	ND	0.0451				13C-1,2,3,4,7,8-HxCDD	117	32 - 141	
1,2,3,6,7,8-HxCDD	0.0771			J		13C-1,2,3,6,7,8-HxCDD	109	28 - 130	
1,2,3,7,8,9-HxCDD	0.114			J		13C-1,2,3,7,8,9-HxCDD	108	32 - 141	
1,2,3,4,6,7,8-HpCDD	1.83			J		13C-1,2,3,4,6,7,8-HpCDD	112	23 - 140	
OCDD	23.9			В		13C-OCDD	89.1	17 - 157	
2,3,7,8-TCDF	0.116			J		13C-2,3,7,8-TCDF	108	24 - 169	
1,2,3,7,8-PeCDF	0.152			J		13C-1,2,3,7,8-PeCDF	120	24 - 185	
2,3,4,7,8-PeCDF	0.0961			J		13C-2,3,4,7,8-PeCDF	117	21 - 178	
1,2,3,4,7,8-HxCDF	0.234			J		13C-1,2,3,4,7,8-HxCDF	107	26 - 152	
1,2,3,6,7,8-HxCDF	0.0759			J		13C-1,2,3,6,7,8-HxCDF	97.3	26 - 123	
2,3,4,6,7,8-HxCDF	0.0381			J		13C-2,3,4,6,7,8-HxCDF	104	28 - 136	
1,2,3,7,8,9-HxCDF	0.0576			J		13C-1,2,3,7,8,9-HxCDF	105	29 - 147	
1,2,3,4,6,7,8-HpCDF	0.399			J		13C-1,2,3,4,6,7,8-HpCDF	83.6	28 - 143	
1,2,3,4,7,8,9-HpCDF	0.0590			J		13C-1,2,3,4,7,8,9-HpCDF	101	26 - 138	
OCDF	0.974			J		13C-OCDF	86.1	17 - 157	
					CRS	37Cl-2,3,7,8-TCDD	104	35 - 197	
						Toxic Equivalent Quotient (TE	Q) Data (pg/g dry	wt)	
						TEQMinWHO2005Dioxin	0.189		
TOTALS									
Total TCDD	0.159		0.248						
Total PeCDD	0.368		0.444						
Total HxCDD	1.70								
Total HpCDD	4.66								
Total TCDF	0.352								
Total PeCDF	0.597		0.618						
Total HxCDF	0.712		0.762						
Total HpCDF	0.981					L-UCL - Lower control limit - upper contro	11		

DL - Sample specifc estimated detection limit

EMPC - Estimated maximum possible concentration

LCL-UCL - Lower control limit - upper control limit

The results are reported in dry weight. weight.

The sample size is reported in wet

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Sample ID: Duplicate EPA Method 1613B

USMPDI-021SC-A-04-05-201107 Source Client ID:

Source LabNumber: 2002434-04 Matrix: Solid

Duplicate Lab Sample: B0L0016-DUP1

Analyte	Dup Conc. (pg/g)	Source Conc.	RPD	RPD Limits		Labeled Standard	Dup %R	Source %R	LCL-UCL
2,3,7,8-TCDD	ND	ND	NA	35	IS	13C-2,3,7,8-TCDD	105	104	25 - 164
1,2,3,7,8-PeCDD	0.0536	ND	#	35		13C-1,2,3,7,8-PeCDD	112	114	25 - 181
1,2,3,4,7,8-HxCDD	ND	ND	NA	35		13C-1,2,3,4,7,8-HxCDD	117	114	32 - 141
1,2,3,6,7,8-HxCDD	0.0771	ND	#	35		13C-1,2,3,6,7,8-HxCDD	109	107	28 - 130
1,2,3,7,8,9-HxCDD	0.114	ND	#	35		13C-1,2,3,7,8,9-HxCDD	108	108	32 - 141
1,2,3,4,6,7,8-HpCDD	1.83	1.20	41.5	35		13C-1,2,3,4,6,7,8-HpCDD	112	111	23 - 140
OCDD	23.9	14.2	51.2	35		13C-OCDD	89.1	91.3	17 - 157
2,3,7,8-TCDF	0.116	0.0979	16.6	35		13C-2,3,7,8-TCDF	108	105	24 - 169
1,2,3,7,8-PeCDF	0.152	0.121	22.9	35		13C-1,2,3,7,8-PeCDF	120	116	24 - 185
2,3,4,7,8-PeCDF	0.0961	ND	#	35		13C-2,3,4,7,8-PeCDF	117	111	21 - 178
1,2,3,4,7,8-HxCDF	0.234	0.166	33.7	35		13C-1,2,3,4,7,8-HxCDF	107	108	26 - 152
1,2,3,6,7,8-HxCDF	0.0759	0.0555	31.1	35		13C-1,2,3,6,7,8-HxCDF	97.3	98.8	26 - 123
2,3,4,6,7,8-HxCDF	0.0381	ND	#	35		13C-2,3,4,6,7,8-HxCDF	104	107	28 - 136
1,2,3,7,8,9-HxCDF	0.0576	0.0400	36.1	35		13C-1,2,3,7,8,9-HxCDF	105	106	29 - 147
1,2,3,4,6,7,8-HpCDF	0.399	0.258	42.8	35		13C-1,2,3,4,6,7,8-HpCDF	83.6	86.6	28 - 143
1,2,3,4,7,8,9-HpCDF	0.0590	ND	#	35		13C-1,2,3,4,7,8,9-HpCDF	101	106	26 - 138
OCDF	0.974	0.432	77.0	35		13C-OCDF	86.1	90.9	17 - 157
					CRS	37C1-2,3,7,8-TCDD	104	101	35 - 197

LCL-UCL - Lower control limit - upper control limit

The results are reported in dry weight.

reported to the MDL

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The sample size is reported in wet weight.Results

Sample ID: USMPI	DI-023SC-A-01-02-201107						EPA Me	thod 1613
Project: Gasco	or QEA, LLC oSiltronic: US Moorings ov-2020 8:45	Sample Data Matrix: Sediment Sample Size: 14.5 g % Solids: 70.0		Lab QC	boratory Data 2002434-05 Batch: B0L0016 te Analyzed: 13-Dec-20 13:5		cted: 03-Dec-2020	
Analyte Conc.	(pg/g)	DL EMPC	Qualifiers		Labeled Standard	%R	LCL-UCL	Qualifiers
2,3,7,8-TCDD	ND	0.103		IS	13C-2,3,7,8-TCDD	108	25 - 164	
1,2,3,7,8-PeCDD	0.194		J		13C-1,2,3,7,8-PeCDD	105	25 - 181	
1,2,3,4,7,8-HxCDD	0.195		J		13C-1,2,3,4,7,8-HxCDD	118	32 - 141	
1,2,3,6,7,8-HxCDD	1.08		J		13C-1,2,3,6,7,8-HxCDD	111	28 - 130	
1,2,3,7,8,9-HxCDD	0.566		J		13C-1,2,3,7,8,9-HxCDD	112	32 - 141	
1,2,3,4,6,7,8-HpCDD	27.0				13C-1,2,3,4,6,7,8-HpCDD	116	23 - 140	
OCDD	406		В		13C-OCDD	101	17 - 157	
2,3,7,8-TCDF	0.638				13C-2,3,7,8-TCDF	110	24 - 169	
1,2,3,7,8-PeCDF	1.36		J		13C-1,2,3,7,8-PeCDF	110	24 - 185	
2,3,4,7,8-PeCDF	0.815		J		13C-2,3,4,7,8-PeCDF	111	21 - 178	
1,2,3,4,7,8-HxCDF	2.14		J		13C-1,2,3,4,7,8-HxCDF	107	26 - 152	
1,2,3,6,7,8-HxCDF	0.797		J		13C-1,2,3,6,7,8-HxCDF	99.7	26 - 123	
2,3,4,6,7,8-HxCDF	0.408		J		13C-2,3,4,6,7,8-HxCDF	107	28 - 136	
1,2,3,7,8,9-HxCDF	0.0957		J		13C-1,2,3,7,8,9-HxCDF	107	29 - 147	
1,2,3,4,6,7,8-HpCDF	6.39				13C-1,2,3,4,6,7,8-HpCDF	87.1	28 - 143	
1,2,3,4,7,8,9-HpCDF	0.567		J		13C-1,2,3,4,7,8,9-HpCDF	111	26 - 138	
OCDF	14.1				13C-OCDF	96.8	17 - 157	
				CRS	37C1-2,3,7,8-TCDD	110	35 - 197	
					Toxic Equivalent Quotient (TE	Q) Data (pg/g	dry wt)	
					TEQMinWHO2005Dioxin	1.54		
TOTALS								
Total TCDD	1.15	1.26						
Total PeCDD	1.92	2.29						
Total HxCDD	11.4							
Total HpCDD	60.0							
Total TCDF	3.42	3.98						
Total PeCDF	6.96							
Total HxCDF	9.51	9.59						
Total HpCDF DL - Sample specifc esti	16.4							

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EMPC - Estimated maximum possible concentration

The results are reported in dry weight. The sample size is reported in wet weight.

Min-The TEQ is calculated using zero for the concentration of congeners that are not detected.

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Sample ID: USMPI	OI-023SC-A-02-03-201107						EPA Me	thod 16131
Project: Gasco	or QEA, LLC Siltronic: US Moorings ov-2020 8:45	Sample Data Matrix: Sediment Sample Size: 13.6 g % Solids: 73.5		Lal QC	boratory Data b Sample: 2002434-06 C Batch: B0L0016 te Analyzed: 13-Dec-20 14:4		eted: 03-Dec-2020	
Analyte Conc.	(pg/g)	DL EMPC	Qualifiers		Labeled Standard	%R	LCL-UCL	Qualifiers
2,3,7,8-TCDD	ND	0.0714		IS	13C-2,3,7,8-TCDD	94.0	25 - 164	
1,2,3,7,8-PeCDD	ND	0.0686			13C-1,2,3,7,8-PeCDD	97.1	25 - 181	
1,2,3,4,7,8-HxCDD	0.0533		J		13C-1,2,3,4,7,8-HxCDD	107	32 - 141	
1,2,3,6,7,8-HxCDD	0.159		J		13C-1,2,3,6,7,8-HxCDD	101	28 - 130	
1,2,3,7,8,9-HxCDD	0.165		J		13C-1,2,3,7,8,9-HxCDD	102	32 - 141	
1,2,3,4,6,7,8-HpCDD	4.19				13C-1,2,3,4,6,7,8-HpCDD	103	23 - 140	
OCDD	39.6		В		13C-OCDD	84.1	17 - 157	
2,3,7,8-TCDF	0.416		J		13C-2,3,7,8-TCDF	95.0	24 - 169	
1,2,3,7,8-PeCDF	0.293		J		13C-1,2,3,7,8-PeCDF	101	24 - 185	
2,3,4,7,8-PeCDF	0.247		J		13C-2,3,4,7,8-PeCDF	100	21 - 178	
1,2,3,4,7,8-HxCDF	0.413		J		13C-1,2,3,4,7,8-HxCDF	99.7	26 - 152	
1,2,3,6,7,8-HxCDF	0.141		J		13C-1,2,3,6,7,8-HxCDF	92.7	26 - 123	
2,3,4,6,7,8-HxCDF	0.0671		J		13C-2,3,4,6,7,8-HxCDF	99.6	28 - 136	
1,2,3,7,8,9-HxCDF	ND	0.0318			13C-1,2,3,7,8,9-HxCDF	99.8	29 - 147	
1,2,3,4,6,7,8-HpCDF	0.615		J		13C-1,2,3,4,6,7,8-HpCDF	78.9	28 - 143	
1,2,3,4,7,8,9-HpCDF	0.100		J		13C-1,2,3,4,7,8,9-HpCDF	98.5	26 - 138	
OCDF	1.24		J		13C-OCDF	82.1	17 - 157	
				CRS	37Cl-2,3,7,8-TCDD	94.5	35 - 197	
					Toxic Equivalent Quotient (TE	Q) Data (pg/g d	ry wt)	
					TEQMinWHO2005Dioxin	0.286		
TOTALS								
Total TCDD	0.211	0.311						
Total PeCDD	0.326	0.725						
Total HxCDD	2.95							
Total HpCDD	9.25							
Total TCDF	1.35	1.55						
Total PeCDF	1.38	1.49						
Total HxCDF	1.34	1.37						
Total HpCDF DL - Sample specifc esti	1.55							

LCL-UCL- Lower control limit - upper control limit

The results are reported in dry weight. The sample size is reported in wet weight.

Min-The TEQ is calculated using zero for the concentration of congeners that are not detected.

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Sample ID: USMPD	DI-023SC-A-03-04-201107	1				EPA Met	hod 1613B
Project: Gasco	or QEA, LLC oSiltronic: US Moorings ov-2020 8:45	Sample Data Matrix: Sediment Sample Size: 13.8 g % Solids: 72.6		Laboratory Data Lab Sample: 2002434-07 QC Batch: B0L0016 Date Analyzed: 13-Dec-20 15:	Date Recei Date Extra 27 Column: ZB	cted: 03-Dec-2020	
Analyte Conc.	(pg/g)	DL EMPC	Qualifiers	Labeled Standard	%R	LCL-UCL	Qualifiers
2,3,7,8-TCDD	ND	0.0236		IS 13C-2,3,7,8-TCDD	84.9	25 - 164	
1,2,3,7,8-PeCDD	ND	0.0286		13C-1,2,3,7,8-PeCDD	104	25 - 181	
1,2,3,4,7,8-HxCDD	ND	0.0420		13C-1,2,3,4,7,8-HxCDD	111	32 - 141	
1,2,3,6,7,8-HxCDD	ND	0.0438		13C-1,2,3,6,7,8-HxCDD	105	28 - 130	
1,2,3,7,8,9-HxCDD	ND	0.0417		13C-1,2,3,7,8,9-HxCDD	110	32 - 141	
1,2,3,4,6,7,8-HpCDD	1.89		J	13C-1,2,3,4,6,7,8-HpCDD	113	23 - 140	
OCDD	25.9		В	13C-OCDD	88.0	17 - 157	
2,3,7,8-TCDF	0.140		J	13C-2,3,7,8-TCDF	82.2	24 - 169	
1,2,3,7,8-PeCDF	0.122		J	13C-1,2,3,7,8-PeCDF	103	24 - 185	
2,3,4,7,8-PeCDF	ND	0.0833		13C-2,3,4,7,8-PeCDF	100	21 - 178	
1,2,3,4,7,8-HxCDF	0.133		J	13C-1,2,3,4,7,8-HxCDF	103	26 - 152	
1,2,3,6,7,8-HxCDF	0.0555		J	13C-1,2,3,6,7,8-HxCDF	95.9	26 - 123	
2,3,4,6,7,8-HxCDF	0.0327		J	13C-2,3,4,6,7,8-HxCDF	105	28 - 136	
1,2,3,7,8,9-HxCDF	0.0261		J	13C-1,2,3,7,8,9-HxCDF	102	29 - 147	
1,2,3,4,6,7,8-HpCDF	0.505		J	13C-1,2,3,4,6,7,8-HpCDF	85.3	28 - 143	
1,2,3,4,7,8,9-HpCDF	ND	0.0511		13C-1,2,3,4,7,8,9-HpCDF	103	26 - 138	
OCDF	2.49		J	13C-OCDF	86.5	17 - 157	
				CRS 37C1-2,3,7,8-TCDD	83.3	35 - 197	
				Toxic Equivalent Quotient (T	EQ) Data (pg/g	dry wt)	
				TEQMinWHO2005Dioxin	0.0749		
TOTALS							
Total TCDD	0.179						
Total PeCDD	0.138	0.341					
Total HxCDD	0.996						
Total HpCDD	4.44						
Total TCDF	0.497						
Total PeCDF	0.388	0.472					
Total HxCDF	0.612						
Total HpCDF	1.65						
DL - Sample specifc esting	mated detection limit		·	LCL-UCL- Lower control limit - upper control lin	nit	·	

EMPC - Estimated maximum possible concentration

The results are reported in dry weight. The sample size is reported in wet weight.

Min-The TEQ is calculated using zero for the concentration of congeners that are not detected.

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Sample ID: USMPI	DI-023SC-A-04-05-201107	7						EPA Me	thod 1613B
Project: Gasco	or QEA, LLC oSiltronic: US Moorings ov-2020 8:45	Sample Dat Matrix: Sample Si % Solids:	Sediment		Lab QC	boratory Data 5 Sample: 2002434-08 6 Batch: B0L0016 13-Dec-20 16:11	Date Received: Date Extracted: Column: ZB-DIO	03-Dec-2020	
Analyte Conc.	. (pg/g)	DL E	MPC	Qualifiers		Labeled Standard	%R	LCL-UCL	Qualifiers
2,3,7,8-TCDD	ND	0.0227			IS	13C-2,3,7,8-TCDD	97.0	25 - 164	
1,2,3,7,8-PeCDD	ND	0.0477				13C-1,2,3,7,8-PeCDD	101	25 - 181	
1,2,3,4,7,8-HxCDD	ND	0.0418				13C-1,2,3,4,7,8-HxCDD	110	32 - 141	
1,2,3,6,7,8-HxCDD	0.0872			J		13C-1,2,3,6,7,8-HxCDD	103	28 - 130	
1,2,3,7,8,9-HxCDD	0.215			J		13C-1,2,3,7,8,9-HxCDD	105	32 - 141	
1,2,3,4,6,7,8-HpCDD	1.32			J		13C-1,2,3,4,6,7,8-HpCDD	108	23 - 140	
OCDD	14.5			В		13C-OCDD	87.9	17 - 157	
2,3,7,8-TCDF	0.0501			J		13C-2,3,7,8-TCDF	98.0	24 - 169	
1,2,3,7,8-PeCDF	0.0638			J		13C-1,2,3,7,8-PeCDF	104	24 - 185	
2,3,4,7,8-PeCDF	0.0372			J		13C-2,3,4,7,8-PeCDF	98.6	21 - 178	
1,2,3,4,7,8-HxCDF	0.0554			J		13C-1,2,3,4,7,8-HxCDF	101	26 - 152	
1,2,3,6,7,8-HxCDF	ND	0.0210				13C-1,2,3,6,7,8-HxCDF	93.6	26 - 123	
2,3,4,6,7,8-HxCDF	ND	0.0232				13C-2,3,4,6,7,8-HxCDF	101	28 - 136	
1,2,3,7,8,9-HxCDF	ND	().0469			13C-1,2,3,7,8,9-HxCDF	103	29 - 147	
1,2,3,4,6,7,8-HpCDF	ND	0.0279				13C-1,2,3,4,6,7,8-HpCDF	80.6	28 - 143	
1,2,3,4,7,8,9-HpCDF	ND	0.0226				13C-1,2,3,4,7,8,9-HpCDF	101	26 - 138	
OCDF	ND	(0.0682			13C-OCDF	85.7	17 - 157	
					CRS	37Cl-2,3,7,8-TCDD	101	35 - 197	
						Toxic Equivalent Quotient (TEC	Q) Data (pg/g dry v	vt)	
						TEQMinWHO2005Dioxin	0.0714		
TOTALS									
Total TCDD	0.313		0.480						
Total PeCDD	0.416		0.490						
Total HxCDD	2.25								
Total HpCDD	3.84								
Total TCDF	0.147								
Total PeCDF	0.101		0.139						
Total HxCDF	0.0837		0.177						
Total HpCDF	ND	0.0279							
DL - Sample specifc est	imated detection limit					CL- Lower control limit - upper control limit			

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EMPC - Estimated maximum possible concentration

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The results are reported in dry weight. The sample size is reported in wet weight.

Min-The TEQ is calculated using zero for the concentration of congeners that are not detected.

Sample ID: USMPI	OI-1023SC-A-02-03-20110	77				EPA Method 1	1613I
Project: Gasco	or QEA, LLC Siltronic: US Moorings ov-2020 0:00	Sample Data Matrix: Sediment Sample Size: 13.3 g % Solids: 75.7		Laboratory Data Lab Sample: 2002434-09 QC Batch: B0L0016 Date Analyzed: 13-Dec-20 16:5		acted: 03-Dec-2020 14:13	
Analyte Conc.	(pg/g)	DL EMPC	Qualifiers	Labeled Standard	%R	LCL-UCL Qual	alifiers
2,3,7,8-TCDD	ND	0.0183		IS 13C-2,3,7,8-TCDD	101	25 - 164	
1,2,3,7,8-PeCDD	ND	0.0383		13C-1,2,3,7,8-PeCDD	106	25 - 181	
1,2,3,4,7,8-HxCDD	ND	0.0351		13C-1,2,3,4,7,8-HxCDD	114	32 - 141	
1,2,3,6,7,8-HxCDD	0.128		J	13C-1,2,3,6,7,8-HxCDD	107	28 - 130	
1,2,3,7,8,9-HxCDD	0.120		J	13C-1,2,3,7,8,9-HxCDD	106	32 - 141	
1,2,3,4,6,7,8-HpCDD	2.88			13C-1,2,3,4,6,7,8-HpCDD	109	23 - 140	
OCDD	33.5		В	13C-OCDD	87.9	17 - 157	
2,3,7,8-TCDF	0.190		J	13C-2,3,7,8-TCDF	102	24 - 169	
1,2,3,7,8-PeCDF	0.890		J	13C-1,2,3,7,8-PeCDF	105	24 - 185	
2,3,4,7,8-PeCDF	0.350		J	13C-2,3,4,7,8-PeCDF	104	21 - 178	
1,2,3,4,7,8-HxCDF	2.42		J	13C-1,2,3,4,7,8-HxCDF	106	26 - 152	
1,2,3,6,7,8-HxCDF	0.898		J	13C-1,2,3,6,7,8-HxCDF	98.3	26 - 123	
2,3,4,6,7,8-HxCDF	0.189		J	13C-2,3,4,6,7,8-HxCDF	105	28 - 136	
1,2,3,7,8,9-HxCDF	0.0975		J	13C-1,2,3,7,8,9-HxCDF	103	29 - 147	
1,2,3,4,6,7,8-HpCDF	1.49		J	13C-1,2,3,4,6,7,8-HpCDF	85.0	28 - 143	
1,2,3,4,7,8,9-HpCDF	0.321		J	13C-1,2,3,4,7,8,9-HpCDF	103	26 - 138	
OCDF	1.34		J	13C-OCDF	86.0	17 - 157	
				CRS 37Cl-2,3,7,8-TCDD	102	35 - 197	
				Toxic Equivalent Quotient (TE	CQ) Data (pg/g	dry wt)	
				TEQMinWHO2005Dioxin	0.593		
TOTALS							
Total TCDD	0.130						
Total PeCDD	0.149	0.434					
Total HxCDD	1.95						
Total HpCDD	6.82						
Total TCDF	0.623						
Total PeCDF	2.32	2.38					
Total HxCDF	4.70						
Total HpCDF DL - Sample specifc esti	2.83			LCL-UCL- Lower control limit - upper control lim			

The results are reported in dry weight. The sample size is reported in wet weight.

Min-The TEQ is calculated using zero for the concentration of congeners that are not detected.

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Sample ID: USMP	DI-056SC-A-01-02-201107					EPA Met	hod 1613B
Project: Gasc	nor QEA, LLC oSiltronic: US Moorings ov-2020 13:30	Sample Data Matrix: Sediment Sample Size: 22.4 g % Solids: 49.4		aboratory Data ab Sample: 2002434 C Batch: B0L015 Date Analyzed: 30-Dec-		ed: 03-Dec-2020	
Analyte Conc	. (pg/g)	DL EMPC	Qualifiers	Labeled Standard	%R	LCL-UCL	Qualifiers
2,3,7,8-TCDD	ND	0.385		13C-2,3,7,8-TCDD	90.3	25 - 164	
1,2,3,7,8-PeCDD	ND	0.676		13C-1,2,3,7,8-PeCDD	90.5	25 - 181	
1,2,3,4,7,8-HxCDD	ND	0.830		13C-1,2,3,4,7,8-HxCDD	95.9	32 - 141	
1,2,3,6,7,8-HxCDD	3.88			13C-1,2,3,6,7,8-HxCDD	91.8	28 - 130	
1,2,3,7,8,9-HxCDD	1.80		J	13C-1,2,3,7,8,9-HxCDD	92.5	32 - 141	
1,2,3,4,6,7,8-HpCDD	71.3			13C-1,2,3,4,6,7,8-HpCD	D 82.4	23 - 140	
OCDD	706			13C-OCDD	70.8	17 - 157	
2,3,7,8-TCDF	8.42			13C-2,3,7,8-TCDF	93.2	24 - 169	
1,2,3,7,8-PeCDF	15.4			13C-1,2,3,7,8-PeCDF	92.8	24 - 185	
2,3,4,7,8-PeCDF	7.22			13C-2,3,4,7,8-PeCDF	99.7	21 - 178	
1,2,3,4,7,8-HxCDF	21.7			13C-1,2,3,4,7,8-HxCDF	92.4	26 - 152	
1,2,3,6,7,8-HxCDF	5.30			13C-1,2,3,6,7,8-HxCDF	92.6	26 - 123	
2,3,4,6,7,8-HxCDF	2.29			13C-2,3,4,6,7,8-HxCDF	92.3	28 - 136	
1,2,3,7,8,9-HxCDF	1.89		J	13C-1,2,3,7,8,9-HxCDF	92.0	29 - 147	
1,2,3,4,6,7,8-HpCDF	14.0			13C-1,2,3,4,6,7,8-HpCD	F 78.7	28 - 143	
1,2,3,4,7,8,9-HpCDF	3.52			13C-1,2,3,4,7,8,9-HpCD	F 84.2	26 - 138	
OCDF	36.2			13C-OCDF	71.1	17 - 157	
				S 37Cl-2,3,7,8-TCDD	95.6	35 - 197	
				Toxic Equivalent Quoti	ent (TEQ) Data (pg/g dr	y wt)	
				TEQMinWHO2005Diox	in 8.27		
TOTALS							
Total TCDD	4.18	6.13					
Total PeCDD	2.61	6.33					
Total HxCDD	32.9	33.7					
Total HpCDD	162						
Total TCDF	30.4	34.2					
Total PeCDF	45.0	47.4					
Total HxCDF	60.0						
Total HpCDF DL - Sample specifc est	50.2			UCL- Lower control limit - upper co			

EMPC - Estimated maximum possible concentration

The results are reported in dry weight. The sample size is reported in wet weight.

Min-The TEQ is calculated using zero for the concentration of congeners that are not detected.

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Client Data							2212112	thod 1613B
Name: Anchor Project: Gascos	r QEA, LLC Siltronic: US Moorings v-2020 13:30	Sample Data Matrix: Sedime Sample Size: 20.4 g % Solids: 49.1	nt	Lab QC	boratory Data 2 Sample: 2002434-11 2 Batch: B0L0016 te Analyzed: 13-Dec-20 18:24		cted: 03-Dec-2020	
Analyte Conc. ((pg/g)	DL EMPC	Qualifiers		Labeled Standard	%R	LCL-UCL	Qualifiers
2,3,7,8-TCDD	ND	0.541		IS	13C-2,3,7,8-TCDD	48.6	25 - 164	
1,2,3,7,8-PeCDD	0.708		J		13C-1,2,3,7,8-PeCDD	74.3	25 - 181	
1,2,3,4,7,8-HxCDD	0.837		J		13C-1,2,3,4,7,8-HxCDD	93.6	32 - 141	
1,2,3,6,7,8-HxCDD	6.37				13C-1,2,3,6,7,8-HxCDD	91.9	28 - 130	
1,2,3,7,8,9-HxCDD	2.73				13C-1,2,3,7,8,9-HxCDD	104	32 - 141	
1,2,3,4,6,7,8-HpCDD	93.6				13C-1,2,3,4,6,7,8-HpCDD	109	23 - 140	
OCDD	988		В		13C-OCDD	85.6	17 - 157	
2,3,7,8-TCDF	5.08				13C-2,3,7,8-TCDF	43.8	24 - 169	
1,2,3,7,8-PeCDF	7.34				13C-1,2,3,7,8-PeCDF	71.9	24 - 185	
2,3,4,7,8-PeCDF	3.29				13C-2,3,4,7,8-PeCDF	59.5	21 - 178	
1,2,3,4,7,8-HxCDF	14.4				13C-1,2,3,4,7,8-HxCDF	84.7	26 - 152	
1,2,3,6,7,8-HxCDF	3.93				13C-1,2,3,6,7,8-HxCDF	82.8	26 - 123	
2,3,4,6,7,8-HxCDF	1.34		J		13C-2,3,4,6,7,8-HxCDF	95.3	28 - 136	
1,2,3,7,8,9-HxCDF	0.456		J		13C-1,2,3,7,8,9-HxCDF	91.9	29 - 147	
1,2,3,4,6,7,8-HpCDF	17.4				13C-1,2,3,4,6,7,8-HpCDF	81.5	28 - 143	
1,2,3,4,7,8,9-HpCDF	2.86				13C-1,2,3,4,7,8,9-HpCDF	94.9	26 - 138	
OCDF	47.9				13C-OCDF	84.5	17 - 157	
				CRS	37Cl-2,3,7,8-TCDD	50.0	35 - 197	
					Toxic Equivalent Quotient (TEC	Q) Data (pg/g	dry wt)	
					TEQMinWHO2005Dioxin	6.88		
TOTALS								
Total TCDD	2.31	2.99						
Total PeCDD	4.53	5.61						
Total HxCDD	48.1							
Total HpCDD	194							
Total TCDF	18.2	20.7						
Total PeCDF	26.2							
Total HxCDF	41.5							
Total HpCDF DL - Sample specifc estin	49.2							

EMPC - Estimated maximum possible concentration

The results are reported in dry weight. The sample size is reported in wet weight.

Min-The TEQ is calculated using zero for the concentration of congeners that are not detected.

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Sample ID: USMPI	DI-056SC-A-03-04-201107						EPA Me	thod 1613B
Project: Gasco	or QEA, LLC oSiltronic: US Moorings ov-2020 13:30	Sample Data Matrix: Sample Size: % Solids:	Sediment 18.1 g 55.9	Lab QC	boratory Data 2002434-12 Batch: B0L0016 te Analyzed: 13-Dec-20 19:0	Date Received: Date Extracted 8 Column: ZB-DIO	: 03-Dec-2020	
Analyte Conc.	(pg/g)	DL EMPC	Qualifiers		Labeled Standard	%R	LCL-UCL	Qualifiers
2,3,7,8-TCDD	ND	0.068	7	IS	13C-2,3,7,8-TCDD	101	25 - 164	
1,2,3,7,8-PeCDD	0.172		J		13C-1,2,3,7,8-PeCDD	98.1	25 - 181	
1,2,3,4,7,8-HxCDD	0.150		J		13C-1,2,3,4,7,8-HxCDD	106	32 - 141	
1,2,3,6,7,8-HxCDD	1.24		J		13C-1,2,3,6,7,8-HxCDD	101	28 - 130	
1,2,3,7,8,9-HxCDD	0.449		J		13C-1,2,3,7,8,9-HxCDD	100	32 - 141	
1,2,3,4,6,7,8-HpCDD	15.6				13C-1,2,3,4,6,7,8-HpCDD	101	23 - 140	
OCDD	168		В		13C-OCDD	78.9	17 - 157	
2,3,7,8-TCDF	1.10				13C-2,3,7,8-TCDF	101	24 - 169	
1,2,3,7,8-PeCDF	3.25				13C-1,2,3,7,8-PeCDF	102	24 - 185	
2,3,4,7,8-PeCDF	1.56		J		13C-2,3,4,7,8-PeCDF	101	21 - 178	
1,2,3,4,7,8-HxCDF	4.40				13C-1,2,3,4,7,8-HxCDF	98.8	26 - 152	
1,2,3,6,7,8-HxCDF	1.03		J		13C-1,2,3,6,7,8-HxCDF	91.3	26 - 123	
2,3,4,6,7,8-HxCDF	0.402		J		13C-2,3,4,6,7,8-HxCDF	97.3	28 - 136	
1,2,3,7,8,9-HxCDF	0.192		J		13C-1,2,3,7,8,9-HxCDF	103	29 - 147	
1,2,3,4,6,7,8-HpCDF	2.57				13C-1,2,3,4,6,7,8-HpCDF	78.0	28 - 143	
1,2,3,4,7,8,9-HpCDF	0.455		J		13C-1,2,3,4,7,8,9-HpCDF	95.3	26 - 138	
OCDF	4.67		J		13C-OCDF	78.3	17 - 157	
				CRS		114	35 - 197	
					Toxic Equivalent Quotient (TE	Q) Data (pg/g dry v	wt)	
					TEQMinWHO2005Dioxin	1.87		
TOTALS								
Total TCDD	0.427	0.495	j					
Total PeCDD	0.703	1.29						
Total HxCDD	8.54							
Total HpCDD	32.0							
Total TCDF	3.93							
Total PeCDF	9.90							
Total HxCDF	10.2							
Total HpCDF DL - Sample specifc esti	6.86							

The results are reported in dry weight. The sample size is reported in wet weight.

Min-The TEQ is calculated using zero for the concentration of congeners that are not detected.

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Sample ID: USMPI	DI-056SC-A-04-05-201107						EPA Me	thod 1613F
Project: Gasco	or QEA, LLC oSiltronic: US Moorings ov-2020 13:30	Sample Data Matrix: Sediment Sample Size: 17.7 g % Solids: 57.6		Lal QC	boratory Data b Sample: 2002434-13 C Batch: B0L0016 te Analyzed: 14-Dec-20 17:3		cted: 03-Dec-2020	
Analyte Conc.	(pg/g)	DL EMPC	Qualifiers		Labeled Standard	%R	LCL-UCL	Qualifiers
2,3,7,8-TCDD	ND	0.285		IS	13C-2,3,7,8-TCDD	94.1	25 - 164	
1,2,3,7,8-PeCDD	1.09		J		13C-1,2,3,7,8-PeCDD	106	25 - 181	
1,2,3,4,7,8-HxCDD	1.24		J		13C-1,2,3,4,7,8-HxCDD	110	32 - 141	
1,2,3,6,7,8-HxCDD	9.58				13C-1,2,3,6,7,8-HxCDD	104	28 - 130	
1,2,3,7,8,9-HxCDD	3.41				13C-1,2,3,7,8,9-HxCDD	103	32 - 141	
1,2,3,4,6,7,8-HpCDD	156				13C-1,2,3,4,6,7,8-HpCDD	104	23 - 140	
OCDD	1690		В		13C-OCDD	84.0	17 - 157	
2,3,7,8-TCDF	13.0				13C-2,3,7,8-TCDF	95.1	24 - 169	
1,2,3,7,8-PeCDF	18.0				13C-1,2,3,7,8-PeCDF	111	24 - 185	
2,3,4,7,8-PeCDF	10.1				13C-2,3,4,7,8-PeCDF	106	21 - 178	
1,2,3,4,7,8-HxCDF	39.1				13C-1,2,3,4,7,8-HxCDF	98.3	26 - 152	
1,2,3,6,7,8-HxCDF	8.57				13C-1,2,3,6,7,8-HxCDF	92.0	26 - 123	
2,3,4,6,7,8-HxCDF	2.73				13C-2,3,4,6,7,8-HxCDF	96.2	28 - 136	
1,2,3,7,8,9-HxCDF	0.862		J		13C-1,2,3,7,8,9-HxCDF	95.0	29 - 147	
1,2,3,4,6,7,8-HpCDF	32.0				13C-1,2,3,4,6,7,8-HpCDF	76.4	28 - 143	
1,2,3,4,7,8,9-HpCDF	6.40				13C-1,2,3,4,7,8,9-HpCDF	92.5	26 - 138	
OCDF	61.7				13C-OCDF	74.7	17 - 157	
				CRS	37Cl-2,3,7,8-TCDD	96.9	35 - 197	
					Toxic Equivalent Quotient (TE	Q) Data (pg/g	dry wt)	
					TEQMinWHO2005Dioxin	15.0		
TOTALS								
Total TCDD	2.80	3.20						
Total PeCDD	7.09	8.32						
Total HxCDD	67.3							
Total HpCDD	321							
Total TCDF	37.7	39.5						
Total PeCDF	63.1							
Total HxCDF	90.1							
Total HpCDF	82.8							
DL - Sample specifc esti	imated detection limit				CL- Lower control limit - upper control limi	t 		

EMPC - Estimated maximum possible concentration

The results are reported in dry weight. The sample size is reported in wet weight.

Min-The TEQ is calculated using zero for the concentration of congeners that are not detected.

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DATA QUALIFIERS & ABBREVIATIONS

B This compound was also detected in the method blank

Conc. Concentration

CRS Cleanup Recovery Standard

D Dilution

DL Detection Limit

E The associated compound concentration exceeded the calibration range of the

instrument

H Recovery and/or RPD was outside laboratory acceptance limits

I Chemical Interference

IS Internal Standard

J The amount detected is below the Reporting Limit/LOQ

K EMPC (specific projects only)

LOD Limit of Detection

LOQ Limit of Quantitation

M Estimated Maximum Possible Concentration (CA Region 2 projects only)

MDL Method Detection Limit

NA Not applicable

ND Not Detected

OPR Ongoing Precision and Recovery sample

P The reported concentration may include contribution from chlorinated diphenyl

ether(s).

Q The ion transition ratio is outside of the acceptance criteria.

RL Reporting Limit

TEQ Toxic Equivalency

U Not Detected (specific projects only)

Unless otherwise noted, solid sample results are reported in dry weight. Tissue samples are reported in wet weight.

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Vista Analytical Laboratory Certifications

Accrediting Authority	Certificate Number
Alaska Department of Environmental Conservation	17-013
Arkansas Department of Environmental Quality	19-013-0
California Department of Health – ELAP	2892
DoD ELAP - A2LA Accredited - ISO/IEC 17025:2005	3091.01
Florida Department of Health	E87777-23
Hawaii Department of Health	N/A
Louisiana Department of Environmental Quality	01977
Maine Department of Health	2018017
Massachusetts Department of Environmental Protection	N/A
Michigan Department of Environmental Quality	9932
Minnesota Department of Health	1521520
New Hampshire Environmental Accreditation Program	207718-В
New Jersey Department of Environmental Protection	190001
New York Department of Health	11411
Oregon Laboratory Accreditation Program	4042-010
Pennsylvania Department of Environmental Protection	016
Texas Commission on Environmental Quality	T104704189-19-10
Vermont Department of Health	VT-4042
Virginia Department of General Services	10272
Washington Department of Ecology	C584-19
Wisconsin Department of Natural Resources	998036160

Current certificates and lists of licensed parameters are located in the Quality Assurance office and are available upon request.

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NELAP Accredited Test Methods

MATRIX: Air	
Description of Test	Method
Determination of Polychlorinated p-Dioxins & Polychlorinated	EPA 23
Dibenzofurans	
Determination of Polychlorinated p-Dioxins & Polychlorinated	EPA TO-9A
Dibenzofurans	

MATRIX: Biological Tissue							
Description of Test	Method						
Tetra- through Octa-Chlorinated Dioxins and Furans by Isotope	EPA 1613B						
Dilution GC/HRMS							
Brominated Diphenyl Ethers by HRGC/HRMS	EPA 1614A						
Chlorinated Biphenyl Congeners in Water, Soil, Sediment, and Tissue	EPA 1668A/C						
by GC/HRMS							
Pesticides in Water, Soil, Sediment, Biosolids, and Tissue by	EPA 1699						
HRGC/HRMS							
Perfluorinated Alkyl Acids in Drinking Water by SPE and LC/MS/MS	EPA 537						
Polychlorinated Dibenzo-p-Dioxins and Polychlorinated Dibenzofurans by	EPA 8280A/B						
GC/HRMS							
Polychlorinated Dibenzodioxins (PCDDs) and Polychlorinated	EPA						
Dibenzofurans (PCDFs) by GC/HRMS	8290/8290A						

MATRIX: Drinking Water						
Description of Test	Method					
2,3,7,8-Tetrachlorodibenzo- p-dioxin (2,3,7,8-TCDD) GC/HRMS	EPA					
	1613/1613B					
1,4-Dioxane (1,4-Diethyleneoxide) analysis by GC/HRMS	EPA 522					
Perfluorinated Alkyl Acids in Drinking Water by SPE and LC/MS/MS	EPA 537					
Perfluorinated Alkyl Acids in Drinking Water by SPE and LC/MS/MS	ISO 25101 2009					

MATRIX: Non-Potable Water	
Description of Test	Method
Tetra- through Octa-Chlorinated Dioxins and Furans by Isotope	EPA 1613B
Dilution GC/HRMS	
Brominated Diphenyl Ethers by HRGC/HRMS	EPA 1614A
Chlorinated Biphenyl Congeners in Water, Soil, Sediment, and Tissue	EPA 1668A/C
by GC/HRMS	
Pesticides in Water, Soil, Sediment, Biosolids, and Tissue by HRGC/HRMS	EPA 1699
Perfluorinated Alkyl Acids in Drinking Water by SPE and LC/MS/MS	EPA 537
Dioxin by GC/HRMS	EPA 613
Polychlorinated Dibenzo-p-Dioxins and Polychlorinated	EPA 8280A/B
Dibenzofurans by GC/HRMS	
Polychlorinated Dibenzodioxins (PCDDs) and Polychlorinated	EPA
Dibenzofurans (PCDFs) by GC/HRMS	8290/8290A

MATRIX: Solids	
Description of Test	Method
Tetra-Octa Chlorinated Dioxins and Furans by Isotope Dilution GC/HRMS	EPA 1613
Tetra- through Octa-Chlorinated Dioxins and Furans by Isotope Dilution GC/HRMS	EPA 1613B
Brominated Diphenyl Ethers by HRGC/HRMS	EPA 1614A
Chlorinated Biphenyl Congeners in Water, Soil, Sediment, and Tissue by GC/HRMS	EPA 1668A/C
Pesticides in Water, Soil, Sediment, Biosolids, and Tissue by HRGC/HRMS	EPA 1699
Perfluorinated Alkyl Acids in Drinking Water by SPE and LC/MS/MS	EPA 537
Polychlorinated Dibenzo-p-Dioxins and Polychlorinated	EPA 8280A/B
Dibenzofurans by GC/HRMS	
Polychlorinated Dibenzodioxins (PCDDs) and Polychlorinated	EPA
Dibenzofurans (PCDFs) by GC/HRMS	8290/8290A

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ANCHOR OEA 1201 3rd Avenue Suite 2600 Seattle, WA 98101

ENVIRONMENTAL SAMPLE CHAIN OF CUSTODY

200 2434

1.200

COC ID:

VISTA-20201107-144831

Sample Custodian:

CO

POC: * Delaney Peterson (360-715-2707)

Project:

GascoSiltronic: US Moorings

1605 Cornwall Avenue, Bellingham, WA 98225

Client:

NW Natural

VISTA

	1605 Cornwall Avenue, Bellinghar	n, WA	A 98225	Client:	NVV	Natural			Lab:	VISTA	
COC Sample Numbe	Field Sample ID	Type	Matrix	Collecte Date	ed _Time	# Containers	Lab QC*	Test Request	Method	TAT**	Preservativ
001	USMPDI-021SC-A-01-02-201107	N	SE	11/07/2020	11:00	1					
			•	_			•	Dioxin/Furans	E1613B	30	4°C
								Total solids (VISTA)	SM2540G	30	4°C
002	USMPDI-021SC-A-02-03-201107	N	SE	11/07/2020	11:00	1					
	<u> </u>		_	•				Dioxin/Furans	E1613B	30	4°C
								Total solids (VISTA)	SM2540G	30	4°C
003	USMPDI-021SC-A-03-04-201107	N	SE	11/07/2020	11:00	1	П				
			_					Dioxin/Furans	E1613B	30	4°C
								Total solids (VISTA)	SM2540G	30	4°C
004	USMPDI-021SC-A-04-05-201107	N	SE	11/07/2020	11:00	2	\square				
			_					Dioxin/Furans	E1613B	30	4°C
-,								Total solids (VISTA)	SM2540G	30	4°C
005	USMPDI-023SC-A-01-02-201107	N	SE	11/07/2020	8:45	1					
				<u> </u>				Dioxin/Furans	E1613B	30	4°C
								Total solids (VISTA)	SM2540G	30	4°C
006	USMPDI-023SC-A-02-03-201107	N	SE	11/07/2020	8:45	1					
			•	·				Dioxin/Furans	E1613B	30	4°C
								Total solids (VISTA)	SM2540G	30	4°C
007	USMPDI-023SC-A-03-04-201107	N	SE	11/07/2020	8:45	1					
		Т						Dioxin/Furans	E1613B	30	4°C
Co	mment:										
		1									
	ature Signa purilib	10	uRW	Relinquis				Received By: Signature	Relinquished By Signature	Received By: Signature	
- 1	Name Print Name				e			Print Name	Print Nama	Print Name	
Com		AL		Company				Company	Company	Company	
1		10		Di 29 Date/Tima				Date/Time	Date/Time	Date/Time	

Date Printed: 11/7/2020

^{*} Lab QC Requested for sample when box is checked ** TAT = Turn Around Time in DAYS # POC = Project Point of Contact

ENVIRONMENTAL SAMPLE CHAIN OF CUSTODY 1.20

COC ID:

VISTA-20201107-144831

POC: "	Delaney Peterson (360-715-2707)
. 00.	

POC: "	Delaney Peterson (360-715-2707)			Project:	Gasco	Siltro	nic: U	S Moorings 3.9	Sample Custodian:	CO	
	1605 Cornwall Avenue, Bellingham	WA	98225	Client:	NW N	atural			Lab:	VISTA	
Sample	Field Sample ID	Sample	Matrix	Collecte		# Containers	Lab QC*	Test Request	Method	TAT**	Preservative
007	USMPDI-023SC-A-03-04-201107	N	SE	11/07/2020		1		"是我们是我们的一个人,我们们们			
								Total solids (VISTA)	SM2540G	30	4°C
008	USMPDI-023SC-A-04-05-201107	N	SE	11/07/2020	8:45	1					
000		ſ				<u> </u>		Dioxin/Furans	F1613B	T 30	4°C
									SM2540G	30	4°C
009	USMPDI-1023SC-A-02-03-201107	FD	SE	11/07/2020		1				The Second Second	ATT SELECT
700		1	-					Dioxin/Furans	E1613B	30	4°C
•								Total solids (VISTA)	SM2540G	30	4°C
010	USMPDI-056SC-A-01-02-201107	N	SE	11/07/2020	13:30	1					201213-711-72
0 10 1		+						Dioxin/Furans	E1613B	30	4°C
									SM2540G	30	4°C
011	USMPDI-056SC-A-02-03-201107	N	SE	11/07/2020	13:30	1	П			No State	100
	-							Dioxin/Furans	E1613B	30	4°C
								Total solids (VISTA)	SM2540G	30	4°C
012	USMPDI-056SC-A-03-04-201107	N	SE	11/07/2020	13:30	1					
								Dioxin/Furans	E1613B	30	4°C
								Total solids (VISTA)	SM2540G	30	4°C
013	USMPDI-056SC-A-04-05-201107	N	SE	11/07/2020	13:30	1				AND SECTION	
,								Dioxin/Furans	E1613B	30	4°C
								Total solids (VISTA)	SM2540G	30	4°C
Comm	ent:										
		42	W.W	Signature	ned Ry:	_		Received By: Signature	Relicquished By: Signature	Received By: Signature	
Print Nar	Print Mante VIII	W	Rill	cht Print Name				Print Name	Print Name	Print Name	
Company		H_		Company				Company	Company	Company	
Date/Tim	· 11/9/26 0836 Date/Time 11/	10/2	0 10	Date/Time				Date/Time	Date/Time	Date/Time	
	012 Commit Relingi Signaturi Print Nar Company	1605 Cornwall Avenue, Bellingham, COC Sample Number Field Sample ID 007 USMPDI-023SC-A-03-04-201107 008 USMPDI-023SC-A-04-05-201107 009 USMPDI-1023SC-A-02-03-201107 010 USMPDI-056SC-A-01-02-201107 011 USMPDI-056SC-A-03-04-201107 012 USMPDI-056SC-A-03-04-201107 Comment: Rellinguished By Signature Signature Signature Signature Signature Print Name Company C	1605 Cornwall Avenue, Bellingham, WA Sample Field Sample ID COC Sample Field Sample ID 007 USMPDI-023SC-A-03-04-201107 N 008 USMPDI-023SC-A-04-05-201107 N 009 USMPDI-1023SC-A-04-05-201107 N 010 USMPDI-056SC-A-01-02-201107 N 011 USMPDI-056SC-A-01-02-201107 N 012 USMPDI-056SC-A-03-04-201107 N 013 USMPDI-056SC-A-04-05-201107 N Comment: Relinquished RV Signature Signa	1605 Cornwall Avenue, Bellingham, WA 98225 CCC Sample Number Field Sample ID	1605 Cornwall Avenue, Bellingham, WA 98225 Client:	1605 Cornwall Avenue, Bellingham, WA 98225 Client: NW N	1605 Cornwall Avenue, Bellingham, WA 98225 Client: NW Natural	1605 Cornwall Avenue, Bellingham, WA 98225 Client: NW Natural	Project: Cascosilitrinic Cascosilitric Cas	Delaney Peterson (360-715-2/07)	Delane Peterson (360-11-2707) Total Solida (VISTA) SM2540G 30

* Lab QC Requested for sample when box is checked ** TAT = Turn Around Time in DAYS # POC = Project Point of Contact

Page 2 of 2

Date Printed: 11/7/2020



Sample Log-In Checklist

						Pa	ıge#_		of	<u>-</u>
Vista Work Orde	r#: <u>2008</u>	2434						Stel		_
Samples	Date/Tim	е		Initials:		Loca	tion:	WR.	1	
Arrival:	1111120	0	921	₩ X		Shelt	//Rack	: <u>/</u>	IA_	
Delivered By:	FedEx	UPS	On Tra	ic GLS	DHI	L	Hand Delive	-	Oth	ner ·
Preservation:	Clo	e	Blu	ue Ice		chni ce	Dry	Ice	No	ne
Temp °C: 1.2	(uncorre	ected)	robe use			Ther	mome	ter ID:	(D -	3
Temp °C: \ . 7	(correct	ed))	111611		———	<u> </u>	
	10 A 1 1 1 1		的包约	世 为 智 智 等		是文章	17.14	YES	NO	NA
Shipping Contain	er(s) Intact	?				K abot Vilori		√		
Shipping Custody										V
Airbill of	3 Trk #	<u> </u>	3138	970	٥					
Shipping Docume	entation Pro	esent?								
Shipping Contain	Shipping Container Vista Client Retain Dispose							oose		
Chain of Custody / Sample Documentation Present?										
Chain of Custody / Sample Documentation Complete?										
Holding Time Acc	ceptable?									V
	Date/Tim	е		Initials:		Loca	tion:	WR	-1 .	
Logged In:	11/10/20){1	123	KS		Shel	f/Rack	: <u>Н-</u>	3_	

Comments:

ID.: LR - SLC

Rev No.: 6

COC Anomaly/Sample Acceptance Form completed?

Rev Date: 07/16/2020

Page: 1 of 1



Sample Log-In Checklist

						Pa	nge # _	2	of <u>2</u>	_
Vista Work Orde	r#: <u>2008</u>	2434				T/	AT	std		_
Samples	Date/Time	e		Initials:		Loca	tion:	U	112-2	2
Arrival:	11/10/9	20 K	0,00	ille)	Shelf	f/Rack	:/	J4	
Delivered By:	FedEx	UPS	On Tra	c GLS	_ DHI		Hand Deliver	i t	Oth	
Preservation:	lce		Blu	ue Ice	Ted	hni e	Dry	Ice	No	ne
·	Temp °C: 3,3 (uncorrected)								— ろ	
Temp °C: 3,3 (corrected) Probe used: Y (N) Thermometer ID: 32-3										
D. 新文学 · 新文学 · D.		松 草 力强度						VEC	410	NA
		TELEVISION I					上上生意力	TES	NO	NA
Shipping Contain	er(s) Intact	?						,	_	
Shipping Custod	y Seals Inta	ct?								
Airbill 34	ろ Trk#	<i>†</i> 77	20 31	39 ois	7			V	1	
Shipping Docume	entation Pre	esent?						0	1	
Shipping Container Vista Clien Retain Return Dispose							oose			
Chain of Custody / Sample Documentation Present?										
Chain of Custody / Sample Documentation Complete?										
Holding Time Ac	ceptable?									
Logged In:	Date/Tim	е		Initials:		Loca	tion:	WP	2	
Logged III.	11/10/20	·	223	de?) 	Shel	f/Rack	: <u>H</u>	-3_	

Comments:

ID.: LR - SLC

hev No.: 6

COC Anomaly/Sample Acceptance Form completed?

Rev Date: 07/16/2020

Page: 1 of 1

CoC/Label Reconciliation Report WO# 2002434

	LabNumber	CoC Sample ID	- 2	SampleAlias	Sample Date/Time		Container	BaseMatrix C	ample comments
C?	2002434-01	A USMPDI-021SC-A-01-02-201107	A		07-Nov-20 11:00	回	Amber Glass, 120 mL	Solid	
T	2002434-02	A USMPDI-021SC-A-02-03-201107	Ø		07-Nov-20 11:00	☐ O	Amber Glass, 120 mL	Solid	
	2002434-03	A USMPDI-021SC-A-03-04-201107	d		07-Nov-20 11:00	Q	Amber Glass, 120 mL	Solid	
1	2002434-04	A USMPDI-021SC-A-04-05-201107	Ø		07-Nov-20 11:00	Image: Control of the	Amber Glass, 120 mL	Solid D	OUP
C	2002434-04	B USMPDI-021SC-A-04-05-201107	Q	新 尼(10)。	07-Nov-20 11:00	Q	Amber Glass, 120 mL	Solid I	OUP
T	2002434-05	A USMPDI-023SC-A-01-02-201107	Ø		07-Nov-20 08:45	Ø	Amber Glass, 120 mL	Solid	
	2002434-06	A USMPDI-023SC-A-02-03-201107	Image: Control of the		07-Nov-20 08:45	Q	Amber Glass, 120 mL	Solid	
	2002434-07	A USMPDI-023SC-A-03-04-201107	Ø		07-Nov-20 08:45	\square	Amber Glass, 120 mL	Solid	- Processed methods
- [2002434-08	A USMPDI-023SC-A-04-05-201107	Ø		07-Nov-20 08:45	d	Amber Glass, 120 mL	Solid	
1	2002434-09	A USMPDI-1023SC-A-02-03-201107	Ø		07-Nov-20 00:00	□	Amber Glass, 120 mL	Solid	
C?	2002434-10	A USMPDI-056\$C-A-01-02-201107			07-Nov-20 13:30	回	Amber Glass, 120 mL	Solid	1490
T	2002434-11	A USMPDI-056SC-A-02-03-201107	☑´		07-Nov-20 13:30	प	Amber Glass, 120 mL	Solid	
	2002434-12	A USMPDI-056SC-A-03-04-201107	N		07-Nov-20 13:30		Amber Glass, 120 mL	Solid	
,	2002434-13	A USMPDI-056SC-A-04-05-201107	Ø		07-Nov-20 13:30	Q	Amber Glass, 120 mL	Solid	

Checkmarks indicate that information on the COC reconciled with the sample label. Any discrepancies are noted in the following columns.

	Yes	No	NA	Comments:
Sample Container Intact?	/			No collection time listed on CoC
Sample Custody Seals Intact?			~	c1= cooler 1
Adequate Sample Volume?	~			cz=cooler 3
Container Type Appropriate for Analysis(es)				
Preservation Documented: Na2S2O3 Trizma None Other		/	/	
If Chlorinated or Drinking Water Samples, Acceptable Preservation?			/	

Verifed by/Date: KS 11/11/20

Printed: 11/11/2020 6:43:29AM

2002434

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Work Order 2002434

EXTRACTION INFORMATION

Work Order 2002434 Page 34 of 955

Process Sheet

Workorder: 2002434

Prep Expiration: 2021-11-07

Client: Anchor QEA, LLC

Workorder Due: 10-Dec-20 00:00

TAT: 30

Method: 1613 Full List Matrix: Solid

Client Matrix: Sediment Also run: Percent Solids Prep Batch: BOL0016

Prep Data Entered:

Date and Initials

Initial Sequence: SULU024R

LabSampleID	Recon	ClientSampleID	Date Received	Location	Comments
2002434-01 4	₫ ι	JSMPDI-021SC-A-01-02-201107	10-Nov-20 10:08	WR-2 H-3	
2002434-02	1	JSMPDI-021SC-A-02-03-201107	10-Nov-20 10:08	WR-2 H-3	
2002434-03	✓ (JSMPDI-021SC-A-03-04-201107	10-Nov-20 10:08	WR-2 H-3	
2002434-04	7 (JSMPDI-021SC-A-04-05-201107	10-Nov-20 10:08	WR-2 H-3	DUP
2002434-05	7	JSMPDI-023SC-A-01-02-201107	10-Nov-20 10:08	WR-2 H-3	
2002434-06	≠ ι	JSMPDI-023SC-A-02-03-201107	10-Nov-20 10:08	WR-2 H-3	
2002434-07	1	JSMPDI-023SC-A-03-04-201107	10-Nov-20 10:08	WR-2 H-3	
2002434-08	ر کا	JSMPDI-023SC-A-04-05-201107	10-Nov-20 10:08	WR-2 H-3	
2002434-09	7	JSMPDI-1023SC-A-02-03-201107	10-Nov-20 10:08	WR-2 H-3	
2002434-10	ا ک	JSMPDI-056SC-A-01-02-201107	10-Nov-20 10:08	WR-2 H-3	
2002434-11	7	JSMPDI-056SC-A-02-03-201107	10-Nov-20 10:08	WR-2 H-3	
2002434-12	± (JSMPDI-056SC-A-03-04-201107	10-Nov-20 10:08	WR-2 H-3	
2002434-13	1	JSMPDI-056SC-A-04-05-201107	10-Nov-20 10:08	WR-2 H-3	

WO Comments: 1613: 10g dw

Pre-Prep Check Out: CHT 11/13/70 Pre-Prep Check In: CHT 1113/20

Prep Check Out: RP 12/03/20 Prep Check In: PR 12/03/22

Prep Reconciled Initals/Date: CHT (\113/20

Spike Reconciled Initals/Date R-R 12/03/20_

Page 1 of 1

Work Order 2002434

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PREPARATION BENCH SHEET

26.1.0.11	
Matrix: Solid	B0L0016
Method: 1613 Full List	Duenand using UDMS

Chemist: RR

Prep Date/Time: 02-Dec-20 14:13

Prepared using: HRMS - Soxhlet

						Со	lumn Packer:						EU 12/05/20					
Sox	VISTA Sample ID	G Eqv	Sample Amt.	IS/NS CHEM/WIT DATE		CRS/PS CHEM/WIT DATE		AP CHEM/ DATE			ABSG CHEM/			AA CHEM/		Florisil CHEM/		S L/WIT
			(g)								DATE		DATE		DATE		DATE	
Al	B0L0016-BLK1	124	(10.00)	PR 12/03/20		QO	EUI 12/04/20		NA		00 12/05/20		010 12/05/20		00 12/05/21		aome	12.105/20
A2	B0L0016-BS1	1	(10.00)				T	, ,	<u> </u>		منا	1	Ī	-1		41	1	
A3	B0L0016-DUPI 2002434-04	11.59	[1.62															186
	2002431-05	18.70	18.70								bro	wn						6
15	2002431-06	17.63	17.83								,	ſ						
A6	2002431-07	16.65	16.82															
A7	2002431-08	17.81	17.83															
A8	2002431-09	17,72	17.78															
Ag	2002434-01	14.89	14.97															
Ato	2002434-02	13.47	[3,5]								7			į				
AU	2002434-03	13.91	13.98															
A12	2002434-04	11,59	11.68															
BI	2002434-05	14,29	14,53															
B2	2002434-06	13.61 13.62																
132					\downarrow		4			W		V -		V		V		
IS:	20FILOI, LONE	. 1	cle Time	APP: SE	_	X SDS	Check Out: Chemist/Date:	P 12/	3/20	Soxhlet Si	iphoned Date:	Not	es:	Approa	Chec	1 arme	ss on	soxher
							Check In: Chemist/Date: RR 12/03/2				<u> </u>					- ,		04/20
rs/cks.zvcv rov/tomo							I -			Vial Transfer								
13. W/100 / 100 / 12/04/20						20ML	'				Chemist/Date:							
Diox/F PCB PAH PEST PBDE HCB 1/03/20 20ML 20/12/05/20																		

1 = Sample approached dryness on rotovap

2 = Sample bumped on rotovap; lost < 5%

3 = Sample poured through Na2SO4 to remove water 4 = Precipitate present at Final Volume

Comments:

5 = Sample homogenized in secondary container

6 = Sample clogged during extaction; pipetted and used Nitrogen to assist

7 = Sohxlet approached dryness

PREPARATION BENCH SHEET

Matrix: Solid B0L0016

Chemist: 212

Prepared using: HRMS - Soxhlet

Prep Date/Time: 02-Dec-20 14:13

					Column Packer:			EU 12/05/20	,	·
Sox	VISTA Sample ID	G Eqv	Sample Amt. (g)	IS/NS CHEM/WIT DATE	CRS/PS CHEM/WIT DATE	AP CHEM/ DATE	ABSG CHEM/ DATE	AA CHEM/ DATE	Florisil CHEM/ DATE	RS CHEM/WIT DATE
BY	2002434-08	11.70	11.74	RPWE12/03/20	06 8111/2/04/120	NA	00 12/05/20	U1 12/05/20	00 12/05/20	00 ME 12/05/20
B5	2002434-09	13.21	13.30		<u>-</u>	<u> </u>	-	+ 1		T'/
B6	2002434-10	20.25	20.63							
B7	2002434-11		20.42				Jellan			
138	2002434-12	17.89	18,12				187			-
139	2002434-13	17,35	17.65	J J		\	1	4	V	V

		<u> </u>		
IS: 20F1101, 10ML Cycle Time	APP: SEFUN SOX SDS	Check Out:	Soxhlet Siphoned	Notes:
	SOLV: Tolyene	Chemist/Date: RP12/03/20	Chemist/Date:	
- \ \\\(\omega_1\omega	Other NA	Check In: Chemist/Date: PP 12/03/20		
PS/CRS: 20E0701, 10ml 4) 1215	Other	Chemist/Date: Fr 2/03/N	10 100 C	
2-110522 18 1 11 000 000	Final Volume(s) C14	Balance ID: HRMS-08	Vial Transfer	
RS: 20H2502,10,11 (No) Stop Date/Time 12/04/20	7 mm volume(s)		Chemist/Date:],
	ZOUL		ao 12/05/2	Y I
Giox/F PCB PAH PEST PBDE HCB - 530				

Comments:

- 3 = Sample poured through Na2SO4 to remove water
- 5 = Sample homogenized in secondary container
- 6 = Sample clogged during extaction; pipetted and used Nitrogen to assist
 - 7 = Sohxlet approached dryness

Method: 1613 Full List

^{1 =} Sample approached dryness on rotovap

^{2 =} Sample bumped on rotovap; lost < 5%

Batch: B0L0016 Matrix: Solid

LabNumber	WetWeight (Initial)	% Solids (Extraction Solids)	DryWeight	Final	Extracted	Ext By	Spike	SpikeAmount	ClientMatrix	Analysis
2002431-05	18.7 -	53.46535	9.9980	20	03-Dec-20 14:13	RR	<u> </u>		Sediment	1613 Full List
2002431-06	17.83	56.72131	10.1134	20	03-Dec-20 14:13	RR			Sediment	1613 Full List
2002431-07	16.82	60.06006	10.1021	20	03-Dec-20 14:13	RR			Sediment	1613 Full List
2002431-08	17.83 /	56.13577	10.0090	20	03-Dec-20 14:13	RR			Sediment	1613 Full List
2002431-09	17.78 /	56.43565	10.0343	20	03-Dec-20 14:13	RR			Sediment	1613 Full List
2002434-01	14.97 /	67.14876	10.0522 🗸	20	03-Dec-20 14:13	RR			Sediment	1613 Full List
2002434-02	13.51 /	74.21874	10.0270	20	03-Dec-20 14:13	RR			Sediment	1613 Full List
2002434-03	13.98 /	71.91651	10.0539	20	03-Dec-20 14:13	RR			Sediment	1613 Full List
2002434-04	11.68	86.28761	10.0784	/ 20	03-Dec-20 14:13	RR			Sediment	1613 Full List
2002434-05	14.53 /	69.96997	10.1666	20	03-Dec-20 14:13	RR			Sediment	1613 Full List
2002434-06	13.62 /	73.45845	10.0050	20	03-Dec-20 14:13	RR			Sediment	1613 Full List
2002434-07	13.78 /	72.5777	10.0012	20	03-Dec-20 14:13	RR			Sediment	1613 Full List
2002434-08	11.74	85.4369	10.0303	/20	03-Dec-20 14:13	RR			Sediment	1613 Full List
2002434-09	13.3	75.70094	10.0682	20	03-Dec-20 14:13	RR			Sediment	1613 Full List
2002434-10	20.63	49.375	10.1861	20	03-Dec-20 14:13	RR			Sediment	1613 Full List
2002434-11	20.42 /	49.1018	10.0266	20	03-Dec-20 14:13	RR			Sediment	1613 Full List
2002434-12	18.12 /	55.88235	10.1259	20	03-Dec-20 14:13	RR			Sediment	1613 Full List
2002434-13	17.65 /	57.62711	10.1712	20	03-Dec-20 14:13	RR			Sediment	1613 Full List
B0L0016-BLK1	10			20	03-Dec-20 14:13	RR				QC
B0L0016-BS1	10			20	03-Dec-20 14:13	RR	20F0107	10		QC
B0L0016-DUP1	11.62 /	86.28761	10.0266	20 /	03-Dec-20 14:13	RR				QC

All bolded data on report verified against written benchsheet by (initial/date) 00 12/05/20

Work Order 2002434

Percent Moisture/ Percent Solids

D2216-90

BATCH ID B0K0110

Analyst: CHT

Test Code: %Moist/%Solids

Units: %

Analyte: Oven ID: 01 02

Data Entry Verified by: (Initial and Date) RR 12/02/20

HRMS-09 Inst

Date/Time IN: / Date/Time OUT 11/13/20 0:00 11/14/20 1340

	В		С	D	E	F	G	н	T.	K	L	M	N	0	P
					Intial and Date:	CHT 11/13/20	EM 11/14/20			CHT 11/13/2	0		NA	NA	CHT 11/13/20 4
Particle Size	SamptD		/	SampType	Pan Tare Wt. (gms)	Wet Pan and Sample Weight (g)	Dry Pan and Sample Weight (g)	Dry Sample Weight (g)	%Solids RawVal	Visual Inspection	CI-		pH After	Acid Added	Sample Homogenized,*
	2002434-01	A E	•	Sample	1.2900	6.1300	4.5400	3.2500	67.15	MUD 🚄	NA	NA	NA	NA	x =
	2002434-02	A		Sample	1.2700	5.1100	4.1200	2.8500	74.22	MUD	NA	NA	NA	NA	X
	2002434-03	A		Sample	1.2700	6.5400	5.0600	3.7900	71.92	MUD	NA	NA_	NA	NA	Х
	2002434-04	A		Sample	1.2700	4.2600	3.8500	2.5800	86.29	MUD	NA	NA	NA	NA	x _
	2002434-05	Α /		Sample	1.2700	4.6000	3.6000	2.3300	69.97	MUD	NA	NA	NA	NA	x
	2002434-06	A		Sample	1.2700	5.0000	4.0100	2.7400	73.46	MUD	NA	NA	NA	NA	X
	2002434-07	A		Sample	1.2800	6.7500	5.2500	3.9700	72.58	MUD	NA	NA	NA	NA	х
	2002434-08	A		Sample	1.2700	3.3300	3.0300	1.7600	85.44	MUD	NA	NA	NA	NA	X
	2002434-09	A		Sample	1.2700	5.5500	4.5100	3.2400	75.70	MUD	NA	NA	NA	NA	х
	2002434-10	A		Sample	1.2700	4.4700	2.8500	1.5800	49.38	MUD	NA	NA	NA	NA	X
	2002434-11	A		Sample	1.2700	4.6100	2.9100	1.6400	49.10	MUD	NA	NA	NA	NA	x
	2002434-12	A		Sample	1.2700	4.3300	2.9800	1.7100	55.88	MUD	NΑ	NA	NA	NA	x 1
	2002434-13	A	1	Sample	1.2600	4.8000	3.3000	2.0400	57.63	MUD J	NA	NA	NA	NA	x
										,					

^{*}Sample homogenized in sample container unless otherwise noted.

BCH_PMOIST_B0K0110.xls

12/2/2020 2:09 PM

Percent Moisture/ Percent Solids

D2216-90

BATCH ID B0K0110

		_
Analyst: CI4T	Test Code: %Moist/%Solids	
, 641		Data Entry Verified by:
Analyte:		(Initial and Date) 14
Dried at 110°C+/-5°C		· ——
Oven ID: (01) 02		

Inst H*V5-7

| Date/Time IN: Date/Time OUT | 11/13/20 | 1/14/20 | 1340 | 1340 | 1340 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 14/14/20 | 1

	В	С	D	1340	F	G	н	1	K		M,	N	0	P
					CHT 1113/20	EM 1114120			CHT	11/)	3/70		Cł	HT N/13/
Particle Size	SampID		SampType	Pan Tare Wt. (gms)	Wet Pan and Sample Weight (g)	Dry Pan and Sample Weight (g)	Dry Sample Weight (g)	%Solids RawVal	Visua Inspect	al Ci	- pH		cid	Sample Homogenized
	2002434-01	<u>A</u> .	Sample	1.29	6.13	4.54			Mud					<u> </u>
	2002434-02		Sample	1.27	5.11	4.12			T					
	2002434-03		Sample	1.27	6.54	5.06					<u> </u>		<u> </u>	
	2002434-04		Sample	1.27	4.26	3.85					<u> </u>			
	2002434-05		Sample	1.27	4.60	3.60								
	2002434-06		Sample	1.27	5.00	4.01						7		
	2002434-07		Sample	1.28	6.75	5.15						<i>X</i>		
	2002434-08		Sample	1.27	3.33	3.03					1 7			
	2002434-09		Sample	1.27	<i>5.</i> 55	4.51								
	2002434-10		Sample	1.27	4.47	2.85	/							
	2002434-11		Sample	1.27	4.61	2.91					<u>/</u>			
	2002434-12		Sample	1.27	4.33	2.98					<u> 1</u> _			
	2002434-13	↓	Sample	1.26	4 41.62 4.80	3.30	/		7					V
						_								
											1			
		_												
											,			
						'								
					•									
								_						
						_					 			
				†							 			

^{*}Sample homogenized in sample container unless otherwise noted.

BCH_PMOIST_B0K0110.xls

11/13/2020 12:44 PM

Process Sheet

Workorder: 2002434

CT 12/15/20 20

Workorder Due: 10-Dec-20 00:00

TAT: 30

Prep Expiration: 2021-11-07 Client: Anchor QEA, LLC

Method: 1613 Full List Matrix: Solid Client Matrix: Sediment Also run: Percent Solids



Prep Batch:

Initial Sequence:

SOL0075

LabSampleID	Recon ClientSampleID	Date Received	Location Comme	nts
2002424-04	UCMDDI 0316C A 01 92 201107	10-140V-20-10.00	VVIX-2 13 6	
2002434-02	USMPDI-021SC-A-02-03-201107	10-Nov-20 10:08	WR-2 H-3	= 1, sec.4:0 €0:00
2002434-03	USMPDI-021SC-A-03-04-201107	10-Nov-20 10:08	WR-2 H-3	11
2002434-04	USMPDI-021SC-A-04-05-201107	16-Nov-20 10:08	WR-2 H-3 DUP	
2002434-05	USMPDI-023SC-A-01-02-201107	10-Nov-20 10:08	WR-2 H-3	
2002434-06	USMPDI-023SC-A-02-03-201107	10-Nov-20 10:08	WR-2 H-3	
2002434-07	USMPD1-023SC-A-03-04-201107	10-Nov-20 10:08	WR-2 H-3	the fact that is defined a community of the minimum.
2002434-08	USMPDI-023SC-A-04-05-201107	10-Nov-20 10:08	WR-2 H-3	
20024 00	USMPDI-1023SC-A-02-03-201107	TU-NOV-20 TU:08	WIN-ZII-O	9.0000
2002434-10	USMPDI-056SC-A-01-02-201107	10-Nov-20 10:08	WR-2 H-3	
2002-134-11	USMPDI-056SC-A-02-03-204101	10-Nov-20 10:08	WR 9 H-3	
2002434-12	USMPDL05698-A-03-04-201107	10-Nov-20 10:08	WR-2 H-3	
£002404-13	USMFD1-03030-7-04-05-201107	19 Nov-20 10:08	WR-2 H-3	

WO	Comments:	1613:	10g	dw
----	-----------	-------	-----	----

Pre-Prep Check Out: Pre-Prep Check In:

Prep Reconciled Initals/Date: Spike Reconciled Initals/Date. HT

PREPARATION BENCH SHEET

Matrix: Solid

B0L0154

Method: 1613 Full List

Prepared using: HRMS - Soxhlet

Prep Date/Time: 22-Dec-20 06:43

					Column Packer:	NA	DG 12/23/20	JF 12/23/20	DG 12/23/20	
Sox	VISTA Sample ID	G Eqv	Sample Amt. (g)	IS/NS CHEM/WIT DATE	CRS/PS CHEM/WIT DATE	AP CHEM/ DATE	ABSG CHEM/ DATE	AA CHEM/ DATE	Florisil CHEM/ DATE	RS CHEM/WIT DATE
DI	B0L0154-BLK1	NA	(10.00)	DS AM12/22/20	DG RR 12/23/20	NA	06-12/23/20	D6_12/23/20	DG_ 12/23/20	D6 6 12/23/20
02	B0L0154-BS1	AW	(10.00)							
D3	2002434-10RE1	20.25	22.36		$\bigcup_{i=1}^{n} \bigvee_{i=1}^{n} i$		0			
DH	2002714-01	8.37	8.70				0			
D 5	2002714-02	9.06	9.21				E			
06	2002714-03	6.61	7.11		\downarrow	V	VO	V	V	
D7	2002714-04 A	6.13	6.16	V						•

_									
I:	20F1101, 10ML (V2)	Cycle Time	APP: SEFUN SOX SDS	Check Out: Of 12/22/20	Soxhlet Siphoned	Notes:	Soxhlet 0	10 12/23/20	
N	is: 20F0107, 10ml (V4)	Start Date/Time	SOLV: 1000ENE	_ · ·		(A) VVCIII	The second secon	10 00 104	/
P	s/crs: 20E0701, 10ul (Vo)	12/22/20	Other	Cheffiso Bate,	10 1949~	B Rx due to aping	dry on soxy	uet 15 142	23/20
R	s: 20H2502, 10al (V6)	Stop Date/Time	Final Volume(s) 20 M	Balance ID: HRMS-9	Vial Transfer Chemist/Date:	@ Salmon rings on AB	S6 DG 12	123/20	
2	iox/F PCB PAH PEST PBDE HCB	12/20 1000	<u> </u>		DG 12/23/20	@ Pale green w/ brawn	rings 196 12	123/20	
e	omments:	1				(E) Pale Hup and angen w	and the same of th		123/20

- 1 = Sample approached dryness on rotovap
- 2 =Sample bumped on rotovap; lost < 5%
- 3 = Sample poured through Na2SO4 to remove water
- 4 = Precipitate present at Final Volume
- 5 = Sample homogenized in secondary container
- 6 = Sample clogged during extaction; pipetted and used Nitrogen to assist
- 7 = Sohxlet approached dryness

Bátch: B0L0154

Matrix: Solid

LabNumber	WetWeight (Initial)	% Solids (Extraction Solids)	DryWeight	Final	Extracted	Ext By	Spike	SpikeAmount	ClientMatrix	Analysis
2002434-10RE1	22.36 ✓	49.375	11.0403	20 ✓	03-Dec-20 14:13	RR			Sediment	1613 Full List
2002714-01	8.7	59.73154	5.1966	20 ✓	03-Dec-20 14:13	DG			Sediment	1613 Full List
2002714-02	9.21 ✓	55.20833	5.0847	20	03-Dec-20 14:13	DG			Sediment	1613 Full List
2002714-03	7.11 🗸	75.61349	5.3761	20 🗸	03-Dec-20 14:13	DG			Sediment	1613 Full List
2002714-04	6.76	74.32647	5.0245	20	03-Dec-20 14:13	DG			Sediment	_1613 Full List
B0L0154-BLK1	10 🗸			20 <	22-Dec-20 06:43	DG				QC
B0L0154-BS1	10 🗸			20	22-Dec-20 06:43	DG	20F0107	10 🗸		QC

SAMPLE DATA – EPA METHOD 1613

Work Order 2002434 Page 44 of 955

Page 1 of 2

Dataset:

U:\VG12.PRO\Results\201211R1\201211R1-11.qld

Last Altered:

Monday, December 14, 2020 11:08:04 AM Pacific Standard Time

Monday, December 14, 2020 11:08:39 AM Pacific Standard Time Printed:

GFB 12/14/2020 C7 12/14/2020

Method: Untitled 11 Dec 2020 08:35:32

Calibration: U:\VG12.PRO\CurveDB\dbDIOXIN_1613vg12-12-03-20.cdb 04 Dec 2020 11:36:07

Name: 201211R1_11, Date: 11-Dec-2020, Time: 18:21:08, ID: B0L0016-BLK1 Method Blank 10, Description: Method Blank

	# Name_		Resp_	_] [_RA:_i	_n/y_	RRF	i loww .	Pred.RT	PRT	[Pred.RRT	_RRT	Conc.	L%Rec_i	DL_L	EMPC
1	1 2,3,7,8-	TCDD			NO	0.980	10.000	26.410		1.001				0.0160	
2	2 1,2,3,7,	8-PeCDD			NO	0.932	10.000	31.094		1.001				0.0360	
3	3 1,2,3,4,	7,8-HxCDD			NO	1.02	10.000	34.379		1.001				0.0408	
4	4 1,2,3,6,	7,8-HxCDD			NO	0.902	10.000	34.504		1.001				0.0443	
5	5 1,2,3,7,	8,9-HxCDD			NO	0.954	<i>•</i> 10.000	34.755		1.000				0.0423	
6	6 1,2,3,4,	6,7,8-HpCDD			NO	0.918	10.000	38.222		1.000				0.0429	
7	7 OCDD		6.60e2	0.86	NO	0.866	10.000	41.113	41.12	1.000	1.000	0.33070		0.165	0.331
8	8 2,3,7,8-	TCDF			NO	0.848	10.000	25.687		1.000				0.0143	
9	9 1,2,3,7,	8-PeCDF			NO	0.960	10.000	29.815		1.000				0.0305	
10	10 2.3.4.7.	8-PeCDF			NO	1.07	10.000	30.889		1.001				0.0265	
11	11 1,2,3,4,	7,8-HxCDF			NO	0.986	1 10.000	33.457		1.000		·		0.0277	
12 32 50	12 1,2,3,6,	7,8-HxCDF			NO	1.04	10.000	33.603		1.001				0.0268	
13 .7 F	13 2,3,4,6,	7,8-HxCDF			NO	1.02	10.000	34.264		1.001				0.0302	
14:	14 1,2,3,7,	8,9-HxCDF	2.29e2	0.91	YES	0.991	10.000	35.259	35.27	1.000	1.001	0.049210		0.0186	0.0422
15	15 1,2,3,4,	6,7,8-HpCDF			NO	1.05	10.000	36.835		1.000		•		0.0375	
16	16 1,2,3,4,	7,8,9-HpCDF			NO	1.18	10.000	38.828		1.000				0.0333	
17,	17 OCDF				NO	0.896	10.000	41.406		1.000				0.0584	
18	18 13C-2,3	3,7,8-TCDD	1.61e6	0.79	NO	1.06	10.000	26.383	26.38	1.030	1.030	216.57	108	0.0894	
19	19 13C-1,2	2,3,7,8-PeCDD	1.27e6	0.64	NO	0.785	10.000	31.229	31.06	1.219	1.213	229.70	115	0.106	
20 ,,	20 13C-1,2	2,3,4,7,8-HxCDD	8.69e5	1.27	NO	0.621	10.000	34.348	34.36	1.014	1.014	243.22	122	0.356	
21, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1	21 13C-1,2	2,3,6,7,8-HxCDD	9.49e5	1.26	NO	0.734	10.000	34.470	34.48	1.017	1.018	224.57	112	0.301	
22	22 13C-1,2	2,3,7,8,9-HxCDD	9.36e5	1.24	NO	0.723	10.000	34.755	34.74	1.026	1.025	224.91	112	0.306	
23	23 13C-1,2	2,3,4,6,7,8-HpCDD	6.93e5	1.04	NO	0.568	10.000	38.255	38.21	1.129	1.128	211.94	106	0.832	
24	24 13C-OC	CDD	9.22e5	0.87	NO	0.496	10.000	41.193	41.10	1.216	1.213	322.80	80.7	0.414	
25	25 13C-2,3	3.7,8-TCDF	2.18e6	0.77	NO	0.919	10.000	25.682	25.68	1.003	1.003	216.15	108	0.102	
26 3 1	, 26 13C-1,2	2,3,7,8-PeCDF	1.74e6	1.54	NO	0.715	10.000	29.938	29.81	1.169	1.164	221.76	111	0.215	
27	27 13C-2,3	3,4,7,8-PeCDF	1.68e6	1.60	NO	0.689	10.000	31.027	30.87	1.212	1.205	222.50	111	0.223	
28	28 13C-1,2	2,3,4,7,8-HxCDF	1.10e6	0.50	NO	0.873	10.000	33.453	33.45	0.987	0.987	218.95	109	0.385	
29	29 13C-1,2	2,3,6,7,8-HxCDF	1.07e6	0.51	NO	0.933	10.000	33.582	33.58	0.991	0.991	199.30	99.6	0.360	
30	30 13C-2,3	3,4,6,7,8-HxCDF	1.01e6	0.50	NO	0.843	10.000	34.250	34.24	1.011	1.011	209.01	105	0.399	
31	31 13C-1,2	2,3,7,8,9-HxCDF	9.39e5	0.50	NO	0.780	10.000	35.249	35.25	1.040	1.040	208.95	104	0.431	

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U:\VG12.PRO\Results\201211R1\201211R1-11.qld

Last Altered: Printed:

Monday, December 14, 2020 11:08:04 AM Pacific Standard Time Monday, December 14, 2020 11:08:39 AM Pacific Standard Time

Name: 201211R1_11, Date: 11-Dec-2020, Time: 18:21:08, ID: B0L0016-BLK1 Method Blank 10, Description: Method Blank

	# Name	ـــــــــــــــــــــــــــــــــــــ	<u></u> k. RA∵ k	_n/y	RRF 4	I MINOI I	- Pred.RT	ليــRT	Pred.RRT	RRT	Conc.		Dir Re-	EMPC
32	32 13C-1,2,3,4,6,7,8	8-HpCDF 6.69e5	0.43	NÓ	0.726	10.000	36.825	36.82	1.087	1.086	159.88	79.9	0.451	
33 E	🏋 33 13C-1,2,3,4,7,8,9	9-HpCDF 5.37e5	0.43	NO	0.491	10.000	38.835	38.82	1.146	1.145	189.84	94.9	0.667	- 1
34	34 13C-OCDF	1.02e6	0.88	NO	0.565	10.000	41.410	41.40	1.222	1.222	313.09	78.3	0.409	
35	35 37CI-2,3,7,8-TC	DD 7.32e5			1.22	10.000	26.378	26.39	1.030	1.031	85.613	107	0.0208	
36	🕻 36 13C-1,2,3,4-TCC	DD 1.40e6	0.80	NO	1.00	10.000	25.640	25.61	1.000	1.000	200.00	100	0.0943	
37] 37 13C-1,2,3,4-TCC	OF 2.20e6	0.78	NO	1.00	10.000	24.130	24.12	1.000	1.000	200.00	100	0.0935	
38	38 13C-1,2,3,4,6,9-l	HxCDF 1.15e6	0.51	NO	1.00	10.000	33.920	33.89	1.000	1.000	200.00	100	0.336	
39	39 Total Tetra-Dioxi	ins			0.980	10.000	24.620		0.000				0.00842	
40	40 Total Penta-Diox	dins			0.932	10.000	29.960		0.000		0.00000		0.0121	0.0403
41	41 Total Hexa-Dioxi	ins			0.902	10.000	33.635		0.000				0.0223	
42	42 Total Hepta-Diox	cins			0.918	10.000	37.640		0.000				0.0246	
43	43 Total Tetra-Fura	ns			0.848	10.000	23.610		0.000				0.00704	
44	🕻 44 1st Func. Penta-	Furans			0.960	10.000	26.930		0.000				0.00684	
45	45 Total Penta-Fura	ans			0.960	10.000	29.275		0.000				0.0135	
46.	46 Total Hexa-Fura	ns			1.02	10.000	33.555		0.000		0.00000		0.0154	0.0566
47.15	1,47 Total Hepta-Fura	ans			1.05	10.000	37.835		0.000				0.0204	

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Vista Analytical Laboratory

Dataset: U:\VG12.PRO\Results\201211R1\201211R1-11.qld

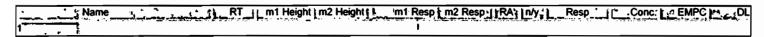
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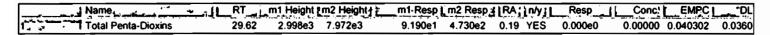
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Name: 201211R1_11, Date: 11-Dec-2020, Time: 18:21:08, ID: B0L0016-BLK1 Method Blank 10, Description: Method Blank

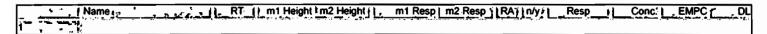
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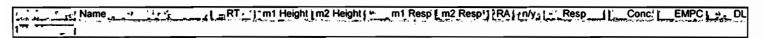
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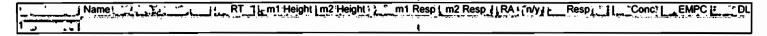
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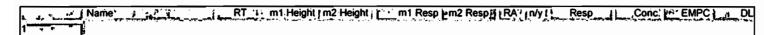
Hepta-Dioxins



Tetra-Furans



Penta-Furans function 1



Hexa-Furans

				•						
Name	RT 1	m1 Height	m2 Height,	m1 Resp	m2 Resp	IRA Iny	Resp	Conc.	'EMPC	_ ;~ DL
1 1,2,3,7,8,9-HxCDF		2.482e3						0.00000		
1 1,2,3,7,8,9-HxCDF 2 Total Hexa-Furans	35.30	1.256e3	2.180e3	4.200e1	6.328e1	0.66 YES	0.000e0	0.00000	0.014418	0.0154

Hepta-Furans

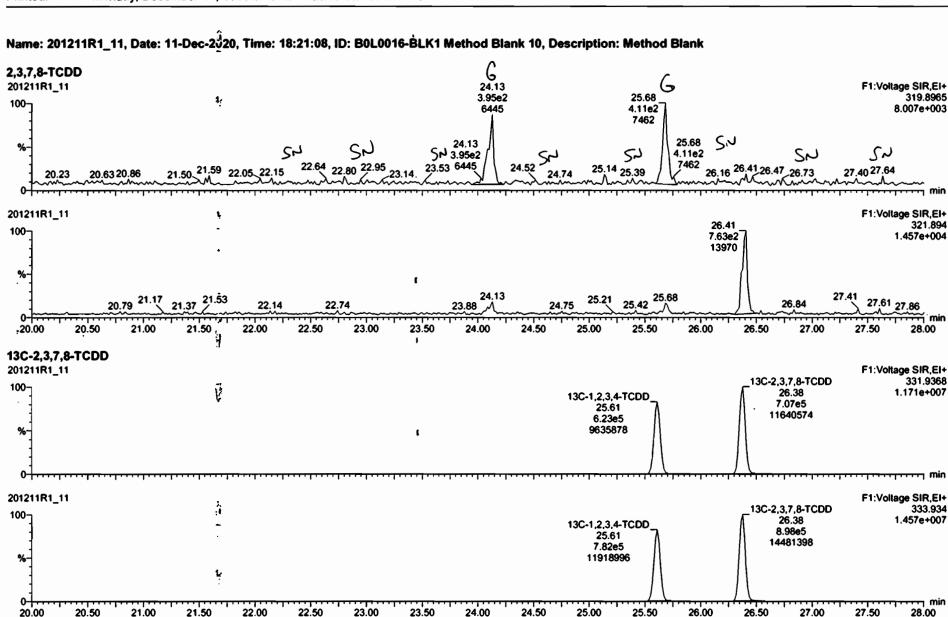
_	 - 11		-	, <u>D</u>			1 3m4 Bass) 2 Dana	110441-6-41	Door	C	EMPC DL
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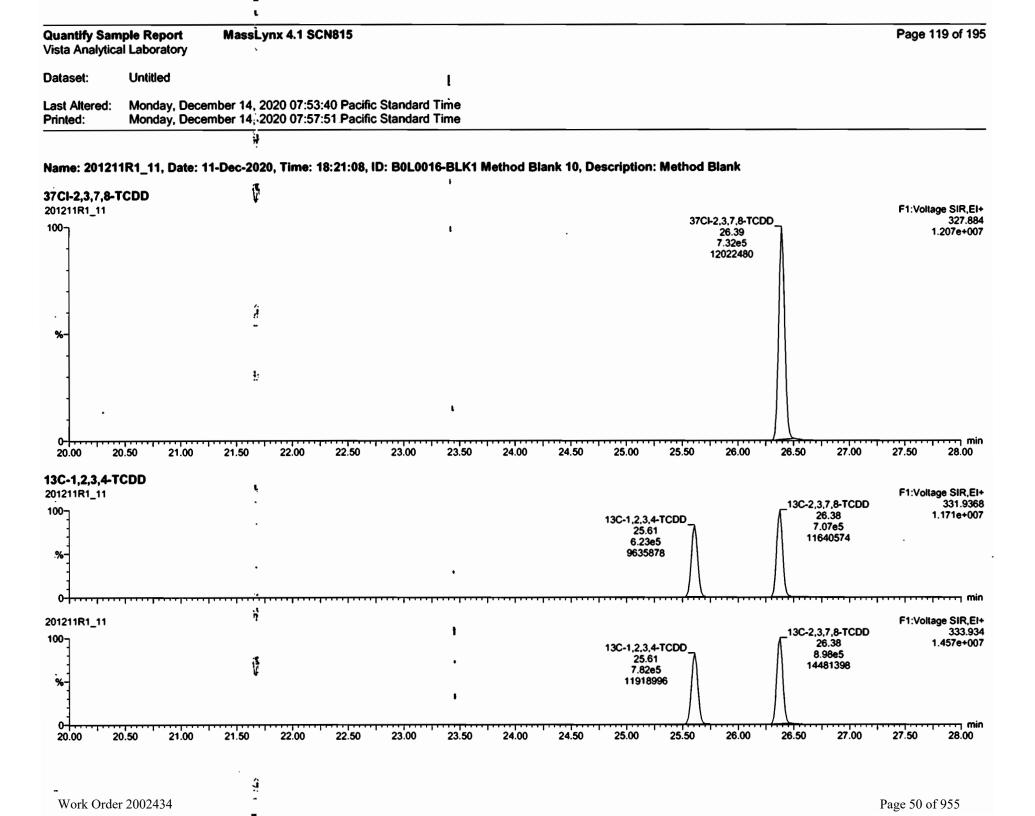
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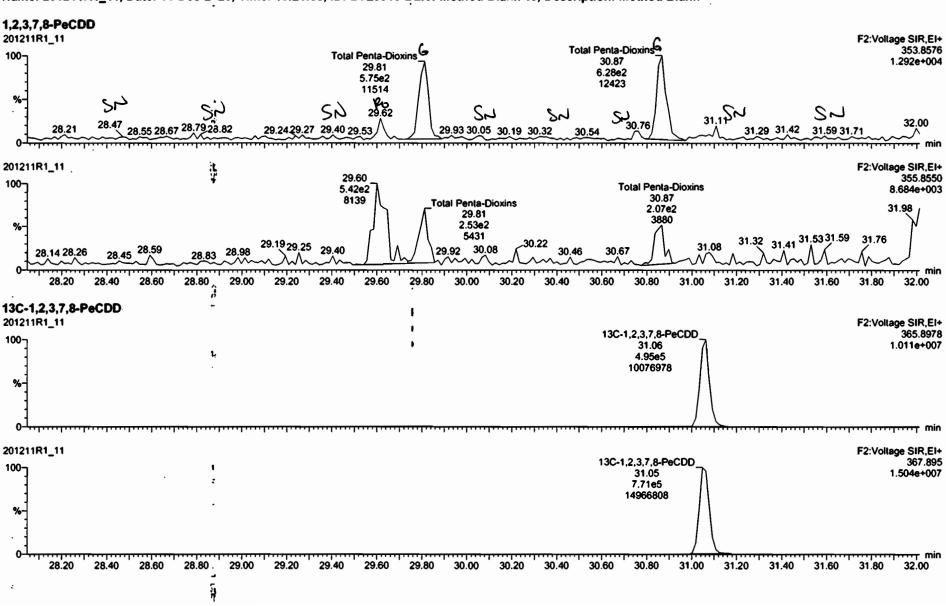
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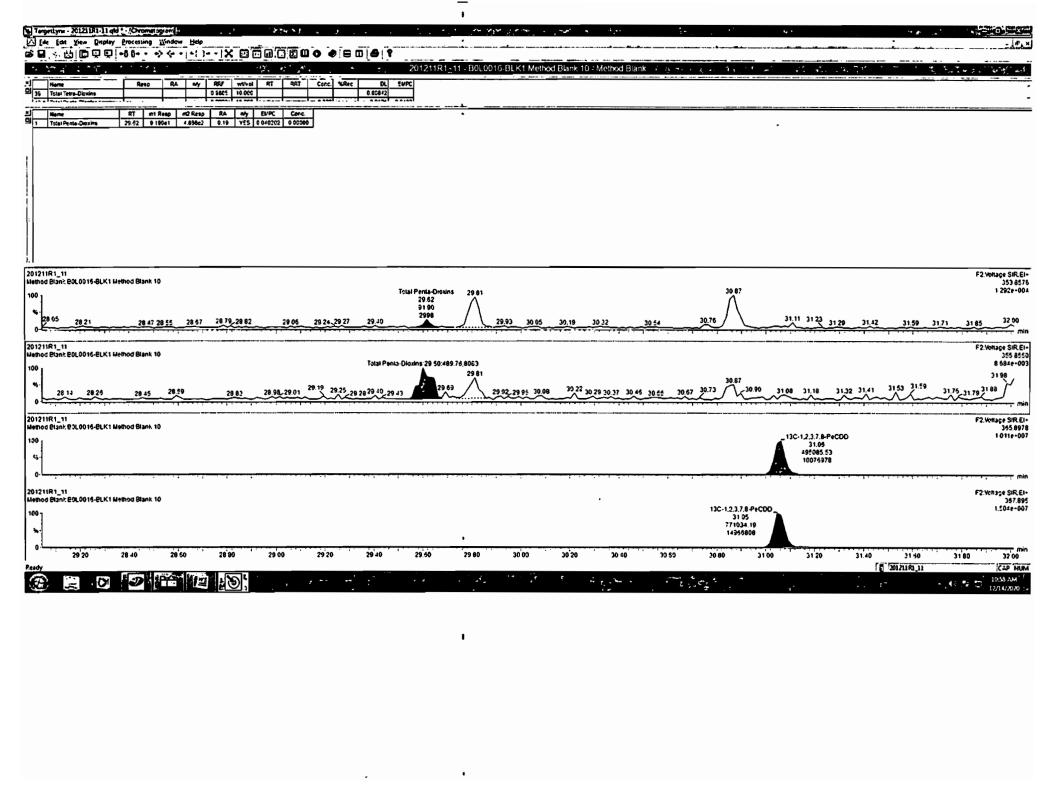


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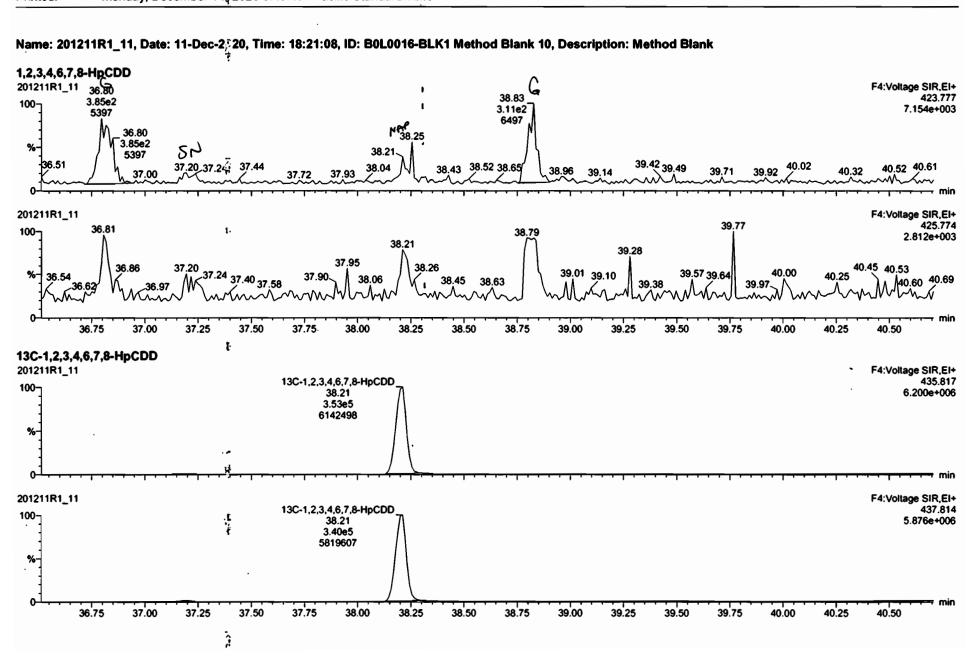
Work Order 2002434

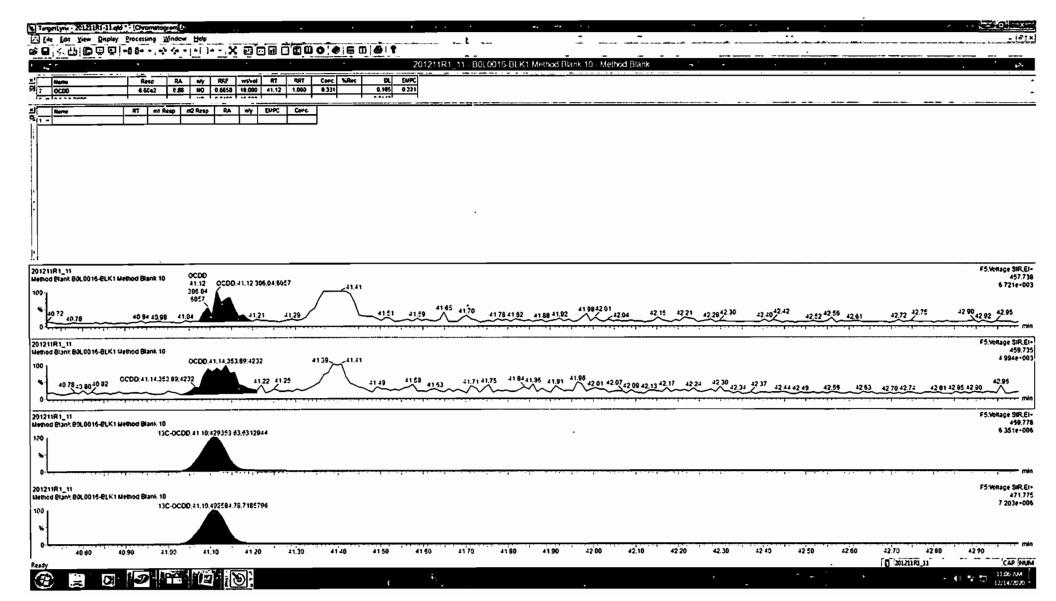
Page 53 of 955

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Monday, December 14, 2020 07:53:40 Pacific Standard Time Monday, December 14, 2020 07:57:51 Pacific Standard Time

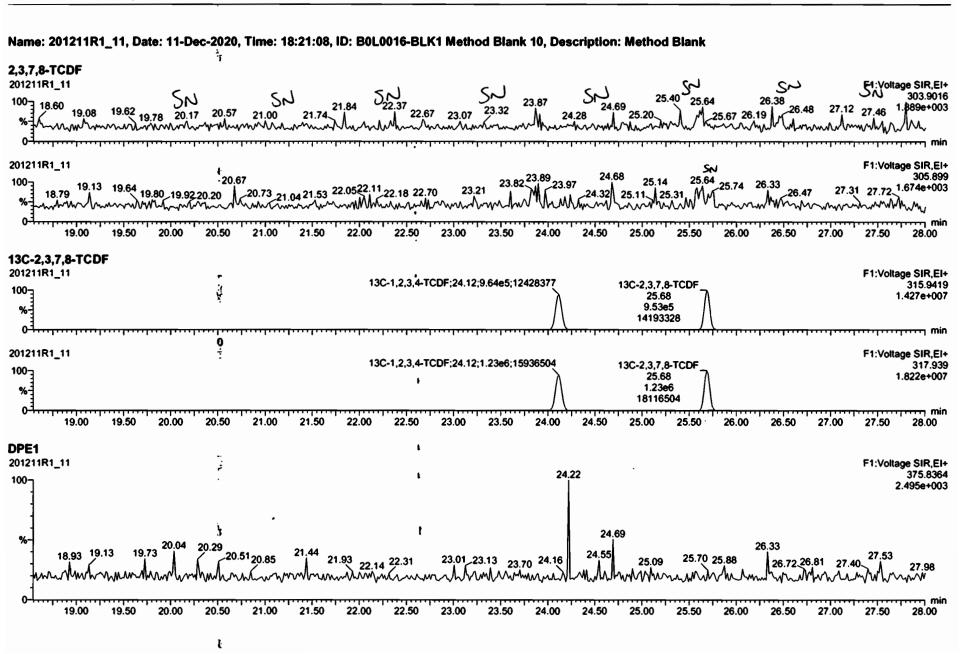




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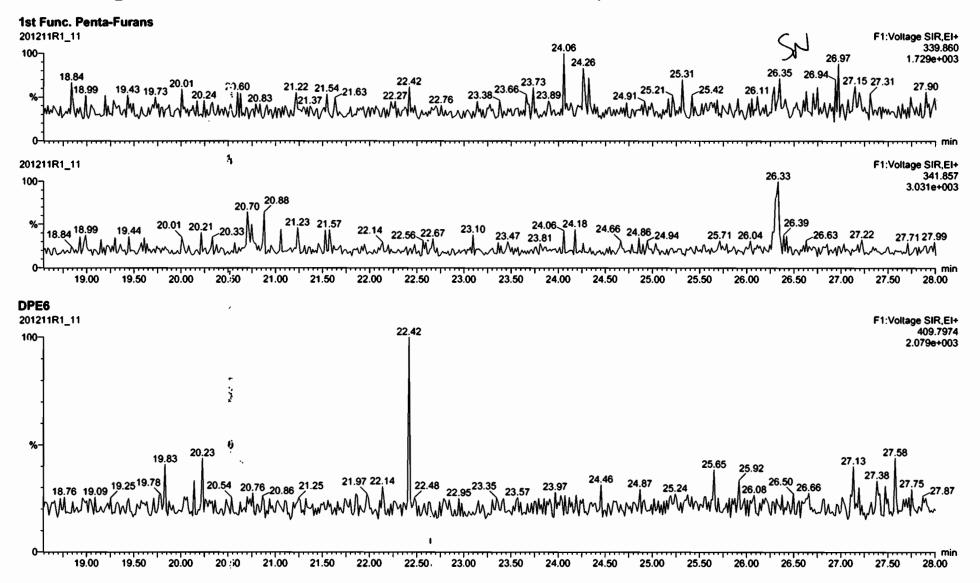
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Monday, December 14, 2020 07:53:40 Pacific Standard Time Monday, December 14, 2020 07:57:51 Pacific Standard Time

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Name: 201211R1_11, Date: 11-Dec-2020, Time: 18:21:08, ID: B0L0016-BLK1 Method Blank 10, Description: Method Blank



Quantify Sample ReportVista Analytical Laboratory

MassLynx 4.1 SCN815

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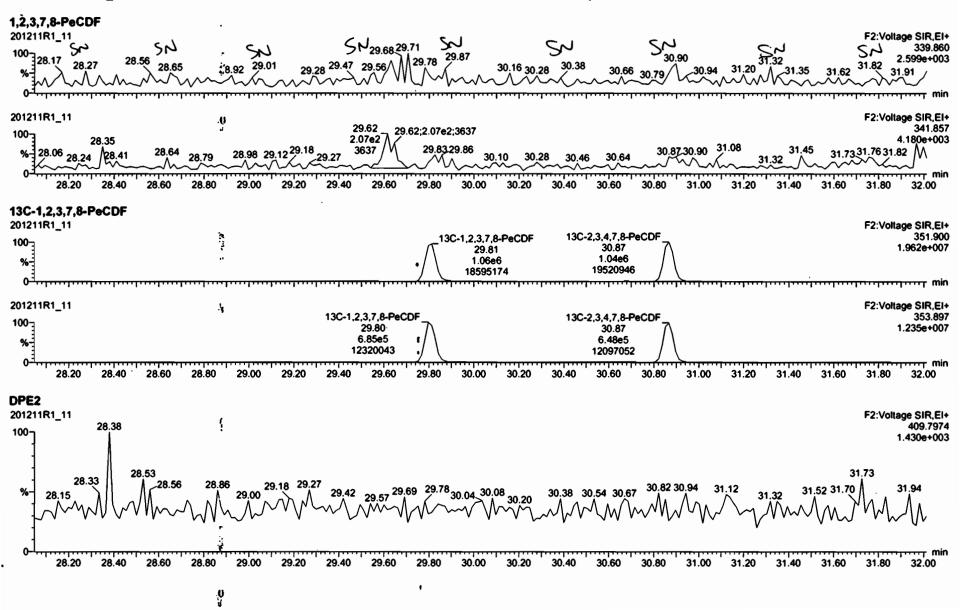
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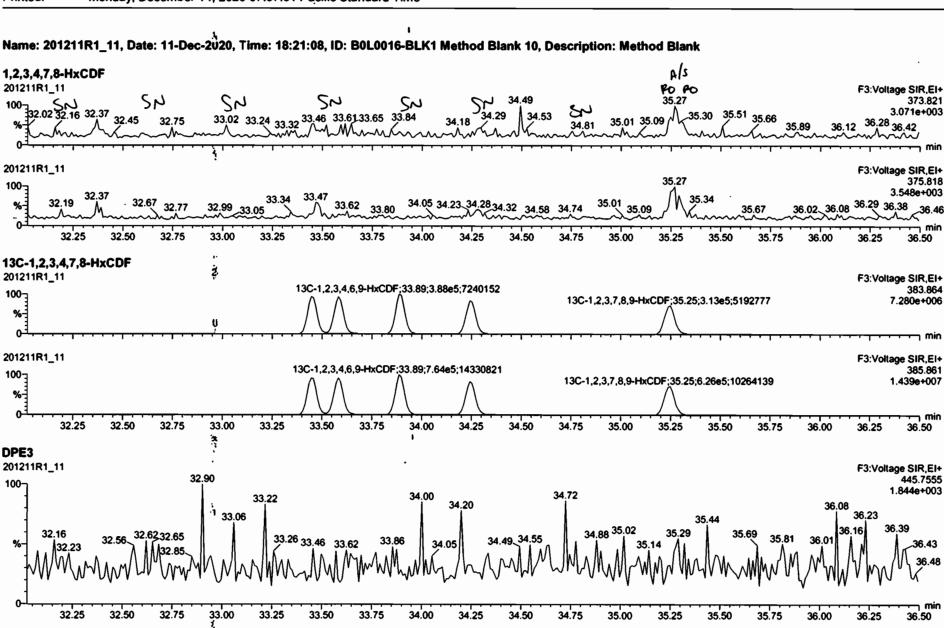
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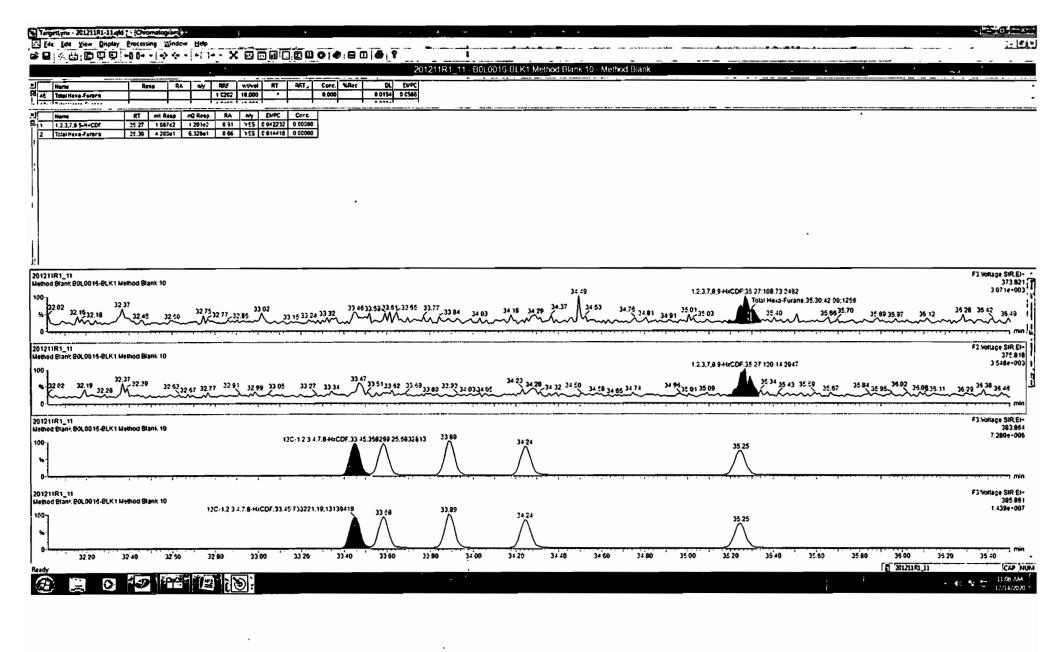




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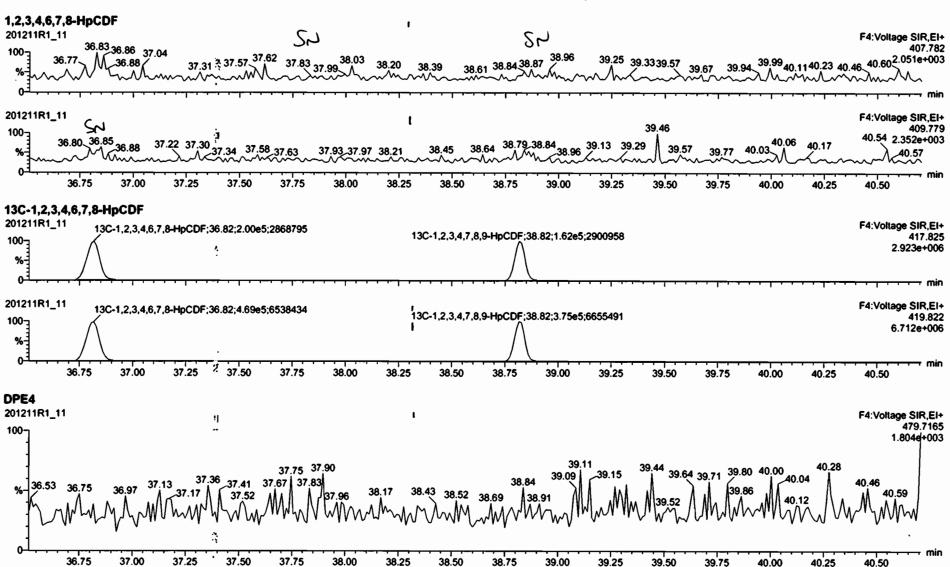
Work Order 2002434 Page 61 of 955

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Monday, December 14, 2020 07:53:40 Pacific Standard Time Monday, December 14, 2020 07:57:51 Pacific Standard Time

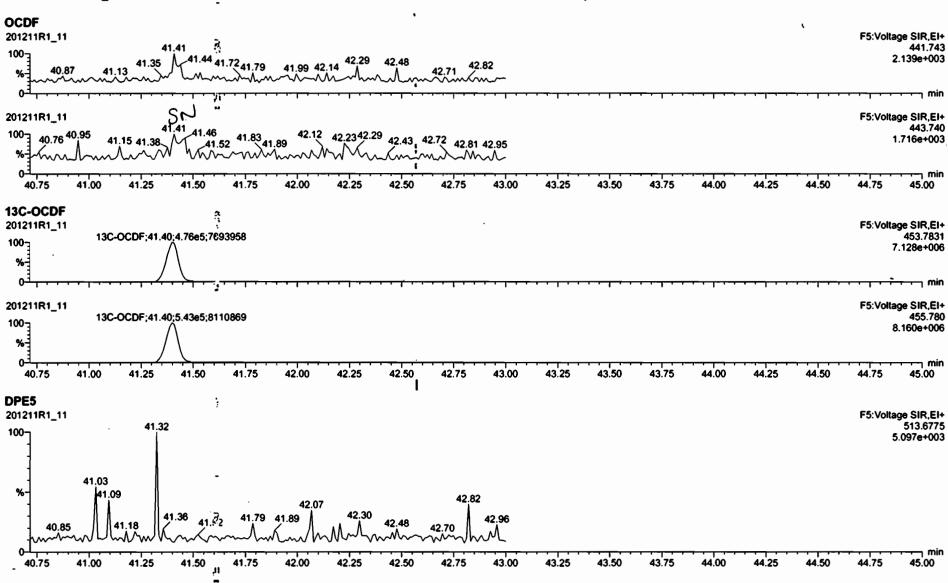
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Name: 201211R1_11, Date: 11-Dec-2020, Time: 18:21:08, ID: B0L0016-BLK1 Method Blank 10, Description: Method Blank



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MassLynx 4.1 SCN815

Page 1 of 2

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Monday, December 14, 2020 8:03:55 AM Pacific Standard Time Monday, December 14, 2020 10:53:16 AM Pacific Standard Time

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Method: U:\VG12.PRO\MethDB\1613rrt-12-11-20.mdb 11 Dec 2020 08:35:32

Calibration: U:\VG12.PRO\CurveDB\dbDIOXIN_1613vg12-12-03-20.cdb*04 Dec 2020 11:36:07

Name: 201211R1_3, Date: 11-Dec-2020, Time: 12:04:46, ID: B0L0016-BS1 OPR 10, Description: OPR

251	# Name	Resp	J L RA		RRF	wt/vol_t	Pred.RT	RT	I Pred.RRT	<u> </u>	Conc.	%Rec	DL [_	EMPC
1	1 2,3,7,8-TCDD	1.44e5	0.75	NO	0.980	10.000 -	26.410	26.41	1.001	1.001	20.256		0.0254	20.3
2	2 1,2,3,7,8-PeCDD	5.45e5	0.61	NO	0.932	10.000	31.094	31.08	1.001	1.000	104.11		0.0687	104
3	3 1,2,3,4,7,8-HxCDD	4.13e5	1.24	NO	1.02	10.000	34.378	34.38	1.001	1.001	100.32		0.156	100
4	4 1,2,3,6,7,8-HxCDD	4.18e5	1.24	NO	0.902	10.000	34.504	34.49	1.001	1.000	100.79		0.157	101
5	5 1,2,3,7,8,9-HxCDD	4.28e5	1.22	NO	0.954	10.000	34.756	34.77	1.000	1.001	99.091		0.151	99.1
6	6 1,2,3,4,6,7,8-HpCDD	2.88e5	1.04	NO	0.918	10.000	38.223	38.22	1.000	1.000	95.297		0.338	95.3
7 34 8	7 OCDD	3.93e5	0.86	NO	0.866	10.000	41.124	41.13	1.000	1.000	206.98		0.501	207
8	8 2,3,7,8-TCDF	1.44e5	0.73	NO	0.848	10.000	25.701	25.71	1.000	1.001	17.833		0.0252	17.8
9 75	9 1,2,3,7,8-PeCDF	7.46e5	1.55	NO	0.960	10.000	29.815	29.83	1.000	1.000	99.296		0.0829	99.3
10	10 2,3,4,7,8-PeCDF	8.12e5	1.53	NO	1.07	10.000	30.889	30.88	1.001	1.000	99.519		0.0772	99.5
11	11 1,2,3,4,7,8-HxCDF	4.62e5	1.21	NO	0.986	10.000	33.468	33.47	1.000	1.000	93.936		0.154	93.9
12	12 1,2,3,6,7,8-HxCDF	4.91e5	1.21	NO	1.04	¹ 10.000	33.614	33.60	1.001	1.000	93.450		0.153	93.5
13 7	13 2,3,4,6,7,8-HxCDF	4.65e5	1.21	NO	1.02	10.000	34.274	34.26	1.001	1.000	93.505		0.158	93.5
14	14 1,2,3,7,8,9-HxCDF	4.78e5	1.23	NO	0.991	10.000	35.258	35.27	1.000	1.001	94.949		0.173	94.9
15	15 1,2,3,4,6,7,8-HpCDF	3.23e5	1.00	NO	1.05	10.000	36.836	36.84	1.000	1.001	94.564		0.342	94.6
16,	16 1,2,3,4,7,8,9-HpCDF	2.96e5	1.00	NO	1.18	10.000	38.839	38.84	1.000	1.000	94.681		0.279	94.7
17	17 OCDF	4.70e5	0.87	NO	0.896	10.000	41.407	41.42	1.000	1.000	194.37		0.320	194
18	18 13C-2,3,7,8-TCDD	1.45e6	0.79	NO	1.06	10.000	26.399	26.38	1.030	1.029	173.50	86.7	0.101	
197	19 13C-1,2,3,7,8-PeCDD	1.12e6	0.63	NO	0.785	10.000	31.247	31.06	1.219	1.212	180.45	90.2	0.117	
20	20 13C-1,2,3,4,7,8-HxCDD	8.06e5	1.28	NO	0.621	10.000	34.358	34.36	1.014	1.014	209.93	105	0.305	
21	21 13C-1,2,3,6,7,8-HxCDD	9.20e5	1.26	NO	0.734	10.000	34.480	34.48	1.017	1.017	202.52	101	0.258	
22	22 13C-1,2,3,7,8,9-HxCDD	9.06e5	1.27	NO	0.723	10.000	34.765	34.74	1.026	1.025	202.52	101	0.262	
23	23 13C-1,2,3,4,6,7,8-HpCC	D 6.59e5	1.06	NO	0.568	10.000	38.267	38.21	1.129	1.127	187.49	93.7	0.642	
24	24 13C-OCDD	8.78e5	0.90	NO	0.496	10.000	41.206	41.12	1.216	1.213	285.99	71.5	0.531	
25	25 13C-2,3,7,8-TCDF	1.91e6	0.77	NO	0.919	10.000	25.696	25.70	1.003	1.003	165.17	82.6	0.0916	
26 - 11-14	26 13C-1,2,3,7,8-PeCDF	1.57e6	1.58	NO	0.715	10.000	29.955	29.81	1.169	1.163	174.26	87.1	0.184	
27	27 13C-2,3,4,7,8-PeCDF	1.53e6	1.60	NO	0.689	10.000	31.044	30.87	1.212	1.205	176.71	88.4	0.191	
28	28 13C-1,2,3,4,7,8-HxCDF	9.98e5	0.50	NO	0.873	£ 10.000	33.463	33.46	0.987	0.987	184.67	92.3	0.344	
29	29 13C-1,2,3,6,7,8-HxCDF	1.01e6	0.50	NO	0.933	10.000	33.592	33.59	0.991	0.991	175.29	87.6	0.322	
30	30 13C-2,3,4,6,7,8-HxCDF	9.75e5	0.51	NO	0.843	10.000	34.260	34.25	1.011	1.010	186.92	93.5	0.356	
3177	31 13C-1,2,3,7,8,9-HxCDF	1.02e6	0.50	NO	0.780	10.000	35.260	35.25	1.040	1.040	210.37	105	0.385	

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Dataset: U:\VG12.PRO\Results\201211R1\201211R1-3.qld

Last Altered: Monday, December 14, 2020 8:03:55 AM Pacific Standard Time Monday, December 14, 2020 10:53:16 AM Pacific Standard Time

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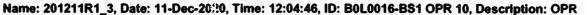
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32 13C-1,2,3,4,6,7,8-HpCDF	6.52e5	0.43	NO	0.726	10.000	36.836	36.82	1.087	1.086	144.95	72.5	0.467
33 13C-1,2,3,4,7,8,9-HpCDF	5.32e5	0.43	NO	0.491	10.000	38.846	38.83	1.146	1.145	175.14	87.6	0.691
34 34 13C-OCDF	1.08e6	0.88	NO	0.565	10.000	41.423	41.40	1.222	1.221	308.35	77.1	0.457
35 £ / 35 37Cl-2,3,7,8-TCDD	7.25e5			1.22	10.000	26.393	26.41	1.030	1.031	75.052	93.8	0.0204
36 36 13C-1,2,3,4-TCDD	1.59e6	0.78	NO	1.00	10.000	25.640	25.63	1.000	1.000	200.00	100	0.107
37 37 13C-1,2,3,4-TCDF	2.51e6	0.78	NO	1.00	10.000	24.130	24.12	1.000	1.000	200.00	100	0.0842
38 13C-1,2,3,4,6,9-HxCDF	1.24e6	0.51	NO	1.00	10.000	33.920	33.90	1.000	1.000	200.00	100	0.300

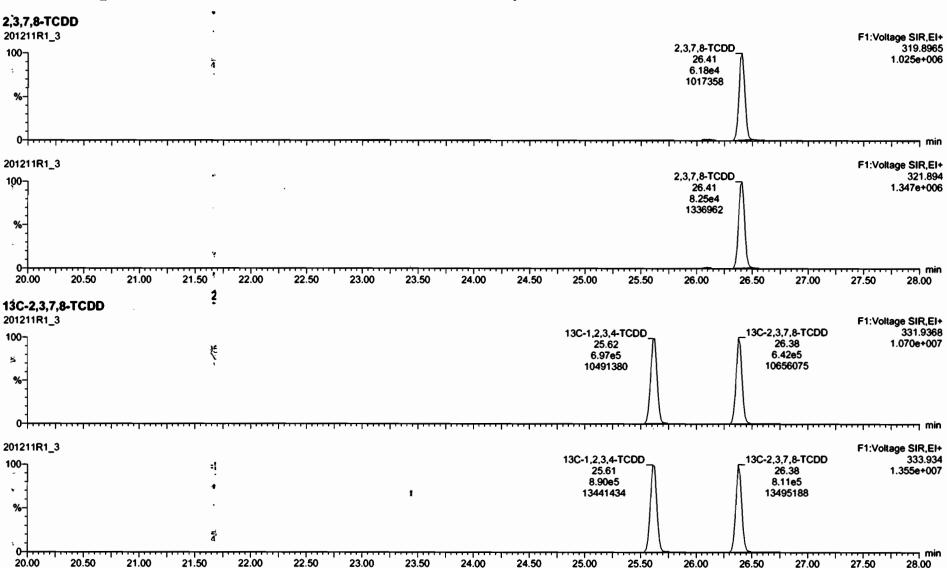
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Last Altered: Monday, December 14, 2020 07:53:40 Pacific Standard Time Printed: Monday, December 14, 2020 07:57:51 Pacific Standard Time

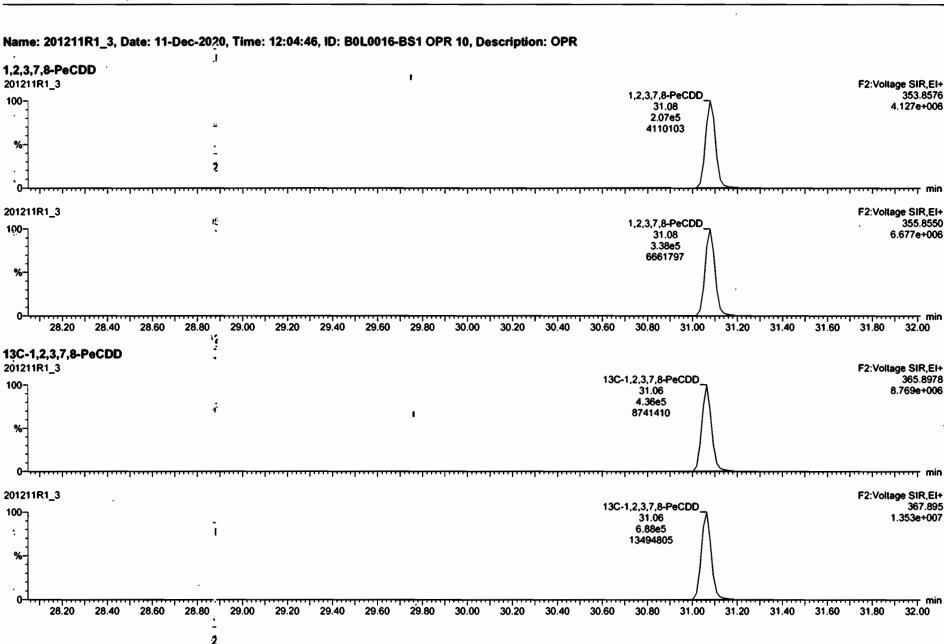




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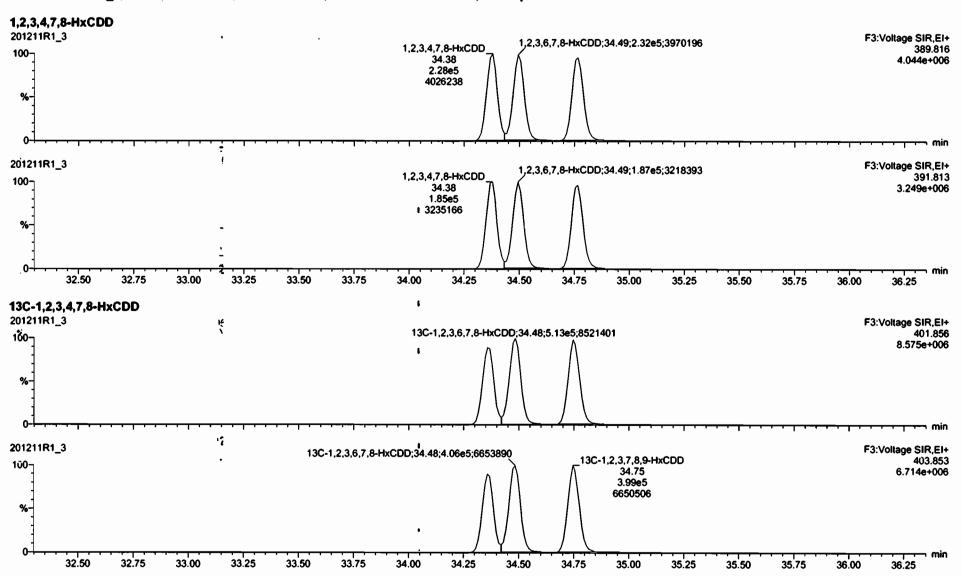


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Monday, December 14, 2020 07:53:40 Pacific Standard Time Monday, December 14, 2020 07:57:51 Pacific Standard Time

Näme: 201211R1_3, Date: 11-Dec-2020, Time: 12:04:46, ID: B0L0016-BS1 OPR 10, Description: OPR



Quantify Sample Report
Vista Analytical Laboratory
Dataset: Untitled
Last Altered: Monday, D

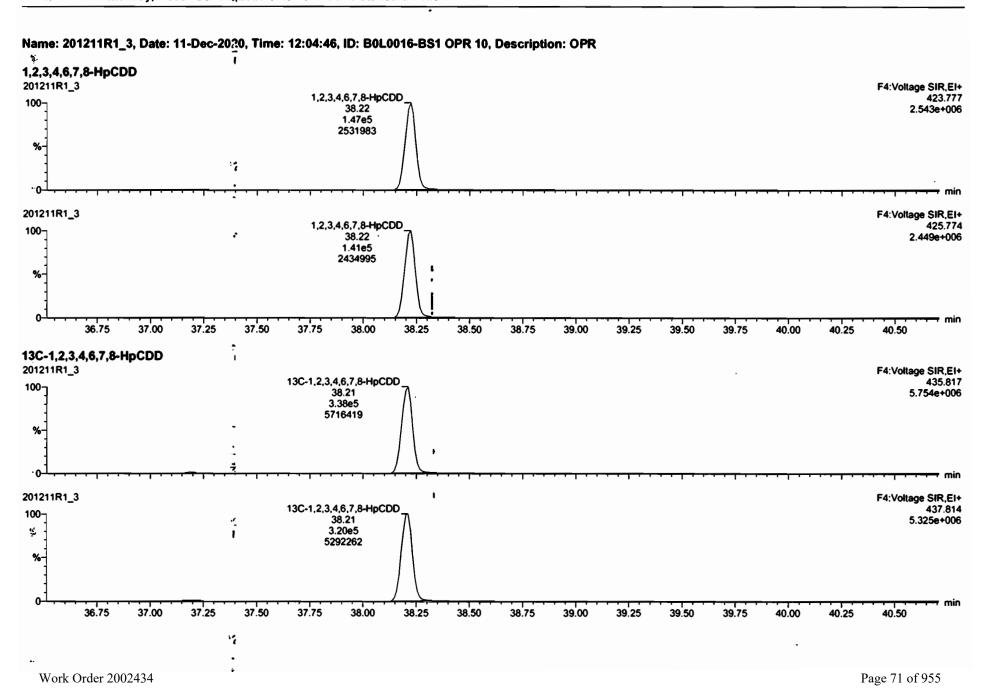
Printed:

MassLynx 4.1 SCN815

Page 18 of 195

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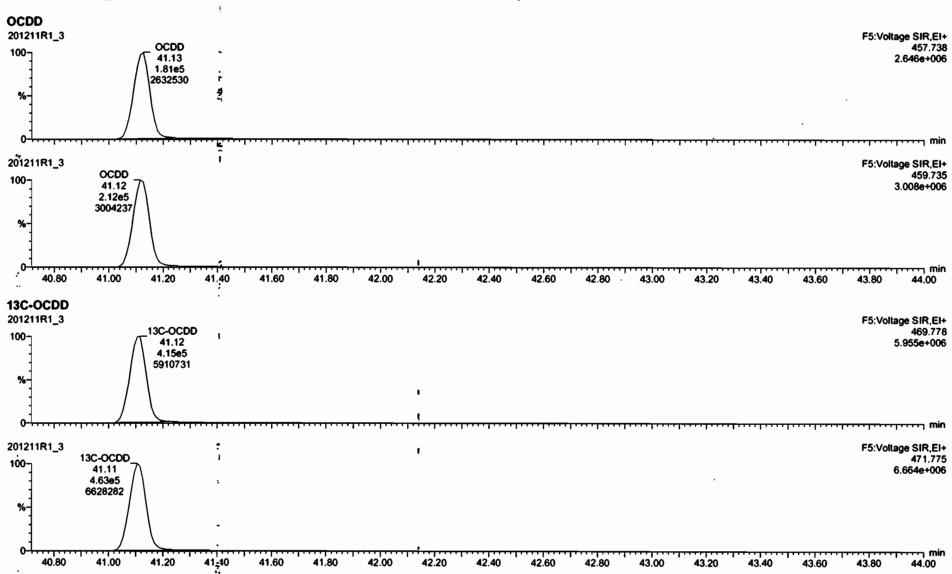
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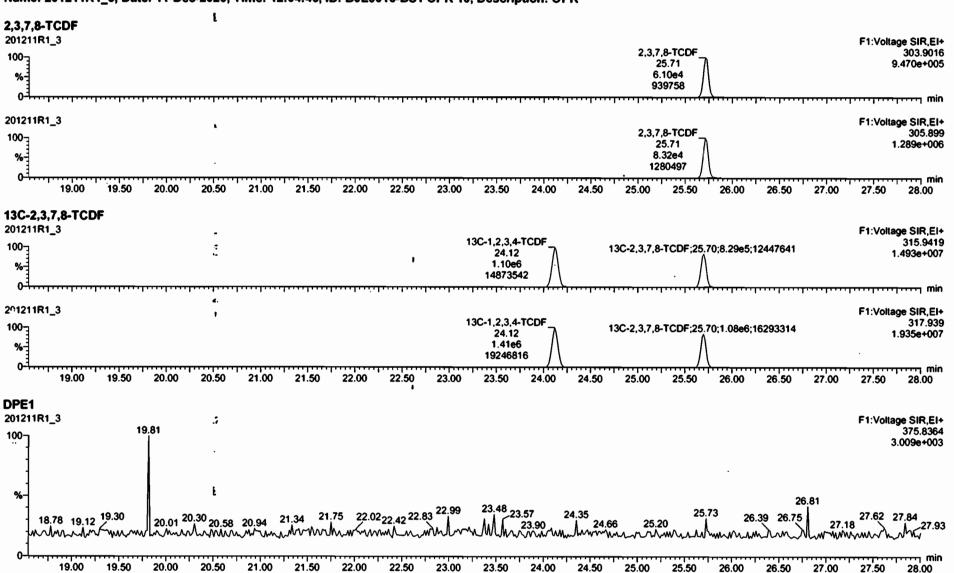


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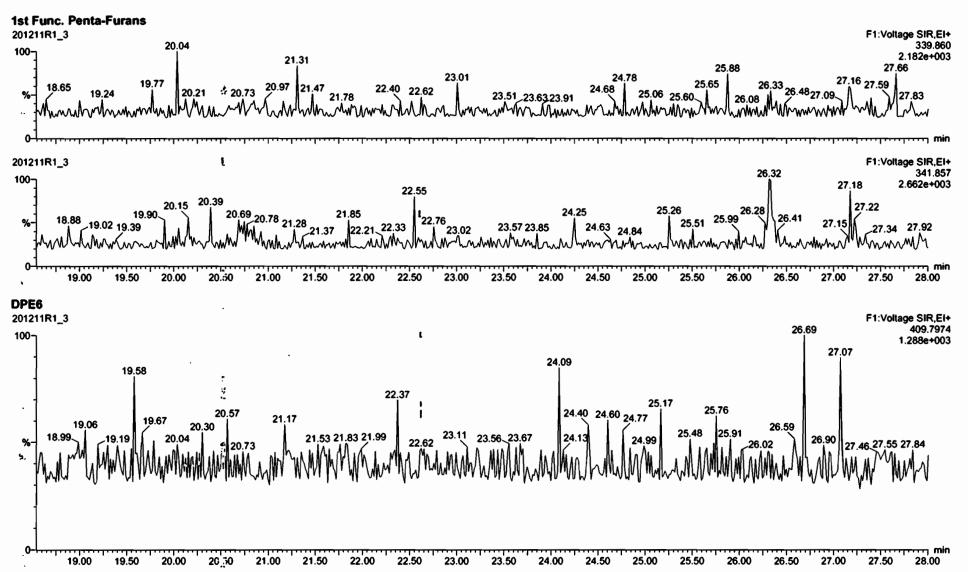
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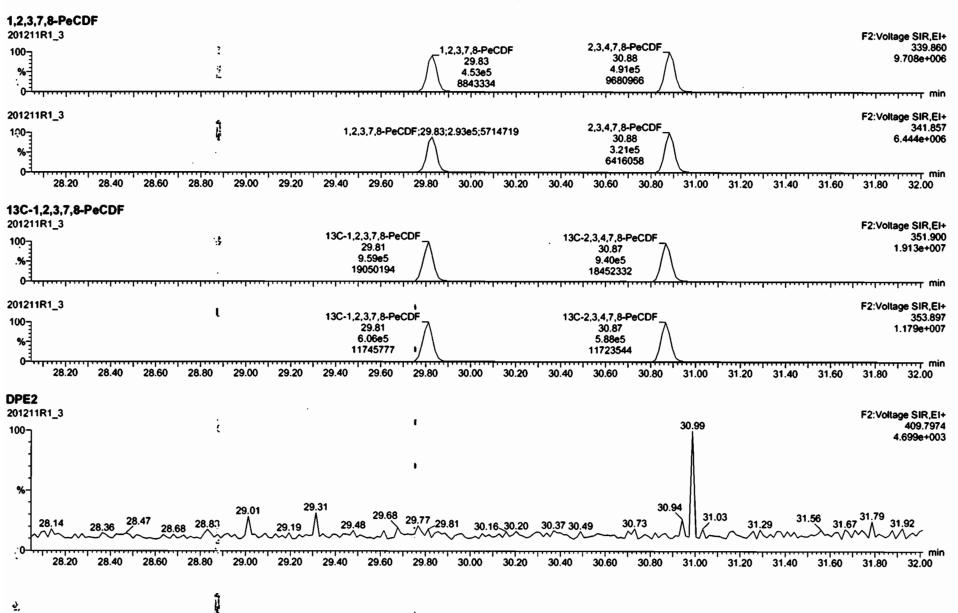
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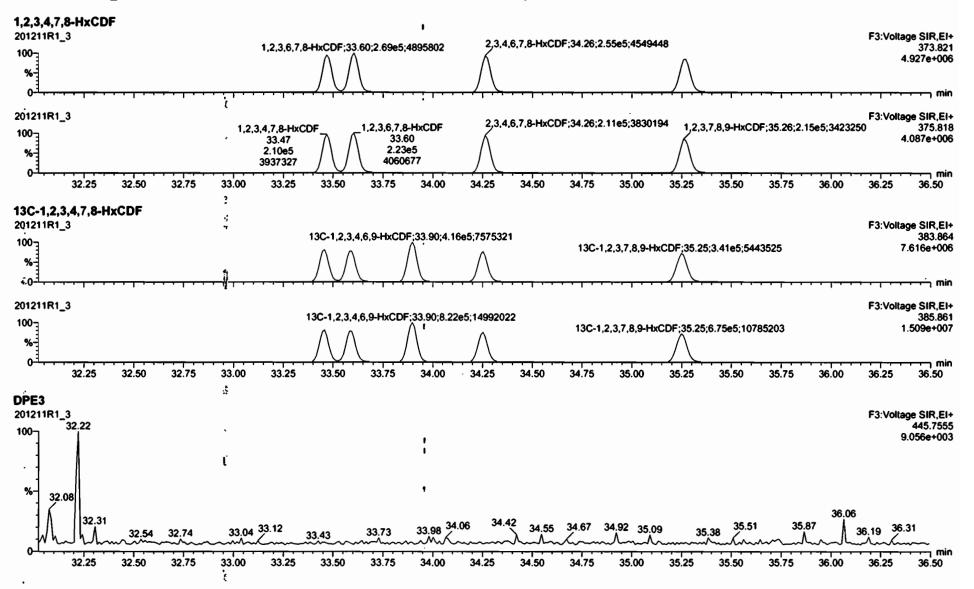
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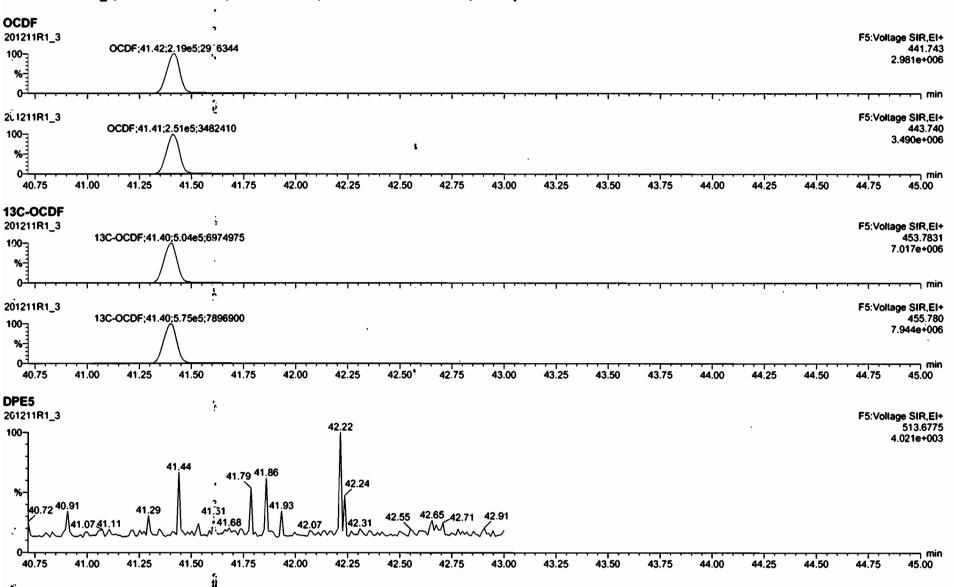
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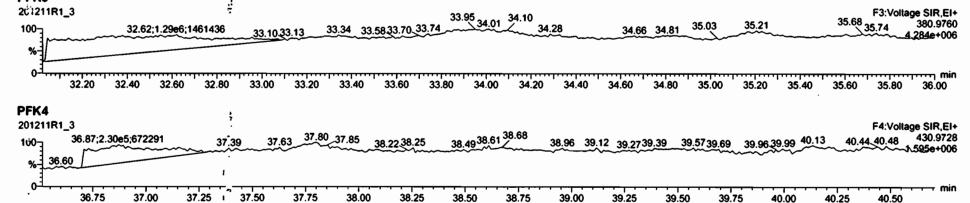


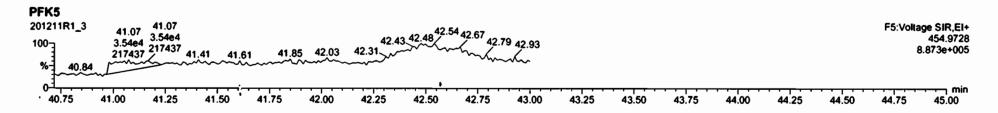
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Last Altered: Monday, December 14; 2020 07:53:40 Pacific Standard Time Printed: Monday, December 14, 2020 07:57:51 Pacific Standard Time









U:\VG7.PRO\Results\201230D1\201230D1_5.qld

Last Altered:

Wednesday, December 30, 2020 15:07:56 Pacific Standard Time

Printed:

Wednesday, December 30, 2020 15:09:00 Pacific Standard Time

7) B 12/30/20 CT12/31/2020

Method: C:\MassLynx\Default.PRO\MethDB\1613_rrt.mdb 10 Dec 2020 12:07:43 Calibration: U:\VG7.PRO\CurveDB\ZB_DIOXIN_1613vg7-9-30-20.cdb 01 Oct 2020 09:27:37

Name: 201230D1_5, Date: 30-Dec-2020, Time: 14:16:03, ID: B0L0154-BLK1 Method Blank 10, Description: Method Blank

123	# Name	Resp	RA	n/y	RRF	wt/vol	Pred.RT	RT	Pred.RRT	RRT	Conc.	%Rec	DL	EMPC
1	1 2,3,7,8-TCDD			NO	1.00	10.000	26.020		1.001				0.128	
2	2 1,2,3,7,8-PeCDD			NO	0.935	10.000	30.489		1.001				0.181	
3	3 1,2,3,4,7,8-HxCDD			NO	1.15	10.000	33.722		1.000				0.180	
4	4 1,2,3,6,7,8-HxCDD			NO	1.02	10.000	33.822		1.000				0.183	
5	5 1,2,3,7,8,9-HxCDD			NO	1.06	10.000	34.130		1.001				0.178	1
6	6 1,2,3,4,6,7,8-HpCDD			NO	1.00	10.000	37.542		1.000				0.231	
7	7 OCDD			NO	0.952	10.000	40.680		1.000				0.314	
8	8 2,3,7,8-TCDF			NO	1.01	10.000	25.357		1.001				0.0947	
9	9 1,2,3,7,8-PeCDF			NO	0.998	10.000	29.280		1.001				0.150	
10	10 2,3,4,7,8-PeCDF			NO	1.07	10.000	30.317		1.001				0.139	
11	11 1,2,3,4,7,8-HxCDF			NO	1.05	10.000	32.801		1.000				0.0908	
12	12 1,2,3,6,7,8-HxCDF			NO	1.10	10.000	32.943		1.000				0.0887	
13	13 2,3,4,6,7,8-HxCDF			NO	1.09	10.000	33.625		1.001				0.0971	
14	14 1,2,3,7,8,9-HxCDF			NO	1.08	10.000	34.601		1.000				0.127	
15	15 1,2,3,4,6,7,8-HpCDF			NO	1.13	10.000	36.217		1.001				0.114	
16	16 1,2,3,4,7,8,9-HpCDF			NO	1.29	10.000	38.189		1.000				0.116	
17	17 OCDF			NO	0.953	10.000	41.009		1.000				0.243	
18	18 13C-2,3,7,8-TCDD	7.22e4	0.75	NO	1.17	10.000	25.912	25.99	1.026	1.029	174.01	87.0	0.586	
19	19 13C-1,2,3,7,8-PeCDD	5.77e4	0.64	NO	0.914	10.000	30.455	30.47	1.206	1.206	178.39	89.2	0.575	
20	20 13C-1,2,3,4,7,8-HxCDD	4.99e4	1.31	NO	0.634	10.000	33.717	33.71	1.014	1.014	191.40	95.7	0.927	
21	21 13C-1,2,3,6,7,8-HxCDD	5.52e4	1.29	NO	0.724	10.000	33.826	33.82	1.017	1.017	185.36	92.7	0.811	
22	22 13C-1,2,3,7,8,9-HxCDD	5.47e4	1.32	NO	0.716	10.000	34.096	34.10	1.025	1.025	185.91	93.0	0.820	
23	23 13C-1,2,3,4,6,7,8-HpCDD	4.02e4	1.05	NO	0.660	10.000	37.541	37.53	1.129	1.129	148.16	74.1	1.56	
24	24 13C-OCDD	5.63 e 4	0.93	NO	0.587	10.000	40.546	40.68	1.219	1.223	233.54	58.4	0.512	
25	25 13C-2,3,7,8-TCDF	1.09 e 5	0.79	NO	1.02	10.000	25.313	25.33	1.002	1.003	174.53	87.3	0.843	
26	26 13C-1,2,3,7,8-PeCDF	8.69e4	1.68	NO	0.842	10.000	29.188	29.26	1.156	1.159	168.88	84.4	0.534	
27	27 13C-2,3,4,7,8-PeCDF	8.44e4	1.68	NO	0.802	10.000	30.079	30.29	1.191	1.199	172.27	86.1	0.561	
28	28 13C-1,2,3,4,7,8-HxCDF	7.50e4	0.49	NO	1.00	10.000	32.852	32.80	0.988	0.986	181.87	90.9	0.798	
29	29 13C-1,2,3,6,7,8-HxCDF	7.31e4	0.49	NO	1.02	10.000	32.985	32.93	0.992	0.990	174.48	87.2	0.786	
30	30 13C-2,3,4,6,7,8-HxCDF	7.18e4	0.51	NO	0.955	10.000	33.554	33.59	1.009	1.010	182.77	91.4	0.838	
31	31 13C-1,2,3,7,8,9-HxCDF	6.20e4	0.50	NO	0.851	10.000	34.628	34.60	1.041	1.041	177.27	88.6	0.940	

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Dataset:

U:\VG7.PRO\Results\201230D1\201230D1_5.qld

Last Altered: Printed:

Wednesday, December 30, 2020 15:07:56 Pacific Standard Time Wednesday, December 30, 2020 15:09:00 Pacific Standard Time

Name: 201230D1_5, Date: 30-Dec-2020, Time: 14:16:03, ID: B0L0154-BLK1 Method Blank 10, Description: Method Blank

0	# Name	Resp	RA	n/y	RRF	wt/vol	Pred.RT	RT	Pred.RRT	RRT	Conc.	%Rec	DL	EMPC
32	32 13C-1,2,3,4,6,7,8-HpCDF	5.30e4	0.42	NO	0.848	10.000	36.144	36.18	1.087	1.088	151.78	75.9	1.16	
33	33 13C-1,2,3,4,7,8,9-HpCDF	3.92e4	0.42	NO	0.624	10.000	38.139	38.19	1.147	1.149	152.55	76.3	1.58	
34	34 13C-OCDF	7.23e4	0.88	NO	0.730	10.000	40.699	41.01	1.224	1.233	240.76	60.2	0.550	-
35	35 37Cl-2,3,7,8-TCDD	3.11e4			1.21	10.000	25.909	26.00	1.026	1.030	72.900	91.1	0.0988	
36	36 13C-1,2,3,4-TCDD	7.08e4	0.80	NO	1.00	10.000	25.300	25.26	1.000	1.000	200.00	100	0.687	
37	37 13C-1,2,3,4-TCDF	1.22e5	0.82	NO	1.00	10.000	23.880	23.83	1.000	1.000	200.00	100	0.861	
38	38 13C-1,2,3,4,6,9-HxCDF	8.22e4	0.50	NO	1.00	10.000	33.310	33.25	1.000	1.000	200.00	100	0.800	
39	39 Total Tetra-Dioxins				1.00	10.000	24.620		0.000				0.0859	1
40	40 Total Penta-Dioxins				0.935	10.000	29.960		0.000				0.0716	
41	41 Total Hexa-Dioxins				1.02	10.000	33.635		0.000				0.0836	
42	42 Total Hepta-Dioxins				1.00	10.000	37.640		0.000				0.0716	
43	43 Total Tetra-Furans				1.01	10.000	23.610		0.000		0.00000		0.0427	0.137
44	44 1st Func. Penta-Furans				0.998	10.000	26.750		0.000				0.0259	
45	45 Total Penta-Furans				0.998	10.000	29.275		0.000				0.0614	
46	46 Total Hexa-Furans				1.09	10.000	33.555		0.000				0.0602	
47	47 Total Hepta-Furans				1.13	10.000	37.835		0.000				0.0739	

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Quantify Totals Report MassLynx 4.1

Vista Analytical Laboratory

Dataset:

U:\VG7.PRO\Results\201230D1\201230D1_5.qld

Last Altered: Printed: Wednesday, December 30, 2020 15:07:56 Pacific Standard Time Wednesday, December 30, 2020 15:09:00 Pacific Standard Time

Method: C:\MassLynx\Default.PRO\MethDB\1613_rrt.mdb 10 Dec 2020 12:07:43

Calibration: U:\VG7.PRO\CurveDB\ZB_DIOXIN_1613vg7-9-30-20.cdb 01 Oct 2020 09:27:37

Name: 201230D1_5, Date: 30-Dec-2020, Time: 14:16:03, ID: B0L0154-BLK1 Method Blank 10, Description: Method Blank

Tetra-Dioxins

Name	RT	m1 Height m2 Height	m1 Resp	m2 Resp	RA n/y	Resp	Conc.	EMPC	DL
1									

Penta-Dioxins

Name	RT	m1 Height m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1										

Hexa-Dioxins

Name	RT	m1 Height m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1										

Hepta-Dioxins

Name	RT	m1 Height m2 Height	m1 Resp	m2 Resp	RA n	n/y	Resp	Conc.	EMPC	DL

Tetra-Furans

1	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	Total Tetra-Furans	25.24	8.610e2	1.288e3	4.703e1	4.278e1	1.10	YES	0.000e0	0.00000	0.13706	0.0427

Penta-Furans function 1

Name	RT	m1 Height m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1										

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Quantify Totals Report MassLynx 4.1

Vista Analytical Laboratory

Dataset:

U:\VG7.PRO\Results\201230D1\201230D1_5.qld

Last Altered: Printed:

Wednesday, December 30, 2020 15:07:56 Pacific Standard Time Wednesday, December 30, 2020 15:09:00 Pacific Standard Time

Name: 201230D1_5, Date: 30-Dec-2020, Time: 14:16:03, ID: B0L0154-BLK1 Method Blank 10, Description: Method Blank

Penta-Furans

	Name	RT	m1 Height m2 Height	m1 Resp m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1										

Page 2 of 2

Hexa-Furans

Name	RT	m1 Height m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1										

Hepta-Furans

Name	RT	m1 Height m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1										

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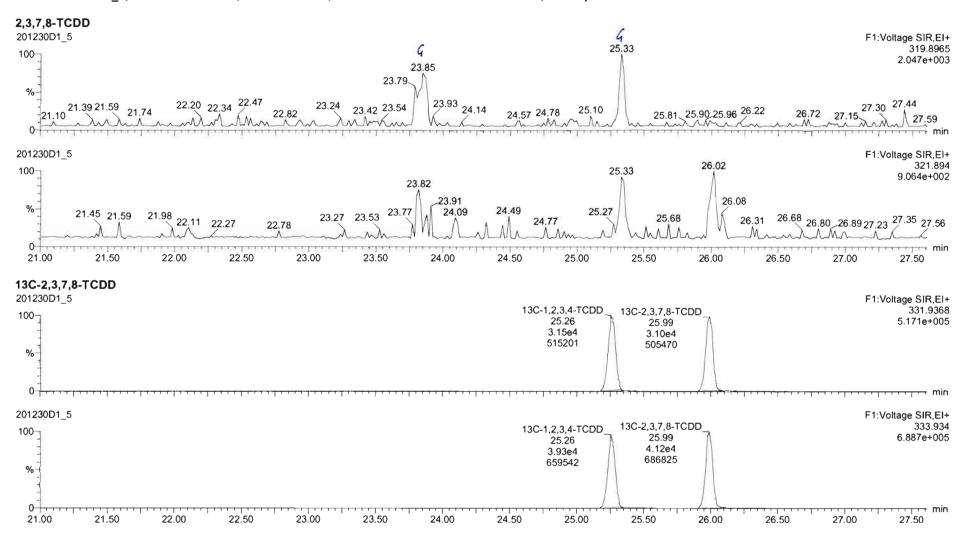
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Dataset: U:\VG7.PRO\Results\201230D1\201230D1_5.qld

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Method: C:\MassLynx\Default.PRO\MethDB\1613_rrt.mdb 10 Dec 2020 12:07:43 Calibration: U:\VG7.PRO\CurveDB\ZB_DIOXIN_1613vg7-9-30-20.cdb 01 Oct 2020 09:27:37

Name: 201230D1_5, Date: 30-Dec-2020, Time: 14:16:03, ID: B0L0154-BLK1 Method Blank 10, Description: Method Blank



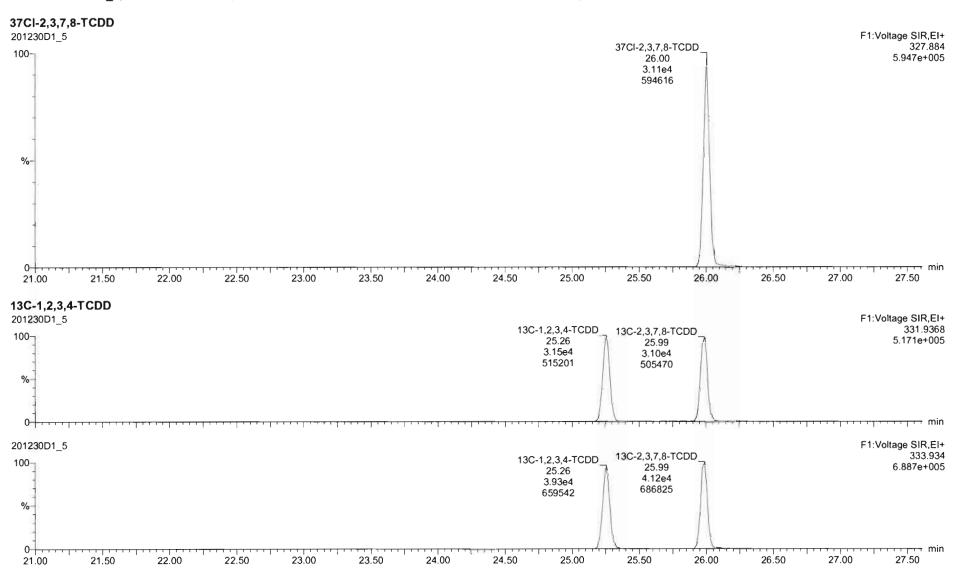
Work Order 2002434 Page 84 of 955

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Dataset: U:\VG7.PRO\Results\201230D1\201230D1_5.qld

Last Altered: Wednesday, December 30, 2020 15:06:51 Pacific Standard Time Printed: Wednesday, December 30, 2020 15:07:21 Pacific Standard Time

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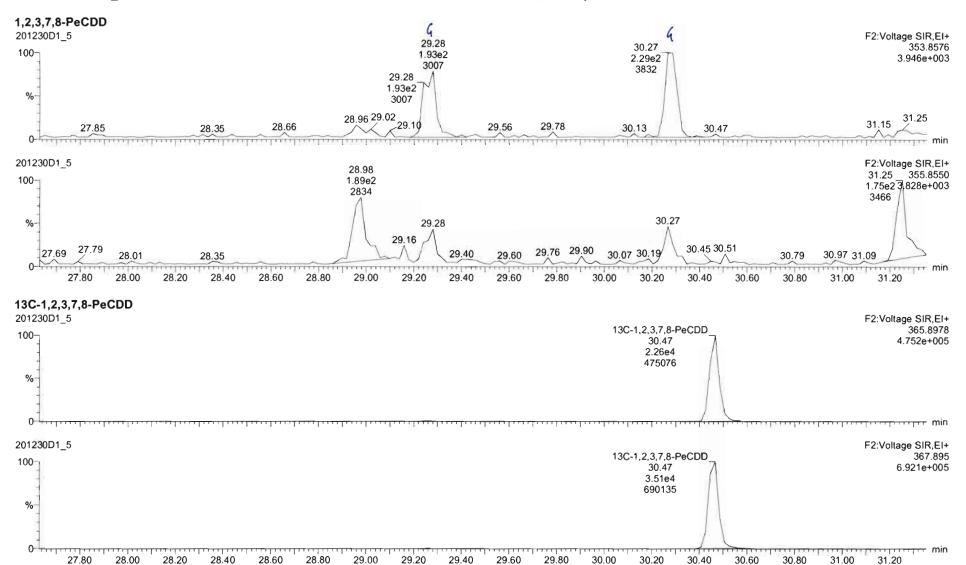
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Dataset: U:\V

U:\VG7.PRO\Results\201230D1\201230D1_5.qld

Last Altered: Printed: Wednesday, December 30, 2020 15:06:51 Pacific Standard Time Wednesday, December 30, 2020 15:07:21 Pacific Standard Time

Name: 201230D1_5, Date: 30-Dec-2020, Time: 14:16:03, ID: B0L0154-BLK1 Method Blank 10, Description: Method Blank

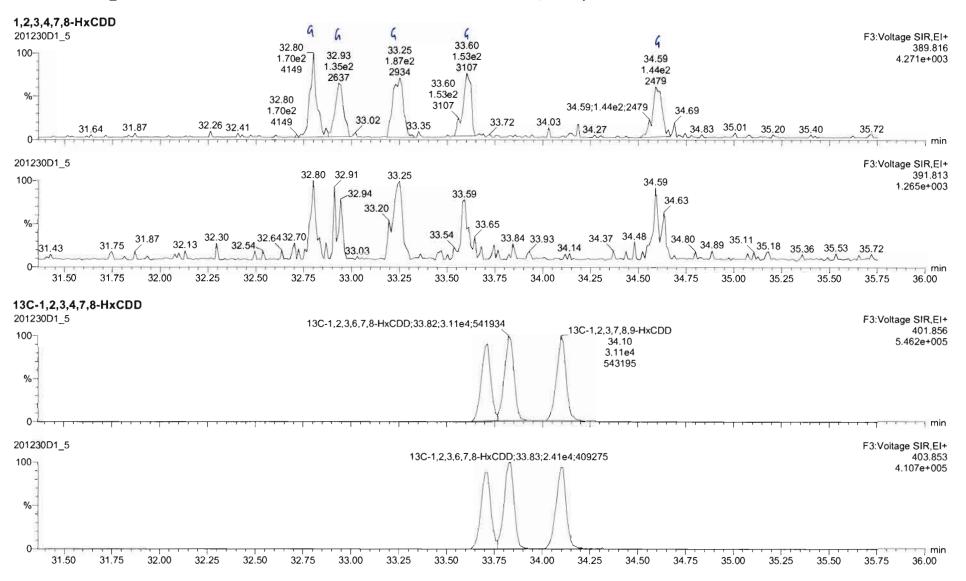


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Dataset: U:\VG7.PRO\Results\201230D1\201230D1_5.qld

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Work Order 2002434

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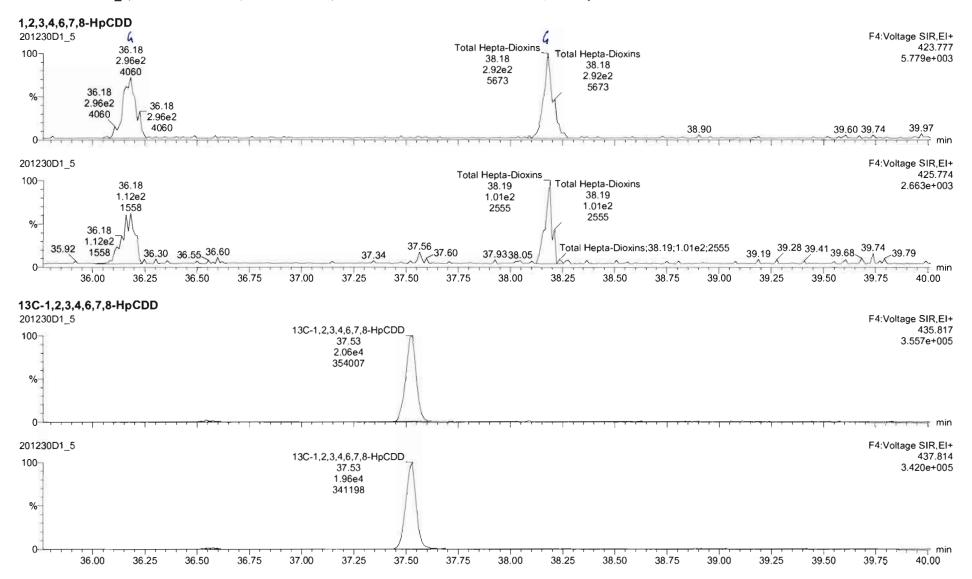
Page 5 of 13

Vista Analytical Laboratory

Dataset: U:\VG7.PRO\Results\201230D1\201230D1_5.qld

Last Altered: Wednesday, December 30, 2020 15:06:51 Pacific Standard Time Printed: Wednesday, December 30, 2020 15:07:21 Pacific Standard Time

Name: 201230D1_5, Date: 30-Dec-2020, Time: 14:16:03, ID: B0L0154-BLK1 Method Blank 10, Description: Method Blank



Work Order 2002434 Page 88 of 955

Page 6 of 13

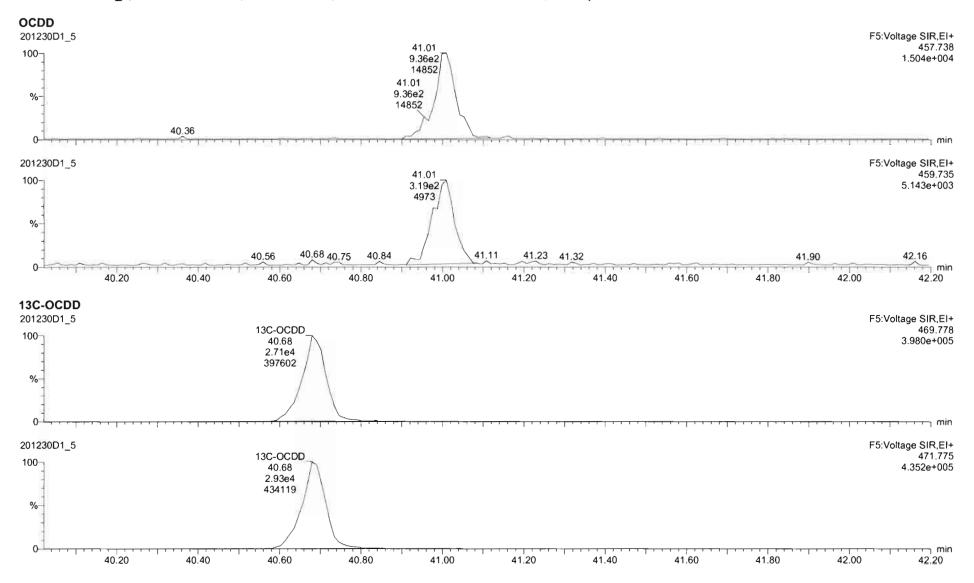
Page 89 of 955

Vista Analytical Laboratory

Dataset: U:\VG7.PRO\Results\201230D1\201230D1_5.qld

Last Altered: Wednesday, December 30, 2020 15:06:51 Pacific Standard Time Printed: Wednesday, December 30, 2020 15:07:21 Pacific Standard Time

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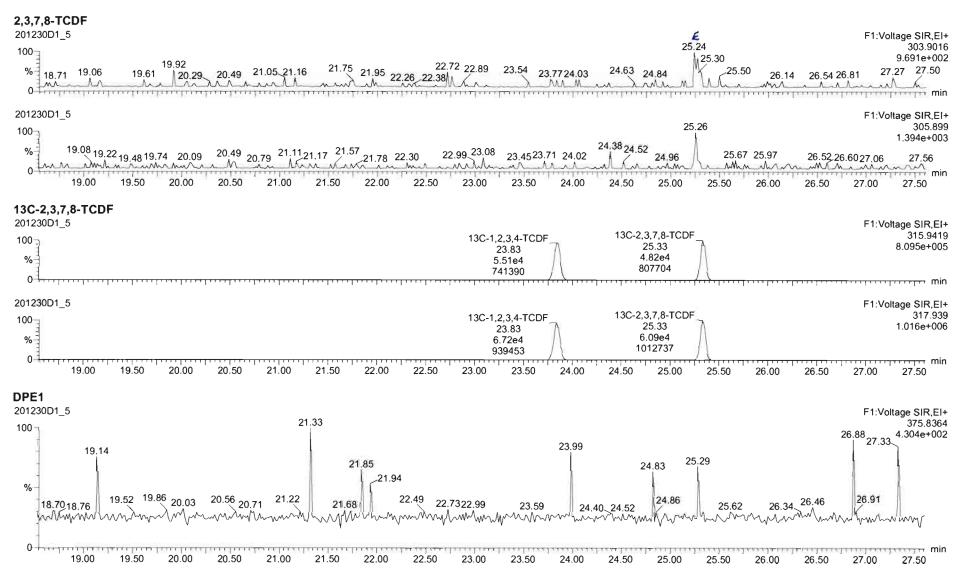


Work Order 2002434

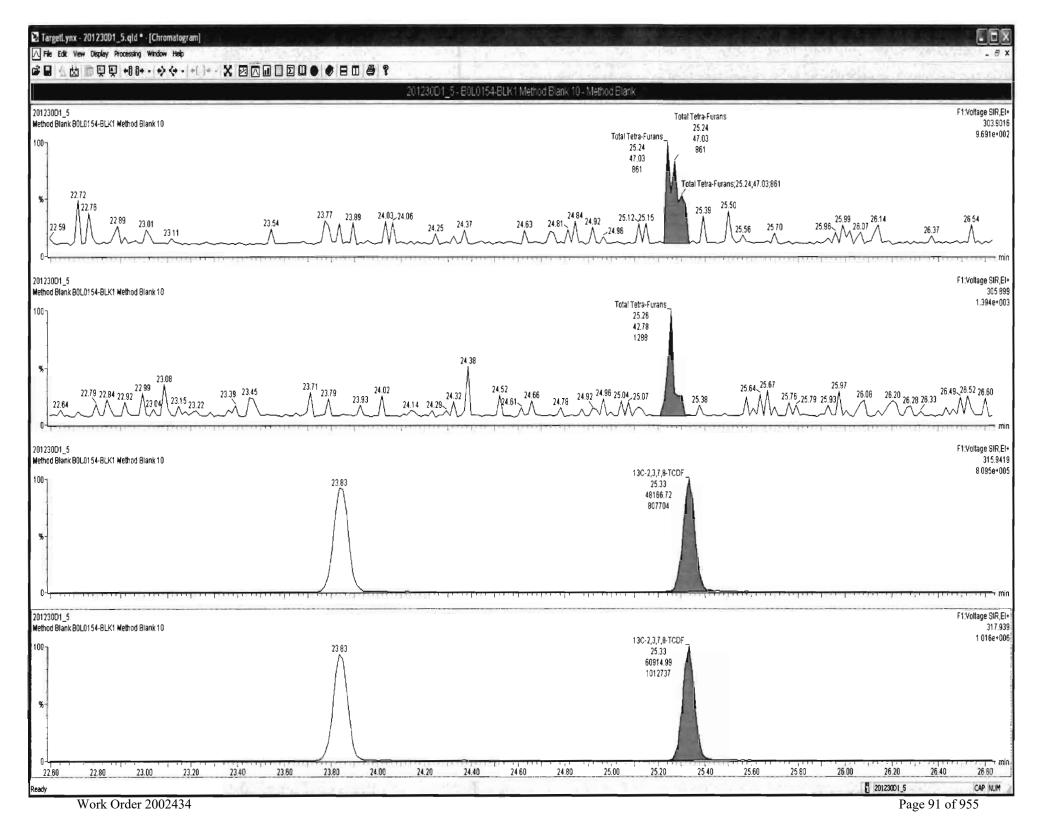
U:\VG7.PRO\Results\201230D1\201230D1_5.qld

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Name: 201230D1_5, Date: 30-Dec-2020, Time: 14:16:03, ID: B0L0154-BLK1 Method Blank 10, Description: Method Blank



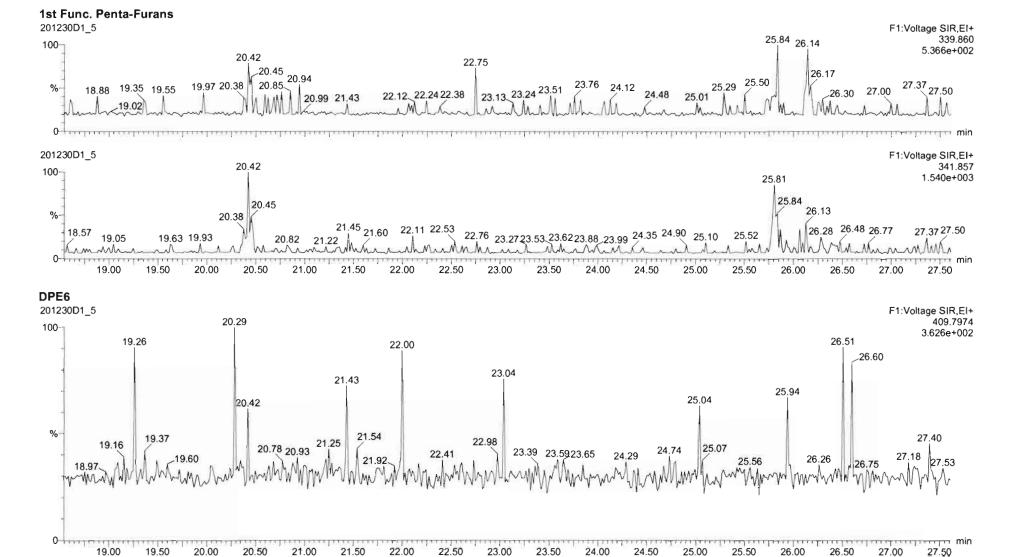
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Dataset: U:\VG7.PRO\Results\201230D1\201230D1_5.qld

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Name: 201230D1_5, Date: 30-Dec-2020, Time: 14:16:03, ID: B0L0154-BLK1 Method Blank 10, Description: Method Blank



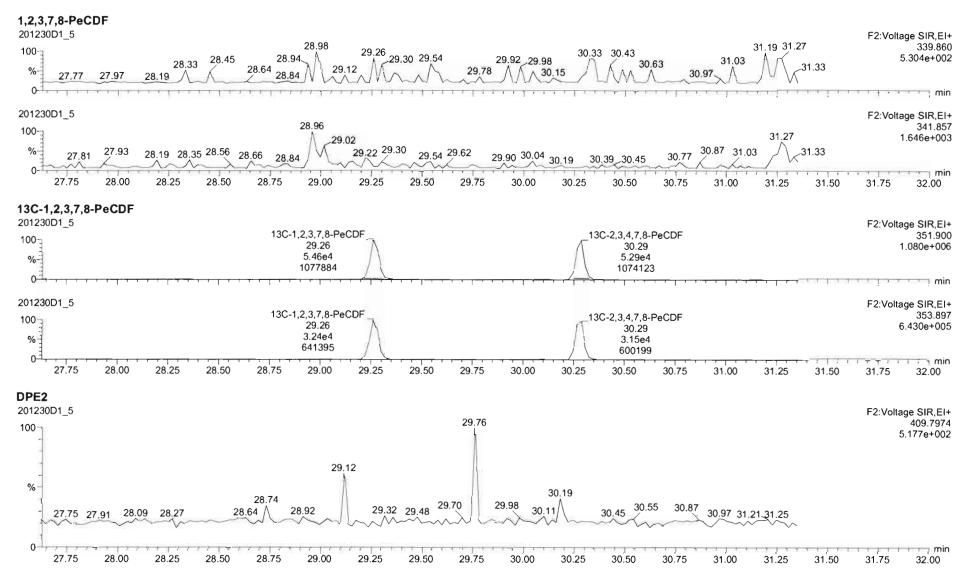
Page 8 of 13

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Dataset: U:\VG7.PRO\Results\201230D1\201230D1_5.qld

Last Altered: Wednesday, December 30, 2020 15:06:51 Pacific Standard Time Printed: Wednesday, December 30, 2020 15:07:21 Pacific Standard Time

Name: 201230D1_5, Date: 30-Dec-2020, Time: 14:16:03, ID: B0L0154-BLK1 Method Blank 10, Description: Method Blank

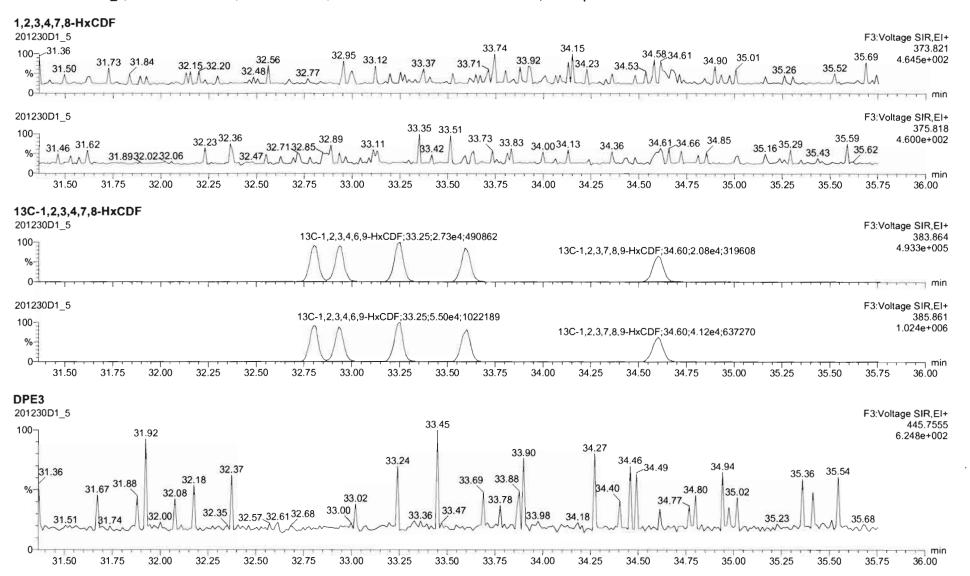


U:\VG7.PRO\Results\201230D1\201230D1 5.qld

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Wednesday, December 30, 2020 15:06:51 Pacific Standard Time Wednesday, December 30, 2020 15:07:21 Pacific Standard Time

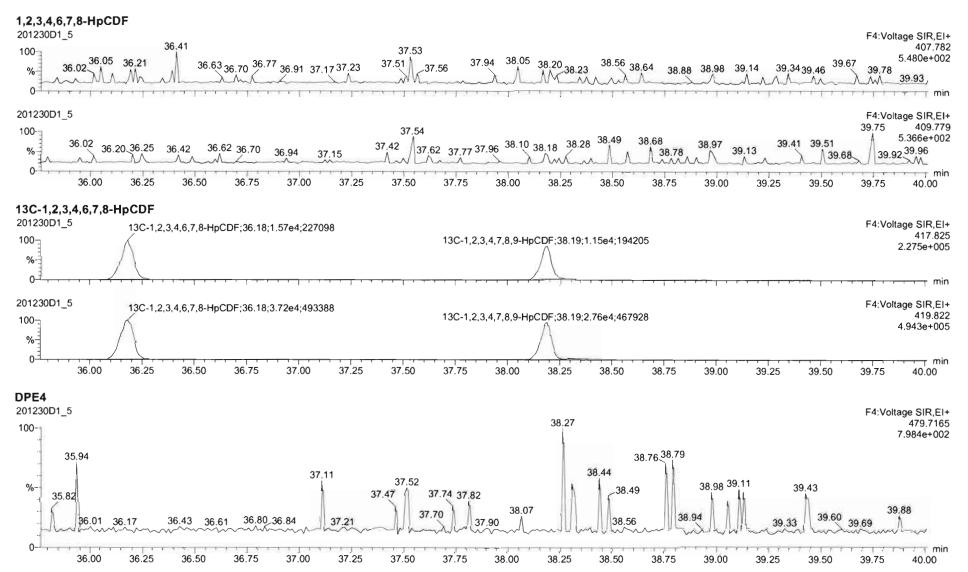
Name: 201230D1_5, Date: 30-Dec-2020, Time: 14:16:03, ID: B0L0154-BLK1 Method Blank 10, Description: Method Blank



U:\VG7.PRO\Results\201230D1\201230D1 5.qld

Last Altered: Printed: Wednesday, December 30, 2020 15:06:51 Pacific Standard Time Wednesday, December 30, 2020 15:07:21 Pacific Standard Time

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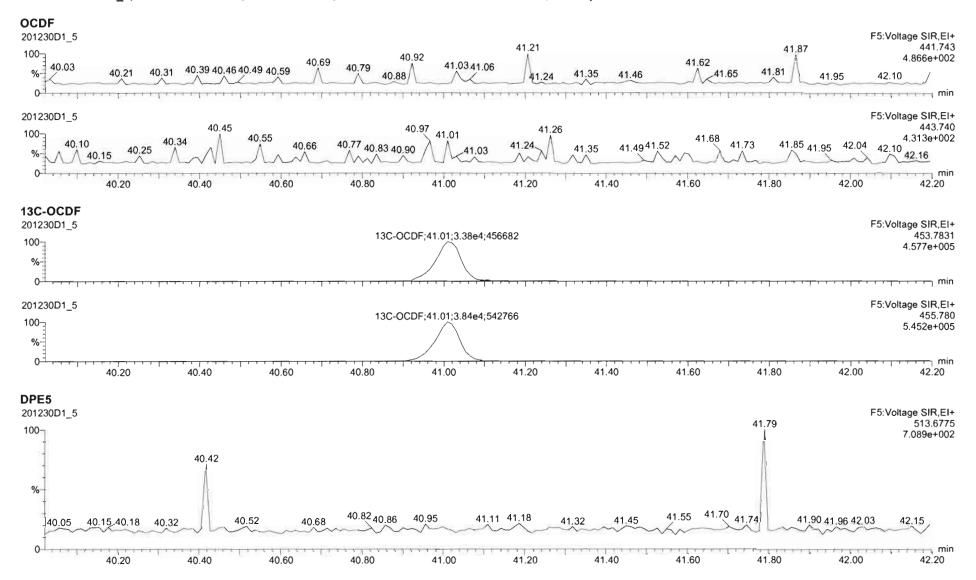
Quantify Sample Report Vista Analytical Laboratory

Dataset:

U:\VG7.PRO\Results\201230D1\201230D1_5.qld

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Name: 201230D1 5, Date: 30-Dec-2020, Time: 14:16:03, ID: B0L0154-BLK1 Method Blank 10, Description: Method Blank

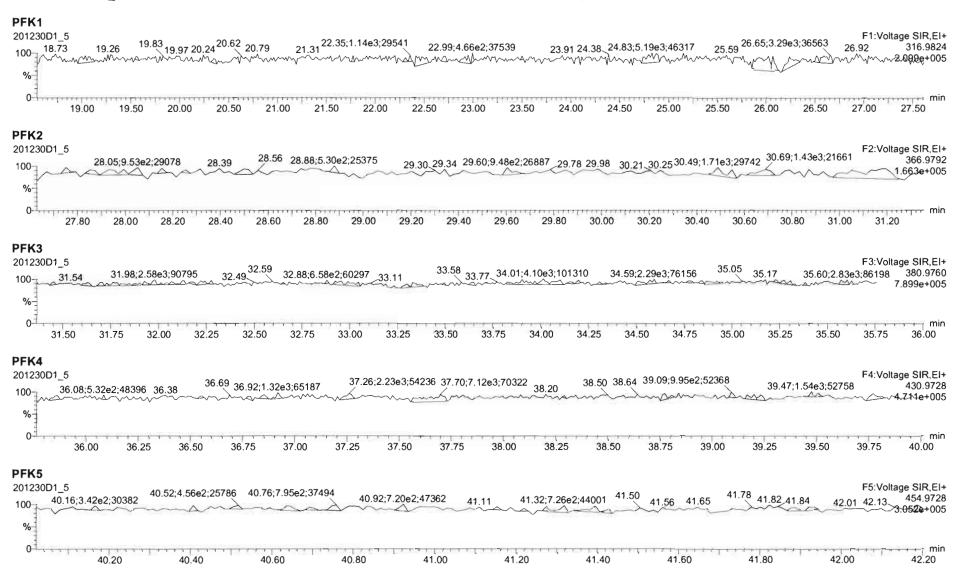


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Dataset: U:\VG7.PRO\Results\201230D1\201230D1_5.qld

Last Altered: Wednesday, December 30, 2020 15:06:51 Pacific Standard Time Printed: Wednesday, December 30, 2020 15:07:21 Pacific Standard Time

Name: 201230D1 5, Date: 30-Dec-2020, Time: 14:16:03, ID: B0L0154-BLK1 Method Blank 10, Description: Method Blank



Dataset: U:\VG7.PRO\Results\201230D1\201230D1_2.qld

Last Altered: Wednesday, December 30, 2020 12:51:43 Pacific Standard Time

Printed: Wednesday, December 30, 2020 12:53:20 Pacific Standard Time

1) B 12/30/20 C7 12/31/2020

Method: C:\MassLynx\Default.PRO\MethDB\1613_rrt.mdb 10 Dec 2020 12:07:43 Calibration: U:\VG7.PRO\CurveDB\ZB_DIOXIN_1613vg7-9-30-20.cdb 01 Oct 2020 09:27:37

Name: 201230D1_2, Date: 30-Dec-2020, Time: 11:57:31, ID: B0L0154-BS1 OPR 10, Description: OPR

Various C	# Name	Resp	RA	n/y	RRF	wt/vol	Pred.RT	RT	Pred.RRT	RRT	Conc.	%Rec	DL	EMPC
1	1 2,3,7,8-TCDD	7.16e3	0.84	NO	1.00	10.000	26.020	26.00	1.001	1.001	20.959	10567-158	0.231	21.0
2	2 1,2,3,7,8-PeCDD	2.38e4	0.62	NO	0.935	10.000	30.489	30.49	1.001	1.001	101.67	102 70 - 142	0.444	102
3	3 1,2,3,4,7,8-HxCDD	2.25e4	1.30	NO	1.15	10.000	33.733	33.74	1.000	1.001	101.48	101 70-164	0.680	101
4	4 1,2,3,6,7,8-HxCDD	2.25e4	1.25	NO	1.02	10.000	33.843	33.85	1.000	1.000	98.173	98.2 76 - 134	0.719	98.2
5	5 1,2,3,7,8,9-HxCDD	2.16e4	1.26	NO	1.06	10.000	34.152	34.13	1.001	1.000	96.073	96.1 64 - 162	0.778	96.1
6	6 1,2,3,4,6,7,8-HpCDD	1.67e4	1.07	NO	1.00	10.000	37.553	37.56	1.000	1.001	104.54	105 70 - 140	1.30	105
7	7 OCDD	2.26e4	0.89	NO	0.952	10.000	40.701	40.71	1.000	1.000	203.04	102 78-144	0.794	203
8	8 2,3,7,8-TCDF	1.00e4	0.82	NO	1.01	10.000	25.372	25.36	1.001	1.001	19.323	96.6 75-158	0.151	19.3
9	9 1,2,3,7,8-PeCDF	3.96e4	1.66	NO	0.998	10.000	29.300	29.30	1.001	1.001	104.56	105 80-134	0.338	105
10	10 2,3,4,7,8-PeCDF	4.41e4	1.67	NO	1.07	10.000	30.337	30.31	1.001	1.000	110.58	111 68-160	0.326	111
11	11 1,2,3,4,7,8-HxCDF	3.38e4	1.25	NO	1.05	10.000	32.823	32.83	1.000	1.000	103.53	104 72-134	0.583	104
12	12 1,2,3,6,7,8-HxCDF	3.52e4	1.27	NO	1.10	10.000	32.965	32.97	1.000	1.000	106.31	106 84 - 130	0.605	106
13	13 2,3,4,6,7,8-HxCDF	3.33e4	1.26	NO	1.09	10.000	33.647	33.62	1.001	1.000	104.89	105 70-156		105
14	14 1,2,3,7,8,9-HxCDF	2.82e4	1.27	NO	1.08	10.000	34.612	34.63	1.000	1.001	106.32	106 78 - 130	0.980	106
15	15 1,2,3,4,6,7,8-HpCDF	2.59e4	1.03	NO	1.13	10.000	36.239	36.21	1.001	1.000	102.64	103 87-172	0.977	103
16	16 1,2,3,4,7,8,9-HpCDF	2.06e4	1.05	NO	1.29	10.000	38.189	38.21	1.000	1.001	99.778	99.8 78-138	1.05	99.8
17	17 OCDF	3.20e4	0.87	NO	0.953	10.000	41.042	41.04	1.000	1.000	218.62	109 63-170	0.814	219
18	18 13C-2,3,7,8-TCDD	6.82e4	0.80	NO	1.17	10.000	25.928	25.99	1.026	1.028	184.80	92.4 20 -175	0.778	
19	19 13C-1,2,3,7,8-PeCDD	5.01e4	0.64	NO	0.914	10.000	30.474	30.47	1.206	1.206	174.28	87.1 21 -277	0.800	
20	20 13C-1,2,3,4,7,8-HxCDD	3.86e4	1.29	NO	0.634	10.000	33.728	33.72	1.014	1.014	186.16	93.1 21-193	1.22	
21	21 13C-1,2,3,6,7,8-HxCDD	4.47e4	1.30	NO	0.724	10.000	33.837	33.84	1.017	1.017	188.70	94.4 25 - 163	1.07	
22	22 13C-1,2,3,7,8,9-HxCDD	4.24e4	1.26	NO	0.716	10.000	34.107	34.12	1.025	1.026	180.97	90.5 21 - 193	1.08	
23	23 13C-1,2,3,4,6,7,8-HpCDD	3.20e4	1.07	NO	0.660	10.000	37.553	37.54	1.129	1.129	148.04	74.0 26-166	1.62	
24	24 13C-OCDD	4.67e4	0.91	NO	0.587	10.000	40.560	40.70	1.219	1.224	243.34	60.8 13-198	0.792	
25	25 13C-2,3,7,8-TCDF	1.02e5	0.77	NO	1.02	10.000	25.329	25.35	1.002	1.003	194.72	AND THE PARTY OF T	0.799	
26	26 13C-1,2,3,7,8-PeCDF	7.59e4	1.65	NO	0.842	10.000	29.205	29.28	1.156	1.159	175.62	87.8 21 - 192	1.31	
27	27 13C-2,3,4,7,8-PeCDF	7.43e4	1.64	NO	0.802	10.000	30.097	30.31	1.191	1.199	180.41	90.2 (3-328	1.37	
28	28 13C-1,2,3,4,7,8-HxCDF	6.21e4	0.50	NO	1.00	10.000	32.863	32.82	0.988	0.987	189.32	94.7 19- 202	1.24	
29	29 13C-1,2,3,6,7,8-HxCDF	6.03e4	0.50	NO	1.02	10.000	32.996	32.95	0.992	0.991	180.99	90.5 21-159	1.22	
30	30 13C-2,3,4,6,7,8-HxCDF	5.83e4	0.51	NO	0.955	10.000	33.565	33.61	1.009	1.011	186.71	93.4 22 - 176	1.31	
31	31 13C-1,2,3,7,8,9-HxCDF	4.91e4	0.51	NO	0.851	10.000	34.639	34.61	1.041	1.041	176.33	88.2 17 - 205	1.47	

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Dataset: U:\VG7.PRO\Results\201230D1\201230D1_2.qld

Last Altered: Wednesday, December 30, 2020 12:51:43 Pacific Standard Time Wednesday, December 30, 2020 12:53:20 Pacific Standard Time

Name: 201230D1_2, Date: 30-Dec-2020, Time: 11:57:31, ID: B0L0154-BS1 OPR 10, Description: OPR

	# Name	Resp	RA	n/y	RRF	wt/vol	Pred.RT	RT	Pred.RRT	RRT	Conc.	%Rec	DL	EMPC
32	32 13C-1,2,3,4,6,7,8-HpCDF	4.46e4	0.43	NO	0.848	10.000	36.156	36.20	1.087	1.088	160.63	80.3 21 - 158	1.51	
33	33 13C-1,2,3,4,7,8,9-HpCDF	3.22e4	0.43	NO	0.624	10.000	38.152	38.19	1.147	1.148	157.58	78.8 20 - 186	2.05	
34	34 13C-OCDF	6.15e4	0.89	NO	0.730	10.000	40.713	41.04	1.224	1.234	257.64	64.4 13-198	0.703	
35	35 37CI-2,3,7,8-TCDD	2.95e4			1.21	10.000	25.925	26.02	1.026	1.030	77.649	97.1 3/ - 19!	0.186	
36	36 13C-1,2,3,4-TCDD	6.29e4	0.80	NO	1.00	10.000	25.300	25.27	1.000	1.000	200.00	100	0.913	
37	37 13C-1,2,3,4-TCDF	1.03e5	0.79	NO	1.00	10.000	23.880	23.85	1.000	1.000	200.00	100	0.816	
38	38 13C-1,2,3,4,6,9-HxCDF	6.54e4	0.51	NO	1.00	10.000	33.310	33.26	1.000	1.000	200.00	100	1.25	

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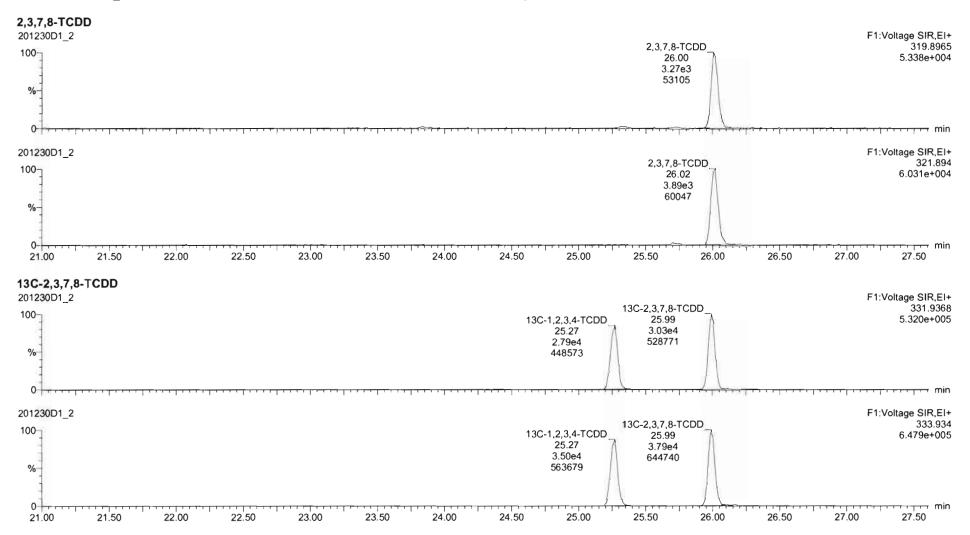
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Dataset: U:\VG7.PRO\Results\201230D1\201230D1_2.qld

Last Altered: Wednesday, December 30, 2020 12:51:43 Pacific Standard Time Printed: Wednesday, December 30, 2020 12:52:10 Pacific Standard Time

Method: C:\MassLynx\Default.PRO\MethDB\1613_rrt.mdb 10 Dec 2020 12:07:43 Calibration: U:\VG7.PRO\CurveDB\ZB_DIOXIN_1613vg7-9-30-20.cdb 01 Oct 2020 09:27:37

Name: 201230D1_2, Date: 30-Dec-2020, Time: 11:57:31, ID: B0L0154-BS1 OPR 10, Description: OPR

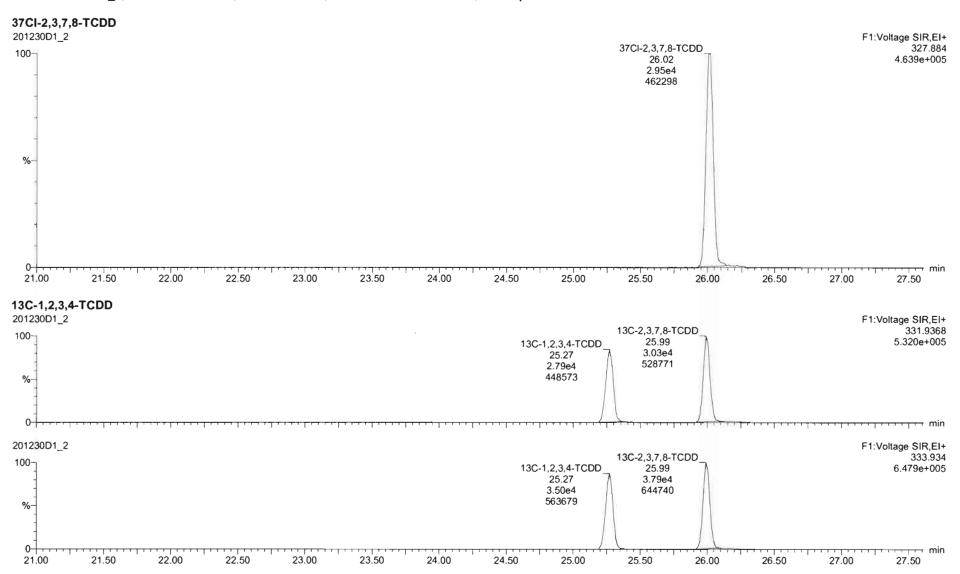


Work Order 2002434

Dataset: U:\VG7.PRO\Results\201230D1\201230D1_2.qld

Last Altered: Wednesday, December 30, 2020 12:51:43 Pacific Standard Time Printed: Wednesday, December 30, 2020 12:52:10 Pacific Standard Time

Name: 201230D1_2, Date: 30-Dec-2020, Time: 11:57:31, ID: B0L0154-B\$1 OPR 10, Description: OPR

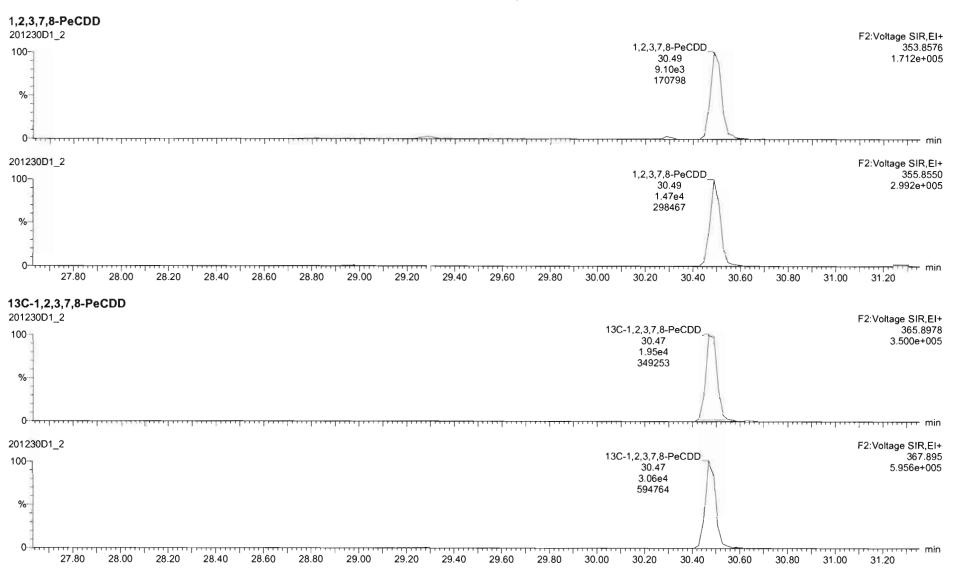


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Dataset: U:\VG7.PRO\Results\201230D1\201230D1_2.qld

Last Altered: Wednesday, December 30, 2020 12:51:43 Pacific Standard Time Printed: Wednesday, December 30, 2020 12:52:10 Pacific Standard Time

Name: 201230D1_2, Date: 30-Dec-2020, Time: 11:57:31, ID: B0L0154-BS1 OPR 10, Description: OPR

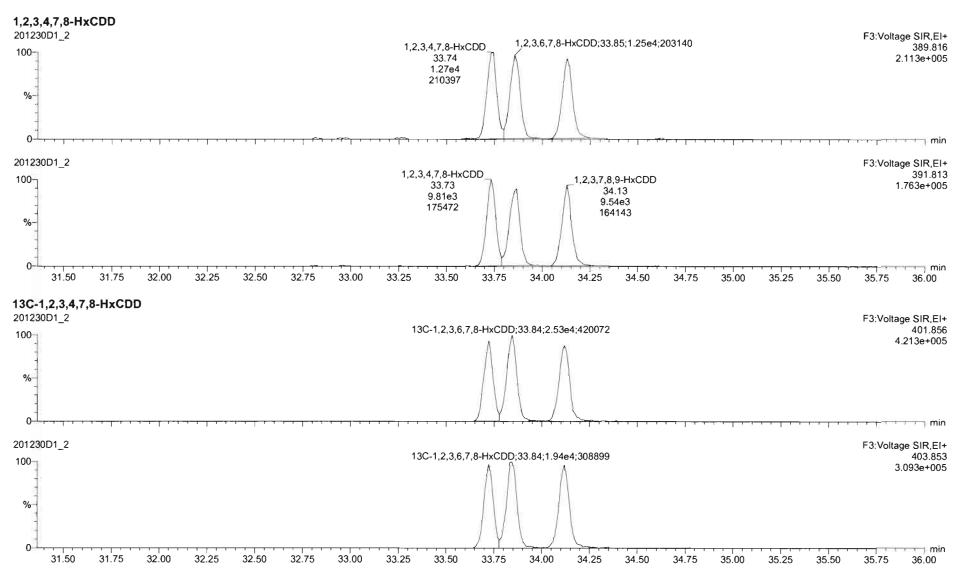


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Dataset: U:\VG7.PRO\Results\201230D1\201230D1_2.qld

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Name: 201230D1_2, Date: 30-Dec-2020, Time: 11:57:31, ID: B0L0154-BS1 OPR 10, Description: OPR



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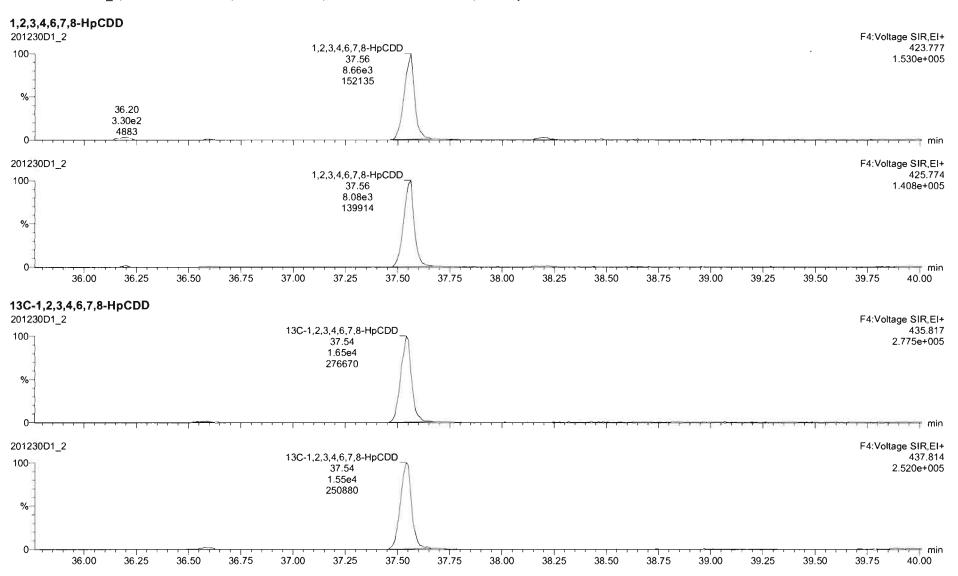
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U:\VG7.PRO\Results\201230D1\201230D1_2.qld

Last Altered: Printed:

Wednesday, December 30, 2020 12:51:43 Pacific Standard Time Wednesday, December 30, 2020 12:52:10 Pacific Standard Time

Name: 201230D1_2, Date: 30-Dec-2020, Time: 11:57:31, ID: B0L0154-BS1 OPR 10, Description: OPR

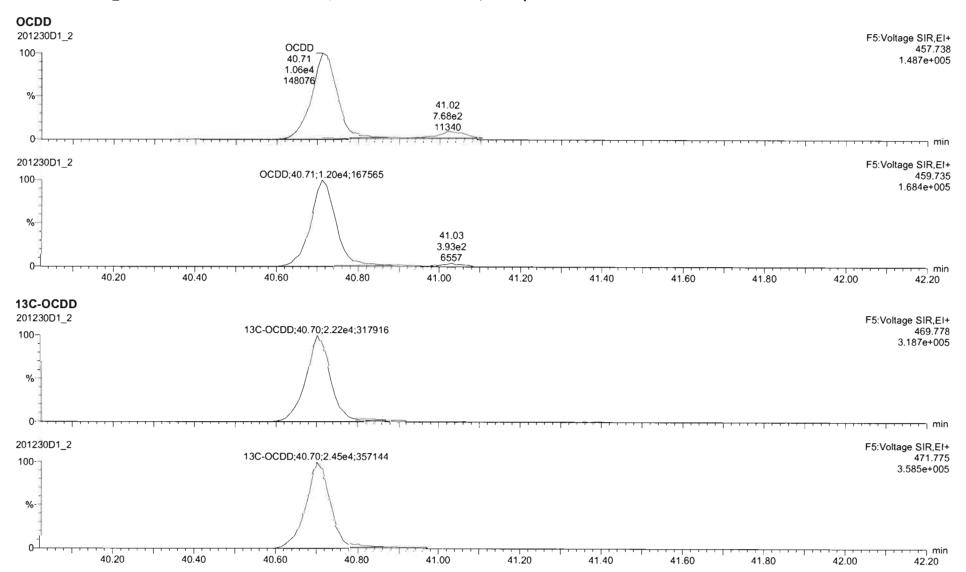


Work Order 2002434

Dataset: U:\VG7.PRO\Results\201230D1\201230D1_2.qld

Last Altered: Wednesday, December 30, 2020 12:51:43 Pacific Standard Time Printed: Wednesday, December 30, 2020 12:52:10 Pacific Standard Time

Name: 201230D1_2, Date: 30-Dec-2020, Time: 11:57:31, ID: B0L0154-BS1 OPR 10, Description: OPR

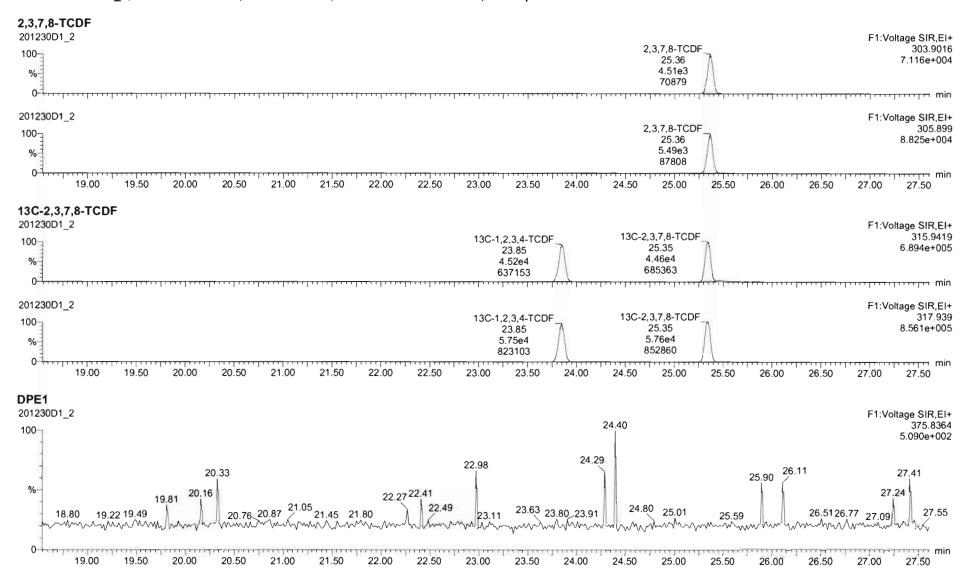


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Dataset: U:\VG7.PRO\Results\201230D1\201230D1_2.qld

Last Altered: Wednesday, December 30, 2020 12:51:43 Pacific Standard Time Printed: Wednesday, December 30, 2020 12:52:10 Pacific Standard Time

Name: 201230D1 2, Date: 30-Dec-2020, Time: 11:57:31, ID: B0L0154-BS1 OPR 10, Description: OPR



Work Order 2002434

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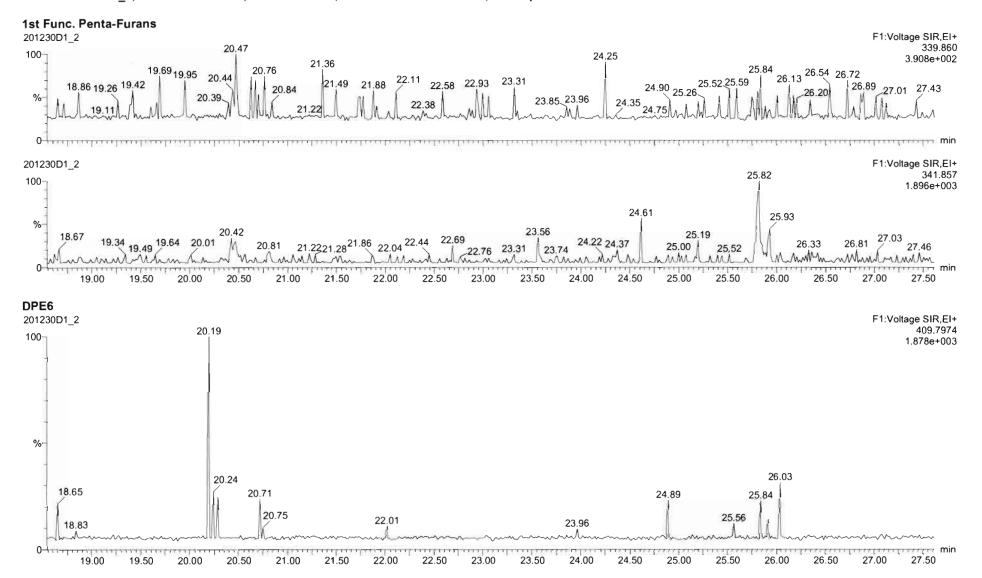
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Dataset:

U:\VG7.PRO\Results\201230D1\201230D1_2.qld

Last Altered: Wednesday, December 30, 2020 12:51:43 Pacific Standard Time Printed: Wednesday, December 30, 2020 12:52:10 Pacific Standard Time

Name: 201230D1_2, Date: 30-Dec-2020, Time: 11:57:31, ID: B0L0154-BS1 OPR 10, Description: OPR



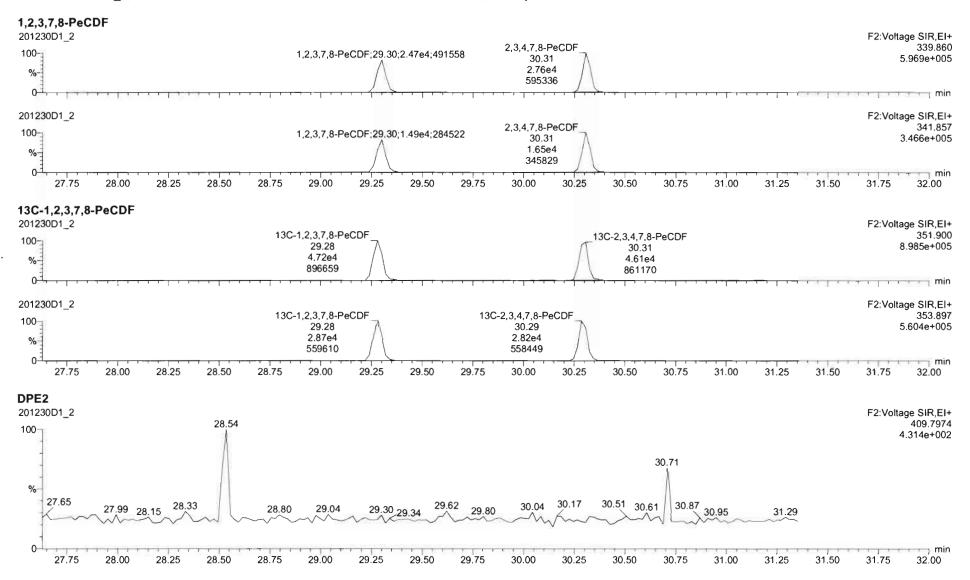
Work Order 2002434 Page 107 of 955

U:\VG7.PRO\Results\201230D1\201230D1_2.qld

Last Altered: Printed:

Wednesday, December 30, 2020 12:51:43 Pacific Standard Time Wednesday, December 30, 2020 12:52:10 Pacific Standard Time

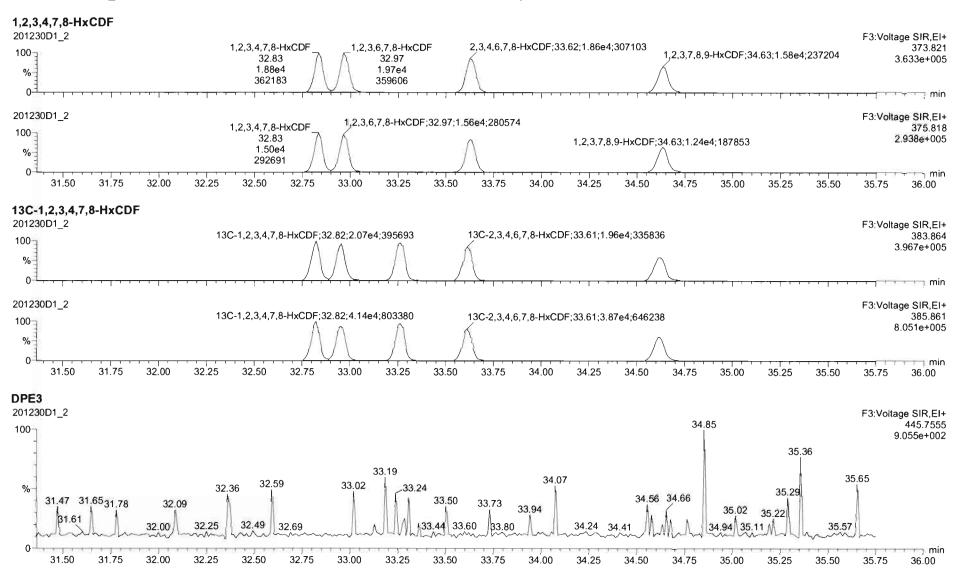
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U:\VG7.PRO\Results\201230D1\201230D1 2.qld

Last Altered: Wednesday, December 30, 2020 12:51:43 Pacific Standard Time Wednesday, December 30, 2020 12:52:10 Pacific Standard Time

Name: 201230D1_2, Date: 30-Dec-2020, Time: 11:57:31, ID: B0L0154-BS1 OPR 10, Description: OPR

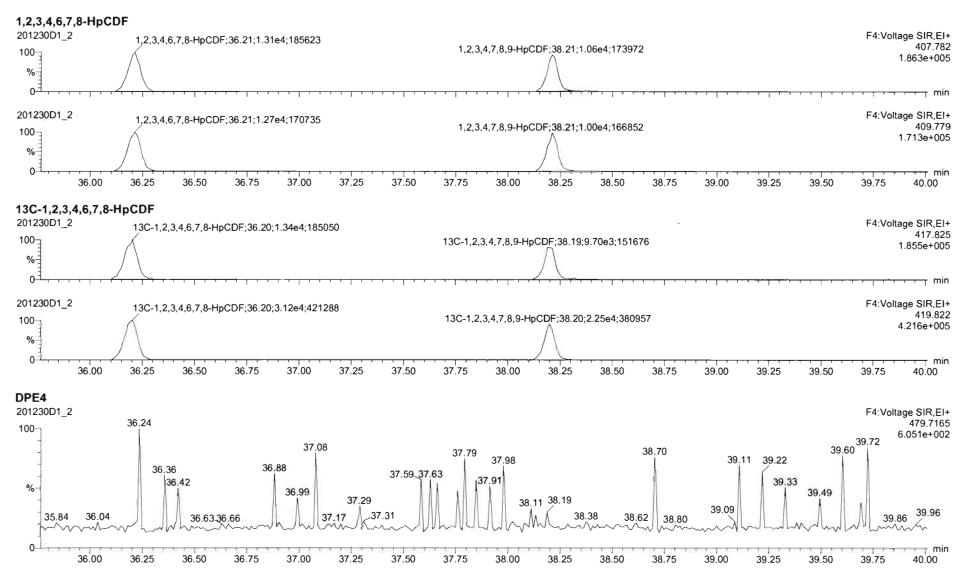


Work Order 2002434

Dataset: U:\VG7.PRO\Results\201230D1\201230D1_2.qld

Last Altered: Wednesday, December 30, 2020 12:51:43 Pacific Standard Time Printed: Wednesday, December 30, 2020 12:52:10 Pacific Standard Time

Name: 201230D1_2, Date: 30-Dec-2020, Time: 11:57:31, ID: B0L0154-BS1 OPR 10, Description: OPR

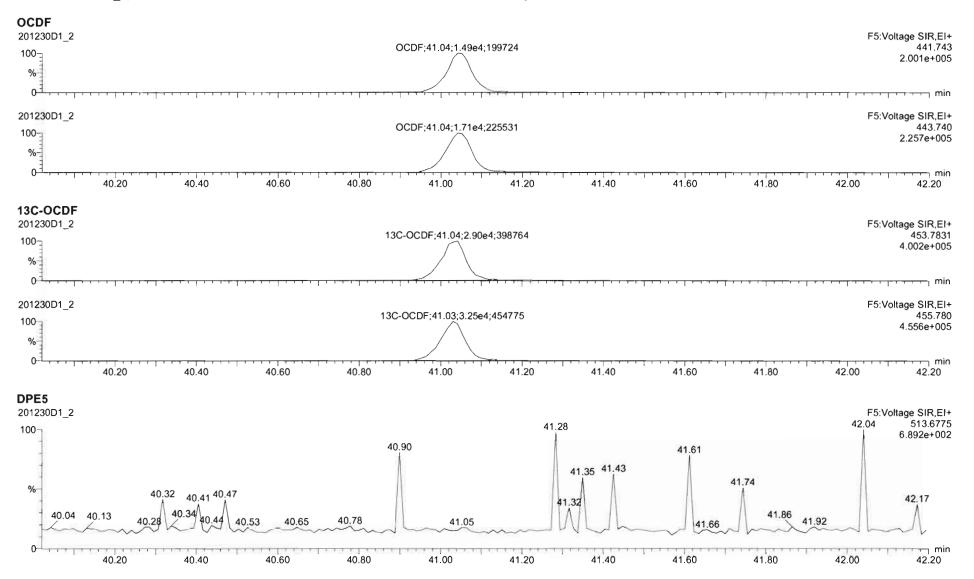


Vista Analytical Laboratory

Dataset: U:\VG7.PRO\Results\201230D1\201230D1_2.qld

Last Altered: Wednesday, December 30, 2020 12:51:43 Pacific Standard Time Printed: Wednesday, December 30, 2020 12:52:10 Pacific Standard Time

Name: 201230D1_2, Date: 30-Dec-2020, Time: 11:57:31, ID: B0L0154-BS1 OPR 10, Description: OPR



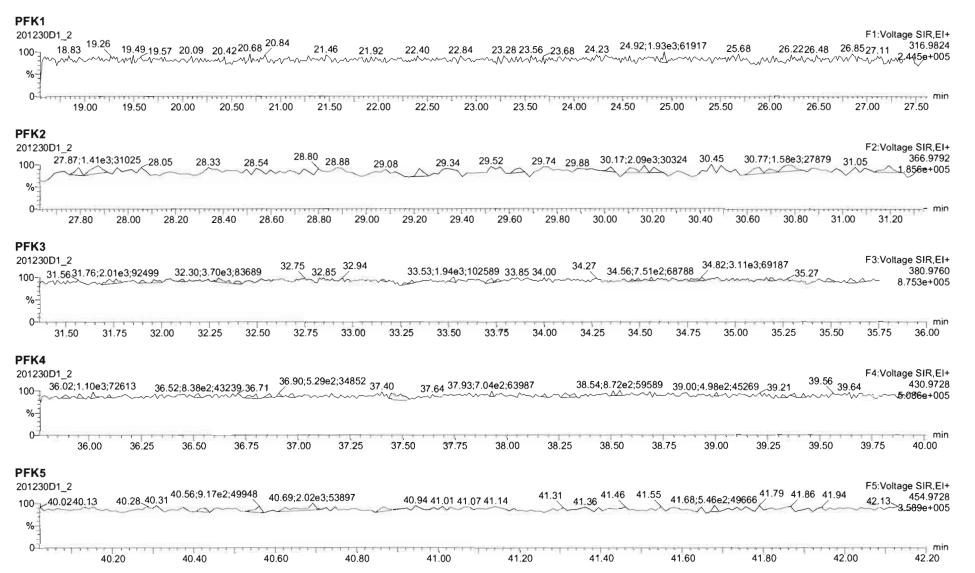
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Vista Analytical Laboratory

Dataset: U:\VG7.PRO\Results\201230D1\201230D1_2.qld

Last Altered: Wednesday, December 30, 2020 12:51:43 Pacific Standard Time Printed: Wednesday, December 30, 2020 12:52:10 Pacific Standard Time

Name: 201230D1_2, Date: 30-Dec-2020, Time: 11:57:31, ID: B0L0154-BS1 OPR 10, Description: OPR



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Dataset:

U:\VG12.PR0\Results\201212R1\201212R1-8.qld

Last Altered: Printed:

Monday, December 14, 2020 2:55:26 PM Pacific Standard Time Monday, December 14, 2020 2:55:56 PM Pacific Standard Time ¹

GRB 12/14/2020

Method: U:\VG12.PRO\MethDB\1613rrt-12-11-20.mdb 11 Dec 2020 08:35:32

Calibration: U:\VG12.PRO\CurveDB\dbDIOXIN_1613vg12-12-03-20.cdb 04 Dec 2020 11:36:07

Name: 201212R1_8, Date: 12-Dec-2020, Time: 16:59:35, ID: 2002434-01 USMPDI-021SC-A-01-02-201107 14.97, Description: USMPDI-021SC-A-01-02-201107

المست العداد	# Name	Resp 1	_RA	_n/y_	RRF	wt/vol !* L	Pred.RT	RT _{3.3} 1	Pred.RRT, L	RRT	Conc.	%Rec	· J DU L	EMPC
1	1 2,3,7,8-TCDD	2.54e3	0.49	YES	0.980	10.052	26.396	26.41	1.001	1.002	0.24883		0.0249	0.189
2	2 1,2,3,7,8-PeCDD	2.72e3	0.68	NO	0.932	10.052	31.079	31.08	1.001	1.001	0.33475		0.0471	0.335
3	3 1,2,3,4,7,8-HxCDD	2.53e3	1.25	NO	1.02	10.052	34.379	34.38 <	1.001	1.001	0.35687		0.0944	0.357
4	4 1,2,3,6,7,8-HxCDD	1.82e4	1.30	NO	0.902	10.052	34.494	34.48 /	1.001	1.000	2.6057		0.0970	2.61
5	5 1,2,3,7,8,9-HxCDD	6.98e3	1.24	NO	0.954	10.052	34.755	34.76 /	1.000	1.000	0.94454		0.0965	0.945
6	6 1,2,3,4,6,7,8-HpCDD	3.75e5	1.04	NO	0.918	10.052	38.211	38.22	1.000	1.001	63.150		0.439	63.1
建艺人工	7 OCDD	3.69e6	0.88	NO	0.866	10.052	41.113	41.12	1.000	1.000	879.14		0.483	879
8	8 2,3,7,8-TCDF	1.28e5	0.74	NO	0.848	10.052 ₁	25.687	25.70	1.000	1.001	10.877		0.0431	10.9
9	9 1,2,3,7,8-PeCDF	1.71e5	1.57	NO	0.960	10.052	29.800	29.81	1.000	1.000	13.892		0.0605	13.9
10	10 2,3,4,7,8-PeCDF	1.05e5	1.50	NO	1.07	10.052	30.889	30.88	1.001	1.000	8.2225		0.0567	8.22
11	11 1,2,3,4,7,8-HxCDF	1.77e5	1.24	NO	0.986	10.052	33.457	33.46 <	1.000	1.000	19.934		0.0568	19.9
12	12 1,2,3,6,7,8-HxCDF	4.62e4	1.17	NO	1.04	10.052	33.603	33.59 <	1.001	1.000	4.8902		0.0556	4.89
13	13 2,3,4,6,7,8-HxCDF	1.45e4	1.20	NO	1.02	10.052	34.264	34.26	1.001	1.001	1.6148		0.0617	1.61
14	14 1,2,3,7,8,9-HxCDF	5.44e3	1.11	NO	0.991	10.052 ·	35.248	35.27	1.000	1.001	0.69025		0.0789	0.690
100 mm m	15 1,2,3,4,6,7,8-HpCDF	1.10e5	1.03	NO	1.05	10.052*	36.824	36.82	1.000	1.000	16.616		0.123	16.6
,	16 1,2,3,4,7,8,9-HpCDF	2.32e4	1.00	NO	1.18	10.052	38.839	38.84	1.000	1.000	3.8818		0.106	3.88
17	17 OCDF	1.55e5	0.86	NO	0.896	10.052	41.396	41.41	1.000	1.001	33.073		0.133	33.1
18 fer a	18 13C-2,3,7,8-TCDD	2.07e6	0.78	NO	1.06	10.052	26.368	26.36	1.030	1.030	184.38	92.7	0.0592	
19	19 13C-1,2,3,7,8-PeCDD	1.7 4e6	0.63	NO	0.785	10.052	31.211	31.05	1.219	1.213	207.62	104	0.154	l
20	20 13C-1,2,3,4,7,8-HxCDD	1.38e6	1.28	NO	0.621	10.052	34.348	34.36 <	1.014	1.014	217.22	109	0.253	
	21 13C-1,2,3,6,7,8-HxCDD	1.54e6	1.28	NO	0.734	10.052	34.470	34.47 /	1.017	1.017	205.18	103	0.214	
22	22 13C-1,2,3,7,8,9-HxCDD	1. 54e 6	1.26	NO	0.723	10.052	34.755	34.74 ′	1.026	1.025	208.32	105	0.218	
231 3 1-1	23 13C-1,2,3,4,6,7,8-HpCD	D 1.29e6	1.05	NO	0.568	10.052	38.255	38.20	1.129	1.127	221.10	111	0.450	
	24 13C-OCDD	1.93e6	0.90	NO	0.496	10.052	41.193	41.10	1.216	1.213	379.90	95.5	0.408	
25	25 13C-2,3,7,8-TCDF	2.77e6	0.78	NO	0.919	10.052	25.667	25.68	1.003	1.003	178.94	89.9	0.0940	
26	26 13C-1,2,3,7,8-PeCDF	2.55e6	1.57	NO	0.715	10.052	29.921	29.80	1.169	1.164	212.26	107	0.200	
27/4 ,3- 3	27 13C-2,3,4,7,8-PeCDF	2.38e6	1.59	NO	0.689	10.052	31.008	30.87	1.212	1.206	205.84	103	0.207	
28	28 13C-1,2,3,4,7,8-HxCDF	1.79e6	0.51	NO	0.873	10.052	33.453	33.45 🖊	0.987	0.987	200.01	101	0.237	
29 7	29 13C-1,2,3,6,7,8-HxCDF	1.81e6	0.51	NO	0.933	10.052	33.582	33.58 ′	0.991	0.991	189.38	95.2	0.222	
30	30 13C-2,3,4,6,7,8-HxCDF	1.75e6	0.51	NO	0.843	10.052	34.250	34.24	1.011*	1.011	202.26	102	0.246	
31,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	31 13C-1,2,3,7,8,9-HxCDF	1.58e6	0.51	NO	0.780	10.052	35.249	35.24	1.040	1.040	198.20	99.6	0.266	

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Name: 201212R1_8, Date: 12-Dec-2020, Time: 16:59:35, ID: 2002434-01 USMPDI-021SC-A-01-02-201107 14.97, Description: USMPDI-021SC-A-01-02-201107

1	# Name	Resp	ر (RA	_n/y,	RRF	FMWolfi	_Pred.RT ₃	<u>∠</u> RT,_	[Pred.RRT]	RRTAL	Conc	JL %Recil.	"DU L	EMPC
32	32 13C-1,2,3,4,6,7,8-HpCDF	1.26e6	0.43	NO	0.726	10.052	36.825	36.81	1.087	1.086	168.76	84.8	0.374	
33	33 13C-1,2,3,4,7,8,9-HpCDF	1.01e6	0.43	NO	0.491	10.052	38.835	38.83	1.146	1.146	200.61	101	0.553	
34]. 34 13C-OCDF	2.08e6	0.88	NO	0.565	10.052	41.410	41.39	1.222	1.221	359.38	90.3	0.342	
35	1 35 37CI-2,3,7,8-TCDD	9.68e5			1.22	10.052	26.363	26.39	1.030	1.031	74.698	93.9	0.0265	
36	36 13C-1,2,3,4-TCDD	2.12e6	0.79	NO	1.00	10.052	25.640	25.59	1.000	1.000	198.96	100	0.0625	
37 4 7 7 13 2	¶ 37 13C-1,2,3,4-TCDF	3.35e6	0.79	NO	1.00	10.052	24.130	24.10	1.000	1.000	198.96	100	0.0864	
38	38 13C-1,2,3,4,6,9-HxCDF	2.04e6	0.51	NO	1.00	10.052	33.920	33.89	1.000	1.000	198.96	100	0.207	
39	39 Total Tetra-Dioxins				0.980	10.052	24.620		0.000		1.7462		0.0249	2.05
40	40 Total Penta-Dioxins				0.932	10.052	29.960		0.000		2.3845		0.0471	3.50
41	41 Total Hexa-Dioxins				0.902	10.052	33.635		0.000		23.921		0.102	23.9
42	42 Total Hepta-Dioxins				0.918	10.052	37.640		0.000		145.56		0.439	146
437	43 Total Tetra-Furans				0.848	10.052	23.610		0.000		33.008		0.0431	33.3
44	44 1st Func. Penta-Furans				0.960	10.052	26.930		0.000		5.0255		0.0160	5.03
45 3 27 9	45 Total Penta-Furans				0.960	10.052	29.275		0.000		38.113		0.0618	38.1
46	46 Total Hexa-Furans				1.02	10.052	33.555		0.000		44.013		0.0620	44.0
47	47 Total Hepta-Furans				1.05	10.052	37.835		0.000		41.155		0.121	41.2

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Method: U:\VG12.PRO\MethDB\1613rrt-12-11-20.mdb 11 Dec 2020 08:35:32

Calibration: U:\VG12.PR0\CurveDB\dbDIOXIN_1613vg12-12-03-20.cdb 04 Dec 2020 11:36:07

Name: 201212R1_8, Date: 12-Dec-2020, Time: 16:59:35, ID: 2002434-01 USMPDI-021SC-A-01-02-201107 14.97, Description: USMPDI-021SC-A-01-02-201107

Tetra-Dioxins

Name	*L_RT	m1 Heig	ht i m2 Height }	m1 Resp [m2,Resp 1	[RA]	n/y . L.	Resp	Conc!	EMPC I	DL
1Total Tetra	-Dioxins 22.	59 2.544	4 3.924e4	2.394e3	3.504e3	0.68	NO	5.899e3	0.57740	0.57740	0.0249
2 Total Tetra	-Dioxins 22.9	93 1.031	e4 1.268e4	8.050e2	1.070e3	0.75	NO	1.875e3	0.18352	0.18352	0.0249
3 Total Tetra	-Dioxins 23.4	45 8.709	e3 1.150e4	6.951e2	9.104e2	0.76	NO	1.606e3	0.15716	0.15716	0.0249
4 Total Tetra	-Dioxins 24.3	31 1.259	4 1.211e4	7.667e2	9.117e2	0.84	NO	1.678e3	0.16429	0.16429	0.0249
5 Total Tetra	-Dioxins 24.5	53 4.885	e3 5.424e3	4.113e2	5.091e2	0.81	МО	9.204e2	0.090093	0.090093	0.0249
6 Total Tetra	-Dioxins 24.3	75 8.409	e3 1.050e4	5.205e2	7.423e2	0.70	NO	1.263e3	0.12362	0.12362	0.0249
7 Total Tetra	-Dioxins 24.9	96 2.596	e3 3.914e3	1.729e2	2.338e2	0.74	NO	4.067e2	0.039811	0.039811	0.0249
8 Total Tetra	-Dioxins 25.2	27 3.924	e3 5.607e3	3.343e2	4.663e2	0.72	NO	8.006e2	0.078366	0.078366	0.0249
9 - 9 Total Tetra	-Dioxins 25.3	33 3.354	e3 5.565e3	2.021e2	7.480e2	0.27	YES	0.000e0	0.00000	0.045468	0.0249
10 Total Tetra		7.433	3 7.191e3	5.421e2	4.133e2	1.31	YES	0.000e0	0.00000	0.071610	0.0249
11 Total Tetra	-Dioxins 26.	13 1.136	4 1.713e4	9.005e2	1.161e3	0.78	NO	2.061e3	0.20178	0.20178	0.0249
12 2,3.7,8-TC		41 1.272	e4 2.835e4	8.402e2	1.702e3	0.49	YES	2.542e3	0.00000	0.18906	0.0249
13 Total Tetra	-Dioxins 26.7	70 5.261	e3 7.456e3	3.184e2	4.137e2	0.77	NO	7.321e2	0.071660	0.071660	0.0249
14 Total Tetra	-Dioxins 27.2	28 4.745	e3 5.368e3	2.579e2	3.401e2	0.76	NO	5.979e2	0.058530	0.058530	0.0249

Penta-Dioxins

Name, (: 5	RT 1	m1 Height	m2 Height	'm1 Resp	m2 Resp	(RA) u/y []	Resp	Conc.	EMPC	DL
1 Total Penta-Dioxins	28.80	4.153e4	7.274e4	2.927e3	4.989e3	0.59	NO	7.916e3	0.97383	0.97383	0.0471
2 7 Total Penta-Dioxins	29.28	2.454e4	2.824e4	1.137e3	1.596e3	0.71	NO	2.732e3	0.33611	0.33611	0.0471
3 Total Penta-Dioxins	29.81	4.254e4	5.215e4	2.362e3	2.890e3	0.82	YES	0.000e0	0.00000	0.57957	0.0471
Total Penta-Dioxins	29.99	2.339e4	3.946e4	1.107e3	1.765e3	0.63	NO	0.000e0	0.00000	0.35329	0.0471
5 Total Penta-Dioxins	30.04	1.515e4	2.173e4	6.123e2	8.567e2	0.71	NO	0.000e0	0.00000	0.18072	0.0471
6 Total Penta-Dioxins	30.26	2.083e4	3.616e4	1.621e3	2.461e3	0.66	NO	4.082e3	0.50212	0.50212	0.0471
7 . Total Penta-Dioxins	30.61	4.607e3	4.448e3	1.981e2	2.833e2	0.70	NO	4.814e2	0.059222	0.059222	0.0471
8 - [-] 1,2,3,7,8-PeCDD	31.08	2.208e4	3.118e4	1.103e3	1.618e3	0.68	NO	2.721e3	0.33475	0.33475	0.0471
9 Total Penta-Dioxins	31.15	5.302e3	9.986e3	2.527e2	3.636e2	0.70	NO	6.163e2	0.075821	0.075821	0.0471
10 7 Total Penta-Dioxins	31.42	8.585e3	1.019e4	3.479e2	4.861e2	0.72	NO	8.340e2	0.10260	0.10260	0.0471

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Name: 201212R1_8, Date: 12-Dec-2020, Time: 16:59:35, ID: 2002434-01 USMPDI-021SC-A-01-02-201107 14.97, Description: USMPDI-021SC-A-01-02-201107

Hexa-Dioxins

Name	ليب برسيد من المراجع ا	RT L	n1 Height)	m2 Height : دور	m1 Resp	m2 Resp	[RA]	n/y, j-	_Resp	Conc.	EMPC •	DL DL
1 Total	Hexa-Dioxins	32.72	6.813e5	5.647e5	3.484e4	2.783e4	1.25	NO	6.267e4	9.2825	9.2825	0.102
2 Total	Hexa-Dioxins	33.32	5.712e4	4.594e4	3.201e3	2.527e3	1.27	NO	5.728e3	0.84834	0.84834	0.102
7 Total	Hexa-Dioxins	33.61	5.094e5	3.995e5	3.470e4	2.791e4	1.24	NO	6.260e4	9.2727	9.2727	0.102
4Total	Hexa-Dioxins	33.70	3.213e4	2.432e4	1.318e3	1.189e3	1.11	NO	2.507e3	0.37127	0.37127	0.102
5 1,2,3,	4,7,8-HxCDD	34.38	2.264e4	1.88 6e4	1.402e3	1.125e3	1.25	NO	2.527e3	0.35687	0.35687	0.0944
6 1,2,3,	6,7,8-HxCDD	34.48	1.706e5	1.279e5	1.032e4	7.917e3	1.30	NO	1.823e4	2.6057	2.6057	0.0970
7 Total	Hexa-Dioxins	34.65	1.342e4	1.205e4	8.393e2	7.764e2	1.08	NO	1.616e3	0.23931	0.23931	0.102
8 1,2,3,	7,8,9-HxCDD	34.76	5.936e4	4.749 e 4	3.862e3	3.122e3	1.24	NO	6.985e3	0.94454	0.94454	0.0965

Hepta-Dioxins

Name , 1 , Total Hepta-Dioxins 2 , 1,2,3,4,6,7,8-HpCDD	RTT	m1 Height	m2 Height; [m1 Resp }	m2 Resp	[RA]	n/y_[⊋ Resp [€] [*Conc. }	EMPC	DL ئىر
1 Total Hepta-Dioxins	37.21	3.127e6	3.080e6	2.471e5	2.418e5	1.02	NO	4.889e5	82.412	82.412	0.439
2 1,2,3,4,6,7,8-HpCDD	38.22	3.059e6	2.961e6	1.908e5	1.838e5	1.04	NO	3.746e5	63.150	63.150	0.439

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Name: 201212R1_8, Date: 12-Dec-2020, Time: 16:59:35, ID: 2002434-01 USMPDI-021SC-A-01-02-201107 14.97, Description: USMPDI-021SC-A-01-02-201107

Tetra-Furans

Name 1	_RT;	m1 Height	m2 Height	m1 Resp)	.m2 Resp	[[RA]	<u>[n</u> /y₄ [Resp	Conc!	EMPC)	DL
1 Total Tetra-Furans	20.33	7.059e3	1.048e4	6.853e2	9.189e2	0.75	NO	1.604e3	0.13612	0.13612	0.0431
2 Total Tetra-Furans	20.88	1.901e4	2.506e4	1.610e3	2.172e3	0.74	NO	3.782e3	0.32090	0.32090	0.0431
3 Total Tetra-Furans	21.68	6.904e4	9.424e4	6.300e3	8.983e3	0.70	NO	1.528e4	1.2967	1.2967	0.0431
4 Total Tetra-Furans	22.06	8.783e3	1.152e4	8.0 99e 2	9.796e2	0.83	NO	1.790e3	0.15185	0.15185	0.0431
5Total Tetra-Furans	22.19	1.954e4	2.880e4	2.177e3	2.574e3	0.85	NO	4.751e3	0.40310	0.40310	0.0431
6: Total Tetra-Furans	22.28	1.043e4	1.329e4	7.303e2	1.103e3	0.66	NO	1.834e3	0.15559	0.15559	0.0431
7 Total Tetra-Furans	22.52	7.433e3	1.202e4	4.464e2	5.670e2	0.79	NO	1.013e3	0.085992	0.085992	0.0431
8 Total Tetra-Furans	22.62	1.425e5	1.837e5	1.324e4	1.734e4	0.76	NO	3.059e4	2.5953	2.5953	0.0431
9 Total Tetra-Furans	23.10	7.622e4	9.649e4	6.168e3	8.136e3	0.76	NO	1.430e4	1.2137	1.2137	0.0431
10 Total Tetra-Furans	23.23	1.665e4	1.839 e 4	1.390e3	1.664e3	0.84	NO	3.055e3	0.25919	0.25919	0.0431
11 / Total Tetra-Furans	23.45	3.319e4	4.164e4	2.703e3	3.465e3	0.78	NO	6.168e3	0.52339	0.52339	0.0431
12 Total Tetra-Furans	23.84	7.421e3	1.075e4	5.655e2	7.139e2	0.79	NO	1.279e3	0.10856	0.10856	0.0431
13 Total Tetra-Furans	23.97	1.049e4	1.335e4	8.386e2	1.043e3	0.80	NO	1.881e3	0.15961	0.15961	0.0431
14) Total Tetra-Furans	24.22	7.242e4	8.738e4	9.325e3	1.186e4	0.79	NO	2.119e4	1.7977	1.7977	0.0431
15 Total Tetra-Furans	24.68	6.995e5	9.741e5	4.900e4	6.662e4	0.74	NO	1.156e5	9.8098	9.8098	0.0431
16, Total Tetra-Furans	25.00	2.122e4	3.112e4	1.584e3	2.322e3	0.68	NO	3.906e3	0.33143	0.33143	0.0431
17, Total Tetra-Furans	25.11	6.244e3	7.222e3	3.774e2	4.282e2	0.88	NO	8.056e2	0.068355	0.068355	0.0431
18 Total Tetra-Furans	25.23	5.531e3	4.894e3	3.016e2	3.603e2	0.84	NO	6.618e2	0.056157	0.056157	0.0431
19 Total Tetra-Furans	25.40	9.633e3	9.406e3	5.859e2	6.872e2	0.85	NO	1.273e3	0.10803	0.10803	0.0431
20 Total Tetra-Furans	25.58	7.853e4	1.028e5	5.155e3	6.825e3	0.76	NO	1.198e4	1.0165	1.0165	0.0431
21 2.3,7,8-TCDF	25.70	8.495e5	1.151e6	5.451e4	7.368e4	0.74	NO	1.282e5	10.877	10.877	0.0431
22 Total Tetra-Furans	25.96	1.317e4	1.976e4	1.014e3	1.412e3	0.72	NO	0.000e0	0.00000	0.20586	0.0431
23 Total Tetra-Furans	26.01	3.283e4	4.114e4	1.939e3	2.580e3	0.75	NO	4.519e3	0.38340	0.38340	0.0431
24 Total Tetra-Furans	26.28	7.195e3	1.168e4	5.184e2	6.677e2	0.78	NO	1.186e3	0.10064	0.10064	0.0431
25 Total Tetra-Furans	26.88	7.603e3	9.962e3	5.744e2	7.097e2	0.81	NO	1.284e3	0.10896	0.10896	0.0431
26 Total Tetra-Furans	27.04	8.557e3	1.201e4	5.015e2	6.744e2	0.74	NO	1.176e3	0.099781	0.099781	0.0431
27 Total Tetra-Furans	27.21	1.919e4	2.340e4	1.102e3	1.473e3	0.75	NO	2.575e3	0.21845	0.21845	0.0431
28 Total Tetra-Furans	27.43	1.335e4	8.527e3	8.463e2	4.934e2	1.72	YEŞ	0.000e0	0.00000	0.074102	0.0431
29 Total Tetra-Furans	, 27.58	5.377e4	6.586e4	3.158e3	4.173e3	0.76	NO_	7.332e3	0.62211	0.62211	0.0431

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Penta-Furans function 1

Name Name	RTAIL	m1 Height	m2 Height ()	m1 Resp [m2 Resp_1	[RA	<u>با</u> ۱۳/۷	Resp	Conc.	EMPC)	DL
1 1st Func. Penta-Furans	27.19	6.617e5	3.973e5	3.774e4	2.207e4	1.71	NO	5.982e4	5.0255	5.0255	0.0160

Penta-Furans

Name '	_RT;}	m1 Height	m2 Height	m1 Resp }	m2 Resp	<u> </u>	[u\y]}	Resp_	Conc. [* EMPC	DL
1 Total Penta-Furans	28.67	4.854e4	4.410e4	3.291e3	2.292e3	1.44	NO	5.584e3	0.46910	0.46910	0.0618
2 Total Penta-Furans	28.83	8.961e5	5.665e5	5.834e4	3.590e4	1.62	NO	9.424e4	7.9171	7.9171	0.0618
3 Total Penta-Furans	29.47	1.139e5	8.563e4	7.103e3	5.132e3	1.38	NO	1.224e4	1.0280	1.0280	0.0618
4. 5. Total Penta-Furans	29.62	1.908e5	1.172e5	9.544e3	6.831e3	1.40	NO	1.637e4	1.3757	1.3757	0.0618
51,2,3,7,8-PeCDF	29.81	2.134e6	1.357e6	1.044e5	6.661e4	1.57	NO	1.710e5	13.892	13.892	0.0605
6 Total Penta-Furans	29.89	4.035e4	2.474e4	1.589e3	1.048e3	1.52	NO	2.637e3	0.22155	0.22155	0.0618
7 Total Penta-Furans	30.07	6.140e5	4.172e5	3.160e4	2.098e4	1.51	NO	5.258e4	4.4171	4.4171	0.0618
8 Total Penta-Furans	30.69	2.590e4	1.872e4	1.128e3	8.224e2	1.37	NO	1.950e3	0.16384	0.16384	0.0618
9 2.3,4,7,8-PeCDF	30.88	1.261e6	8.307e5	6.308e4	4.202e4	1.50	NO	1.051e5	8.2225	8.2225	0.0567
10 r Total Penta-Furans	31.79	5.209e4	3.262e4	3.071e3	1.763e3	1.74	NO	4.834e3	0.40611	0.40611	0.0618

Hexa-Furans

	Name	RT.	m1 Height	m2 Height	m1 Resp	m2 Resp	, IRA,	in/y/i	Resp	Conc.	EMPC	DL
for.	7 Total Hexa-Furans	32.20	1.626e5	1.338e5	8.169e3	6.722e3	1.22	NO	1.489e4	1.6763	1.6763	0.0620
2.4	, Total Hexa-Furans	32.37	6.644e5	5.489e5	3.245e4	2.658e4	1.22	NO	5.902e4	6.6446	6.6446	0.0620
3	Total Hexa-Furans	32.78	1.195e4	1.013e4	6.831e2	5.960e2	1.15	NO	1.279e3	0.14400	0.14400	0.0620
4.	"Total Hexa-Furans	32.99	6.408e5	5.118e5	3.307e4	2.639e4	1.25	NO	5.945e4	6.6927	6.6927	0.0620
5} 7.7	Total Hexa-Furans	33.33	2.440e4	1.752e4	1.249e3	1:002e3	1.25	NO	2.251e3	0.25342	0.25342	0.0620
6	1,2,3,4,7,8-HxCDF	33.46	1.756e6	1.444e6	9.773e4	7.902e4	1.24	NO	1.767e5	19.934	19.934	0.0568
7	1,2,3,6,7,8-HxCDF	33.59	4.427e5	3.627e5	2.496e4	2.127e4	1.17	NO	4.623e4	4.8902	4.8902	0.0556
8 3	Total Hexa-Furans	33.91	1.271e4	8.759e3	6.238e2	4.741e2	1.32	NO	1.098e3	0.12359	0.12359	0.0620
9	2,3,4,6,7,8-HxCDF	34.26	1.286e5	9.714e4	7.893e3	6.568e3	1.20	NO	1.446e4	1.6148	1.6148	0.0617
10	1,2,3,7,8,9-HxCDF	35.27	1.114e5	8.760e4	2.869e3	2.574e3	1,11	NO	5.443e3	0.69025	0.69025	0.0789
117	Total Hexa-Furans	35.28	1.333e5	1.126e5	6.634e3	5.343e3	1.24	NO	1.198e4	1.3482	1.3482	0.0620

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Vista Analytical Laboratory

Dataset:

U:\VG12.PRO\Results\201212R1\201212R1-8.qld

Last Altered: Printed:

Monday, December 14, 2020 2:55:26 PM Pacific Standard Time Monday, December 14, 2020 2:55:56 PM Pacific Standard Time

Name: 201212R1_8, Date: 12-Dec-2020, Time: 16:59:35, ID: 2002434-01 USMPDI-021SC-A-01-02-201107 14.97, Description: USMPDI-021SC-A-01-02-201107

Hepta-Furans

Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	JĮRAJ	[U\A!]	Resp	Conc'	EMPC	- CDL
1 1,2,3,4,6,7,8-HpCDF	36.82	7.367e5	7.190e5	5.592e4	5.411e4	1.03	NO	1.100e5	16.616	16.616	0.123
2 Total Hepta-Furans	37.30	1.527e4	1.086e4	1.062e3	9.699e2	1.09	NO	2.032e3	0.34021	0.34021	0.121
3 Total Hepta-Furans	37.55	8.797e5	8.364e5	6.087e4	6.046e4	1.01	NO	1.213e5	20.317	20.317	0.121
4 1,2,3,4,7,8,9-HpCDF	38.84	1.941e5	1.951e5	1.158e4	1.157e4	1.00	NO	2.315e4	3.8818	3.8818	0.106

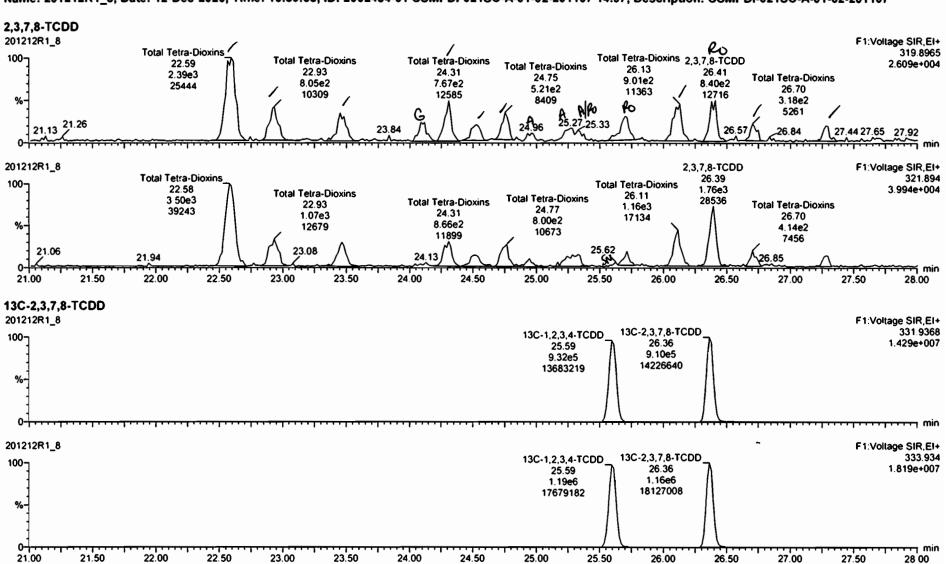
Work Order 2002434 Page 119 of 955

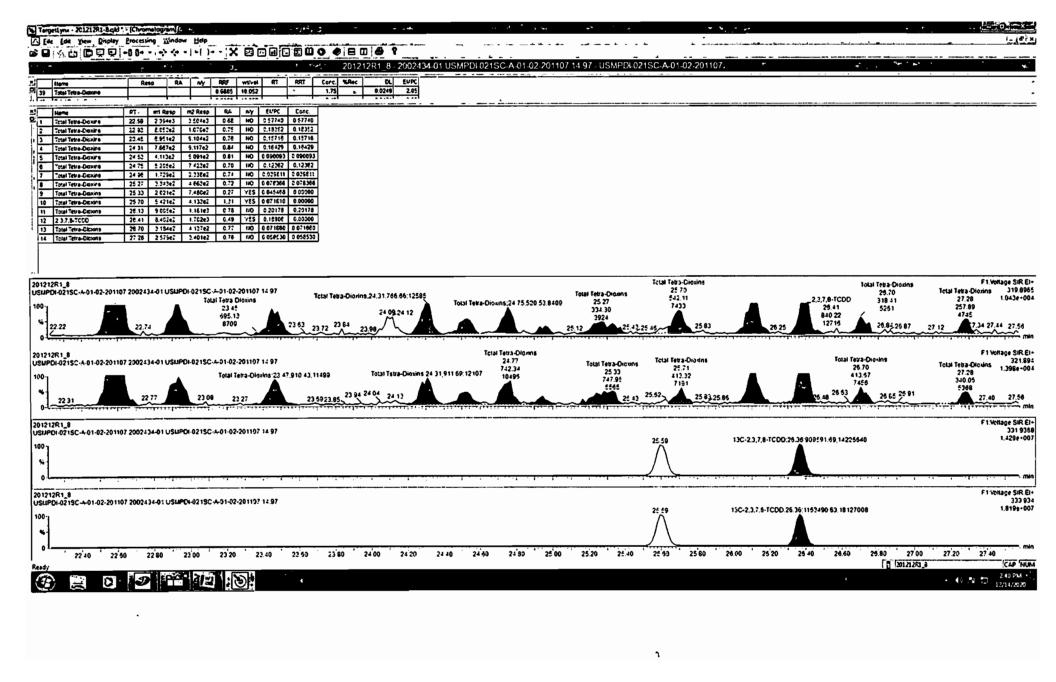
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Sunday, December 13, 2020 08:38:08 Pacific Standard Time Sunday, December 13, 2020 08:39:24 Pacific Standard Time

Name: 201212R1_8, Date: 12-Dec-2020, Time: 16:59:35, ID: 2002434-01 USMPDI-021SC-A-01-02-201107 14.97, Description: USMPDI-021SC-A-01-02-201107



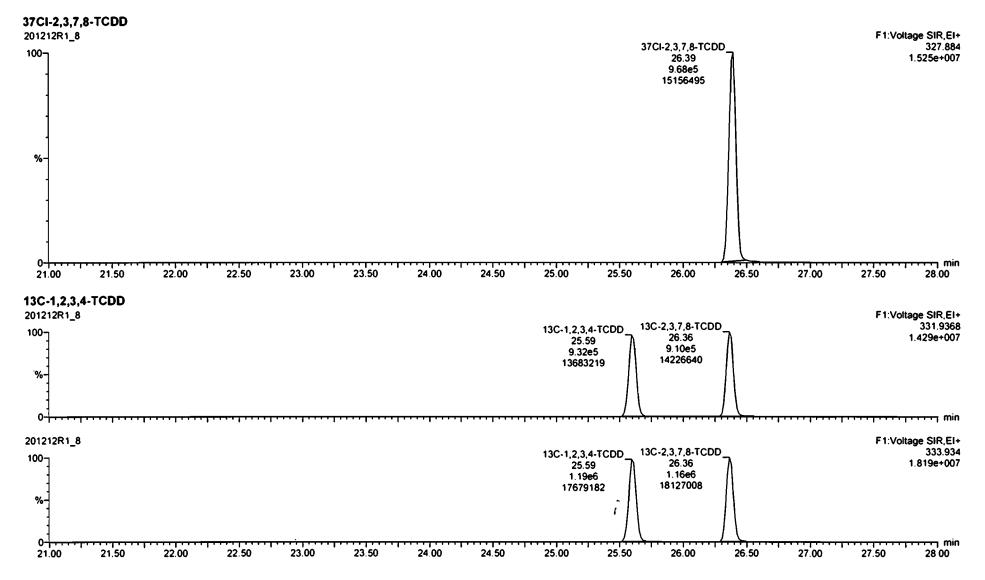


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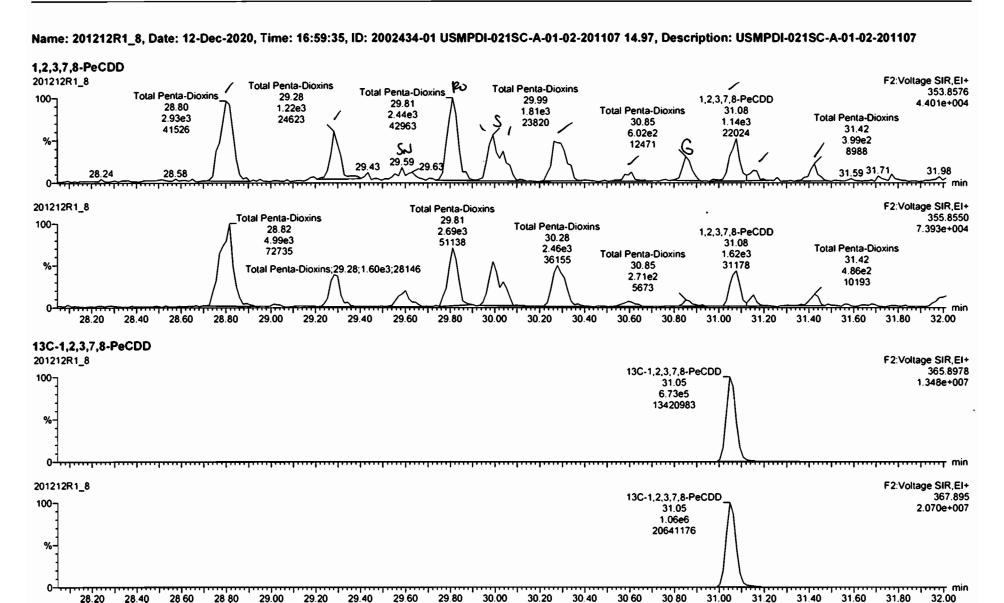
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Name: 201212R1_8, Date: 12-Dec-2020, Time: 16:59:35, ID: 2002434-01 USMPDI-021SC-A-01-02-201107 14.97, Description: USMPDI-021SC-A-01-02-201107

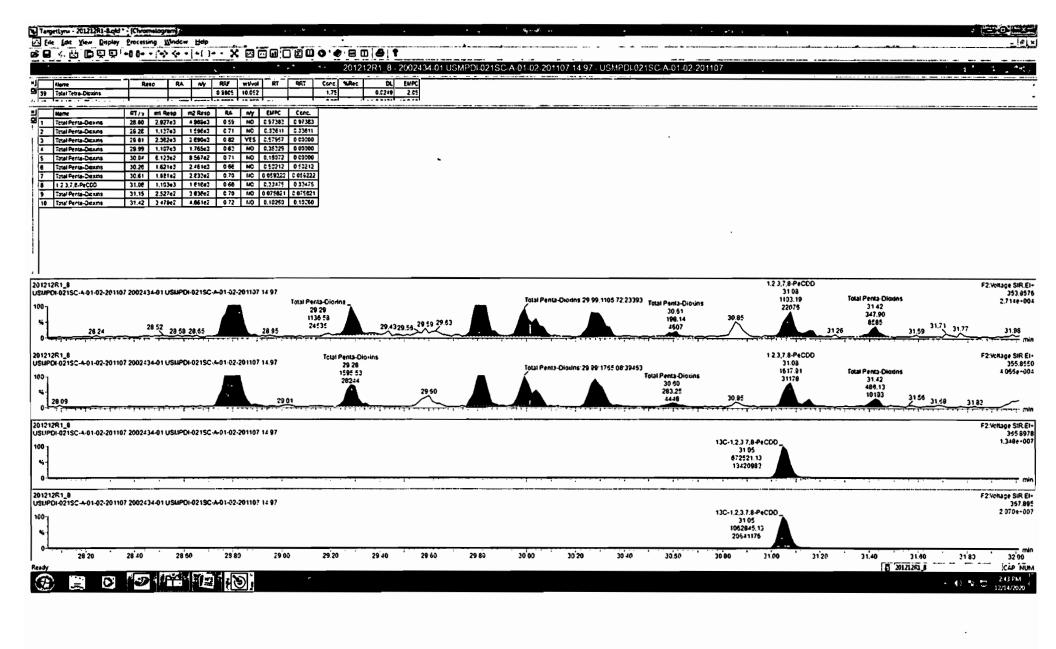


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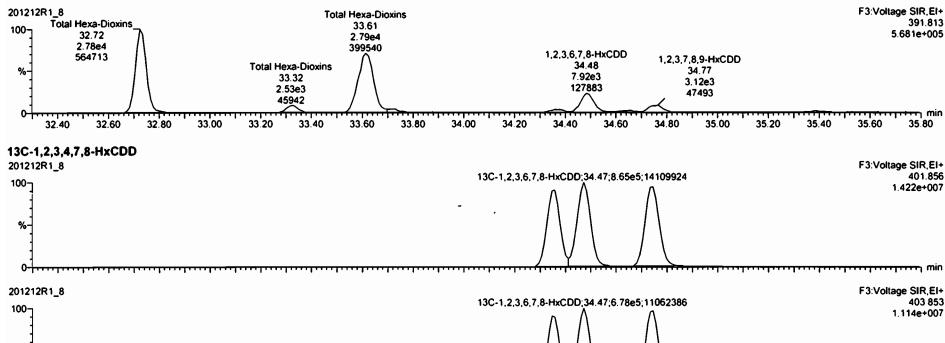
Last Altered: Sunday, December 13, 2020 08:38:08 Pacific Standard Time Sunday, December 13, 2020 08:39:24 Pacific Standard Time



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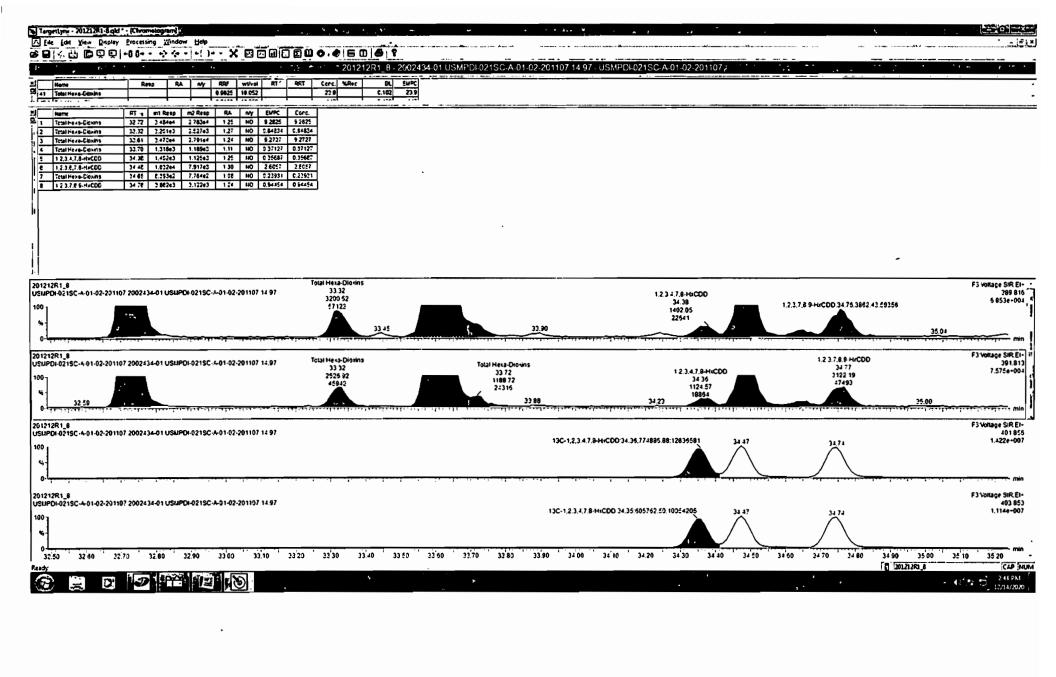
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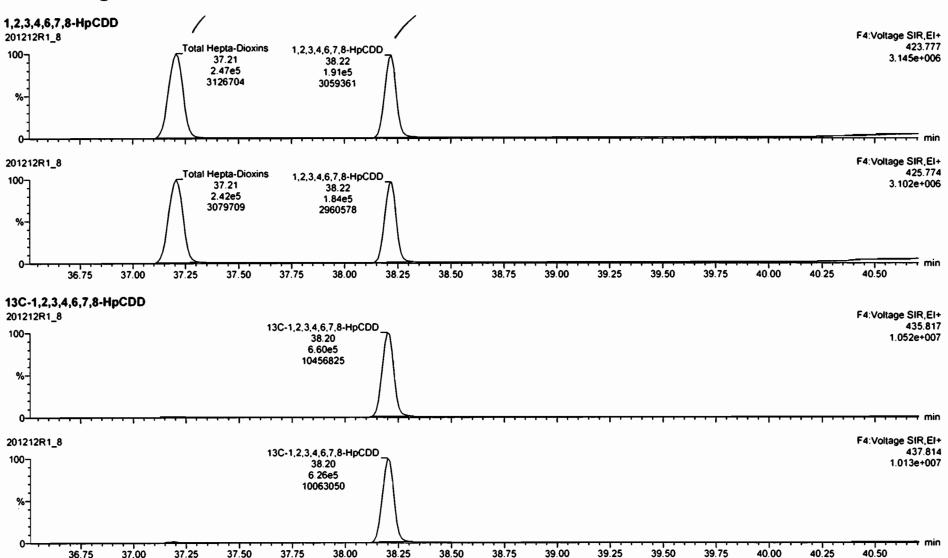
Work Order 2002434 Page 126 of 955

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Last Altered: Printed:

Sunday, December 13, 2020 08:38:08 Pacific Standard Time Sunday, December 13, 2020 08:39:24 Pacific Standard Time

Name: 201212R1_8, Date: 12-Dec-2020, Time: 16:59:35, ID: 2002434-01 USMPDI-021SC-A-01-02-201107 14.97, Description: USMPDI-021SC-A-01-02-201107

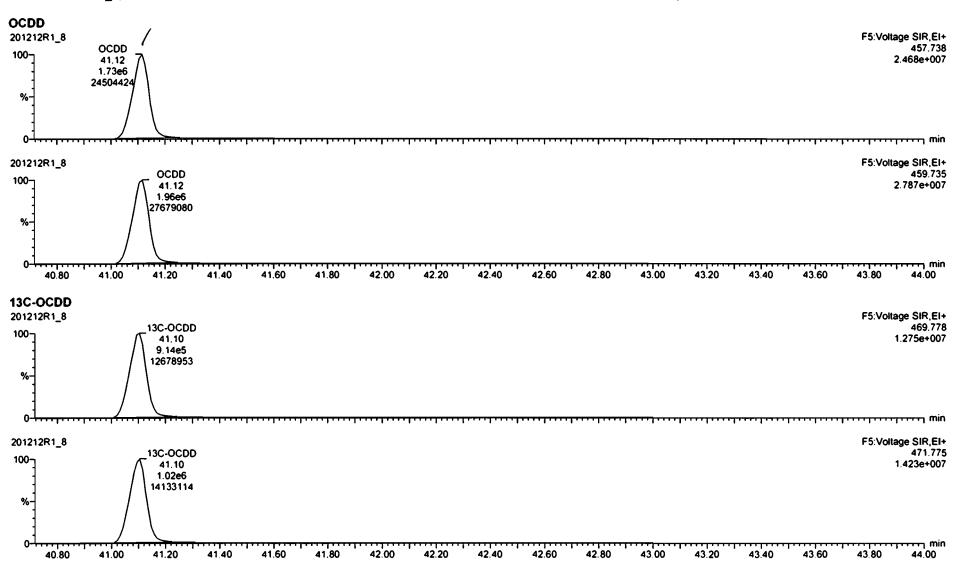


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Name: 201212R1_8, Date: 12-Dec-2020, Time: 16:59:35, ID: 2002434-01 USMPDI-021SC-A-01-02-201107 14.97, Description: USMPDI-021SC-A-01-02-201107



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Name: 204242B4 9 Date: 42 Dag 2020 Time: 45:50:25 ID: 2002424 04 USMBDI 0245C A 04 02 204407 44 07 Dagginting: USMBDI 0245C A 04 02 204407

Sunday, December 13, 2020 08:39:24 Pacific Standard Time

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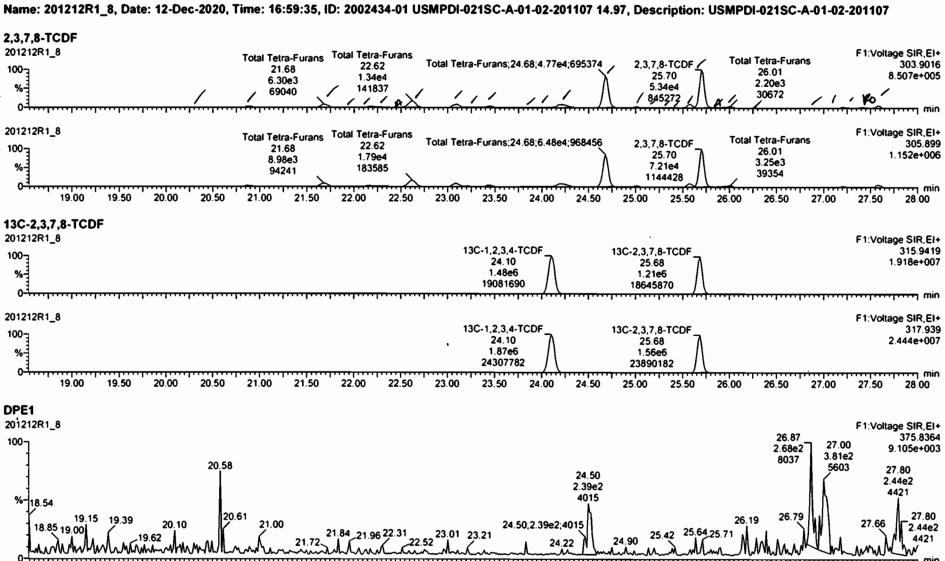
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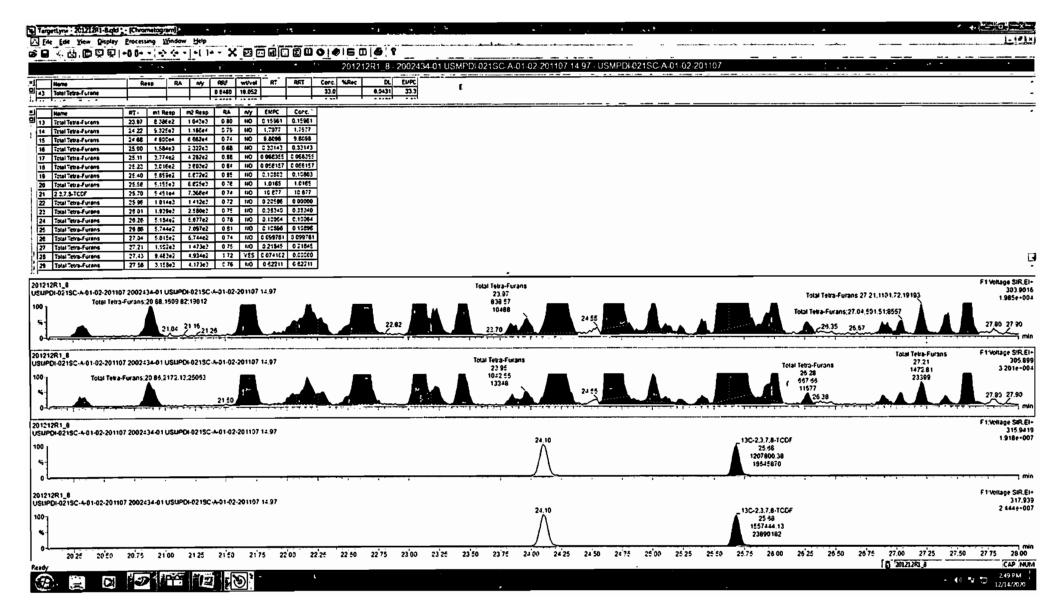
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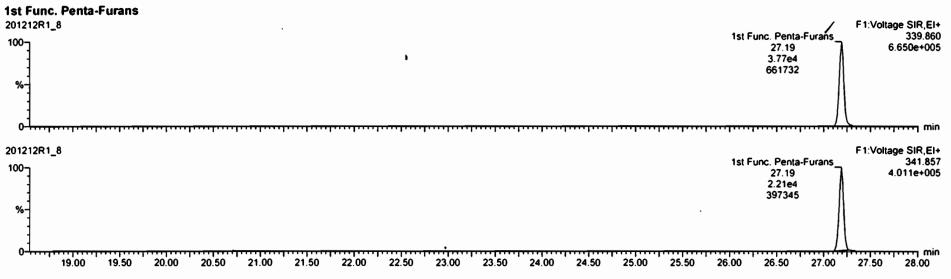
Work Order 2002434 Page 130 of 955

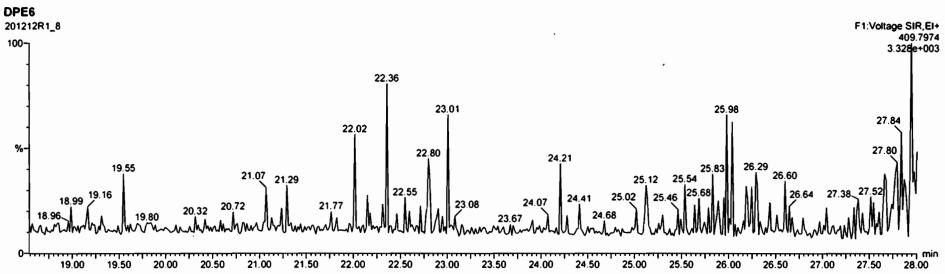
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Name: 201212R1_8, Date: 12-Dec-2020, Time: 16:59:35, ID: 2002434-01 USMPDI-021SC-A-01-02-201107 14.97, Description: USMPDI-021SC-A-01-02-201107

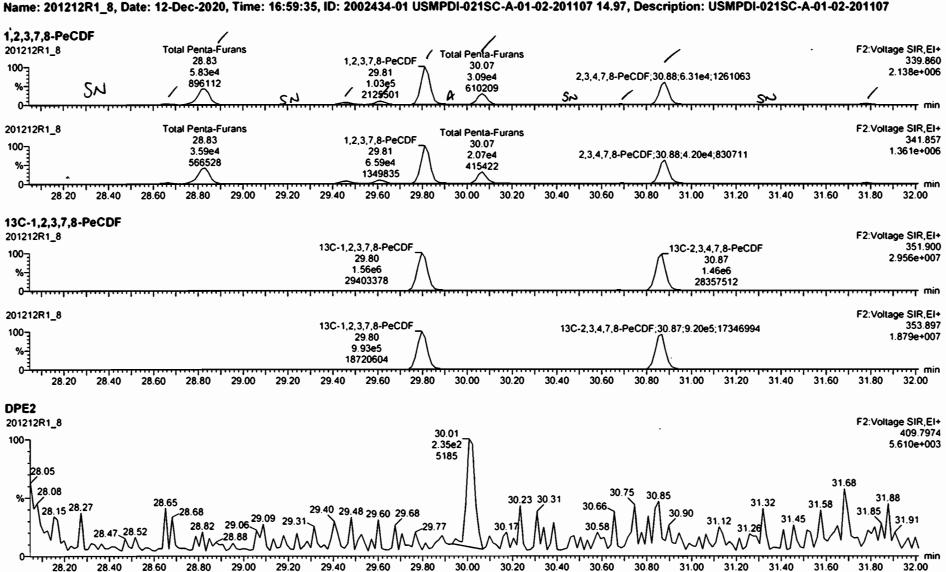




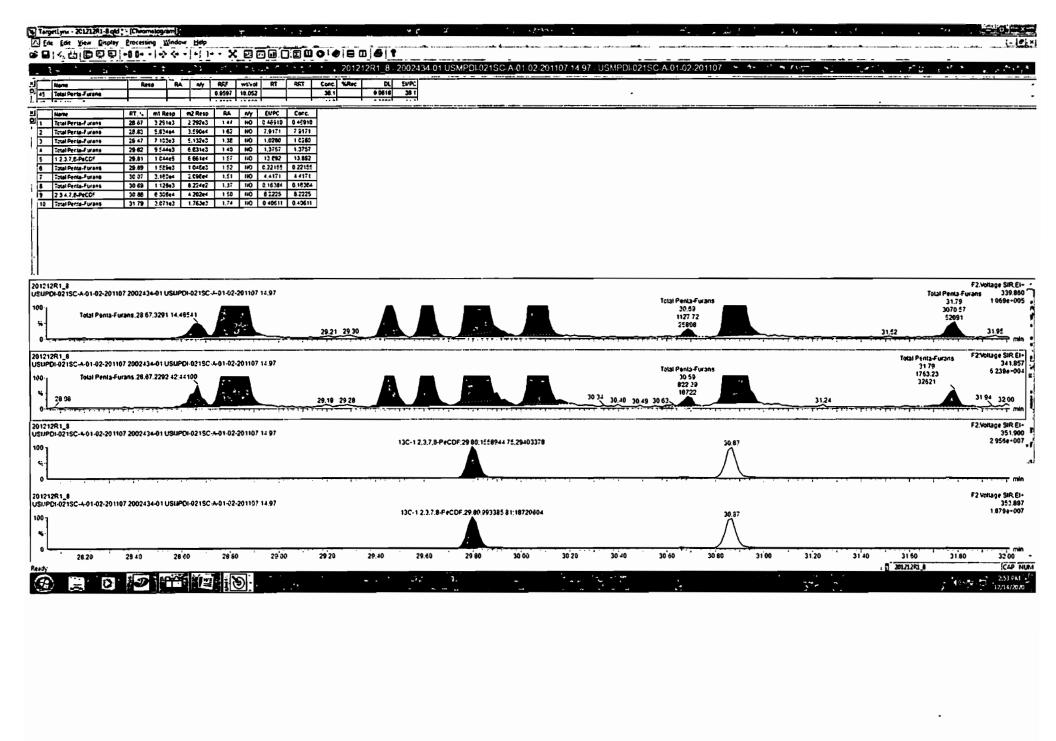


Sunday, December 13, 2020 08:39:24 Pacific Standard Time

Printed:



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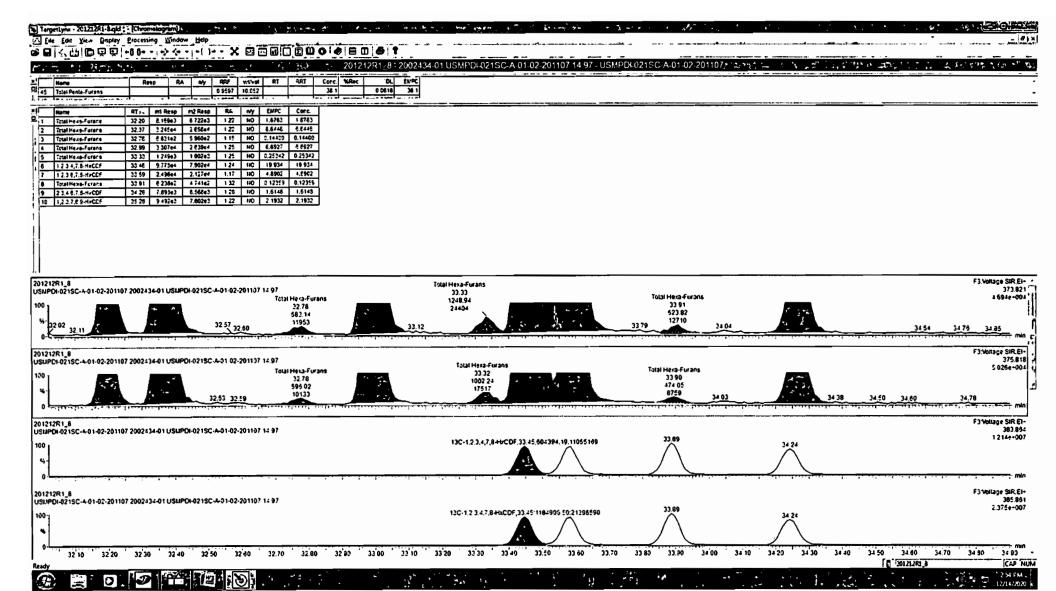
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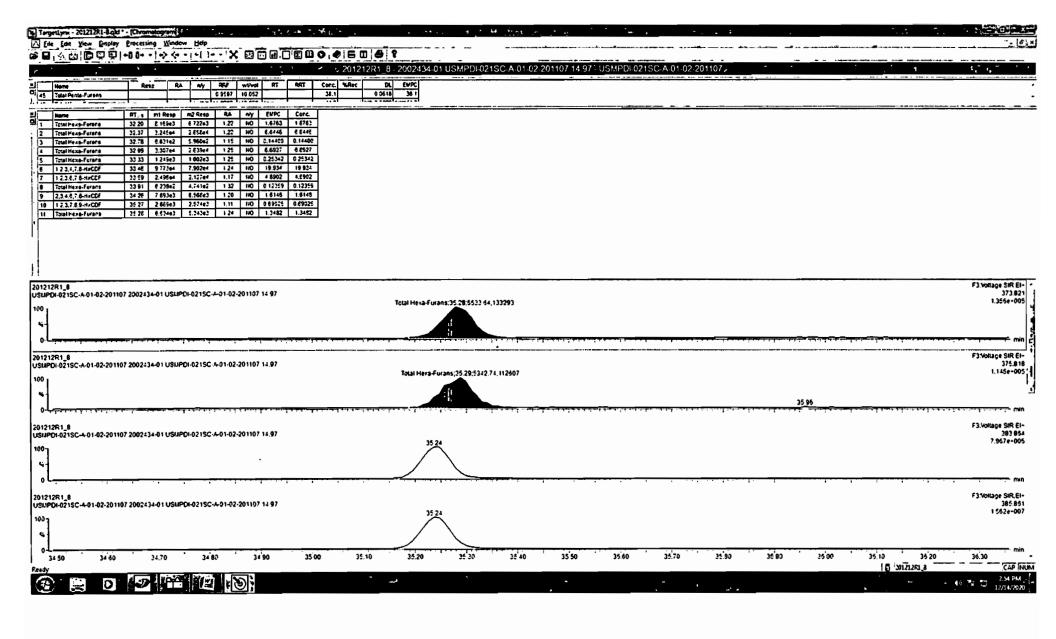
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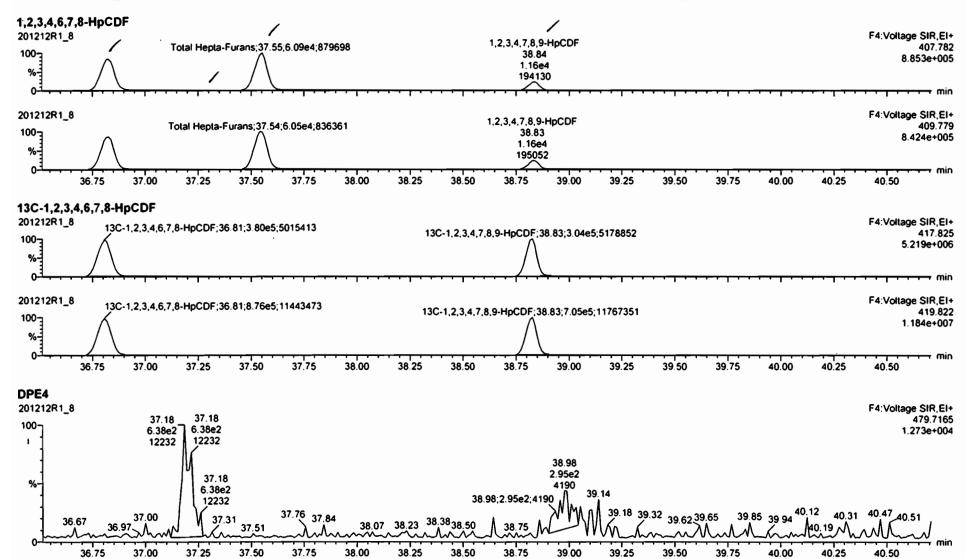
Work Order 2002434 Page 136 of 955

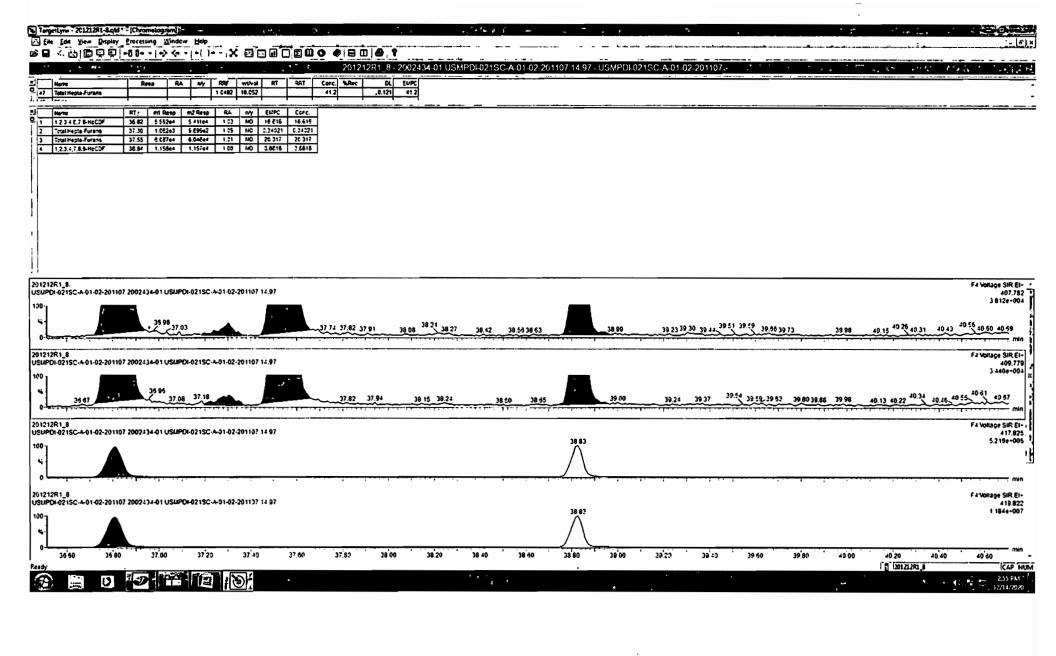
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Last Altered: Printed:

Sunday, December 13, 2020 08:38:08 Pacific Standard Time Sunday, December 13, 2020 08:39:24 Pacific Standard Time

Name: 201212R1_8, Date: 12-Dec-2020, Time: 16:59:35, ID: 2002434-01 USMPDI-021SC-A-01-02-201107 14:97, Description: USMPDI-021SC-A-01-02-201107





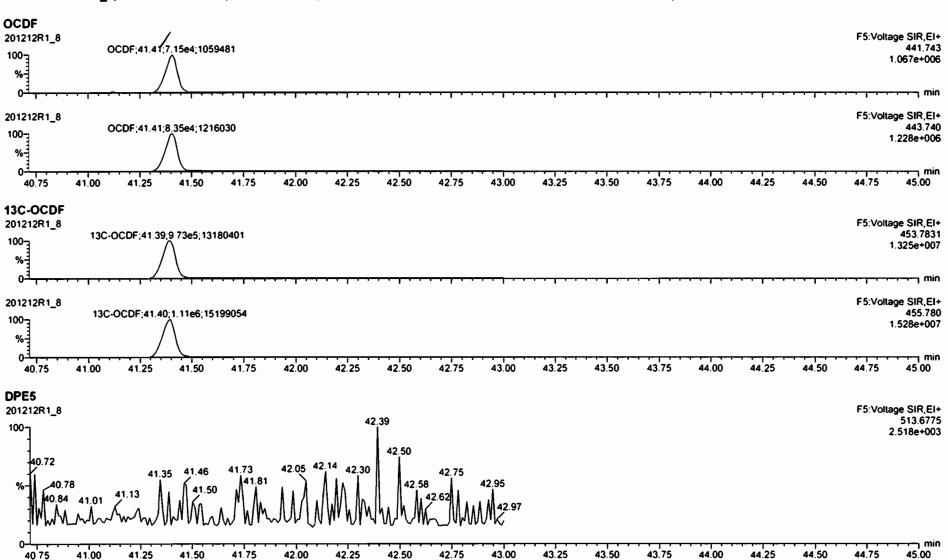
Work Order 2002434 Page 138 of 955

Untitled

Last Altered: Printed:

Sunday, December 13, 2020 08:38:08 Pacific Standard Time Sunday, December 13, 2020 08:39:24 Pacific Standard Time

Name: 201212R1_8, Date: 12-Dec-2020, Time: 16:59:35, ID: 2002434-01 USMPDI-021SC-A-01-02-201107 14.97, Description: USMPDI-021SC-A-01-02-201107

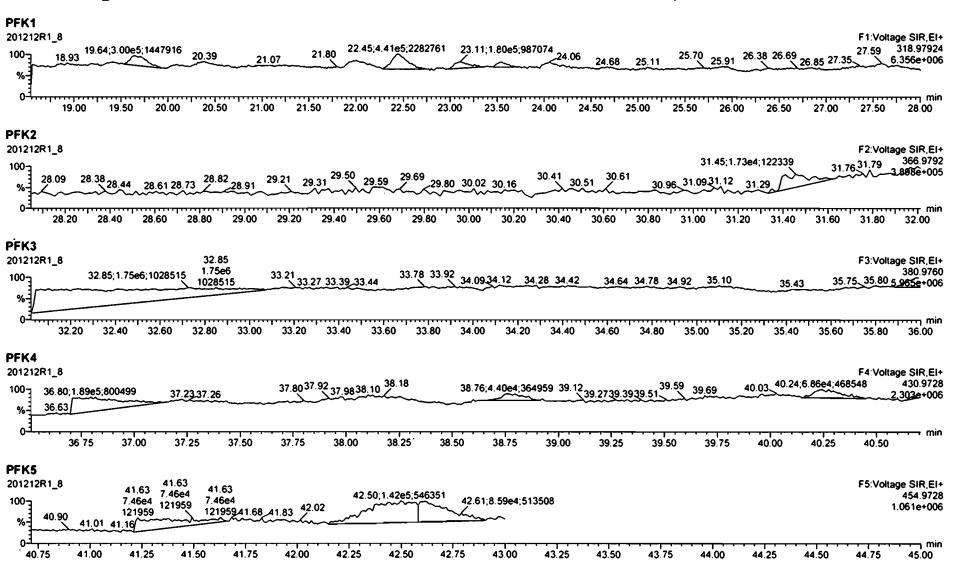


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Last Altered: Sunday, December 13, 2020 08:38:08 Pacific Standard Time Printed: Sunday, December 13, 2020 08:39:24 Pacific Standard Time

Name: 201212R1_8, Date: 12-Dec-2020, Time: 16:59:35, ID: 2002434-01 USMPDI-021SC-A-01-02-201107 14.97, Description: USMPDI-021SC-A-01-02-201107



Page 1 of 2

Dataset: U:\VG12.PRO\Results\201212R1\201212R1-9.qld

Last Altered: Monday, December 14, 2020 3:16:25 PM Pacific Standard Time Printed: Monday, December 14, 2020 3:17:41 PM Pacific Standard Time

GPB 12/14/2020

Method: U:\VG12.PRO\MethDB\1613rrt-12-11-20.mdb 11 Dec 2020 08:35:32

Calibration: U:\VG12.PRO\CurveDB\dbDIOXIN_1613vg12-12-03-20.cdb 04 Dec 2020 11:36:07

Name: 201212R1_9, Date: 12-Dec-2020, Time: 17:43:49, ID: 2002434-02 USMPDI-021SC-A-02-03-201107 13.51, Description: USMPDI-021SC-A-02-03-201107

* Name	Resp_	, RA	n/y	JRRF_	[wtvol_[Pred.RT	L RT	Pred.RRT	RRT-!	_Conc	%Rec.	DL' EMPC
1 2.3.7.8-TCDD	1.42e3	0.23	YES	0.980	10.027	26.396	26.38	1.001	1.001	0.14065	0	0.0627
21,5- 2 1,2,3,7,8-PeCDD			NO	0.932	10.027	31.079		1.001		·	0	.0423
3 1,2,3,4,7,8-HxCDD	2.02e3	1.15	NO	1.02	10.027	34.368	34.46	1.001	1.003	0.32517	0	.0701 0.325
4 1,2,3,6,7,8-HxCDD			NO	0.902	10.027	34.483		1.001			0	.0748
5 1,2,3,7,8,9-HxCDD	1.43e3	1.16	NO	0.954	10.027	34.745	34.74	1.000	1.000	0.21971	0	.0715 0.220
6 1,2,3,4,6,7,8-HpCDD	4.98e4	1.05	NO	0.918	10.027	38.200	38.21	1.000	1.001	9.6980		0.184 9.70
75 77 7 7 OCDD	4.40e5	0.88	NO	0.866	10.027	41.113	41.12	1.000	1.000	124.84		0.257 125
8 2.3.7.8-TCDF	1.35e4	0.79	NO	0.848	10.027	25.672	25.70	1.000	1.001	1.1675	0	.0331 1.17
9 1,2,3,7,8-PeCDF	3.43e5	1.57	NO	0.960	10.027	29.800	29.81	1.000	1.000	32.126	0	.0840 32.1
10. 2.3.4.7.8-PeCDF	1.29e5	1.58	NO	1.07	10.027	30.874	30.87	1.001	1.000	11.107	0	.0749 11.1
11 1,2,3,4,7,8-HxCDF	8.19e5	1.22	NO	0.986	10.027	33.446	33.46	1.000	1.001	102.20	0	.0738 102
12 1,2,3,6,7,8-HxCDF	1.76e5	1.22	NO	1.04	10.027	33.592	33.58	1.001	1.000	21.096	0	.0722 21.1
13 71 3: 13 2.3.4.6.7.8-HxCDF	3.91e4	1.21	NO	1.02	10.027	34.253	34.26	1.001	1.001	4.8860	0	.0776 4.89
14 1,2,3,7,8,9-HxCDF	3.65e4	1.15	NO	0.991	10.027	35.238	35.27	1.000	1.001	5.1659		0.100 5.17
15 1.2.3.4.6.7.8-HpCDF	8.53e4	0.99	NO	1.05	10.027	36.824	36.82	1.000	1.000	14.708	0	.0988 14.7
16:	2.85e4	1.03	NO	1.18	10.027	38.817	38.83	1.000	1.001	5.3687	0	.0853 5.37
17. 17 OCDF	3.30e4	0.84	NO	0.896	10.027	41.406	41.41	1.000	1.000	8.0924	0	.0945 8.09
18 13C-2,3,7,8-TCDD	1.97e6	0.78	NO	1.06	10.027	26.368	26.36	1.030	1.030	189.03	94.8 0	.0628
19 13C-1,2,3,7,8-PeCDD	1.59e6	0.64	NO	0.785	10.027	31.211	31.05	1.219	1.213	205.37	103	0.128
20 13C-1.2,3.4,7,8-HxCDD	1.22e6	1.28	NO	0.621	10.027	34.348	34.35	/ 1.014	1.014	210.71	106	0.258
21 13C-1,2,3,6,7,8-HxCDD	1.37e6	1.27	NO	0.734	10.027	34.470	34.46	1.017	1.017	200.80	101	0.218
22 13C-1,2,3,7,8,9-HxCDD	1.36e6	1.25	NO	0.723	10.027	34.755	34.74	/ 1.026	1.025	202.60	102	0.222
23 13C-1,2,3,4,6,7,8-HpCDD	1.11e6	1.05	NO	0.568	10.027	38.255	38.19	1.129	1.127	210.93	106	0.526
24 13C-OCDD	1.62e6	0.90	NO	0.496	10.027	41.193	41.10	1.216	1.213	352.00	88.2	0.377
25 13C-2,3,7,8-TCDF	2.73e6	0.77	NO	0.919	10.027	25.667	25.67	1.003	1.003	187.83	94.2	0.101
26 13C-1,2,3,7,8-PeCDF	2.22e6	1.58	NO	0.715	10.027	29.921	29.80	1.169	1.164	196.50	98.5	0.167
27 13C-2,3,4,7,8-PeCDF	2.17e6	1.60	NO	0.689	10.027	31.008	30.85	1.212	1.205	199.60	100	0.174
28 13C-1,2,3,4,7,8-HxCDF	1.62e6	0.52	NO	0.873	10.027	33.453	33.44	/ 0.987	0.987	199.54	100	0.259
29 3 29 13C-1,2,3,6,7,8-HxCDF	1.60e6	0.51	NO	0.933	10.027	33.582	33.57	/ 0.991	0.991	184.22	92.4	0.242
30 30 13C-2,3,4,6,7,8-HxCDF	1.57e6	0.51	NO	0.843	10.027	34.250	34.23	/ 1.011	1.010	199.45	100	0.268
31 13C-1,2,3,7,8,9-HxCDF	1.42e6	0.51	NO	0.780	10.027	35.249	35.23	/ 1.040	1.040	195.83	98.2	0.290

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U:\VG12.PRO\Results\201212R1\201212R1-9.qld

Last Altered: Printed:

Monday, December 14, 2020 3:16:25 PM Pacific Standard Time Monday, December 14, 2020 3:17:41 PM Pacific Standard Time

Name: 201212R1_9, Date: 12-Dec-2020, Time: 17:43:49, ID: 2002434-02 USMPDI-021SC-A-02-03-201107 13.51, Description: USMPDI-021SC-A-02-03-201107

للمن المناسلة	*	Name '	_ [Resp_	B LRA LI	n/y	RRF	T NOVO T	Pred.RT	_RT_	Pred.RRT	RRT	· · Conc.	L%Recil	DU	EMPC
32	32	13C-1,2,3,4,6,7,8-HpCDF	1.10e6	0.44	NO	0.726	10.027	36.825	36.81	1.087	1.086	163.11	81.8	0.335	
33	33	13C-1,2,3,4,7,8,9-HpCDF	9.00e5	0.43	NO	0.491	10.027	38.835	38.81	1.146	1.145	196.93	98.7	0.495	ŀ
34	34	13C-OCDF	1.81e6	0.87	NO	0.565	10.027	41.410	41.40	1.222	1.222	344.56	86.4	0.423	
35	35	37CI-2,3,7,8-TCDD	9.17e5			1.22	10.027	26.363	26.38	1.030	1.031	76.520	95.9	0.0169	
36	36	13C-1,2,3,4-TCDD	1.96e6	0.79	NO	1.00	10.027	25.640	25.59	1.000	1.000	199.46	100	0.0662	
37 -	37	13C-1,2,3,4-TCDF	3.15e6	0.79	NO	1.00	10.027	24.130	24.10	1.000	1.000	199.46	100	0.0927	
38	38	13C-1,2,3,4,6,9-HxCDF	1.86e6	0.51.	NO	1.00	10.027	33.920	33.89	1.000	1.000	199.46	100	0.226	
39	39	Total Tetra-Dioxins				0.980	10.027	24.620		0.000		0.51874		0.0232	0.697
40	40	Total Penta-Dioxins				0.932	10.027	29.960		0.000		0.53011		0.0423	0.831
41	41	Total Hexa-Dioxins			•	0.902	10.027	33.635		0.000		4.3417		0.0765	4.34
42	42	Total Hepta-Dioxins				0.918	10.027	37.640		0.000		22.780		0.184	22.8
43	43	Total Tetra-Furans				0.848	10.027	23.610		0.000		3.7992		0.0331	3.91
44	44	1st Func. Penta-Furans				0.960	10.027	26.930		0.000		1.6262		0.0133	1.63
45	45	Total Penta-Furans				0.960	10.027	29.275		0.000		68.803		0.0837	68.8
46	ⁱ 46	Total Hexa-Furans				1.02	10.027	33.555		0.000		158.11		0.0794	158
47	47	Total Hepta-Furans				1.05	10.027	37.835		0.000		29.514		0.0974	29.5

Work Order 2002434

Vista Analytical Laboratory

Dataset: U:\VG12.PR0\Results\201212R1\201212R1-9.qld

Last Altered: Monday, December 14, 2020 3:16:25 PM Pacific Standard Time Printed: Monday, December 14, 2020 3:17:41 PM Pacific Standard Time

Method: U:\VG12.PRO\MethDB\1613rrt-12-11-20.mdb 11 Dec 2020 08:35:32

Calibration: U:\VG12.PRO\CurveDB\dbDIOXIN_1613vg12-12-03-20.cdb 04 Dec 2020 11:36:07

Name: 201212R1_9, Date: 12-Dec-2020, Time: 17:43:49, ID: 2002434-02 USMPDI-021SC-A-02-03-201107 13.51, Description: USMPDI-021SC-A-02-03-201107

Tetra-Dioxins

-	Name	RT	m1 Height	m2 Height 1	m1 Resp [m2 Resp	(LRA) L	٧ <u>١</u> ١.	Resp	Conc.	EMPC)	٠٠٠ DL
13	Total Tetra-Dioxins	22.58	1.419e4	1.423e4	9.903e2	1.282e3			2.272e3	0.23521	0.23521	0.0232
2	Total Tetra-Dioxins	22.93	4.005e3	4.084e3	2.463e2	2.971e2	0.83	NO	5.434e2	0.056242	0.056242	0.0232
3,1 ,	Total Tetra-Dioxins	23.48	2.900e3	3.403e3	2.208e2	2.551e2	0.87	NO	4.760e2	0.049263	0.049263	0.0232
4 1.24	Total Tetra-Dioxins	24.29	7.990e3	1.057e4	5.673e2	7.785e2	0.73	NO	1.346e3	0.13930	0.13930	0.0232
5	Total Tetra-Dioxins	24.52	3.256e3	3.412e3	1.732e2	2.010e2	0.86	NO	3.742e2	0.038735	0.038735	0.0232
6.3	Total Tetra-Dioxins	24.77	3.159e3	3.650e3	2.106e2	2.392e2	0.88	NO	0.000e0	0.00000	0.046558	0.0232
7	Total Tetra-Dioxins	25.68	5.817e3	6.845e3	4.557e2	3.742e2	1.22 Y	'ES	0.000e0	0.00000	0.068557	0.0232
8	⁷ 2,3,7,8-TCDD	26.38	4.306e3	1.713e4	2.637e2	1.153e3	0.23 Y	'ES	1.417e3	0.00000	0.062746	0.0232

Penta-Dioxins

4 .		Name	· · ·	1	الندRT ال	m1 Height	m2 Height)	m1 Resp	m2 Resp	J [RA] [n/y, [, Resp;∸	L* Conc!	EMPC	i,DL
1		Total F	enta-Dioxir	าร	28.77	8.919e3					1.782e3	0.24020	0.24020	0.0423
2	1	Total F	enta-Dioxir	าร	29.28	7.206e3	1.023e4	3.071e2	5.187e2	0.59 NO	8.258e2	0.11134	0.11134	0.0423
3	T)	Total F	enta-Dioxir	าร	29.80	1.593e4	1.515e4	1.016e3	9.164e2	1.11 YES	0.000e0	0.00000	0.20139	0.0423
4	**	Total F	enta-Dioxir	าร	30.02	3.724e3	7.796e3	2.851e2	5.774e2	0.49 YES	0.000e0	0.00000	0.099455	0.0423
5	* * *	l Total F	enta-Dioxir	าร	30.31	6.739e3	1.101e4	5.324e2	7.922e2	0.67 NO	1.325e3	0.17858	0.17858	0.0423

Hexa-Dioxins

Name	RT.	m1 Height	m2 Height	m1 Resp	m2 Resp	J [RA]	in/y,	Resp	Conc.	EMPC	<u>ک</u> DL
1 Total Hexa-Dioxins	32.72	1.238e5	1.011e5	6.516e3	4.977e3	1.31	NO	1.149e4	1.9282	1.9282	0.0765
2 Total Hexa-Dioxins	33.32	1.318e4	1.400e4	6.987e2	5.876e2	1.19	NO	1.286e3	0.21582	0.21582	0.0765
3 Total Hexa-Dioxins	33.60	7.309e4	5.919e4	5.071e3	4.119e3	1.23	NO	9.190e3	1.5419	1.5419	0.0765
4 2 Total Hexa-Dioxins	33.67	7.532e3	5.755e3	3.646e2	2:963e2	1.23	NO	6.609e2	0.11088	0.11088	0.0765
51,2,3,4,7,8-HxCDD	34.46	1.665e4	1.663e4	1.081e3	9.432e2	1.15	NO	2.024e3	0.32517	0.32517	0.0701
6 c c 1,2,3,7,8,9-HxCDD	34.74	1.271e4	1.110e4	7.695e2	6.628e2	1.16	NO	1.432e3	0.21971	0.21971	0.0715

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Quantify Totals Report MassLynx 4.1 SCN815

Vista Analytical Laboratory

Dataset:

U:\VG12.PRO\Results\201212R1\201212R1-9.qld

Last Altered: Printed:

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Name: 201212R1_9, Date: 12-Dec-2020, Time: 17:43:49, ID: 2002434-02 USMPDI-021SC-A-02-03-201107 13.51, Description: USMPDI-021SC-A-02-03-201107

Hepta-Dioxins

Name -	RT	n1 Height	m2 Height	m1 Resp	_m2_Resp_	[RA]	u/y]i_	Resp	Conc.	EMPC	DL
1 Total Hepta-Dioxins	37.21	4.381e5	4.158e5	3.393e4	'3.318e4	1.02	NO	6.711e4	13.082	13.082	0.184
2: 1,2,3,4,6,7,8-HpCDD	38.21	4.081e5	3.998e5	2.553e4	2.422e4	1.05	NO	4.975e4	9.6980	9.6980	0.184

Tetra-Furans

Nam	ie	RT. ibn	1 Height	m2 Height	m1 Resp	m2 Resp	LRA11	וַעיַח	Resp	Conc.	EMPC }	DL
1 Tota	I Tetra-Furans	20.32	3.191e3	3.066e3	1.910e2	2.286e2	0.84	NO	4.196e2	0.036204	0.036204	0.0331
	I Tetra-Furans	20.89	3.979e3	4.838e3	2.874e2	4.004e2	0.72	NO	6.878e2	0.059345	0.059345	0.0331
3 Tota	I Tetra-Furans	21.68	1.856e4	2.522e4	1.692e3	2.422e3	0.70	NO	4.114e3	0.35496	0.35496	0.0331
4 Tota	il Tetra-Furans	22.61	1.604e4	2.188e4	1.560e3	2.160e3	0.72	NO	3.719e3	0.32089	0.32089	0.0331
	I Tetra-Furans	23.10	1.526e4	2.242e4	1.271e3	1.915e3	0.66	NO	3.186e3	0.27490	0.27490	0.0331
6 . Tota	I Tetra-Furans	23.44	4.650e3	6.142e3	2.988e2	4.191e2	0.71	NO	7.180e2	0.061950	0.061950	0.0331
7 Tota	I Tetra-Furans	24.24	1.319e4	1.782e4	1.421e3	2.008e3	0.71	NO	3.429e3	0.29583	0.29583	0.0331
8 Tota	al Tetra-Furans	24.55	3.196e3	5.229e3	2.445e2	3.043e2	0.80	NO	5.487e2	0.047346	0.047346	0.0331
	al Tetra-Furans	24.68	5.180e4	7.082e4	3.823e3	5.124e3	0.75	NO	8.946e3	0.77191	0.77191	0.0331
	al Tetra-Furans	25.57	8.808e3	1.154e4	5.142e2	6.887e2	0.75	NO	1.203e3	0.10379	0.10379	0.0331
11 ,2,3,	7,8-TCDF	25.70	8.829e4	1.163e5	5.951e3	7.580e3	0.79	NO	1.353e4	1.1675	1.1675	0.0331
12 Tota	i Tetra-Furans	25.92	2.714e3	2.243e3	1.193e2	1.281e2	0.93	YES	0.000e0	0.00000	0.019565	0.0331
13 Tota	al Tetra-Furans	25.98	4.090e3	4.824e3	2.643e2	3.772e2	0.70	NO	6.415e2	0.055353	0.055353	0.0331
14 Tota	al Tetra-Furans	26.88	6.159e3	9.155e3	3.687e2	4.892e2	0.75	NO	8.579e2	0.074025	0.074025	0.0331
15 Tota	al Tetra-Furans	27.03	9.842e3	1.346e4	5.338e2	7.838e2	0.68	NO	1.318e3	0.11369	0.11369	0.0331
16 Tota	al Tetra-Furans	27.19	6.933e3	7.011e3	4.309e2	4.715e2	0.91	YES	0.000e0	0.00000	0.072011	0.0331
17. July Tota	al Tetra-Furans	27.40	2.995e3	2.682e3	1.533e2	1.354e2	1.13	YES	0.000e0	0.00000	0.020671	0.0331
	el Tetra-Furans	27.58	5.527e3	5.567e3	3.134e2	3:991e2	0.79	NO	7.125e2	0.061479	0.061479	0.0331

Penta-Furans function 1

Marchania.	Name	2 O'RT	m1 Height	m2 Height	m1 Resp	m2 Resp	: IRA ! I	n/y <u>}</u> [Resp	Conc.	EMPC	Litz DL
11.3 %	1st Func. Penta-Furans	27.19	1.784e5	1.090e5	1.049 e 4	6:680e3	1.57	NO	1.717e4	1.6262	1.6262	0.0133

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Quantify Totals Report MassLynx 4.1 SCN815

Vista Analytical Laboratory

Dataset: U:\VG12.PRO\Results\201212R1\201212R1-9.qld

Last Altered: Monday, December 14, 2020 3:16:25 PM Pacific Standard Time Printed: Monday, December 14, 2020 3:17:41 PM Pacific Standard Time

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Penta-Furans

Name	RT_J	m1_Height	m2 Height	m1 Resp	m2 Resp	J RAI	Iu/A P	Resp	J Conc.	EMPC	, DL
1 Total Penta-Furans	28.65	1.654e4	9.669e3	9.087e2	6.617e2	1.37	NO	1.570e3	0.14872	0.14872	0.0837
2 Total Penta-Furans	28.82	1.524e6	9.996e5	8.925e4	5.630e4	1.59	NO	1.455e5	13.783	13.783	0.0837
Total Penta-Furans	29.45	3.255e4	2.072e4	1.607e3	1.122e3	1.43	NO	2.730e3	0.25850	0.25850	0.0837
Total Penta-Furans	29.60	8.871e4	5.689e4	4.430e3	3.005e3	1.47	NO	7.435e3	0.70411	0.70411	0.0837
5: 1,2,3,7,8-PeCDF	29.81	4.097e6	2.629e6	2.097e5	1.333e5	1.57	NO	3.430e5	32.126	32.126	0.0840
6 Total Penta-Furans	29.89	6.502e4	3.741e4	2.606e3	1.474e3	1.77	NO	4.079e3	0.38632	0.38632	0.0837
7 Total Penta-Furans	30.07	1.232e6	7.530e5	6.485e4	4.119e4	1.57	NO	1.060e5	10.042	10.042	0.0837
8 2.3.4.7,8-PeCDF	30.87	1.557e6	9.951e5	7.891e4	5.006e4	1.58	NO	1.290e5	11.107	11.107	0.0749
9 Total Penta-Furans	31.77	3.206e4	1.982 e4	1.626e3	9.786e2	1.66	NO	2.605e3	0.24669	0.24669	0.0837

Hexa-Furans

Na ا ا	me Trime	<u>RT '</u>	m1 Height	m2 Height	m1 Resp ا	m2 Resp	LIRA:	Tu/A1	Resp	Conc.	*EMPC	DL ADL
1 ; 7 , To	tal Hexa-Furans	32.19	7.435e4	6.131e4	3.866e3	3.075e3	1.26	NO	6.941e3	0.87419	0.87419	0.0794
2 То	tal Hexa-Furans	32.36	8.841e5	7.225e5	4.448e4	3.646e4	1.22	NO	8.094e4	10.194	10.194	0.0794
3	otal Hexa-Furans	32.76	9.946e3	6.317e3	4.567e2	3.543e2	1.29	NO	8.109e2	0.10214	0.10214	0.0794
4 To	ital Hexa-Furans	32.99	4.737e5	3.872e5	2.304e4	1.916e4	1.20	NO	4.220e4	5.3153	5.3153	0.0794
5 To	otal Hexa-Furans	33.32	4.108e4	3.319e4	1.903e3	1.621e3	1.17	NO	3.524e3	0.44383	0.44383	0.0794
6 1.2	2,3,4,7,8-HxCDF	33.46	8.028e6	6.576e6	4.499e5	3.696e5	1.22	NO	8.195e5	102.20	102.20	0.0738
7 1.2	2,3,6,7,8-HxCDF	33.58	1.677e6	1.363e6	9.676e4	7 _. 910e4	1.22	NO	1.759e5	21.096	21.096	0.0722
8	3,4,6,7,8-HxCDF	34.26	3.517e5	2.834e5	2.138e4	1:773e4	1.21	NO	3.911e4	4.8860	4.8860	0.0776
9 2 3 1,2	2,3,7,8,9-HxCDF	35.27	7.277e5	6.200e5	1.951e4	1.697e4	1.15	NO	3.648e4	5.1659	5.1659	0.100
10 , To	otal Hexa-Furans	35.28	7.91 <u>1e5</u>	6.379e5	3.482e4	2.731e4	1.28	NO	6.213e4	7.8255	7.8255	0.0794

Hepta-Furans

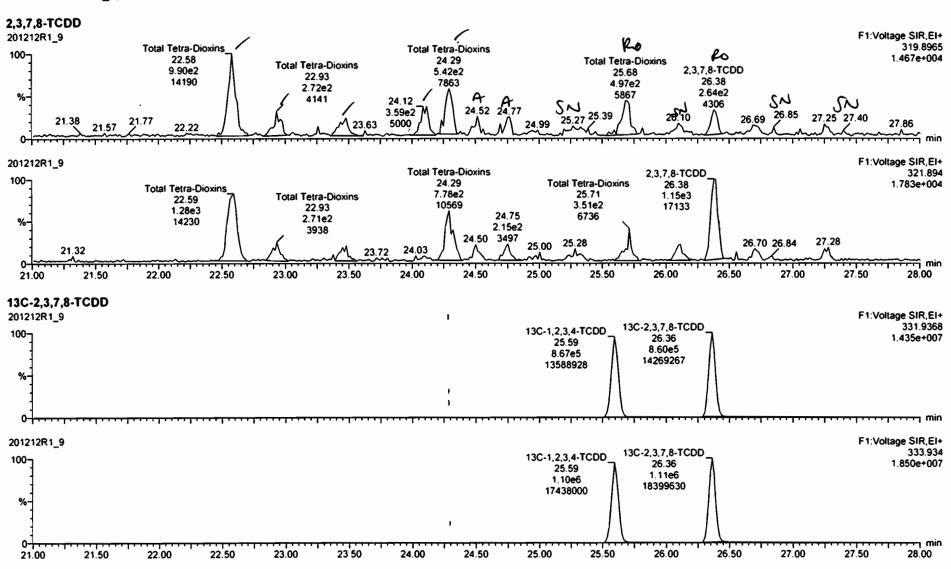
Name - tay	RT_L	n1 Height ;	m2 Height	m1 Resp	m2 Resp_	RAL	u/y_t	Resp_	Conc. F	EMPC	DLپېرو
11 1,2,3,4,6,7,8-HpCDF	36.82	5.695e5				0.99		8.533e4		14.708	0.0988
2 Total Hepta-Furans	37.29	1.002e4	1.072e4	8.937e2	9.113e2	0.98	NO	1.805e3	0.34260	0.34260	0.0974
3 Total Hepta-Furans	37.54	3.171e5	3.238e5	2.395e4	2.397e4	1.00	NO	4.792e4	9.0952	9.0952	0.0974
1,2,3,4,7,8,9-HpCDF	38.83	2.385e5	2.450e5	1.443 e4	1.406e4	1.03	NO	2.849e4	5.3687	5.3687	0.0853

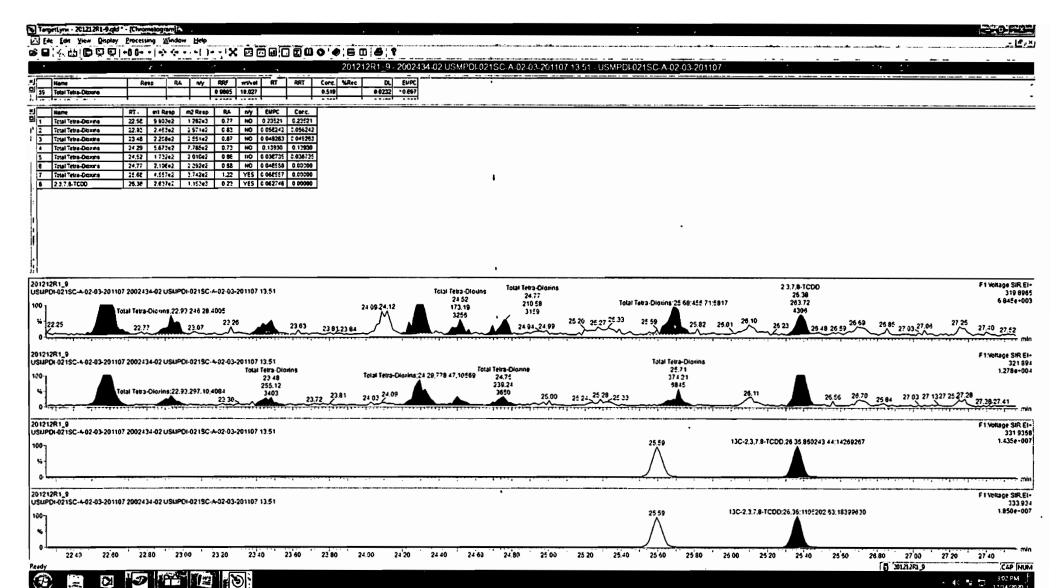
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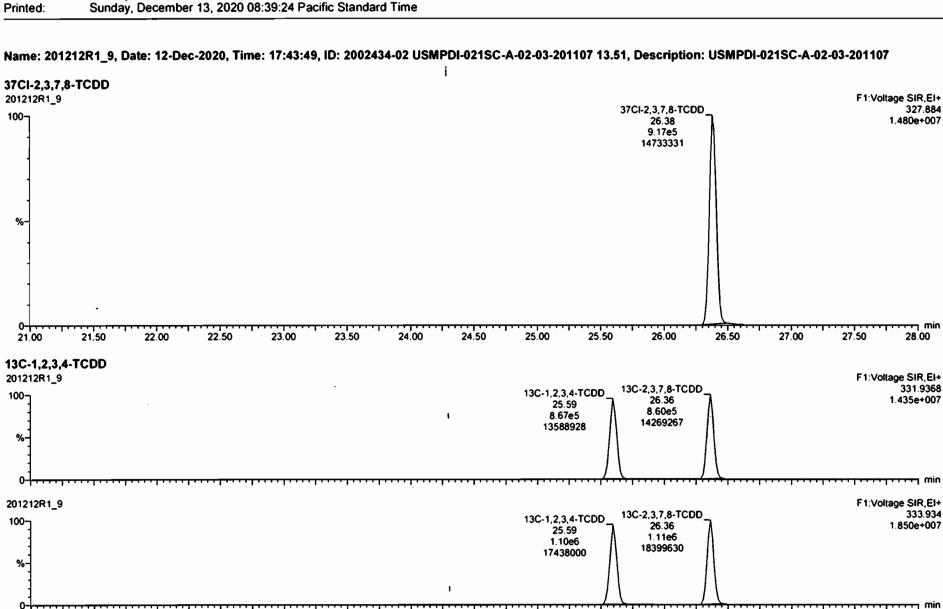
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Sunday, December 13, 2020 08:38:08 Pacific Standard Time Sunday, December 13, 2020 08:39:24 Pacific Standard Time



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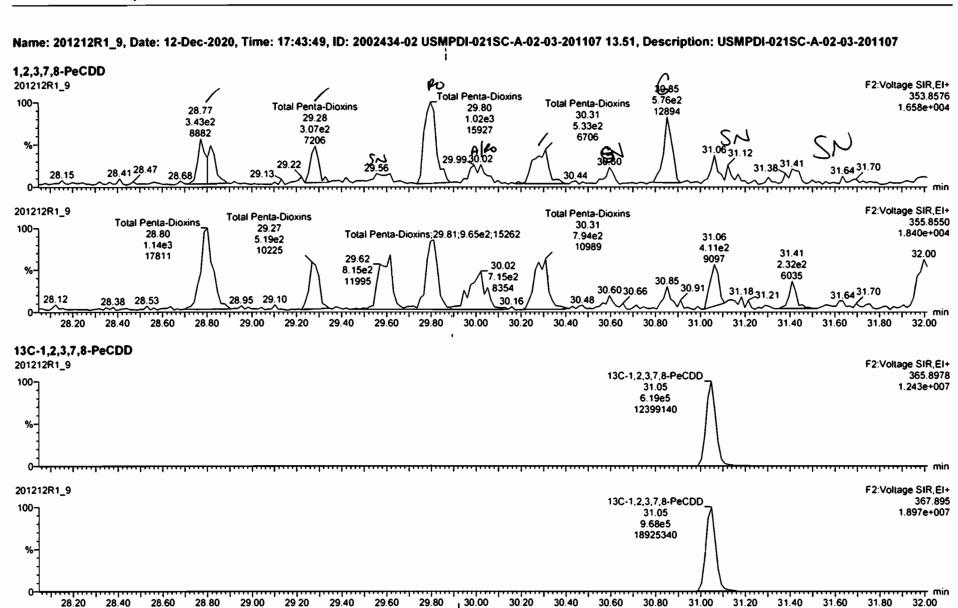
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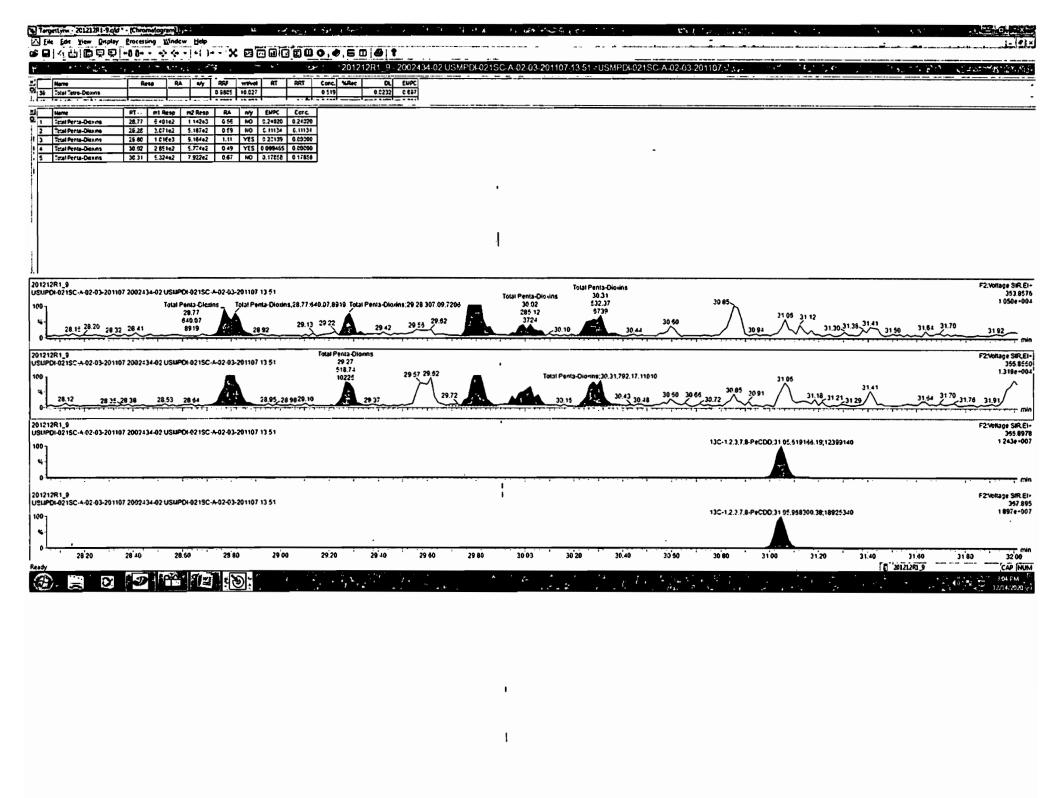
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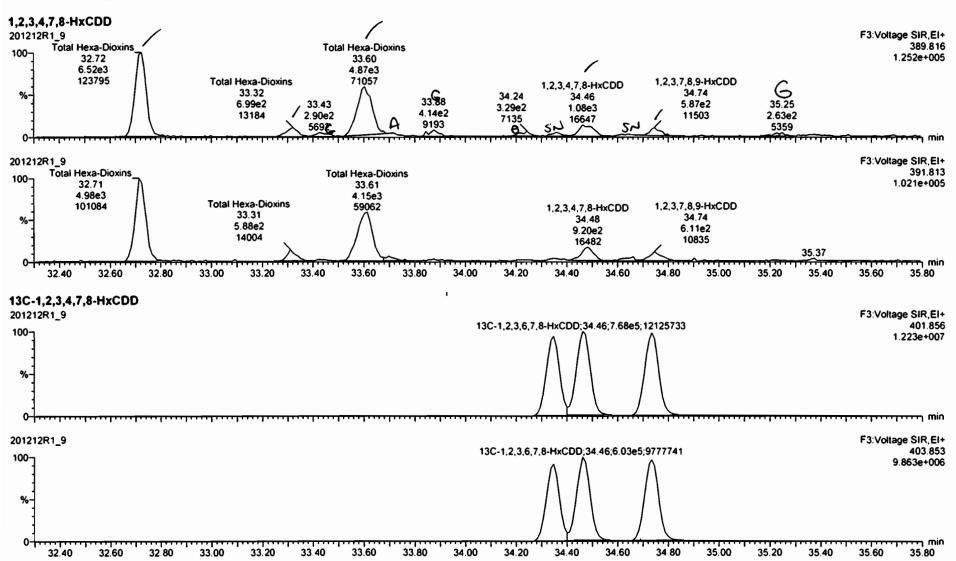
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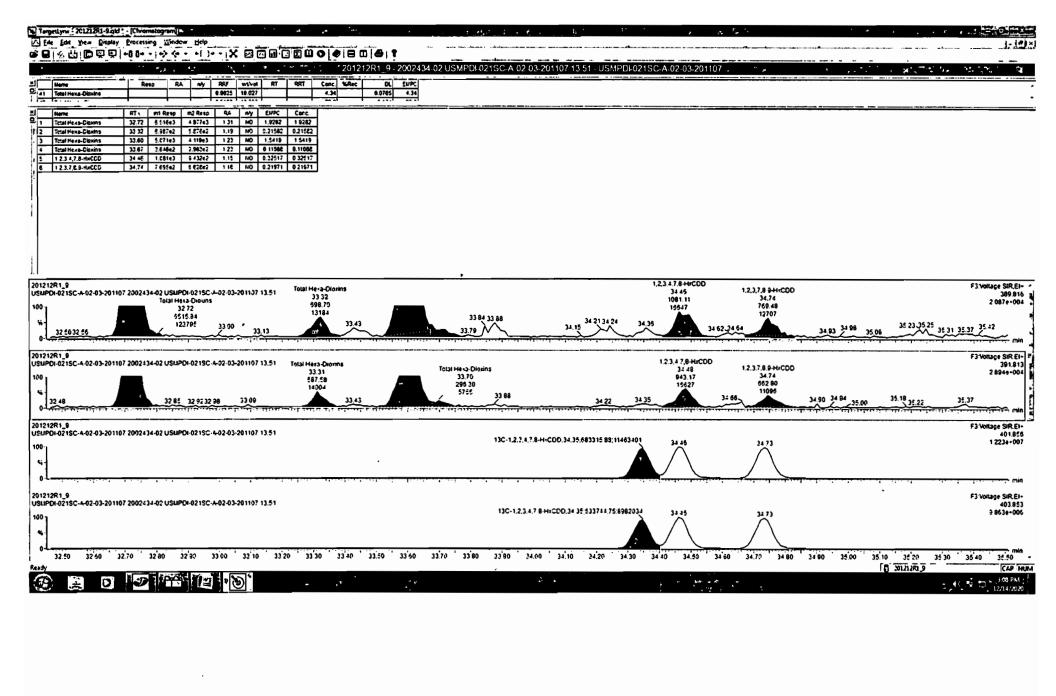




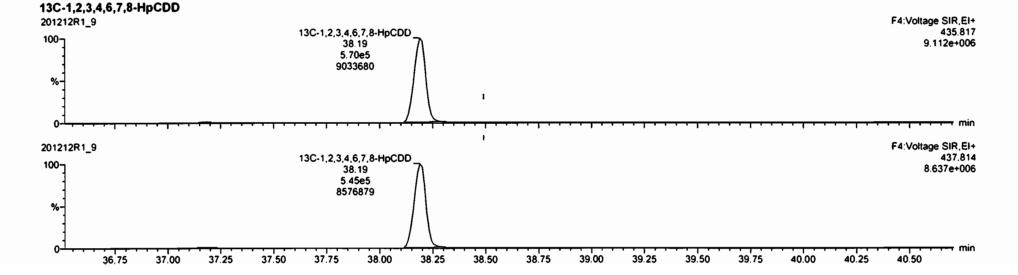
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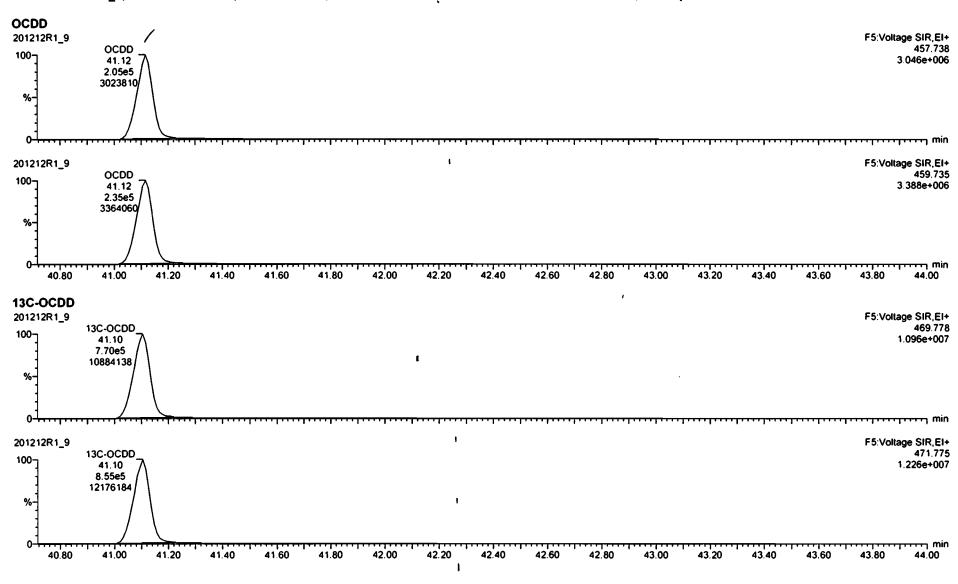
Work Order 2002434 Page 152 of 955



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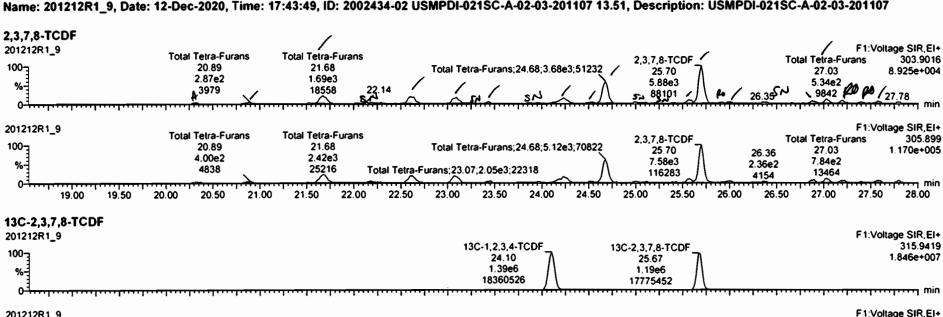


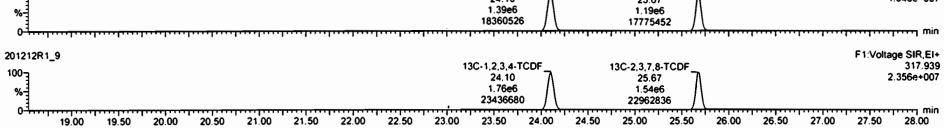
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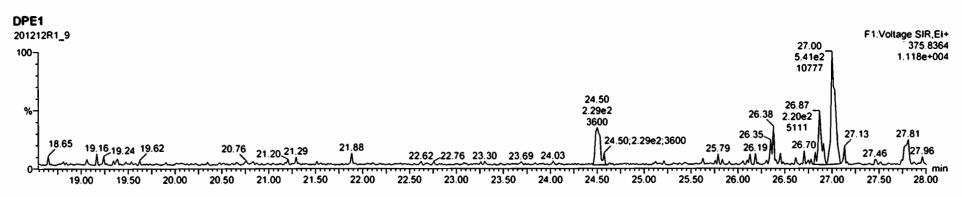
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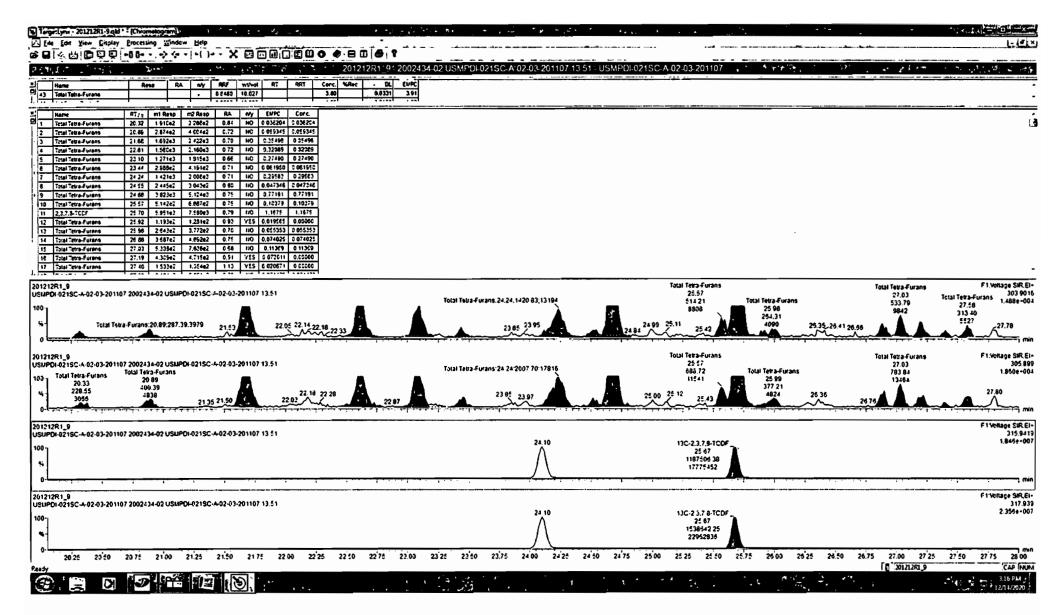
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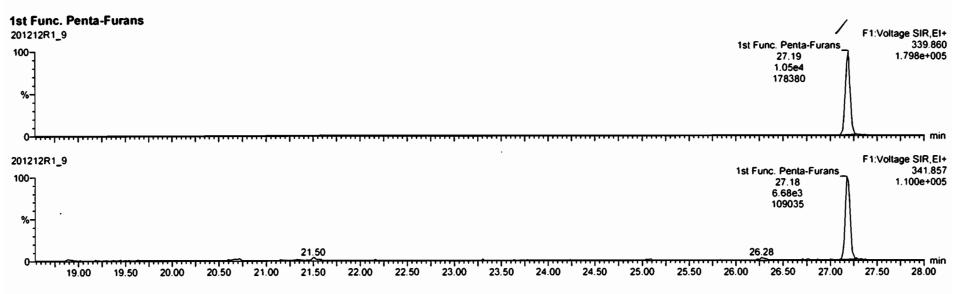


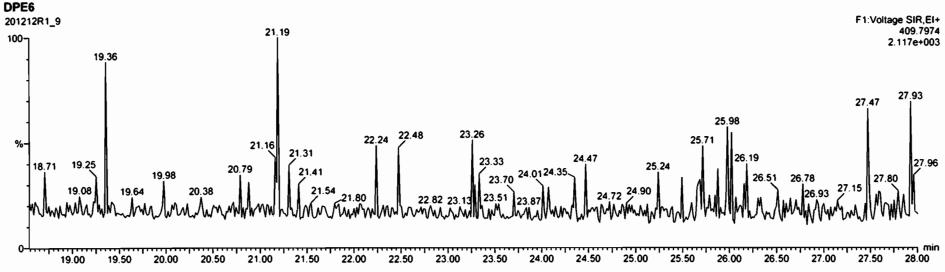
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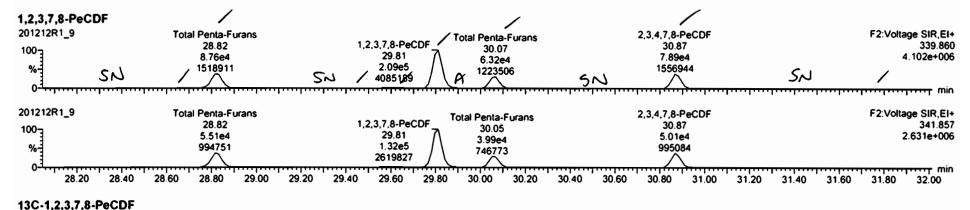


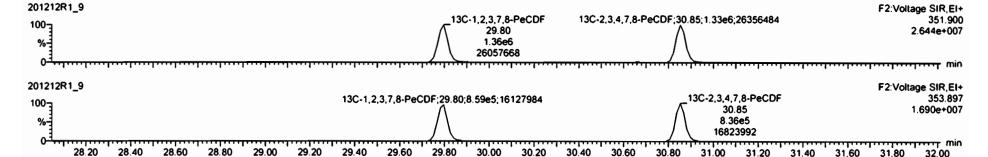


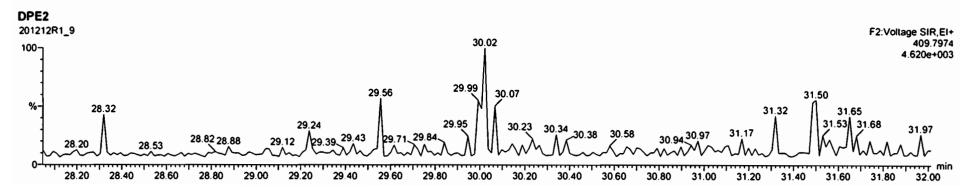
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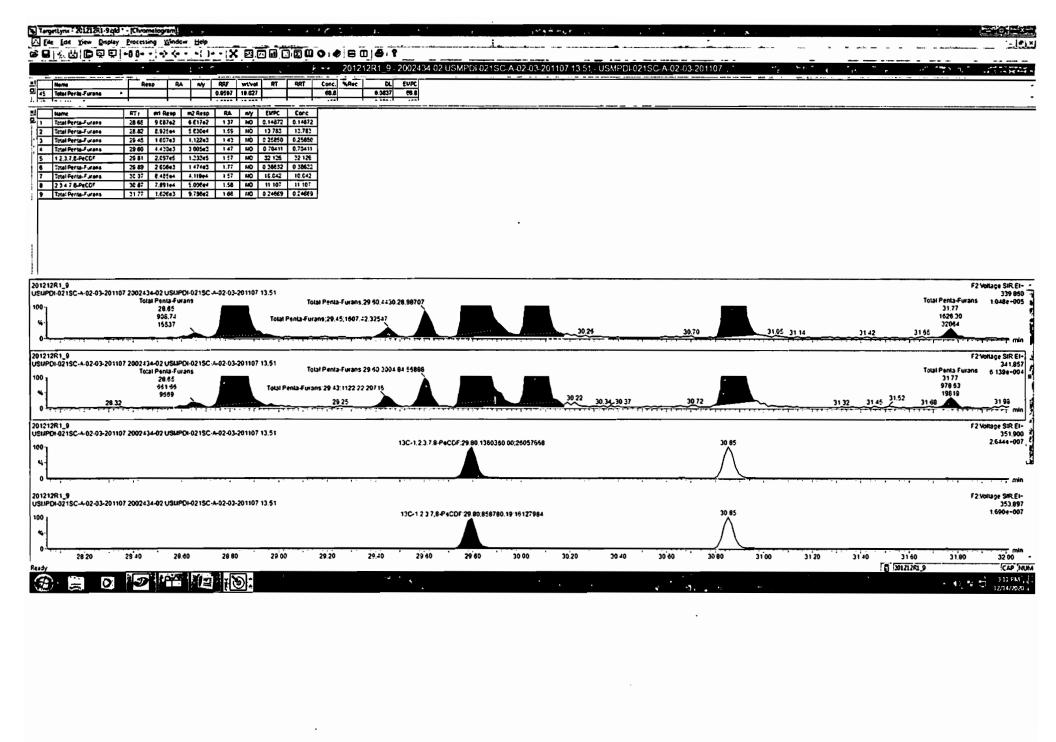
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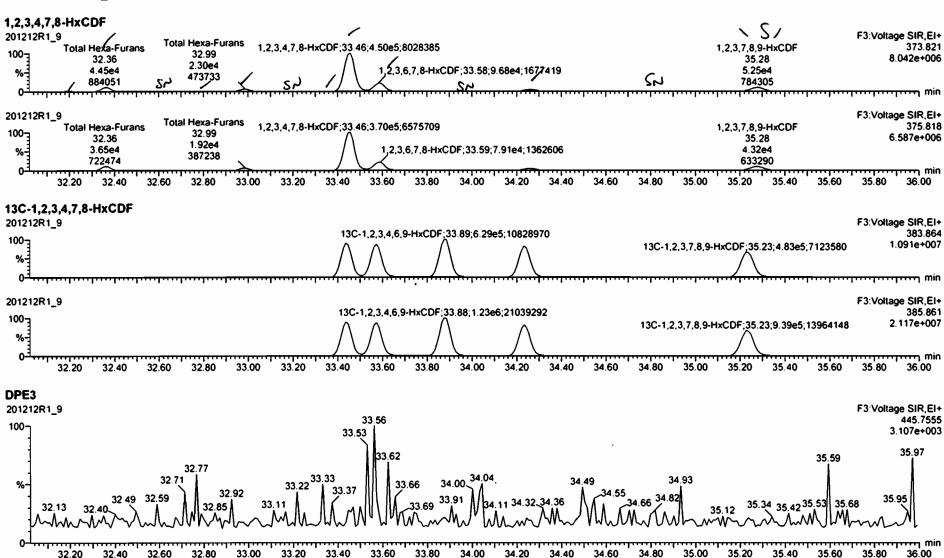


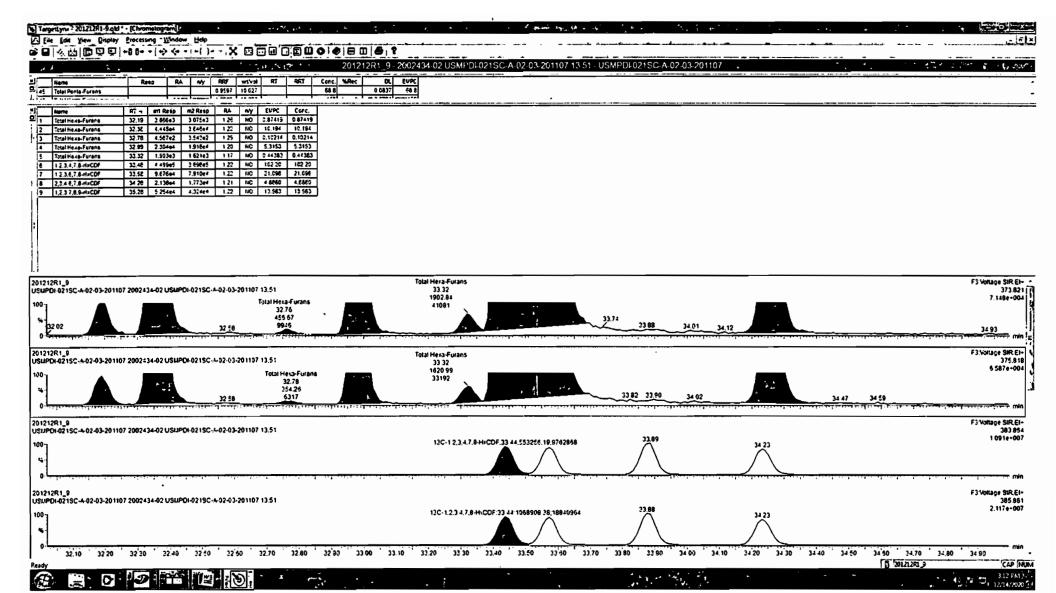
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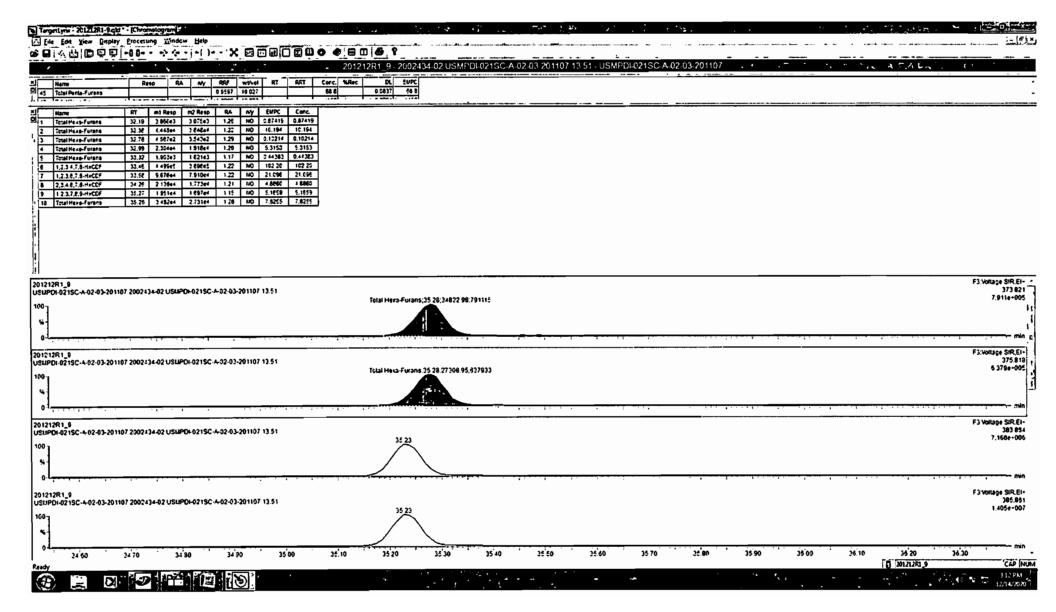
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Vista Analytical Laboratory

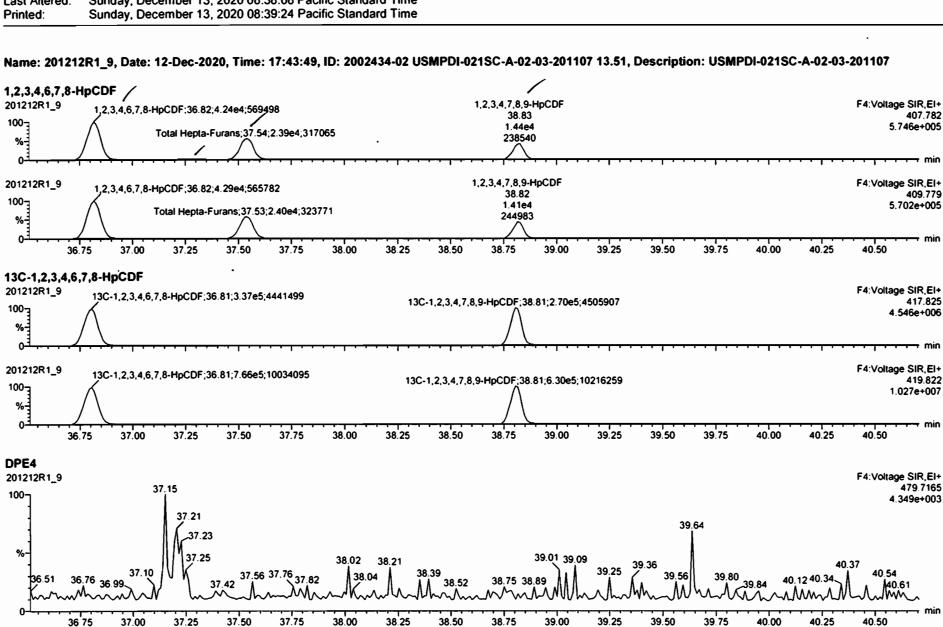
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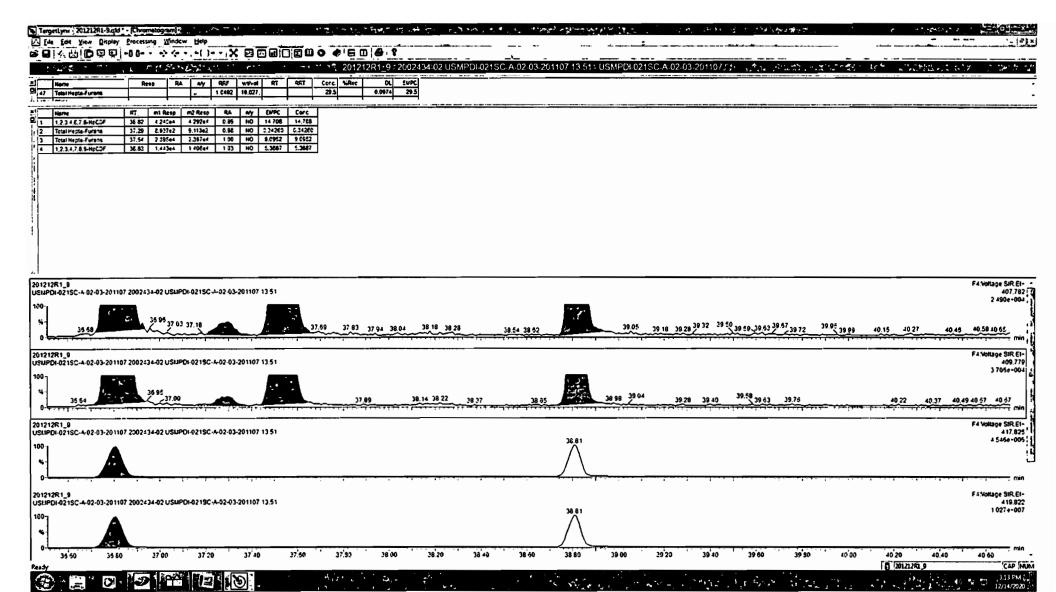




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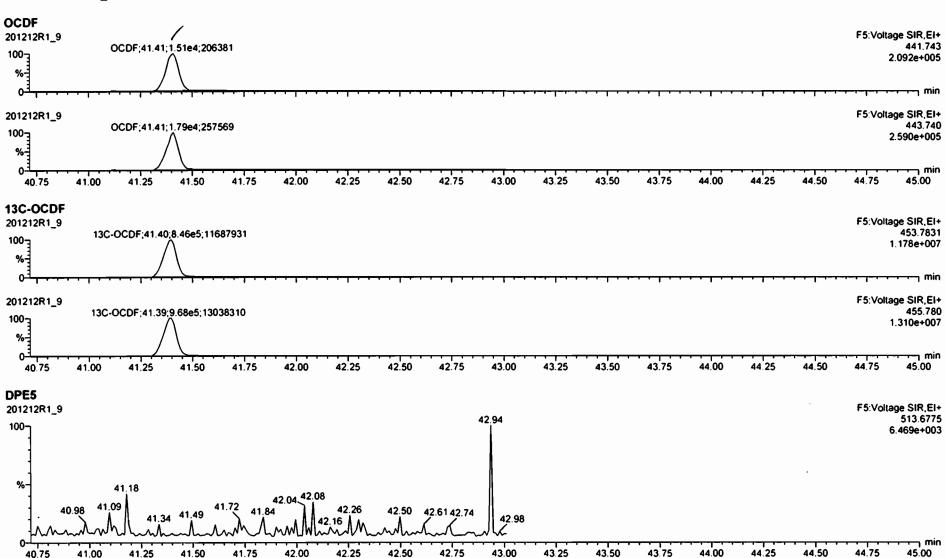
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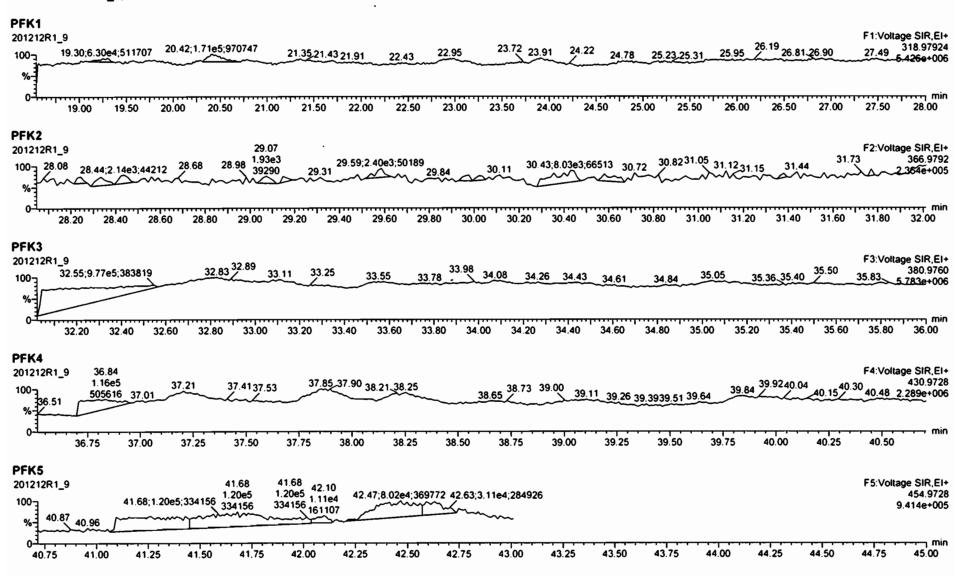


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Page 1 of 2

Dataset:

U:\VG12.PRO\Results\201212R1\201212R1-10.qld

Last Altered: Printed:

Tuesday, December 15, 2020 9:38:59 AM Pacific Standard Time Tuesday, December 15, 2020 9:39:32 AM Pacific Standard Time

GPB 12/15/2020

Method: U:\VG12.PRO\MethDB\1613rrt-12-11-20.mdb 11 Dec 2020 08:35:32

Calibration: U:\VG12.PRO\CurveDB\dbDIOXIN_1613vg12-12-03-20.cdb 04 Dec 2020 11:36:07

Name: 201212R1_10, Date: 12-Dec-2020, Time: 18:28:04, ID: 2002434-03 USMPDI-021SC-A-03-04-201107 13.98, Description: USMPDI-021SC-A-03-04-201107

الوالي المسالة	# Name	ار بران ارسان ارسان ارسان ارسان ار	Resp	, RA	L n/y	RRF	wtvol	Pred.RT	RT	Pred RRT (RRT_I	Conc.	%Rec <u>Ţ</u> [DL,	EMPC
112.4	1 2,3,7,	8-TCDD	7.69e3	0.63	YES	0.980	10.054	26.396	26.38	1.001	1.001	0.66864		0.0205	0.595
2	2 1,2,3,	7,8-PeCDD	5.28e3	0.60	NO	0.932	10.054	31.079	31.06	1.001	1.000	0.61555		0.0798	0.616
3	3 1,2,3,	4,7,8-HxCDD	1.43e3	1.13	NO	1.02	10.054	34.368	34.37	1.001	1.001	0.19001		0.106	0.190
4-5-1	4 1,2,3,	6,7,8-HxCDD	9.47e3	1.17	NO	0.902	10.054	34.494	34.48	1.001	1.000	1.2848		0.111	1.28
2 - A - AL	5 1,2,3,	7,8,9-HxCDD	6.27e3	1.14	NO	0.954	10.054	34.745	34.76	1.000	1.001	0.81236		0.109	0.812
6 P. T. T.	6 1,2,3,	4,6,7,8-HpCDD	2.52e5	1.03	NO	0.918	10.054	38.211	38.22	1.000	1.001	41.786		0.419	41.8
7.	7 OCDE		2.26e6	0.88	NO	0.866	10.054	41.124	41.13	1.000	1.000	572.85		0.366	573
8 27	8 2.3.7.	8-TCDF	8.30e4	0.72	NO	0.848	10.054	25.687	25.70	1.000	1.001	6.1067		0.0290	6.11
94.12.104.1	9 1,2,3,	7,8-PeCDF	1.38e5	1.57	NO	0.960	10.054	29.800	29.81	1.000	1.000	10.826		0.0448	10.8
10	10 2,3,4,	7,8-PeCDF	9.78e4	1.58	NO	1.07	10.054	30.889	30.88	1.001	1.000	7.1257		0.0424	7.13
113	11 1,2,3,	4,7,8-HxCDF	1.47e5	1.22	NO	0.986	10.054	33.457	33.46 /	1.000	1.000	15.526		0.0602	15.5
12	12 1,2,3,	6,7,8-HxCDF	3.81e4	1.22	NO	1.04	10.054	33.603	33.59	1.001	1.000	3.8284		0.0583	3.83
1317.7	13 2,3,4,6	6,7,8-HxCDF	1.44e4	1.20	NO	1.02	10.054	34.264	34.26 /	1.001	1.001	1.5366		0.0651	1.54
	14 1,2,3,	7,8,9-HxCDF	3.79e3	1.13	NO	0.991	10.054	35.248	35.26 /	1.000	1.001	0.44301		0.0782	0.443
	15 1,2,3,	4,6,7,8-HpCDF	1.23e5	0.98	NO	1.05	10.054	36.824	36.83	1.000	1.001	17.999		0.123	18.0
16	16 1,2.3,	4,7,8.9-HpCDF	1.64e4	1.03	NO	1.18	10.054	38.839	38.84	1.000	1.000	2.6452		0.100	2.65
17 - 1	17 OCDF	:	1.63e5	0.86	NO	0.896	10.054	41.417	41.42	1.000	1.000	35.666		0.108	35.7
18	18 13C-2	2,3,7,8-TCDD	2.33e6	0.78	NO	1.06	10.054	26.383	26.36	1.030	1.029	197.89	99.5	0.0804	- 1
19	19 13C-1	,2,3,7,8-PeCDD	1.83e6	0.63	NO	0.785	10.054	31.229	31.05	1.219	1.212	208.95	105	0.107	
20	20 13C-1	,2,3,4,7,8-HxCDD	1.47e6	1.28	NO	0.621	10.054	34.348	34.35	1.014	1.014	216.48	109	0.319	
217	21 13C-1	,2,3,6,7,8-HxCDD	1.62e6	1.27	NO	0.734	10.054	34.470	34.47	1.017	1.017	202.46	102	0.270	1
22 1 57	22 13C-1	,2,3,7,8,9-HxCDD	1.61e6	1.26	NO	0.723	10.054	34.755	34.74 /	1.026	1.025	203.71	102	0.274	
23	23 13C-1	,2,3,4,6,7,8-HpCDD	1.31e6	1.04	NO	0.568	10.054	38.255	38.20	1.129	1.127	210.35	106	0.548	
24 1	24 13C-C	OCDD	1.81e6	0.90	NO	0.496	10.054	41.193	41.12	1.216	1.213	334.76	84.1	0.434	
25, 7,	25 13C-2	2,3,7,8-TCDF	3.19e6	0.78	NO	0.919	10.054	25.682	25.68	1.003	1.003	195.69	98.4	0.0799	
26	26 13C-1	.2.3.7.8-PeCDF	2.65e6	1.57	NO	0.715	10.054	29.938	29.80	1.169	1.163	208.63	105	0.181	
27	27 13C-2	2,3,4,7,8-PeCDF	2.56e6	1.59	NO	0.689	10.054	31.027	30.87	1.212	1.205	209.66	105	0.188	
28	28 13C-1	,2,3,4,7,8-HxCDF	1.91e6	0.51	NO	0.873	10.054	33.453	33.45	0.987	0.987	199.95	101	0.318	
	29 13C-1	,2,3,6,7,8-HxCDF	1.90e6	0.51	NO	0.933	10.054	33.582	33.58	0.991	0.991	186.49	93.7	0.297	
30	30 13C-2	2,3,4,6,7,8-HxCDF	1.83e6	0.51	NO	0.843	10.054	34.250	34.24	1.011	1.011	198.37	99.7	0.329	
31	31 13C-1	,2,3,7,8,9-HxCDF	1.72e6	0.51	NO	0.780	10.054	35.249	35.24	1.040	1.040	201.50	101	0.356	

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Tuesday, December 15, 2020 9:39:32 AM Pacific Standard Time

Name: 201212R1_10, Date: 12-Dec-2020, Time: 18:28:04, ID: 2002434-03 USMPDI-021SC-A-03-04-201107 13.98, Description: USMPDI-021SC-A-03-04-201107

1-1-1-5		Name :	Resp	_RA	li n/y	RRF	Fwivol	Pred.RT	ير RT	[Pred.RRT]	RRT	Conc.	Rec L	DL'	EMPC	
32	·-·]· 32	13C-1,2,3,4,6,7,8-HpCDF	1.30e6	0.44	NO	0.726	10.054	36.825	36.81	1.087	1.086	163.06	82.0	0.343		
33	 33	3 13C-1,2,3,4,7,8,9-HpCDF	1.05e6	0.44	NO	0.491	10.054	38.835	38.83	1.146	1.146	195.48	98.3	0.507		
34	34	13C-OCDF	2.03e6	0.88	NO	0.565	10.054	41.410	41.41	1.222	1.222	328.08	82.5	0.363		
35	<u>7</u> 7 35	37CI-2,3,7,8-TCDD	1.06e6			1.22	10.054	26.378	26.39	1.030	1.031	78.084	98.1	0.0277		
36] 36	13C-1,2,3,4-TCDD	2.22e6	0.79	NO	1.00	10.054	25.640	25.61	1.000	1.000	198.93	100	0.0848		
37	37	13C-1,2,3,4-TCDF	3.53e6	0.79	NO	1.00	10.054	24.130	24.10	1.000	1.000	198.93	100	0.0734		
38	38	3 13C-1,2,3,4,6,9-HxCDF	2.18e6	0.51	NO	1.00	10.054	33.920	33.89	1.000	1.000	198.93	100	0.277		
39	39	Total Tetra-Dioxins				0.980	10.054	24.620		0.000		4.1667		0.0205	5.01	
40		Total Penta-Dioxins				0.932	10.054	29.960		0.000		4.4233		0.0798	4.98	
41	41	Total Hexa-Dioxins				0.902	10.054	33.635		0.000		14.588		0.115	14.6	
42	1 42	Total Hepta-Dioxins				0.918	10.054	37.640		0.000		95.644		0.419	95.6	
43	43	Total Tetra-Furans				0.848	10.054	23.610		0.000		19.650		0.0290	20.0	P
44.	Tr 44	1st Func. Penta-Furans				0.960	10.054	26.930		0.000		4.5925		0.0145	4.59	
45	45	Total Penta-Furans				0.960	10.054	29.275		0.000		33.864		0.0459	33.9	
46	., 46	Total Hexa-Furans				1.02	10.054	33.555		0.000		36.730		0.0644	36.7	
47 - 5		Total Hepta-Furans				1.05	10.054	37.835		0.000		44.873		0.118	44.9	

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Method: U:\VG12.PRO\MethDB\1613rrt-12-11-20.mdb 11 Dec 2020 08:35:32

Calibration: U:\VG12.PRO\CurveDB\dbDlOXIN_1613vg12-12-03-20.cdb 04 Dec 2020 11:36:07

Name: 201212R1_10, Date: 12-Dec-2020, Time: 18:28:04, ID: 2002434-03 USMPDI-021SC-A-03-04-201107 13.98, Description: USMPDI-021SC-A-03-04-201107

Tetra-Dioxins

Name .	- i	_RTL	m1 Height լ	m2 Height	m1 Resp	m2 Resp	[RA]	n/y.€ L	Resp_	[]Conc:	EMPC	یے:DL
1 Total Tetra	-Dioxins	22.59	5.616e4	7.477e4	4.727e3	6.308e3	0.75	NO	1.103e4	0.95945	0.95945	0.0205
2 Total Tetra	-Dioxins	22.93	1.016e4	1.540e4	9.735e2	1.154e3	0.84	NO	2.128e3	0.18501	0.18501	0.0205
3 Total Tetra	-Dioxins	23.47	1.011e4	1.305e4	8.130e2	9.792e2	0.83	NO	1.792e3	0.15582	0.15582	0.0205
4Total Tetra	-Dioxins	24.28	1.071e4	1.150e4	8.643e2	9.813e2	0.88	NO	1.846e3	0.16046	0.16046	0.0205
5 Total Tetra	-Dioxins	24.53	9.856e3	1.317e4	1.009e3	1.181e3	0.85	NO	2.190e3	0.19043	0.19043	0.0205
6 Total Tetra	-Dioxins	24.75	2.269e4	2.663e4	1.592e3	2.006e3	0.79	NO	3.598e3	0.31282	0.31282	0.0205
7 Total Tetra	-Dioxins	24.96	6.617e3	6.793e3	3.866e2	4.759e2	0.81	NO	8.625e2	0.074995	0.074995	0.0205
8 Total Tetra	-Dioxins	25.24	9.660e3	1.237e4	5.252e2	6.520e2	0.81	NO	1.177e3	0.10236	0.10236	0.0205
9 Total Tetra	-Dioxins	25.34	2.373e4	3.446e4	1.886e3	2.295e3	0.82	NO	4.181e3	0.36354	0.36354	0.0205
10, L. Total Tetra	-Dioxins	25.70	2.025e4	2.038e4	1.506e3	1.582e3	0.95	YES	0.000e0	0.00000	0.24347	0.0205
11 Total Tetra	-Dioxins	26.10	1.813e4	1.923e4	1.885e3	2.204e3	0.86	NO	4.089e3	0.35552	0.35552	0.0205
12 2,3,7,8-TCI	DD	26.38	4.629e4	8.091e4	2.979e3	4.708e3	0.63	YES	7.687e3	0.00000	0.59532	0.0205
13 Total Tetra	-Dioxins	26.70	6.419e4	8.271e4	4.043e3	5.258e3	0.77	NO	9.301e3	0.80868	0.80868	0.0205
14 Total Tetra	-Dioxins	26.85	7.540e3	1.032e4	4.501e2	6.813e2	0.66	NO	1.131e3	0.098369	0.098369	0.0205
15 Total Tetra	-Dioxins	27.28	3.358e4	4.521e4	2.043e3	2.549e3	0.80	NO	4.592e3	0.39925	0.39925	0.0205

Penta-Dioxins

	Name C' - To	RT.	m1 Height	m2 Height;	m1 Resp	m2 Resp	J RA	[n/ý] <u>}</u>	Resp	Conc.	EMPC (DL
1-	Total Penta-Dioxins	28.82	4.357e4	5.938e4	3.127e3	5.047e3	0.62	NO	8.174e3	0.95262	0.95262	0.0798
2.	Total Penta-Dioxins	29.28	2.867e4	4.064e4	1.897e3	2.024e3	0.94	YES	0.000e0	0.00000	0.38447	0.0798
3	Total Penta-Dioxins	29.81	4.614e4	6.065e4	2.323e3	3.234e3	0.72	NO	5.557e3	0.64756	0.64756	0.0798
4	Total Penta-Dioxins	29.98	2.290e4	3.594e4	6.486e2	1.017e3	0.64	NO	1.665e3	0.19407	0.19407	0.0798
5_	Total Penta-Dioxins	30.04	2.327e4	4.015e4	1.642e3	2.709e3	0.61	NO	4.351e3	0.50707	0.50707	0.0798
6,,	Total Penta-Dioxins	30.29	3.205e4	5.477e4	2.587e3	4.309e3	0.60	NO	6.896e3	0.80357	0.80357	0.0798
7.	1,2,3,7,8-PeCDD	31.06	3.653e4	6.527e4	1.985e3	3.297e3	0.60	NO	5.282e3	0.61555	0.61555	0.0798
8	Total Penta-Dioxins	31.14	1.393e4	1.856 e4	6.630e2	8.911e2	0.74	YES	0.000e0	0.00000	0.16927	0.0798
9	Total Penta-Dioxins	31.42	4.718e4	7.734e4	2.233e3	3.799e3	0.59	NO	6.032e3	0.70291	0.70291	0.0798

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Name: 201212R1_10, Date: 12-Dec-2020, Time: 18:28:04, ID: 2002434-03 USMPDI-021SC-A-03-04-201107 13.98, Description: USMPDI-021SC-A-03-04-201107

Hexa-Dioxins

Name of the state	RT_dl	m1 Height	m2 Height	m1 Resp	m2 Resp	<u>IRA</u>	lu/y[]	Resp	Conc.]	EMPC [)DL
1: Total Hexa-Dioxins	32.72	4.629e5	3.990e5	2.307e4	1.919e4	1.20	NO	4.227e4	5.9423	5.9423	0.115
2 Total Hexa-Dioxins	33.33	4.992e4	3.755e4	2.602e3	1.933e3	1.35	NO	4.535e3	0.63758	0.63758	0.115
3 Total Hexa-Dioxins	33.61	2.982e5	2.324e5	2.102e4	1.659e4	1.27	NO	3.761e4	5.2875	5.2875	0.115
4 Total Hexa-Dioxins	33.69	1.941e4	1.381e4	8.907e2	6.732e2	1.32	NO	1.564e3	0.21987	0.21987	0.115
5: 1.2.3.4.7.8-HxCDD	34.37	1.252e4	1.085e4	7.595e2	6.718e2	1.13	NO	1.431e3	0.19001	0.19001	0.106
6 1,2,3,6,7,8-HxCDD	34.48	8.904e4	6.983e4	5.099e3	4.372e3	1.17	NO	9.471e3	1.2848	1.2848	0.111
7: Total Hexa-Dioxins	34.62	1.057e4	1.143e4	7.922e2	7.236e2	1.09	NO	1.516e3	0.21312	0.21312	0.115
8. 1.2.3.7,8,9-HxCDD	34.76	5.874e4	5.002e4	3.348e3	2.924e3	1.14	NO_	6.272e3	0.81236	0.81236	0.109

Hepta-Dioxins

Total Hepta-Dioxins 1 12,3,4,6,7,8-HpCDD	<u>RT~≀L</u>	n1 Height	m2 Height	m1 Resp	m2 Resp_	(RA	n/y, [Resp	Conc. L	EMPC L	DL
1 Total Hepta-Dioxins	37.21	2.159e6	2.080e6	1.642e5	1.604e5	1.02	NO	3.245e5	53.858	53.858	0.419
2 1,2,3,4,6,7,8-HpCDD	38.22	2.103e6	2.029e6	1.280e5	1.238e5	1.03	NO	2.518e5	41.786	41.786	0.419

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Quantify Totals Report MassLynx 4.1 SCN815 Vista Analytical Laboratory

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Name: 201212R1_10, Date: 12-Dec-2020, Time: 18:28:04, ID: 2002434-03 USMPDI-021SC-A-03-04-201107 13.98, Description: USMPDI-021SC-A-03-04-201107

Tetra-Furans

- ' Name		RT	1 Height L	m2 Height [m1/Resp	m2 Resp_	[RA]	Lu/y# L	- Resp	Conc.	EMPC	DL	1
1 Total T	etra-Furans	20.35	5.782e3	6.275e3	4.959e2	5.894e2	0.84	NO	1.085e3	0.079839	0.079839	0.0290	
Total T	etra-Furans	20.89	1.333e4	1.459e4	9.802e2	1.332e3	0.74	NO	2.312e3	0.17009	0.17009	0.0290	1
3. Total To	etra-Furans	21.69	5.563e4	8.450e4	5.254e3	7.241e3	0.73	NO	1.250e4	0.91925	0.91925	0.0290	
4 ? Jan Total T	etra-Furans	22.08	4.603e3	6.008e3	4.040e2	5.469e2	0.74	NO	9.508e2	0.069948	0.069948	0.0290	
5 Total T	etra-Furans	22.18	1.037e4	1.557e4	1.036e3	1.410e3	0.73	NO	2.445e3	0.17989	0.17989	0.0290	
6 Total T	etra-Furans	22.28	8.996e3	1.124e4	5.172e2	6.557e2	0.79	NO	1.173e3	0.086282	0.086282	0.0290	
7 Total T	etra-Furans	22.62	1.078e5	1.443e5	1.011e4	1.376e4	0.74	NO	2.387e4	1.7559	1.7559	0.0290	
	etra-Furans	23.10	5.776e4	8.708e4	5.102e3	7.161e3	0.71	NO	1.226e4	0.90214	0.90214	0.0290	ł
9 Total T	etra-Furans	23.24	5.650e3	8.164e3	3.956e2	4.601e2	0.86	NO	8.558e2	0.062955	0.062955	0.0290	l
10 Total T	etra-Furans	23.45	1.915e4	2.110e4	1.376e3	1.573e3	0.88	NO	2.949e3	0.21692	0.21692	0.0290	l
Total T	etra-Furans	23.82	2.861e3	6.251e3	2.624e2	3.974e2	0.66	NO	6.598e2	0.048540	0.048540	0.0290	
12 Total T	etra-Furans	24.00	5.565e3	7.490e3	3.827e2	5.792e2	0.66	NO	9.619e2	0.070762	0.070762	0.0290	l
13 Total T	etra-Furans	24.16	1.671e4	2.957e4	7.554e2	9.529e2	0.79	NO	1.708e3	0.12567	0.12567	0.0290	
14 Total T	etra-Furans	24.22	5.004e4	6.545e4	5.747e3	7.739e3	0.74	NO	1.349e4	0.99212	0.99212	0.0290	
151 Total T	etra-Furans	24.53	7.623e3	1.110e4	4.898e2	6.941e2	0.71	NO	1.184e3	0.087096	0.087096	0.0290	P
16 Total T	etra-Furans	24.68	4.693e5	6.578e5	3.310e4	4.620e4	0.72	NO	7.930e4	5.8337	5.8337	0.0290	l
17 Total T	etra-Furans	24.81	5.902e3	6.071e3	3.800e2	4.347e2	0.87	NO	8.147e2	0.059936	0.059936	0.0290	
18 Total T	etra-Furans	25.00	1.597e4	1.701e4	1.158e3	1.314e3	0.88	NO	2.472e3	0.18185	0.18185	0.0290	
19 Total T	etra-Furans	25.14	4.428e3	5.713e3	2.981e2	4.271e2	0.70	NO	7.251e2	0.053343	0.053343	0.0290	
201 Total T	etra-Furans	25.23	3.507e3	4.786e3	2.477e2	3.278e2	0.76	NO	5.755e2	0.042339	0.042339	0.0290	
21 Total T	etra-Furans	25.43	6.255e3	8.283e3	4.877e2	6.200e2	0.79	NO	1.108e3	0.081491	0.081491	0.0290	
22 Total T	etra-Furans	25.58	4.529e4	6.345e4	3.248e3	4.389e3	0.74	NO	7.636e3	0.56177	0.56177	0.0290	
23,7.8	-TCDF	25.70	5.265e5	7.385e5	3.470e4	4.830e4	0.72	NO	8.301e4	6.1067	6.1067	0.0290	
24 Total T	etra-Furans	25.96	7.995e3	8.442e3	4.033e2	5.282e2	0.76	NO	0.000e0	0.00000	0.068523	0.0290	l
25 Total T	etra-Furans	26.01	1.998e4	2.713e4	1.077e3	1.566e3	0.69	NO	0.000e0	0.00000	0.19442	0.0290	1
26 Total T	etra-Furans	26.26	5.802e3	7.280e3	3.314e2	4.058e2	0.82	NO	7.371e2	0.054229	0.054229	0.0290	
	etra-Furans	26.38	4.329e3	5.121e3	2.530e2	3.458e2	0.73	NO	5.987e2	0.044047	0.044047	0.0290	
28 Total T	etra-Furans	26.88	1.178e4	1.688e4	8.708e2	1.014e3	0.86	NO	1.885e3	0.13868	0.13868	0.0290	~
29 Total T	etra-Furans	27.04	1.855e4	2.572e4	1.204e3	1.474e3	0.82	NO	2.678e3	0.19700	0.19700	0.0290	P
7	etra-Furans	27.21	1.696e4	2.130e4	1.040e3	1.378e3	0.75	NO	2.418e3	0.17785	0.17785	0.0290	
31 Total T	etra-Furans	27.41	2.436e4	1.210e4	1.149e3	7.817e2	1.47	YES	0.000e0	0.00000	0.10178	0.0290	
32 Total T	etra-Furans	27.58	3.269e4	4.693e4	1.985e3	2.763e3	0.72	NO_	4.749e3	0.34935	0.34935	0.0290	

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Dataset:

U:\VG12.PRO\Results\201212R1\201212R1-10.qld

Last Altered: Printed:

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Name: 201212R1_10, Date: 12-Dec-2020, Time: 18:28:04, ID: 2002434-03 USMPDI-021SC-A-03-04-201107 13.98, Description: USMPDI-021SC-A-03-04-201107

Penta-Furans function 1

ſ	Name Name	Ľ_RTL	m1 Height	m2 Height	m1 Resp	m2 Resp	; RA; į	n/y,	Resp	Conc. L	EMPC	DL
1	1st Func. Penta-Furans	27.19	6.369e5	3.641e5	3.591e4	2.175e4	1.65	NO	5.766e4	4.5925	4.5925	0.0145

Penta-Furans

Name	RT.	m1 Height	m2 Height,	.m1 Resp	m2 Resp	!RA!	n/yjt.	Resp	Conc.	EMPC	DL
1 Total Penta-Furans	28.67	3.428e4	2.237e4	1.945e3	1.420e3	1.37	NO	3.364e3	0.26795	0.26795	0.0459
2 Total Penta-Furans	28.83	9.227e5	5.811e5	5.823e4	3.656e4	1.59	NO	9.479e4	7.5501	7.5501	0.0459
3 Total Penta-Furans	29.45	1.405e5	8.937e4	7.423e3	4.910e3	1.51	NO	1.233e4	0.98234	0.98234	0.0459
4 Total Penta-Furans	29.62	2.042e5	1.203e5	1.052e4	6.668e3	1.58	NO	1.719e4	1.3692	1.3692	0.0459
5 1,2,3,7,8-PeCDF	29.81	1.633e6	1.088e6	8.434e4	5.382e4	1.57	NO	1.382e5	10.826	10.826	0.0448
6 Total Penta-Furans	29.89	2.448 e 4	1.896e4	1.078e3	7.863e2	1.37	NO	1.864e3	0.14845	0.14845	0.0459
7Total Penta-Furans	30.07	8.006e5	5.225e5	3.931e4	2.505e4	1.57	NO	6.437e4	5.1268	5.1268	0.0459
8 Total Penta-Furans	30.69	1.930e4	1.207e4	9.321e2	5.874e2	1.59	NO	1.519e3	0.12102	0.12102	0.0459
9 2,3,4,7,8-PeCDF	30.88	1.171e6	7.414e5	5.996e4	3.788e4	1.58	NO	9.785e4	7.1257	7.1257	0.0424
10 ਾ ਪੈ - L Total Penta-Furans	31.77	3.910e4	2.951e4	2.657e3	1.696e3	1.57	NO	4.353e3	0.34668	0.34668	0.0459

Hexa-Furans

Name a	RT.	m1 Height	m2 Height	m1 Resp	m2 Resp	[RA	n/y]	Resp	Conc.	EMPC :	DL
1 Total Hexa-Furans	32.20	1.504e5	1.266e5	7.851e3	6.514e3	1.21	NO	1.436e4	1.5224	1.5224	0.0644
2 Total Hexa-Furans	32.37	6.057e5	4.925e5	2.969e4	2.431e4	1.22	NO	5.400e4	5.7226	5.7226	0.0644
Total Hexa-Furans	32.78	8.148e3	1.066e4	4.667e2	4.379e2	1.07	NO	9.046e2	0.095869	0.095869	0.0644
4 Total Hexa-Furans	32.99	6.246e5	5.267e5	3.111e4	2.627e4	1.18	NO	5.738e4	6.0815	6.0815	0.0644
5 Total Hexa-Furans	33.33	2.421e4	2.127e4	1.294e3	1.095e3	1.18	NO	2.388e3	0.25313	0.25313	0.0644
6 1,2,3,4,7,8-HxCDF	33.46	1.497e6	1.260e6	8.063e4	6.631e4	1.22	NO	1.469e5	15.526	15.526	0.0602
7 1,2,3,6,7,8-HxCDF	33.59	3.771e5	3.030e5	2.090e4	1.715e4	1.22	NO	3.805e4	3.8284	3.8284	0.0583
8 Total Hexa-Furans	33.90	1.728e4	1.405e4	1.051e3	7.890e2	1.33	NO	1.840e3	0.19502	0.19502	0.0644
9. 2.3.4,6,7,8-HxCDF	34.26	1.233e5	1.033e5	7.858e3	6.552e3	1.20	NO	1.441e4	1.5366	1.5366	0.0651
10 1.2,3,7,8,9-HxCDF	35.26	8.475e4	7.931e4	2.008e3	1.784e3	1.13	NO	3.792e3	0.44301	0.44301	0.0782
11 Total Hexa-Furans	35.27	1.344e5	1.218e5	7.801e3	6.586e3	1.18	NO	1.439e4	1.5248	1.5248	0.0644

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Quantify Totals Report MassLynx 4.1 SCN815

Vista Analytical Laboratory

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Dataset:

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Name: 201212R1_10, Date: 12-Dec-2020, Time: 18:28:04, ID: 2002434-03 USMPDI-021SC-A-03-04-201107 13.98, Description: USMPDI-021SC-A-03-04-201107

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Hepta-Furans

Name	E RT	m1 Height	m2 Height	m1 Resp	m2 Resp	JIRA :	Ju/A (Resp	Conc:	EMPC L	DL
1,2,3,4,6,7,8-HpCDF	36.83		8.132e5	6.091e4	6.205e4	0.98	NO	1.230e5	17.999	17.999	0.123
Total Hepta-Furans	37.31	9.101e3	9.379e3	6.679e2	6.706e2	1.00	NO	1.338e3	0.21645	0.21645	0.118
3Total Hepta-Furans	37.55	1.086e6	1.031e6	7.478 e 4	7.370e4	1.01	NO	1.485e5	24.012	24.012	0.118
4 1,2,3,4,7,8,9-HpCDF	38.84	1.393e5	1.414e5	8.338e3	8.075e3	1.03	NO	1.641e4	2.6452	2.6452	0.100

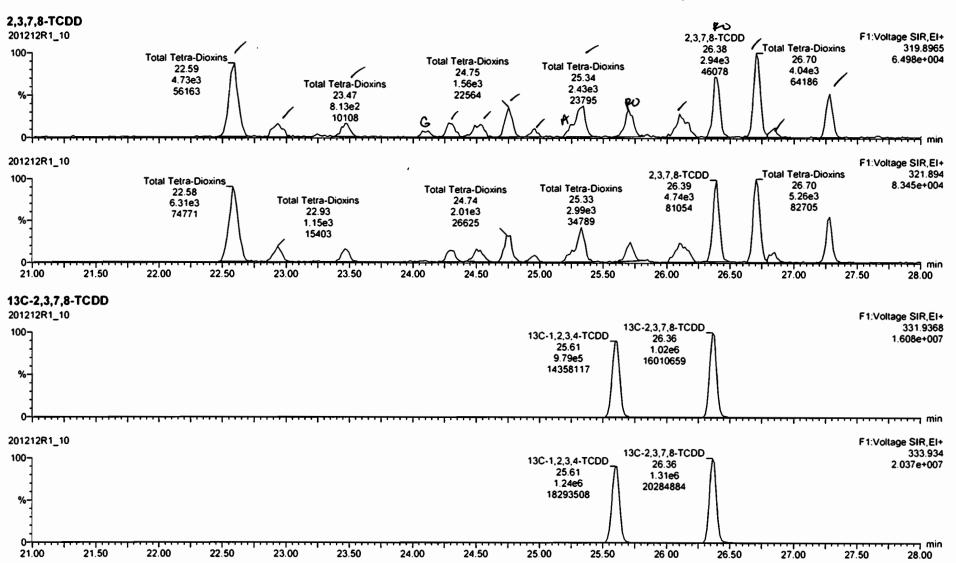
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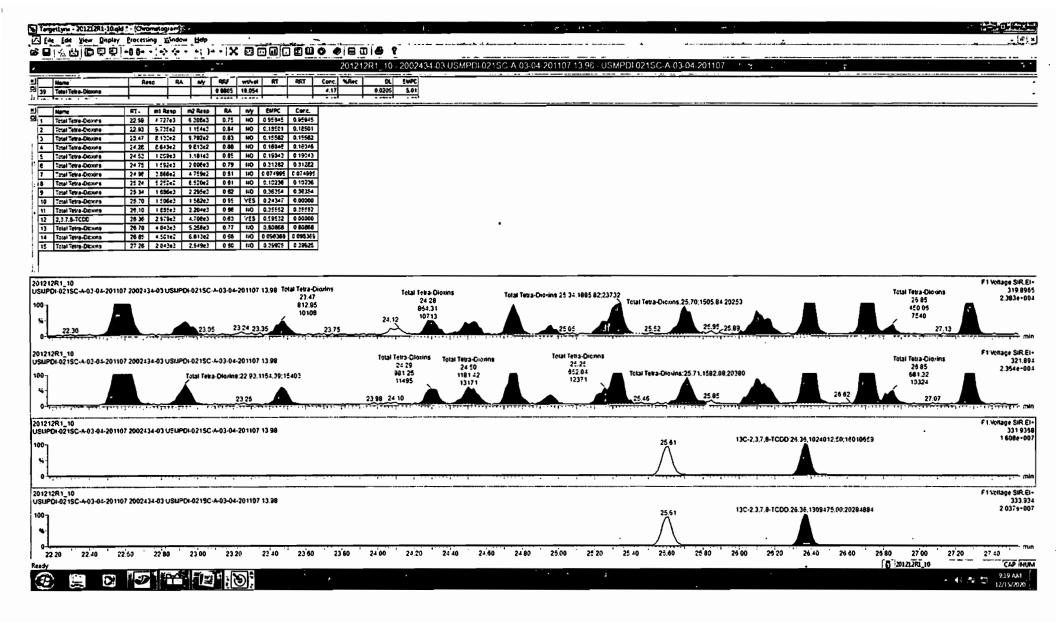
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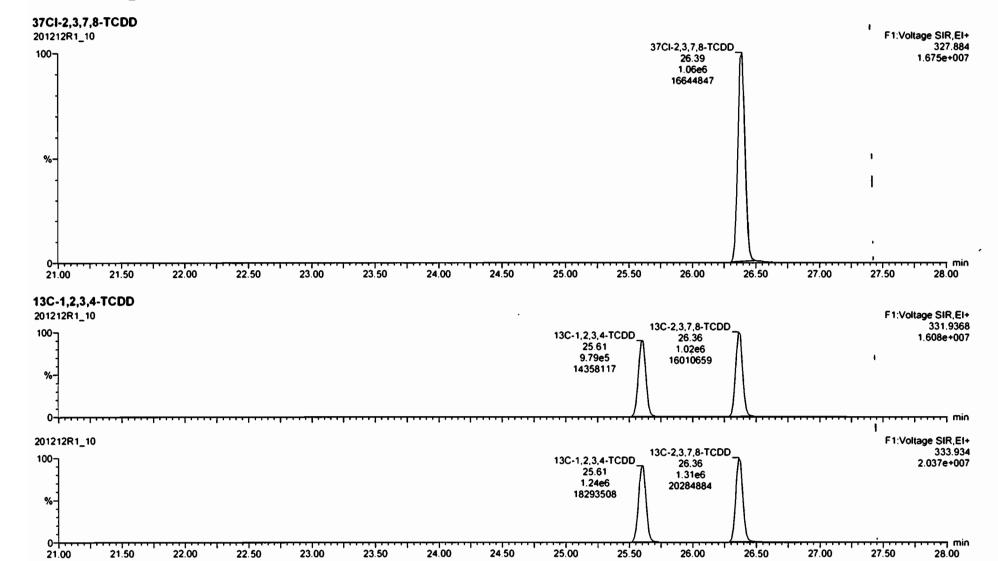


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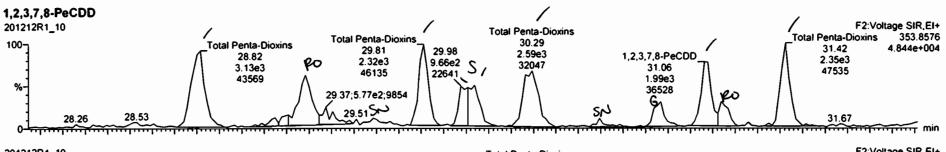
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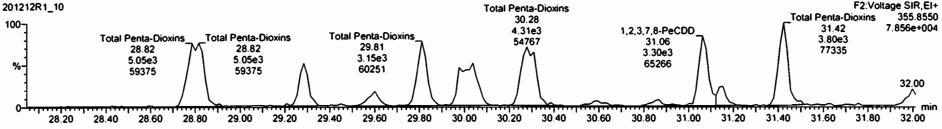


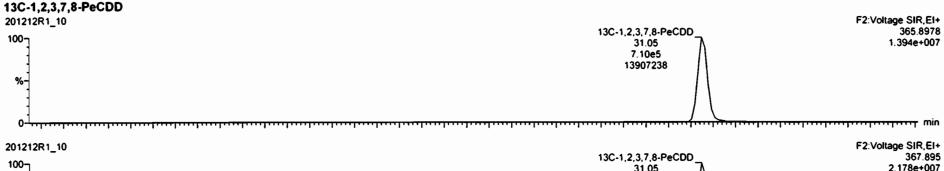
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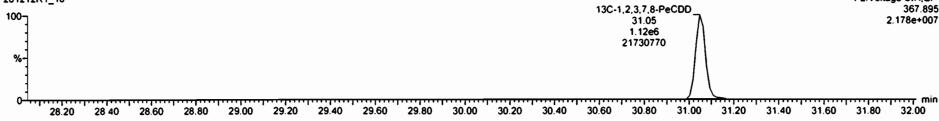
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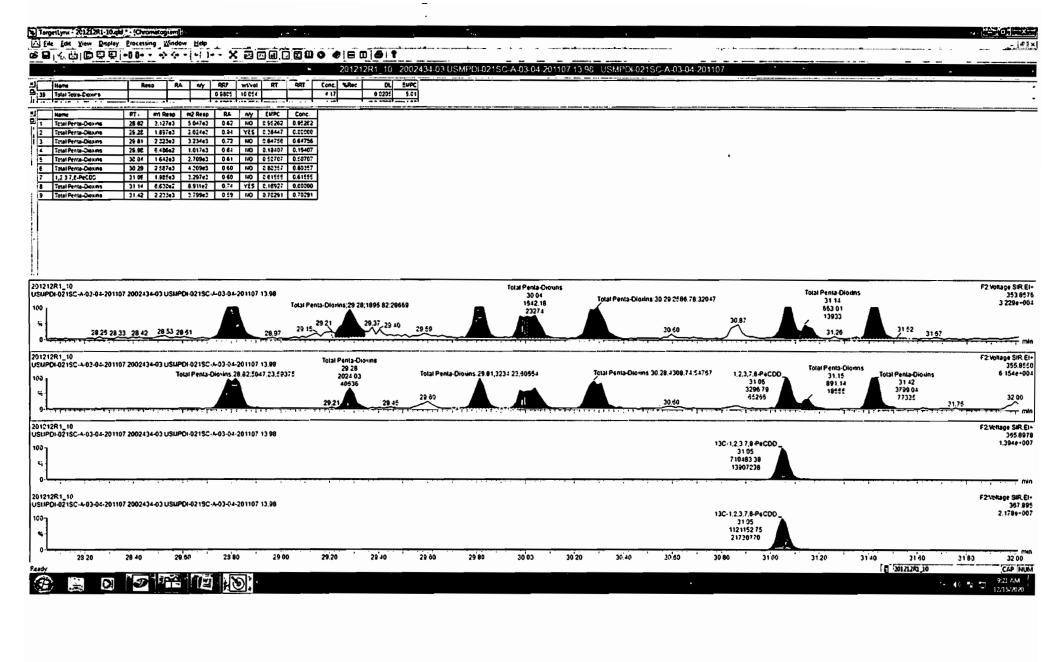
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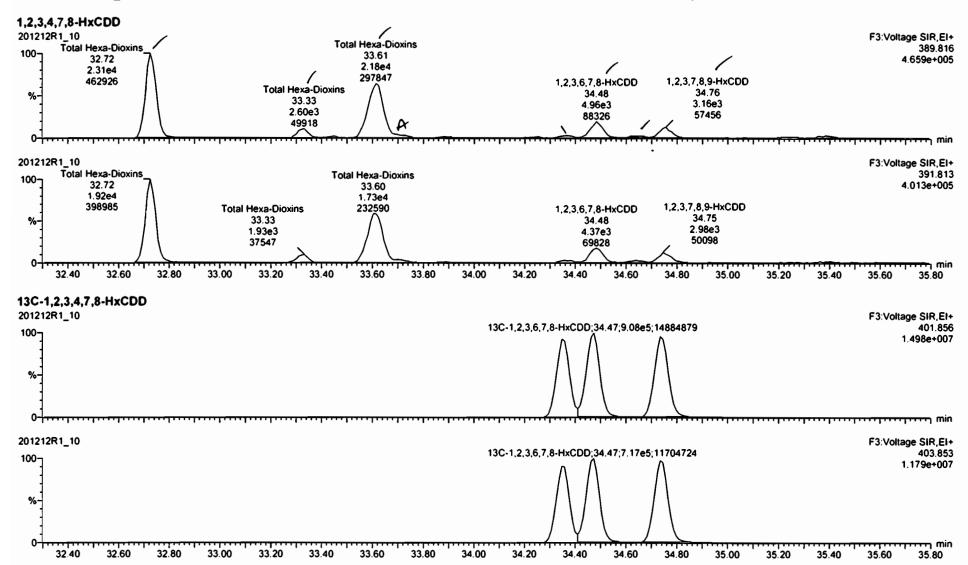


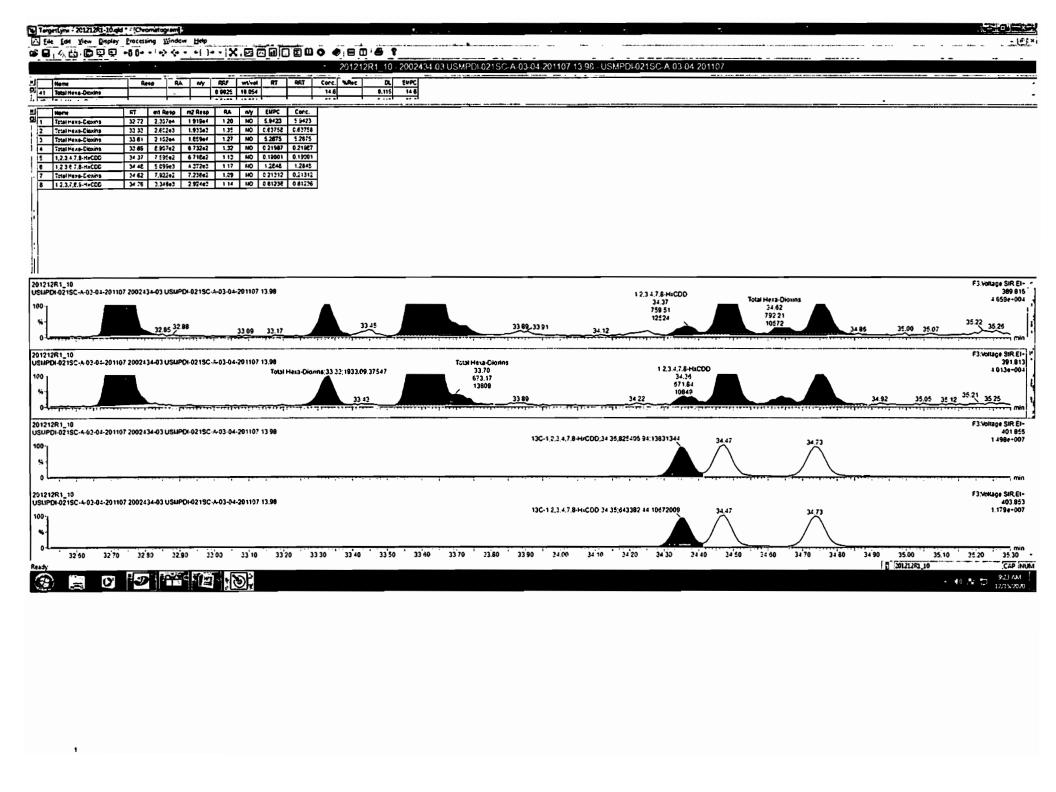
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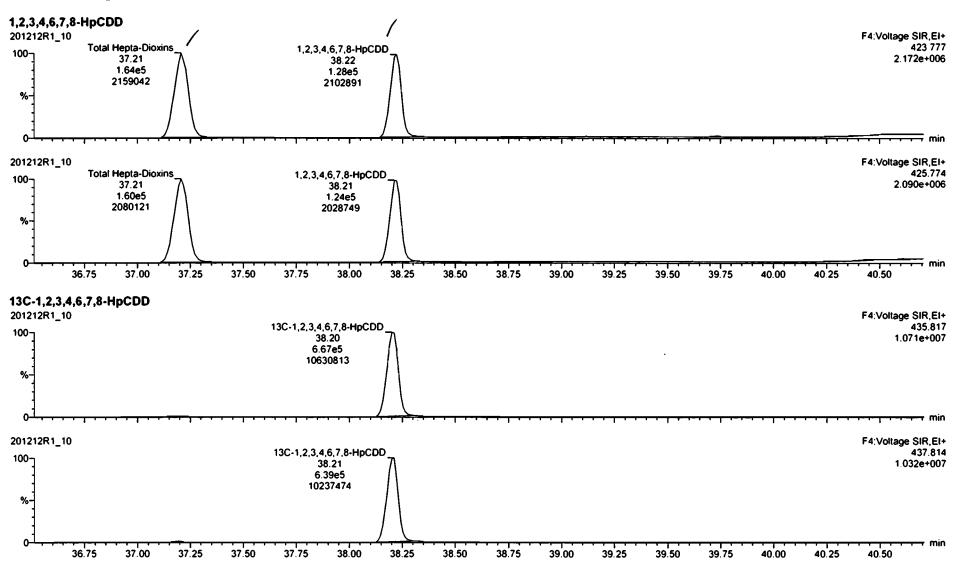
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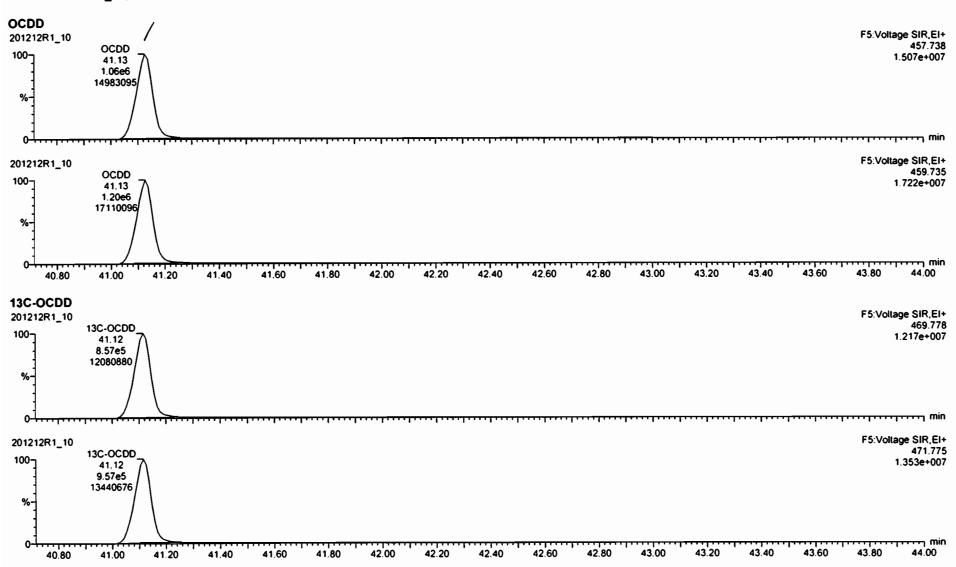


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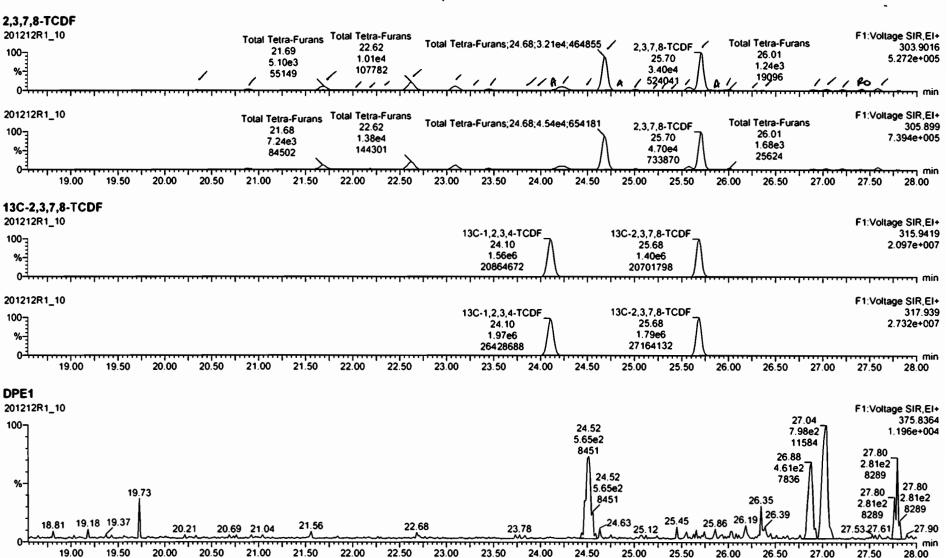
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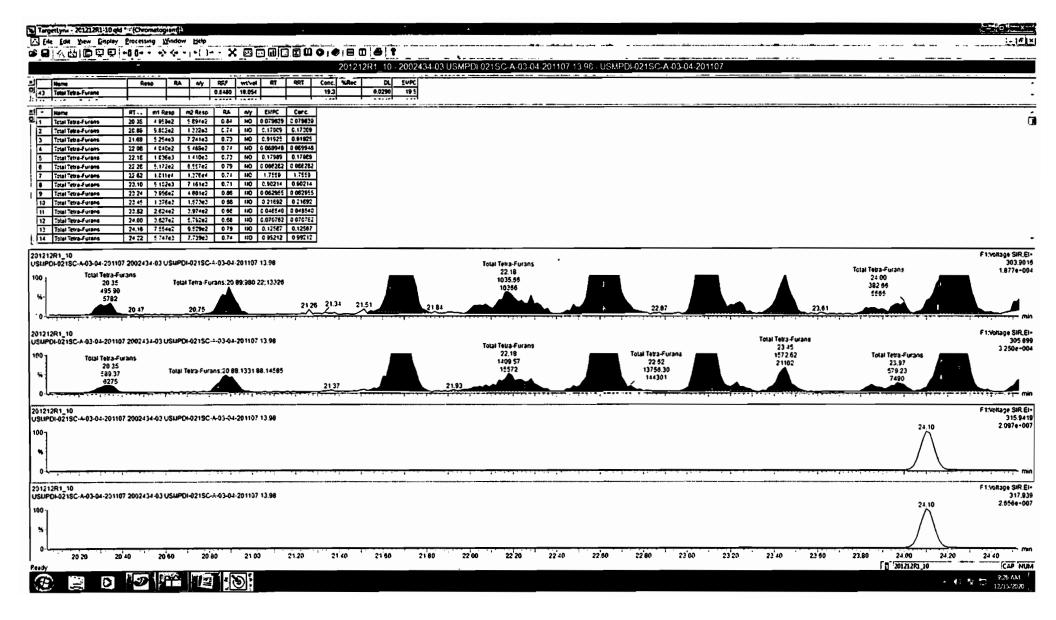


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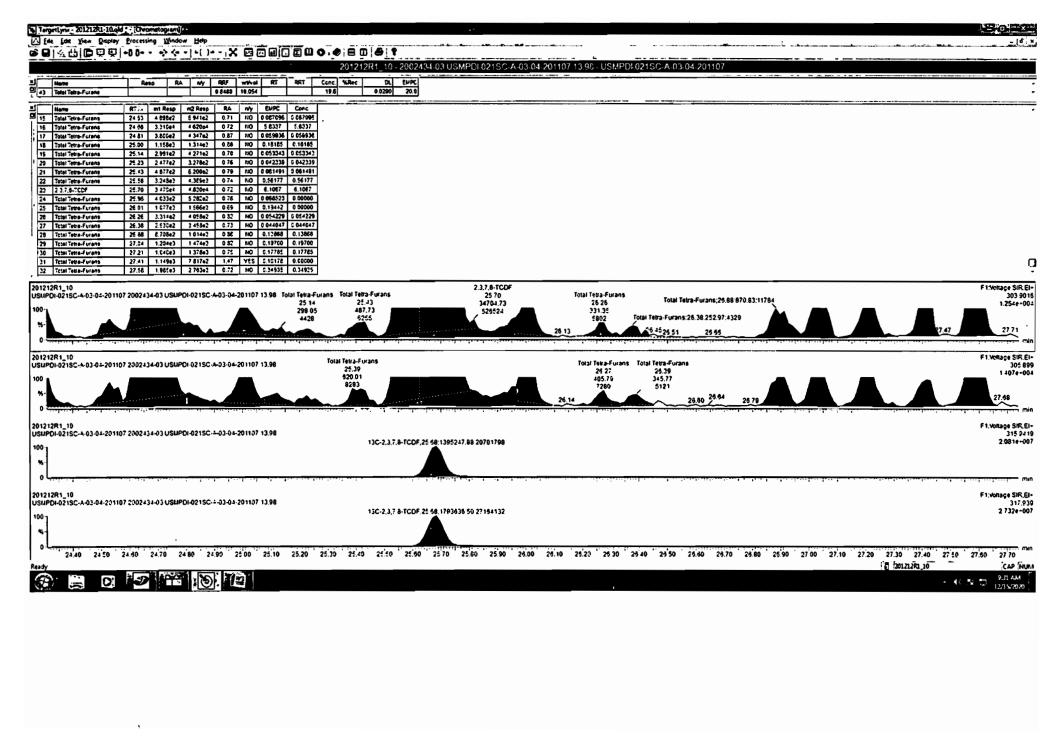
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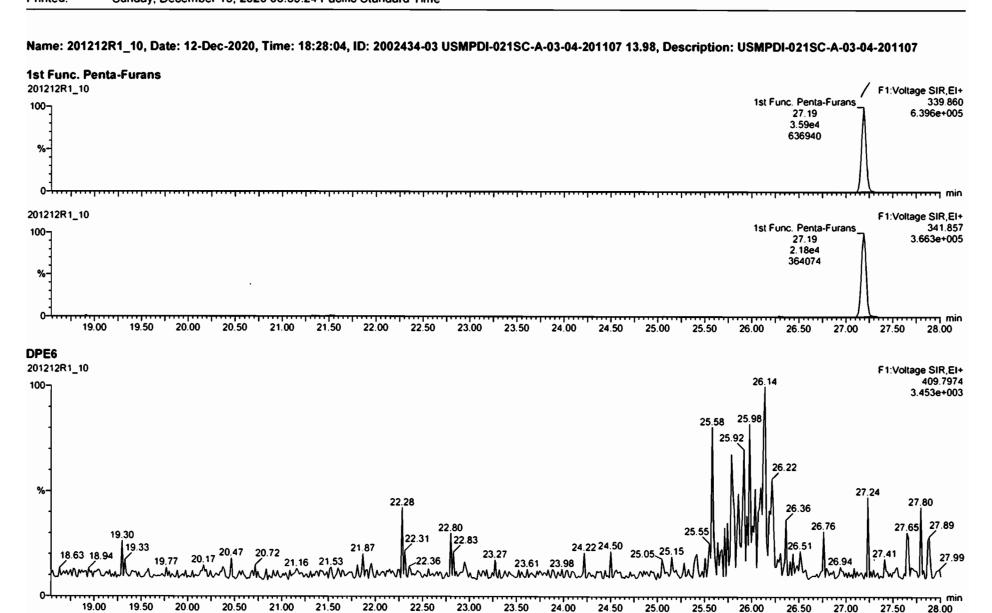




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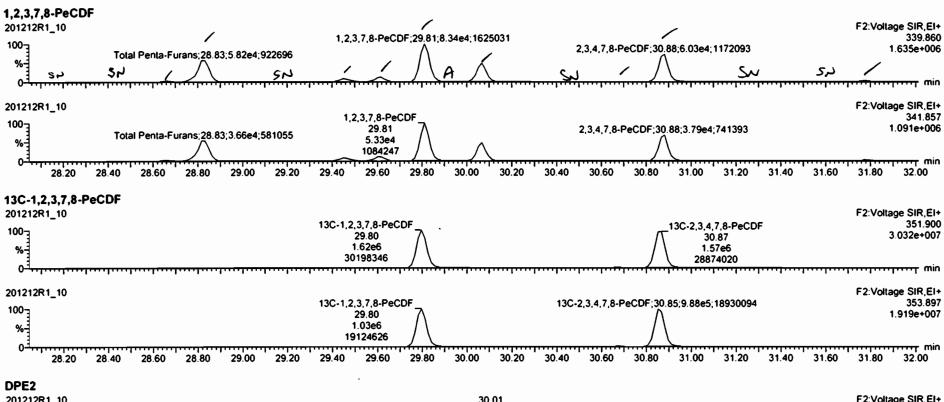
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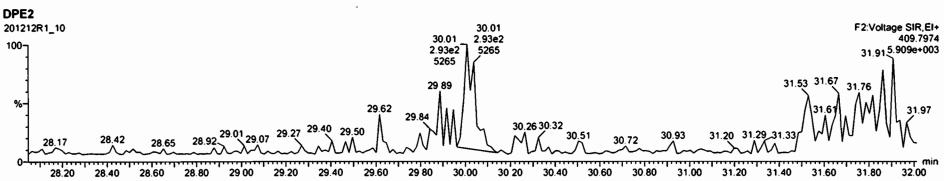
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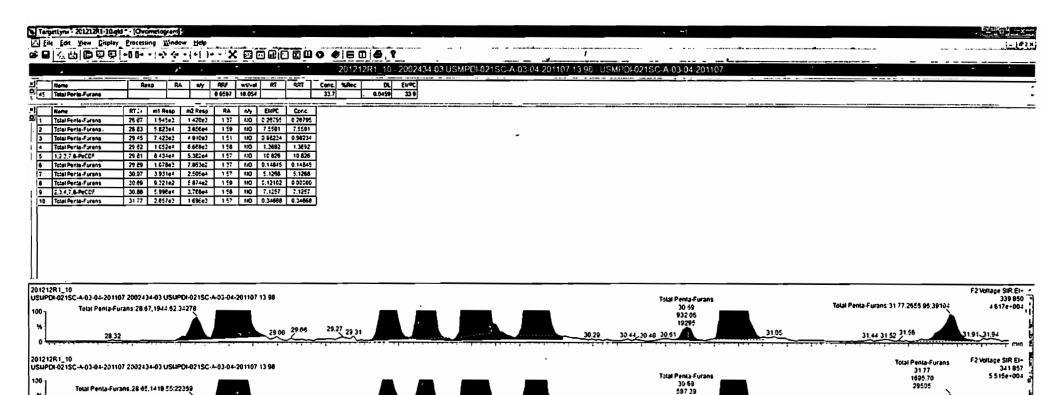
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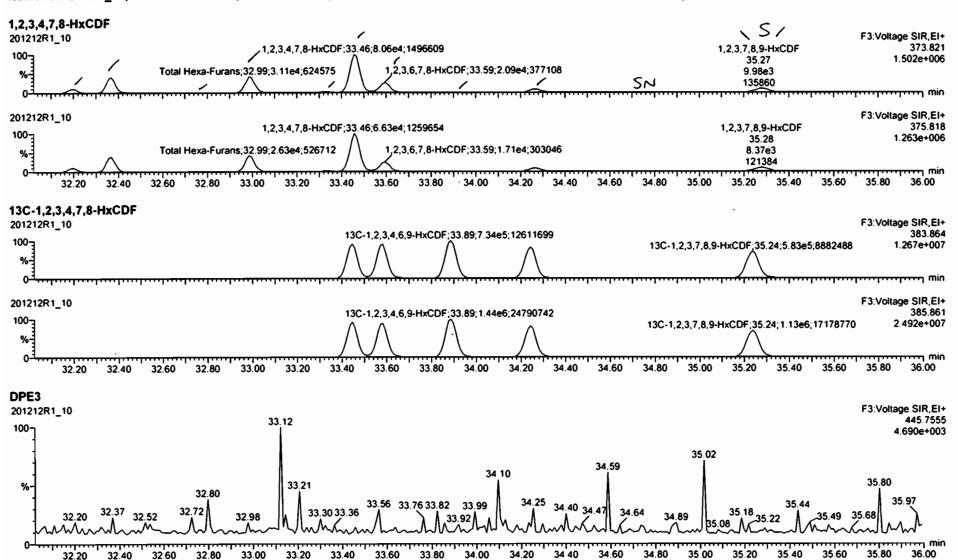
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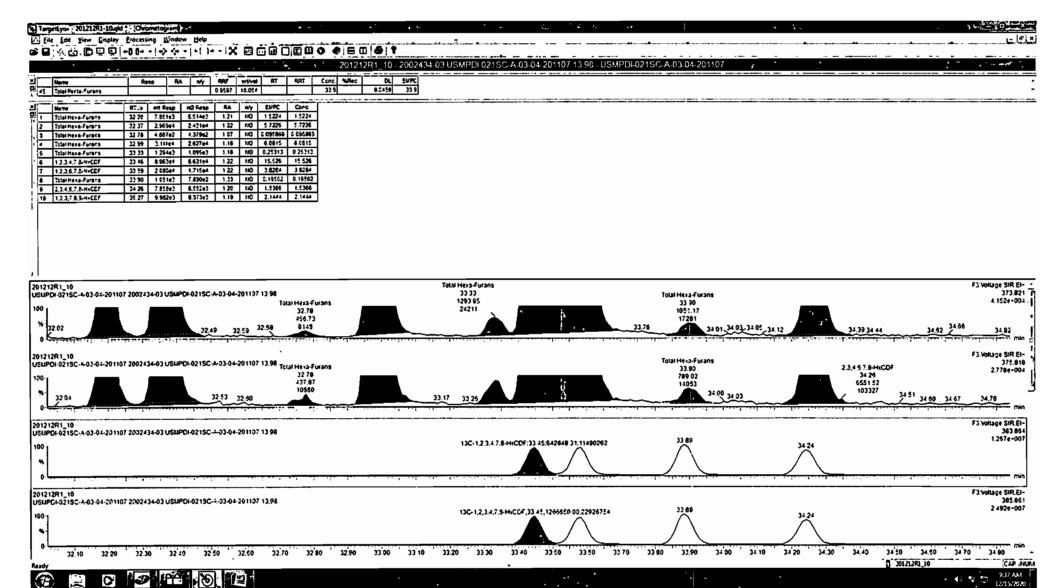
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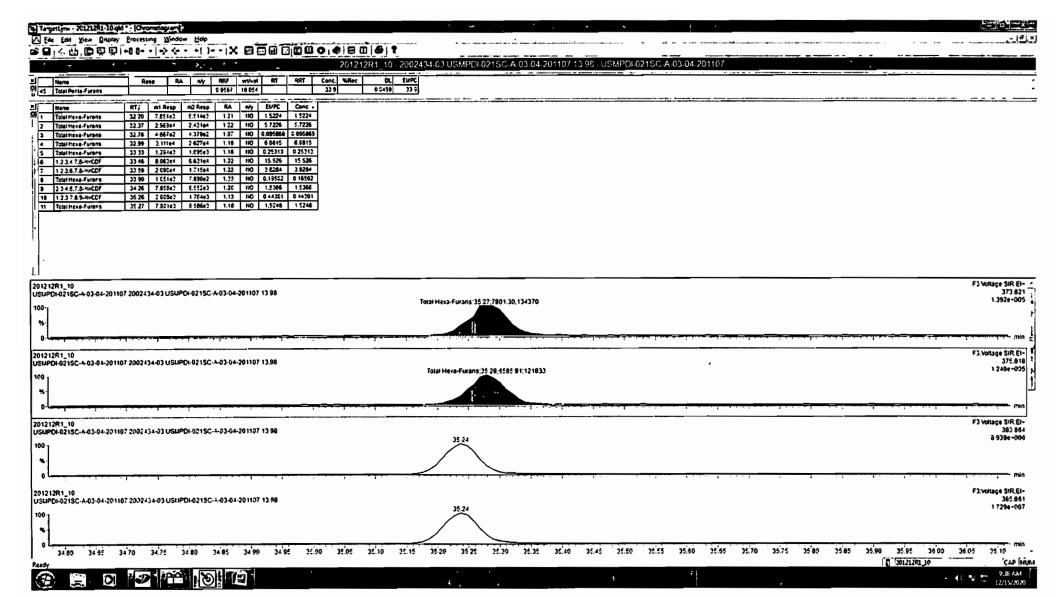
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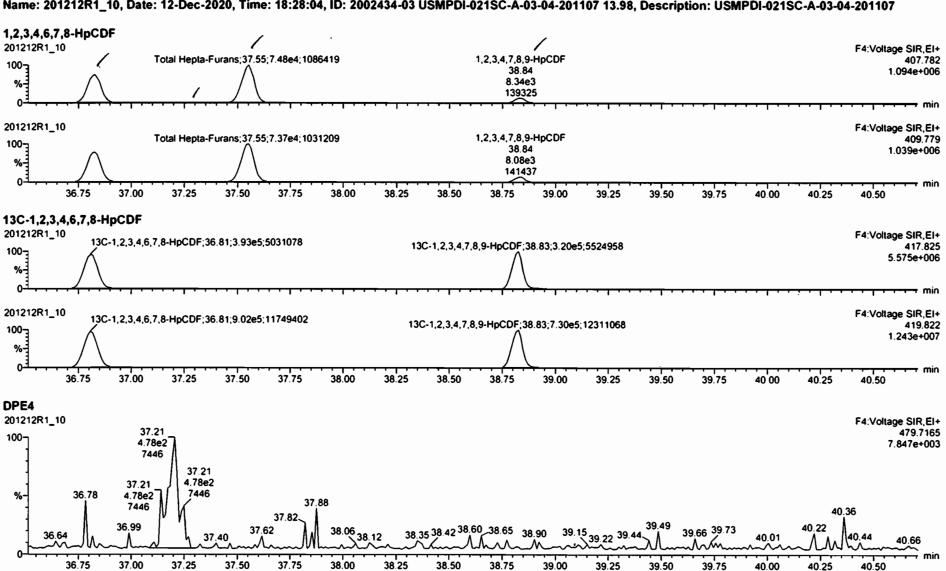
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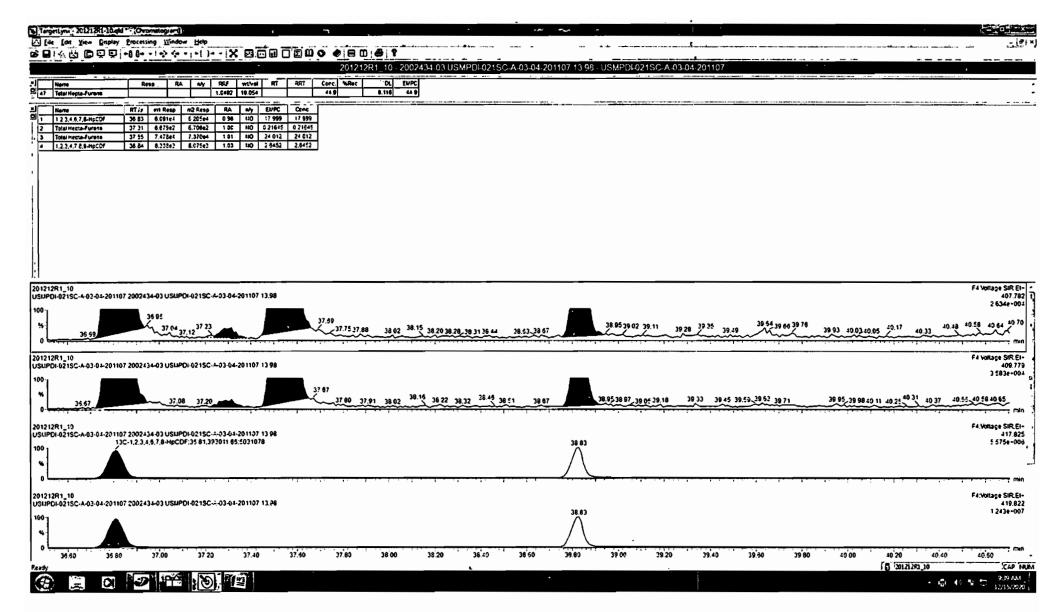


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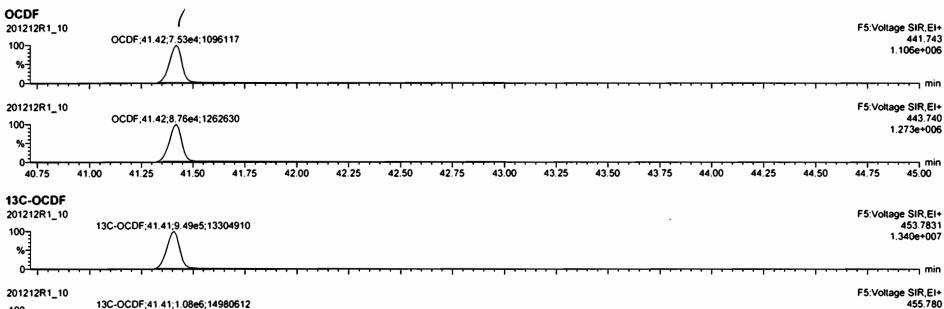


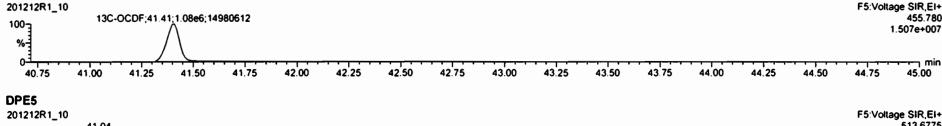
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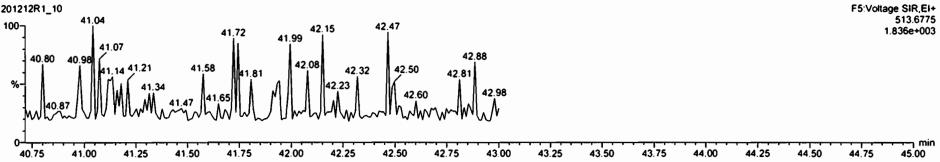
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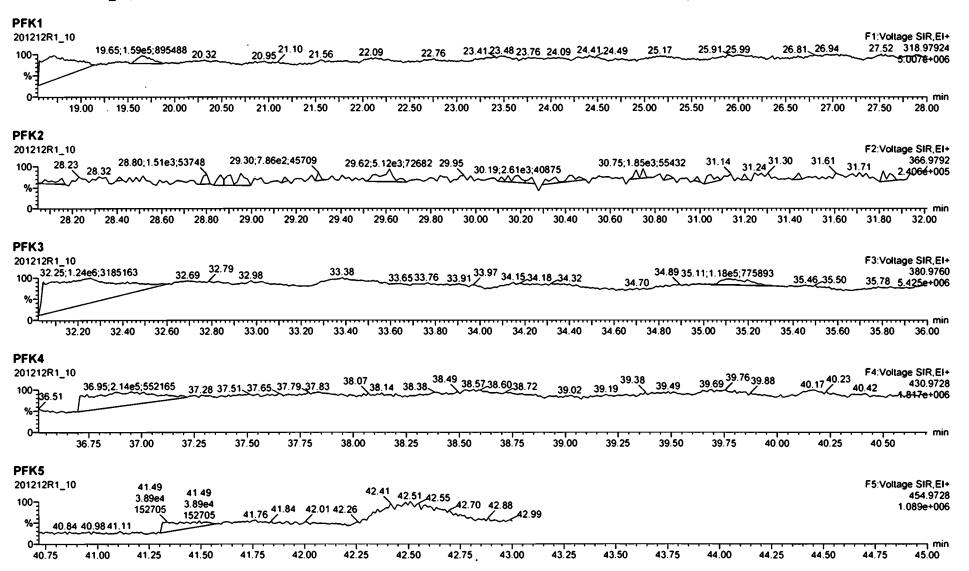


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Last Altered:

Tuesday, December 15, 2020 10:10:04 AM Pacific Standard Time

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GRB 12/15/2020

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	I # Name ™ Si	'} 'Resp`_:	RA' ,	n/y	RRF_1	, Mt/vol.: Je	Pred.RT	RT	ed.RRT:	RRT:	Conc,) %Rec 't	DL3	e' EMPC
1. 77. 3	1 2,3,7,8-TCDD	. F. 	_* 1	NO	0.980	10.078	26.410	in make	1.001	The Towns of the		, han 11, 11, 11 at \$44	0.0201	A-1 1
2	2 1,2,3,7,8-PeCDD			NO	0.932	10.078	31.094		1.001				0.0304	
3	3 1,2,3,4,7,8-HxCDD			NO	1.02	10.078	34.379		1.001				0.0454	ì
4	4 1,2,3,6,7,8-HxCDD			NO	0.902	10.078	34.494		1.001				0.0464	
5	5 1,2,3,7,8,9-HxCDD			NO	0.954	10.078	34.755		1.000				0.0451	
6 9 9 9 9 9 9 9 9 9 9 9	6 1,2,3,4,6,7,8-HpCDD	6.05e3	1.07	NO	0.918	10.078	38.211	38.22	1.000	1.001	1.1985		0.0983	1.20
7	7 OCDD	4.85e4	0.88	NO	0.866	10.078	41.113	41.12	1.000	1.000	14.167		0.116	14.2
8*	8 2,3,7,8-TCDF	1.18e3	0.71	NO	0.848	10.078	25.687	25.71	1.000	1.001	0.097876		0.0185	0.0979
9	9 1,2,3,7,8-PeCDF	1.42e3	1.64	NO	0.960	10.078	29.800	29.81	1.000	1.000	0.12094		0.0355	0.121
10	10 2,3,4,7,8-PeCDF	1.29e3	0.64	YES	1.07	10.078	30.889	30.88	1.001	1.000	0.10215		0.0250	0.0687
112	11 1,2,3,4,7,8-HxCDF	1.35e3	1.20	NO	0.986	10.078	33.457	33.47	1.000	1.001	0.16640		0.0333	0.166
12	12 1,2,3,6,7,8-HxCDF	4.64e2	1.16	NO	1.04	10.078	33.603	33.60	1.001	1.001	0.055480		0.0320	0.0555
13	13 2,3,4,6,7,8-HxCDF			NO	1.02	10.078	34.264		1.001				0.0354	
14.	14 1,2,3,7,8,9-HxCDF	2.85e2	1.20	NO	0.991	10.078	35.259	35.25	1.000	1.000	0.039980		0.0452	0.0400
15	15 1,2,3,4,6,7,8-HpCDF	1.49e3	1.03	NO	1.05	10.078	36.824	36.84	1.000	1.001	0.25812		0.0496	0.258
16:	16 1,2,3,4,7,8,9-HpCDF			NO	1.18	10.078	38.828		1.000				0.0407	1
17 -	17 OCDF	1.74e3	0.84	NO	0.896	10.078	41.406	41.41	1.000	1.000	0.43246		0.0433	0.432
18	18 13C-2,3,7,8-TCDD	2.00e6	0.78	NO	1.06	10.078	26.383	26.38	1.030	1.030	207.04	104	0.0974	1
19	19 13C-1,2,3,7,8-PeCDD	1.62e6	0.64	NO	0.785	10.078	31.229	31.06	1.219	1.213	225.17	113	0.134	
20	20 13C-1,2,3,4,7,8-HxCDD	1.22e6	1.29	NO	0.621	10.078	34.348	34.36 /	1.014	1.014	225.25	114	0.303	
21, 5, 6, 1	21 13C-1,2,3,6,7,8-HxCDD	1.36e6	1.27	NO	0.734	10.078	34.470	34.47 /	1.017	1.017	211.49	107	0.256	1
22 11 2	22 13C-1,2,3,7,8,9-HxCDD	1.35e6	1.25	NO	0.723	10.078	34.755	34.74	1.026	1.025	213.67	108	0.260	
23	23 13C-1,2,3,4,6,7,8-HpCDD	1.09e6	1.06	NO	0.568	10.078	38.255	38.20	1.129	1.127	220.15	111	0.574	1
24	24 13C-OCDD	1.57e6	0.90	NO	0.496	10.078	41.193	41.10	1.216	1.213	362.41	91.3	0.360	
25	25 13C-2,3,7,8-TCDF	2.82e6	0.78	NO	0.919	10.078	25.682	25.68	1.003	1.003	207.53	105	0.0856	
26	26 13C-1,2,3,7,8-PeCDF	2.43e6	1.59	NO	0.715	10.078	29.938	29.80	1.169	1.163	229.71	116	0.223	
27	27 13C-2.3,4,7,8-PeCDF	2.24e6	1.59	NO	0.689	10.078	31.027	30.87	1.212	1.205	220.36	111	0.232	
28 7 70	28 13C-1,2,3,4,7,8-HxCDF	1.63e6	0.51	NO	0.873	10.078	33.453	33.45 /	0.987	0.987	213.64	108	0.294	
29 📌 🗎	29 13C-1,2,3,6,7,8-HxCDF	1.60e6	0.51	NO	0.933	10.078	33.582	33.58 /	0.991	0.991	196.00	98.8	0.275	
30 - 31	30 13C-2,3,4,6,7,8-HxCDF	1.56e6	0.51	NO	0.843	10.078	34.250	34.24 /	1.011	1.011	211.37	107	0.305	
31	31 13C-1,2,3,7,8,9-HxCDF	1.43e6	0.51	NO	0.780	10.078	35.249	35.25	1.040	1.040	209.56	106	C.329	

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MassLynx 4.1 SCN815

Page 2 of 2

Dataset:

U:\VG12.PRO\Results\201212R1\201212R1-11.qld

Last Altered:

Tuesday, December 15, 2020 10:10:04 AM Pacific Standard Time

Printed:

Tuesday, December 15, 2020 10:10:46 AM Pacific Standard Time

Name: 201212R1_11, Date: 12-Dec-2020, Time: 19:12:18, ID: 2002434-04 USMPDI-021SC-A-04-05-201107 11.68, Description: USMPDI-021SC-A-04-05-201107

	# Name	Resp.	L_RA_1	n/y	RRF	Fwtvol	Pred.RT J	_RT:	[Pred.RRT	RRTOK	Conc. J	L %Rec ≰	DL L	EMPC
32	32 13C-1,2,3,4,6,7,8-HpCDF	1.09e6	0.43	NO	0.726	10.078	36.825	36.81	1.087	1.086	171.90	86.6	0.339	
33	33 13C-1,2,3,4,7,8,9-HpCDF	8.98e5	0.43	NO	0.491	10.078	38.835	38.82	1.146	1.145	209.34	105	0.501	
34	34 13C-OCDF	1.78e6	0.88	NO	0.565	10.078	41.410	41.40	1.222	1.222	360.93	90.9	0.393	
35,	35 37CI-2,3,7,8-TCDD	8.91e5			1.22	10.078	26.378	26.39	1.030	1.031	79.917	101	0.0179	
36	36 13C-1,2,3,4-TCDD	1.82e6	0.79	NO	1.00	10.078	25.640	25.61	1.000	1.000	198.44	100	0.103	
37	37 13C-1,2,3,4-TCDF	2.93e6	0.79	NO	1.00	10.078	24.130	24.12	1.000	1.000	198.44	100	0.0787	
38	38 13C-1,2,3,4,6,9-HxCDF	1.73e6	0.51	NO	1.00	10.078	33.920	33.89	1.000	1.000	198.44	100	0.257	
39	39 Total Tetra-Dioxins				0.980	10.078	24.620		0.000		0.13950		0.0201	0.140
40 5.	40 Total Penta-Dioxins				0.932	10.078	29.960		0.000		0.17425		0.0304	0.174
41	41 Total Hexa-Dioxins				0.902	10.078	33.635		0.000		0.98942		0.0484	0.989
42	42 Total Hepta-Dioxins				0.918	10.078	37.640		0.000		3.0193		0.0983	3.02
43	43 Total Tetra-Furans				0.848	10.078	23.610		0.000		0.27312		0.0185	0.273
44	44 1st Func. Penta-Furans				0.960	10.078	26.930		0.000		0.082016		0.0106	0.0820
45.	45 Total Penta-Furans				0.960	10.078	29.275		0.000		0.21965		0.0372	0.288
46	46 Total Hexa-Furans				1.02	10.078	33.555		0.000		0.47667		0.0358	0.521
47	47 Total Hepta-Furans				1.05	10.078	37.835		0.000		0.25812		0.0478	0.560

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Vista Analytical Laboratory

Dataset:

U:\VG12.PRO\Results\201212R1\201212R1-11.qld

Last Altered: Printed: Tuesday, December 15, 2020 10:10:04 AM Pacific Standard Time Tuesday, December 15, 2020 10:10:46 AM Pacific Standard Time

Method: U:\VG12.PRO\MethDB\1613rrt-12-11-20.mdb 11 Dec 2020 08:35:32

Calibration: U:\VG12.PRO\CurveDB\dbDIOXIN_1613vg12-12-03-20.cdb 04 Dec 2020 11:36:07

Name: 201212R1_11, Date: 12-Dec-2020, Time: 19:12:18, ID: 2002434-04 USMPDI-021SC-A-04-05-201107 11.68, Description: USMPDI-021SC-A-04-05-201107

Tetra-Dioxins

Name :	RT 1	m1 Height j	m2 Height [m1 Resp	m2 Resp	, RA	ľu/λ¶	Resp	Conc.	EMPC	L ¿ DL
1 Total Tetra-Dioxins	24.31	8.626e3						1.380e3			

Penta-Dioxins

Name	_RT]_	m1 Height	m2 Height,	m1 Resp	m2 Resp	<u>[</u> [RA,][νy) L	Resp	[] Conc. L " EMPC	DL
1 Total Penta-Dioxins	29.28	4.297e3							0.093406 0.093406	
2 Total Penta-Dioxins	30.31	3.843e3	4.683e3	2.401e2	3.745e2	0.64	NO _	6.147e2	0.080842 0.080842	0.0304

Hexa-Dioxins

Name (A)	RT. LL n	n1 Height	m2 Height j	m1 Resp լ	m2 Resp	RALL	n/y, L	Resp	E Conc.	EMPC (DL
1 Total Hexa-Dioxins		3.790e4			1.605e3				0.62095		
2 Total Hexa-Dioxins	33.60	1.668e4	1.311e4	1.275e3	9.183e2	1.39	NO_	2.193e3	0.36847	0.36847	0.0484

Hepta-Dioxins

Name	RT.	m1 Height	m2 Height	m1 Resp	m2 Resp	, LRA'	ַן נְעַּחַ	Resp	Conc!	EMPC,	DL
1 Total Hepta-Dioxins	37.22	6.185e4	5.895e4	4.680e3	4.516e3	1.04	NO	9.197e3	1.8209	1.8209	0.0983
2.2 1,2,3,4,6,7,8-HpCDD	38.22	4.813e4	4.942e4	3.122e3	2.931e3	1.07	NO	6.053e3	1.1985	1.1985	0.0983

Tetra-Furans

Name	.RT- i i n	n1 Height	m2 Height : -	-m1 Resp)	m2 Resp	I [RA]:	n/y ነ ኒ	Resp	Conc.	EMPC	DL
1 Total Tetra-Furans		2.169e3							0.031119		
2 Total Tetra-Furans	22.62	2.775e3	3.451e3	1.939e2	2.451e2	0.79	NO	4.390e2	0.036421	0.036421	0.0185
2 Total Tetra-Furans 3 Total Tetra-Furans	24.68	6.481e3	7.573e3	3.937e2	5.254e2	0.75	NO	9.191e2	0.076249	0.076249	0.0185
4 Total Tetra-Furans	25.61	2.513e3	3.152e3	1.731e2	2.061e2	0.84	NO	3.791e2	0.031454	0.031454	0.0185
5 ** 2,3,7,8-TCDF	25.71	7.1 <mark>93e3</mark>	1.041e4	4.893e2	6.904e2	0.71	NO	1.180e3	0.097876	0.097876	0.0185

Work Order 2002434

Vista Analytical Laboratory

Dataset:

U:\VG12.PRO\Results\201212R1\201212R1-11.qld

Last Altered: Printed:

Tuesday, December 15, 2020 10:10:04 AM Pacific Standard Time Tuesday, December 15, 2020 10:10:46 AM Pacific Standard Time

Name: 201212R1_11, Date: 12-Dec-2020, Time: 19:12:18, ID: 2002434-04 USMPDI-021SC-A-04-05-201107 11.68, Description: USMPDI-021SC-A-04-05-201107

Penta-Furans function 1

Name .	J_RT_1	m1 Height [m2 Height	m1_Resp [m2 Resp	RALI	ν <u>γ [*</u> _ Re	spCon	c. L EMPC	, DL
1 1st Func. Penta-Furans	27.19	9.135e3	7.107e3	5.607e2	3.661e2	1.53	NO 9.26	8e2 0.08201	16 0.082016	3 0.0106

Penta-Furans

Name	RT jer	n1 Height	m2 Height	m1 Resp [m2 Resp	[RAj[n/y][Resp`	Conc.	EMPC :	DL
1 Total Penta-Furans		8.641e3				1.68 NO		0.098709		
2 1,2,3,7,8-PeCDF	29.81	1.582e4	1.293e4	8.832e2	5.377e2	1.64 NO	1.421e3	0.12094	0.12094	0.0355
2 1,2,3,7,8-PeCDF 3 2,3,4,7,8-PeCDF	30.88	7.712e3	1.190e4	5.040e2	7.890e2	0.64 YES	1.293e3	0.00000	0.068712	0.0350

Hexa-Furans

	Name = -		RT	-≱E m	l Height	m2 Height,	14	m1 Resp	m2 Resp	. RA	n/y{l	Resp	Conc.	EMPC	DL. شب
1	Total Hexa-Fu	irans	32.	19	3.795e3	2.460e3	-	1.336e2	1.100e2	1.21	NO	2.437e2	0.030521	0.030521	0.0358
2	Total Hexa-Fu	ırans	32.	38	7.159e3	9.801e3		3.819e2	3.307e2	1.15	NO	7.126e2	0.089252	0.089252	0.0358
3, 5	Total Hexa-Fι	ırans	32.	99 9	9.531e3	6.601e3		4.342e2	3.246e2	1.34	NO	7.588e2	0.095041	0.095041	0.0358
4	(1,2,3,4,7,8-Hx	CDF	33.	47	1.10 9e4	9.149e3		7.356e2	6.118e2	1.20	NO	1.347e3	0.16640	0.16640	0.0333
5	1,2,3,6,7,8-Hx	CDF	33.	60	5.401e3	4.639e3		2.491e2	2.150e2	1.16	NO	4.641e2	0.055480	0.055480	0.0320
6	1,2,3,7,8,9-Hx	CDF	35.	25	5.418e3	3.838e3		1.553e2	1.297e2	1.20	NO	2.850e2	0.039980	0.039980	0.0452
7	Total Hexa-Fu	urans	35.	29 4	4.2 <u>19e3</u>	4.403e3		1.878e2	1.676e2	1.12	NO	0.000e0	0.00000	0.044515	0.0358

Hepta-Furans

Name 1,2,3,4,6,7,8-HpCDF	RT_ <u>[] '</u>	m1 Height	m2 Height, L	m1 Resp	m2 Resp	RATINY,	Resp*	Conc.	EMPC	DL
1,2,3,4,6,7,8-HpCDF	36.84	1.027e4	1.145e4	7.545e2	7.341e2	1.03 NO	1.489e3	0.25812	0.25812	0.0496
2 Total Hepta-Furans	37.55	1.088e4	1.284e4			0.85 YES		0.00000		

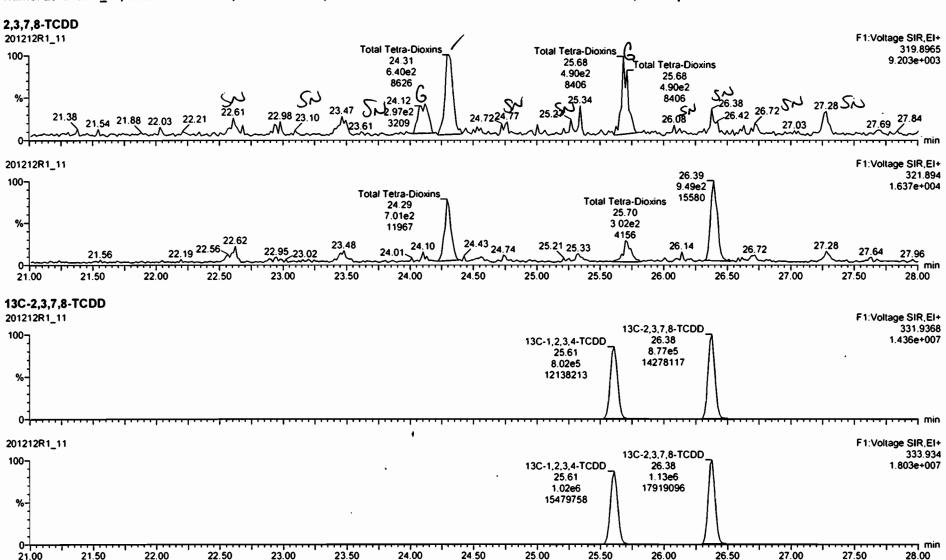
Work Order 2002434 Page 199 of 955

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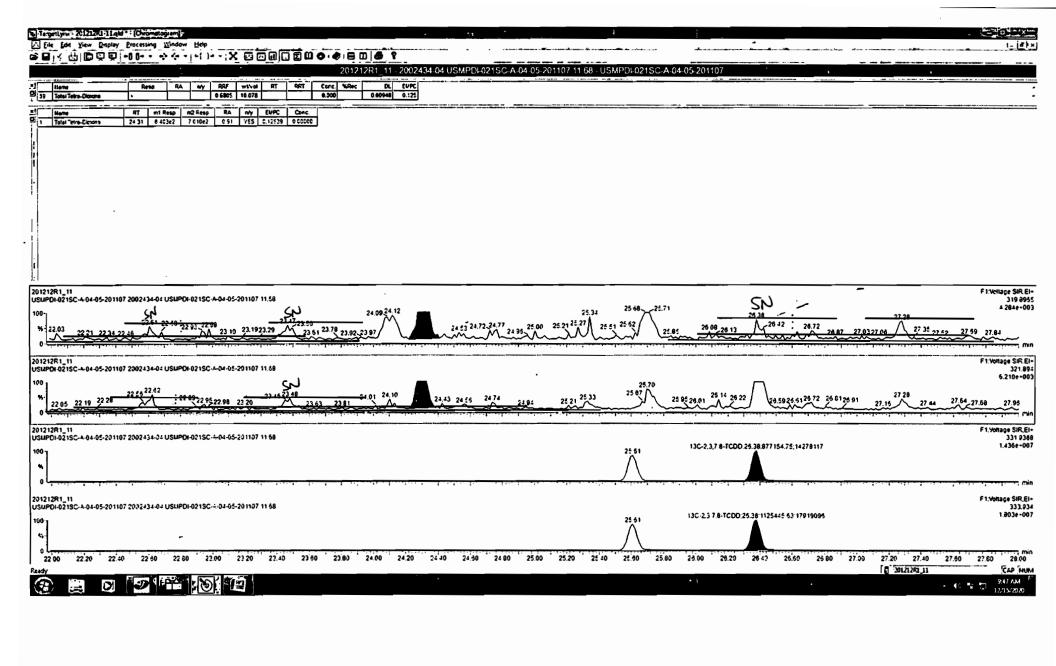
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Sunday, December 13, 2020 08:38:08 Pacific Standard Time Sunday, December 13, 2020 08:39:24 Pacific Standard Time

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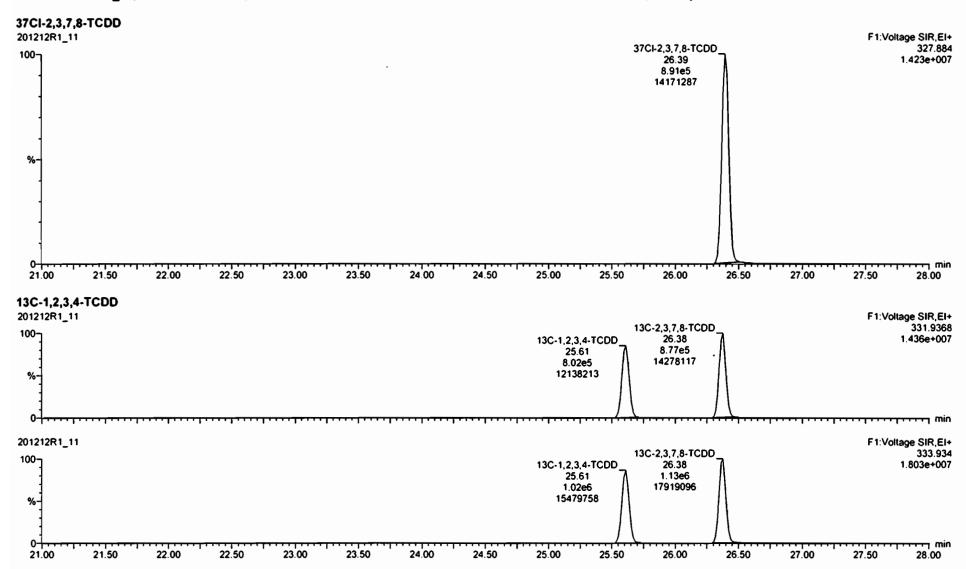


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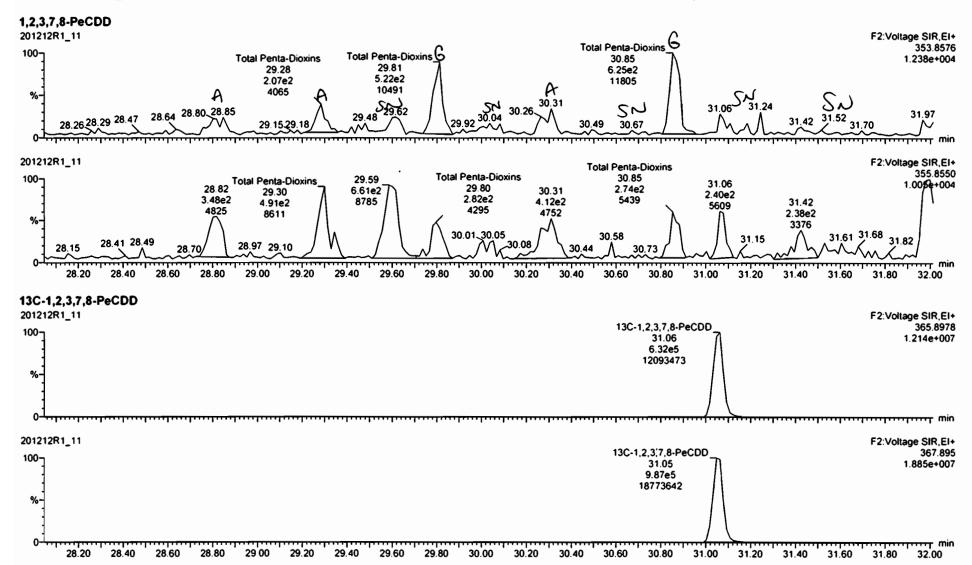


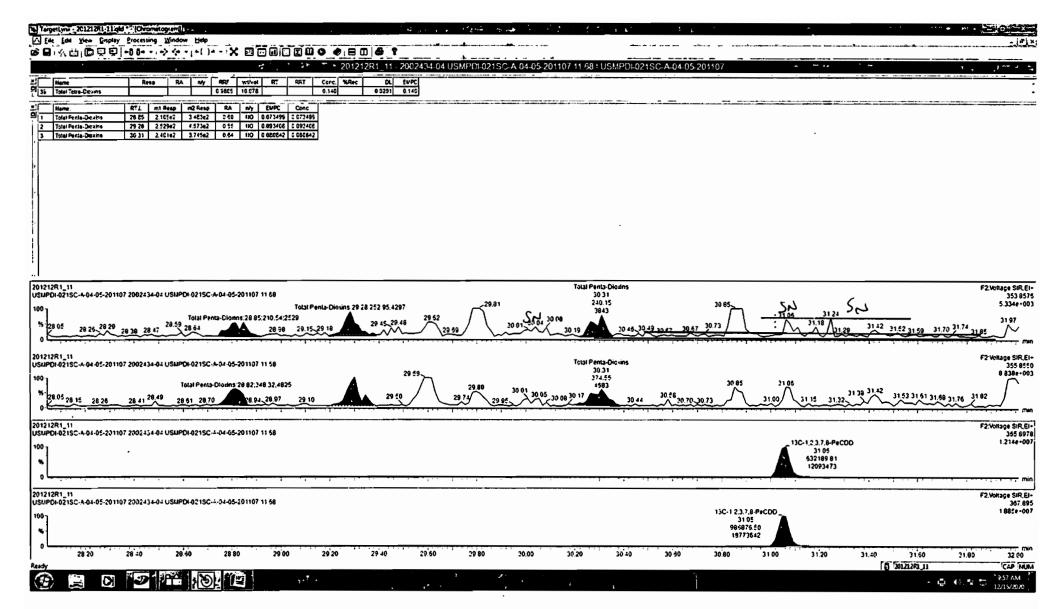
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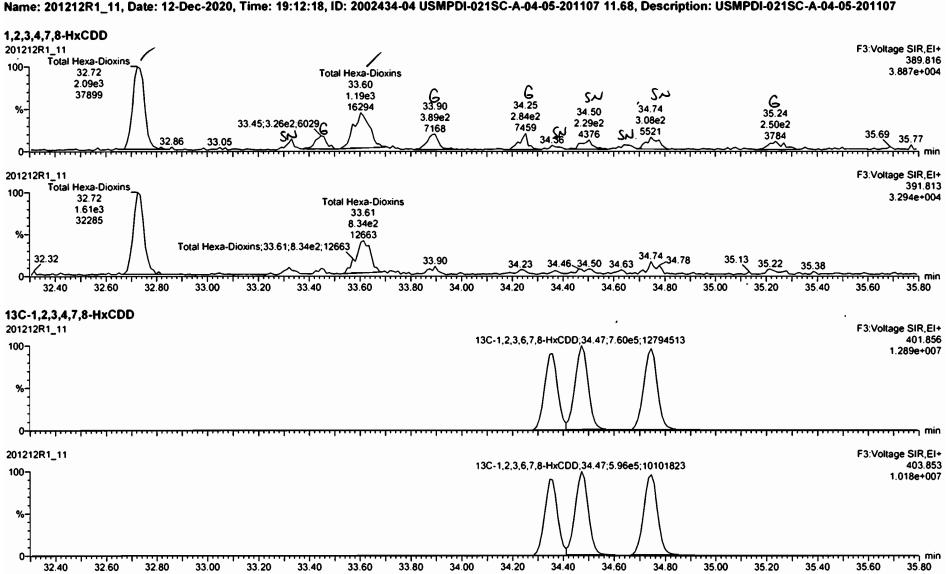
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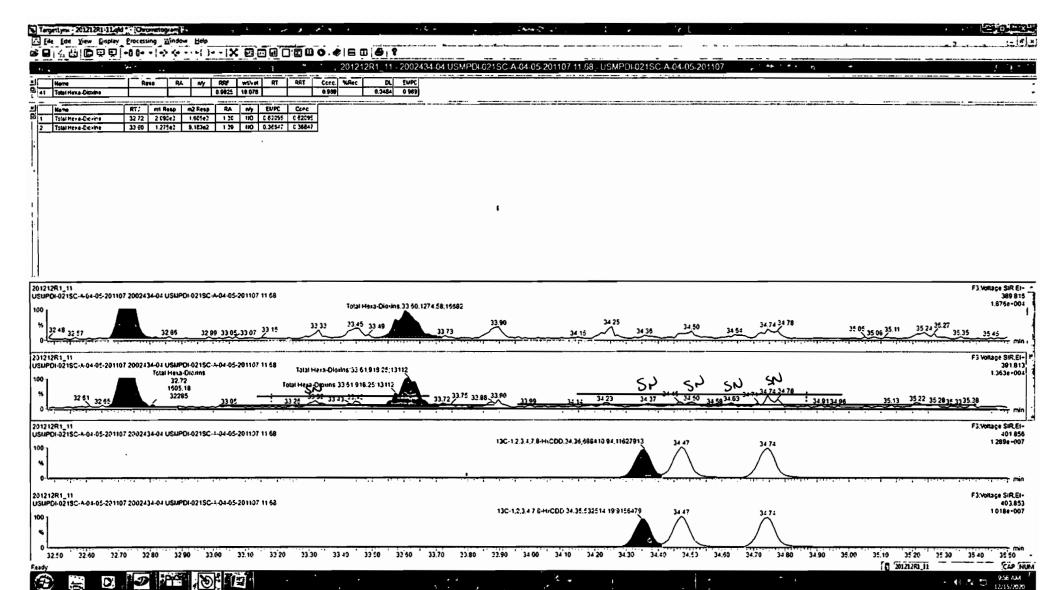


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Name: 201212R1_11, Date: 12-Dec-2020, Time: 19:12:18, ID: 2002434-04 USMPDI-021SC-A-04-05-201107 11.68, Description: USMPDI-021SC-A-04-05-201107



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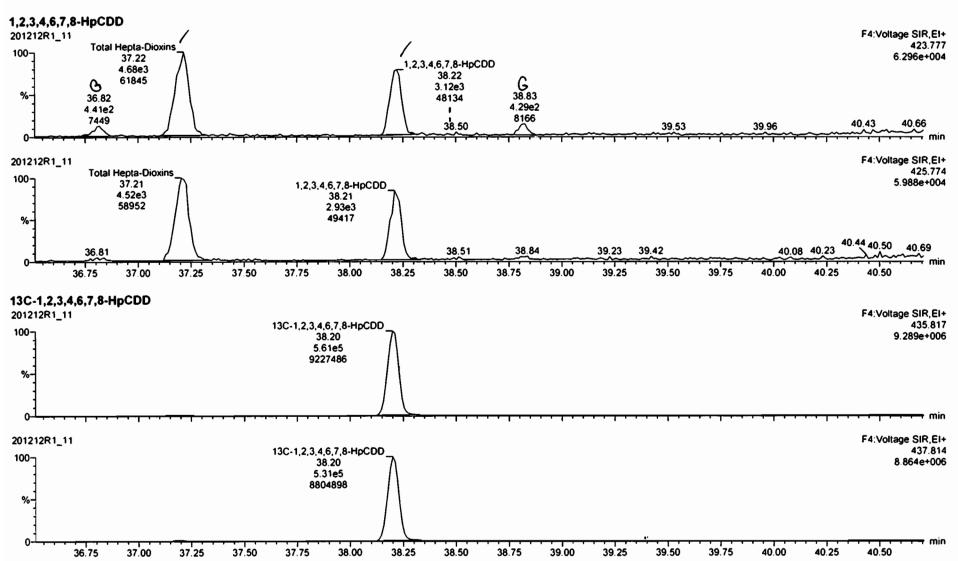
Work Order 2002434 Page 206 of 955

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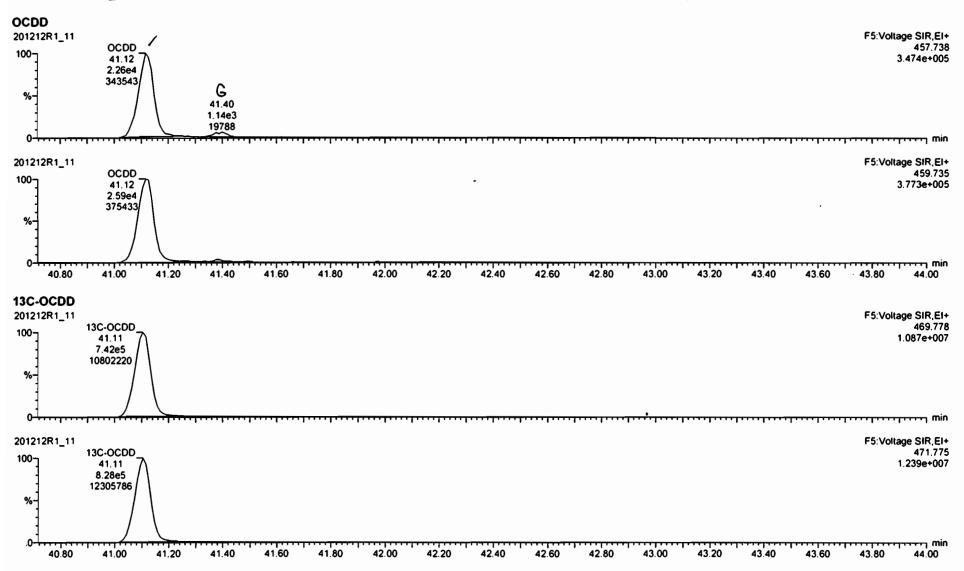
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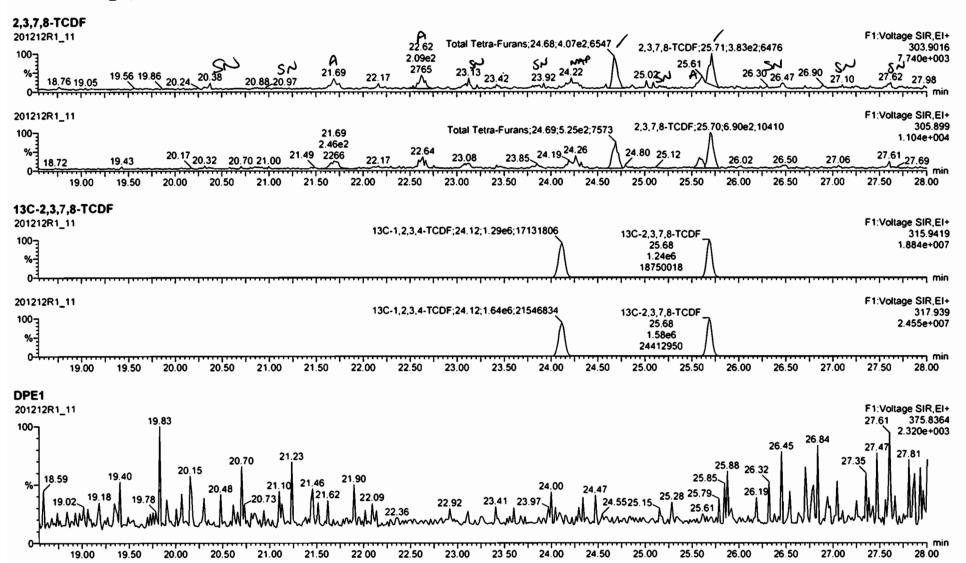


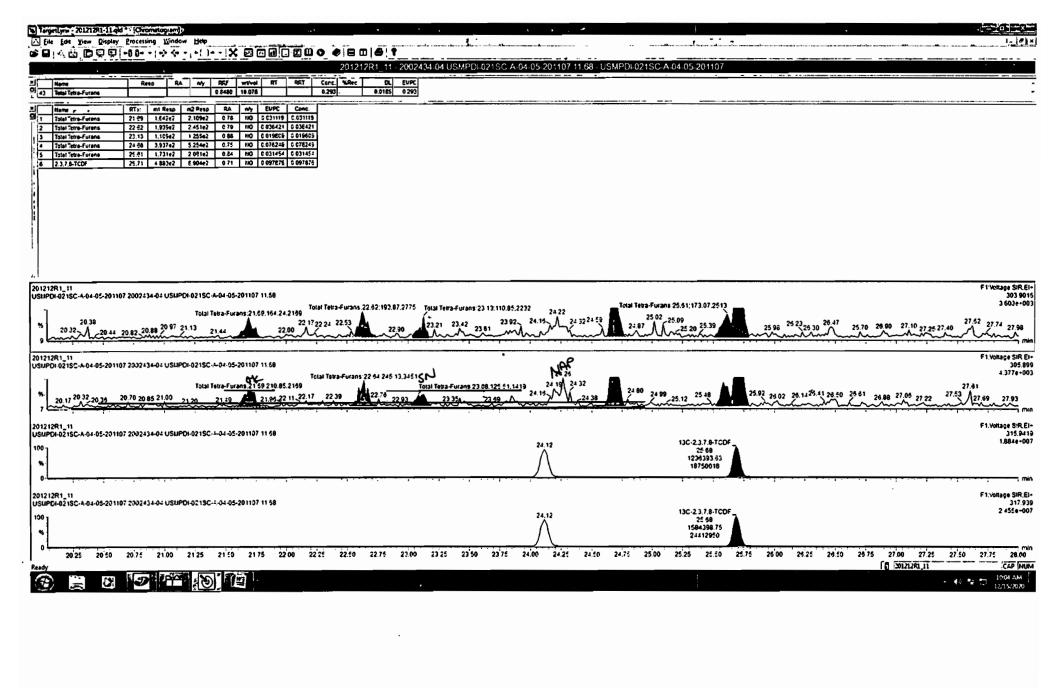
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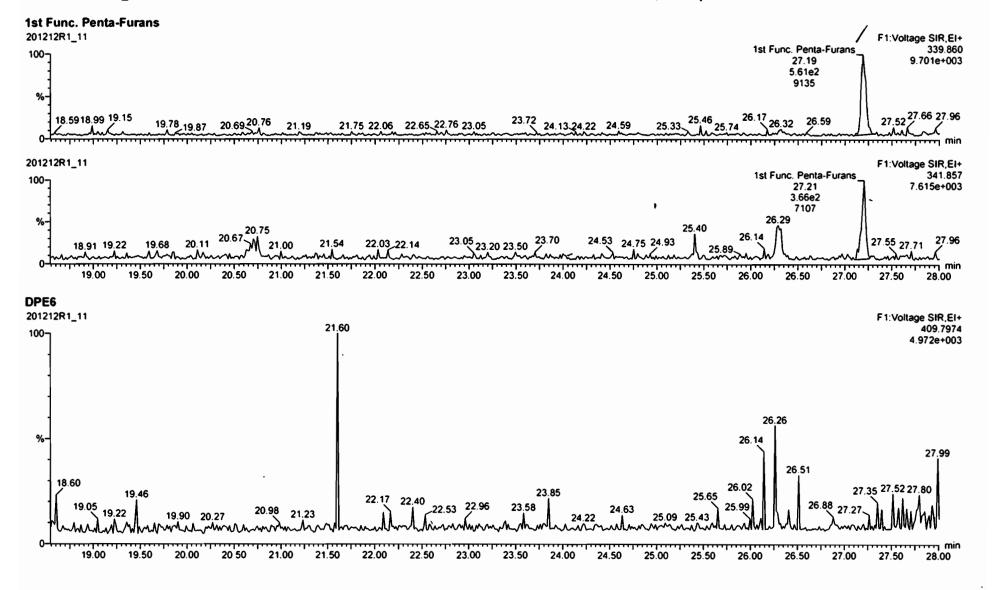
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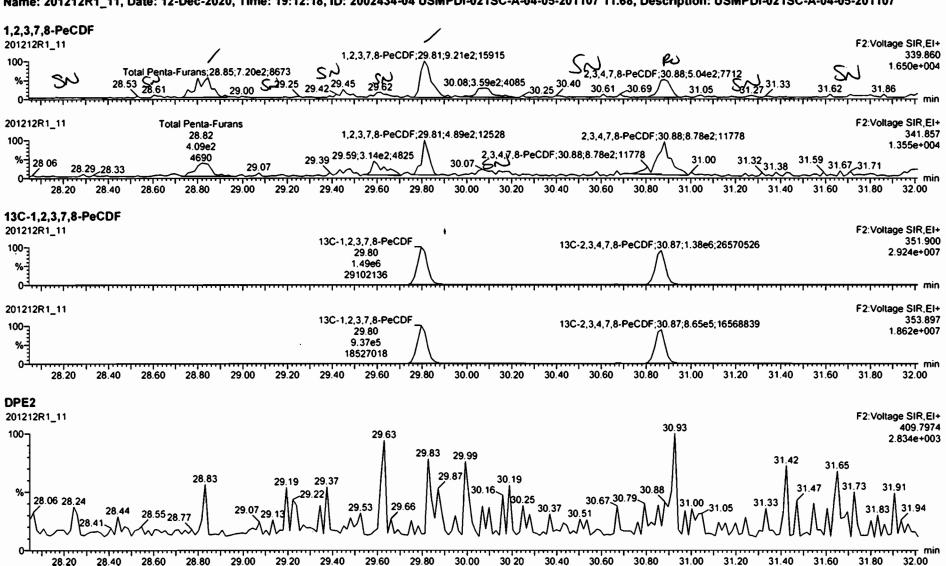
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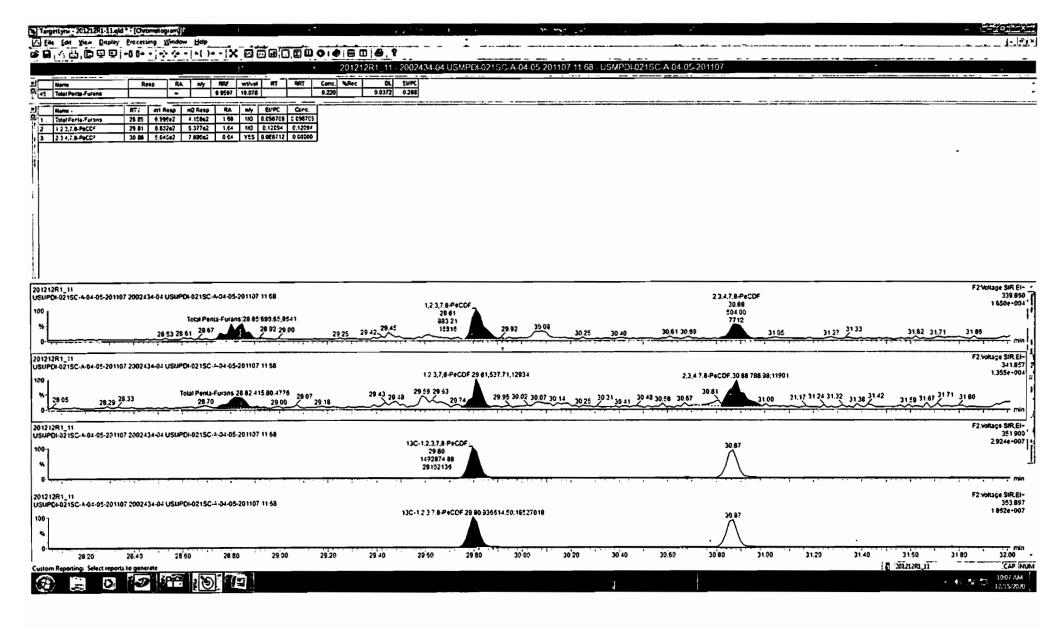
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Name: 201212R1_11, Date: 12-Dec-2020, Time: 19:12:18, ID: 2002434-04 USMPDI-021SC-A-04-05-201107 11.68, Description: USMPDI-021SC-A-04-05-201107



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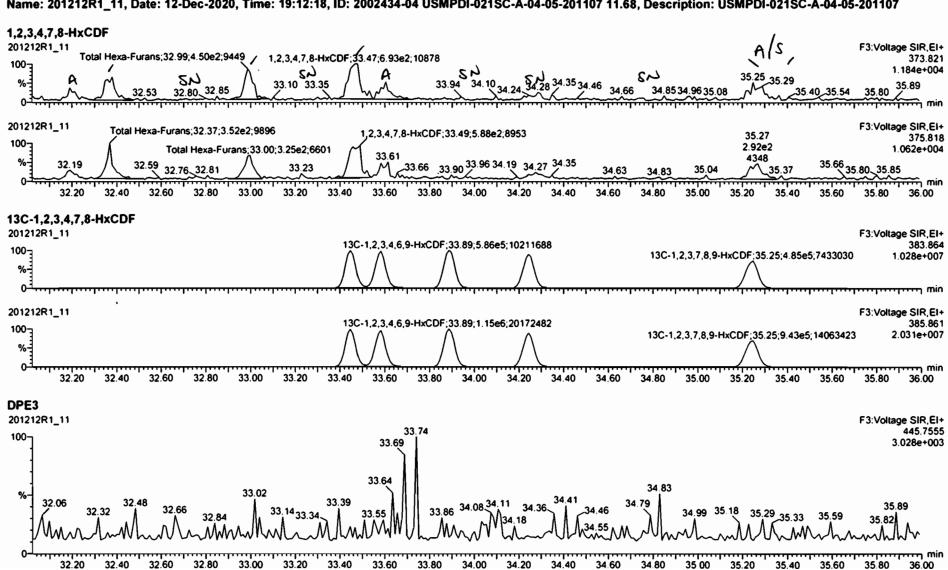


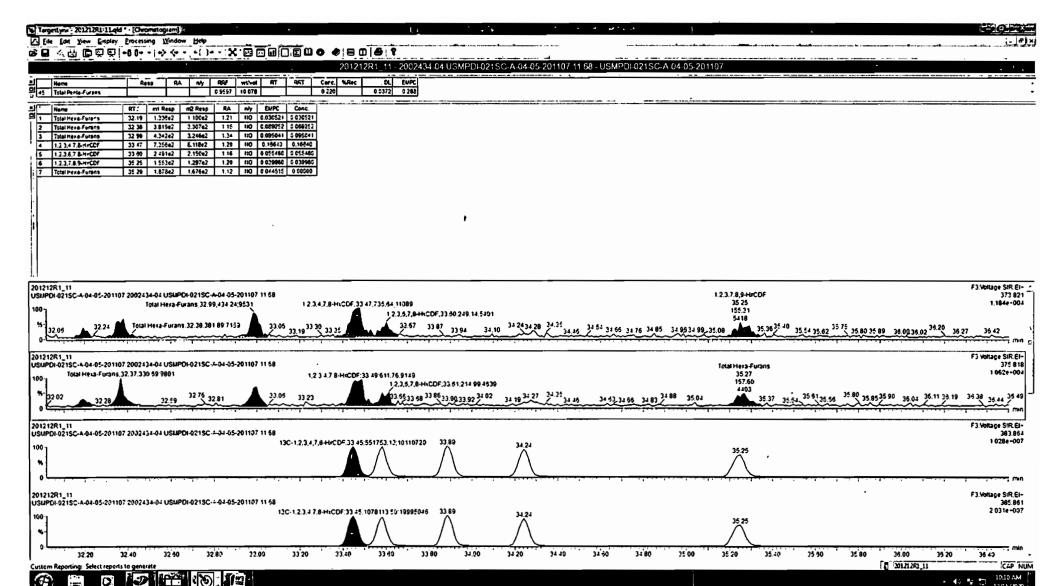
Work Order 2002434 Page 213 of 955

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Sunday, December 13, 2020 08:38:08 Pacific Standard Time Sunday, December 13, 2020 08:39:24 Pacific Standard Time

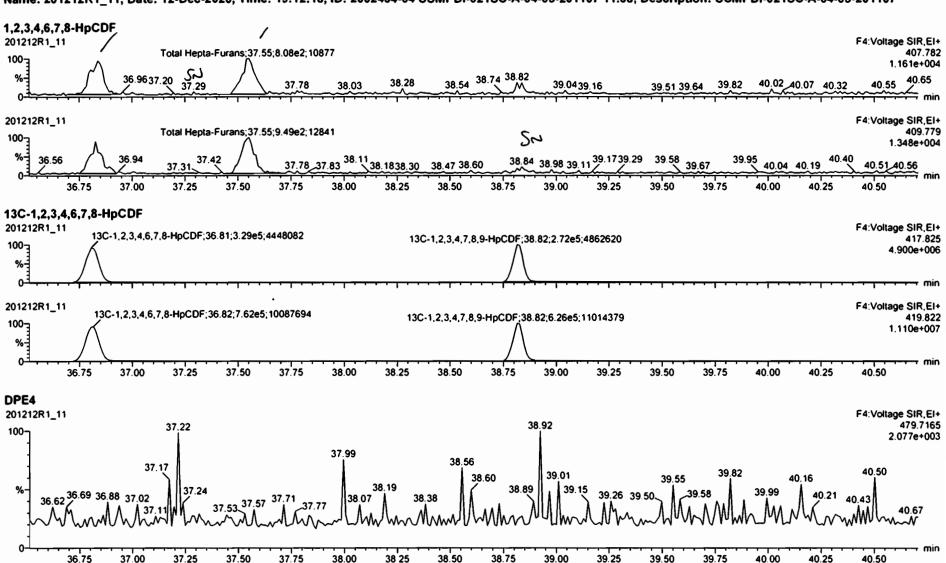




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Last Altered: Sunday, December 13, 2020 08:38:08 Pacific Standard Time Sunday, December 13, 2020 08:39:24 Pacific Standard Time

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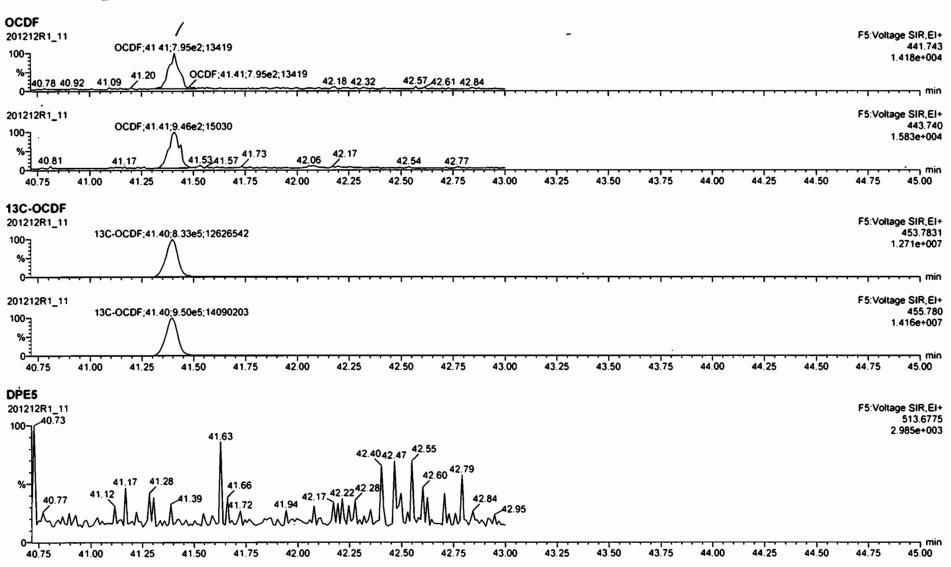
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Sunday, December 13, 2020 08:38:08 Pacific Standard Time Sunday, December 13, 2020 08:39:24 Pacific Standard Time

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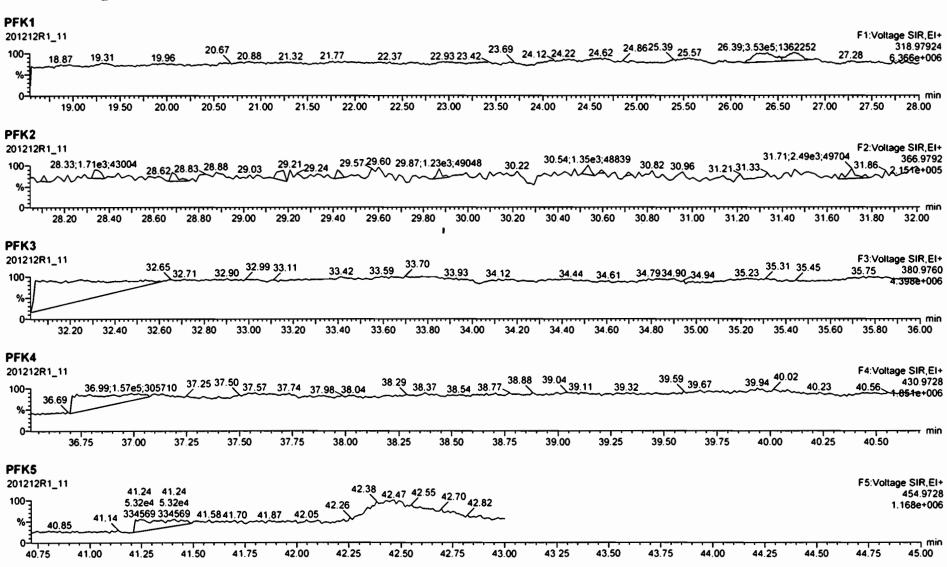
Work Order 2002434 Page 217 of 955

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Last Altered: Printed:

Sunday, December 13, 2020 08:38:08 Pacific Standard Time Sunday, December 13, 2020 08:39:24 Pacific Standard Time

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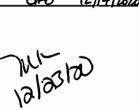
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SPB 12/14/2020

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Name: 201213R2 5, Date: 13-Dec-2020, Time: 13:14:22, ID: B0L0016-DUP1 Duplicate 11.62, Description: Duplicate



بأرث فرو المنطف	#	Name	Resp_;	L.RA!	n/y_ <u>3</u> ,	r, RRF_s	F Mt/vol TF	Pred.RT	RTi	Pred.RRT	RRT	Conc	3%Rec] [یال DL کیت	EMPC
13 7 7 7 7	1	2,3,7,8-TCDD	1.26e3	0.15	YES	0.980	10.027	26.396	26.38	1.001	1.001	0.11859		0.0144	0.0348
2 7 7	2	1,2,3,7.8-PeCDD	4.32e2	0.61	NO	0.932	10.027	31.079	31.06	1.001	1.000	0.053596		0.0323	0.0536
3 795	3	1,2,3,4,7,8-HxCDD			NO	1.02	10.027	34.378		1.001				0.0451	
4	4	1,2,3,6,7,8-HxCDD	4.97e2	1.18	NO	0.902	10.027	34.494	34.50 -	1.001	1.001	0.077144		0.0464	0.0771
5	5	1,2,3,7,8,9-HxCDD	7.63e2	1.29	NO	0.954	10.027	34.755	34.77 -	1.000	1.001	0.11441		0.0454	0.114
6 - 3 - 3	6	1,2,3,4,6,7,8-HpCDD	9.54e3	0.96	NO	0.918	10.027	38.222	38.22	1.000	1.000	1.8256		0.0894	1.83
7******	7	OCDD	8.18e4	0.89	NO	0.866	10.027	41.144	41.15	1.000	1.000	23.928		0.127	23.9
87.775	8	2,3,7,8-TCDF	1.48e3	0.87	NO	0.848	10.027	25.687	25.70	1.000	1.001	0.11559		0.0146	0.116
9 4 4 4	9	1,2,3,7,8-PeCDF	1.91e3	1.34	NO	0.960	10.027	29.799	29.83	1.000	1.001	0.15222		0.0182	0.152
10,	10	2,3,4,7,8-PeCDF	1.26e3	1.74	NO	1.07	10.027	30.889	30.88	1.001	1.000	0.096125		0.0172	0.0961
The second of the second of	11	1,2,3,4,7,8-HxCDF	1.92e3	1.32	NO	0.986	10.027	33.457	33.46 ,	1.000	1.000	0.23385		0.0276	0.234
12 R. F.	12	1,2,3,6,7,8-HxCDF	6.39e2	1.32	NO	1.04	10.027	33.603	33.59 🗸	1.001	1.000	0.075888		0.0268	0.0759
13 MIA	13	2,3,4,6,7,8-HxCDF	3.04e2	1.32	NO	1.02	10.027	34.263	34.28 /	1.001	1.001	0.038140		0.0299	0.0381
14: 11	14	1,2,3,7,8,9-HxCDF	4.19e2	1.29	NO	0.991	10.027	35.258	35.27 /	1.000	1.001	0.057602		0.0349	0.0576
A Marianti A Paris B		1,2,3,4,6,7,8-HpCDF	2.27e3	0.94	NO	1.05	10.027	36.835	36.84	1.000	1.001	0.39873		0.0278	0.399
1675 97	16	1,2,3,4,7,8,9-HpCDF	3.08e2	1.05	NO	1.18	10.027	38.839	38.85	1.000	1.001	0.059038		0.0235	0.0590
17	17	OCDF	3.79e3	0.88	NO	0.896	10.027	41.437	41.44	1.000	1.000	0.97382		0.0253	0.974
181	18	13C-2,3,7,8-TCDD	2.17e6	0.78	NO	1.06	10.027	26.383	26.36	1.030	1.029	209.55	105	0.0583	
19	19	13C-1,2,3,7,8-PeCDD	1.72e6	0.64	NO	0.785	10.027	31.229	31.05	1.219	1.212	224.07	112	0.0810	
20	20	13C-1,2,3,4,7,8-HxCDD	1.30e6	1.29	NO	0.621	10.027	34.347	34.36 /	1.014	1.014	234.02	117	0.294	
THE PROPERTY OF THE PARTY OF TH	21	13C-1,2,3,6,7,8-HxCDD	1.42e6	1.28	МО	0.734	10.027	34.469	34.47 /	1.017	1.017	217.15	109	0.249	
	22	13C-1,2,3,7,8,9-HxCDD	1.39e6	1.27	NO	0.723	10.027	34.753	34.74 /	1.026	1.025	216.11	108	0.253	
	23	13C-1,2,3,4,6,7,8-HpCDD	1.14e6	1.04	NO	0.568	10.027	38.254	38.21	1.129	1.128	224.04	112	0.725	
24	24	13C-OCDD	1.57e6	0.90	NO	0.496	10.027	41.192	41.14	1.216	1.214	355.64	89.1	0.474	
25	25	13C-2,3,7,8-TCDF	3.01e6	0.78	NO	0.919	10.027	25.682	25.68	1.003	1.003	214.85	108	0.0914	
261	26	13C-1,2,3,7,8-PeCDF	2.61e6	1.59	NO	0.715	10.027	29.938	29.80	1.169	1.163	239.29	120	0.207	
27* **********	27	13C-2,3,4,7,8-PeCDF	2.44e6	1.60	NO	0.689	10.027	31.027	30.87	1.212	1.205	232.92	117	0.215	
28		13C-1,2,3,4,7,8-HxCDF	1.66e6	0.50	NO	0.873	10.027	33.452	33.45	0.987	0.987	212.47	107	0.318	
29 4.4	29	13C-1,2,3,6,7,8-HxCDF	1.62e6	0.51	NO	0.933	10.027	33.581	33.58 🗸	0.991	0.991	194.09	97.3	0.298	
30 7 7	30	13C-2,3,4,6,7,8-HxCDF	1.56e6	0.51	NO	0.843	10.027	34.249	34.24 /	1.011	1.011	207.11	104	0.330	
31	31	13C-1,2,3,7,8,9-HxCDF	1.46e6	0.50	NO	0.780	10.027	35.248	35.25 /	1.040	1.040	210.20	105	0.356	

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Dataset:

U:\VG12.PRO\Results\201213R2\201213R2-5.qld

Last Altered: Printed:

Monday, December 14, 2020 2:34:11 PM Pacific Standard Time Monday, December 14, 2020 2:34:29 PM Pacific Standard Time

Name: 201213R2_5, Date: 13-Dec-2020, Time: 13:14:22, ID: B0L0016-DUP1 Duplicate 11.62, Description: Duplicate

	# Name	3 Tub	Resp.	[RA	<u>د ۱۰٬</u> ۷۰۰	RRF_	wt/vol_{[Pred.RT	*RT	Pred.RRT	RRT	Conc.	_1 L %Rec 1	DL I	EMPC
32	32 13C-1	1,2,3,4,6,7,8-HpCDF	1.08e6	0.44	NO	0.726	10.027	36.824	36.82	1.087	1.086	166.82	83.6	0.375	·
33	33 13C-1	1,2,3,4,7,8,9-HpCDF	8.85e5	0.43	NO	0.491	10.027	38.833	38.83	1.146	1.146	201.85	101	0.555	
34	34 13C-0	OCDF	1.73e6	0.88	NO	0.565	10.027	41.409	41.43	1.222	1.223	343.56	86.1	0.478	
35	35 37CI-	2,3,7,8-TCDD	9.89e5			1.22	10.027	26.378	26.39	1.030	1.031	82.840	104	0.0240	
36	36 13C-1	1,2,3,4-TCDD	1.96e6	0.79	NO	1.00	10.027	25.640	25.61	1.000	1.000	199.47	100	0.0615	
37	37 13C-1	1,2,3,4-TCDF	3.04e6	0.78	NO	1.00	10.027	24.130	24.12	1.000	1.000	199.47	100	0.0840	
38	38 13C-1	1,2,3,4,6,9-HxCDF	1.78e6	0.51	NO	1.00	10.027	33.920	33.89	1.000	1.000	199.47	100	0.278	
39 77	39 Total	Tetra-Dioxins				0.980	10.027	24.620		0.000		0.15887		0.0144	0.248
40	40 Total	Penta-Dioxins				0.932	10.027	29.960		0.000		0.36810		0.0323	0.444
41	41 Total	Hexa-Dioxins				0.902	10.027	33.635		0.000		1.6993		0.0484	1.70
42	42 Total	Hepta-Dioxins				0.918	10.027	37.640		0.000		4.6589		0.0894	4.66
43	43 Total	Tetra-Furans				0.848	10.027	23.610		0.000		0.35208		0.0146	0.352
44	ુ 44 1st Fi	unc. Penta-Furans				0.960	10.027	26.930		0.000		0.14279		0.00657	0.143
45	45 Total	Penta-Furans				0.960	10.027	29.275		0.000		0.45467		0.0186	0.476
46	46 Total	Hexa-Furans				1.02	10.027	33.555		0.000		0.71250		0.0293	0.762
47	/ 47 Total	Hepta-Furans				1.05	10.027	37.835		0.000		0.98075		0.0272	0.981

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Dataset: U:\VG12.PRO\Results\201213R2\201213R2-5.qld

Last Altered: Monday, December 14, 2020 2:34:11 PM Pacific Standard Time Printed: Monday, December 14, 2020 2:34:29 PM Pacific Standard Time

Method: U:\VG12.PRO\MethDB\1613rrt-12-11-20.mdb 11 Dec 2020 08:35:32

Calibration: U:\VG12.PRO\CurveDB\dbDIOXIN_1613vg12-12-03-20.cdb 04 Dec 2020 11:36:07

Name: 201213R2_5, Date: 13-Dec-2020, Time: 13:14:22, ID: B0L0016-DUP1 Duplicate 11.62, Description: Duplicate

Tetra-Dioxins

Name	RT 11	m1 Height	m2 Height	m1 Resp	m2 Resp	ILRA; Iny	Resp	Conc.	EMPC	DL.
1 Total Tetra-Dioxins	23.48	2.495e3	2.267e3	1.287e2	1.541e2	0.84 NO	2.828e2	0.026510	0.026510	0.0144
2 Total Tetra-Dioxins	24.29	7.785e3	1.174e4	6.577e2	7.540e2	0.87 NO	1.412e3	0.13236	0.13236	0.0144
3 Total Tetra-Dioxins	25.70	8.332e3	4.576e3	5.354e2	3.299e2	1.62 YES	0.000e0	0.00000	0.054753	0.0144
4 2.3.7.8-TCDD	26.38	2.891e3	1.903e4	1.612e2	1.104e3	0.15 YES	1.265e3	0.00000	0.034751	0.0144

Penta-Dioxins

Name -	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	J RAJ L	vyj L. "Resp_	Conc.	EMPC	DL.
1 Total Penta-Dioxins	28.82	5.166e3	7.163e3	3.124e2	4.572e2	0.68	NO 7.696e2	0.095496	0.095496	0.0323
2 Total Penta-Dioxins	29.28	6.279e3	1.067e4	3.281e2	5.065e2	0.65	NO 8.346e2	0.10356	0.10356	0.0323
3 Total Penta-Dioxins	29.80	1.114e4	7.471e3	6.075e2	3.775e2	1.61 Y	ES 0.000e0	0.00000	0.076357	0.0323
4+, Total Penta-Dioxins	30.29	7.320e3	8.586e3	3.694e2	5.611e2	0.66	NO 9.304e2	0.11545	0.11545	0.0323
5 1.2,3,7,8-PeCDD	31.06	3.722e3	4.735e3	· 1.632e2	2.687e2	0.61	NO 4.319e2	0.053596	0.053596	0.0323

Hexa-Dioxins

	- Name	RT	m1 Height	m2 Height; §	m1 Resp	m2 Resp	JIRAJ	ľu/λ [Γ	Resp	Conc.	EMPC	DL
1	Total Hexa-Dioxins	32.72	6.586e4	5.003e4	3.128e3	2.510e3	1.25	NO	5.637e3	0.90849	0.90849	0.0484
2	Total Hexa-Dioxins	33.32	4.258e3	3.977e3	2.111e2	1.704e2	1.24	NO	3.815e2	0.061472	0.061472	0.0484
3	Total Hexa-Dioxins	33.62	2.487e4	1.745e4	1.735e3	1.412e3	1.23	NO	3.146e3	0.50703	0.50703	0.0484
4	1.2.3.6.7.8-HxCDD	34.50	5.175e3	3.692e3	2.690e2	2.278e2	1.18	NO	4.968e2	0.077144	0.077144	0.0464
5	Total Hexa-Dioxins	34.65	2.723e3	1.605e3	9.954e1	9.148e1	1.09	NO	1.910e2	0.030783	0.030783	0.0484
6 ***	1,2,3,7,8,9-HxCDD	34.77	7.701e3	5.901e3	4.306e2	3.326e2	1.29	NO	7.632e2	0.11441	0.11441	0.0454

Hepta-Dioxins

Name	r 4 mg RT_rel_(m1 Height	m2 Height	m1 Resp լ	m2 Resp	₽ RA : I	u∖Aìľ	Resp	LConc. C	_ EMPC	يال DL
1 Total Hepta-Dioxins	37.23	1.070e5	1.078e5	7.424e3	7.387e3	1.01	NO	1.481e4	2.8333	2.8333	0.0894
2 1,2,3,4,6,7,8-HpCDD	38.22	8.559e4	8.830e4	4.667e3	4.876e3	0.96	NO	9.543e3	1.8256	1.8256	0.0894

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Quantify Totals Report MassLynx 4.1 SCN815

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Dataset: U:\VG12.PRO\Results\201213R2\201213R2-5.qld

Last Altered: Monday, December 14, 2020 2:34:11 PM Pacific Standard Time Printed: Monday, December 14, 2020 2:34:29 PM Pacific Standard Time

Name: 201213R2_5, Date: 13-Dec-2020, Time: 13:14:22, ID: B0L0016-DUP1 Duplicate 11.62, Description: Duplicate

Tetra-Furans

Name	RT :	m1 Height	m2 Height	m1 Resp	m2 Resp	; RA]	n/y ,	Resp	Conc	EMPC	الايت.
1 Total Tetra-Furans	21.72	2.631e3	3.353e3	2.061e2	3.115e2	0.66	NO	5.175e2	0.040498	0.040498	0.0146
2 Total Tetra-Furans	22.62	2.398e3	4.418e3	2.088e2	2.910e2	0.72	NO	4.999e2	0.039118	0.039118	0.0146
3 Total Tetra-Furans	23.08	2.456e3	4.056e3	1.904e2	2.346e2	0.81	NO	4.250e2	0.033259	0.033259	0.0146
4 Total Tetra-Furans	24.71	8.600e3	9.913e3	5.566e2	6.611e2	0.84	NO	1.218e3	0.095290	0.095290	0.0146
5 Total Tetra-Furans	25.55	3.463e3	2.858e3	1.587e2	2.033e2	0.78	NO	3.620e2	0.028329	0.028329	0.0146
6 2,3,7,8-TCDF	25.70	9.457e3	1.201e4	6.864e2	7.907e2	0.87	NO	1.477e3	0.11559	0.11559	0.0146

Penta-Furans function 1

Name	RT	m1 Height	m2 Height	m1 Resp	m2-Resp	RA	n/y []	Resp	Conc.	EMPC L	DL
1. 1st Func. Penta-Furans	27.19	1.514e4	1.419e4	9.871e2	7.462e2	1.32	NO	1.733e3	0.14279	0.14279	0.00657

Penta-Furans

Name,	RT 1	m1 Height	m2 Height;	m1'Resp	m2 Resp	J [RA]	[n/y]	: *Resp -	≰ rConc:	EMPC [· " DL
1 Total Penta-Furans	28.83	1.250e4	1.021e4	7.743e2	5.838e2	1.33	NO	1.358e3	0.11188	0.11188	0.0186
2 Total Penta-Furans	29.45	6.575e3	2.536e3	2.158e2	1.560e2	1.38	NO	3.718e2	0.030624	0.030624	0.0186
3 Total Penta-Furans	29.62	2.140e3	6.160e3	1.544e2	2.280e2	0.68	YES	0.000e0	0.00000	0.020922	0.0186
4 L . 1,2,3,7,8-PeCDF	29.83	1.976e4	1.393e4	1.094e3	8.136e2	1.34	NO	1.908e3	0.15222	0.15222	0.0182
5 Total Penta-Furans	30.07	9.829e3	5.463e3	4.411e2	3.339e2	1.32	NO	7.749e2	0.063833	0.063833	0.0186
6 2.3,4,7,8-PeCDF	30.88	1.319e4	8.159e3	7.974e2	4.581e2	1.74	NO	1.256e3	0.096125	0.096125	0.0172

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Dataset: U:\VG12.PRO\Results\201213R2\201213R2-5.qld

Last Altered: Monday, December 14, 2020 2:34:11 PM Pacific Standard Time Printed: Monday, December 14, 2020 2:34:29 PM Pacific Standard Time

Name: 201213R2_5, Date: 13-Dec-2020, Time: 13:14:22, ID: B0L0016-DUP1 Duplicate 11.62, Description: Duplicate

Hexa-Furans

Name 1	RT J	m1 Height [m2 Height	m1 Resp	m2 Resp	[RA]	ן האין	Resp	Conc.	EMPC	DL.
1 Total Hexa-Furans	32.20	4.613e3	4.227e3	2.090e2	1.927e2	1.08	NO	0.000e0	0.00000	0.049887	0.0293
2. Total Hexa-Furans	32.37	1.256e4	8.827e3	5.509e2	4.654e2	1.18	NO	1.016e3	0.12621	0.12621	0.0293
Total Hexa-Furans	33.00	1.262e4	9.958e3	6.304e2	5.029e2	1.25	NO	1.133e3	0.14075	0.14075	0.0293
1,2,3,4,7,8-HxCDF	33.46	2.080e4	1.454e4	1.091e3	8.242e2	1.32	NO	1.915e3	0.23385	0.23385	0.0276
51,2,3,6,7,8-HxCDF	33.59	5.473e3	4.806e3	3.637e2	2.756e2	1.32	NO	6.394e2	0.075888	0.075888	0.0268
6 2.3,4,6,7,8-HxCDF	34.28	3.132e3	3.359e3	1.727e2	1.314e2	1.32	NO	3.041e2	0.038140	0.038140	0.0299
71,2,3,7,8,9-HxCDF	35.27	5.282e3	4.833e3	2.364e2	1.825e2	1.29	NO	4.189e2	0.057602	0.057602	0.0349
81 Total Hexa-Furans	35.29	4.824e3	5.495e3	1.677e2	1.549e2	1.08	NO	3.226e2	0.040058	0.040058	0.0293

...

Hepta-Furans

1 1.2,3,4,6,7,8-HpCDF	JL_RT_',_	m1 Height	m2 Height	m1 Resp	m2 Resp	JRAII	սչյլ	Resp	Conc.	EMPC :	, DL
1 1,2,3,4,6,7,8-HpCDF	36.84	1.853e4	1.804e4	1.099e3	1.171e3	0.94	NO	2.270e3	0.39873	0.39873	0.0278
2년 Total Hepta-Furans		1.935e4						2.706e3			
3. 1,2,3,4,7,8,9-HpCDF	38.85	3.430e3	2.950e3	1.581e2	1.500e2	1.05	NO	3.081e2	0.059038	0.059038	0.0235

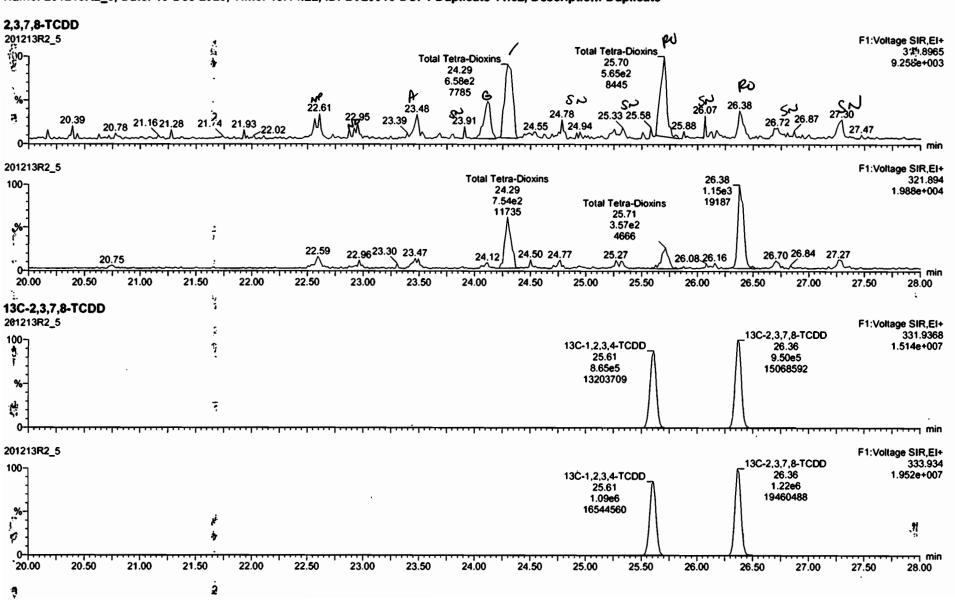
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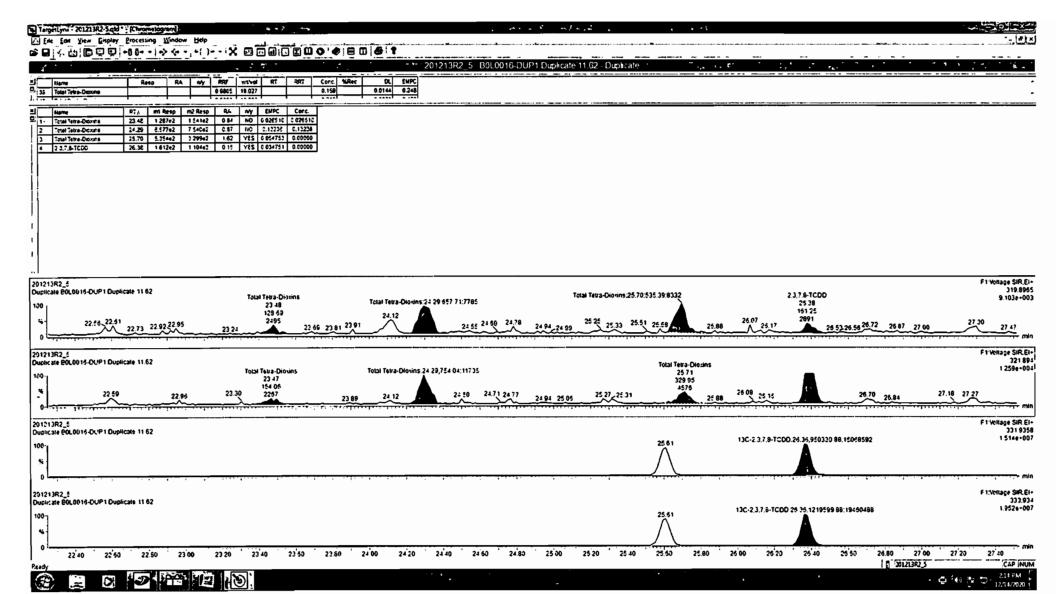
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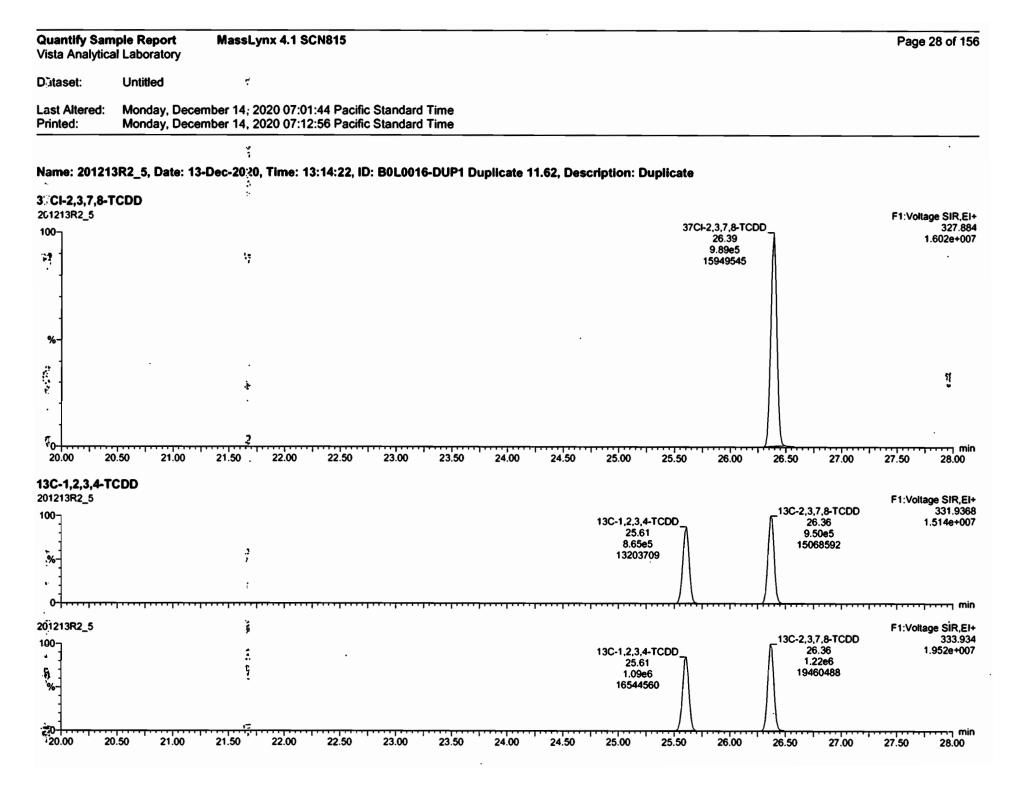
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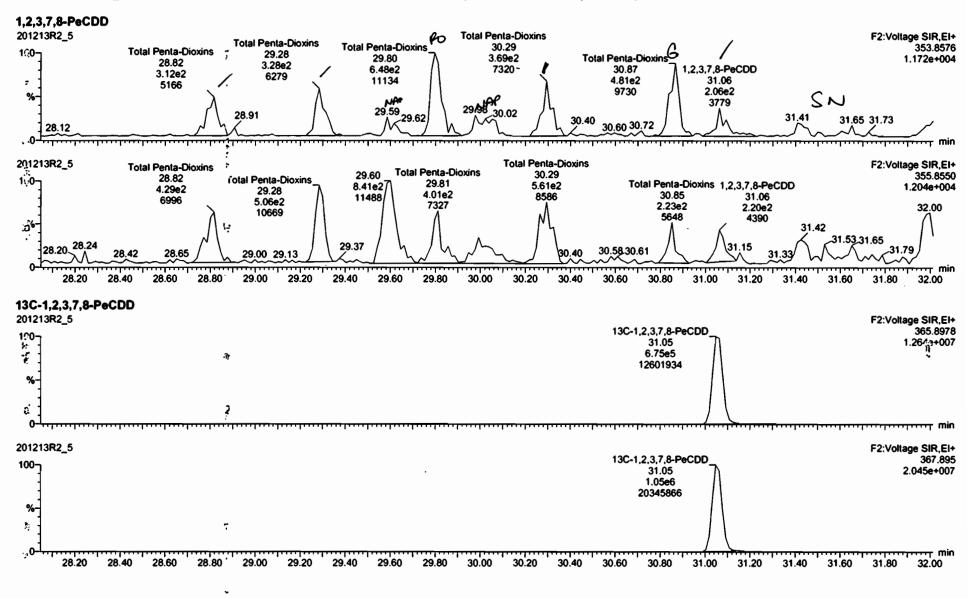
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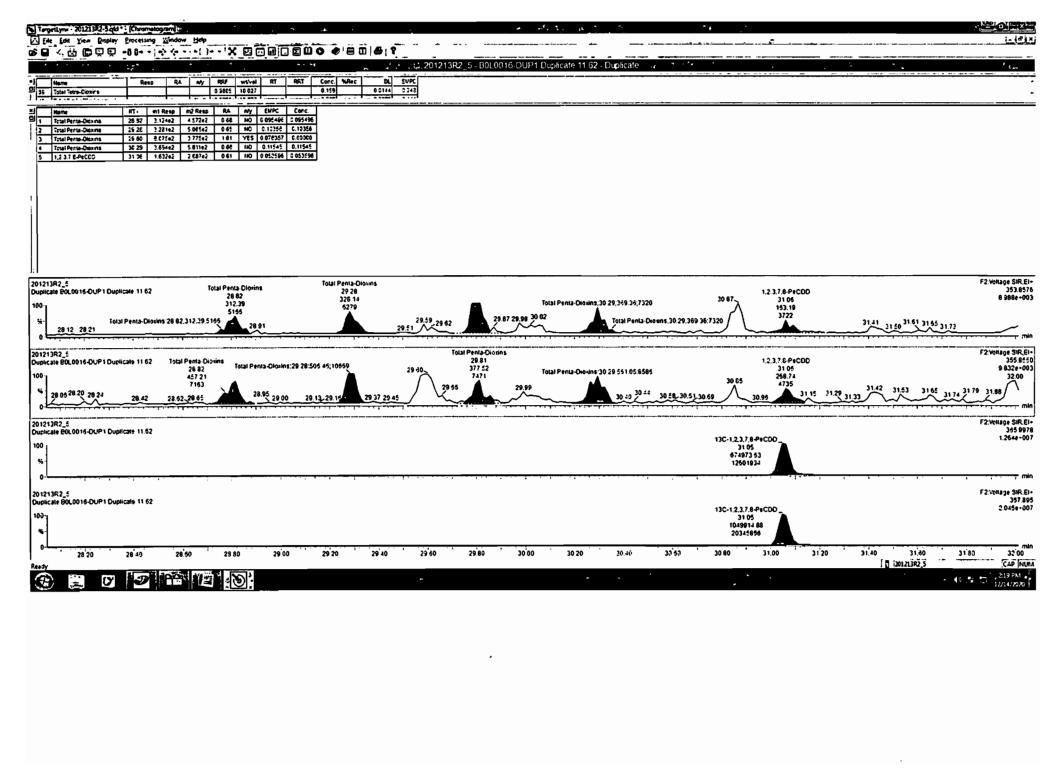
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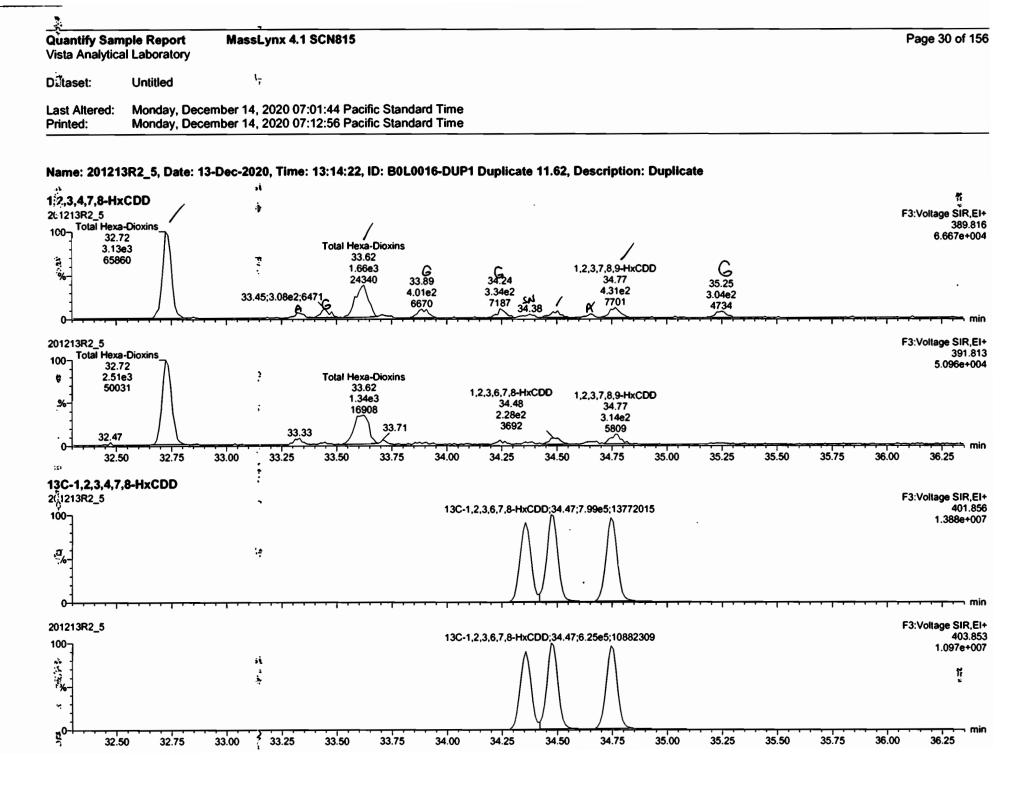
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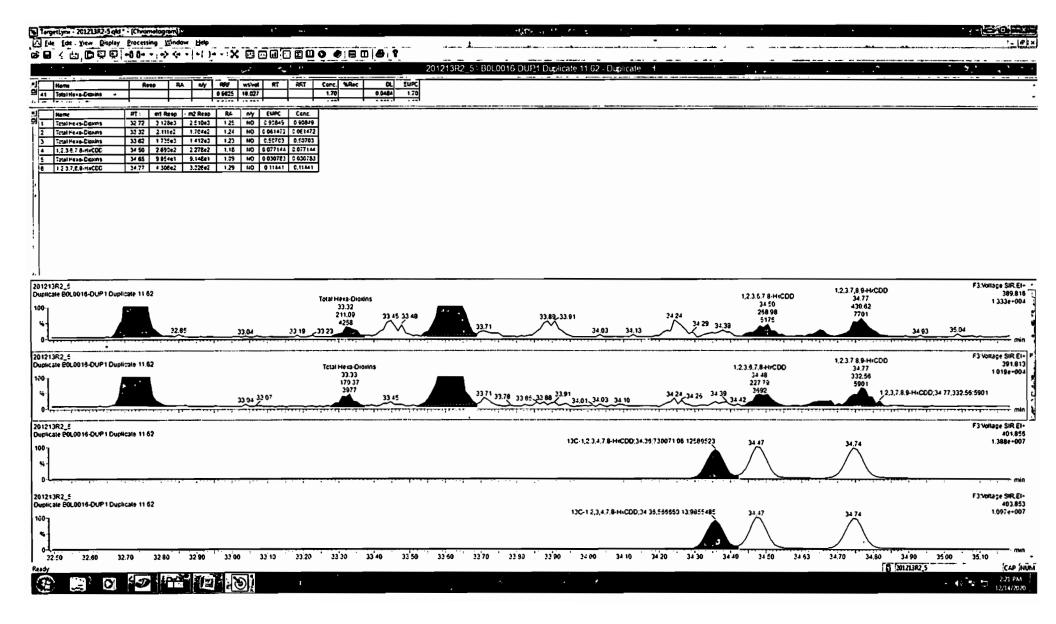
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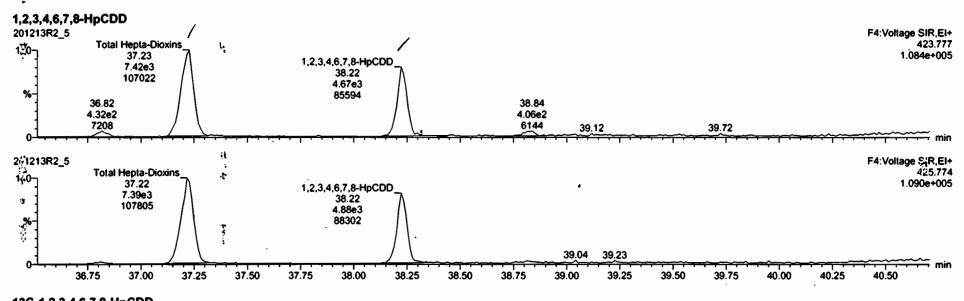
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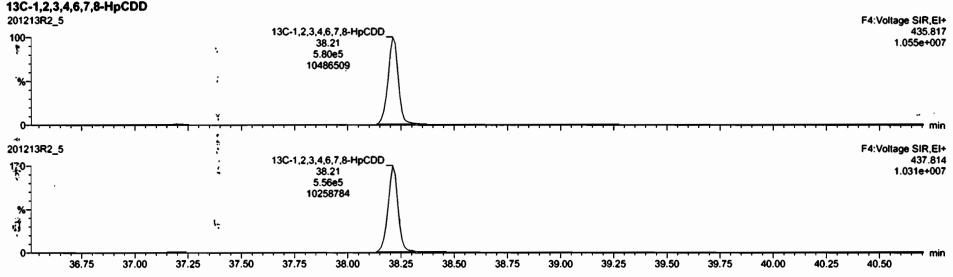
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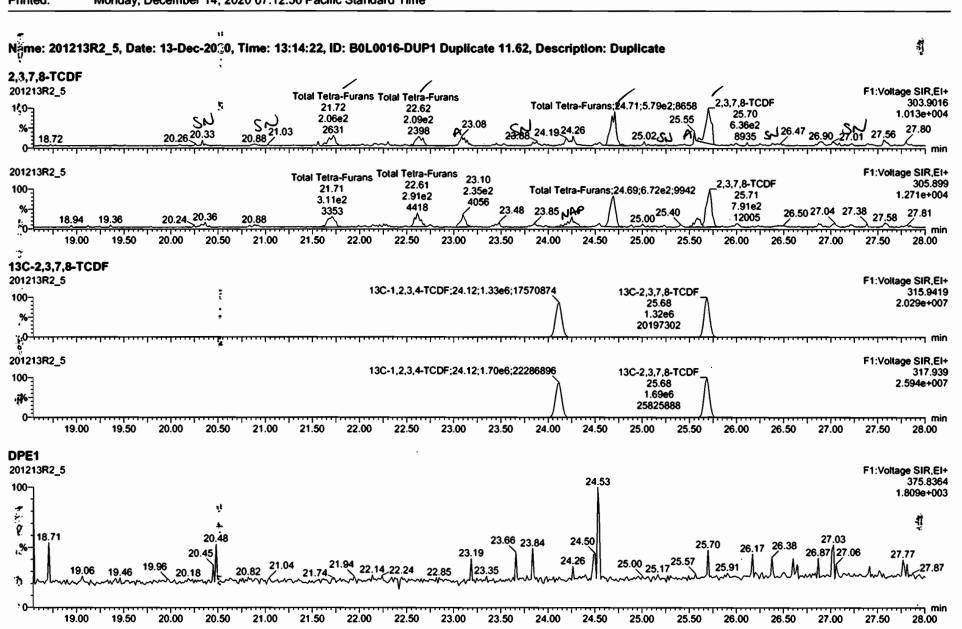
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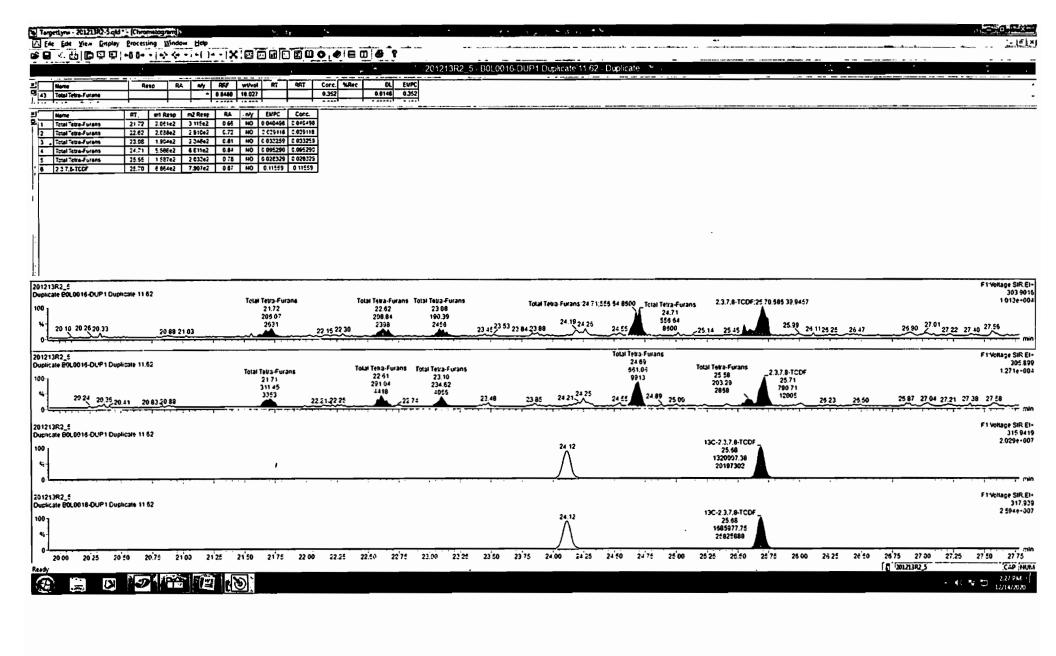




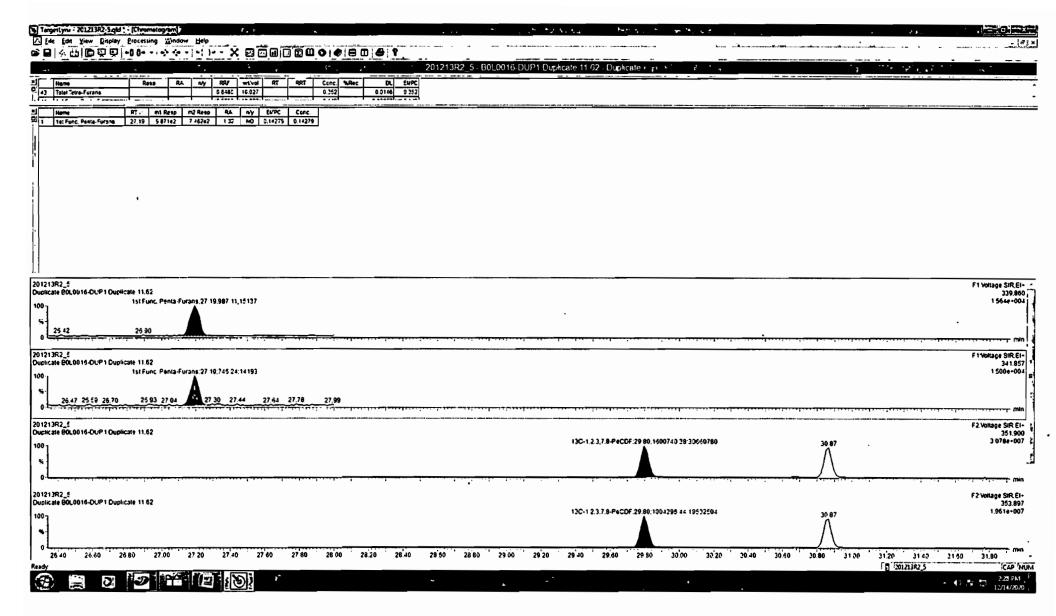
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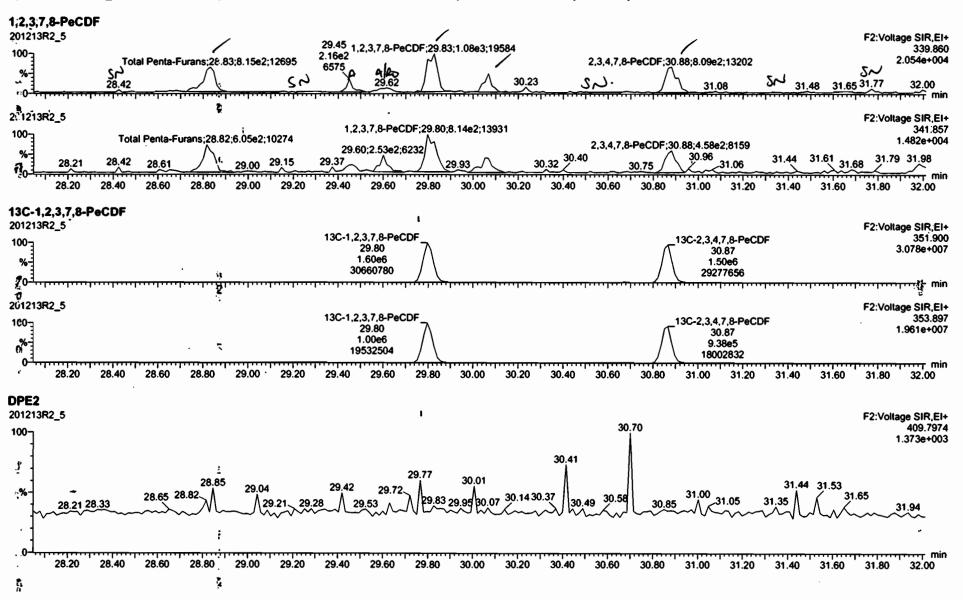


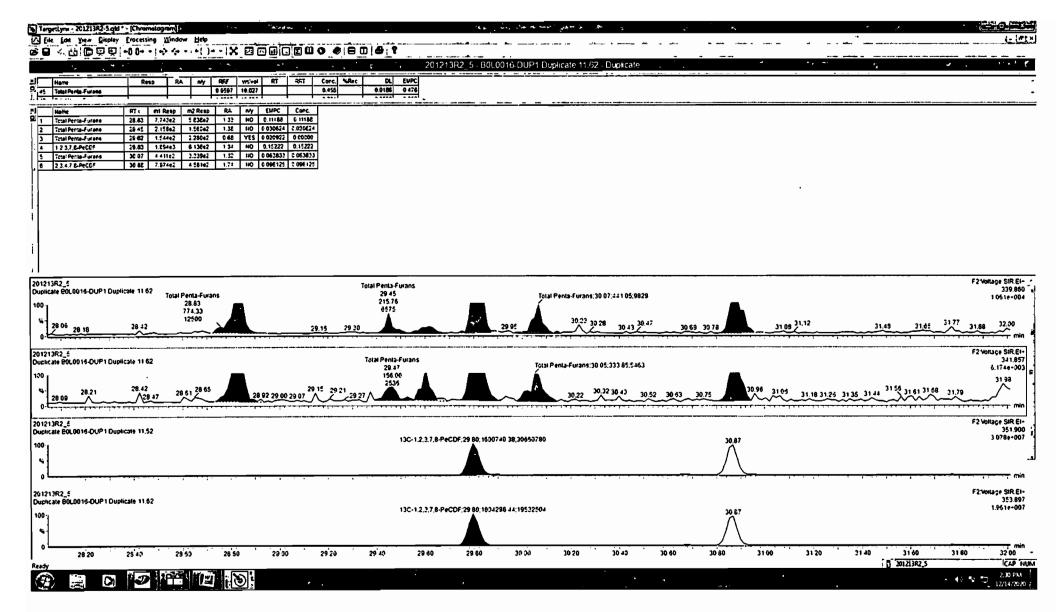
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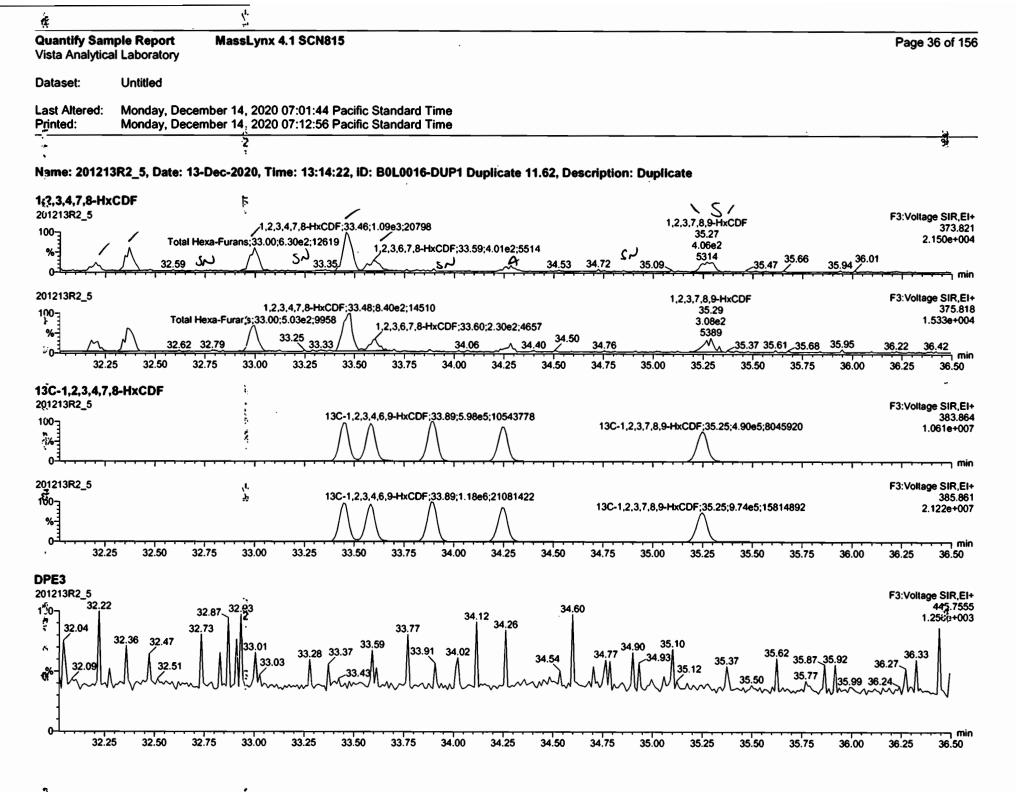
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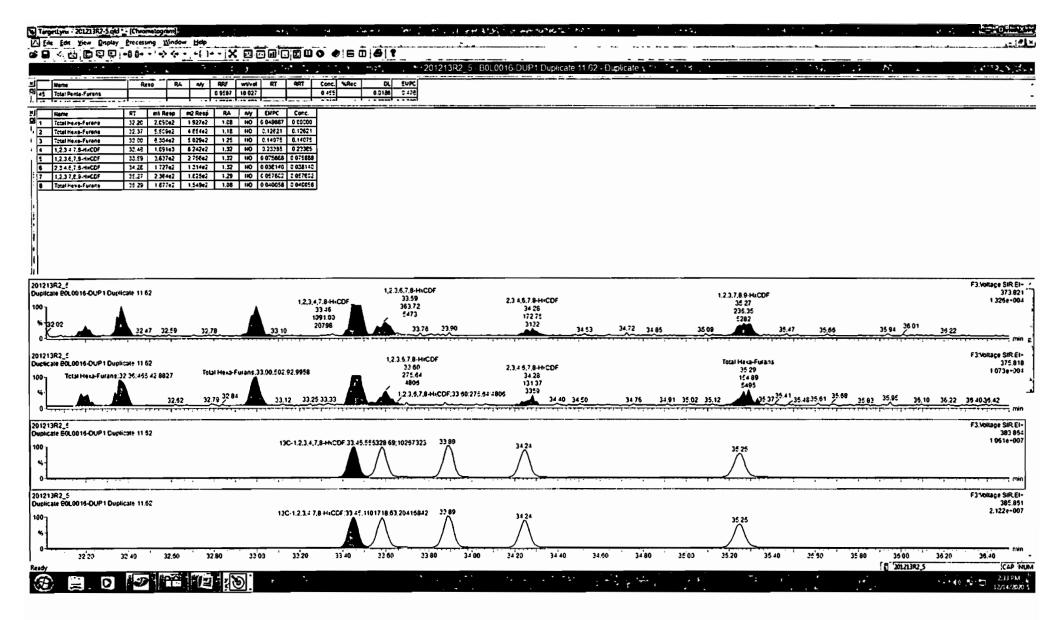
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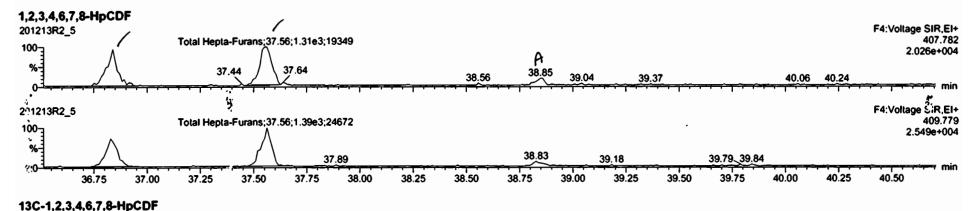
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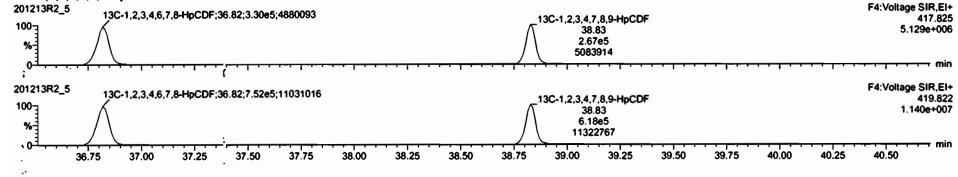
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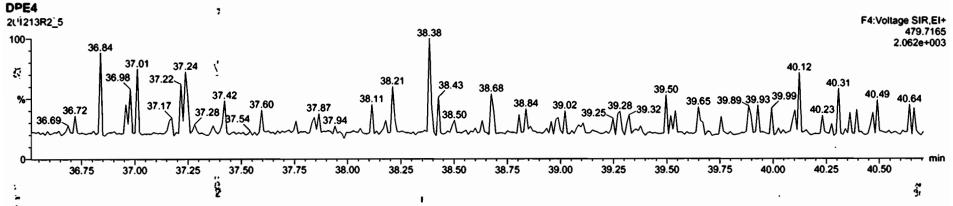
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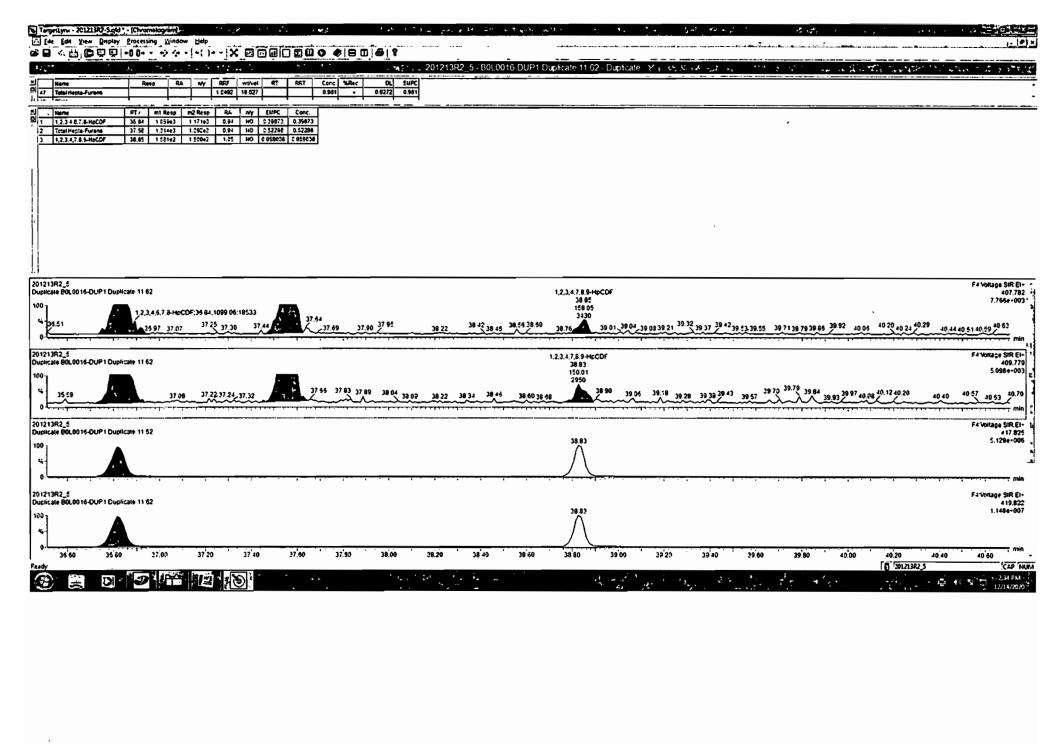
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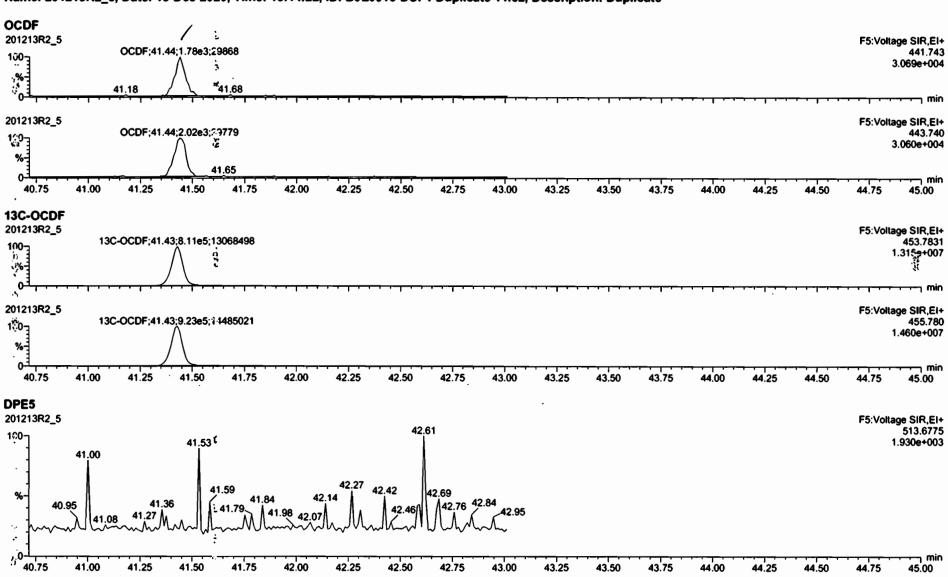
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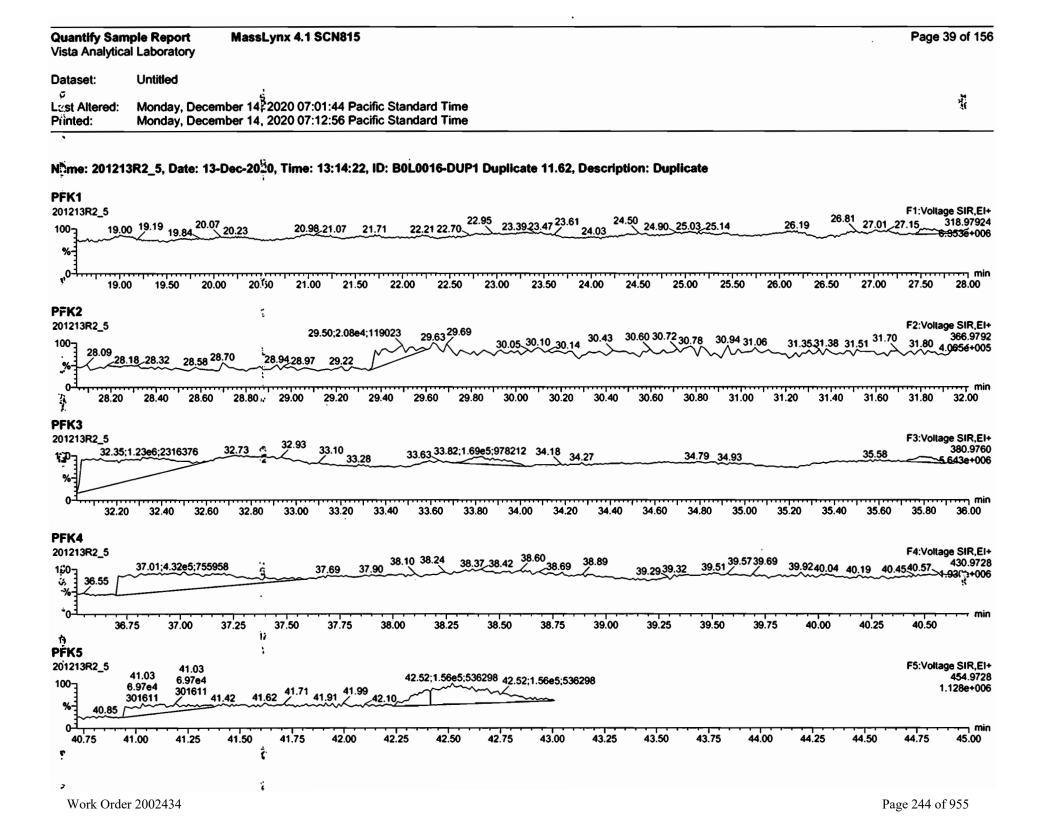
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Monday, December 14, 2020 07:01:44 Pacific Standard Time Monday, December 14, 2020 07:12:56 Pacific Standard Time

Name: 201213R2_5, Date: 13-Dec-2020, Time: 13:14:22, ID: B0L0016-DUP1 Duplicate 11.62, Description: Duplicate





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Dataset:

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Last Altered:

Tuesday, December 15, 2020 10:34:49 AM Pacific Standard Time

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Tuesday, December 15, 2020 10:35:31 AM Pacific Standard Time

GRB 12/15/2020

Method: U:\VG12.PRO\MethDB\1613rrt-12-11-20.mdb 11 Dec 2020 08:35:32

Calibration: U:\VG12.PRO\CurveDB\dbDIOXIN_1613vg12-12-03-20.cdb 04 Dec 2020 11:36:07

Name: 201213R2_6, Date: 13-Dec-2020, Time: 13:58:39, ID: 2002434-05 USMPDI-023SC-A-01-02-201107 14.53, Description: USMPDI-023SC-A-01-02-201107

فالمنسب وجوجة	# Name :	Resp_	Įį RA	n/y_	RRF	[wtvol 1]	Pred.RT	RT_	Pred.RRT	RRT	Conc.	[%Rec]	-+, * DU -	EMPC
15-4	1 2,3,7,8-TCDD	1.99e3	0.28	YES	0.980	10.167	26.396	26.39	1.001	1.001	0.20247		0.0346	0.103
2	2 1,2,3,7,8-PeCDD	1.31e3	0.61	NO	0.932	10.167	31.079	31.05	1.001	1.000	0.19377		0.0295	0.194
327	3 1,2,3,4,7,8-HxCDD	1.14e3	1.15	NO	1.02	10.167	34.368	34.37	1.001	1.001	0.19522		0.0807	0.195
4	4 1,2,3,6,7,8-HxCDD	6.18e3	1.27	NO	0.902	10.167	34.483	34.48	1.001	1.001	1.0767		0.0839	1.08
5	5 1,2,3,7,8,9-HxCDD	3.40e3	1.19	NO	0.954	10.167	34.744	34.77	1.000	1.001	0.56557		0.0845	0.566
67.73	6 1,2,3,4,6,7,8-HpCDD	1.27e5	1.05	NO	0.918	10.167	38.211	38.21	1.000	1.000	26.994		0.339	27.0
7	7 OCDD	1.38e6	0.88	NO	0.866	10.167	41.113	41.12	1.000	1.000	405.76		0.374	406
8	8 2,3,7,8-TCDF	7.53e3	0.75	NO	0.848	10.167	25.687	25.70	1.000	1.001	0.63753		0.0273	0.638
9: 4	9 1,2,3,7,8-PeCDF	1.41e4	1.56	NO	0.960	10.167	29.784	29.80	1.000	1.001	1.3575		0.0327	1.36
1047	10 2,3,4,7,8-PeCDF	9.17e3	1.55	NO	1.07	10.167	30.874	30.87	1.001	1.000	0.81537		0.0295	0.815
117-1, 77	11 1,2,3,4,7,8-HxCDF	1.54e4	1.22	NO	0.986	10.167	33.446	33.45	1.000	1.000	2.1377		0.0403	2.14
	12 1,2,3,6,7,8-HxCDF	6.02e3	1.22	NO	1.04	10.167	33.592	33.58	1.001	1.000	0.79711		0.0394	0.797
13 ***	13 2,3,4,6,7,8-HxCDF	2.94e3	1.27	NO	1.02	10.167	34.253	34.26	1.001	1.001	0.40832		0.0419	0.408
14	14 1,2,3,7,8,9-HxCDF	6.17e2	1.11	NO	0.991	10.167	35.248	35.26	1.000	1.001	0.095741		0.0537	0.0957
15:	15 1,2,3,4,6.7,8-HpCDF	3.31e4	0.98	NO	1.05	10.167	36.824	36.83	1.000	1.001	6.3862		0.0751	6.39
162 3	16 1,2,3,4,7,8,9-HpCDF	2.84e3	1.09	NO	1.18	10.167	38.828	38.83	1.000	1.000	0.56657		0.0630	0.567
17.	17 OCDF	5.40e4	0.81	NO	0.896	10.167	41.406	41.41	1.000	1.000	14.082		0.0959	14.1
18	18 13C-2,3,7,8-TCDD	1.98e6	0.77	NO	1.06	10.167	26.368	26.36	1.030	1.030	213.10	108	0.0777	
19	19 13C-1,2,3,7,8-PeCDD	1.43e6	0.63	NO	0.785	10.167	31.211	31.05	1.219	1.213	207.30	105	0.124	
20	20 13C-1,2,3,4,7,8-HxCDD	1.12e6	1.27	NO	0.621	10.167	34.337	34.35	1.014	1.014	231.61	118	0.313	
21	21 13C-1,2,3,6,7,8-HxCDD	1.25e6	1.26	NO	0.734	10.167	34.459	34.46	1.017	1.017	218.09	111	0.265	1
22	22 13C-1,2,3,7,8,9-HxCDD	1.24e6	1.26	NO	0.723	10.167	34.743	34.73	1.026	1.025	219.36	112	0.269	
23" 20" 7 33"	23 13C-1,2,3,4,6,7,8-HpCD	D 1.01e6	1.05	NO	0.568	10.167	38.243	38.20	1.129	1.128	227.70	116	0.600	
24	24 13C-OCDD	1.54e6	0.90	NO	0.496	10.167	41.180	41.10	1.216	1.213	397.52	101	0.459	
	25 13C-2,3,7,8-TCDF	2.74e6	0.76	NO	0.919	10.167	25.667	25.68	1.003	1.003	216.11	110	0.111	
	26 13C-1,2,3,7,8-PeCDF	2.14e6	1.58	NO	0.715	10.167	29.921	29.78	1.169	1.164	216.42	110	0.237	İ
27	27 13C-2,3,4,7,8-PeCDF	2.07e6	1.60	NO	0.689	10.167	31.008	30.85	1.212	1.205	218.35	111	0.246	
28	28 13C-1,2,3,4,7,8-HxCDF	1.44e6	0.51	NO	0.873	10.167	33.442	33.44	0.987	0.987	210.65	107	0.290	
29 🗷	29 13C-1,2,3,6,7,8-HxCDF	1.43e6	0.51	NO	0.933	10.167	33.571	33.57	0.991	0.991	196.17	99.7	0.271	
30	30 13C-2,3,4,6,7,8-HxCDF	1.39e6	0.51	NO	0.843	10.167	34.238	34.23	1.011	1.011	210.88	107	0.301	
31	31 13C-1,2,3,7,8,9-HxCDF	1.28e6	0.51	NO	0.780	10.167	35.238	35.24	1.040	1.040	210.03	107	0.325	

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Name: 201213R2_6, Date: 13-Dec-2020, Time: 13:58:39, ID: 2002434-05 USMPDI-023SC-A-01-02-201107 14.53, Description: USMPDI-023SC-A-01-02-201107

	L.#	Name		<u> i Nesp へ</u> i	LRA.	F U/A	RRF	-wt/vol 1	Pred.RT	RT ()	Pred.RRT	RRT	Conc.	** Rec	DL'	**EMPC
32	32	13C-1,2,3,4,6	6,7,8-HpCDF	9.73e5	0.44	NO	0.726	10.167	36.813	36.81	1.087	1.086	171.33	87.1	0.385	
33**	33	13C-1,2,3,4,7	7.8.9-HpCDF	8.38e5	0.43	NO	0.491	10.167	38.822	38.82	1.146	1.146	218.39	111 .	0.570	
34 5	34	13C-OCDF		1.68e6	0.88	NO	0.565	10.167	41.396	41.40	1.222	1.222	380.88	96.8	0.392	
35	35	37CI-2,3,7,8-	TCDD	9.28e5			1.22	10.167	26.363	26.38	1.030	1.031	86.884	110	0.0264	
36	36	13C-1,2,3,4-	TCDD	1.73e6	0.79	NO	1.00	10.167	25.640	25.59	1.000	1.000	196.71	100	0.0820	
37-	37	13C-1,2,3,4-	TCDF	2.71e6	0.79	NO	1.00	10.167	24.130	24.10	1.000	1.000	196.71	100	0.102	
38	38	13C-1,2,3,4,6	6,9-HxCDF	1.54e6	0.50	NO	1.00	10.167	33.920	33.88	1.000	1.000	196.71	100	0.253	
39,	39	Total Tetra-D	Dioxins				0.980	10.167	24.620		0.000		1.1544		0.0346	1.26
40	40	Total Penta-0	Dioxin s				0.932	10.167	29.960		0.000		1.9205		0.0295	2.29
41,	41	Total Hexa-D	Dioxins				0.902	10.167	33.635		0.000		11.362		0.0880	11.4
42	42	Total Hepta-l	Dioxins				0.918	10.167	37.640		0.000		59.965		0.339	60.0
43	43	Total Tetra-F	urans				0.848	10.167	23.610		0.000		3.4171		0.0273	3.98
44	, 44	1st Func. Per	nta-Furans				0.960	10.167	26.930		0.000		2.1129		0.0108	2.11
45	45	Total Penta-f	Furans				0.960	10.167	29.275		0.000		4.8513		0.0328	4.85
4610	46	Total Hexa-F	urans				1.02	10.167	33.555		0.000		9.5063		0.0430	9.59
47	⁵ 47	Total Hepta-f	Furans				1.05	10.167	37.835		0.000		16.395		0.0730	16.4

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Dataset:

U:\VG12.PRO\Results\201213R2\201213R2-6.qld

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Tetra-Dioxins

Name '	L RT	m1 Height	m2 Height	m1 Resp	m2 Resp	J[RA!]	√y, L	_Resp_	Conc:	EMPC	,OL
17 Total Tetra-Dioxins	22.59	1.670e4	2.132e4	1.460e3	2.026e3		NO `	3.486e3	0.35403	0.35403	0.0346
2 Total Tetra-Dioxins	22.92	8.736e3	1.054e4	7.209e2	8.778e2	0.82	NO	1.599e3	0.16237	0.16237	0.0346
3 Total Tetra-Dioxins	23.48	5.849e3	7.455e3	4.219e2	5.201e2	0.81	NO	9.421e2	0.095682	0.095682	0.0346
4 Total Tetra-Dioxins	24.29	1.358e4	1.579e4	1.033e3	1.228e3	0.84	NO	2.261e3	0.22961	0.22961	0.0346
5 Total Tetra-Dioxins	24.50	4.454e3	5.914e3	3.099e2	4.485e2	0.69	NO	7.584e2	0.077027	0.077027	0.0346
6 Total Tetra-Dioxins	24.74	6.486e3	6.614e3	3.738e2	4.277e2	0.87	NO	8.015e2	0.081408	0.081408	0.0346
7 Total Tetra-Dioxins	26.10	3.790e3	6.510e3	2.878e2	4.317e2	0.67	NO	7.195e2	0.073073	0.073073	0.0346
8 3 2.3.7.8-TCDD	26.39	6.635e3	2.598e4	4.410e2	1.552e3	0.28 Y	ES	1.994e3	0.00000	0.10297	0.0346
9 Total Tetra-Dioxins	26.70	3.137e3	4.953e3	2.164e2	2.863e2	0.76	NO	5.027e2	0.051058	0.051058	0.0346
10 * Total Tetra-Dioxins	27.28	2.327e3	3.378e3	1.239e2	1.730e2	0.72	NO	2.969e2	0.030154	0.030154	0.0346

Penta-Dioxins

1 N	ame	Y: RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RAJ	tn/y]	Resp	L Conc.	EMPC	DL.
17	otal Penta-Dioxins	28.80	2.408e4	4.492e4	1.657e3	2.744e3	0.60	NÖ	4.401e3	0.65034	0.65034	0.0295
2 To	otal Penta-Dioxins	29.27	1.247e4	2.097e4	6.827e2	9.715e2	0.70	NO	1.654e3	0.24443	0.24443	0.0295
3 To	otal Penta-Dioxins	29.80	2.100e4	2.855e4	9.885e2	1.549e3	0.64	NO	2.537e3	0.37491	0.37491	0.0295
	otal Penta-Dioxins	29.98	1.456e4	1.812e4	5.802e2	8.094e2	0.72	NO	0.000e0	0.00000	0.20533	0.0295
5 TO	otal Penta-Dioxins	30.01	6.935e3	1.207e4	3.057e2	5.154e2	0.59	NO	0.000e0	0.00000	0.12133	0.0295
	otal Penta-Dioxins	30.26	1.363e4	2.666e4	8.718e2	1.543e3	0.56	NO	2.415e3	0.35687	0.35687	0.0295
7 1,	2,3,7,8-PeCDD	31.05	9.946e3	1.516e4	4.955e2	8.159e2	0.61	NO	1.311e3	0.19377	0.19377	0.0295
	otal Penta-Dioxins	31.12	2.524e3	4.102e3	1.020e2	1.773e2	0.57	NO	0.000e0	0.00000	0.041266	0.0295
9 T	otal Penta-Dioxins	31.42	4.478e3	5.783e3	2.782e2	4.000e2	0.70	NO	6.782e2	0.10021	0.10021	0.0295

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Quantify Totals Report MassLynx 4.1 SCN815

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Hexa-Dioxins

فسنخسخ	Name	RT_	m1 Height	m2 Height;	m1 Resp [m2 Resp	· RA	U/A F	Resp	Conc. L	EMPC [DL
11	Total Hexa-Dioxins	32.71	2.880e5	2.303e5	1.374e4	1.114e4	1.23	NO	2.488e4	4.5038	4.5038	0.0880
21.1	Total Hexa-Dioxins	33.32	2.551e4	2.115e4	1.386e3	1.154e3	1.20	NO	2.540e3	0.45973	0.45973	0.0880
3	Total Hexa-Dioxins	33.61	1.751e5	1.493e5	1.305e4	1.053e4	1.24	NO	2.358e4	4.2672	4.2672	0.0880
41	Total Hexa-Dioxins	33.70	1.306e4	9.021e3	4.782e2	3.705e2	1.29	NO	8.487e2	0.15363	0.15363	0.0880
2	1,2,3,4,7,8-HxCDD	34.37	1.079e4	9.629e3	6.084e2	5.287e2	1.15	NO	1.137e3	0.19522	0.19522	0.0807
6	1,2,3,6,7,8-HxCDD	34.48	6.035e4	4.994e4	3.462e3	2.717e3	1.27	МО	6.179e3	1.0767	1.0767	0.0839
7	Total Hexa-Dioxins	34.64	8.781e3	4.773e3	4.301e2	3.458e2	1.24	NO	7.759e2	0.14044	0.14044	0.0880
8	1,2,3,7,8,9-HxCDD	34.77	3.096e4	2.702e4	1.849e3	1.549e3	1.19	NO	3.398e3	0.56557	0.56557	0.0845

Hepta-Dioxins

1 Total Hepta-Dioxins	RT_IL	m1 Height [m2 Height	m1/Resp t	m2 Resp	ĮRA	lu/y	Resp	Conc. [EMPC [DL
Total Hepta-Dioxins	37.21	1.117e6	1.081e6	7.877e4	7.666e4	1.03	NO	1.554e5	32.971	32.971	0.339
2 1,2,3,4,6,7,8-HpCDD	38.21	1.146e6		6.504e4						26.994	0.339

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Tetra-Furans

	Name		RT_j_m	1 Height	m2 Height	m1 Resp	m2 Resp	RA	lu/y } L	Resp	Conc	EMPC	, DL
127	L'Total T	etra-Furans	20.35	4.344e3	5.952e3	3.924e2	5.103e2	0.77	NO	9.027e2	0.076433	0.076433	0.0273
2]	Total To	etra-Furans	20.89	5.659e3	1.057e4	5.068e2	7.708e2	0.66	NO	1.278e3	0.10818	0.10818	0.0273
3 3 3 3 3 3 5 5	Total To	etra-Furans	21.69	2.914e4	3.476e4	2.461e3	3.329e3	0.74	NO	5.790e3	0.49026	0.49026	0.0273
4	Total To	etra-Furans	22.62	2.056e4	2.558e4	2.079e3	2.769e3	0.75	NO	4.849e3	0.41053	0.41053	0.0273
5	Total T	etra-Furans	23.10	1.974e4	2.663e4	1.569e3	2.192e3	0.72	NO	3.761e3	0.31847	0.31847	0.0273
9 km 4m/	Total T	etra-Furans	23.21	5.056e3	6.164e3	3.783e2	4.969e2	0.76	NO	8.752e2	0.074107	0.074107	0.0273
7	Total T	etra-Furans	23.44	6.711e3	1.134e4	5.602e2	7.795e2	0.72	NO	1.340e3	0.11344	0.11344	0.0273
8	Total T	etra-Furans	23.85	4.545e3	3.959e3	2.194e2	2.944e2	0.75	NO	5.138e2	0.043503	0.043503	0.0273
9	Total T	etra-Furans	23.95	5.371e3	4.908e3	3.975e2	4.829e2	0.82	NO	8.804e2	0.074544	0.074544	0.0273
10, 11,	Total T	etra-Furans	24.21	1.270e4	1.618e4	6.788e2	9.629e2	0.70	NO	0.000e0	0.00000	0.13900	0.0273
11	Total T	etra-Furans	24.26	1.536e4	2.283e4	1.245e3	1.603e3	0.78	NO	0.000e0	0.00000	0.24116	0.0273
12**	₹ Total T	etra-Furans	24.52	3.027e3	4.005e3	2.016e2	2.643e2	0.76	NO	4.659e2	0.039449	0.039449	0.0273
13	Total T	etra-Furans	24.68	4.125e4	5.133e4	3.110e3	3.934e3	0.79	Ю	7.045e3	0.59649	0.59649	0.0273
14	Total T	etra-Furans	25.00	4.754e3	5.969e3	2.823e2	4.208e2	0.67	NO	7.031e2	0.059536	0.059536	0.0273
15,	Total T	etra-Furans	25.08	1.915e3	2.669e3	1.185e2	1.718e2	0.69	NO	2.903e2	0.024583	0.024583	0.0273
16	Total T	etra-Furans	25.23	1.699e3	2.653e3	7.252e1	1.014e2	0.72	NO	1.739e2	0.014727	0.014727	0.0273
17	Total T	etra-Furans	25.40	4.577e3	3.935e3	1.599e2	2.215e2	0.72	NO	3.815e2	0.032301	0.032301	0.0273
18	Total T	etra-Furans	25.57	7.639e3	1.106e4	5.103e2	7.479e2	0.68	NO	1.258e3	0.10654	0.10654	0.0273
19"	2,3,7,8	-TCDF	25.70	5.508e4	7.061e4	3.217e3	4.313e3	0.75	NO	7.529e3	0.63753	0.63753	0.0273
20	Total T	etra-Furans	25.96	4.859e3	5.725e3	2.616e2	3.548e2	0.74	NO	0.000e0	0.00000	0.052192	0.0273
21,	Total T	etra-Furans	25.99	9.171e3	1.054e4	5.006e2	6.421e2	0.78	NO	0.000e0	0.00000	0.096756	0.0273
22	Total T	etra-Furans	26.88	4.372e3	5.377e3	2.621e2	3.585e2	0.73	NO	6.205e2	0.052541	0.052541	0.0273
23	Total T	etra-Furans	27.03	5.570e3	6.566e3	2.762e2	3.926e2	0.70	NO	6.689e2	0.056634	0.056634	0.0273
24	Total T	etra-Furans	27.21	8.042e3	8.619e3	4.241e2	6.073e2	0.70	МО	1.031e3	0.087331	0.087331	0.0273
25	Total T	etra-Furans	27.59	3.642e3	6.291e3	1.834e2	3.691e2	0.50	YES	0.000e0	0.00000	0.035701	0.0273

Penta-Furans function 1

Name	#	_RT	m1 Height	m2 Height	٠,	m1 Resp	m2 Resp	, RA;	n/y	Resp	Conc.	EMPC	DLDL
1 st Func. Penta-Furans		27.18	2.170e5	1.423e5	`	1.352e4	8.177e3	1.65	NO	2.169e4	2.1129	2.1129	0.0108

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U:\VG12.PRO\Results\201213R2\201213R2-6.qld

Last Altered: Printed: Tuesday, December 15, 2020 10:34:49 AM Pacific Standard Time Tuesday, December 15, 2020 10:35:31 AM Pacific Standard Time

Name: 201213R2_6, Date: 13-Dec-2020, Time: 13:58:39, ID: 2002434-05 USMPDI-023SC-A-01-02-201107 14.53, Description: USMPDI-023SC-A-01-02-201107

Penta-Furans

Name	RTLACE	1 Height	m2 Height	_m1 Resp j.	m2 Resp_	¿[RA	iu/A] ["	Resp	L Conc!	EMPC L	DL
1 Total Penta-Furans	28.65	1.461e4	1.010e4	1.068e3	7.220e2	1.48	NO	1.790e3	0.17435	0.17435	0.0328
2: Total Penta-Furans	28.82	1.415e5	8.992e4	9.098e3	5.580e3	1.63	NO	1.468e4	1.4297	1.4297	0.0328
Total Penta-Furans	29.45	5.158e4	2.364e4	2.460e3	1.398e3	1.76	NO	3.857e3	0.37570	0.37570	0.0328
4 Total Penta-Furans	29.60	1.828e4	1.135e4	9.781e2	7.206e2	1.36	NO	1.699e3	0.16547	0.16547	0.0328
5- 1,2,3,7,8-PeCDF	29.80	1.775e5	1.051e5	8.623e3	5.516e3	1.56	NO	1.414 e 4	1.3575	1.3575	0.0327
6 Total Penta-Furans	30.05	5.959e4	4.442e4	3.310e3	2.164e3	1.53	NO	5.474e3	0.53316	0.53316	0.0328
7 2,3,4,7,8-PeCDF	30.87	1.178e5	7.407e4	5.579e3	3.594e3	1.55	NO	9.173e3	0.81537	0.81537	0.0295

Hexa-Furans

Name	L RT: 11	m1 Height	m2 Height	m1 Resp	m2 Resp	IRA:	(u/y)	Resp_	Conc.	EMPC	DL
1 Total Hexa-Furans	32.18	4.723e4	4.524e4	2.639e3	2.125e3	1.24	NO	4.765e3	0.66365	0.66365	0.0430
2 Total Hexa-Furans	32.36	1.820e5	1.459e5	8.958e3	7.232e3	1.24	NO	1.619e4	2.2550	2.2550	0.0430
3 Total Hexa-Furans	32.75	4.508e3	4.318e3	2.272e2	1.828e2	1.24	NO	4.100e2	0.057105	0.057105	0.0430
1 Total Hexa-Furans	32.99	2.185e5	1.835e5	1.136e4	9.339e3	1.22	NO	2.070e4	2.8829	2.8829	0.0430
57, Total Hexa-Furans	33.32	6.359e3	6.708e3	3.026e2	2.846e2	1.06	NO	0.000e0	0.00000	0.081784	0.0430
6 1,2,3,4,7,8-HxCDF	33.45	1.540e5	1.190e5	8.457e3	6.946e3	1.22	NO	1.540e4	2.1377	2.1377	0.0403
71,2,3,6,7,8-HxCDF	33.58	6.149e4	5.150e4	3.309e3	2.714e3	1.22	NO	6.023e3	0.79711	0.79711	0.0394
8 - 2,3,4,6,7,8-HxCDF	34.26	2.502e4	1.992e4	1.647e3	1.294e3	1.27	NO	2.942e3	0.40832	0.40832	0.0419
9 7. 1,2,3,7,8,9-HxCDF	35.26	1.276e4	9.529e3	3.249e2	2.924e2	1.11	NO	6.173e2	0.095741	0.095741	0.0537
10Total Hexa-Furans	35.28	1.756e4	1.328e4	8.387e2	6.603e2	1.27	NO	1.499e3	0.20878	0.20878	0.0430

Hepta-Furans

Name	·RT. :; n	n1 Height	m2 Height	m1.Resp	m2 Resp	≀RA‡,	n/y;	Resp;	Conc. [EMPC	DL.
11,2,3,4,6,7,8-HpCDF	36.83	2.326e5	2.484e5	1.638e4	1.675e4	0.98	NO	3.313e4	6.3862	6.3862	0.0751
2 Total Hepta-Furans	37.54	3.608e5	3.427e5	2.295e4	2.264e4	1.01	NO	4.559e4	9.4424	9.4424	0.0730
3 1,2,3,4,7,8,9-HpCDF	38.83	2.665e4	2.564e4	1.479e3	1.359e3	1.09	NO	2.838e3	0.56657	0.56657	0.0630

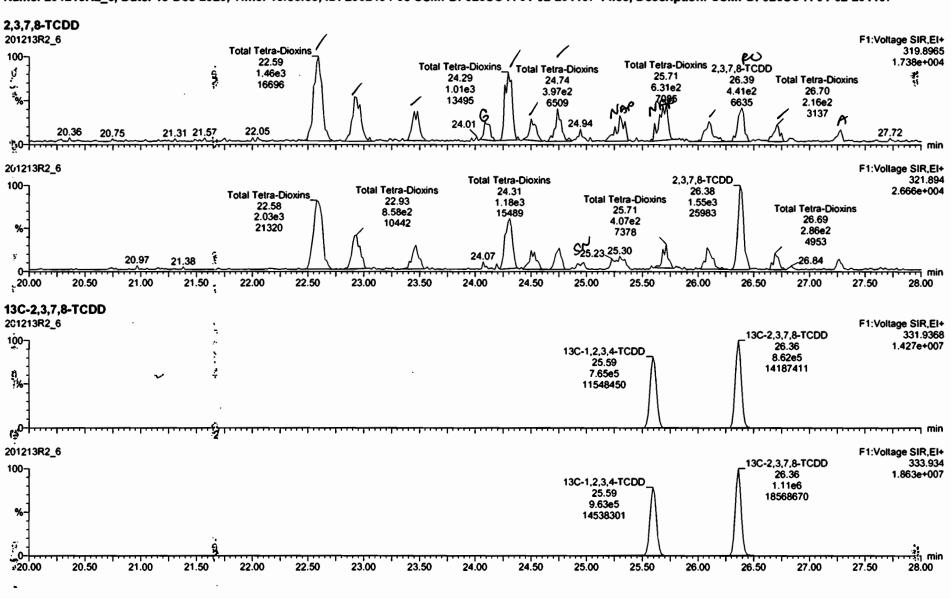
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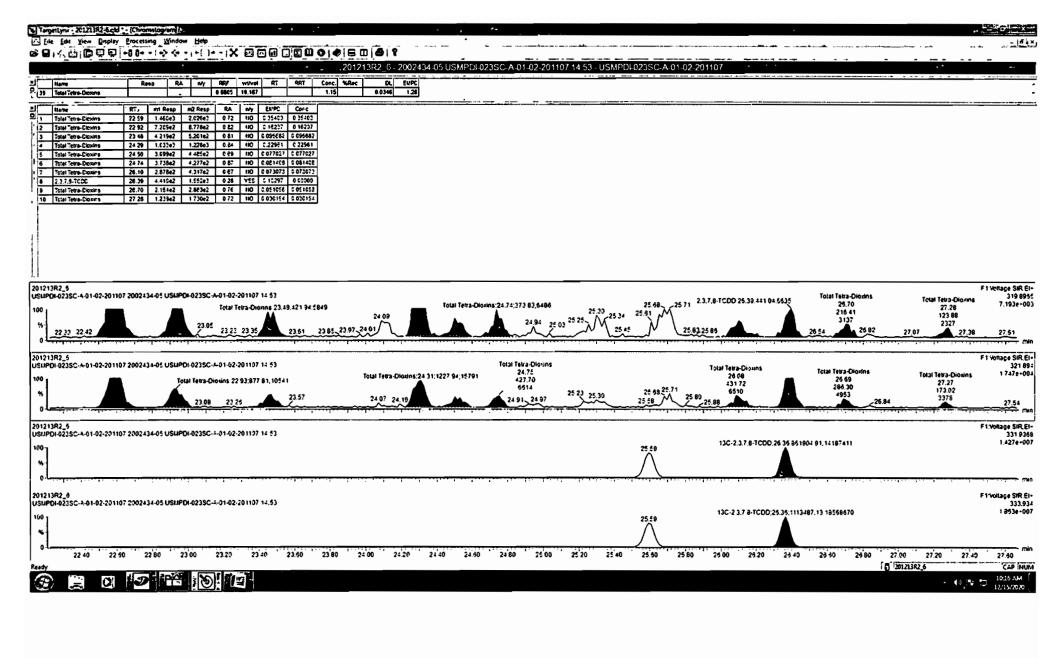
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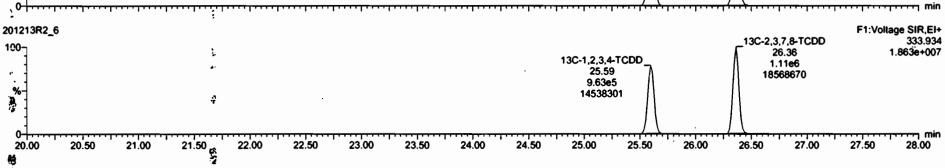
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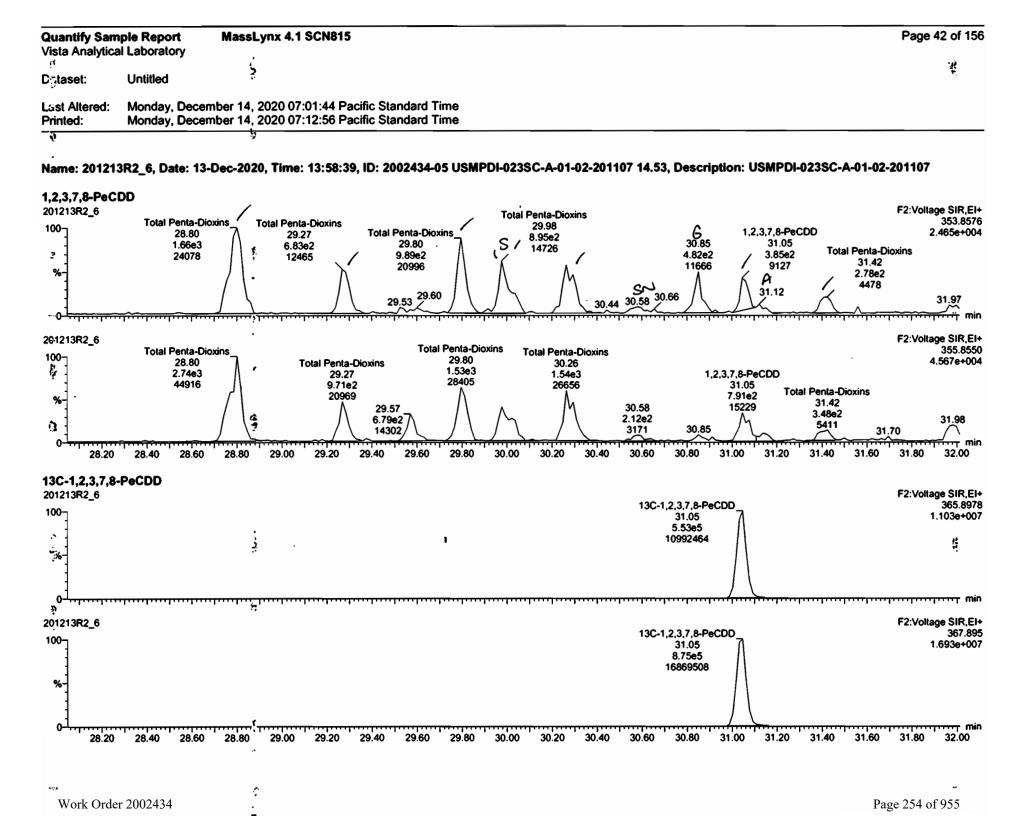
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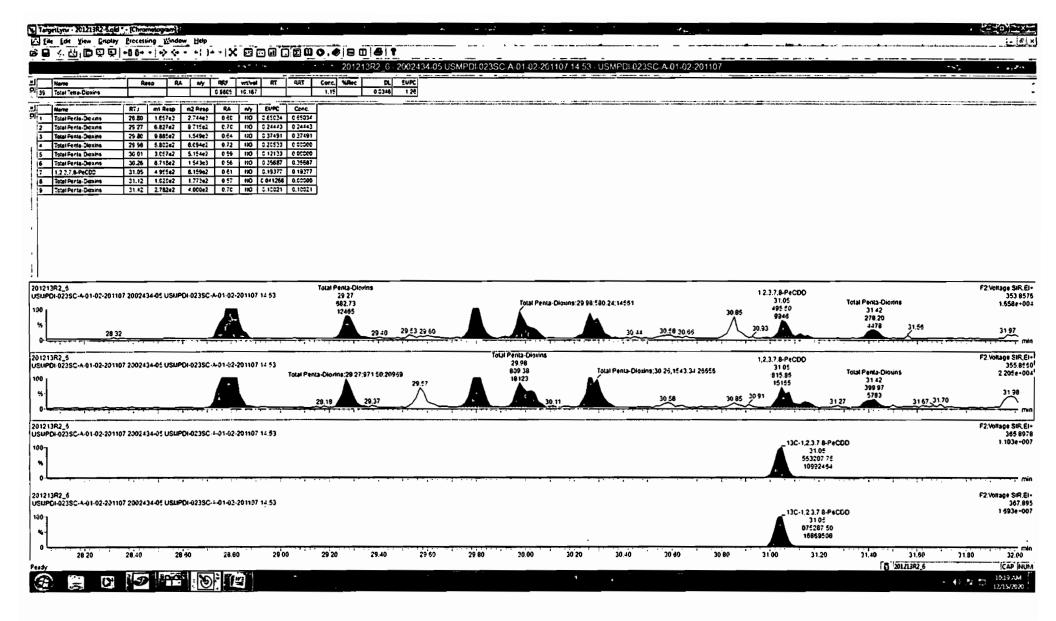




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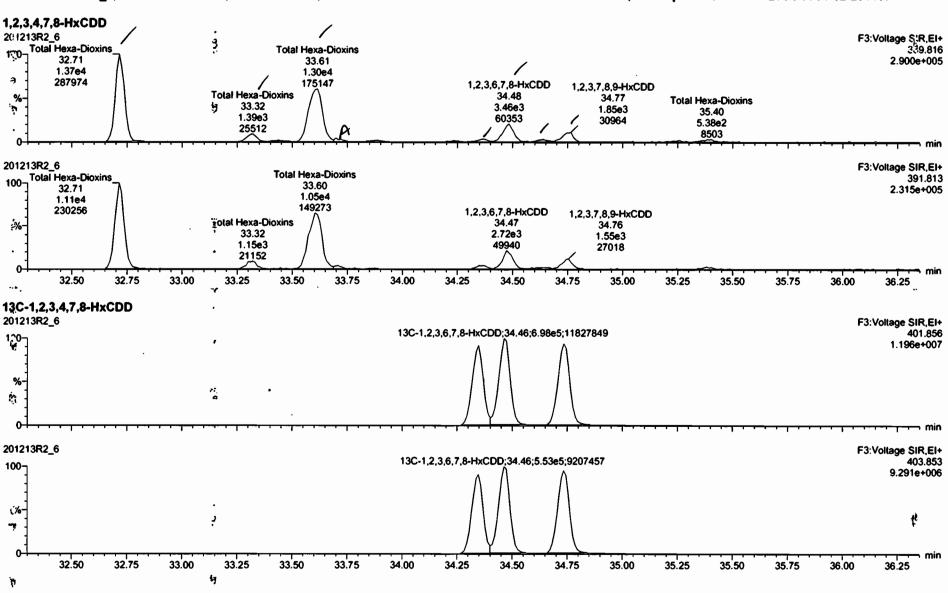


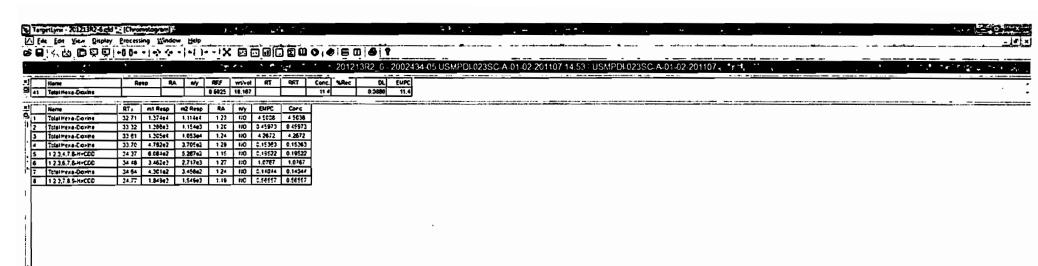


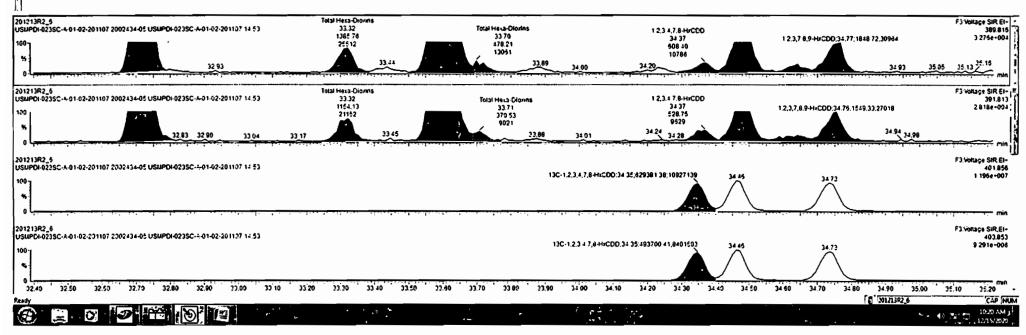
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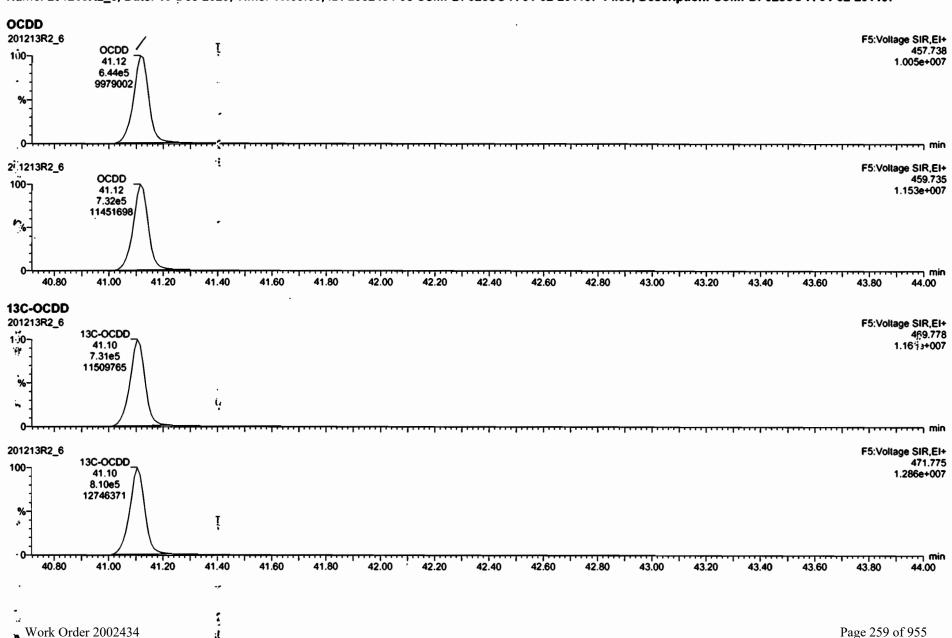
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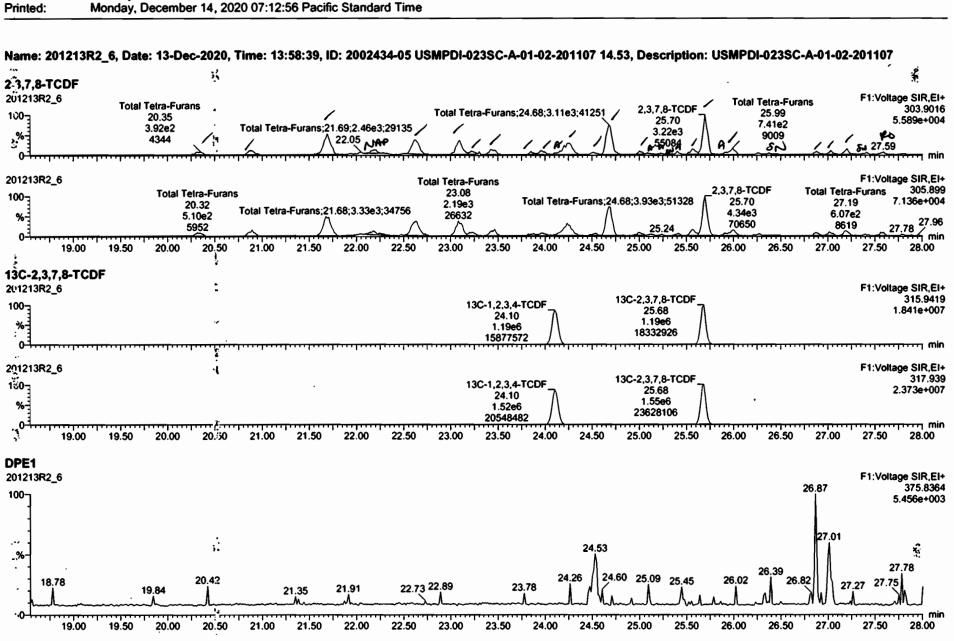
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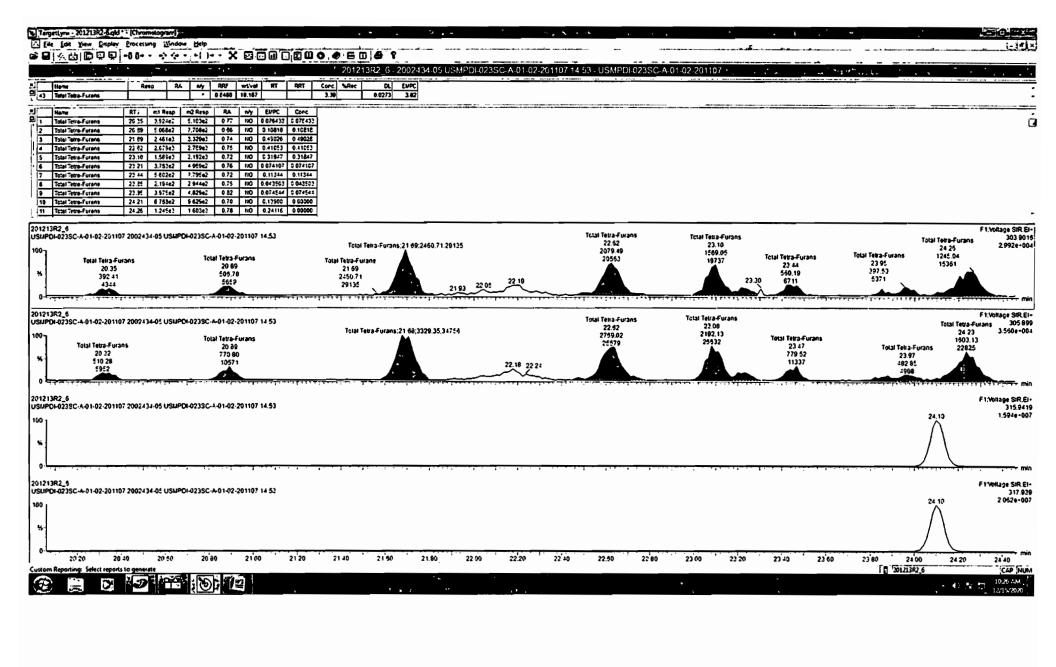
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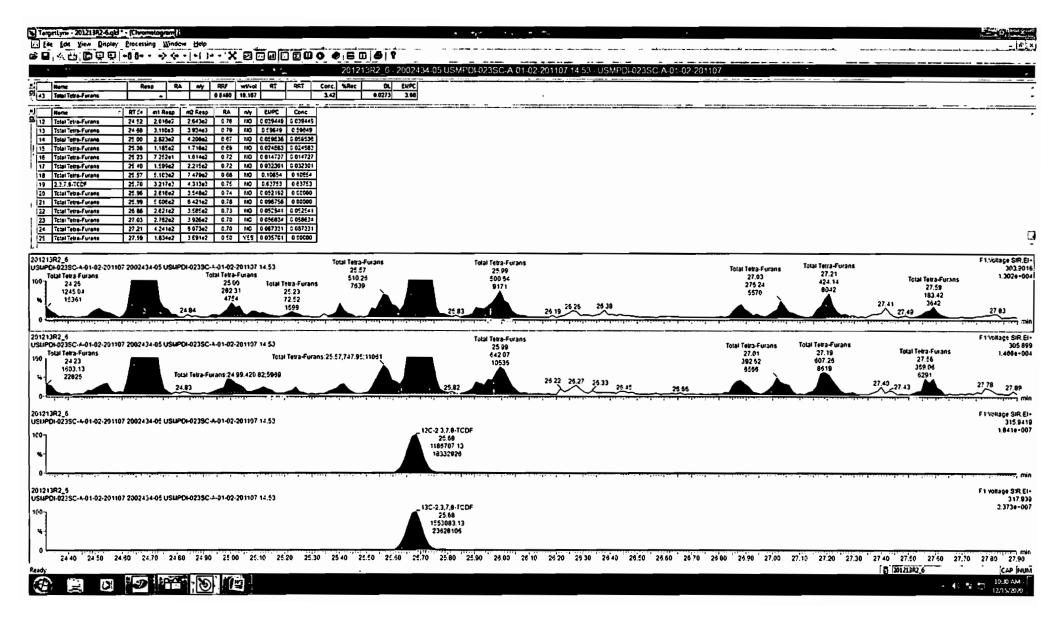
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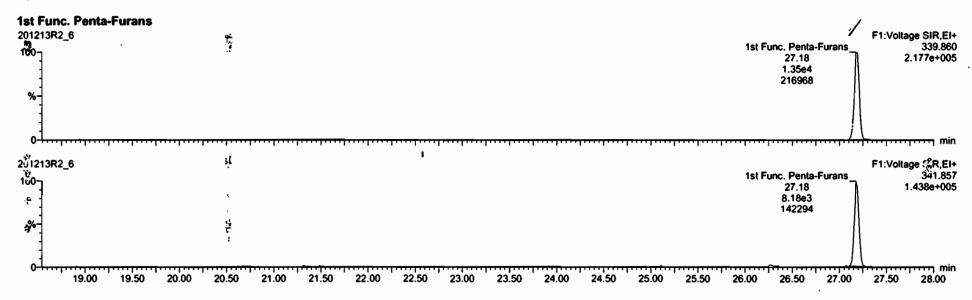


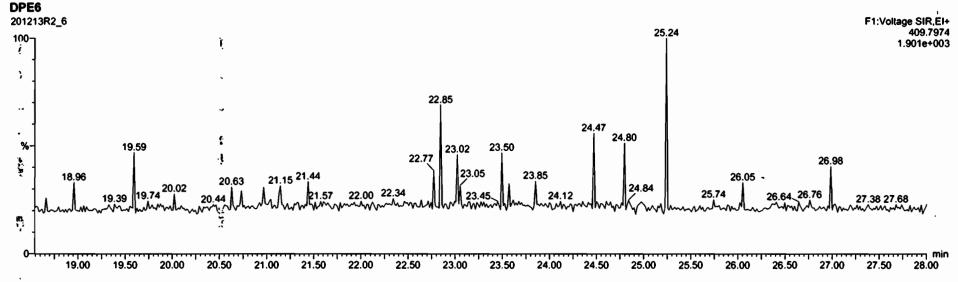
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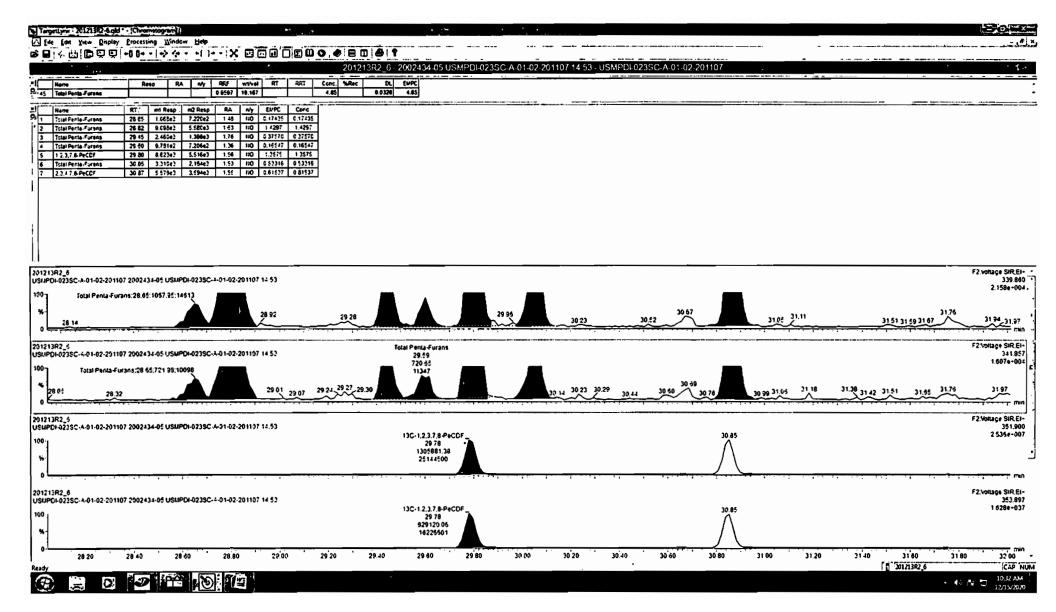




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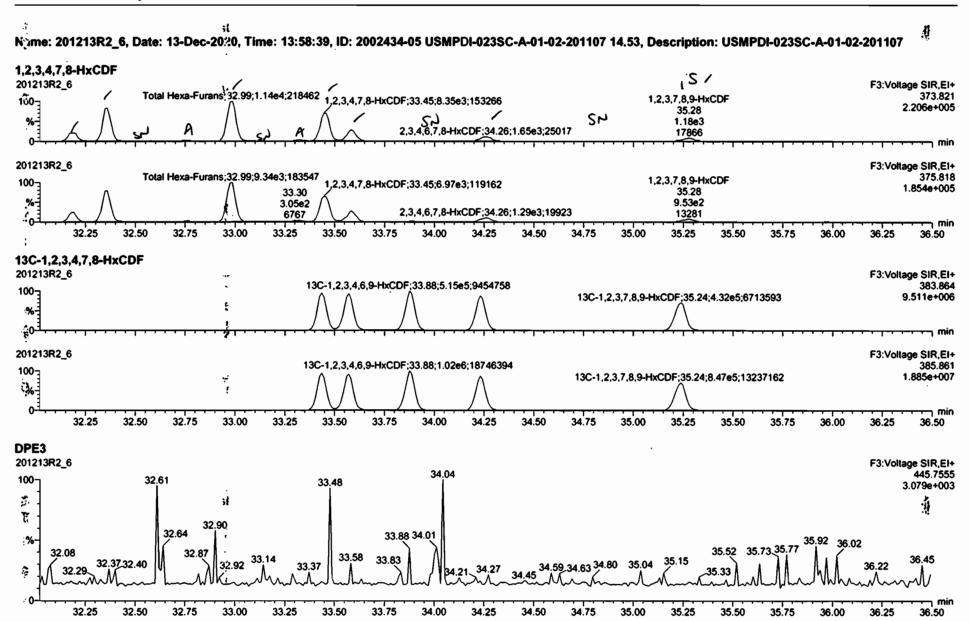
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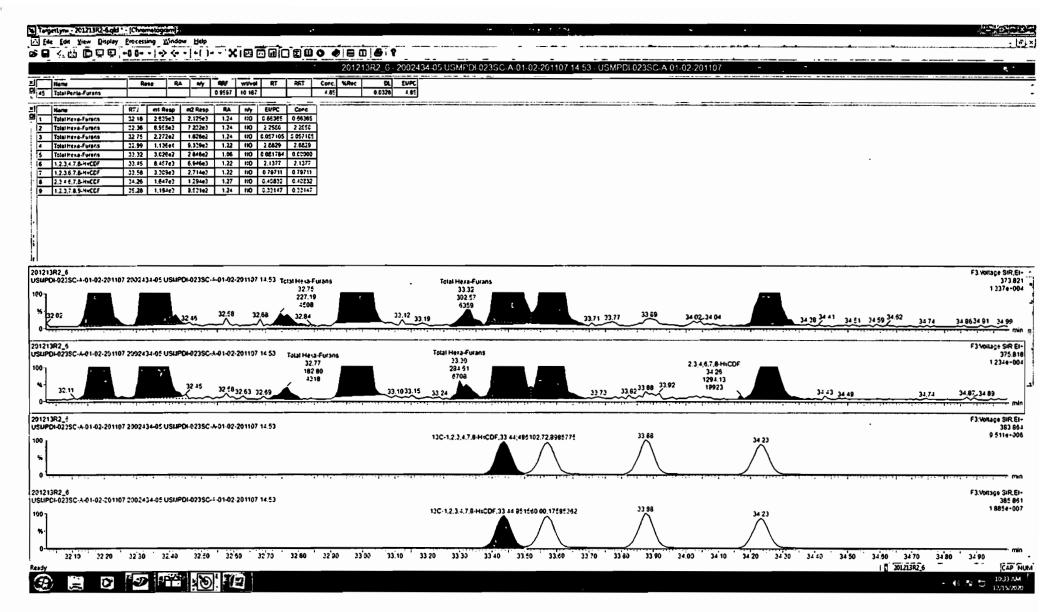


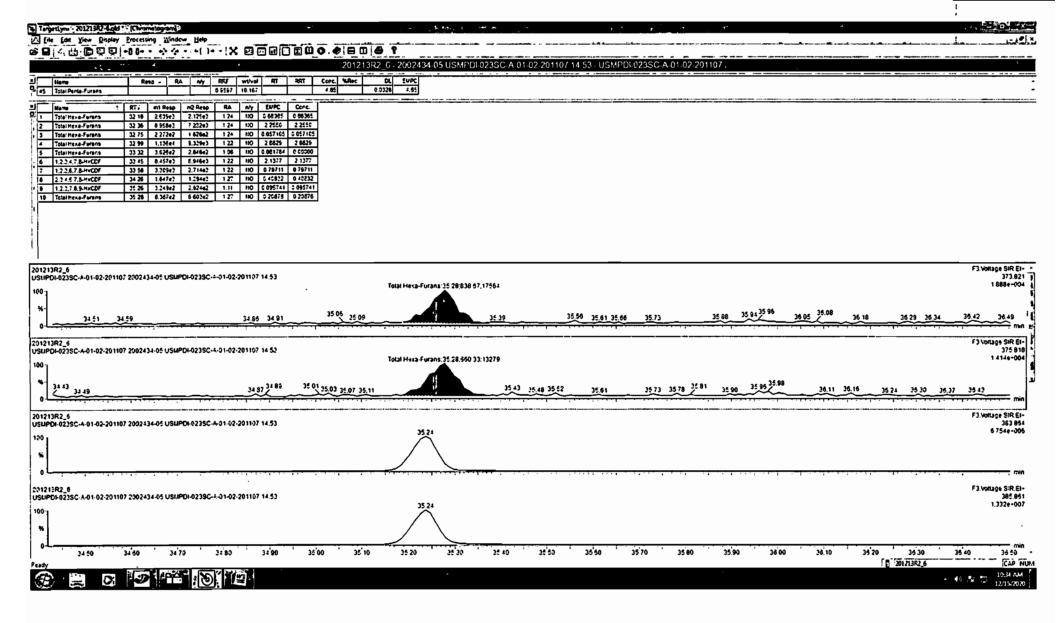
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Last Altered: Monday, December 14, 2020 07:01:44 Pacific Standard Time Printed: Monday, December 14, 2020 07:12:56 Pacific Standard Time







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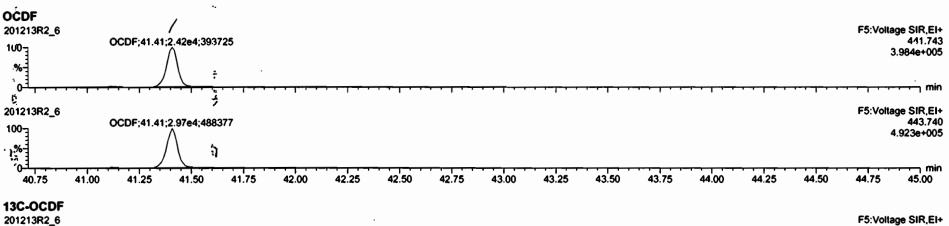
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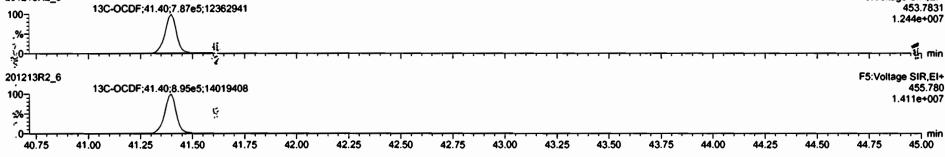
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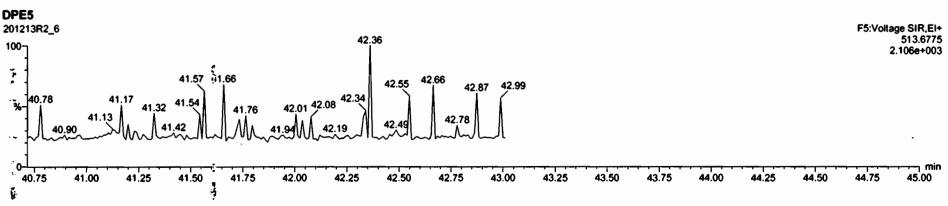
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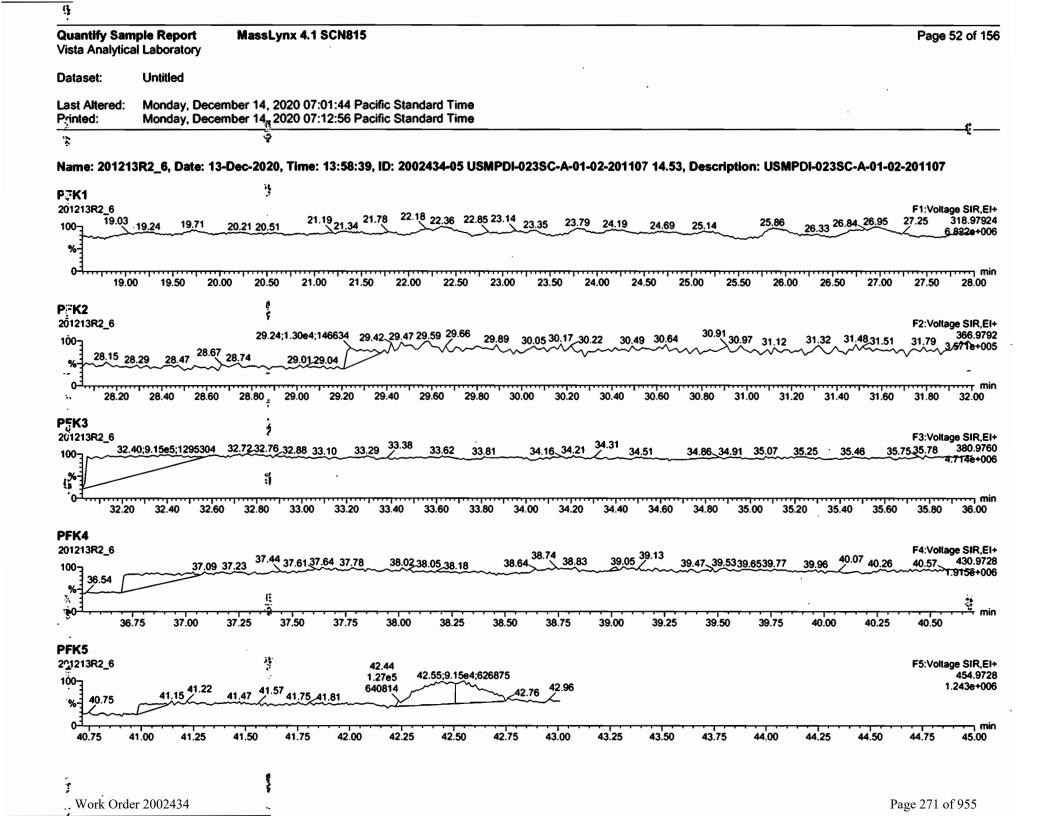
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Dataset: U:\VG12.PRO\Results\201213R2\201213R2-7.qld

Last Altered:

Tuesday, December 15, 2020 11:02:09 AM Pacific Standard Time

Printed: Tuesday, December 15, 2020 11:02:30 AM Pacific Standard Time

GRB 12/15/2020

Method: U:\VG12.PRO\MethDB\1613rrt-12-11-20.mdb 11 Dec 2020 08:35:32

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Name: 201213R2_7, Date: 13-Dec-2020, Time: 14:42:54, ID: 2002434-06 USMPDI-023SC-A-02-03-201107 13.62, Description: USMPDI-023SC-A-02-03-201107

14 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	# Name,	Resp.	, ا _س RA رزا	n/y,};	RRF_	. wt/vol_ຢູ່ໄ	Pred.RT	RT	Pred RRT	RRT_(Conc.	_%Rec	DL }	EMPC
The same	1 2,3,7,8-TCDD	1.46e3	0.24	YES	0.980	10.005	26.396	26.38	1.001	1.001	0.16/103		0.0230	0.0714
279-74 1497-	2 1,2,3,7,8-PeCDD	5.04e2	0.54	YES	0.932	10.005	31.079	31.08	1.001	1.001	0.07/0031		0.0864	0.0686
3	3 1,2,3,4,7,8-HxCDD	3.03e2	1.30	NO	1.02	10.005	34.379	34.38 /	1.001	1.001	0.053319		0.0395	0.0533
4	4 1,2,3,6,7,8-HxCDD	8.88e2	1.10	NO	0.902	10.005	34.504	34.49	1.001	1.000	0.15885		0.0415	0.159
5	5 1,2,3,7,8,9-HxCDD	9.74e2	1.24	NO	0.954	10.005	34.755	34.77	1.000	1.001	0.16534		0.0397	0.165
6	6 1,2,3,4,6,7,8-HpCDD	1.89e4	1.00	NO	0.918	10.005	38.222	38.22	1.000	1.000	4.1948		0.121	4.19
7 * 3 21	7 OCDD	1.19e5	0.88	NO	0.866	10.005	41.124	41.13	1.000	1.000	39.635		0.117	39.6
8	8 2,3,7,8-TCDF	4.57e3	0.82	NO	0.848	10.005	25.687	25.71	1.000	1.001	0.41565		0.0232	0.416
9, , , , ,	🧗 9 1,2,3,7,8-PeCDF	3.01e3	1.63	NO	0.960	10.005	29.800	29.81	1.000	1.001	0.29329		0.0472	0.293
10	L 10 2,3,4,7,8-PeCDF	2.70e3	1.43	NO	1.07	10.005	30.874	30.88	1.001	1.001	0.24656		0.0427	0.247
11	11 1,2,3,4,7,8-HxCDF	2.96e3	1.09	NO	0.986	10.005	33.457	33.46 /	1.000	1.000	0.41306		0.0299	0.413
12 25 25	☑ 12 1.2,3,6,7,8-HxCDF	1.06e3	1.09	NO	1.04	10.005	33.603	33.58 /	1.001	1.000	0.14089		0.0301	0.141
13 5	13 2,3,4,6,7,8-HxCDF	4.80e2	1.16	NO	1.02	10.005	34.264	34.27 /	1.001	1.001	0.067114		0.0338	0.0671
14.	14 1,2,3,7,8,9-HxCDF	2.35e2	0.93	YES	0.991	10.005	35.259	35.26 ′	1.000	1.000	0.036546		0.0393	0.0318
15.	፫ ^ት 15 1,2,3,4,6,7,8-HpCDF	3.09e3	1.02	NO	1.05	10.005	36.835	36.83	1.000	1.000	0.61542		0.0308	0.615
16	16 1,2,3,4,7,8,9-HpCDF	4.76e2	0.96	NO	1.18	10.005	38.839	38.84	1.000	1.000	0.10038		0.0247	0.100
17	17 OCDF	4.29e3	0.86	NO	0.896	10.005	41.417	41.43	1.000	1.001	1.2356		0.0448	1.24
18	18 13C-2,3,7,8-TCDD	1.85e6	0.78	NO	1.06	10.005°	26.383	26.36	1.030	1.029	187.81	94.0	0.0568	
19 ~ ~ .*	19 13C-1,2,3,7,8-PeCDD	1.42e6	0.63	NO	0.785	10.005	31.229	31.05	1.219	1.212	194.12	97.1	0.111	
20	20 13C-1,2,3,4,7,8-HxCDD	1.11e6	1.28	NO	0.621	10.005	34.348	34.36 ,	1.014	1.014	214.70	107	0.271	
21,	21 13C-1,2,3,6,7,8-HxCDD	1.24e6	1.26	NO	0.734	10.005	34.470	34.48 /	1.017	1.018	202.08	101	0.229	
22	22 13C-1,2,3,7,8,9-HxCDD	1.23e6	1.25	NO	0.723	10.005	34.755	34.74	1.026	1.025	204.55	102	0.233	
23	23 13C-1,2,3,4,6,7,8-HpCDD	9.79e5	1.06	NO	0.568	10.005	38.255	38.21	1.129	1.128	206.55	103	0.500	
24	£ 24 13C-OCDD	1.39e6	0.91	NO	0.496	10.005	41.193	41.12	1.216	1.213	336.10	84.1	0.372	
	₹ 25 13C-2,3,7,8-TCDF	2.59e6	0.77	NO	0.919	10.005	25.682	25.68	1.003	1.003	189.84	95.0	0.0952	
26 3 35	26 13C-1,2,3,7,8-PeCDF	2.14e6	1.57	NO	0.715	10.005	29.938	29.80	1.169	1.163	201.40	101	0.155	
27	27 13C-2,3,4,7,8-PeCDF	2.05e6	1.60	NO	0.689	10.005	31.027	30.85	1.212	1.205	200.21	100	0.161	
28 7 777	28 13C-1,2,3,4,7,8-HxCDF	1.45e6	0.51	NO	0.873	10.005	33.453	33.45	0.987	0.987	199.26	99.7	0.275	
29	29 13C-1,2,3,6,7,8-HxCDF	1.44e6	0.51	NO	0.933	10.005	33.582	33.58	0.991	0.991	185.24	92.7	0.257	
30 20 70		1.40e6	0.51	NO	0.843	10.005	34.250	34.24	/ 1.011	1.011	199.06	99.6	0.285	
31 7	31 13C-1,2,3,7,8,9-HxCDF	1.30e6	0.51	NO	0.780	10.005	35.249	35.25	/ 1.040	1.040	199.59	99.8	0.308	

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MassLynx 4.1 SCN815

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Dataset:

U:\VG12.PRO\Results\201213R2\201213R2-7.qld

Last Altered: Printed:

Tuesday, December 15, 2020 11:02:09 AM Pacific Standard Time Tuesday, December 15, 2020 11:02:30 AM Pacific Standard Time

Name: 201213R2_7, Date: 13-Dec-2020, Time: 14:42:54, ID: 2002434-06 USMPDI-023SC-A-02-03-201107 13.62, Description: USMPDI-023SC-A-02-03-201107

اے کی ا	* Name	Resp.	IL RA	h_n/y_	RRF_	1. MWOIT	Pred.RT	~.RT	Pred.RRT	RRT	Conc.	, %Rec L	DL L	EMPC
32	, 32 13C-1,2,3,4,6,7,8-HpCDF	9.56e5	0.43	NO	0.726	10.005	36.825	36.82	1.087	1.086	157.70	78.9	0.332	
33	33 13C-1,2,3,4,7,8,9-HpCDF	8.07e5	0.44	NO	0.491	10.005	38.835	38.83	1.146	1.146	196.82	98.5	0.491	
34	34 13C-OCDF	1.55e6	0.88	NO	0.565	10.005	41.410	41.41	1.222	1.222	328.38	82.1	0.389	
35	1 35 37CI-2,3,7,8-TCDD	8.58e5			1.22	10.005	26.378	26.39	1.030	1.031	75.524	94.5	0.0209	
36	36 13C-1,2,3,4-TCDD	1.87e6	0.79	NO	1.00	10.005	25.640	25.61	1.000	1.000	199.90	100	0.0600	
37	37 13C-1,2,3,4-TCDF	2.97e6	0.79	NO	1.00	10.005	24.130	24.12	1.000	1.000	199.90	100	0.0875	
38	38 13C-1,2,3,4,6,9-HxCDF	1.67e6	0.51	NO	1.00	10.005	33.920	33.89	1.000	1.000	199.90	100	0.240	
39	39 Total Tetra-Dioxins				0.980	10.005	24.620		0.000		0.21078		0.0230	0.311
40	40 Total Penta-Dioxins				0.932	10.005	29.960		0.000		0.32635		0.0364	0.725
41	41 Total Hexa-Dioxins				0.902	10.005	33.635		0.000		2.9451		0.0427	2.95
42	42 Total Hepta-Dioxins				0.918	10.005	37.640		0.000		9.2456		0.121	9.25
43	43 Total Tetra-Furans				0.848	10.005	23.610		0.000		1.3516		0.0232	1.55
44	44 1st Func. Penta-Furans				0.960	10.005	26.930		0.000		0.24704		0.0103	0.247
4534	45 Total Penta-Furans				0.960	10.005	29.275		0.000		1.1377		0.0474	1.25
46 5	46 Total Hexa-Furans				1.02	10.005	33.555		0.000		1.3427		0.0327	1.37
47	47 Total Hepta-Furans			_	1.05	10.005	37.835		0.000		1.5532		0.0293	1.55

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Last Altered: Printed: Tuesday, December 15, 2020 11:02:09 AM Pacific Standard Time Tuesday, December 15, 2020 11:02:30 AM Pacific Standard Time

Method: U:\VG12.PRO\MethDB\1613rrt-12-11-20.mdb 11 Dec 2020 08:35:32

Calibration: U:\VG12.PRO\CurveDB\dbDIOXIN_1613vg12-12-03-20.cdb 04 Dec 2020 11:36:07

Name: 201213R2_7, Date: 13-Dec-2020, Time: 14:42:54, ID: 2002434-06 USMPDI-023SC-A-02-03-201107 13.62, Description: USMPDI-023SC-A-02-03-201107

Tetra-Dioxins

Name '	RT. 1	m1 Height [m2 Height (m1 Resp (m2 Resp	[RAJENYIL	Resp	EMPC	DL.
Total Tetra-Dioxins	22.61	2.973e3				0.83 NO	4.484e2	0.049366 0.049366	
2 ,Total Tetra-Dioxins	24.29	6.277e3	8.280e3	4.593e2	6.264e2	0.73 NO	1.086e3	0.11954 0.11954	0.0230
3	26.38	4.099e3	2.063e4	2.822e2	1.180e3	0.24 YES	1.463e3	0.00000 0.071434	0.0230
4 Total Tetra-Dioxins	26.70	3.329e3	4.164e3	1.693e2	2.110e2	0.80 NO	3.803e2	0.041874 0.041874	0.0230
5 Total Tetra-Dioxins	27.30	2.866e3	2.411e3	1.324e2	1.476e2	0.90 YES	0.000e0	0.00000 0.028769	0.0230

Penta-Dioxins

Name 1	;> RT ::> n	n1 Height	m2.Height	m1 Resp [m2 Resp	μRA∶•n/y	Resp	Conc.	EMPC	DL
1 Total Penta-Dioxins	28.79	5.583e3		4.440e2	6.761e2	0.66 NO		0.16885	0.16885	0.0364
2 Total Penta-Dioxins	29.28	4.578e3	6.874e3	2.645e2	3.781e2	0.70 NO	6.426e2	0.096870	0.096870	0.0364
3 Total Penta-Dioxins	29.59	2.627e3	9.541e3	1.538e2	5.896e2	0.26 YES	0.000e0	0.00000	0.060002	0.0364
4 Total Penta-Dioxins	29.80	1.367e4	6.314e3	6.722e2	3.483e2	1.93 YES	0.000e0	0.00000	0.085585	0.0364
5 Total Penta-Dioxins	29.99	4.609e3	5.821e3	1.608e2	2.414e2	0.67 NO	4.022e2	0.060633	0.060633	0.0364
6 Total Penta-Dioxins	30.02	2.675e3	4.718e3	1.109e2	2.235e2	0.50 YES	0.000e0	0.00000	0.043272	0.0364
7 Total Penta-Dioxins	30.28	5.511e3	1.057e4	3.619e2	7.193e2	0.50 YES	0.000e0	0.00000	0.14117	0.0364
8 7, 1,2,3,7,8-PeCDD	31.08	3.406e3	6.062e3	1.758e2	3.285e2	0.54 YES	5.043e2	0.00000	0.068585	0.0364

Hexa-Dioxins

Name	RT.LL	m1 Height	m2 Height	m1 Resp	m2 Resp	(RA)	iu/A [†] Γ	Resp. 4	L Conc. [EMPC	DL C
1 Total Hexa-Dioxins	32.72	7.986e4	7.316e4	4.039e3	3.492e3	1.16	NO	7.531e3	1.3965	1.3965	0.0427
2 Total Hexa-Dioxins	33.31	7.405e3	9.377e3	4.113e2	3.852e2	1.07	NO	7.966e2	0.14772	0.14772	0.0427
3 - Total Hexa-Dioxins	33.59	3.806e4	2.911e4	2.819e3	2.109e3	1.34	NO	4.928e3	0.91384	0.91384	0.0427
4 Total Hexa-Dioxins	33.72	2.672e3	3.055e3	1.334e2	1.077e2	1.24	NO	2.411e2	0.044713	0.044713	0.0427
5 1,2,3,4,7,8-HxCDD	34.38	3.792e3	3.054e3	1.709e2	1.316e2	1.30	NO	3.026e2	0.053319	0.053319	0.0395
6 1,2,3,6,7,8-HxCDD	34.49	8.975e3	8.329e3	4.650e2	4.227e2	1.10	NO	8.877e2	0.15885	0.15885	0.0415
7 Total Hexa-Dioxins	34.66	3.265e3	3.756e3	1.879e2	1.612e2	1.17	NO	3.491e2	0.064744	0.064744	0.0427
8 1,2,3,7,8,9-HxCDD	34.77	1.188e4	8.371e3	5.385e2	4.350e2	1.24	NO	9.735e2	0.16534	0.16534	0.0397

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Tuesday, December 15, 2020 11:02:09 AM Pacific Standard Time

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Tuesday, December 15, 2020 11:02:30 AM Pacific Standard Time

Name: 201213R2_7, Date: 13-Dec-2020, Time: 14:42:54, ID: 2002434-06 USMPDI-023SC-A-02-03-201107 13.62, Description: USMPDI-023SC-A-02-03-201107

Hepta-Dioxins

J Name	RT /L	m1 Height L	m2 Height	r 1 Resp	m2 Resp	_RA;	Ju/y.L	Resp.	Conc!	EMPC	,DL
1 Total Hepta-Dioxins	37.22		1.623e5	1.122e4						5.0509	
2 1,2,3,4,6,7,8-HpCDD	38.22	1.818e5	1.942e5	9.435e3	9.416e3	1.00	NO	1.885e4	4.1948	4.1948	0.121

Tetra-Furans

Name	** RT. 4	m1 Height	m2 Height	m1 Resp	m2 Resp	RAI	n/y	Resp	Conc في الم	F- EMPC	v • DL
1 Total Tetra-Furans	21.71	3.410e3	5.736e3	3.352e2	4.783e2	0.70	NO	8.135e2	0.073994		0.0232
2 Total Tetra-Furans	22.64	6.933e3	1.161e4	7.213e2	1.047e3	0.69	NO	1.769e3	0.16086	0.16086	0.0232
3 Total Tetra-Furans	23.11	3.803e3	4.190e3	2.755e2	3.409e2	0.81	NO	6.164e2	0.056065	0.056065	0.0232
4 Total Tetra-Furans	23.45	1.971e3	2.494e3	1.425e2	1.719e2	0.83	NO	3.144e2	0.028599	0.028599	0.0232
5 Total Tetra-Furans	24.19	6.823e3	1.023e4	9.257e2	1.256e3	0.74	NO	0.000e0	0.00000	0.19845	0.0232
6 Total Tetra-Furans	24.68	2.753e4	3.243e4	1.835e3	2.359e3	0.78	NO	4.194e3	0.38144	0.38144	0.0232
7 Total Tetra-Furans	25.57	1.006e4	1.277e4	6.508e2	7.927e2	0.82	NO	1.444e3	0.13130	0.13130	0.0232
8 2,3,7,8-TCDF	25.71	3.203e4	3.902e4	2.054e3	2.516e3	0.82	NO	4.570e3	0.41565	0.41565	0.0232
9 Total Tetra-Furans	25.96	3.148e3	6.666e3	3.057e2	4.369e2	0.70	NO	7.426e2	0.067539	0.067539	0.0232
10 Total Tetra-Furans	27.58	2.666e3	4.546e3	1.612e2	2.363e2	0.68	NO	3.976e2	0.036160	0.036160	0.0232

Penta-Furans function 1

18.) Name -	RT:	m1 Height	m2 Height	m1-Resp	m2 Resp	: RA	rn/y [t	Resp	Conc!	EMPC:	DL_
12,20	1st Func. Penta-Furans	27.19	2.407e4	1.671e4	1.509e3	9.743e2	1.55	NO	2.483e3	0.24704	0.24704	0.0103

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Dataset:

U:\VG12.PRO\Results\201213R2\201213R2-7.qld

Last Altered: Printed:

Tuesday, December 15, 2020 11:02:09 AM Pacific Standard Time Tuesday, December 15, 2020 11:02:30 AM Pacific Standard Time

Name: 201213R2_7, Date: 13-Dec-2020, Time: 14:42:54, ID: 2002434-06 USMPDI-023SC-A-02-03-201107 13.62, Description: USMPDI-023SC-A-02-03-201107

Penta-Furans

Name	E RT.	m1 Height	m2 Height	m1 Resp	m2 Resp	<u>r[</u> RA¡¡n/y][:_Resp_	Conc	EMPC L DL
1 Total Penta-Furans	28.65	4.877e3	2.466e3	3.114e2	2.300e2	1.35 NO	5.414e2		053863 0.0474
2 Total Penta-Furans	28.83	2.587e4	1.847e4	1.861e3	1.238e3	1.50 NO	3.099e3	0.30832	0.30832 0.0474
3 Total Penta-Furans	29.43	7.255e3	5.850e3	5.427e2	3.682e2	1.47 NO	9.109e2	0.090627 0.	090627 0.0474
4: Total Penta-Furans	29.60	8.295e3	1.086e4	4.651e2	5.343e2	0.87 YES	0.000e0	0.00000 0.	076119 0.0474
5 1,2,3,7,8-PeCDF	29.81	3.409e4	2.078e4	1.866e3	1.147e3	1.63 NO	3.013e3	0.29329	.29329 0.0472
6 Total Penta-Furans	30.05	1.965e4	1.156e4	8.614e2	5.967e2	1.44 NO	1.458e3	0.14507 0	0.14507 0.0474
7 Total Penta-Furans	30.69	4.467e3	4.441e3	1.941e2	1.688e2	1.15 YES	0.000e0	0.00000 0.	031771 0.0474
8, 2,3,4,7,8-PeCDF	30.88	3.047e4	2.072e4	1.587e3	1.109e3	1.43 NO	2.696e3	0.24656 0	.24656 0.0427

Hexa-Furans

المستحد الأ	Name	RT	n1 Height	m2 Height 1	m1 Resp	m2 Resp	[RA]	[n/y]	Resp	Conc.	EMPC (DL:
1	Total Hexa-Furans	32.19	7.807e3	6.317e3	3.577e2		1.31	NO	6.315e2	0.088469		0.0327
2	Total Hexa-Furans	32.37	2.202e4	1.602e4	1.036e3	8.125e2	1.28	NO	1.849e3	0.25897	0.25897	0.0327
3.5	Total Hexa-Furans	33.00	2.143e4	1.53 9e4	9.991e2	8.179e2	1.22	NO	1.817e3	0.25455	0.25455	0.0327
41	Total Hexa-Furans	33.32	3.074e3	2.539e3	1.605e2	1.278e2	1.26	NO	2.883e2	0.040392	0.040392	0.0327
5	1,2,3,4,7,8-HxCDF	33.46	2.828e4	3.062e4	1.540e3	1.419e3	1.09	NO	2.959e3	0.41306	0.41306	0.0299
6	1,2,3,6,7,8-HxCDF	33.58	1.111e4	1.099e4	5.501e2	5.064e2	1.09	NO	1.056e3	0.14089	0.14089	0.0301
7	2,3,4,6,7,8-HxCDF	34.27	5.142e3	3.652e3	2.574e2	2.223e2	1.16	NO	4.797e2	0.067114	0.067114	0.0338
8 3	1,2,3,7,8,9-HxCDF	35.26	4.540e3	4.859e3	1.134e2	1.219e2	0.93	YES	2.353e2	0.00000	0.031822	0.0393
9,	Total Hexa-Furans	35.30	7.127e3	5.643e3	2.953e2	2.702e2	1.09	NO	5.655e2	0.079226	0.079226	0.0327

Hepta-Furans

Name	الترايي الم	m1 Height	m2 Height1	m1 Resp [m2 Resp	J!RA[n/y j [Resp	[] Conc.	EMPC	DL.
1,2,3,4,6,7,8-HpCDF		2.222e4							0.61542		
Total Hepta-Furans 3, 1,2,3,4,7,8,9-HpCDF	37.55	3.079e4	3.445e4	1.936e3	1.938e3	1.00	NO	3.873e3	0.83734	0.83734	0.0293
1,2,3,4,7,8,9-HpCDF	38.84	4.475e3	5.999e3	2.331e2	2.432e2	0.96	МО	4.763e2	0.10038	0.10038	0.0247

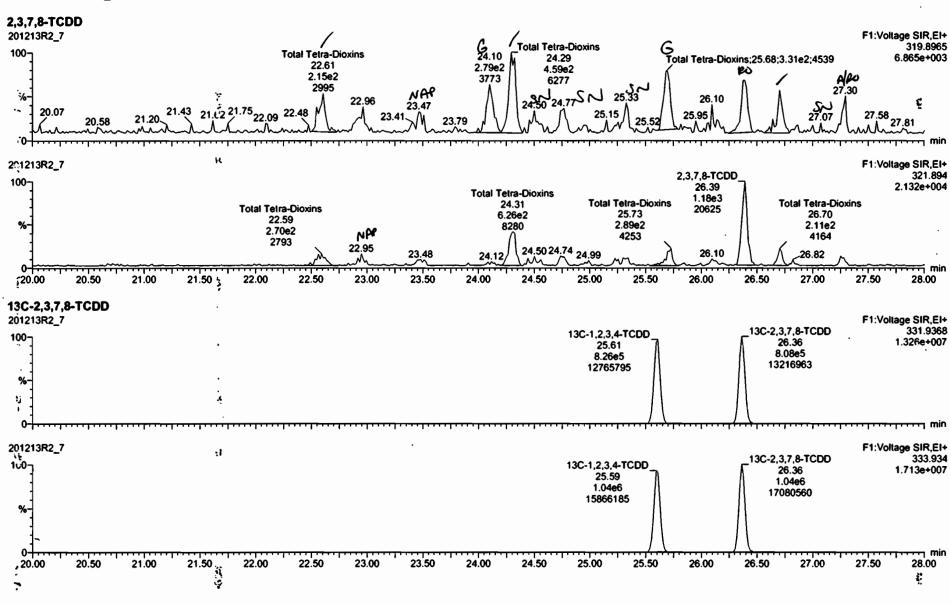
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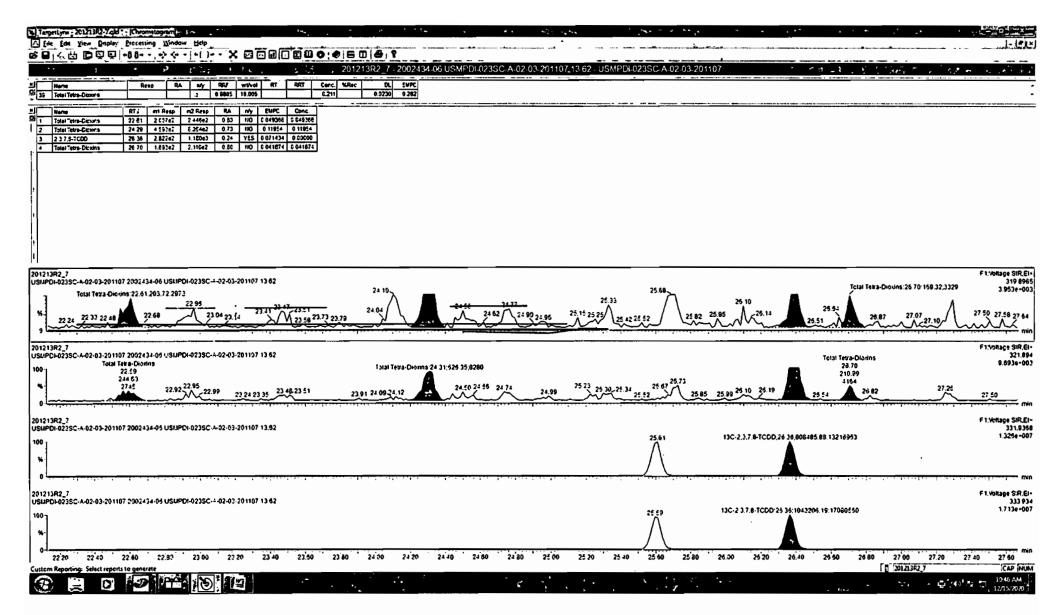
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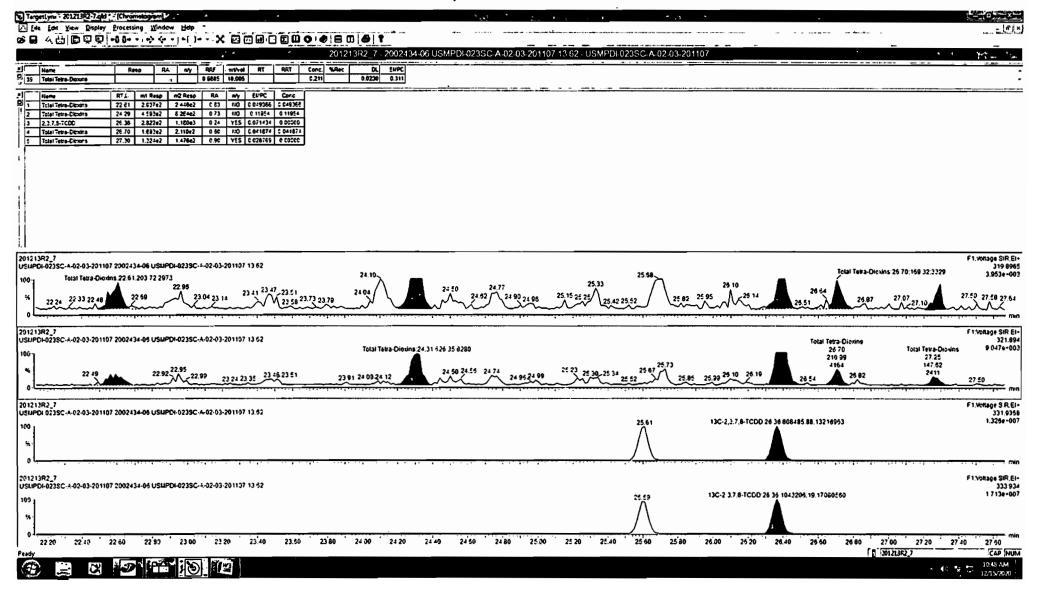


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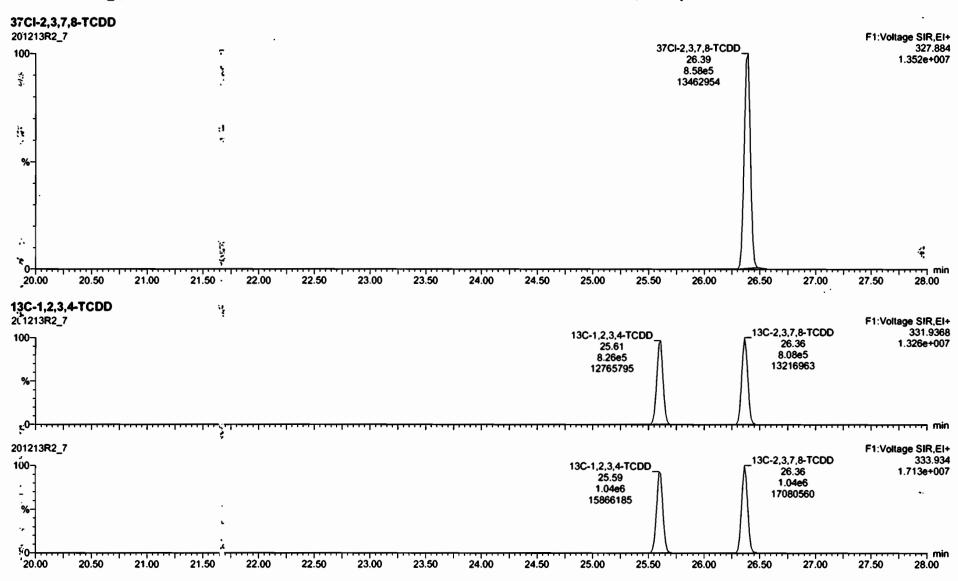
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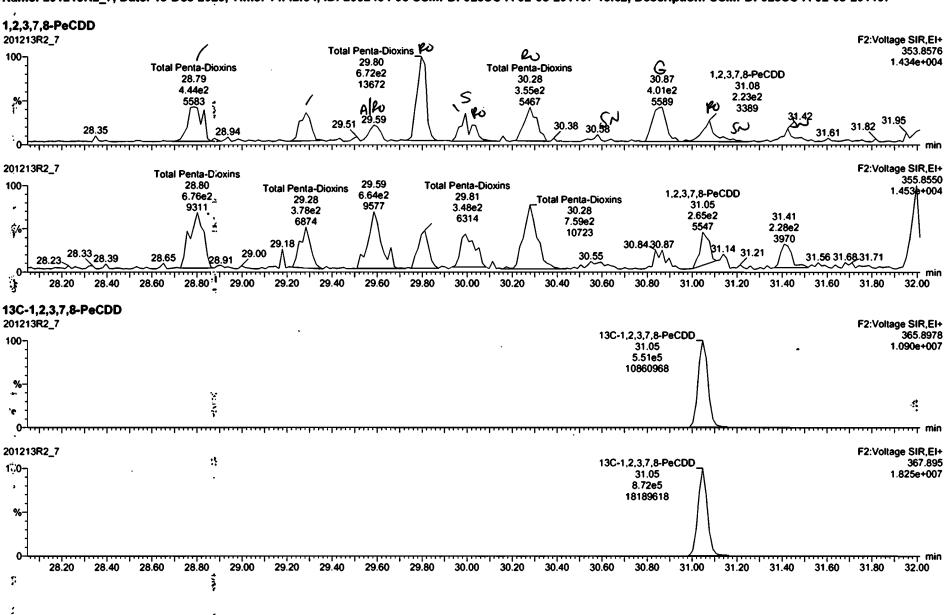
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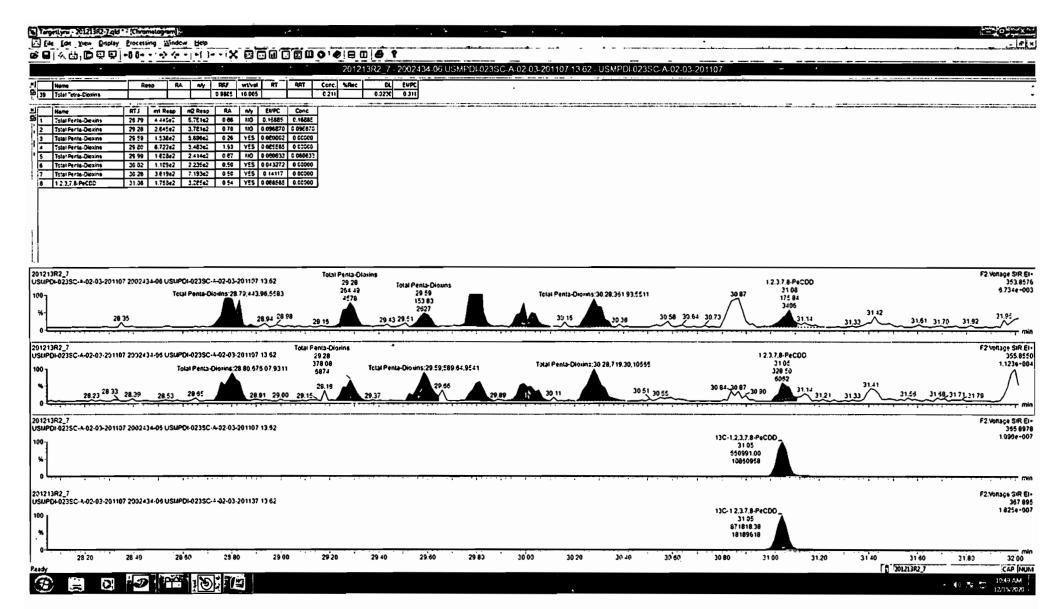
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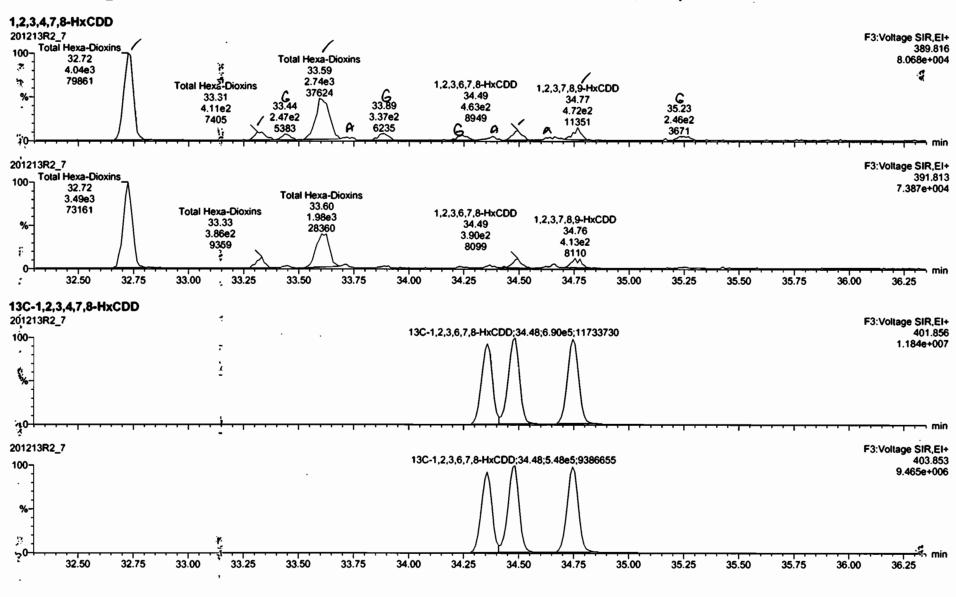
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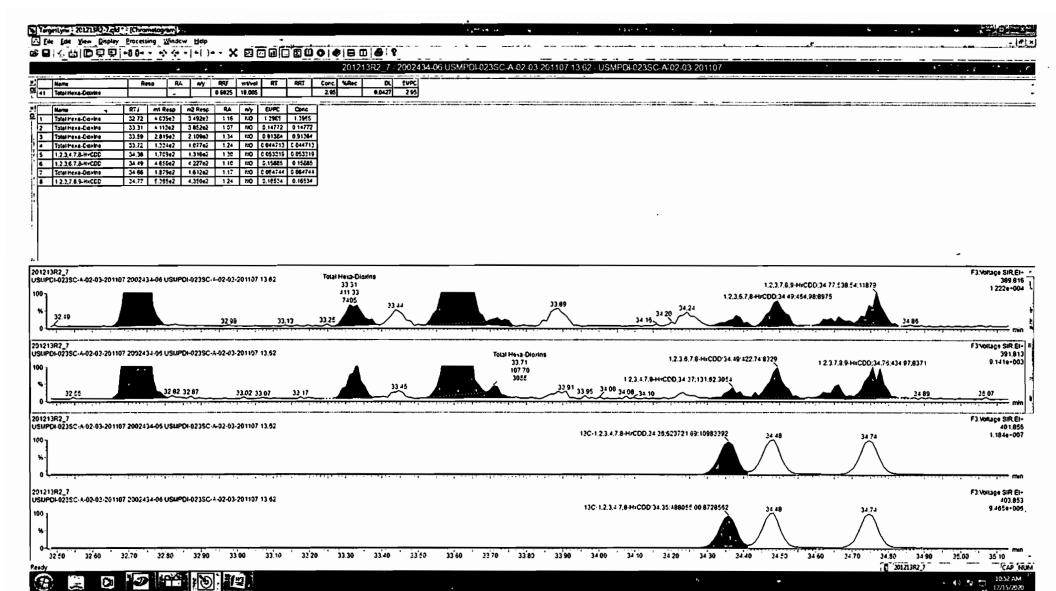
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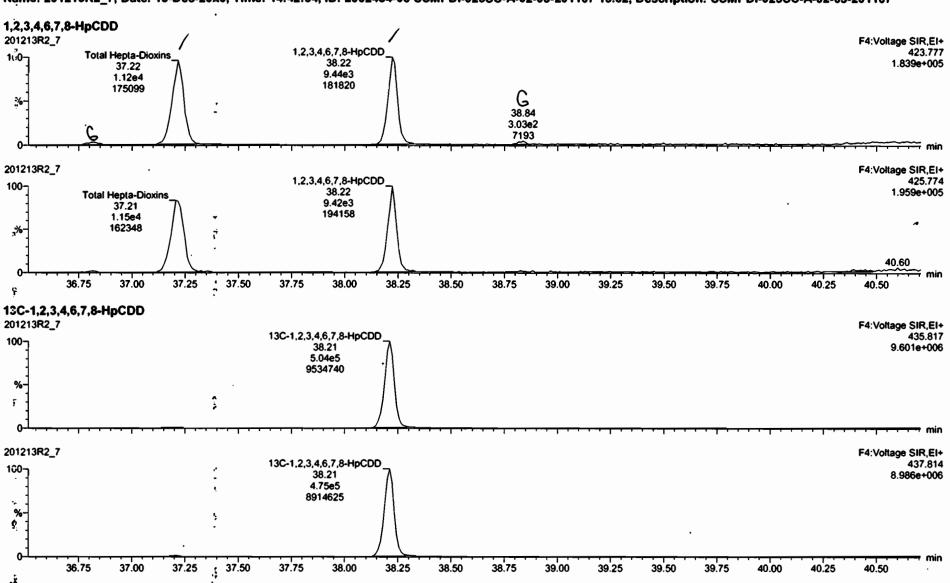




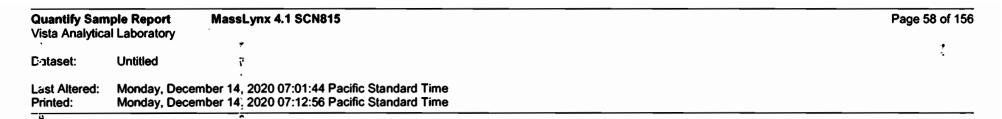
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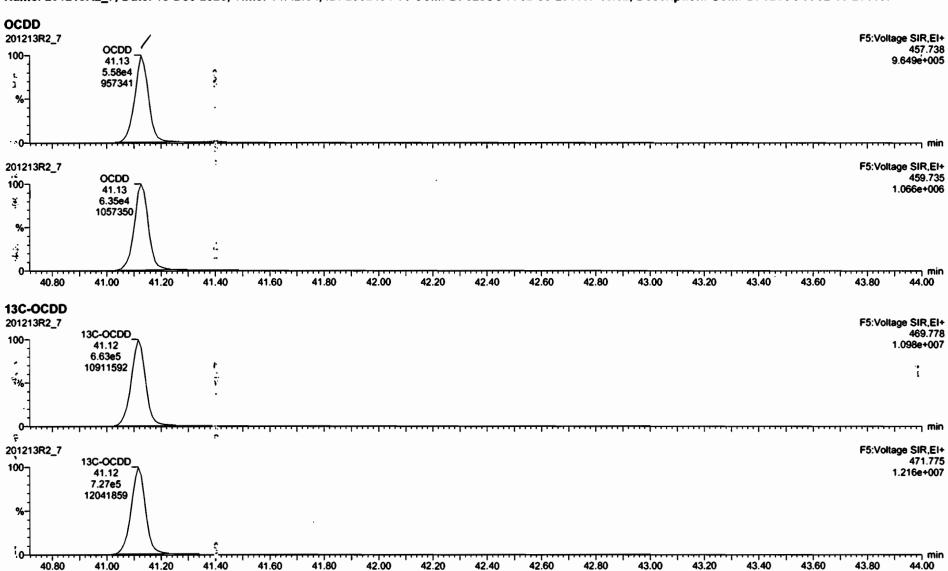




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Name: 201213R2_7, Date: 13-Dec-2020, Time: 14:42:54, ID: 2002434-06 USMPDI-023SC-A-02-03-201107 13.62, Description: USMPDI-023SC-A-02-03-201107

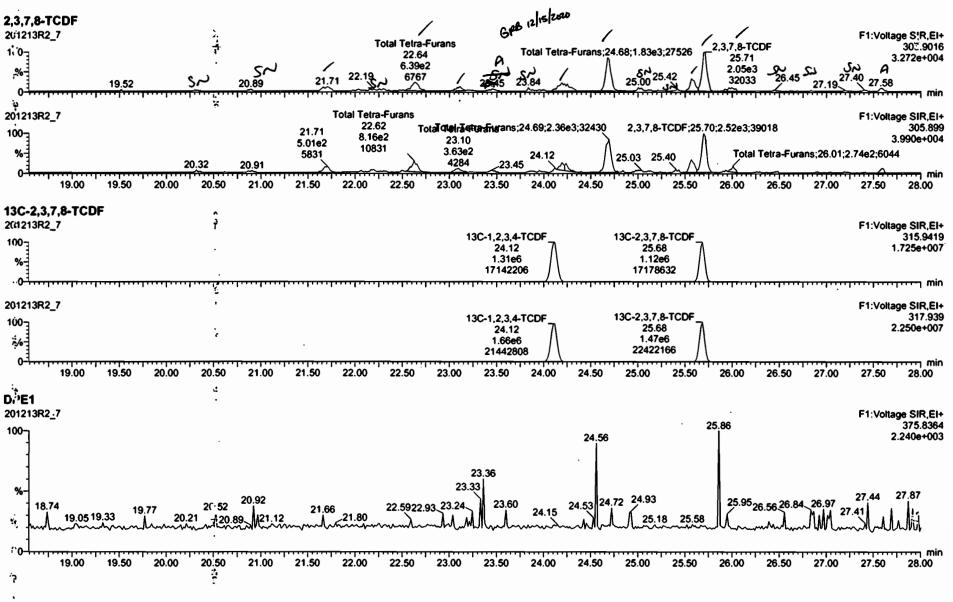


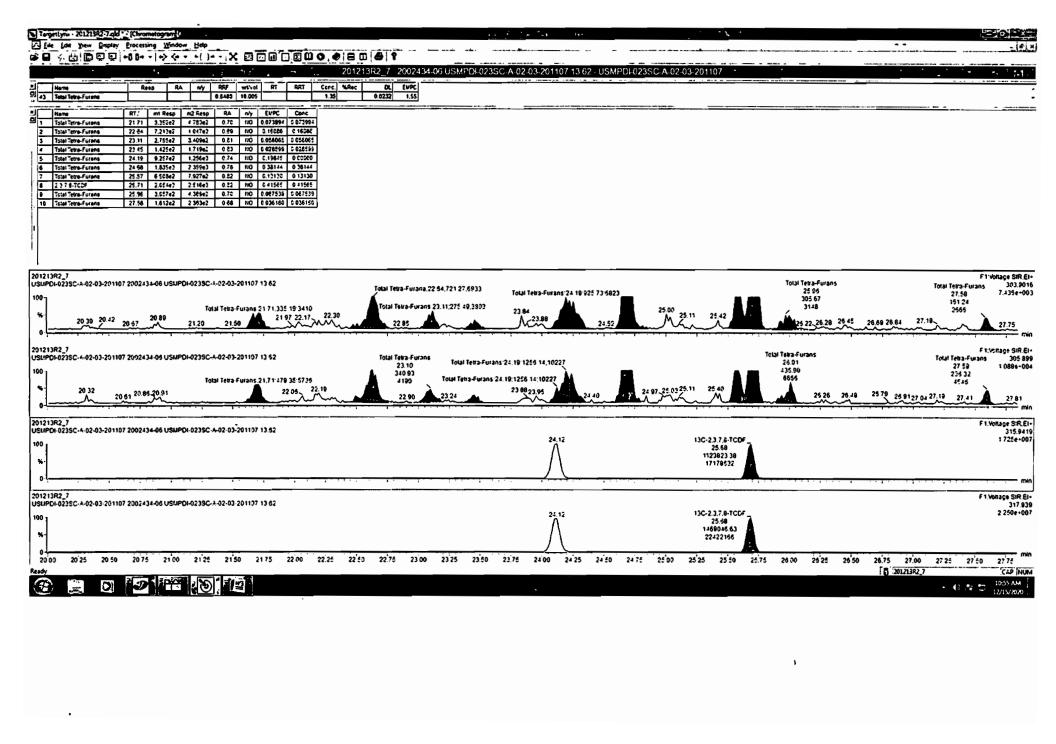
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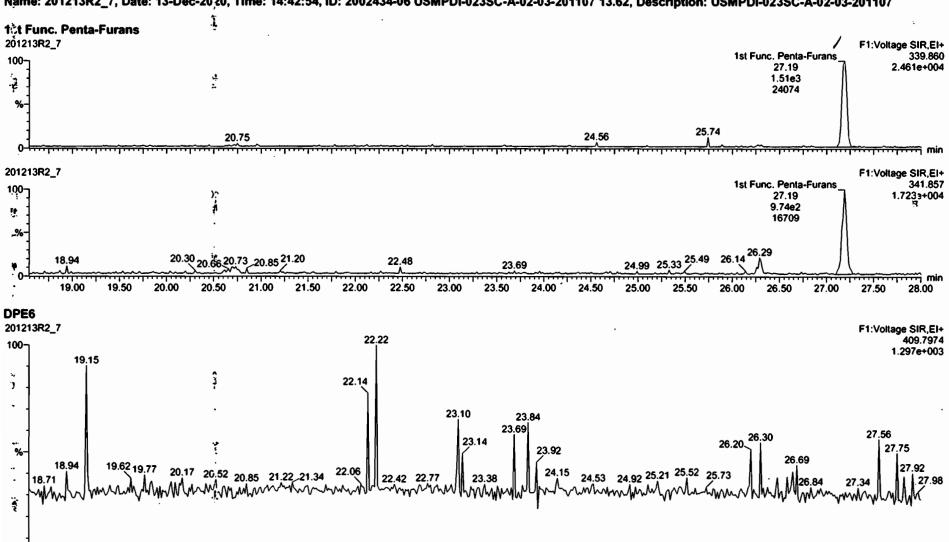




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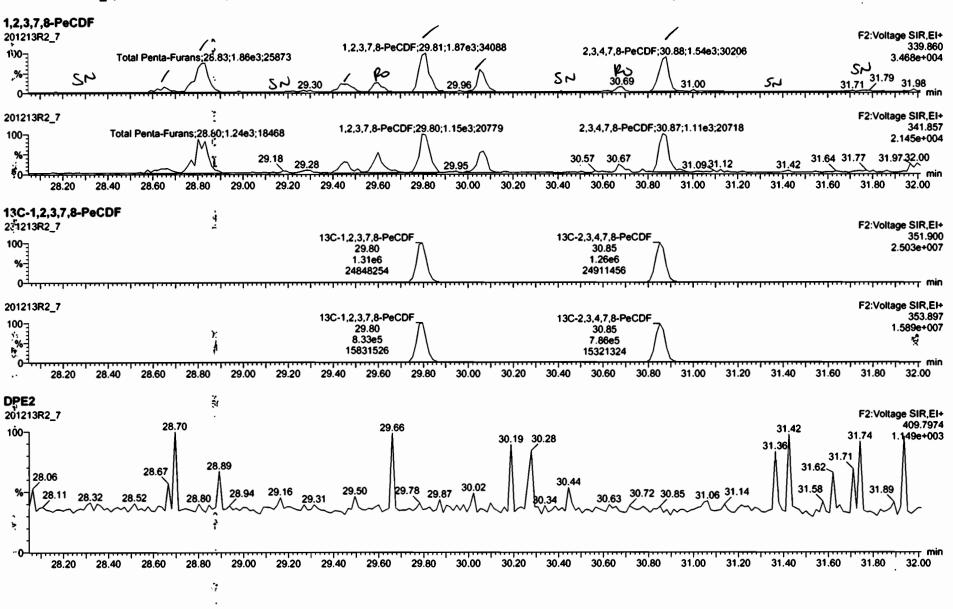
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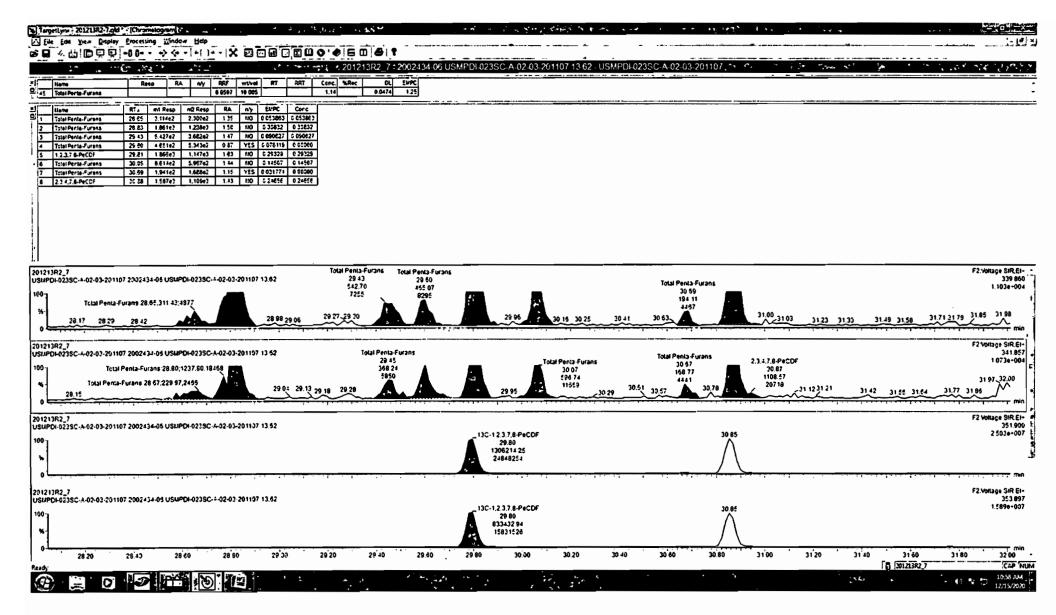
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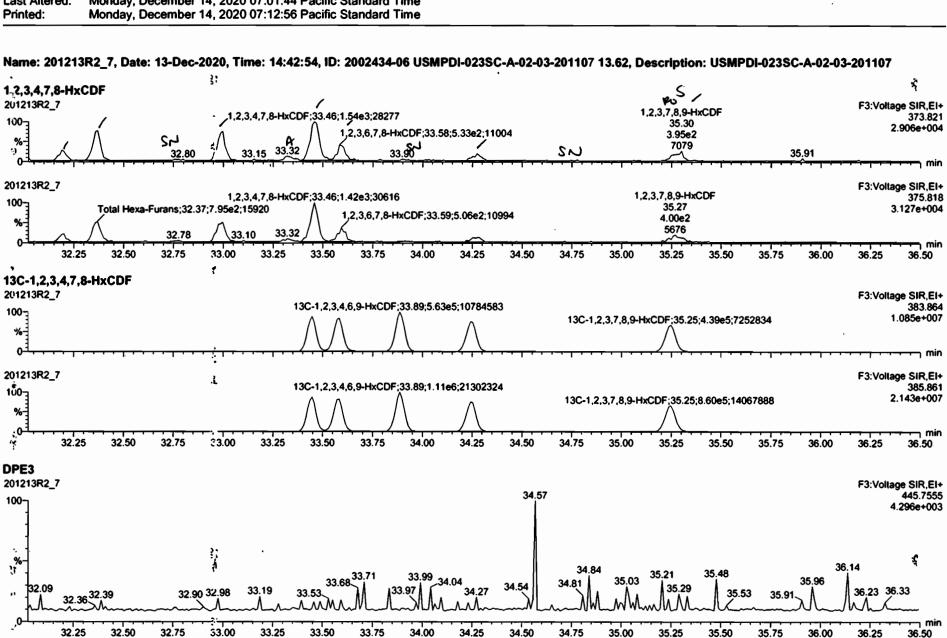
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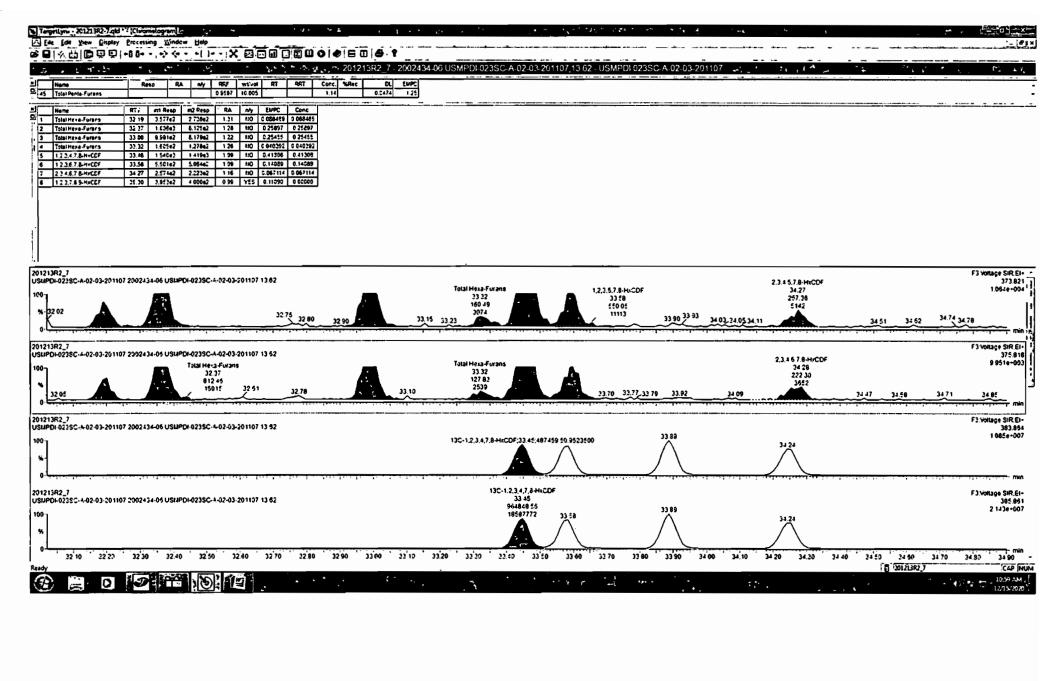
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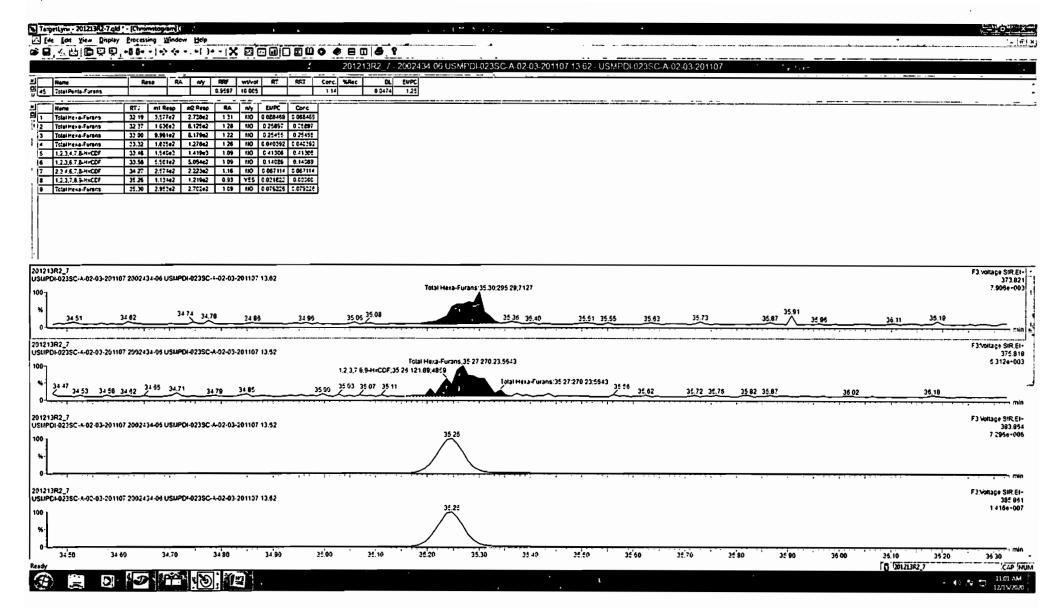


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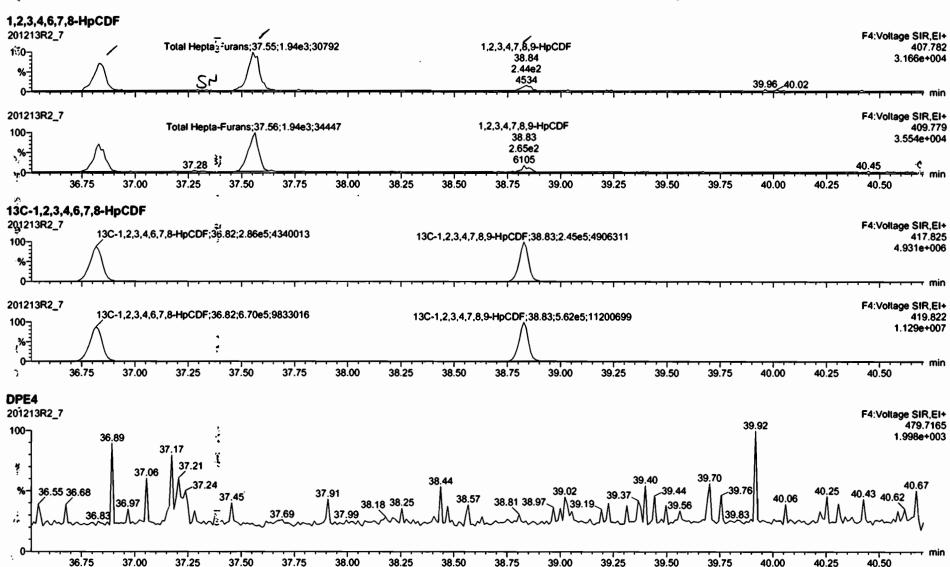
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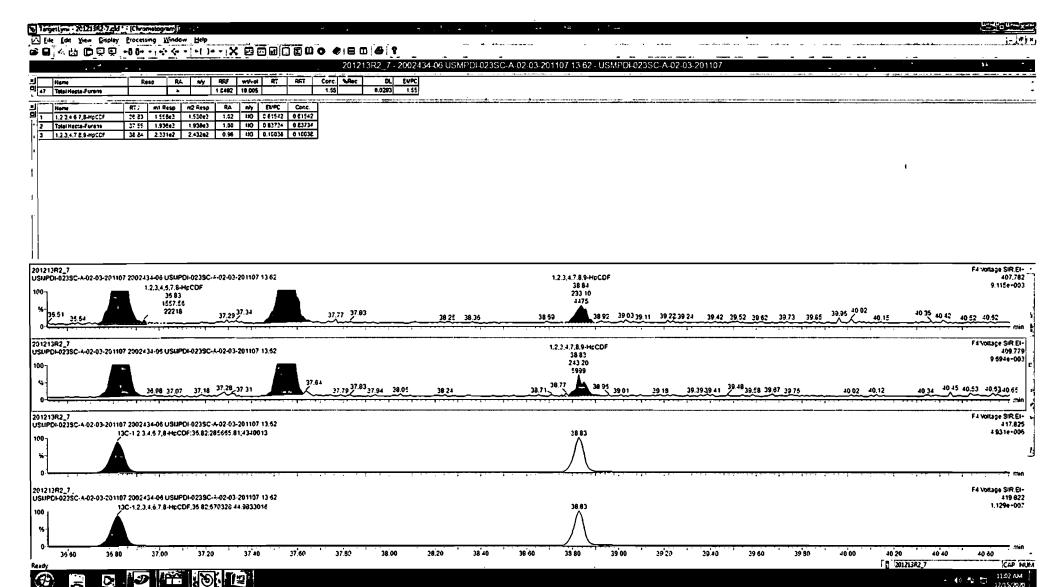
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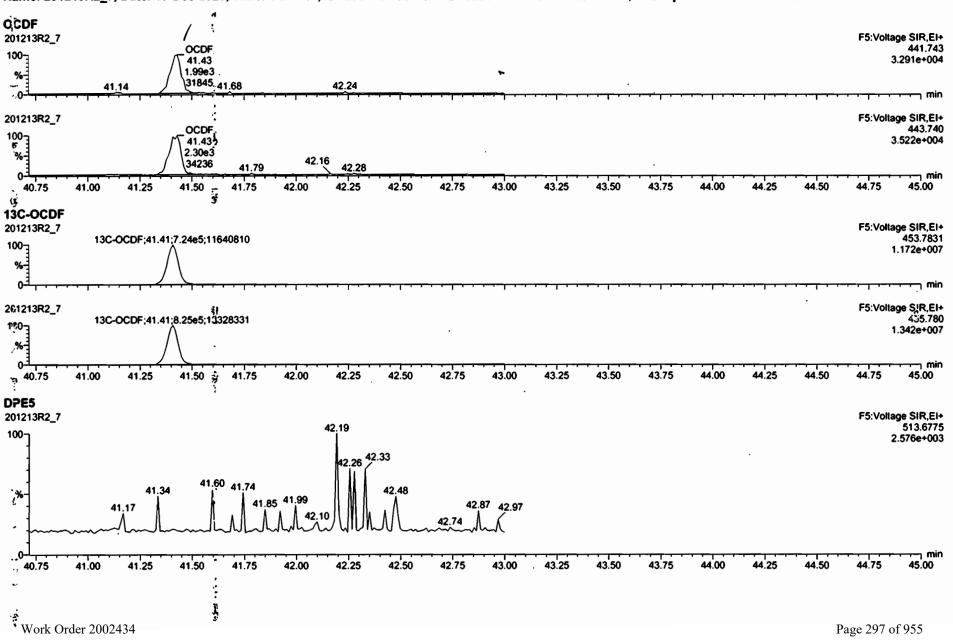
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Dataset:

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Last Altered: Printed:

Tuesday, December 15, 2020 11:16:41 AM Pacific Standard Time Tuesday, December 15, 2020 11:17:27 AM Pacific Standard Time

GPB 12/15/2020

Method: U:\VG12.PRO\MethDB\1613rrt-12-11-20.mdb 11 Dec 2020 08:35:32

Calibration: U:\VG12.PRO\CurveDB\dbDIOXIN_1613vg12-12-03-20.cdb 04 Dec 2020 11:36:07

Name: 201213R2_8, Date: 13-Dec-2020, Time: 15:27:08, ID: 2002434-07 USMPDI-023SC-A-03-04-201107 13.78, Description: USMPDI-023SC-A-03-04-201107

a material and a first	# Name	Resp	RA_I	n/y;	RRF	[wt/vol_) Pred.RT.	RT1	Pred.RRT	_RRT_	Conc. J	`%Rec [L	DIT	EMPC
1	1 2,3,7,8-TCDD			NO	0.980	10.001	26.410		1.001				0.0236	
2	2 1,2,3,7,8-PeCDD			NO	0.932	10.001	31.079		1.001				0.0286	
3	3 1,2,3,4,7,8-HxCDD			NO	1.02	10.001	34.379		1.001				0.0420	
4336	4 1,2,3,6,7,8-HxCDD			NO	0.902	10.001	34.504		1.001				0.0438	
5***	5 1,2,3,7,8,9-HxCDD			NO	0.954	10.001	34.766		1.000				0.0417	
6	6 1,2,3,4,6,7,8-HpCDD	9.58e3	1.13	NO	0.918	10.001	4 38.222	38.22	1.000	1.000	1.8862		0.0854	1.89
7-4	7 OCDD	8.43e4	0.87	NO	0.866	10.001	41.124	41.13	1.000	1.000	25.851		0.132	25.9
8.	8 2,3,7,8-TCDF	1.38e3	0.86	NO	0.848	10.001	25.687	25.70	1.000	1.001	0.14013		0.0185	0.140
اسوديس سياو	9 1,2,3,7,8-PeCDF	1.32e3	1.50	NO	0.960	10.001	29.800	29.81	1.000	1.001	0.12183		0.0287	0.122
10	10 2,3,4,7,8-PeCDF	1.02e3	1.30	YES	1.07	10.001	30.889	30.88	1.001	1.000	0.089522		0.0264	0.0833
114. 1	11 1,2,3,4,7,8-HxCDF	1.02e3	1.40	NO	0.986	10.001	33.467	33.46	1.000	1.000	0.13340		0.0239	0.133
12	12 1,2,3,6,7,8-HxCDF	4.46e2	1.14	NO	1.04	10.001	33.603	33.61 /	1.001	1.001	0.055495		0.0221	0.0555
13	13 2,3,4,6,7,8-HxCDF	2.54e2	1.32	NO	1.02	10.001	34.274	34.28 /	1.001	1.001	0.032718		0.0245	0.0327
14 1 1	14 1,2,3,7,8,9-HxCDF	1.79e2	1.12	NO	0.991	10.001	35.259	35.26	1.000	1.000	0.026135		0.0294	0.0261
1572.7	15 1,2,3,4,6,7,8-HpCDF	2.84e3	0.98	NO	1.05	10.001	36.835	36.84	1.000	1.001	0.50548		0.0596	0.505
16	16 1,2,3,4,7,8,9-HpCDF			NO	1.18	10.001	38.839		1.000				0.0511	
	17 OCDF	9.44e3	0.83	NO	0.896	10.001	41.417	41.42	1.000	1.000	2.4938		0.0528	2.49
18	18 13C-2,3,7,8-TCDD	1.73e6	0.78	NO	1.06	10.001	26.383	26.38	1.030	1.030	169.83	84.9	0.0652	
19	19 13C-1,2,3,7,8-PeCDD	1.56e6	· 0.64	NO	0.785	10.001	31.229	31.05	1.219	1.212	207.01	104	0.100	
20	20 13C-1,2,3,4,7,8-HxCDD	1.19e6	1.29	NO	0.621	10.001	34.358	34.36 /	1.014	1.014	221.76	111	0.306	
21 7	21 13C-1,2,3,6,7,8-HxCDD	1.33e6	1.26	NO	0.734	10.001	34.480	34.48 /	1.017	1.017	210.59	105	0.258	
22	22 13C-1,2,3,7,8,9-HxCDD	1.37e6	1.25	NO	0.723	10.001	34.765	34.76 /	1.026	1.025	220.24	110	0.262	
23 . **-	23 13C-1,2,3,4,6,7,8-HpCDD	1.11e6	1.06	NO	0.568	10.001	38.266	38.21	1.129	1.127	225.64	113	0.616	
24	24 13C-OCDD	1.51e6	0.90	NO	0.496	10.001	41.205	41.12	1.216	1.213	351.78	88.0	0.448	1
25	25 13C-2,3,7,8-TCDF	2.33e6	0.77	NO	0.919	10.001	25.682	25.68	1.003	1.003	164.35	82.2	0.0918	
26	26 13C-1,2,3,7,8-PeCDF	2.26e6	1.59	NO	0.715	10.001	29.938	29.80	1.169	1.163	205.31	103	0.252	
27	27 13C-2,3,4,7,8-PeCDF	2.13e6	1.59	NO	0.689	10.001	31.027	30.87	1.212	1.205	200.71	100	0.261	
28	28 13C-1,2,3,4,7,8-HxCDF	1.55e6	0.51	NO	0.873	10.001	33.463	33.46/	0.987	0.987	204.95	102	0.324	
29	29 13C-1,2,3,6,7,8-HxCDF	1.55e6	0.51	NO	0.933	10.001	33.592	33.58 🗸	0.991	0.991	191.82	95.9	0.303	
30	30 13C-2,3,4,6,7,8-HxCDF	1.52e6	0.51	NO	0.843	10.001	34.260	34.25 /	1.011	1.011	208.89	104	0.336	
31	31 13C-1,2,3,7,8,9-HxCDF	1.38e6	0.51	NO	0.780	10.001	35.260	35.25	1.040	1.040	204.67	102	0.363	

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Dataset:

U:\VG12.PRO\Results\201213R2\201213R2-8.qld

Last Altered: Printed:

Tuesday, December 15, 2020 11:16:41 AM Pacific Standard Time Tuesday, December 15, 2020 11:17:27 AM Pacific Standard Time

Name: 201213R2_8, Date: 13-Dec-2020, Time: 15:27:08, ID: 2002434-07 USMPDI-023SC-A-03-04-201107 13.78, Description: USMPDI-023SC-A-03-04-201107

الشنفششة		Name .	T Resp	L. P. RA	ጟ ፎ_ ሀ/እ	RRF	F WWOI 3	Pred.RT 1	S RT_	Pred.RRT	L RRT	Conc.	1 %Rec	DL 1	✓ EMPC
32	32	13C-1,2,3,4,6,7,8-HpCC	OF 1.07e6	0.44	NO	0.726	10.001	36.836	36.82	1.087	1.086	170.52	85.3	0.451	
33	33	13C-1,2,3,4,7,8,9-HpCE	OF 8.73e5	0.44	NO	0.491	10.001	38.846	38.83	1.146	1.145	205.88	103	0.667	1
34 ; 1	34	13C-OCDF	1.69e6	88.0	NO	0.565	10.001	41.422	41.41	1.222	1.222	346.09	86.5	0.428	
35	35	37CI-2,3,7,8-TCDD	7.81e5	5		1.22	10.001	26.378	26.39	1.030	1.031	66.660	83.3	0.0184	1
36	36	13C-1,2,3,4-TCDD	1.92e6	0.79	NO	1.00	10.001	25.640	25.61	1.000	1.000	199.98	100	0.0688	
37.	37	13C-1,2,3,4-TCDF	3.08e6	0.78	NO	1.00	10.001	24.130	24.12	1.000	1.000	199.98	100	0.0844	
38	38	13C-1,2,3,4,6,9-HxCDF	1.73e6	0.51	NO	1.00	10.001	33.920	33.90	1.000	1.000	199.98	100	0.283	
39	39	Total Tetra-Dioxins				0.980	10.001	24.620		0.000		0.17923		0.0236	0.179
40	40	Total Penta-Dioxins				0.932	10.001	29.960		0.000		0.13817	•	0.0286	0.341
41.	41	Total Hexa-Dioxins				0.902	10.001	33.635		0.000		0.99606		0.0450	0.996
42	42	Total Hepta-Dioxins				0.918	10.001	37.640		0.000		4.4381		0.0854	4.44
43 35	43	Total Tetra-Furans				0.848	10.001	23.610		0.000		0.49680		0.0185	0.497
44	44	1st Func. Penta-Furans				0.960	10.001	26.930		0.000		0.10461		0.00749	0.105
45	45	Total Penta-Furans				0.960	10.001	29.275		0.000		0.28359		0.0290	0.367
46	46	Total Hexa-Furans				1.02	10.001	33.555		0.000		0.61167		0.0246	0.612
47.	47	Total Hepta-Furans				1.05	10.001	37.835		0.000		1.6502		0.0585	1.65

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Dataset:

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U:\VG12.PRO\Results\201213R2\201213R2-8.qld

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Name: 201213R2_8, Date: 13-Dec-2020, Time: 15:27:08, ID: 2002434-07 USMPDI-023SC-A-03-04-201107 13.78, Description: USMPDI-023SC-A-03-04-201107

Tetra-Dioxins

Name; Reside	RT	m1 Height) i	m2 Heigh	! te s	m1 Resp	_m2 Resp	1 RA	in/y	Resp	L Conc.	EMPC	يال منوب
1 Total Tetra-Dioxins	24.31	9.761e3	1.243e4	, ,	6.798e2	8.362e2	0.81	NO	1.516e3	0.17923	0.17923	0.0236

Penta-Dioxins

Name 7.	RT_ib,	m1 Height	m2 Height	m1_Resp	_m2 Resp_	[RA; [n/y] L	· Resp: 107	Conc. E. EMPC	K_u) DL
1 Total Penta-Dioxins	28.82		4.528e3			0.82 YES	0.000e0	0.00000 0.079762	0.0286
2Total Penta-Dioxins	29.30	3.263e3	6.386e3	1.964e2	3.256e2	0.60 NO	5.220e2	0.071650 0.071650	0.0286
3. Total Penta-Dioxins	29.60	2.608e3	1.068e4 **** ¹	1.645e2	6.272e2	0.26 YES	0.000e0	0.00000 0.058405	0.0286
4 Total Penta-Dioxins	29.80	1.169e4	7.318e3 .	6.030e2	2.900e2	2.08 YES	0.000e0	0.00000 0.064881	0.0286
5 Total Penta-Dioxins	30.31	3.701e3	4.075e3	1.876e2	2.970e2	0.63 NO	4.847e2	0.066524 0.066524	0.0286

Hexa-Dioxins

Name :	RT 4	m1 Height	m2 Height	L;_m1:Resp	m2 Resp	J.RA	[U/Y]K	Resp	1 Conc.	EMPC	DL DL
1 Total Hexa-Dioxins	32.74	3.677e4	2.620e4	1.823e3	1.413e3	1.29	NO	3.236e3	0.55192	0.55192	0.0450
2 Total Hexa-Dioxins	33.32	3.897e3	2.971e3	1.772e2	1.374e2	1.29	NO	3.146e2	0.053663	0.053663	0.0450
3 Total Hexa-Dioxins	33.62	1.638e4	1.441e4	1.314e3	9.752e2	1.35	NO	2.289e3	0.39047	0.39047	0.0450

Hepta-Dioxins

Name Name	ام : RT <u>:</u>	m1 Height	m2 Height	- 1 n1 Resp	m2 Resp!	I-RA1	<u>n</u> /ý, t	ېتر Resp «، ⊬ا	Conc.]	- PEMPC	DL.
1 Total Hepta-Dioxins	37.21	8.261e4	8.946e4	6.404e3	6.554e3	0.98	NO	1.29 6 e4	2.5520	2.5520	0.0854
2 1,2,3,4,6,7,8-HpCDD	38.22	8.524e4	8.034e4	5.073e3	4.504e3	1.13	NO	9.578e3	1.8862	1.8862	0.0854

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Dataset:

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Name: 201213R2_8, Date: 13-Dec-2020, Time: 15:27:08, ID: 2002434-07 USMPDI-023SC-A-03-04-201107 13.78, Description: USMPDI-023SC-A-03-04-201107

Tetra-Furans

مارينمالي	Name	الدلية الم	m1 Height	m2 Height	m1 Resp;	m2 Resp	J [RA]	lu/y.j	. Resp	11 Conc.	EMPCL	DL
1	Total Tetra-Furans	21.69	3.455e3	4.049e3	2.873e2	3.872e2	0.74	NO	6.744e2	0.068373	0.068373	0.0185
2 1	Total Tetra-Furans	22.61	2.273e3	2.436e3	2.021e2	2.437e2	0.83	NO	4.458e2	0.045199	0.045199	0.0185
3	Total Tetra-Furans	23.10	1.416e3	1.789e3	1.094e2	1.404e2	0.78	NO	2.499e2	0.025331	0.025331	0.0185
4	Total Tetra-Furans	24.24	2.229e3	3.315e3	2.057e2	2.995e2	0.69	NO	5.052e2	0.051216	0.051216	0.0185
5	Total Tetra-Furans	24.69	9.042e3	1.100e4	5.817e2	7.350e2	0.79	NO	1.317e3	0.13350	0.13350	0.0185
67	Total Tetra-Furans	25.59	2.020e3	3.888e3	1.412e2	1.848e2	0.76	NO	3.260e2	0.033055	0.033055	0.0185
7 5	2,3,7,8-TCDF	25.70	1.024e4	1.139e4	6.402e2	7.420e2	0.86	NO	1.382e3	0.14013	0.14013	0.0185

Penta-Furans function 1

٠	Name	RT;	m1 Height	m2 Height	m1 Resp	m2 Resp	(RA)	n/y_	Resp_	[Conc.	EMPC	DL
1,7	1st Func. Penta-Furans	27.19	1.247e4	6.596e3	7.057e2	3.961e2	1.78	NO	1.102e3	0.10461	0.10461	0.00749

Penta-Furans

Name	RT	m1 Height {	m2 Height	m1 Resp	m2 Resp	(RA_Ln/yjt	_Resp_^	Conc.	EMPC	DL
1 Total Penta-Furans	28.83	8.744e3					1.134e3	0.10771	0.10771	0.0290
2 1,2,3,7,8-PeCDF	29.81	1.608e4	1.056e4	7.921e2	5.298e2	1.50 NO	1.322e3	0.12183	0.12183	0.0287
3 Total Penta-Furans	30.07	6.697e3	4.269e3	3.363e2	2.331e2	1.44 NO	5.694e2	0.054060	0.054060	0.0290
431 2.3.4.7.8-PeCDF	30.88	1.119e4	8.564e3	5.753e2	4.415e2	1.30 YES	1.017e3	0.00000	0.083333	0.0264

Hexa-Furans

Name:	RT	m1 Height	m2 Height ; j	m1 Resp	m2 Resp	, RA	u/y]	Resp	Conc.	*EMPC	DL
1 Total Hexa-Furans	32.21	5.269e3	2.708e3	1.746e2	1.418e2	1.23	NO	3.164e2	0.041417	0.041417	0.0246
2. Total Hexa-Furans	32.37	1.072e4	9.354e3	5.617e2	4.390e2	1.28	NO	1.001e3	0.13097	0.13097	0.0246
3 Total Hexa-Furans	33.00	1.161e4	1.048e4	6.172e2	5.144e2	1.20	NO	1.132e3	0.14810	0.14810	0.0246
41. 1,2,3,4,7,8-HxCDF	33.46	9.813e3	8.270e3	5.924e2	4.241e2	1.40	NO	1.017e3	0.13340	0.13340	0.0239
1,2,3,6,7,8-HxCDF	33.61	4.459e3	3.935e3	2.376e2	2.081e2	1.14	NO	4.457e2	0.055495	0.055495	0.0221
6 2,3,4,6,7,8-HxCDF	34.28	2.254e3	2.489e3	1.442e2	1.096e2	1.32	NO	2.538e2	0.032718	0.032718	0.0245
7 1,2,3,7,8,9-HxCDF	35.26	3.577e3	2.752e3	9.439e1	8.411e1	1.12	NO	1.785e2	0.026135	0.026135	0.0294
81 Total Hexa-Furans	35.27	4.967e3	3.913e3	1.939e2	1.380e2	1.40	NO	3.318e2	0.043432	0.043432	0.0246

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Quantify Totals Report MassLynx 4.1 SCN815

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Dataset: U:\VG12.PRO\Results\201213R2\201213R2-8.qld

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Tuesday, December 15, 2020 11:16:41 AM Pacific Standard Time Tuesday, December 15, 2020 11:17:27 AM Pacific Standard Time

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Hepta-Furans

f Name	RT.	m1 Height	m2 Height ! [m1 Resp	m2 Resp	JIRA	ľu/λ1 ř	Resp	Conc.	EMPC	DL
1 1,2,3,4,6,7,8-HpCDF	36.84	2.036e4							0.50548		
2 Total Hepta-Furans	37.56	4.318e4	4.320e4	2.936e3	2.898e3	1.01	NO	5.834e3	1.1448	1.1448	0.0585

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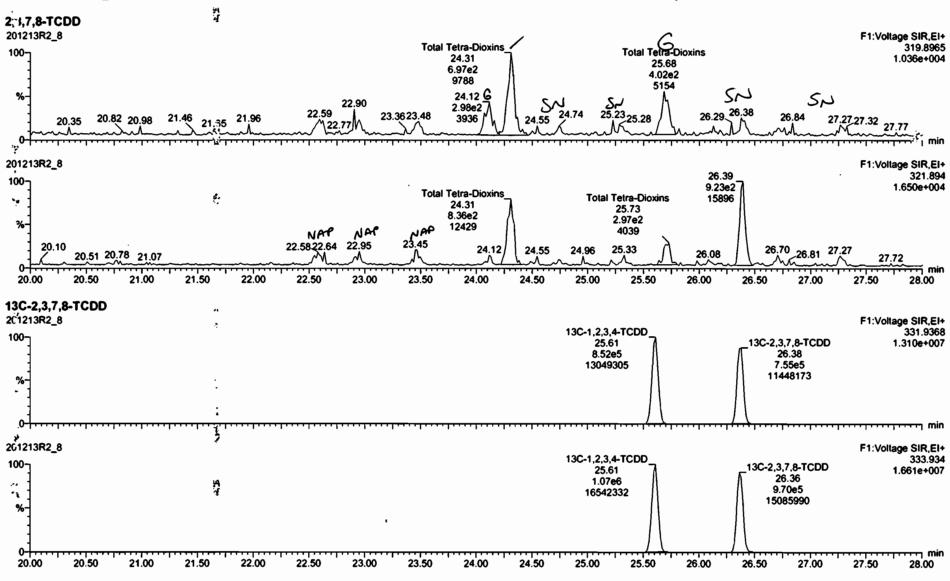
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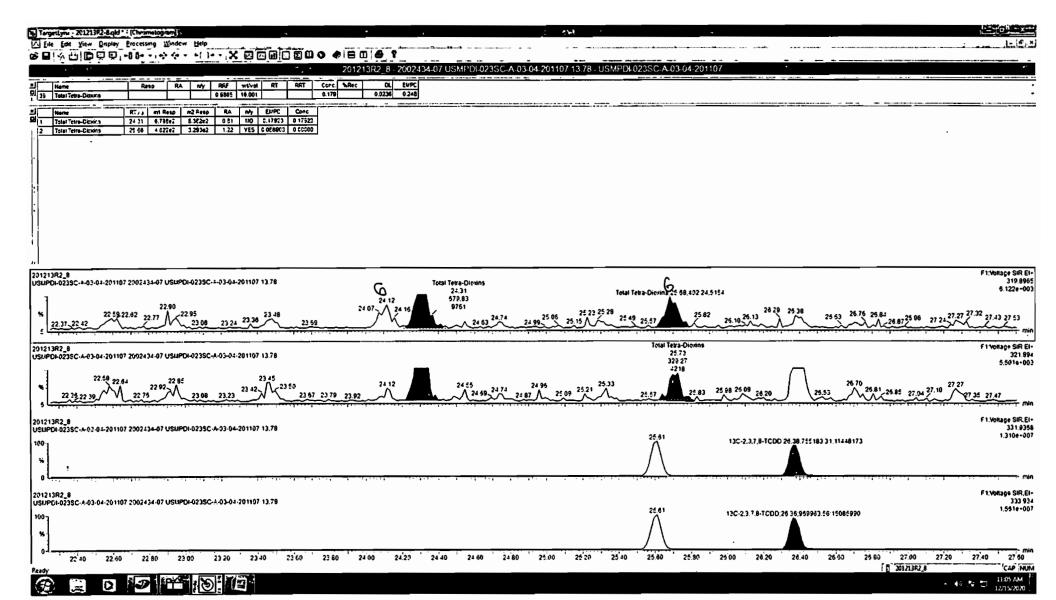
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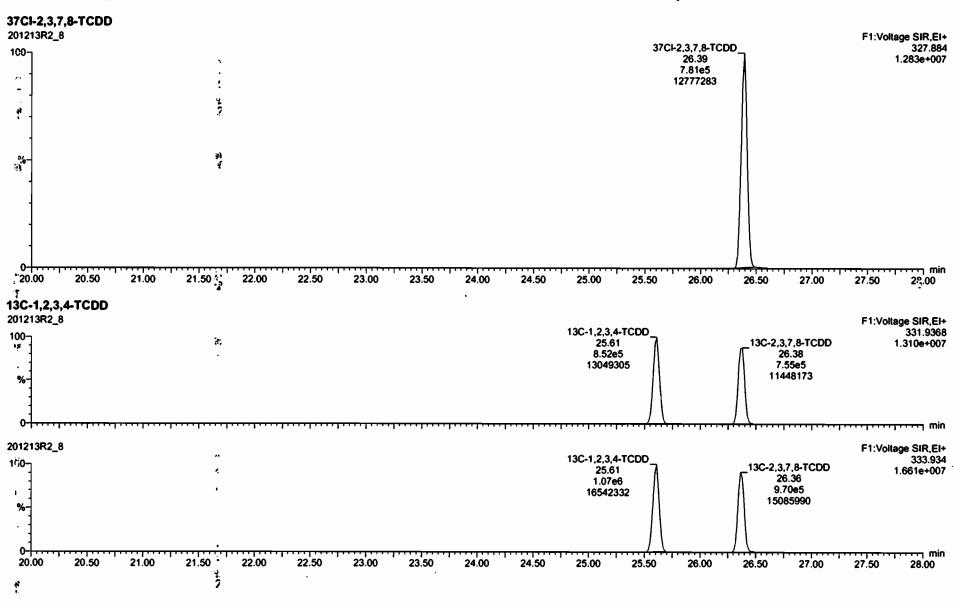
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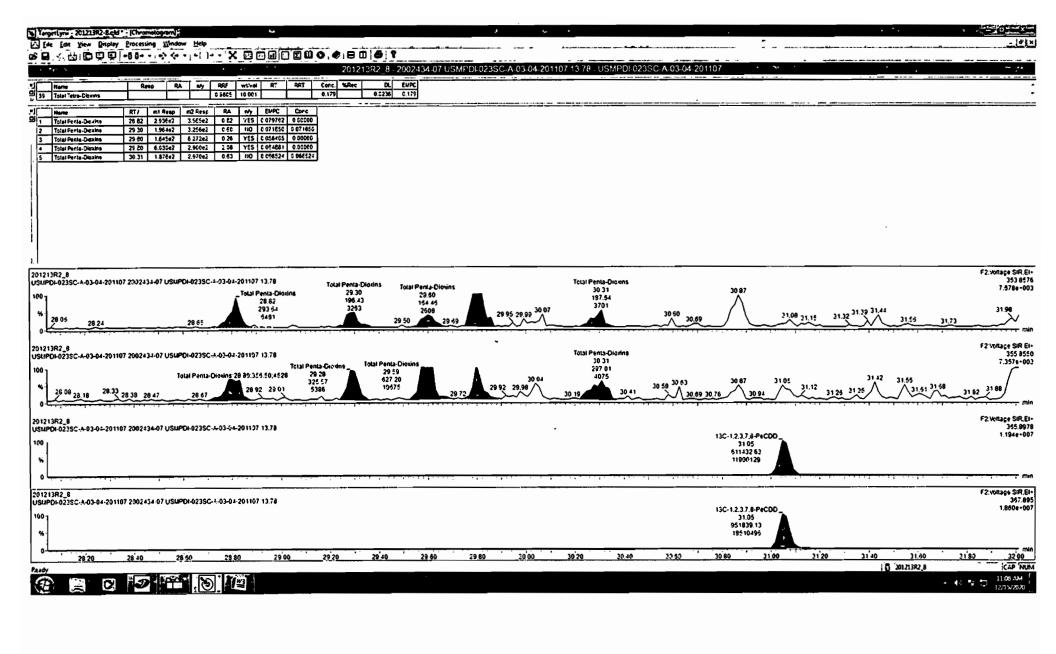
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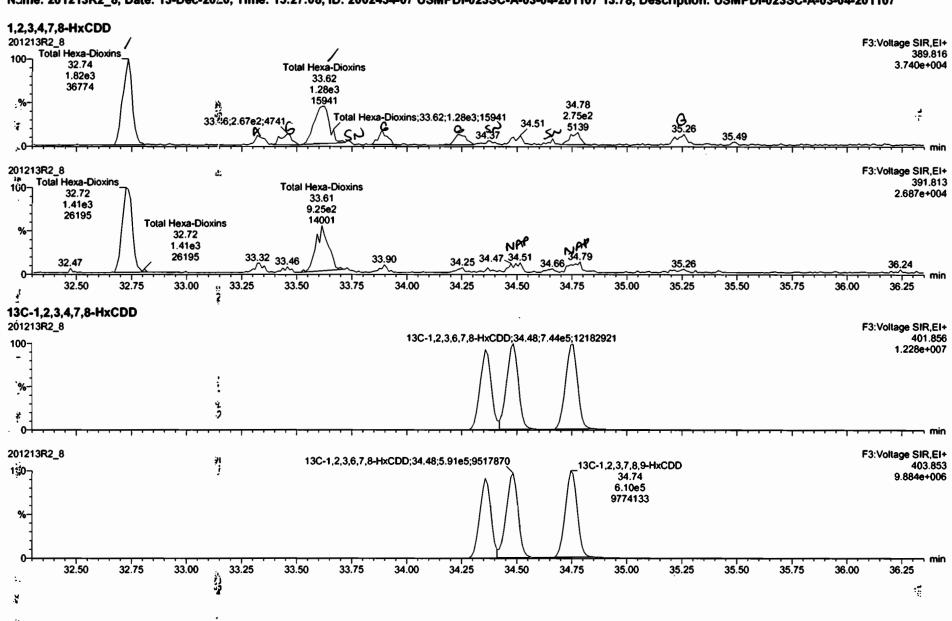
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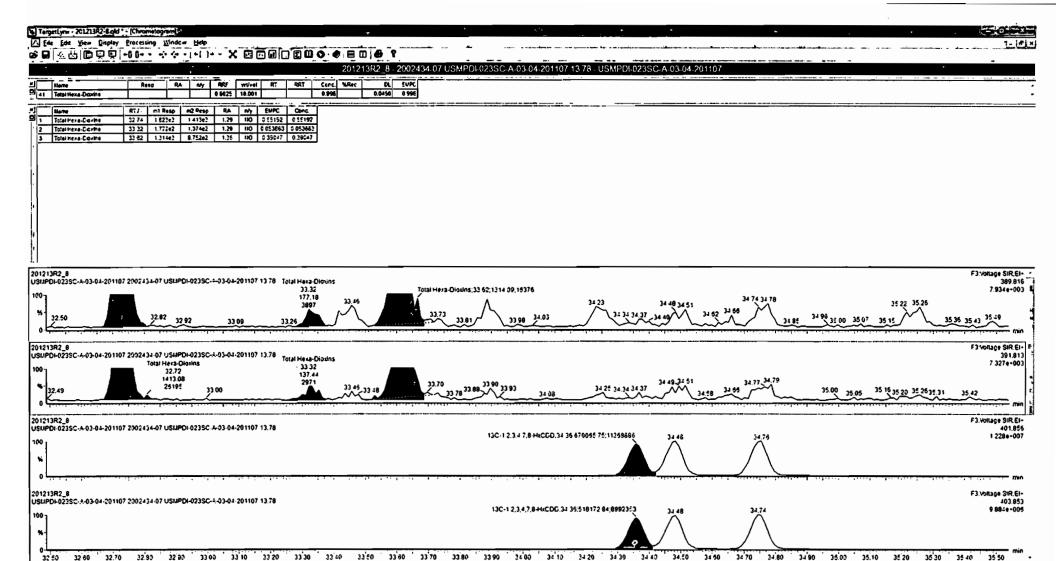
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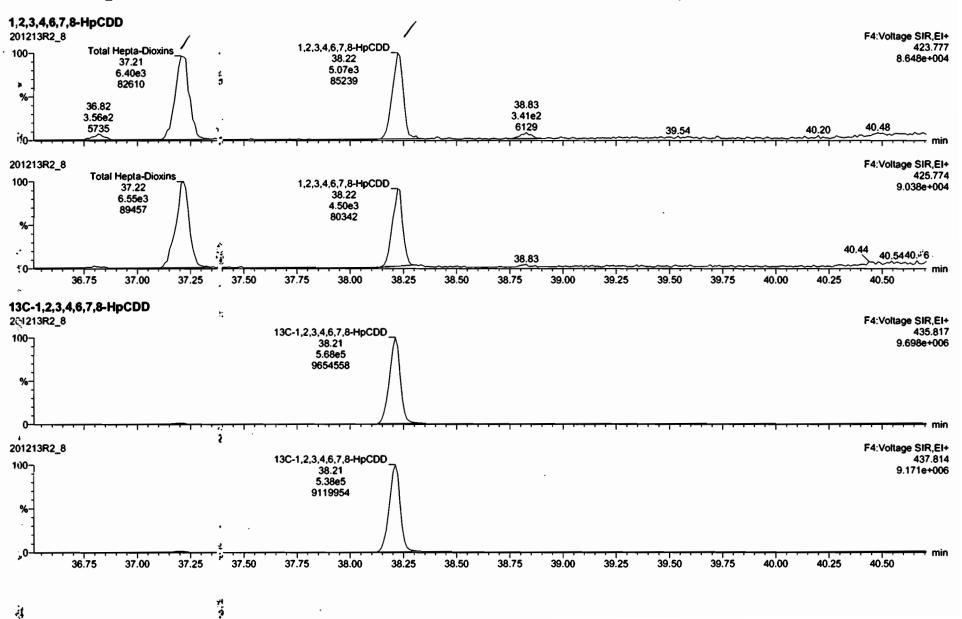
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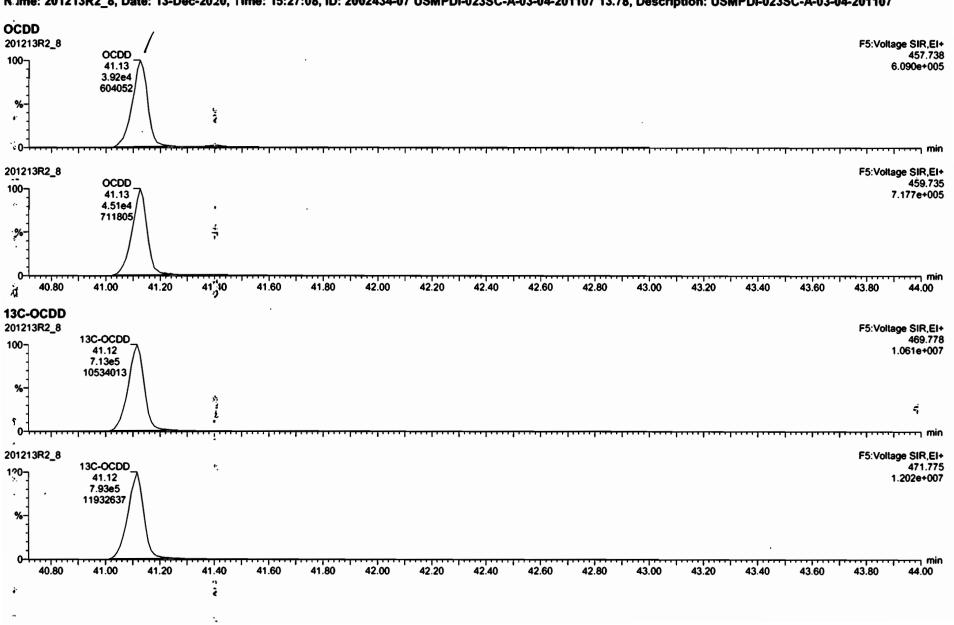
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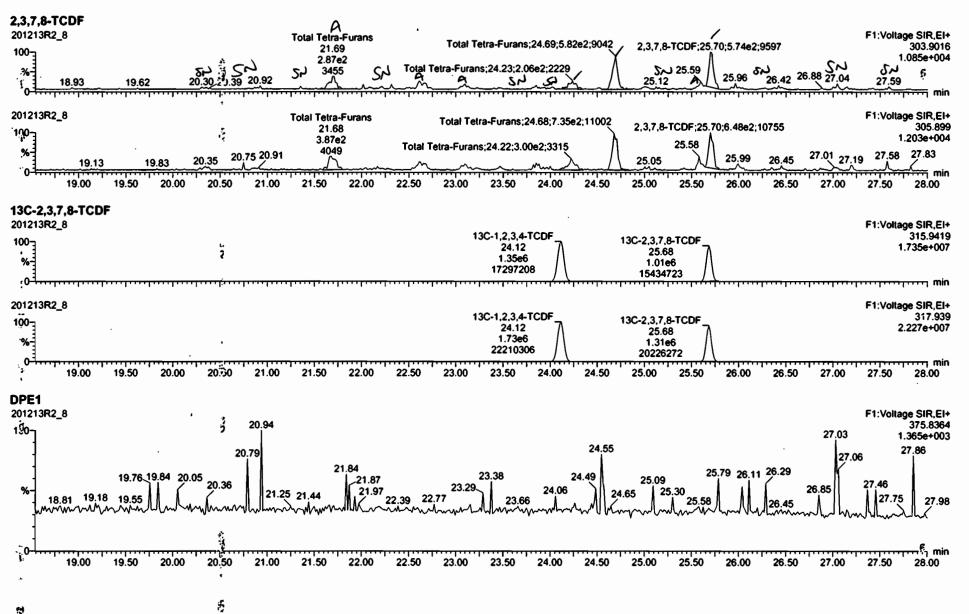


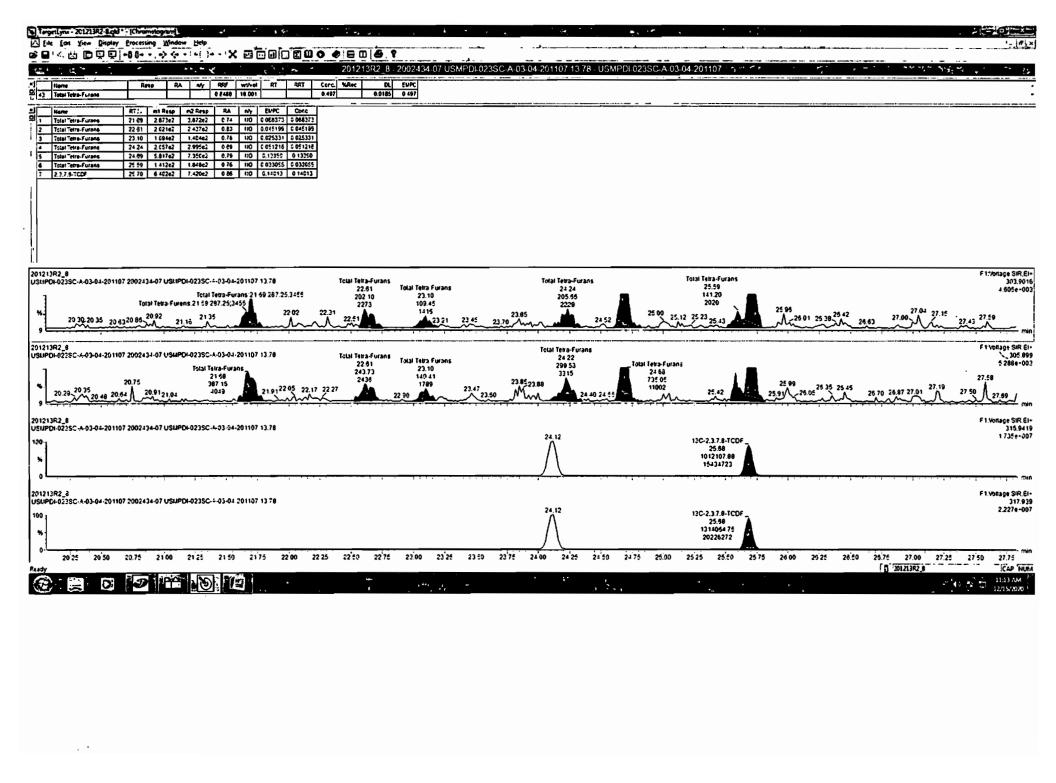
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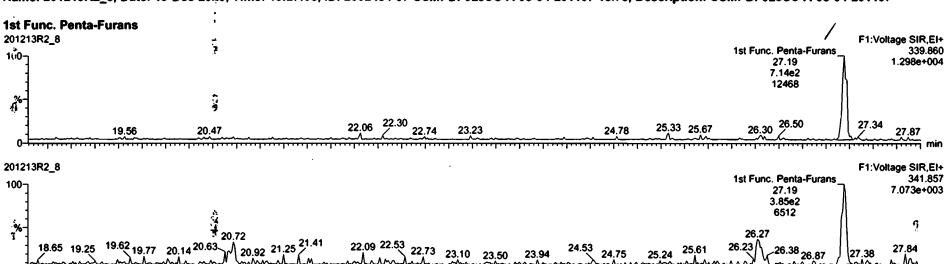
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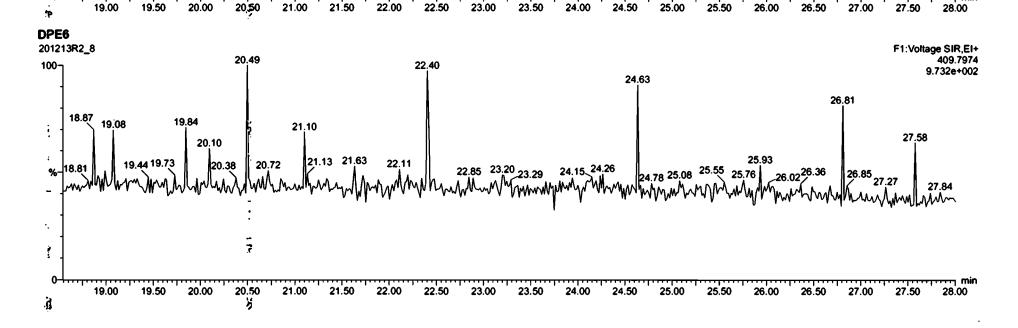
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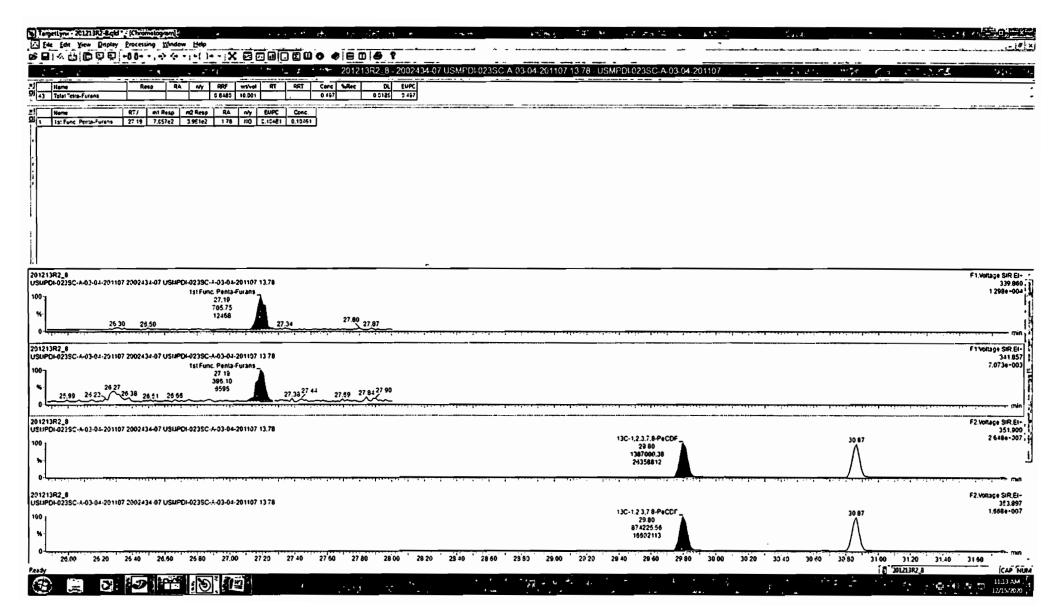
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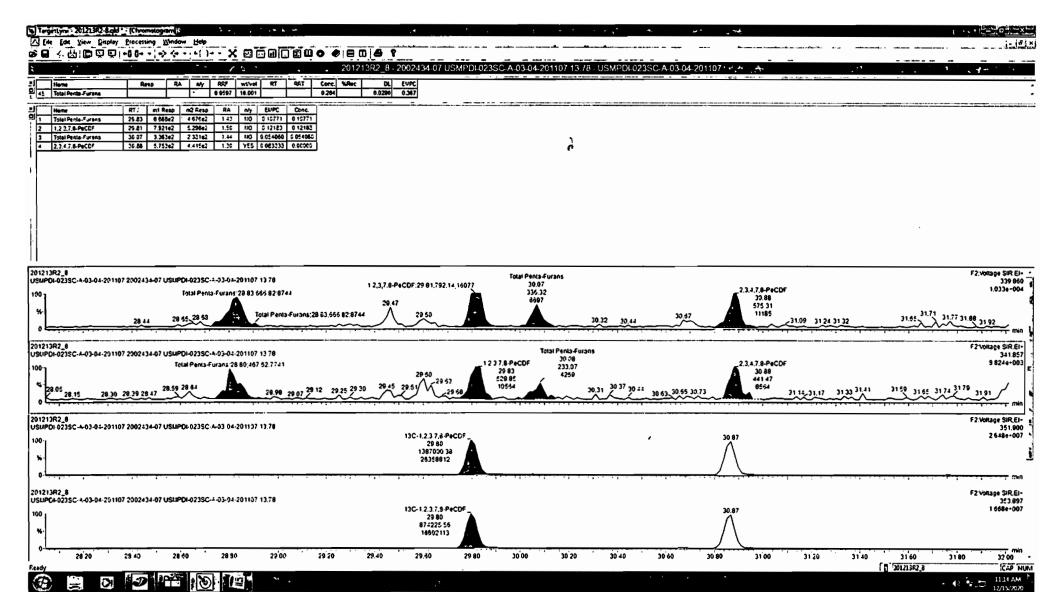
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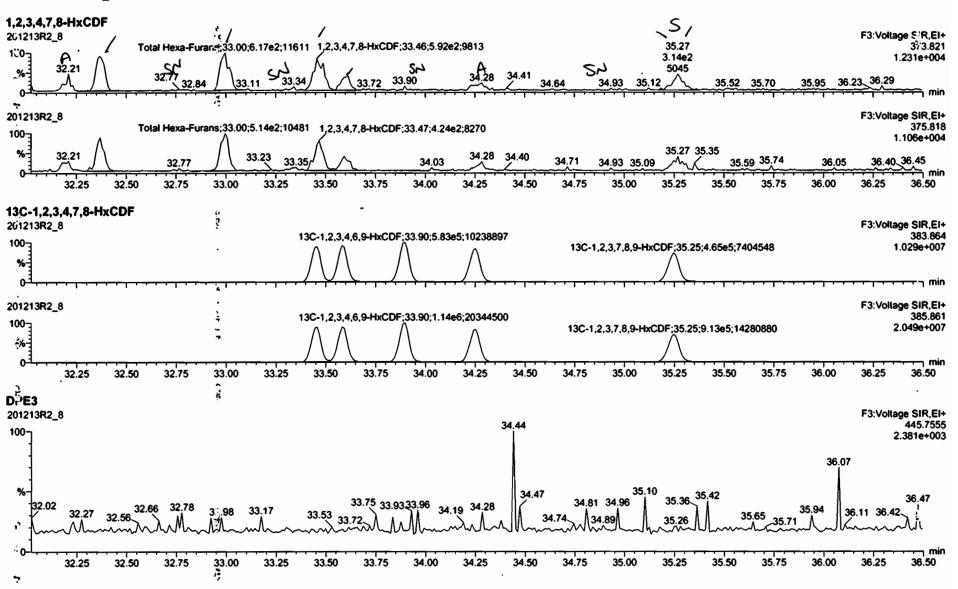
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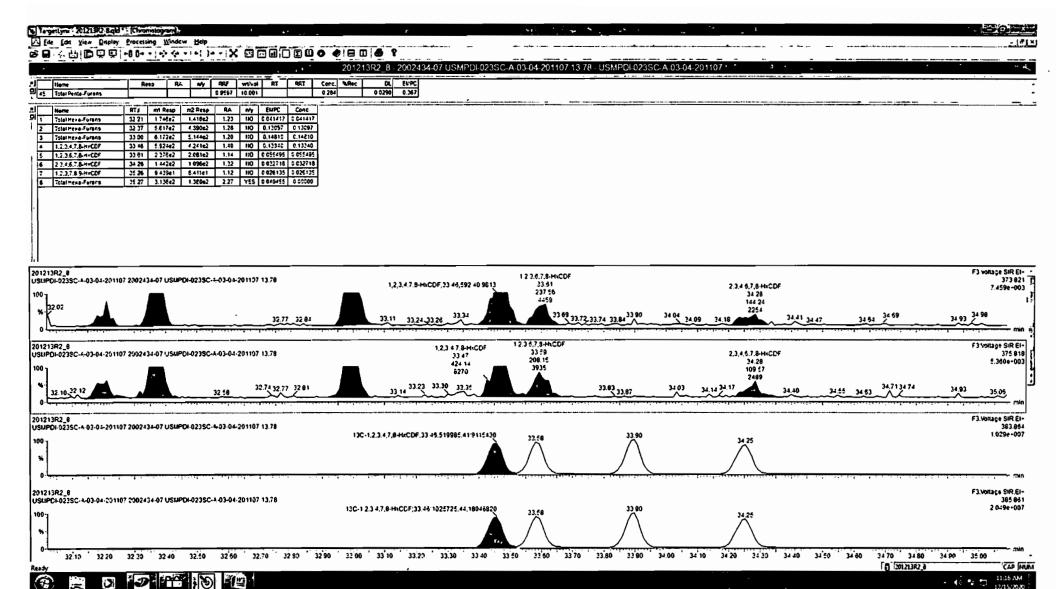
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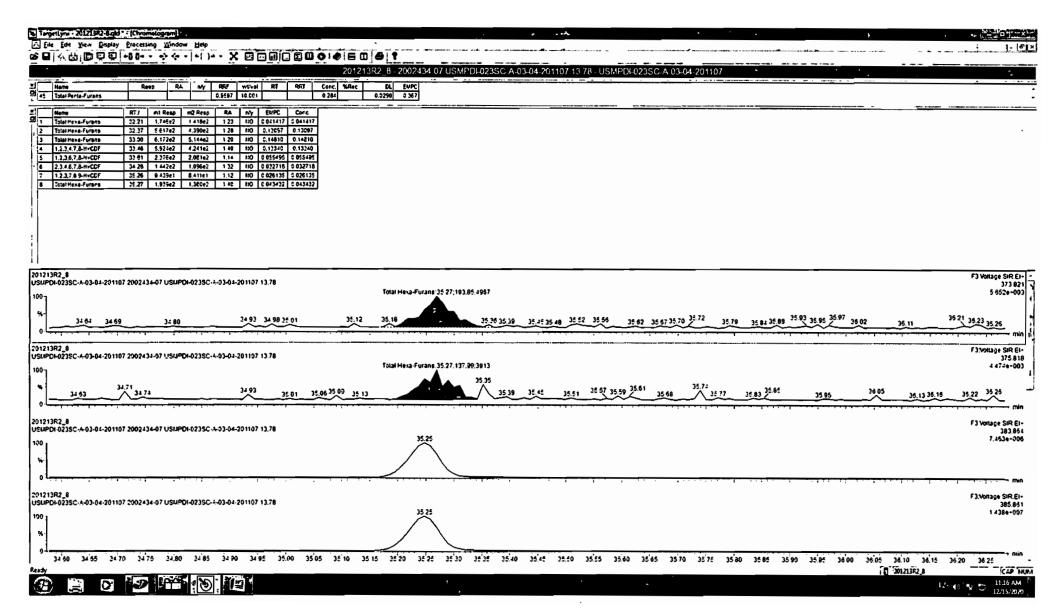




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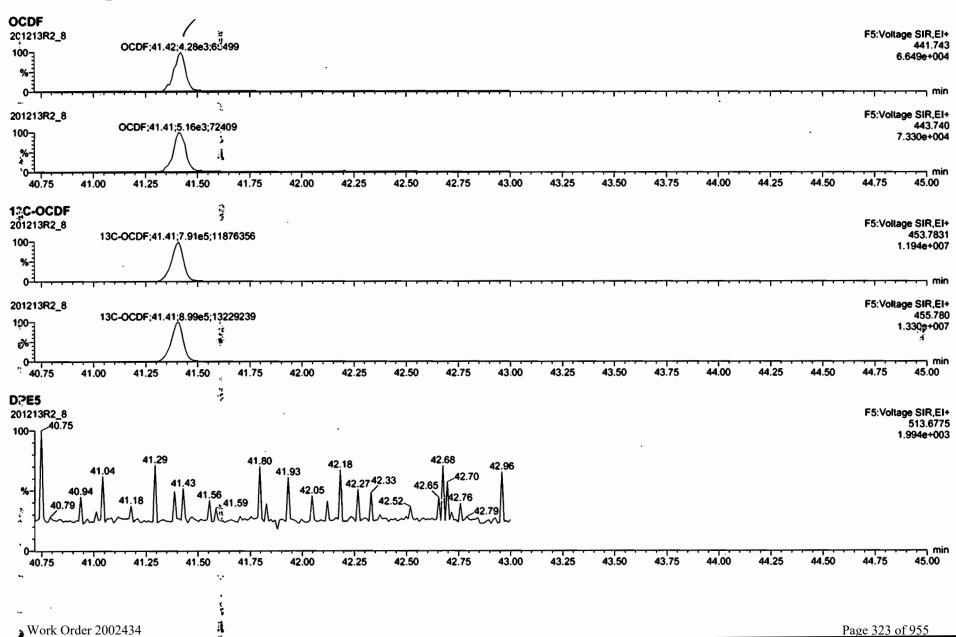
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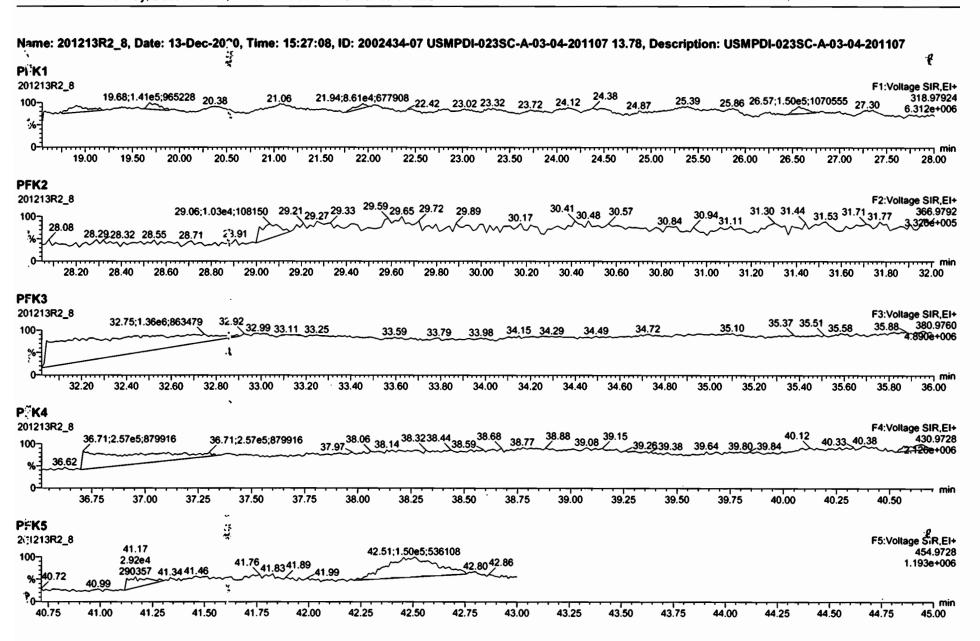


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Work Order 2002434

U:\VG12.PRO\Results\201213R2\201213R2-9.qld

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Tuesday, December 15, 2020 11:34:38 AM Pacific Standard Time

Printed:

Tuesday, December 15, 2020 11:35:24 AM Pacific Standard Time

GRB 12/15/2020

Method: U:\VG12.PRO\MethDB\1613rrt-12-11-20.mdb 11 Dec 2020 08:35:32

Calibration: U:\VG12.PR0\CurveDB\dbDIOXIN_1613vg12-12-03-20.cdb 04 Dec 2020 11:36:07

Name: 201213R2_9, Date: 13-Dec-2020, Time: 16:11:26, ID: 2002434-08 USMPDI-023SC-A-04-05-201107 11.74, Description: USMPDI-023SC-A-04-05-201107

# Namer	Resp	L.RA'	[_n/y	PRF.	£ wt/vol # }	Pred.RT	L RT	Pred.RRT,	RRT	Conc.	%Rec J	" » DU T	EMPC
1 2.3.7.8-TCDD	r, ec. , r, e r	•	NO	0.980	10.030	26.396		1.001				0.0227	
2 1,2,3,7,8-PeCDD			NO	0.932	10.030	31.079		1.001				0.0477	
3 1,2,3,4,7,8-HxCDD			NO	1.02	10.030	34.368		1.001				0.0418	
4 1,2,3,6,7,8-HxCDD	4.68e2	1.31	NO	0.902	10.030	34.483	34.49	1.001	1.001	0.087166		0.0464	0.0872
5 1,2,3,7,8,9-HxCDD	1.21e3	1.06	NO	0.954	10.030	34.744	34.73	1.000	1.000	0.21486		0.0427	0.215
6 1,2,3,4,6,7,8-HpCDD	5.79e3	0.99	NO	0.918	10.030	38.211	38.21	1.000	1.000	1.3165		0.0678	1.32
7 OCDO	4.29e4	0.87	NO	0.866	10.030	41.102	41.10	1.000	1.000	14.496		0.127	14.5
8 2.3,7.8-TCDF	5.40e2	0.80	NO	0.848	10.030	25.672	25.70	1.000	1.001	0.050077		0.0121	0.0501
9 1.2.3.7.8-PeCDF	6.42e2	1.63	NO	0.960	10.030	29.799	29.80	1.000	1.000	0.063846		0.0208	0.0638
10 10 2,3,4,7,8-PeCDF	3.81e2	1.46	NO	1.07	10.030	30.874	30.87	1.001	1.000	0.037164		0.0196	0.0372
11 1,2,3,4,7,8-HxCDF	3.77e2	1.28	NO	0.986	10.030	33.446	33.45	1.000	1.000	0.055445		0.0211	0.0554
12 1,2,3,6,7,8-HxCDF			NO	1.04	10.030	33.592		1.001				0.0210	
13 3, 3 13 2,3,4,6,7,8-HxCDF			NO	1.02	10.030	34.253		1.001				0.0232	
14 7 14 1,2,3,7,8,9-HxCDF	3.17e2	1.04	YES	0.991	10.030	35.248	35.24	1.000	1.000	0.059802		0.0273	0.0469
15 2 15 1,2,3,4,6,7,8-HpCDF			NO	1.05	10.030	36.813		1.000				0.0279	
16 1,2,3,4,7,8,9-HpCDF			NO	1.18	10.030	38.828		1.000				0.0226	
17 17 OCDF	2.80e2	1.28	YES	0.896	10.030	41.396	41.39	1.000	1.000	0.082/171		0.0289	0.0682
18 13C-2,3,7,8-TCDD	1.80e6	0.78	NO	1.06	10.030	26.368	26.36	1.030	1.030	193.46	97.0	0.0735	
19 13C-1,2,3,7,8-PeCDD	1.39e6	0.64	NO	0.785	10.030	31.211	31.05	1.219	1.213	201.02	101	0.118	
20 13C-1,2,3,4,7,8-HxCDD	1.07e6	1.27	NO	0.621	10.030	34.337	34.35 🗸	1.014	1.014	219.04	110	0.282	
21 13C-1,2,3,6,7,8-HxCDD	1.19e6	1.29	NO	0.734	10.030	34.459	34.46	1.017	1.017	206.21	103	0.238	
22 13C-1,2,3,7,8,9-HxCDD	1.18e6	1.25	NO	0.723	10.030	34.743	34.73	1.026	1.025	208.45	105	0.242	
23 23 13C-1,2,3,4,6,7,8-HpCDD	9.56e5	1.03	NO	0.568	10.030	38.243	38.20	1.129	1.128	214.65	108	0.692	
24 24 13C-OCDD	1.36e6	0.90	NO	0.496	10.030	41.180	41.09	1.216	1.213	350.54	87.9	0.388	
25 13C-2,3,7,8-TCDF	2.54e6	0.78	NO	0.919	10.030	25.667	25.67	1.003	1.003	195.43	98.0	0.102	
26 13C-1,2,3,7,8-PeCDF	2.09e6	1.62	NO	0.715	10.030	29.921	29.80	1.169	1.164	206.79	104	0.219	
27 13C-2,3,4,7,8-PeCDF	1.91e6	1.60	NO	0.689	10.030	31.008	30.85	1.212	1.205	196.65	98.6	0.227	
28 13C-1,2,3,4,7,8-HxCDF	1.38e6	0.51	NO	0.873	10.030	33.442	33.44 /	0.987	0.987	200.78	101	0.303	
29 13C-1,2,3,6,7,8-HxCDF	1.37e6	0.51	NO	0.933	10.030	33.571	33.57	0.991	0.991	186.65	93.6	0.283	
30 13C-2,3,4,6,7,8-HxCDF	1.33e6	0.51	NO	0.843	10.030	34.238	34.23	1.011	1.011	200.46	101	0.314	
31 13C-1,2,3,7,8,9-HxCDF	1.25e6	0.51	NO	0.780	10.030	35.238	35.24	1.040	1.040	204.97	103	0.339	

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Tuesday, December 15, 2020 11:34:38 AM Pacific Standard Time Tuesday, December 15, 2020 11:35:24 AM Pacific Standard Time

Name: 201213R2_9, Date: 13-Dec-2020, Time: 16:11:26, ID: 2002434-08 USMPDI-023SC-A-04-05-201107 11.74, Description: USMPDI-023SC-A-04-05-201107

	L# Name	711 E	Resp	LI PAY	L'yn/y.	RRF	CMINO	Pred.RT	RIV	Pred.RRT	RRT,	Conc. Li	%Rec	DL tr.	EMPC
32	32 13C-1,2,3,4,6,	7,8-HpCDF	9.16e5	√0.43	NO	0.726	10.030	36.813	36.79	1.087	1.086	160.76	80.6	0.362	
33 -0	™ 33 13C-1,2,3,4,7,8	3,9-HpCDF	7.74e5	₹0.43	NO	0.491	10.030	38.822	38.82	1.146	1.146	200.93	101	0.535	
34 9.	34 13C-OCDF		1.52e6	.0.87	NO	0.565	10.030	41.396	41.39	1.222	1.222	341.77	85.7	0.420	
35	35 37CI-2,3,7,8-T	CDD	8.60e5	*		1.22	10.030	26.363	26.38	1.030	1.031	80.236	101	0.0168	
36	36 13C-1,2,3,4-T	CDD	1.76e6	₩0.78	NO	1.00	10.030	25.640	25.59	1.000	1.000	199.40	100	0.0776	
371 + 1	37 13C-1,2,3,4-T	CDF	2.82e6	.0.79	NO	1.00	10.030	24.130	24.10	1.000	1.000	199.40	100	0.0938	
38 " 5"	38 13C-1,2,3,4,6,9	9-HxCDF	1.56e6	1 0.51	NO	1.00	10.030	33.920	33.88	1.000	1.000	199.40	100	0.264	
39: 1	39 Total Tetra-Dio	ixins		63%.4		0.980	10.030	24.620		0.000		0.31254		0.0227	0.480
40	40 Total Penta-Di	oxins		<i>::</i> •		0.932	10.030	29.960		0.000		0.41641		0.0477	0.490
41	, 41 Total Hexa-Dio	xins		.10. 16		0.902	10.030	33.635		0.000		2.2474		0.0462	2.25
42	42 Total Hepta-Di	oxins				0.918	10.030	37.640		0.000		3.8364		0.0678	3.84
43,	43 Total Tetra-Fu	rans		200818		0.848	10.030	23.610		0.000		0.14717		0.0121	0.147
44	44 1st Func. Pent	a-Furans				0.960	10.030	26.930		0.000				0.00344	
45	45 Total Penta-Fu	rans		43 A. 2417		0.960	10.030	29.275		0.000		0.10101		0.0213	0.139
46	46 Total Hexa-Fu	rans		N 256 W		1.02	10.030	33.555		0.000		0.083726		0.0228	0.177
47	47 Total Hepta-Fu	irans				1.05	10.030	37.835	_	0.000				0.0148	

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Dataset:

U:\VG12.PRO\Results\201213R2\201213R2-9.qld

Last Altered: Printed:

Tuesday, December 15, 2020 11:34:38 AM Pacific Standard Time Tuesday, December 15, 2020 11:35:24 AM Pacific Standard Time

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Tetra-Dioxins

Name	RT.	m1 Height	m2 Height	m1 Resp	m2 Resp	JERAJI MY	. Resp∙	Conc.	EMPC	DLے
1 Total Tetra-Dioxins	22.93	1.315e3	2.204e3	1.202e2	1.666e2	0.72 NO	2.869e2	0.032447	0.032447	0.0227
2 Total Tetra-Dioxins	23.47	3.340e3	3.097e3	1.733e2	1.948e2	0.89 YES	0.000e0	0.00000	0.038988	0.0227
3 Total Tetra-Dioxins	24.29	1.586e4	1.726e4	1.026e3	1.451e3	0.71 NO	2.476e3	0.28009	0.28009	0.0227
4 Total Tetra-Dioxins	25.71	8.441e3	8.568e3	5.858e2	4.573e2	1.28 YES	0.000e0	0.00000	0.091551	0.0227
Total Tetra-Dioxins	27.27	1.858e3	3.362e3	1.307e2	1.965e2	0.67 NO	0.000e0	0.00000	0.037011	0.0227

Penta-Dioxins

Name 1	RT Tr	m1 Height j	m2 Height	m1 Resp1	m2 Resp	:[RA][n	/yjiResp.	Conc.	L. EMPC	DL_
Total Penta-Dioxins	28.82	4.479e3	6.081e3	2.590e2	4.181e2	0.62 N	NO 6.771e2	0.10430	0.10430	0.0477
2 Total Penta-Dioxins	29.28	6.967e3	1.101e4	4.159e2	6.179e2	0.67 N	NO 1.034e3	0.15926	0.15926	0.0477
31 - 125 Total Penta-Dioxins	29.78	9.444e3	4.833e3	5.105e2	2.935e2	1.74 Y	ES 0.000e0	0.00000	0.073700	0.0477
Total Penta-Dioxins	30.29	5.531e3	1.049e4	3.621e2	6.301e2	0.57	NO 9.922e2	0.15284	0.15284	0.0477

Hexa-Dioxins

Se after management	Name	RT	m1 Height	m2 Height	_m1 Resp	m2 Resp	, RA	n/y)	Resp:_	Conc.	EMPC	₹•_DF
1	Total Hexa-Dioxins	32.72	7.216e4	5.318e4	3.514e3	2.674e3	1.31	NO	6.188e3	1.1940	1.1940	0.0462
2.5	Total Hexa-Dioxins	33.31	4.603e3	3.191e3	2.365e2	1.765e2	1.34	NO	4.131e2	0.079697	0.079697	0.0462
3 , 2 6	Total Hexa-Dioxins	33.61	2.712e4	1.909e4	1.844e3	1.365e3	1.35	NO	3.209e3	0.61913	0.61913	0.0462
4	Total Hexa-Dioxins	33.71	2.913e3	2.283e3	1.422e2	1.304e2	1.09	NO	2.726e2	0.052604	0.052604	0.0462
5	1,2,3,6,7,8-HxCDD	34.49	4.795e3	3.618e3	2.654e2	2.030e2	1.31	NO	4.685e2	0.087166	0.087166	0.0464
6	1,2,3,7,8,9-HxCDD	34.73	9.825e3	1.052e4	6.261e2	5.889e2	1.06	NO	1.215e3	0.21486	0.21486	0.0427

Hepta-Dioxins

Name Total Hepta-Dioxins	RT	m1 Height	m2 Height	<u></u>	m2 Resp	1RA ₃	n/y	Resp	Conc.	EMPC	DL
Total Hepta-Dioxins	37.21	7.976e4	7.388e4	5.671e3	5.420e3	1.05	NO	1.109e4	2.5199	2.5199	0.0678
1,2,3,4,6,7,8-HpCDD	38.21		5.126e4					5.795e3			

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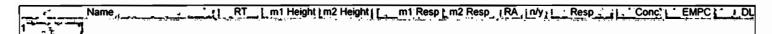
Tuesday, December 15, 2020 11:34:38 AM Pacific Standard Time Tuesday, December 15, 2020 11:35:24 AM Pacific Standard Time

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Tetra-Furans

Name	RT	m1 Height	m2 Height, L	m1 Resp	m2 Resp	[RA	lu/A.f	Resp	Conc.	EMPC	DL
1 Total Tetra-Furans	21.69	3.328e3	3.506e3	2.393e2	3.137e2	0.76	NO	5.530e2	0.051234	0.051234	0.0121
2 Total Tetra-Furans	24.68	3.756e3	4.103e3	2.223e2	2.726e2	0.82	NO	4.949e2	0.045857	0.045857	0.0121
3.7 2,3,7,8-TCDF	25.70	3.806e3	4.538e3	2.401e2	3.004e2	0.80	NO	5.405e2	0.050077	0.050077	0.0121

Penta-Furans function 1



Penta-Furans

1 Total Penta-Furans	i RT	m1 Height	m2 Height՝ լ	m1 Resp (m2 Resp	Į RA II	n/y 'E	Resp	Conc.	EMPC	DL.
1 Total Penta-Furans	28.83	3.801e3	4.913e3	2.235e2	2.250e2	0.99	YES	0.000e0	0.00000	0.038178	0.0213
2 1.2.3.7.8-PeCDF	29.80	7.717e3	5.141e3	3.982e2	2.439e2	1.63	NO	6.421e2	0.063846	0.063846	0.0208
3: \$2.7 2,3,4,7,8-PeCDF	30.87	6.746e3	2.717e3	2.259e2	1.546e2	1.46	NO_	3.806e2	0.037164	0.037164	0.0196

Hexa-Furans

		Name -	all RT "IL	m1 Height	m2 Height	m1 Resp	m2 Resp	'RA	[n/y.] L	Respr⊬	Conc.	- EMPC	- : DL
ĮĪ,		Total Hexa-Furans	32.37	2.444e3	1.787e3	1.130e2	7.948e1	1.42	NO	1.925e2	0.028281	0.028281	0.0228
2		Total Hexa-Furans	32. <u>9</u> 9	2.106e3	3.337e3	1.087e2	1.222e2	0.89	YES	0.000e0	0.00000	0.028850	0.0228
3	* ~ .	1,2,3,4,7,8-HxCDF	33.45	5.700e3	3.744e3	2.118e2	1.653e2	1.28	NO	3.771e2	0.055445	0.055445	0.0211
4		1,2,3,7,8,9-HxCDF	35.24	3.124e3	4.845e3	1.617e2	1.549e2	1.04	YES	3.166e2	0.00000	0.046873	0.0273
5		Totat Hexa-Furans	35.28	2.224e3	2.443e3	6.888e1	4.998e1	1.38	NO	0.000e0	0.00000	0.017461	0.0228

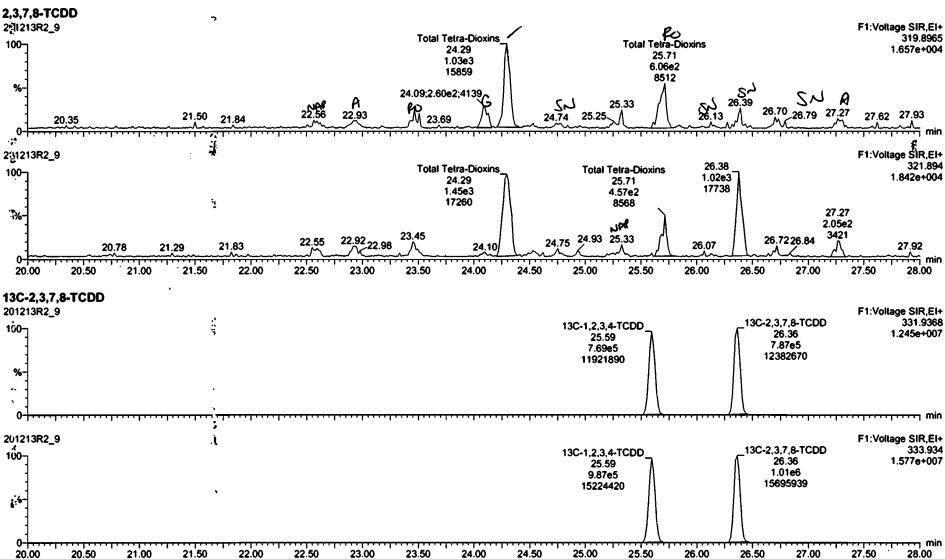
Hepta-Furans

Name Name	RT m1 Height m2 Height	m1 Resp t m2 Resp RA in/y	Resp# til. Conc.	-EMPC DL
1				

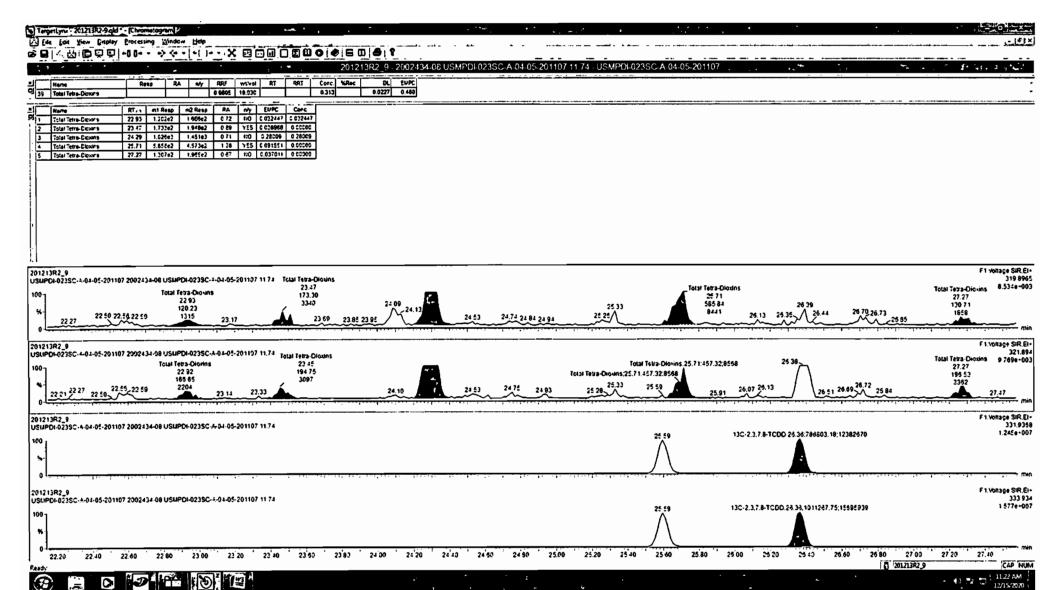
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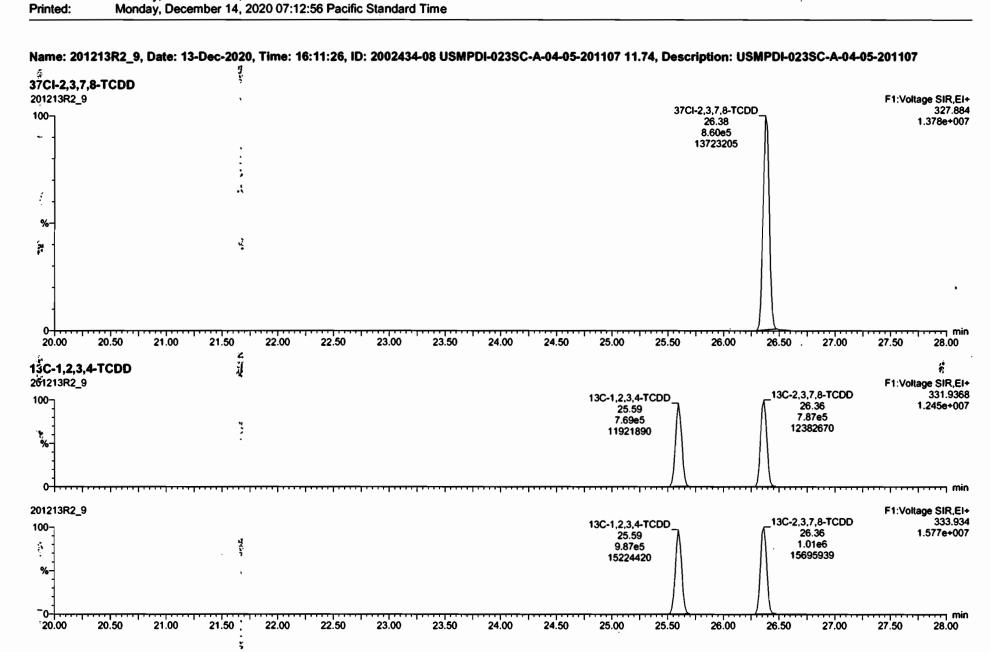
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28.20

28.40

28.60

28.80

29.00

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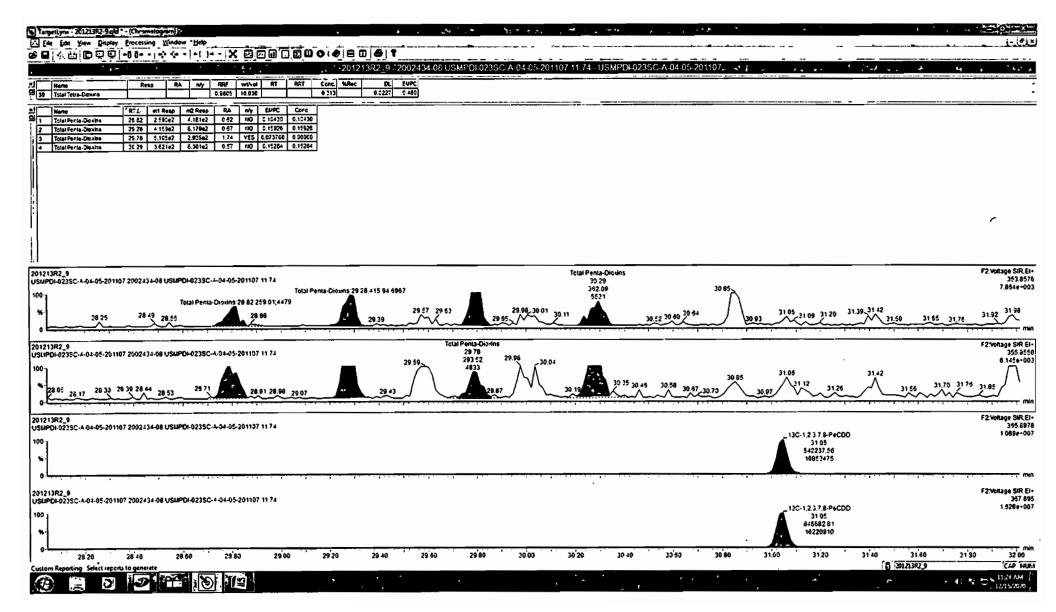
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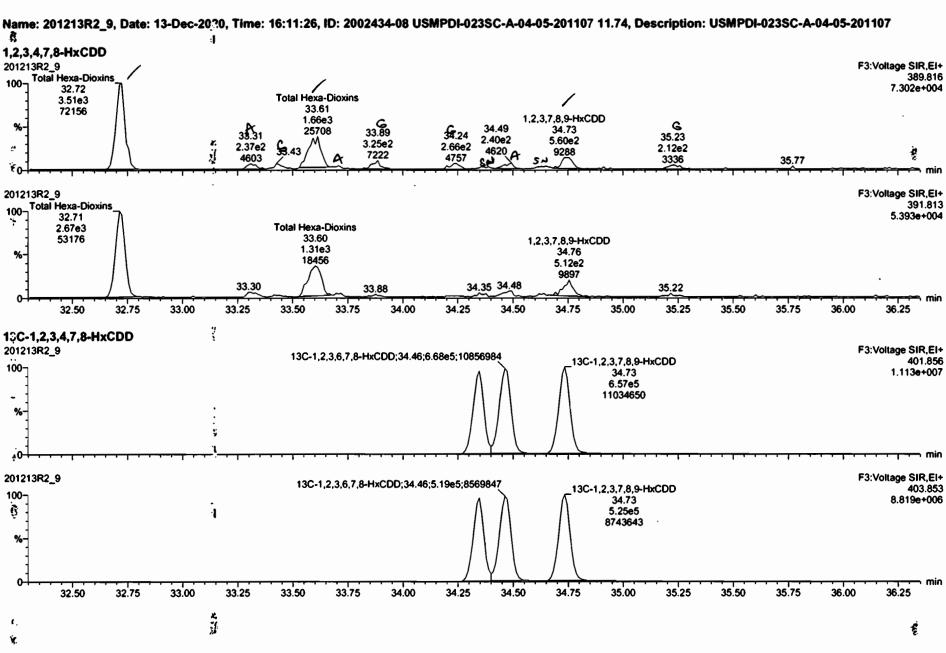
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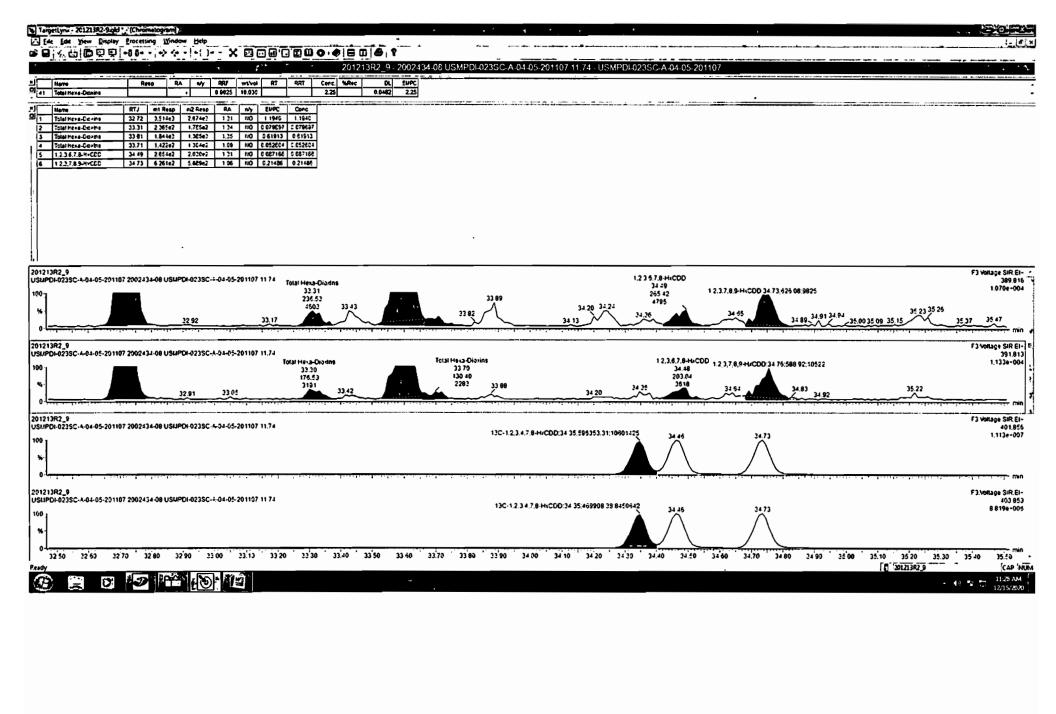
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32.00



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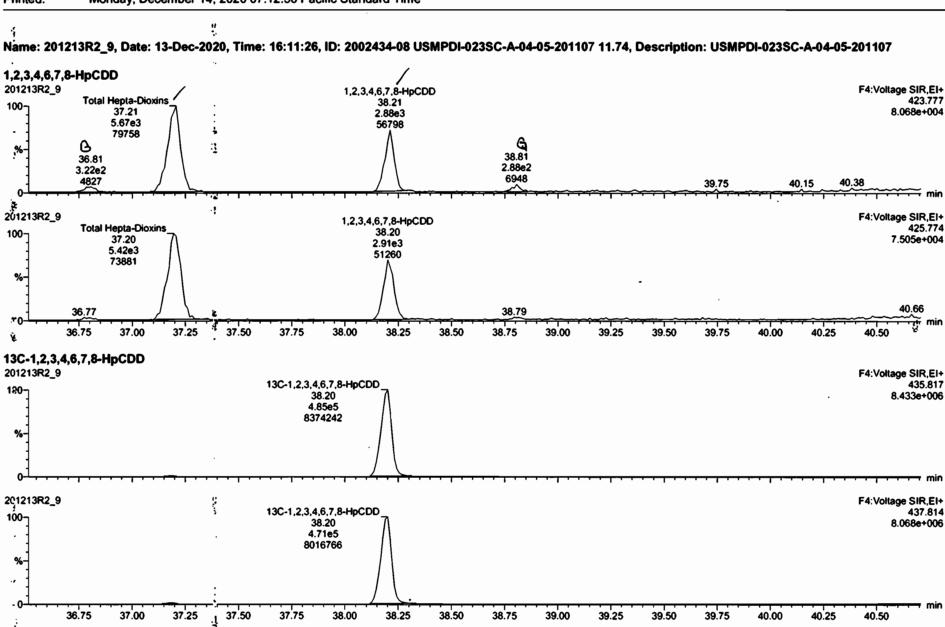




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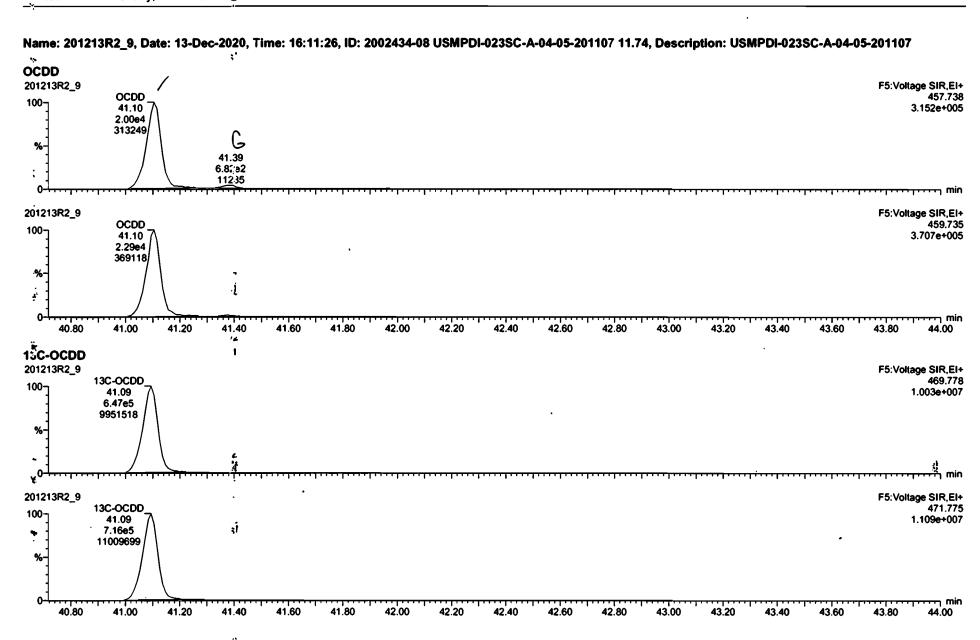
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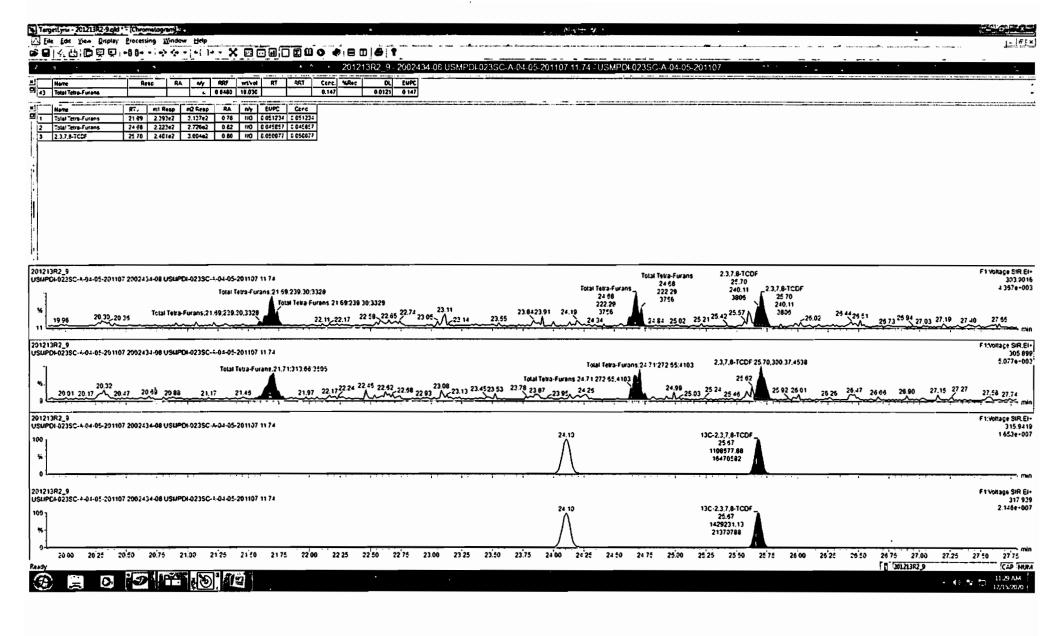
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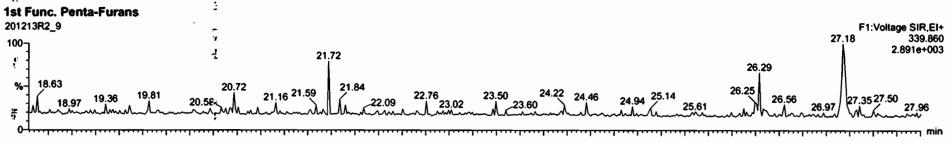
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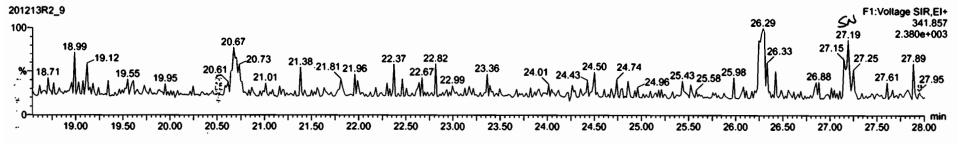
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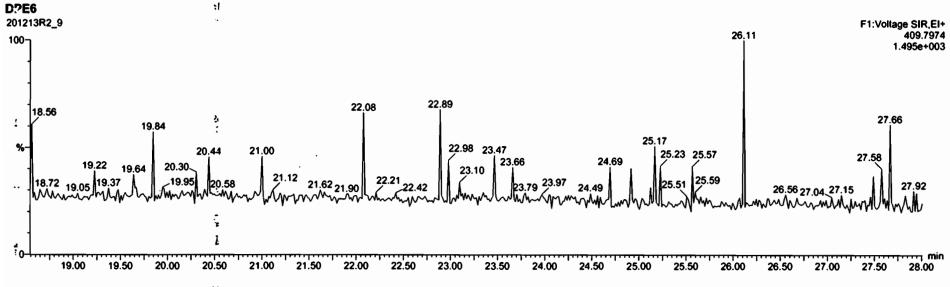
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Monday, December 14, 2020 07:01:44 Pacific Standard Time Monday, December 14, 2020 07:12:56 Pacific Standard Time

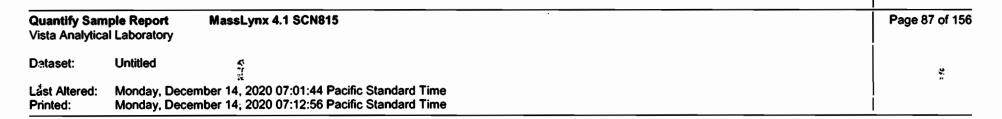




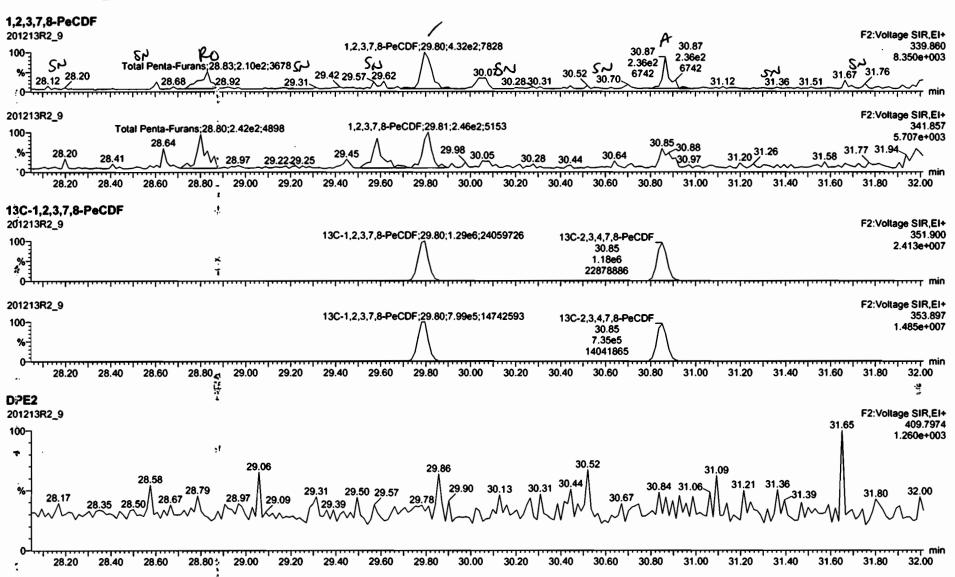


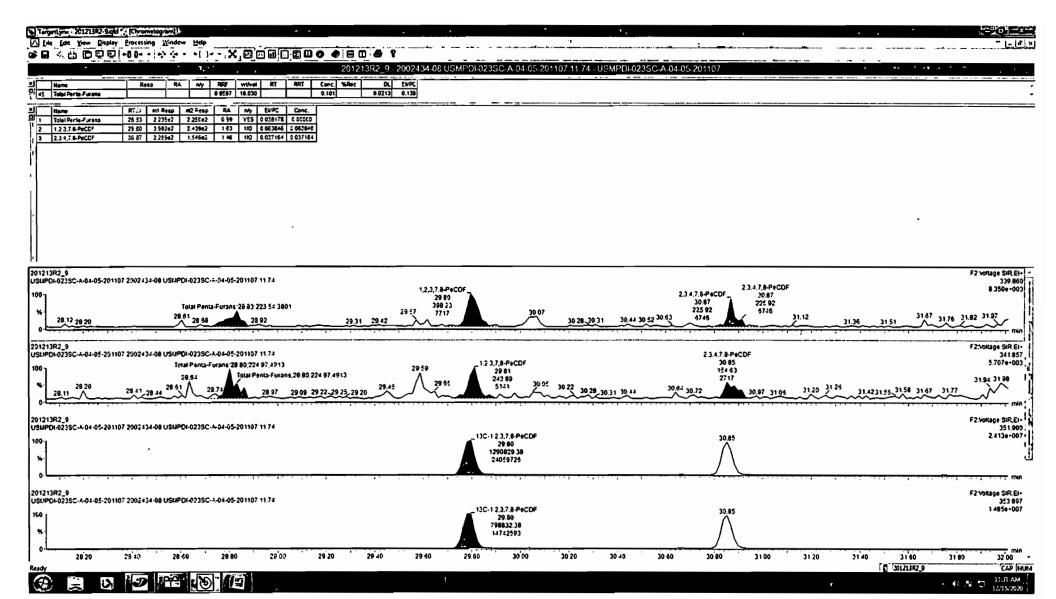


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Name: 201213R2_9, Date: 13-Dec-2020, Time: 16:11:26, ID: 2002434-08 USMPDI-023SC-A-04-05-201107 11.74, Description: USMPDI-023SC-A-04-05-201107





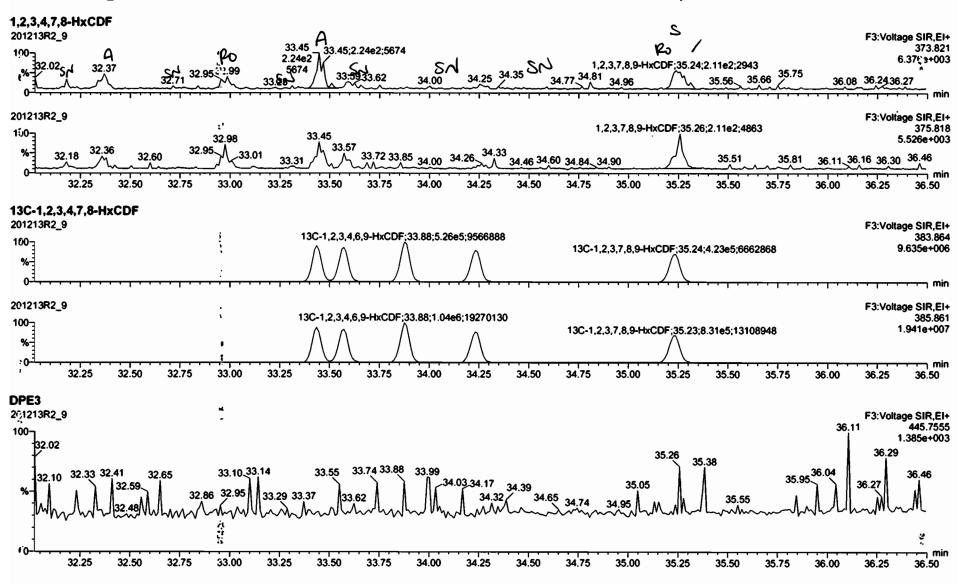
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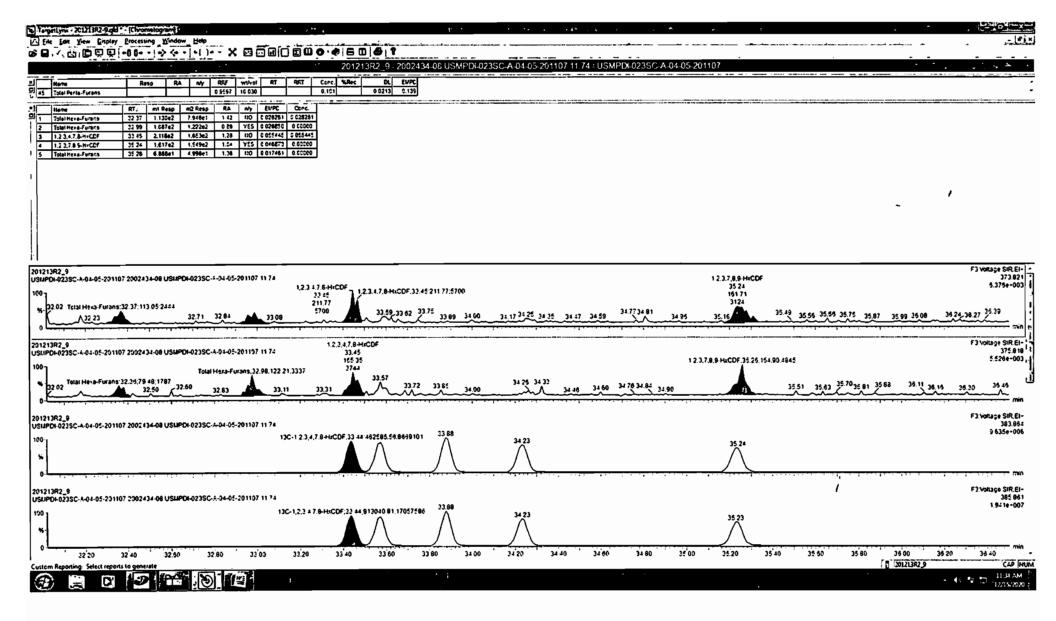
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Monday, December 14, 2020 07:01:44 Pacific Standard Time Monday, December 14, 2020 07:12:56 Pacific Standard Time

Name: 201213R2_9, Date: 13-Dec-2020, Time: 16:11:26, ID: 2002434-08 USMPDI-023SC-A-04-05-201107 11.74, Description: USMPDI-023SC-A-04-05-201107

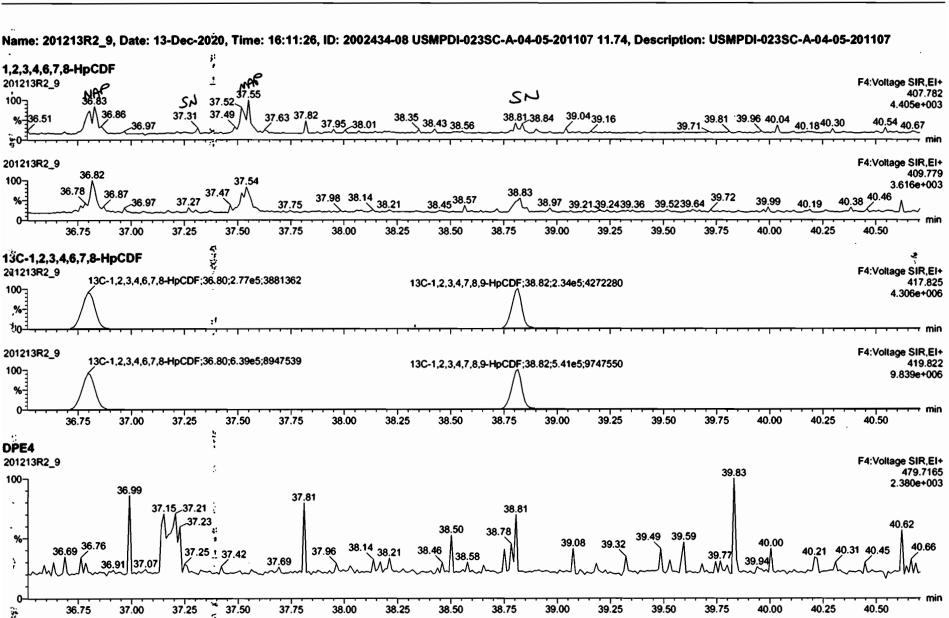




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Untitled

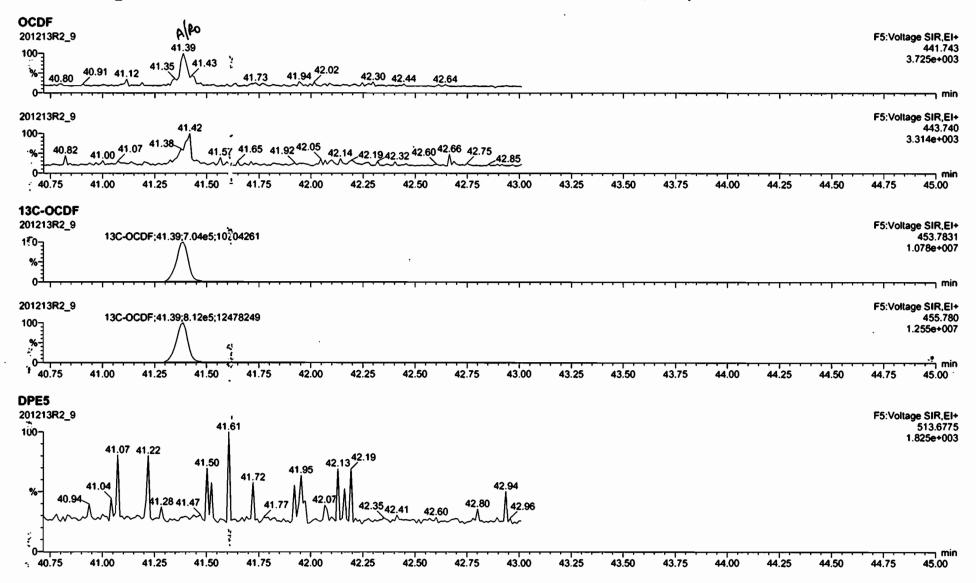
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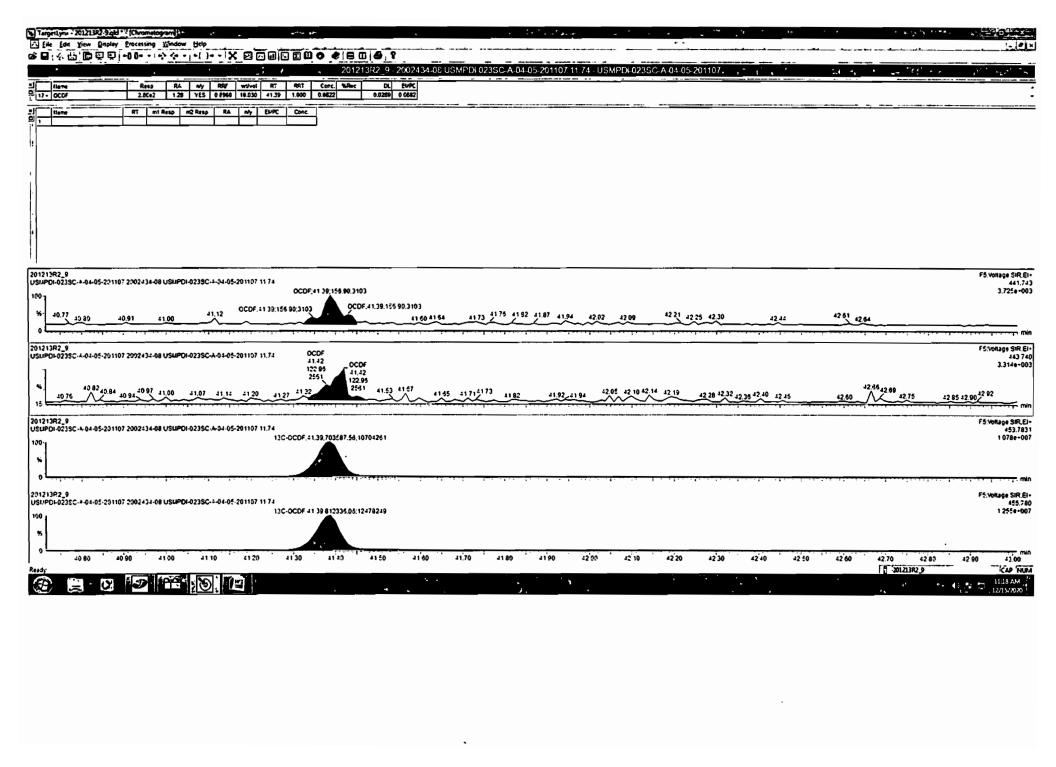


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Name: 201213R2_9, Date: 13-Dec-2020, Time: 16:11:26, ID: 2002434-08 USMPDI-023SC-A-04-05-201107 11.74, Description: USMPDI-023SC-A-04-05-201107





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Dataset:

U:\VG12.PRO\Results\201213R2\201213R2-10.qld

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Tuesday, December 15, 2020 11:47:35 AM Pacific Standard Time

GPB 12/15/2020

Method: U:\VG12.PRO\MethDB\1613rrt-12-11-20.mdb 11 Dec 2020 08:35:32

Calibration: U:\VG12.PRO\CurveDB\dbDIOXIN_1613vg12-12-03-20.cdb 04 Dec 2020 11:36:07

Name: 201213R2_10, Date: 13-Dec-2020, Time: 16:55:42, ID: 2002434-09 USMPDI-1023SC-A-02-03-201107 13.3, Description: USMPDI-1023SC-A-02-03-201107

# Name	Resp	RA	_ n/y	RRF	r wt/vol		La RT I	Pred.RRT	_RRT_	Conc.	_%Rec_≱	DL {	₹ EMP
1 2,3,7,8-TCDD			NO	0.980	10.068	26.396		1.001				0.0183	
2 1,2,3,7,8-PeCDD			NO	0.932	10.068	31.079		1.001				0.0383	
3 1,2,3,4,7,8-HxCDD			NO	1.02	10.068	34.368		1.001				0.0351	
4 1,2,3,6,7,8-HxCDD	6.81e2	1.10	NO	0.902	10.068	34.483	34.48	1.001	1.001	0.12850		0.0366	0.12
5 1,2,3,7,8,9-HxCDD	6.58e2	1.08	NO	0.954	10.068	34.744	34.74	1.000	1.000	0.11998		0.0364	0.12
6 1,2,3,4,6,7,8-HpCDD	1.22e4	1.05	NO	0.918	10.068	38.200	38.21	1.000	1.001	2.8820		0.126	2.8
7 OCDD	9.44e4	0.88	NO	0.866	10.068	41.113	41.12	1.000	1.000	33.467		0.151	33.
8 2,3,7,8-TCDF	2.08e3	0.79	NO	0.848	10.068	25.672	25.70	1.000	1.001	0.18964		0.0246	0.19
9 1,2,3,7,8-PeCDF	8.86e3	1.68	NO	0.960	10.068	29.784	29.80	1.000	1.001	0.89017	•	0.0232	0.89
10 2.3,4,7,8-PeCDF	3.69e3	1.34	NO	1.07	10.068	30.874	30.87	1.001	1.000	0.35016		0.0214	. 0.35
11 1,2,3,4,7,8-HxCDF	1.65e4	1.23	NO	0.986	10.068	33.446	33.45	1.000	1.000	2.4200		0.0251	2.4
12 1,2,3,6,7,8-HxCDF	6.39e3	1.13	NO	1.04	10.068	33.592	33.59 /	1.001	1.001	0.89768		0.0243	0.89
13 2,3,4,6,7,8-HxCDF	1.27e3	1.13	NO	1.02	10.068	34.253	34.25/	1.001	1.001	0.18939		0.0268	0.18
14 1,2,3,7,8,9-HxCDF	5.78e2	1.10	NO	0.991	10.068	35.248	35.26 /	1.000	1.001	0.097503		0.0349	0.097
15 1,2,3,4,6,7,8-HpCDF	7.19e3	0.99	NO	1.05	10.068	36.813	36.82	1.000	1.001	1.4852		0.0433	1.4
16 1,2,3,4,7,8,9-HpCDF	1.43e3	0.97	NO	1.18	10.068	38.817	38.82	1.000	1.000	0.32104		0.0389	0.32
17 OCDF	4.37e3	0.82	NO	0.896	10.068	41.396	41.40	1.000	1.000	1.3425		0.0559	1.3
18 13C-2,3,7,8-TCDD	1.80e6	0.79	NO	1.06	10.068	26.368	26.36	1.030	1.030	201.52	101	0.0913	
19 13C-1,2,3,7,8-PeCDD	1.40e6	0.64	NO	0.785	10.068	31.211	31.05	1.219	1.213	210.94	106	0.101	
1 20 13C-1,2,3,4,7,8-HxCDD	1.05e6	1.27	NO	0.621	10.068	34.337	34.35 /	1.014	1.014	225.42	113	0.368	
1 21 13C-1,2,3,6,7,8-HxCDD	1.17e6	1.29	NO	0.734	10.068	34.459	34.46 /	1.017	1.017	212.81	107	0.311	
22 13C-1,2,3,7,8,9-HxCDD	1.14e6	1.24	NO	0.723	10.068	34.743	34.73 /	1.026	1.025	211.29	106	0.316	
7 23 13C-1,2,3,4,6,7,8-HpCDD	9.17e5	1.06	NO	0.568	10.068	38.243	38.19	1.129	1.127	216.15	109	0.612	
24 13C-OCDD	1.29e6	0.90	NO	0.496	10.068	41.180	41.10	1.216	1.213	349.40	87.9	0.454	
25 13C-2,3,7,8-TCDF	2.57e6	0.77	NO	0.919	10.068	25.667	25.67	1.003	1.003	203.31	102	0.101	
26 13C-1,2,3,7,8-PeCDF	2.06e6	1.59	NO	0.715	10.068	29.921	29.78	1.169	1.164	209.37	105	0.241	
27 13C-2,3,4,7,8-PeCDF	1.96e6	1.60	NO	0.689	10.068	31.008	30.85	1.212	1.205	206.90	104	0.250	
28 13C-1,2,3,4,7,8-HxCDF	1.37e6	0.51	NO	0.873	10.068	33.442	33.44 /	0.987	0.987	210.48	106	0.342	
29 13C-1,2,3,6,7,8-HxCDF	1.36e6	0.51	NO	0.933	10.068	33.571	33.57	0.991	0.991	195.29	98.3	0.320	
29 13C-1,2,3,6,7,8-HxCDF 30 13C-2,3,4,6,7,8-HxCDF	1.31e6	0.51	NO	0.843	10.068	34.238	34.23 /	1.011	1.011	207.73	105	0.354	
31 13C-1,2,3,7,8,9-HxCDF	1.19e6	0.51	NO	0.780	10.068	35.238	35.24		1.040	204.06	103	0.383	

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Last Altered: Printed:

Tuesday, December 15, 2020 11:46:50 AM Pacific Standard Time Tuesday, December 15, 2020 11:47:35 AM Pacific Standard Time

Name: 201213R2_10, Date: 13-Dec-2020, Time: 16:55:42, ID: 2002434-09 USMPDI-1023SC-A-02-03-201107 13.3, Description: USMPDI-1023SC-A-02-03-201107

1777	* Name	_: LResp	112RA 4	_n/y!	<u>RRF र</u>	E.MINOL.	Pred.RT,	L_RT	Pred.RRT	L'RRT.	Conc.	_L%Rec_[DL k	EMPC
32	32 13C-1,2,3,4,6,7,8-H	pCDF 9.17e5	0.43	NO	0.726	10.068	36.813	36.79	1.087	1.086	168.85	85.0	0.451	
33	i, 33 13C-1,2,3,4,7,8,9-H	pCDF 7.50e5	0.43	NO	0.491	10.068	38.822	38.81	1.146	1.146	204.47	103	0.667	
34	34 13C-OCDF	1.44e6	0.89	NO	0.565	10.068	41.396	41.39	1.222	1.222	341.60	86.0	0.407	
35	35 37CI-2,3,7,8-TCDD	8.34e5			1.22	10.068	26.363	26.38	1.030	1.031	80.991	102	0.0188	
36	36 13C-1,2,3,4-TCDD	1.68e6	0.80	NO	1.00	10.068	25.640	25.59	1.000	1.000	198.64	100	0.0964	
37	37 13C-1,2,3,4-TCDF	2.73e6	0.79	NO	1.00	10.068	24.130	24.10	1.000	1.000	198.64	100	0.0932	
38	38 13C-1,2,3,4,6,9-HxC	DF 1.48e6	0.51	NO	1.00	10.068	33.920	33.88	1.000	1.000	198.64	100	0.299	
39	39 Total Tetra-Dioxins				0.980	10.068	24.620		0.000		0.13008		0.0183	0.130
40	3 40 Total Penta-Dioxins				0.932	10.068	29.960		0.000		0.14897		0.0383	0.434
41	, 41 Total Hexa-Dioxins				0.902	10.068	33.635		0.000		1.9458		0.0382	1.95
42	42 Total Hepta-Dioxins				0.918	10.068	37.640		0.000		6.8243		0.126	6.82
43	3 43 Total Tetra-Furans		•		0.848	10.068	23.610		0.000		0.62253		0.0246	0.623
44	🤼 44 1st Func. Penta-Fura	ans			0.960	10.068	26.930		0.000		0.24841		0.00732	0.248
45 -	45 Total Penta-Furans				0.960	10.068	29.275		0.000		2.0749		0.0235	2.13
46	46 Total Hexa-Furans				1.02	10.068	33.555		0.000		4.6973		0.0272	4.70
ن بريد 47 ما 47	7 47 Total Hepta-Furans				1.05	10.068	37.835		0.000		2.8280		0.0434	2.83

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Dataset:

U:\VG12.PRO\Results\201213R2\201213R2-10.qld

Last Altered: Printed: Tuesday, December 15, 2020 11:46:50 AM Pacific Standard Time Tuesday, December 15, 2020 11:47:35 AM Pacific Standard Time

Method: U:\VG12.PRO\MethDB\1613rrt-12-11-20.mdb 11 Dec 2020 08:35:32

Calibration: U:\VG12.PRO\CurveDB\dbDIOXIN_1613vg12-12-03-20.cdb 04 Dec 2020 11:36:07

Name: 201213R2_10, Date: 13-Dec-2020, Time: 16:55:42, ID: 2002434-09 USMPDI-1023SC-A-02-03-201107 13.3, Description: USMPDI-1023SC-A-02-03-201107

Tetra-Dioxins

Name	L_RT_ile	m1 Height	m2 Height : }	m1 Resp	m2 Resp	ILRA LIN	Resp 1	L_Conc:	EMPC!	DL
1 Total Tetra-Dioxins	24.29	8.496e3			6.158e2				0.13008	

Penta-Dioxins

Name:	RT	m1 Height į	ساز Meight	1 m1 Resp [m2 Resp	[RA;]n/	Resp_	IL, Conc	EMPC	DĿ
1 Total Penta-Dioxins	28.82	5.267e3	5.121e3	3.237e2	4.480e2	0.72 N	O 0.000e0	0.00000	0.11748	0.0383
2 Total Penta-Dioxins	29.27	3.907e3	4.797e3	1.808e2	2.779e2	0.65 N	O 4.587e2	0.069838	0.069838	0.0383
3 Total Penta-Dioxins	29.78	1.173 e4	7.456e3	5.149e2	3.350e2	1.54 YE	S 0.000e0	0.00000	0.083141	0.0383
4 Total Penta-Dioxins	30.04	3.800e3	3.550e3	2.033e2	3.165e2	0.64 N	O 5.197e2	0.079127	0.079127	0.0383
5' Total Penta-Dioxins	30.28	5.225e3	8.571e3	2.140e2	4.206e2	0.51 YE	S 0.000e0	0.00000	0.084281	0.0383

Hexa-Dioxins

Name 5	RT.	m1 Height	m2 Height	m1 Resp	m2 Resp	: LRAIL	n/y₌ Ł	Resp	Conc.	EMPC	DL
1 } Total Hexa-Dioxins	32.71	5.366e4	4.140e4	2.635e3	1.995e3	1.32	NO	4.630e3	0.91159	0.91159	0.0382
2 Total Hexa-Dioxins	33.31	6.829e3	5.096e3	3.394e2	3.168e2	1.07	NO	6.562e2	0.12921	0.12921	0.0382
3. Total Hexa-Dioxins	33.60	2.773e4	2.021e4	1.906e3	1.429e3	1.33	NO	3.334e3	0.65657	0.65657	0.0382
1,2,3,6,7,8-HxCDD	34.48	7.251e3	6.249e3	3.577e2	3.237e2	1.10	NO	6.814e2	0.12850	0.12850	0.0366
5 1,2,3,7,8,9-HxCDD	34.74	5.821e3	6.739e3	3.41 <u>4e2</u>	3.161e2	1.08	NO	6.576e2	0.11998	0.11998	0.0364

Hepta-Dioxins

Name	RT .	m1 Height	m2 Height	m1 Resp	m2 Resp	,RA ₁	n/y, L	Resp	Conc. (_EMPC	DL.
1 Total Hepta-Dioxins	37.21	1.031e5		8.524e3						3.9423	
1,2,3,4,6,7,8-HpCDD	38.21	1.028e5	9.683e4	6.260e3	5.954e3	1.05	NO	1.221e4	2.8820	2.8820	0.126

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Dataset:

U:\VG12.PRO\Results\201213R2\201213R2-10.qld

Last Altered:

Tuesday, December 15, 2020 11:46:50 AM Pacific Standard Time

Printed: Tuesday, December 15, 2020 11:47:35 AM Pacific Standard Time

Name: 201213R2_10, Date: 13-Dec-2020, Time: 16:55:42, ID: 2002434-09:USMPDI-1023SC-A-02-03-201107 13.3, Description: USMPDI-1023SC-A-02-03-201107

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Tetra-Furans

Name 1	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	ĮRA!	[ո/уქ	Resp	L_Conc!	EMPC	DL COL
1 Total Tetra-Furans	21.68	4.527e3	5.721e3	3.935e2	5.425e2	0.73	NO	9.360e2	0.085268	0.085268	0.0246
2 Total Tetra-Furans	22.58	3.215e3	6.060e3	3.689e2	4.970e2	0.74	NO	8.658e2	0.078875	0.078875	0.0246
3. Total Tetra-Furans	23.10	2.914e3	4.784e3	2.557e2	3.670e2	0.70	NO	6.227e2	0.056726	0.056726	0.0246
4 Total Tetra-Furans	24.68	1.187e4	1.383e4	8.467e2	1.092e3	0.78	NO	1.939e3	0.17665	0.17665	0.0246
5 Total Tetra-Furans	25.55	2.920e3	3.547e3	1.678e2	2.205e2	0.76	NO	3.883e2	0.035372	0.035372	0.0246
6 2.3,7,8-TCDF	25.70	1.640e4	1.67 <mark>7e4</mark>	9.159e2	1.166e3	0.79	NO	2.082e3	0.18964	0.18964	0.0246

Penta-Furans function 1

Name	L RT. II	m1 Height	m2 Height	m1 Resp	m2 Resp	[RA][n/	ا لالأ	Resp '	Conc.	EMPC !	DL
1- 1st Func. Penta-Furans	27.18	2.248e4						2.413e3		0.24841 0.0	

Penta-Furans

Name -i	RT /	m1 Height	m2 Height	+,m1.Resp	m2 Resp	, RA	Tu/AT	- Resp +	1 Conc!	EMPC (TH-DL
1 Total Penta-Furans	28.82	5.767e4	2.916e4	2.840e3	1.799e3	1.58	NO	4.640e3	0.47765	0.47765	0.0235
2 Total Penta-Furans	29.45	7.483e3	7.591e3	5.243e2	3.685e2	1.42	NO	8.929e2	0.091924	0.091924	0.0235
3 Total Penta-Furans	29.60	5.010e3	6.135e3	3.423e2	3.224e2	1.06	YES	0.000e0	0.00000	0.057977	0.0235
4 1,2,3,7,8-PeCDF	29.80	1.093e5	6.271e4	5.551e3	3.311e3	1.68	NO	8.861e3	0.89017	0.89017	0.0232
5 Total Penta-Furans	30.07	2.866e4	1.982e4	1.624e3	9.500e2	1.71	NO	2.574e3	0.26496	0.26496	0.0235
61, 2,3,4,7,8-PeCDF	30.87	4.397e4	2.724e4	2.111e3	1.577e3	1.34	NO	3.688e3	0.35016	0.35016	0.0214

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Dataset:

U:\VG12.PRO\Results\201213R2\201213R2-10.qld

Last Altered: Printed:

Tuesday, December 15, 2020 11:46:50 AM Pacific Standard Time Tuesday, December 15, 2020 11:47:35 AM Pacific Standard Time

Name: 201213R2_10, Date: 13-Dec-2020, Time: 16:55:42, ID: 2002434-09 USMPDI-1023SC-A-02-03-201107 13.3, Description: USMPDI-1023SC-A-02-03-201107

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Hexa-Furans

Name	RT_1L	m1 Height	m2 Height	m1 Resp	m2 Resp	I[RA]	lu\\[Resp	Conc!	EMPC	<u> </u>
1 Total Hexa-Furans	32.18	9.071e3	5.070e3	3.713e2	2.716e2	1.37	NO	6.428e2			0.0272
2 Total Hexa-Furans	32.36	4.257e4	3.048e4	1.969e3	1.613e3	1.22	NO	3.583e3	0.53317	0.53317	0.0272
3 Total Hexa-Furans	32.99	1.911e4	1.963e4	1.094e3	9.806e2	1.12	NO	2.075e3	0.30880	0.30880	0.0272
4 Total Hexa-Furans	33.33	2.769e3	2.335e3	1.158e2	1.046e2	1.11	NO	2.204e2	0.032802	0.032802	0.0272
5; 1,2,3,4,7,8-HxCDF	33.45	1.660e5	1.359e5	9.087e3	7.413e3	1.23	NO	1.650e4	2.4200	2.4200	0.0251
6, 1,2,3,6,7,8-HxCDF	33.59	5.513e4	5.276e4	3.397e3	2.997e3	1.13	NO	6.395e3	0.89768	0.89768	0.0243
7 2,3,4,6,7,8-HxCDF	34.25	9.130e3	1.122e4	6.746e2	5.982e2	1.13	NO	1.273e3	0.18939	0.18939	0.0268
8 1,2,3,7,8,9-HxCDF	35.26	1.080e4	8.898e3	3.027e2	2.757e2	1.10	NO	5.784e2	0.097503	0.097503	0.0349
9 Total Hexa-Furans	35.27	1.076e4	7.899e3	4.534e2	3.678e2	1.23	NO	8.213e2	0.12222	0.12222	0.0272

Hepta-Furans

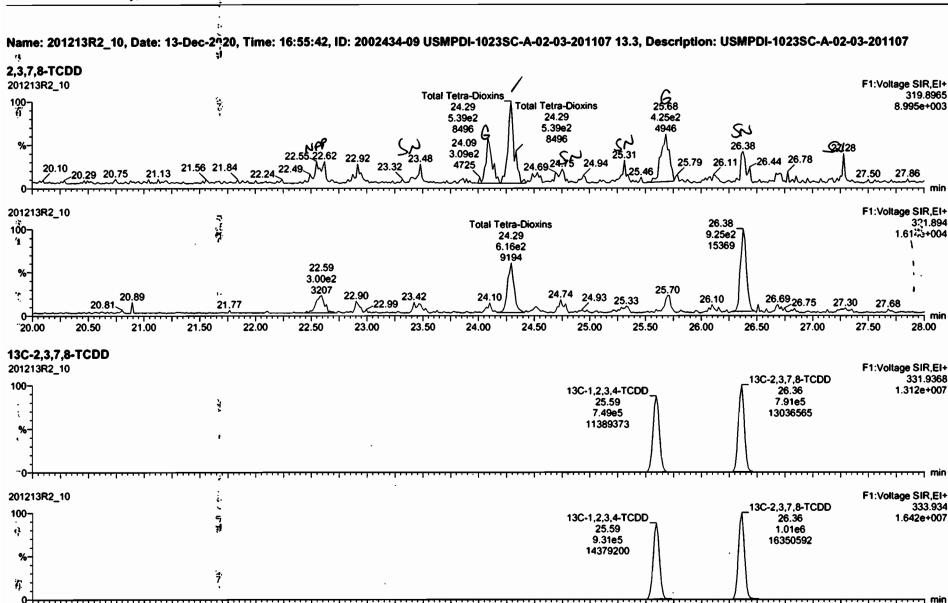
Name	¥ RT	m1.Height	m2 Height's	1.7	m1 Resp	m2 Resp	[RAT	In/y [Resp	Conc.	EMPC }	, DL
1. 1,2,3,4,6,7,8-HpCDF	36.82	4.993e4				3.619e3			7.190e3	1.4852	1.4852	0.0433
2 Total Hepta-Furans	37.54	2.857e4	3.046e4		2.289e3	2.209e3	1.04	NO	4.498e3	1.0217	1.0217	0.0434
3 1,2,3,4,7,8,9-HpCDF	38.82	1.133e4	1.140e4	•	7.023e2	7.237e2	0.97	NO	1.426e3	0.32104	0.32104	0.0389

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Monday, December 14, 2020 07:01:44 Pacific Standard Time Monday, December 14, 2020 07:12:56 Pacific Standard Time



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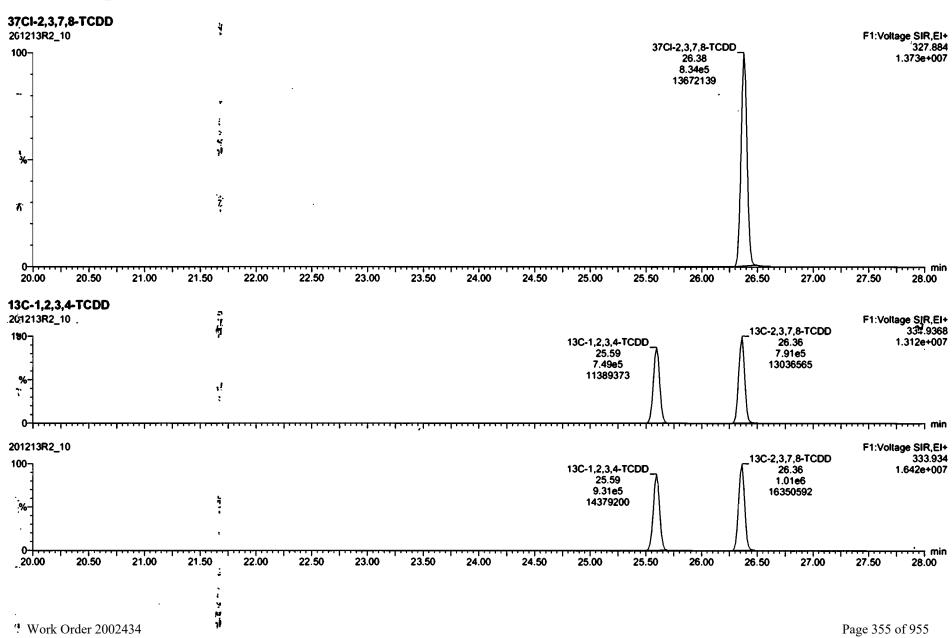
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Q: antify Sample Report Vista Analytical Laboratory

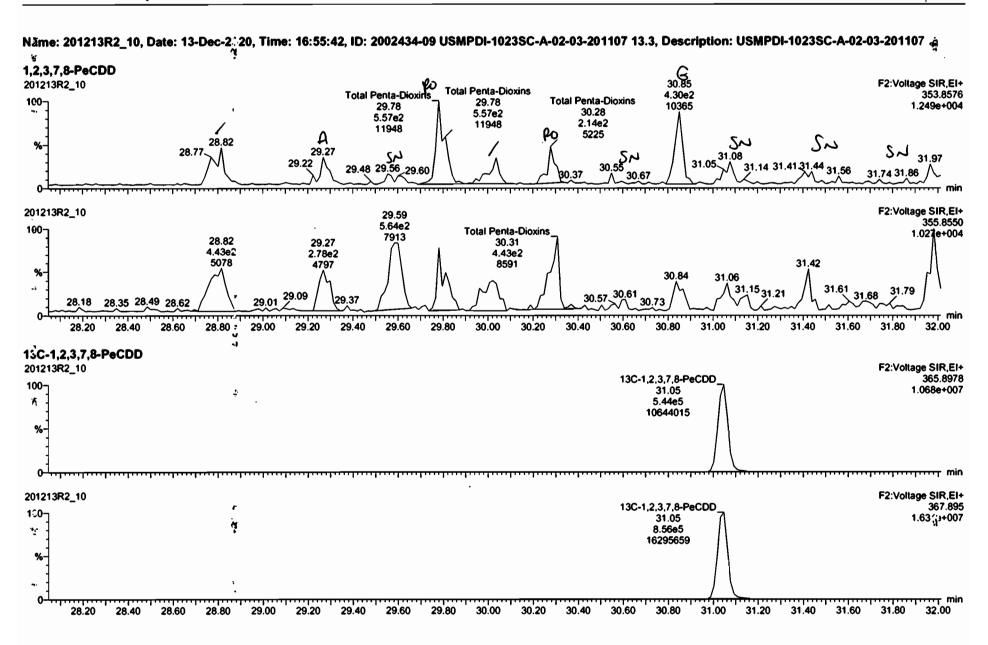
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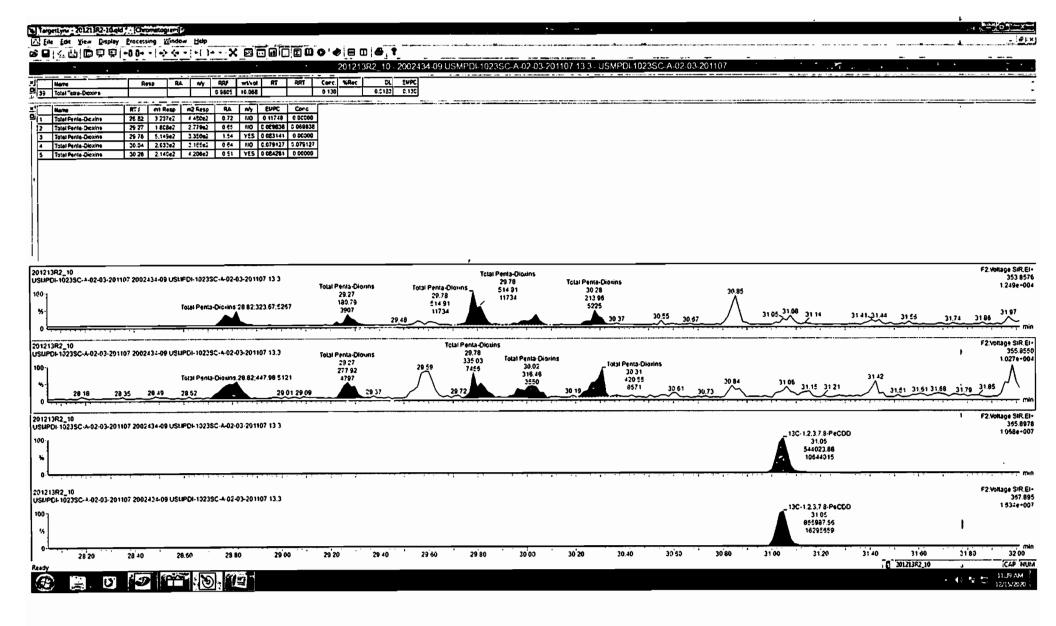
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Last Altered: Monday, December 14, 2020 07:01:44 Pacific Standard Time Printed: Monday, December 14, 2020 07:12:56 Pacific Standard Time





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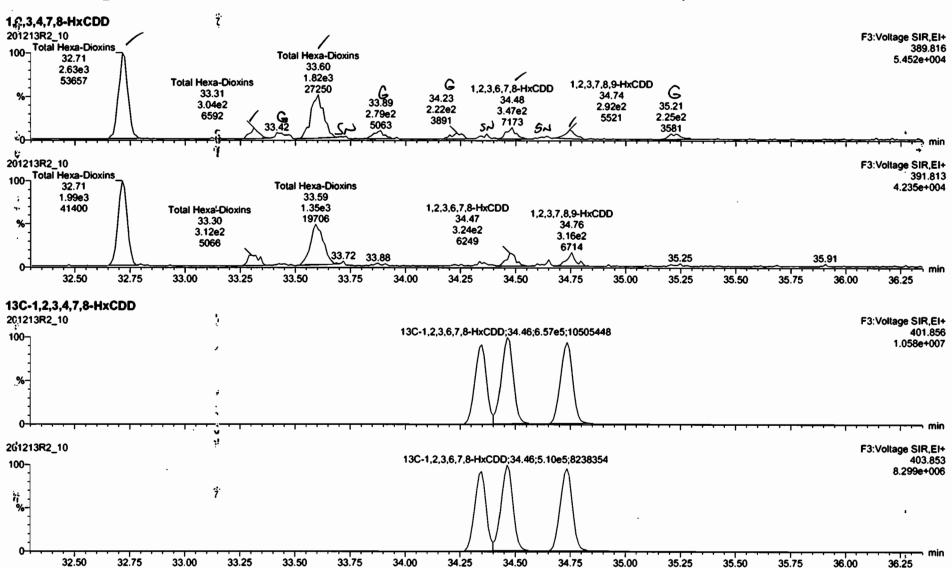
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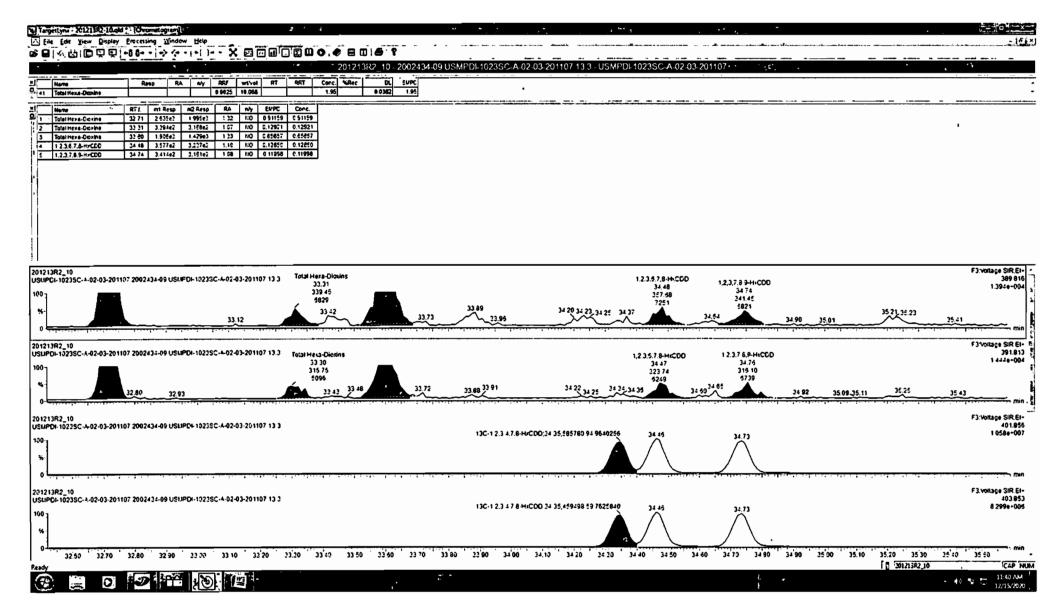
Last Altered: Printed:

Monday, December 14, 2020 07:01:44 Pacific Standard Time Monday, December 14, 2020 07:12:56 Pacific Standard Time

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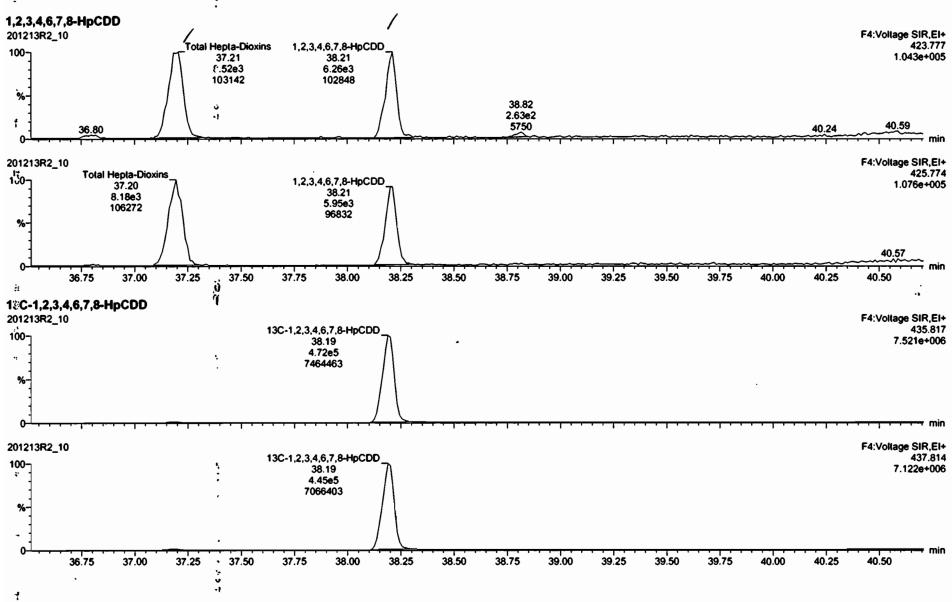


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Dataset: Untitled

Last Altered: Monday, December 14, 2020 07:01:44 Pacific Standard Time Printed: Monday, December 14, 2020 07:12:56 Pacific Standard Time

Name: 201213R2_10, Date: 13-Dec-2)20, Time: 16:55:42, ID: 2002434-09 USMPDI-1023SC-A-02-03-201107 13.3, Description: USMPDI-1023SC-A-02-03-201107



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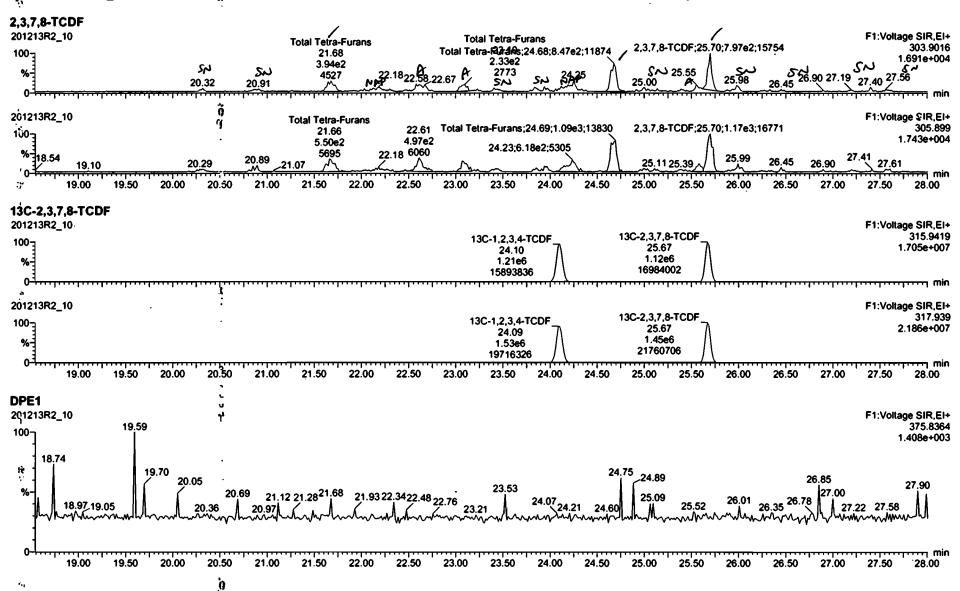
Work Order 2002434

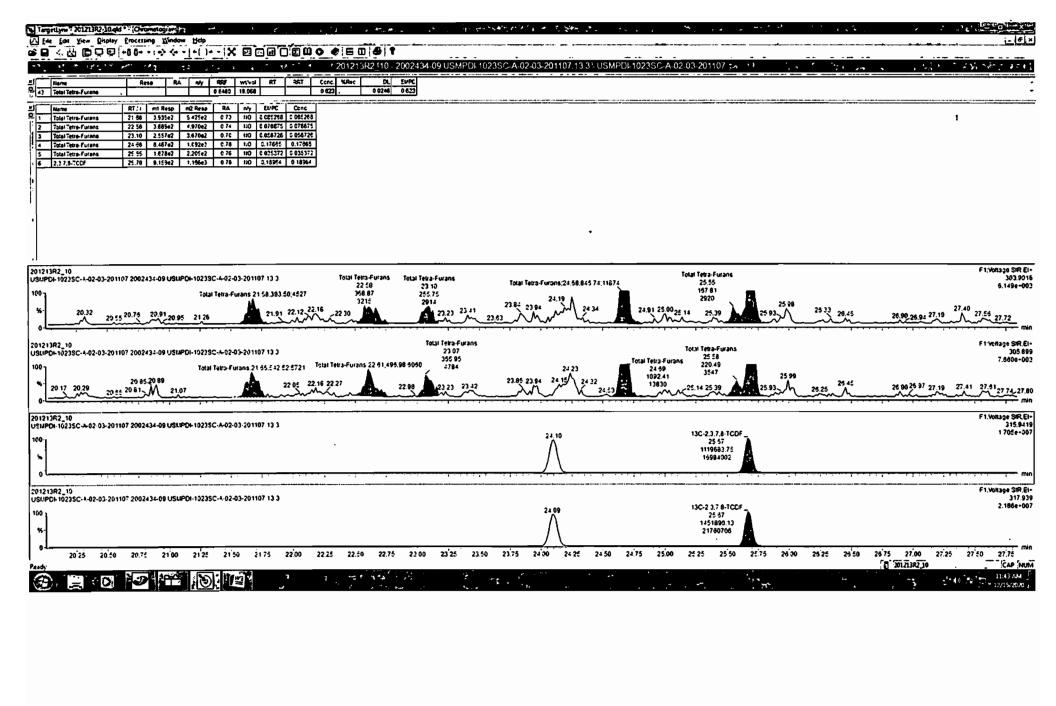
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Monday, December 14, 2020 07:01:44 Pacific Standard Time Monday, December 14, 2020 07:12:56 Pacific Standard Time

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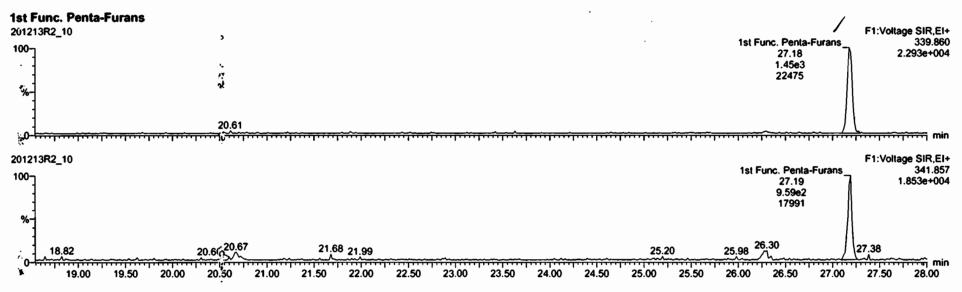


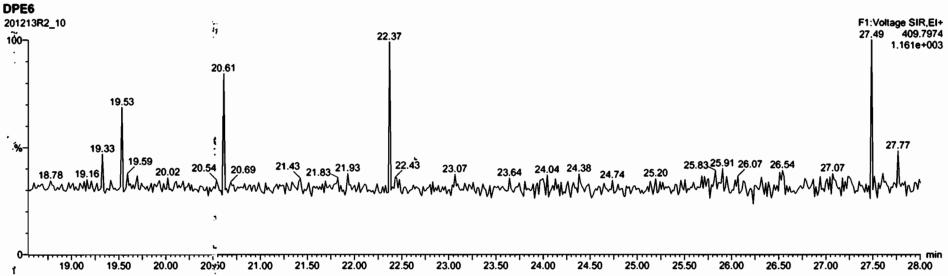
Work Order 2002434 Page 363 of 955

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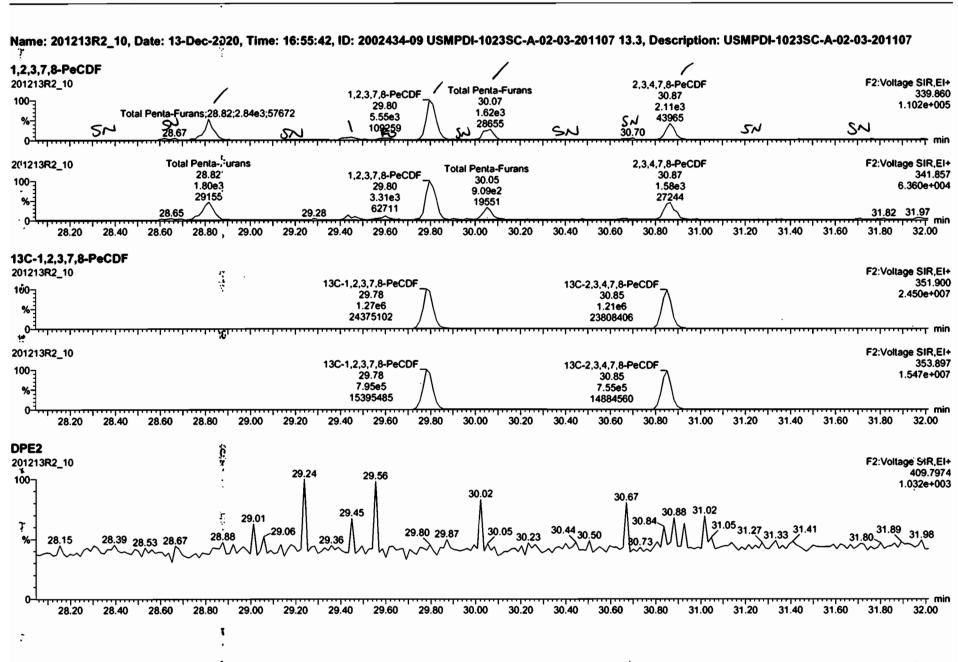
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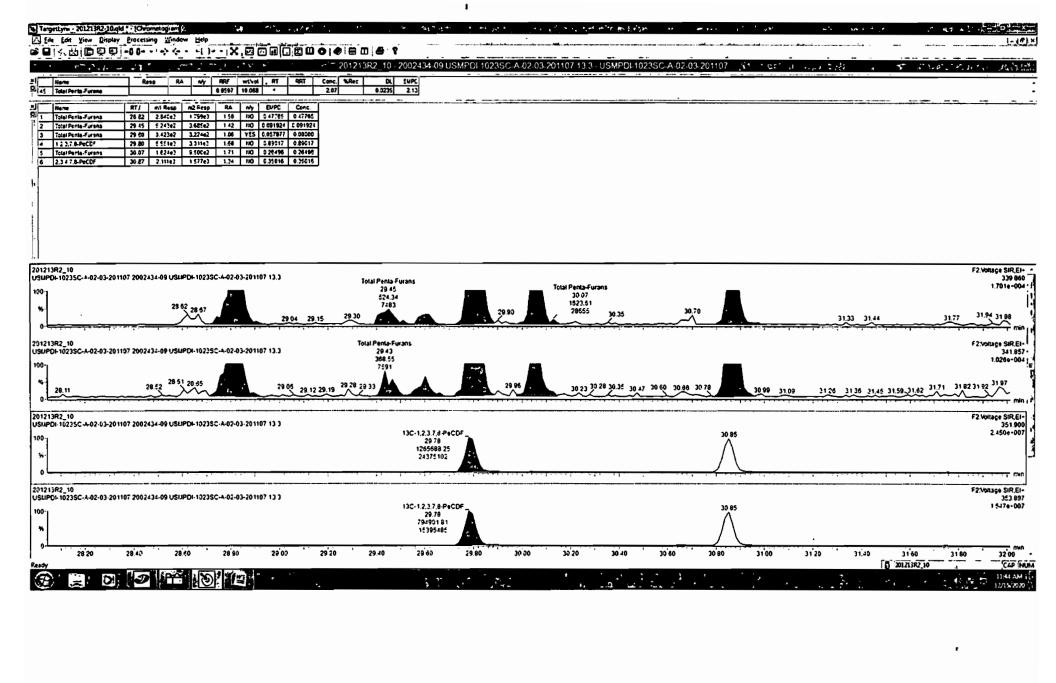




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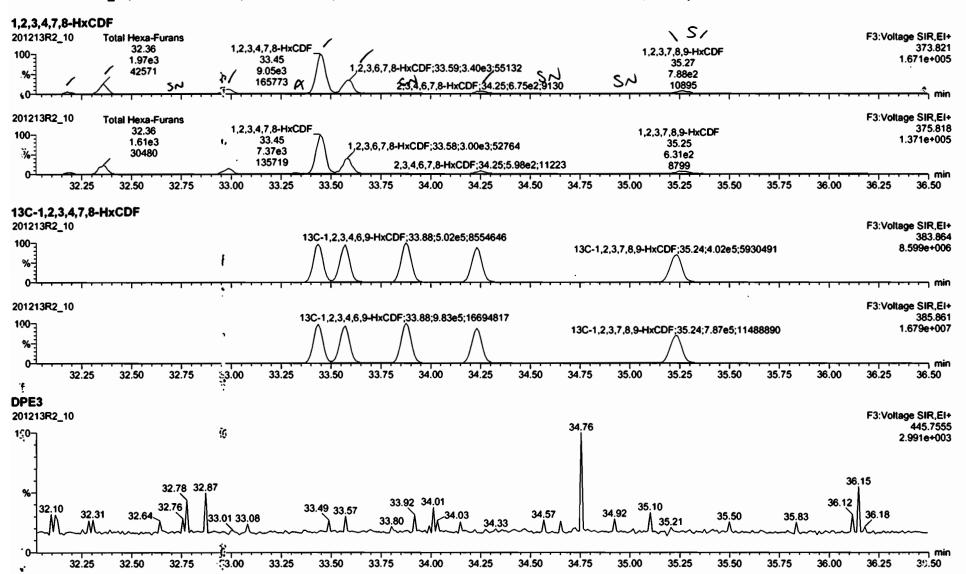
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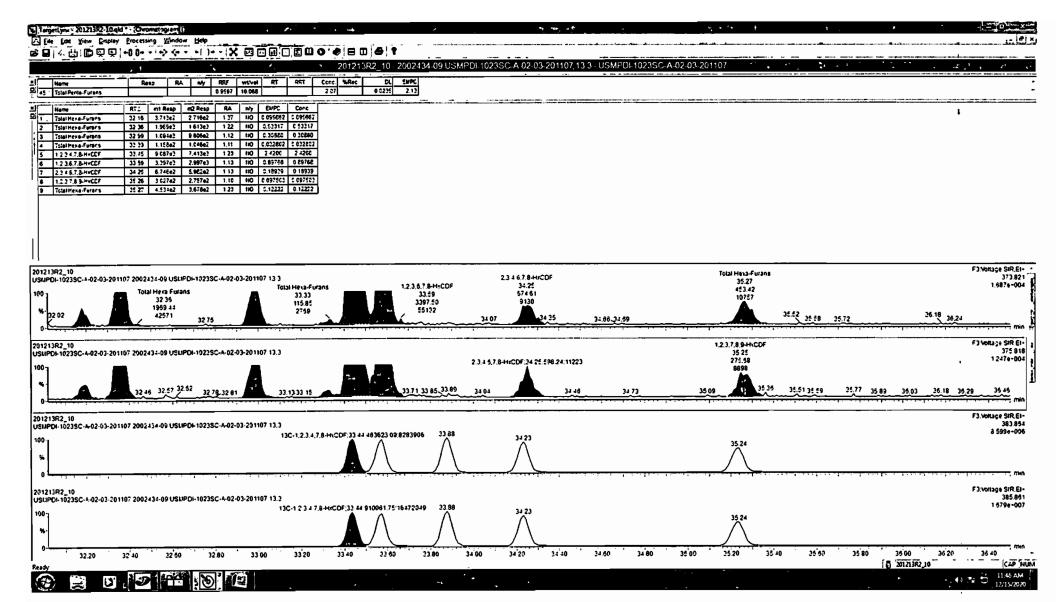


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Name: 201213R2_10, Date: 13-Dec-2020, Time: 16:55:42, ID: 2002434-09 USMPDI-1023SC-A-02-03-201107 13.3, Description: USMPDI-1023SC-A-02-03-201107



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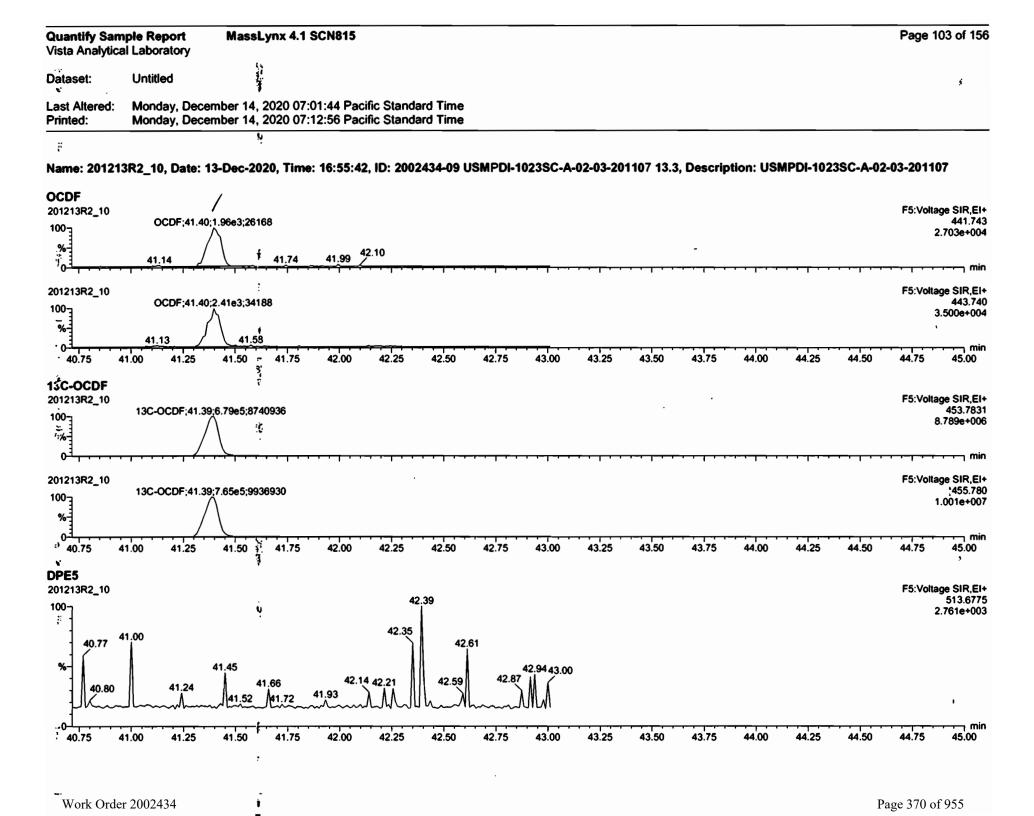
Work Order 2002434 . Page 368 of 955

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Monday, December 14: 2020 07:01:44 Pacific Standard Time Monday, December 14, 2020 07:12:56 Pacific Standard Time Name: 201213R2_10, Date: 13-Dec-2020, Time: 16:55:42, ID: 2002434-09 USMPDi-1023SC-A-02-03-201107 13.3, Description: USMPDI-1023SC-A-02-03-201107 1,2,3,4,6,7,8-HpCDF F4:Voltage SIR,EI+ 201213R2_10 1,2,3,4,6,7,8-HpCDF;36.82;3.57e3;49934 1,2,3,4,7,8,9-HpCDF 407.782 100-38.82 5.094e+004 Total Hepta-i-urans;37.54;2.29e3;28567 7.02e2 11325 39.83 min 🖚 2.1213R2_10 F4:Voltage SIR,EI+ 1,2,3,4,6,7,8-HpCDF;36.82;3.62e3;45795 1,2,3,4,7,8,9-HpCDF 409.779 1007 38.82 4.684e+004 Total Hepta-Furans;37.53;2.21e3;30458 7.24e2 11403 39.66 → min 36.75 37.00 37.25 37.50 37.75 38.00 38.25 38.50 38.75 39.00 39.25 39.50 39.75 40.00 40.25 40.50 13C-1,2,3,4,6,7,8-HpCDF 261213R2_10 F4:Voltage SIR,EI+ 13C-1,2,3,4,6,7,8-HpCDF;3(2)80;2.75e5;3584486 13C-1,2,3,4,7,8,9-HpCDF;38.81;2.26e5;3575378 417.825 1:07 3.605e+006 **%**-201213R2_10 F4:Voltage SIR,EI+ 13C-1,2,3,4,6,7,8-HpCDF;36.80;6.42e5;8193579 419.822 13C-1,2,3,4,7,8,9-HpCDF;38.81;5.24e5;8390984 100-8.436e+006 39.50 36.75 37.00 37.25 37.50 37.75 38.00 38.25 38.50 38.75 39.00 39.25 39.75 40.00 40.25 40.50 DPE4 F4:Voltage SIR,EI+ 2C1213R2_10 479.7165 37.18 100-1.784e+003 38.09 39.51 37.88 36.62 40.44 40.58 39.68 38.19 37.00 37.14 37.36 36.72 38.95 38.98 39.12 39.21 40.26 38.29 39.49 40.65 37.54 37.68 36.75 37.00 37.25 37.50 37.75 38.00 38.25 38.50 38.75 39.00 39.25 39.50 39.75 40.00 40.25 40.50

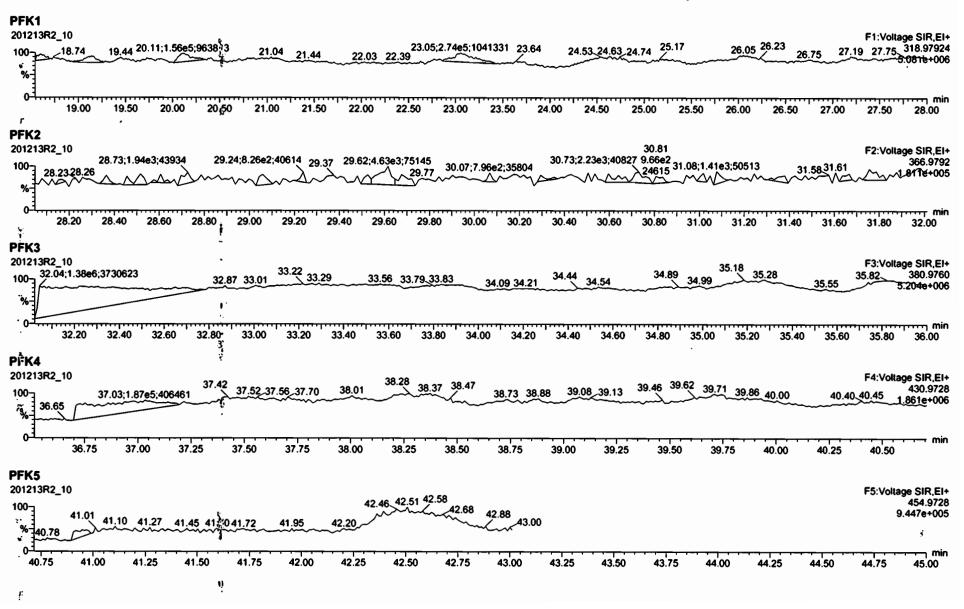


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Name: 201213R2_10, Date: 13-Dec-2020, Time: 16:55:42, ID: 2002434-09 USMPDI-1023SC-A-02-03-201107 13.3, Description: USMPDI-1023SC-A-02-03-201107



MassLynx 4.1

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Dataset: U:\VG7.PRO\Results\201230D1\201230D1_10.qld

Last Altered: Thursday, December 31, 2020 12:36:56 Pacific Standard Time Printed: Thursday, December 31, 2020 12:38:58 Pacific Standard Time

DB 12/31/20 CT 12/31/2020

Method: Untitled 10 Dec 2020 12:07:43

Calibration: U:\VG7.PRO\CurveDB\ZB_DIOXIN_1613vg7-9-30-20.cdb 01 Oct 2020 09:27:37

Name: 201230D1_10, Date: 30-Dec-2020, Time: 18:06:53, ID: 2002434-10RE1 USMPDI-056SC-A-01-02-201107 22:36, Description: USMPDI-056SC-A-01-02-201107

45 300	# Name	Resp	RA	n/y	RRF	wt/vol	Pred.RT	RT	Pred.RRT	RRT	Conc.	%Rec	DL	EMPC
1	1 2,3,7,8-TCDD	1.96e2	0.51	YES	1.00	11.040 /	26.020	26.02	1.001	1.001	0.49428		0.209	0.385
2	2 1,2,3,7,8-PeCDD	2.15e2	0.80	YES	0.935	11.040	30.488	30.47	1.001	1.000	0.74604		0.272	0.676
3	3 1,2,3,4,7,8-HxCDD	2.56e2	1.47	YES	1.15	11.040	33.711	33.71	1.000	1.000	0.91316		0 <i>,5</i> 26	0.830
4	4 1,2,3,6,7,8-HxCDD	1.06e3	1.09	NO	1.02	11.040	33.822	33.82	1.000	1.000	3.8787		0.535	3.88
5	5 1,2,3,7,8,9-HxCDD	5.07e2	1.26	NO	1.06	11.040	34.130	34.12	1.001	1.001	1.8048		0.588	1.80
6	6 1,2,3,4,6,7,8-HpCDD	1.56e4	1.01	NO	1.00	11.040	37.531	37.54	1.000	1.001	71.272		1.43	71.3
7	7 OCDD	1.12e5	0.89	NO	0.952	11.040	40.691	40.70	1.000	1.000	705.55		1.08	706
8	8 2,3,7,8-TCDF	4.94e3	0.77	NO	1.01	11.040	25.357	25.35	1.001	1.001	8.4185		0.319	8.42
9	9 1,2,3,7,8-PeCDF	7.33e3	1.60	NO	0.998	11.040	29.280	29.28	1.001	1.001	15.448		0.221	15.4
10	10 2,3,4,7,8-PeCDF	3.77e3	1.58	NO	1.07	11.040	30.316	30.31	1.001	1.001	7.2189		0.183	7.22
11	11 1,2,3,4,7,8-HxCDF	8.47e3	1.18	NO	1.05	11.040	32.801	32.81	1.000	1.000	21.708		0.307	21.7
12	12 1,2,3,6,7,8-HxCDF	2.20e3	1.14	NO	1.10	11.040	32.943	32.95	1.000	1.001	5.2965		0.283	5.30
13	13 2,3,4,6,7,8-HxCDF	8.79e2	1.26	NO	1.09	11.040	33.625	33.62	1.001	1.001	2.2890		0.330	2.29
14	14 1,2,3,7,8,9-HxCDF	6.42e2	1.29	NO	1.08	11.040	34.601	34.63	1.000	1.001	1.8915		0.431	1.89
15	15 1,2,3,4,6,7,8-HpCDF	4.24e3	1.05	NO	1.13	11.040	36.217	36.19	1.001	1.000	14.025		0.475	14.0
16	16 1,2,3,4,7,8,9-HpCDF	9.51e2	1.15	NO	1.29	11.040	38.178	38.19	1.000	1.000	3.5156		0.449	3.52
17	17 OCDF	7.17e3	0.86	NO	0.953	11.040	41.009	41.03	1.000	1.001	36.180		0.355	36.2
18	18 13C-2,3,7,8-TCDD	7.16e4	0.78	NO	1.17	11.040	25.928	25.99	1.026	1.028	163.49	90.2	0.601	
19	19 13C-1,2,3,7,8-PeCDD	5.59e4	0.63	NO	0.914	11.040	30.474	30.47	1.206	1.206	163.90	90.5	0.545	
20	20 13C-1,2,3,4,7,8-HxCDD	4.41e4	1.35	NO	0.634	11.040	33.705	33.70	1.014	1.014	173.74	95.9	0.818	1
21	21 13C-1,2,3,6,7,8-HxCDD	4.83e4	1.26	NO	0.724	11.040	33.815	33.82	1.017	1.018	166.39	91.8	0.716	
22	22 13C-1,2,3,7,8,9-HxCDD	4.80e4	1.29	NO	0.716	11.040	34.084	34.10	1.025	1.026	167.50	92.5	0.724	- 1
23	23 13C-1,2,3,4,6,7,8-HpCDD	3.95e4	1.08	NO	0.660	11.040	37.528	37.52	1.129	1.129	149.32	82.4	1.17	
24	24 13C-OCDD	6.03e4	0.89	NO	0.587	11.040	40.533	40.69	1.219	1.224	256.59	70.8	0.728	
25	25 13C-2,3,7,8-TCDF	1.05e5	0.77	NO	1.02	11.040	25.329	25.33	1.002	1.002	168.77	93.2	0.674	1
26	26 13C-1,2,3,7,8-PeCDF	8.61e4	1.62	NO	0.842	11.040	29.206	29.26	1.156	1.158	168.10	92.8	0.715	
27	27 13C-2,3,4,7,8-PeCDF	8.81e4	1.70	NO	0.802	11.040	30.098	30.29	1.191	1.198	180.66	99.7	0.751	
28	28 13C-1,2,3,4,7,8-HxCDF	6.72e4	0.50	NO	1.00	11.040	32.841	32.80	0.988	0.987	167.44	92.4	0.772	- 1
29	29 13C-1,2,3,6,7,8-HxCDF	6.84e4	0.50	NO	1.02	11.040	32.974	32.93	0.992	0.991	167.75	92.6	0.760	
30	30 13C-2,3,4,6,7,8-HxCDF	6.40e4	0.51	NO	0.955	11.040	33.542	33.59	1.009	1.011	167.24	92.3	0.810	
31	31 13C-1,2,3,7,8,9-HxCDF	5.68e4	0.52	NO	0.851	11.040	34.616	34.60	1.041	1.041	166.71	92.0	0.909	

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Dataset:

U:\VG7.PRO\Results\201230D1\201230D1_10.qld

Last Altered: Printed: Thursday, December 31, 2020 12:36:56 Pacific Standard Time Thursday, December 31, 2020 12:38:58 Pacific Standard Time

Name: 201230D1_10, Date: 30-Dec-2020, Time: 18:06:53, ID: 2002434-10RE1 USMPDI-056SC-A-01-02-201107 22:36, Description: USMPDI-056SC-A-01-02-201107

	# Name	Resp	RA	n/y	RRF	wt/vol	Pred.RT	RT	Pred.RRT	RRT	Conc.	%Rec	DL	EMPC
32	32 13C-1,2,3,4,6,7,8-HpCDF	4.84e4	0.43	NO	0.848	11.040	36.132	36.18	1.087	1.088	142.54	78.7	0.979	
33	33 13C-1,2,3,4,7,8,9-HpCDF	3.81e4	0.45	NO	0.624	11.040	38.126	38.18	1.147	1.149	152.50	84.2	1.33	
34	34 13C-OCDF	7.53 e 4	0.89	NO	0.730	11.040	40.686	41.01	1.224	1.234	257.78	71.1	0.657	
35	35 37CI-2,3,7,8-TCDD	3.12e4			1.21	11.040	25.926	26.00	1.026	1.029	69.283	95.6	0.320	- 1
36	36 13C-1,2,3,4-TCDD	6.76e4	0.80	NO	1.00	11.040	25.300	25.27	1.000	1.000	181.16	100	0.705	
37	37 13C-1,2,3,4-TCDF	1.10e5	0.80	NO	1.00	11.040	23.880	23.85	1.000	1.000	181.16	100	0.689	
38	38 13C-1,2,3,4,6,9-HxCDF	7.25e4	0.50	NO	1.00	11.040	33.310	33.24	1.000	1.000	181.16	100	0.774	-
39	39 Total Tetra-Dioxins				1.00	11.040	24.620		0.000		4.1789		0.209	6.13
40	40 Total Penta-Dioxins				0.935	11.040	29.960		0.000		2.6130		0.272	6.33
41	41 Total Hexa-Dioxins				1.02	11.040	33.635		0.000		32.903		0.578	33.7
42	42 Total Hepta-Dioxins				1.00	11.040	37.640		0.000		162.30		1.43	162
43	43 Total Tetra-Furans				1.01	11.040	23.610		0.000		30.395		0.319	34.2
44	44 1st Func. Penta-Furans				0.998	11.040	26.750		0.000		6.2866		0.0809	6.29
45	45 Total Penta-Furans				0.998	11.040	29.275		0.000		38.739		0.209	41.1
46	46 Total Hexa-Furans				1.09	11.040	33.555		0.000		60.026		0.331	60.0
47	47 Total Hepta-Furans				1.13	11.040	37.835		0.000		50.217		0.490	50.2

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Dataset:

U:\VG7.PRO\Results\201230D1\201230D1_10.qld

Last Altered: Printed:

Thursday, December 31, 2020 12:36:56 Pacific Standard Time Thursday, December 31, 2020 12:38:58 Pacific Standard Time

Method: Untitled 10 Dec 2020 12:07:43

Calibration: U:\VG7.PRO\CurveDB\ZB_DIOXIN_1613vg7-9-30-20.cdb 01 Oct 2020 09:27:37

Name: 201230D1_10, Date: 30-Dec-2020, Time: 18:06:53, ID: 2002434-10RE1 USMPDI-056SC-A-01-02-201107 22.36, Description: USMPDI-056SC-A-01-02-201107

Tetra-Dioxins

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	Total Tetra-Dioxins	22.41	2.279e3	2.705e3	2.085e2	2.297e2	0.91	YES	0.000e0	0.00000	1.0265	0.209
2	Total Tetra-Dioxins	22.73	1.435e3	1.685e3	1.022e2	1.526e2	0.67	NO	2.548e2	0.64327	0.64327	0.209
3	Total Tetra-Dioxins	23.24	7.100e2	1.754e3	5.551e1	6.908e1	0.80	NO	1.246e2	0.31459	0.31459	0.209
4	Total Tetra-Dioxins	24.02	1.007e3	1.102e3	4.910e1	4.661e1	1.05	YES	0.000e0	0.00000	0.20831	0.209
5	Total Tetra-Dioxins	24.26	8.030e2	8.400e2	7.804e1	7.466e1	1.05	YES	0.000e0	0.00000	0.33368	0.209
6	Total Tetra-Dioxins	24.46	1.098e3	1.190e3	6.462e1	7.704e1	0.84	NO	1.417e2	0.35770	0.35770	0.209
7	Total Tetra-Dioxins	25.74	8.134e3	9.662e3	5.099e2	6.241e2	0.82	NO	1.134e3	2.8633	2.8633	0.209
8	2,3,7,8-TCDD	26.02	1.258e3	2.169e3	6.633e1	1.295e2	0.51	YES	1.958e2	0.00000	0.38499	0.209

Penta-Dioxins

1 - 1	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	Total Penta-Dioxins	28.33	3.994e3	5.546e3	3.156e2	4.388e2	0.72	NO	7.544e2	2.6130	2.6130	0.272
2	Total Penta-Dioxins	28.76	1.748e3	2.446e3	1.094e2	1.013e2	1.08	YES	0.000e0	0.00000	0.57214	0.272
3	Total Penta-Dioxins	29.50	2.235e3	2.627e3	1.995e2	2.460e2	0.81	YES	0.000e0	0.00000	1.3889	0.272
4	Total Penta-Dioxins	29.72	1.902e3	2.679e3	9.754e1	2.049e2	0.48	YES	0.000e0	0.00000	0.87410	0.272
5	1,2,3,7,8-PeCDD	30.47	2.106e3	3.070e3	9.569e1	1.197e2	0.80	YES	2.154e2	0.00000	0.67583	0.272
6	Total Penta-Dioxins	30.55	9.340e2	1.166 e 3	3.082e1	3.683e1	0.84	YES	0.000e0	0.00000	0.20793	0.272

Hexa-Dioxins

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	Total Hexa-Dioxins	32.09	3.654e4	3.233e4	1.829e3	1.561e3	1.17	NO	3.390e3	12.823	12.823	0.578
2	Total Hexa-Dioxins	32.67	4.551e3	3.999e3	2.479e2	1.847e2	1.34	NO	4.326e2	1.6365	1.6365	0.578
3	Total Hexa-Dioxins	32.97	2.649e4	2.352e4	1.727e3	1.399e3	1.23	NO	3.127e3	11.827	11.827	0.578
4	Total Hexa-Dioxins	33.05	3.107e3	2.405e3	1.275e2	1.192e2	1.07	NO	2.467e2	0.93328	0.93328	0.578
5	1,2,3,4,7,8-HxCDD	33.71	2.418e3	2.038e3	1.521e2	1.038e2	1.47	YES	2.560e2	0.00000	0.82963	0.526
6	1,2,3,6,7,8-HxCDD	33.82	8.775e3	9.055e3	5.520 e 2	5.057e2	1.09	NO	1.058e3	3.8787	3.8787	0.535
7	1,2,3,7,8,9-HxCDD	34.12	4.306e3	3.877e3	2.827e2	2.247e2	1.26	NO	5.074e2	1.8048	1.8048	0.588

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Dataset:

U:\VG7.PRO\Results\201230D1\201230D1_10.qld

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Hepta-Dioxins

3	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	Total Hepta-Dioxins	36.58	1.370e5	1.369e5	9.948e3	9.923e3	1.00	NO	1.987e4	91.032	91.032	1.43
2	1,2,3,4,6,7,8-HpCDD	37.54	1.389e5	1.387e5	7.827e3	7.730e3	1.01	NO	1.556e4	71.272	71.272	1.43

Tetra-Furans

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	Total Tetra-Furans	20.18	1.744e3	2.846e3	1.226e2	1.843e2	0.67	NO	3.069e2	0.52299	0.52299	0.319
2	Total Tetra-Furans	20.75	1.851e3	2.822e3	1.491e2	1.916e2	0.78	NO	3.407e2	0.58048	0.58048	0.319
3	Total Tetra-Furans	21.56	8.262e3	9.561e3	7.619e2	9.900e2	0.77	NO	1.752e3	2.9852	2.9852	0.319
4	Total Tetra-Furans	22.04	2.562e3	3.525e3	3.951e2	4.537e2	0.87	NO	8.488e2	1.4464	1.4464	0.319
5	Total Tetra-Furans	22.44	8.628e3	1.026e4	8.177e2	9.295e2	88.0	NO	1.747e3	2.9772	2.9772	0.319
6	Total Tetra-Furans	22.87	4.841e3	5.892e3	5.311e2	6.632e2	0.80	NO	1.194e3	2.0352	2.0352	0.319
7	Total Tetra-Furans	23.22	2.303e3	3.676e3	1.990e2	2.891e2	0.69	NO	4.881e2	0.83175	0.83175	0.319
8	Total Tetra-Furans	23.73	1.279e3	3.639e3	9.384e1	1.422e2	0.66	NO	0.000e0	0.00000	0.40227	0.319
9	Total Tetra-Furans	23.96	5.161e3	6.522e3	7.023e2	8.210e2	0.86	NO	1.523e3	2.5958	2.5958	0.319
10	Total Tetra-Furans	24.40	2.780e4	2.799e4	1.881e3	2.150e3	0.88	NO	4.031e3	6.8686	6.8686	0.319
11	Total Tetra-Furans	24.69	2.352e3	3.302e3	1.234e2	2.074e2	0.59	YES	0.000e0	0.00000	0.48318	0.319
12	Total Tetra-Furans	25.09	1.824e3	1.711e3	7.749e1	1.016e2	0.76	NO	1.791e2	0.30517	0.30517	0.319
13	Total Tetra-Furans	25.22	5.127e3	7.479e3	4.120e2	4.425e2	0.93	YES	0.000e0	0.00000	1.3347	0.319
14	2,3,7,8-TCDF	25.35	3.289e4	4.407e4	2.143e3	2.798e3	0.77	NO	4.940e3	8.4185	8.4185	0.319
15	Total Tetra-Furans	25.64	3.358e3	2.450e3	2.055e2	2.803e2	0.73	NO	4.859e2	0.82791	0.82791	0.319
16	Total Tetra-Furans	25.90	1.305e3	1.288e3	7.933e1	6.664e1	1.19	YES	0.000e0	0.00000	0.20099	0.319
17	Total Tetra-Furans	26.80	2.481e3	2.147e3	1.011e2	9.227e1	1.10	YES	0.000e0	0.00000	0.27829	0.319
18	Total Tetra-Furans	27.00	4.327e3	2.958e3	2.348e2	1.959e2	1.20	YES	0.000e0	0.00000	0.59071	0.319
19	Total Tetra-Furans	27.15	3.097e3	4.211e3	1.409e2	2.472e2	0.57	YES	0.000e0	0.00000	0.55172	0.319

Penta-Furans function 1

1	1	Name	RT	m1 Height m	2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
	1	1st Func. Penta-Furans	26.77	2.896e4 1	1.830e4	1.836e3	1.180e3	1.56	NO	3.016e3	6.2866	6.2866	0.0809

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Dataset:

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Penta-Furans

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	Total Penta-Furans	28.17	2.903e3	2.583e3	2.070e2	1.964e2	1.05	YES	0.000e0	0.00000	0.70996	0.209
2	Total Penta-Furans	28.33	4.597e4	2.654e4	2.812e3	1.690e3	1.66	NO	4.503e3	9.3853	9.3853	0.209
3	Total Penta-Furans	28.94	9.293e3	5.456e3	4.756e2	3.673e2	1.29	YES	0.000e0	0.00000	1.6310	0.209
4	Total Penta-Furans	29.10	7.374e3	4.150e3	3.541e2	2.420e2	1.46	NO	5.961e2	1.2425	1.2425	0.209
5	1,2,3,7,8-PeCDF	29.28	9.232e4	5.297e4	4.506e3	2.820e3	1.60	NO	7.326e3	15.448	15.448	0.221
6	Total Penta-Furans	29.52	2.404e4	1.635e4	1.273e3	8.105e2	1.57	NO	2.083e3	4.3426	4.3426	0.209
7	2,3,4,7,8-PeCDF	30.31	4.414e4	2.824e4	2.310e3	1.462e3	1.58	NO	3.772e3	7.2189	7.2189	0.183
8	Total Penta-Furans	31.11	3.676e3	2.307e3	3.149e2	2.140e2	1.47	NO	5.289e2	1.1023	1.1023	0.209

Hexa-Furans

	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	Total Hexa-Furans	31.56	1.377e4	1.225e4	6.297e2	5.543e2	1.14	NO	1.184e3	3.0762	3.0762	0.331
2	Total Hexa-Furans	31.73	4.790e4	3.355e4	2.003e3	1.605e3	1.25	NO	3.608e3	9.3742	9.3742	0.331
3	Total Hexa-Furans	32.35	6.467e4	5.160e4	3.158e3	2.636e3	1.20	NO	5.794e3	15.054	15.054	0.331
4	1,2,3,4,7,8-HxCDF	32.81	8.428e4	7.306e4	4.594e3	3.878e3	1.18	NO	8.472e3	21.708	21.708	0.307
5	1,2,3,6,7,8-HxCDF	32.95	2.176e4	1.768e4	1.171e3	1.029e3	1.14	NO	2.200e3	5.2965	5.2965	0.283
6	2,3,4,6,7,8-HxCDF	33.62	9.770e3	6.441e3	4.905e2	3.884e2	1.26	NO	8.789e2	2.2890	2.2890	0.330
7	1,2,3,7,8,9-HxCDF	34.63	9.607e3	8.595e3	3.615e2	2.804e2	1.29	NO	6.419e2	1.8915	1.8915	0.431
8	Total Hexa-Furans	34.66	9.063e3	8.595e3	2.844e2	2.300e2	1.24	NO	5.144e2	1.3365	1.3365	0.331

Hepta-Furans

T	Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	RA	n/y	Resp	Conc.	EMPC	DL
1	1,2,3,4,6,7,8-HpCDF	36.19	3.028e4	3.081e4	2.166e3	2.073e3	1.05	NO	4.239e3	14.025	14.025	0.475
2	Total Hepta-Furans	36.89	6.512e4	6.227e4	4.440e3	4.385e3	1.01	NO	8.826e3	32.676	32.676	0.490
3	1,2,3,4,7,8,9-HpCDF	38.19	8.171e3	7.550e3	5.081e2	4.433e2	1.15	NO	9.514e2	3.5156	3.5156	0.449

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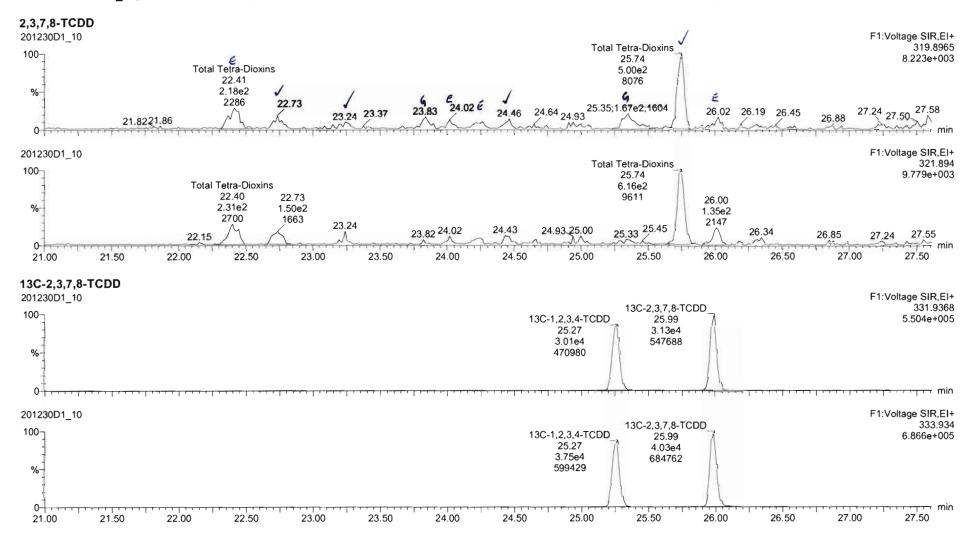
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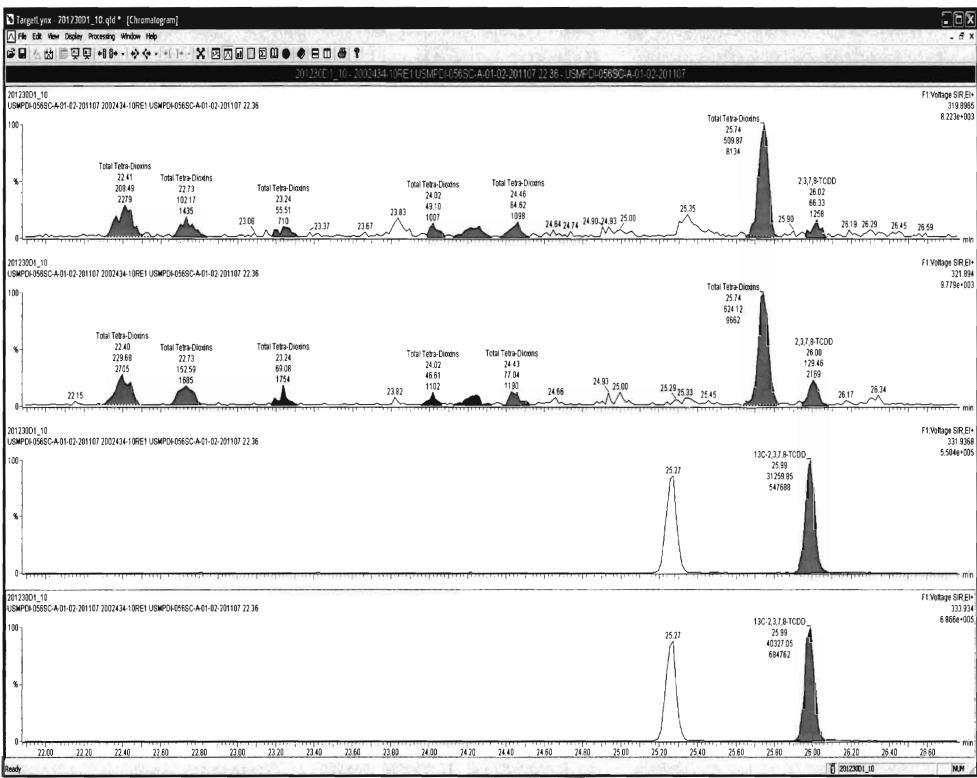
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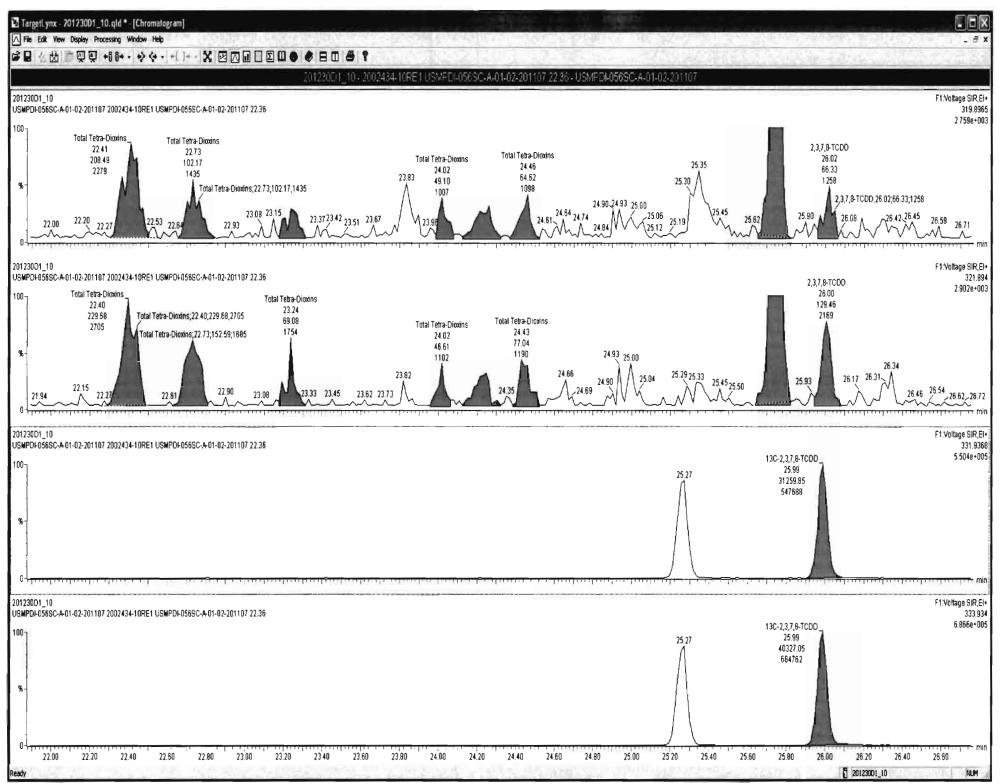
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Quantify Sample Report

MassLynx 4.1

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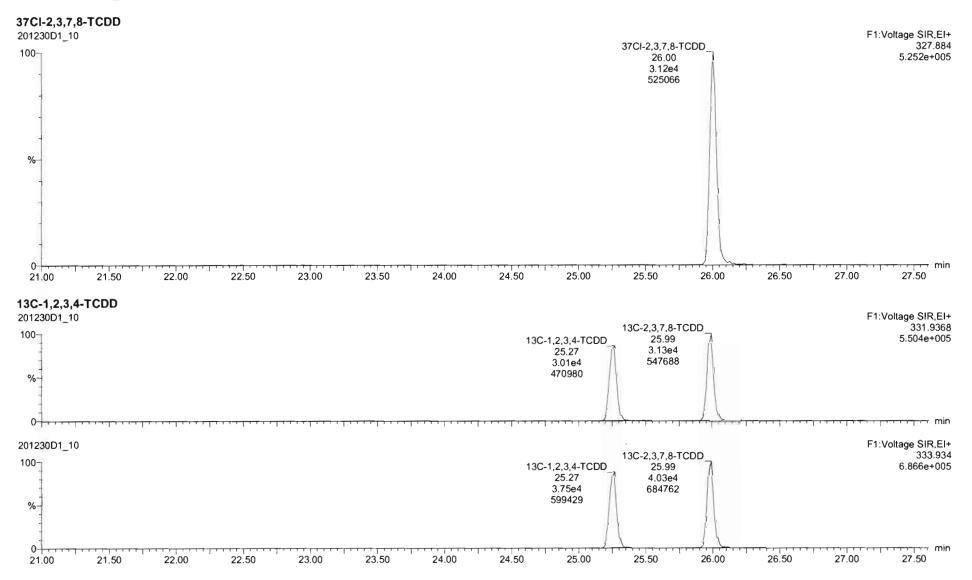
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MassLynx 4.1

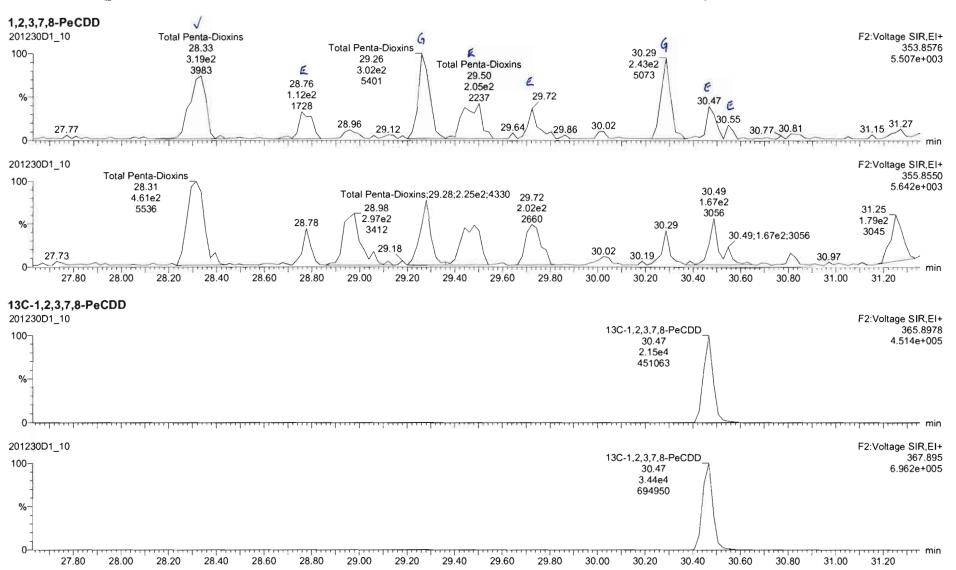
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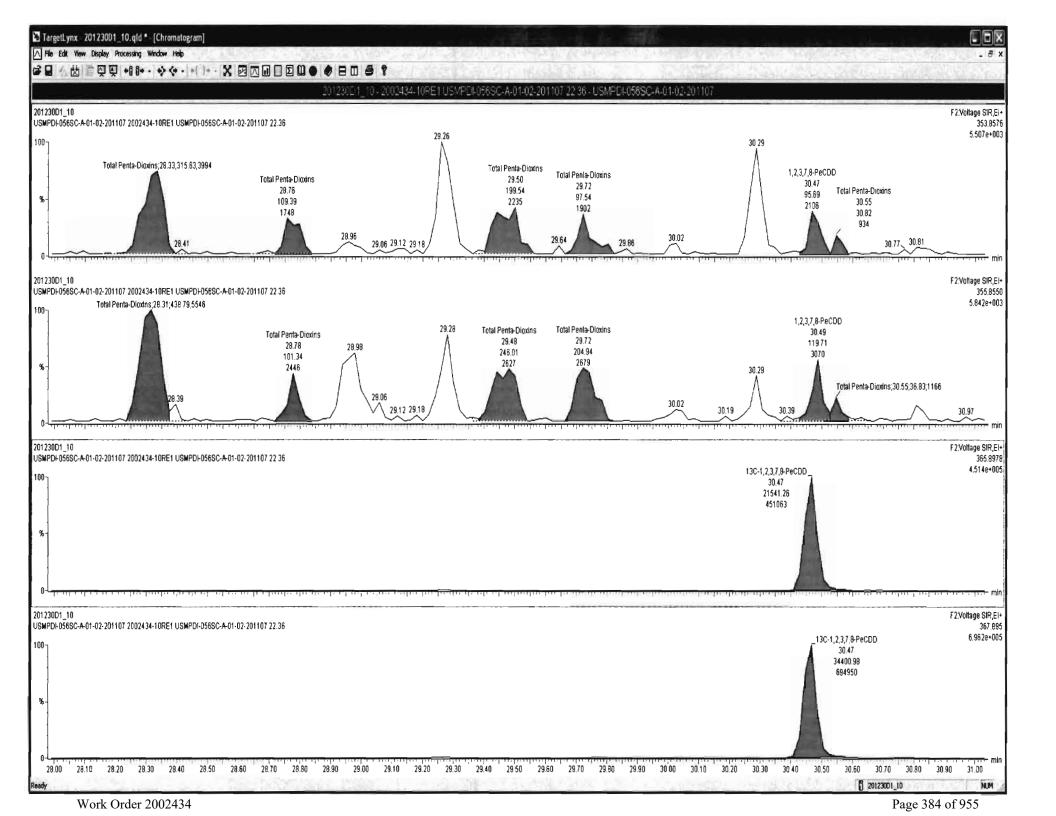
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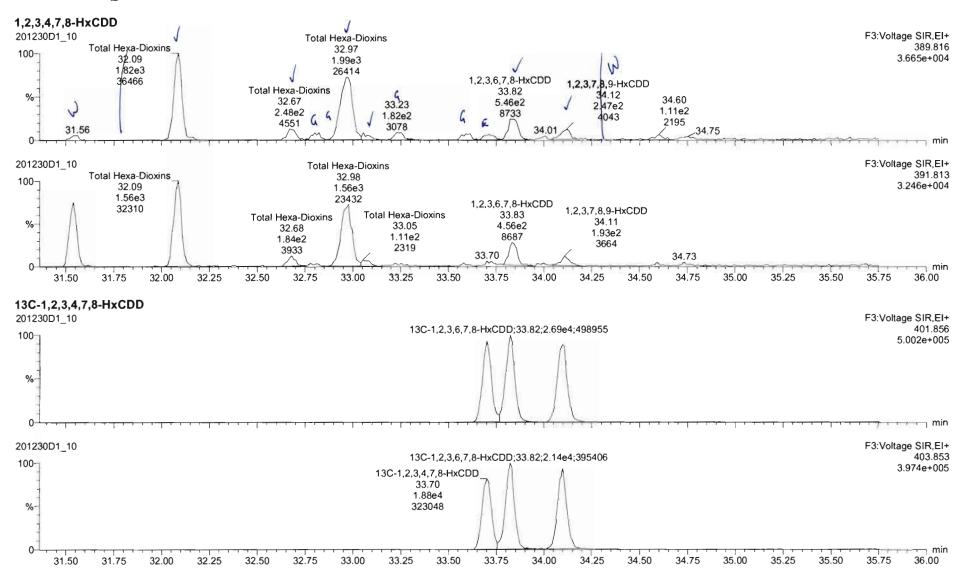




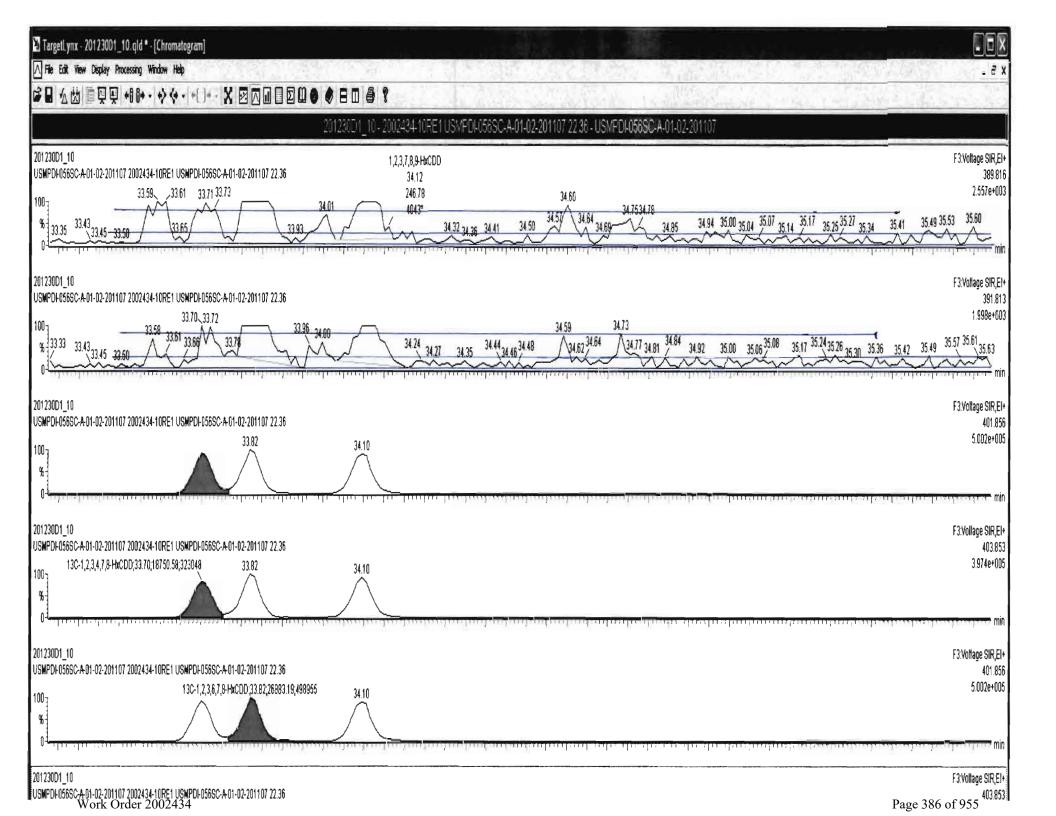
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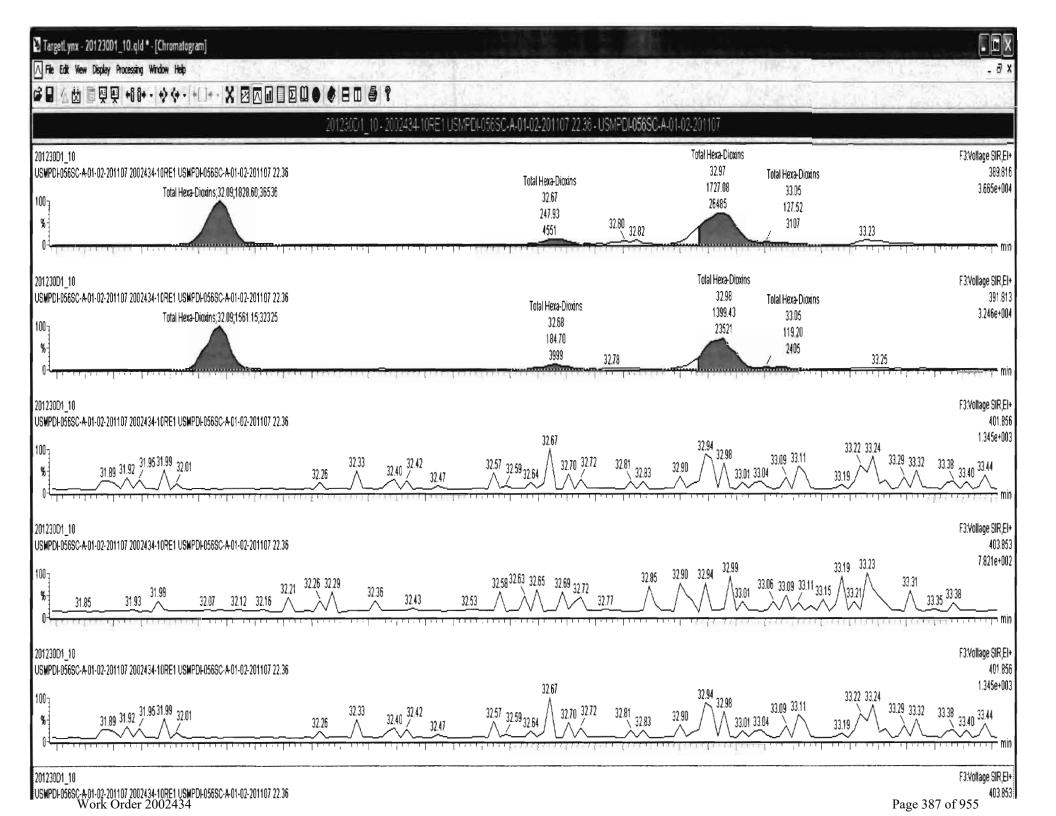
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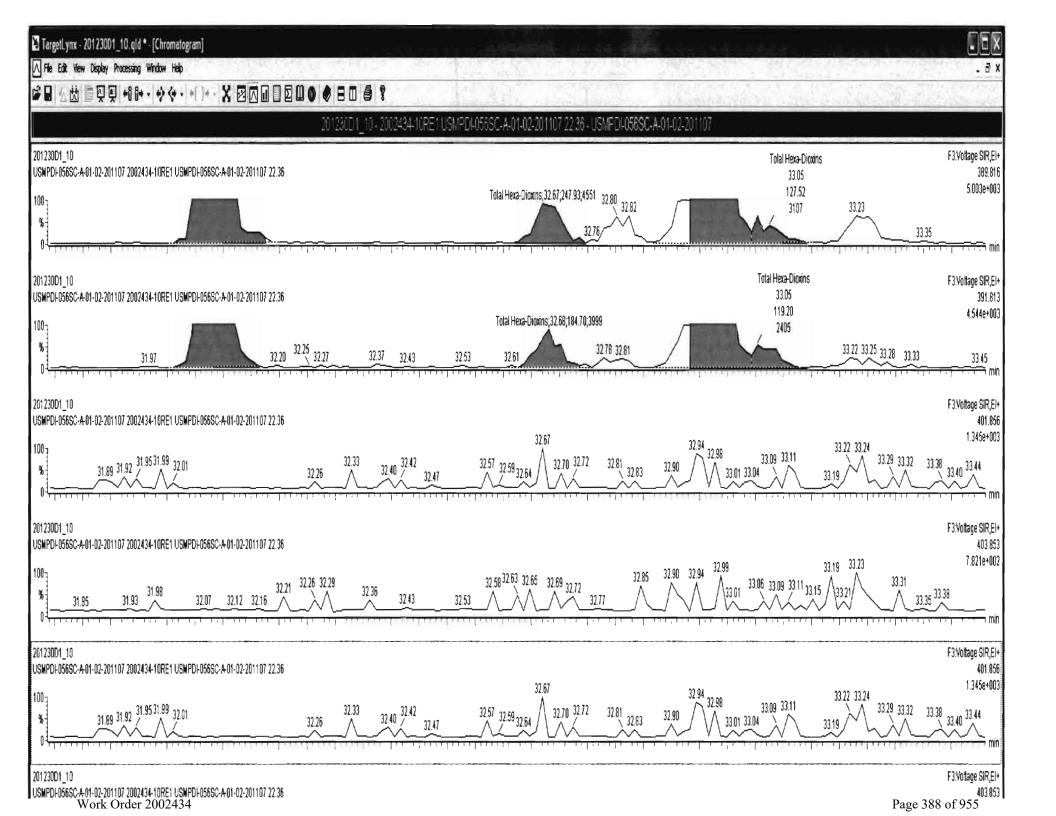
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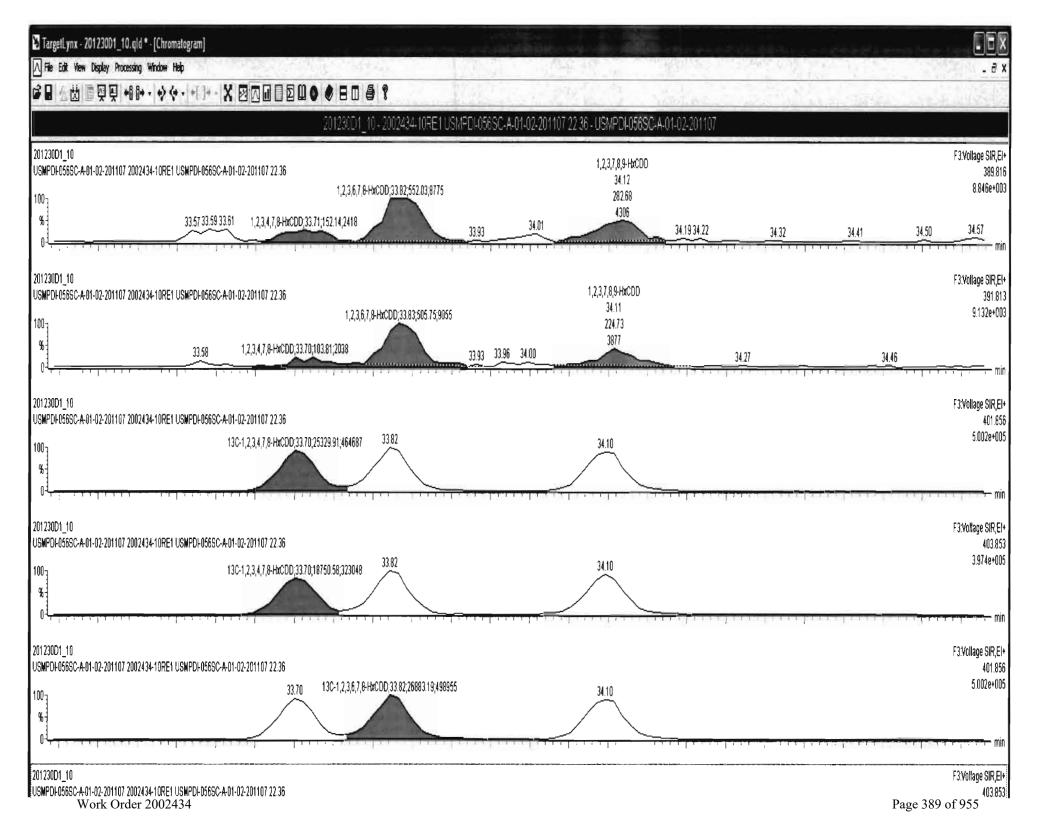


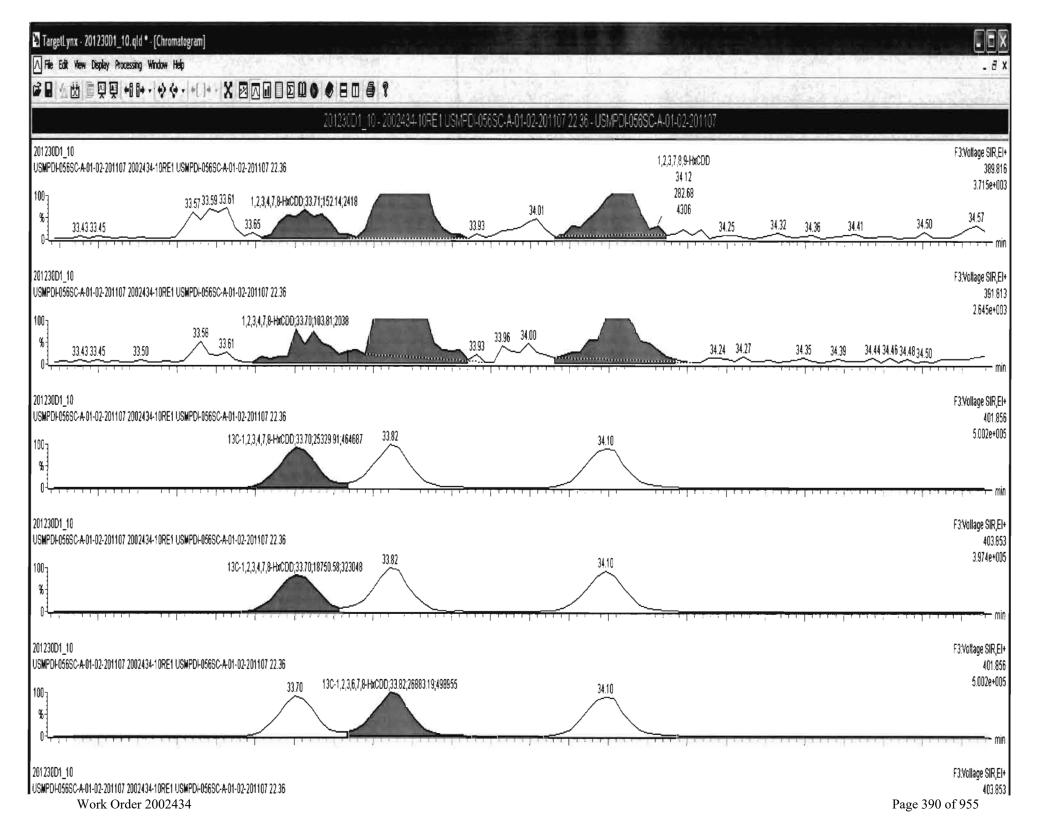
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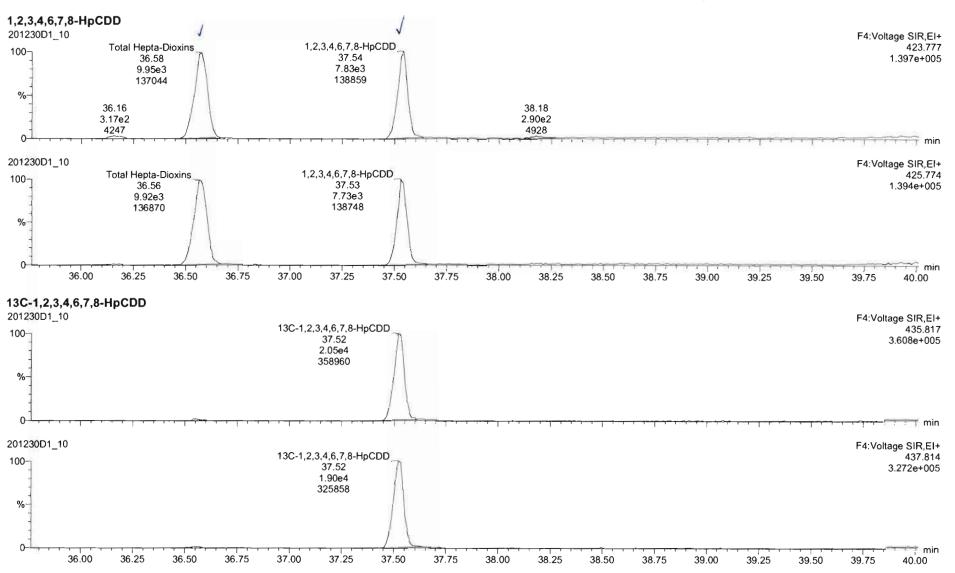


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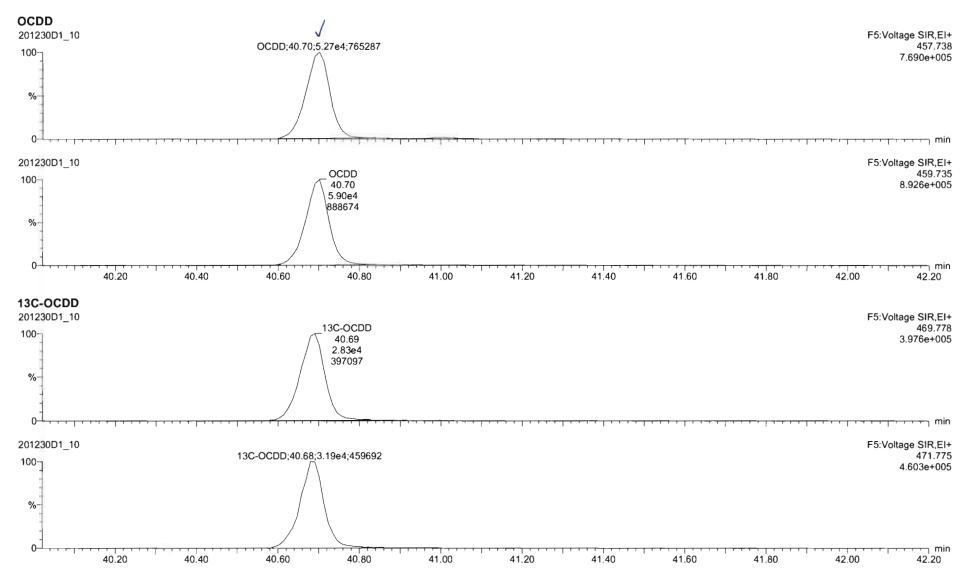
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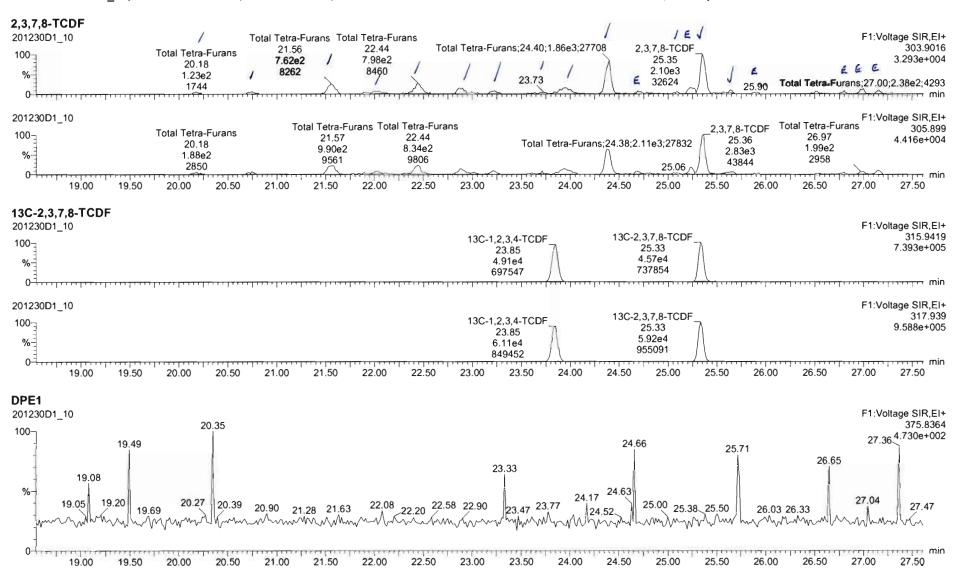
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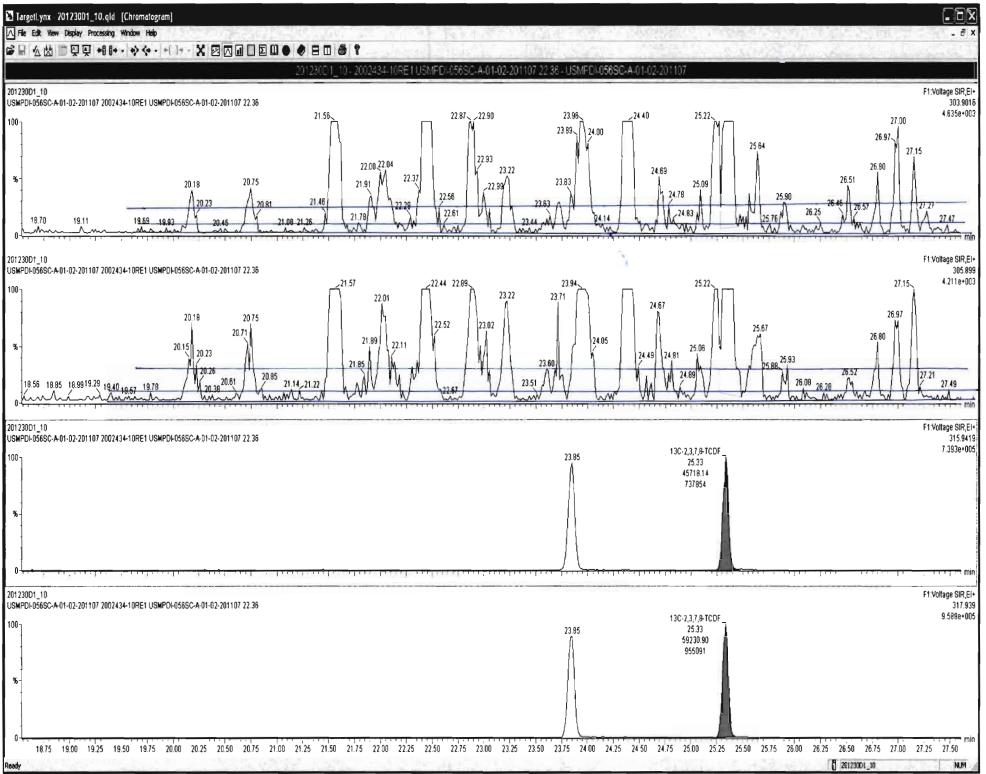
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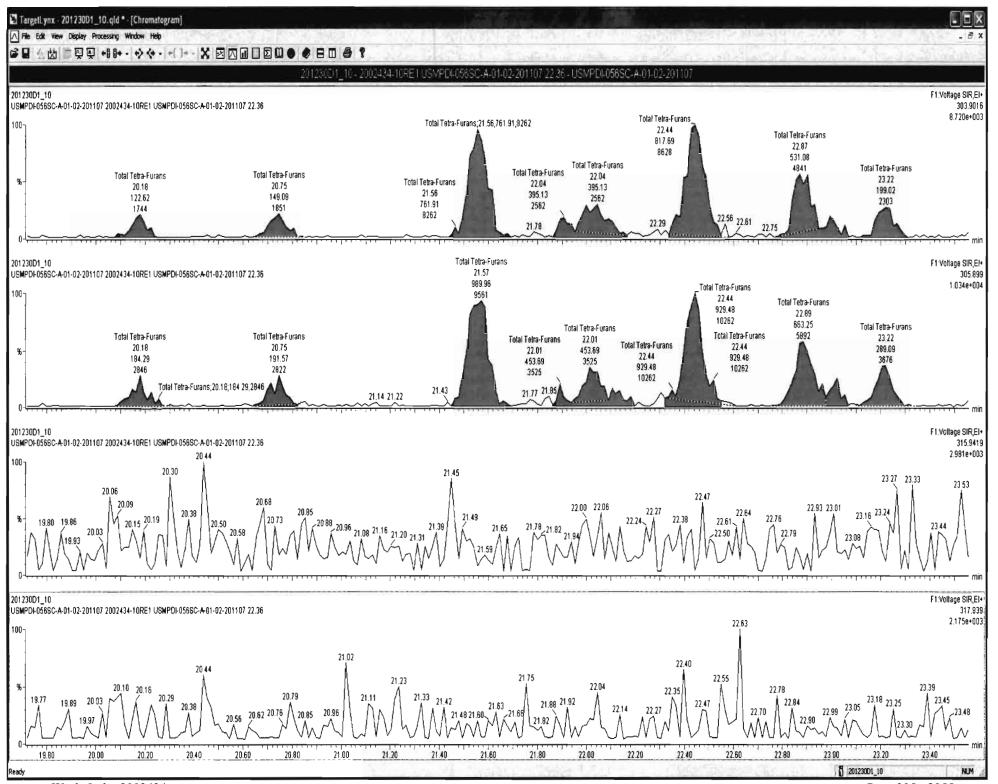
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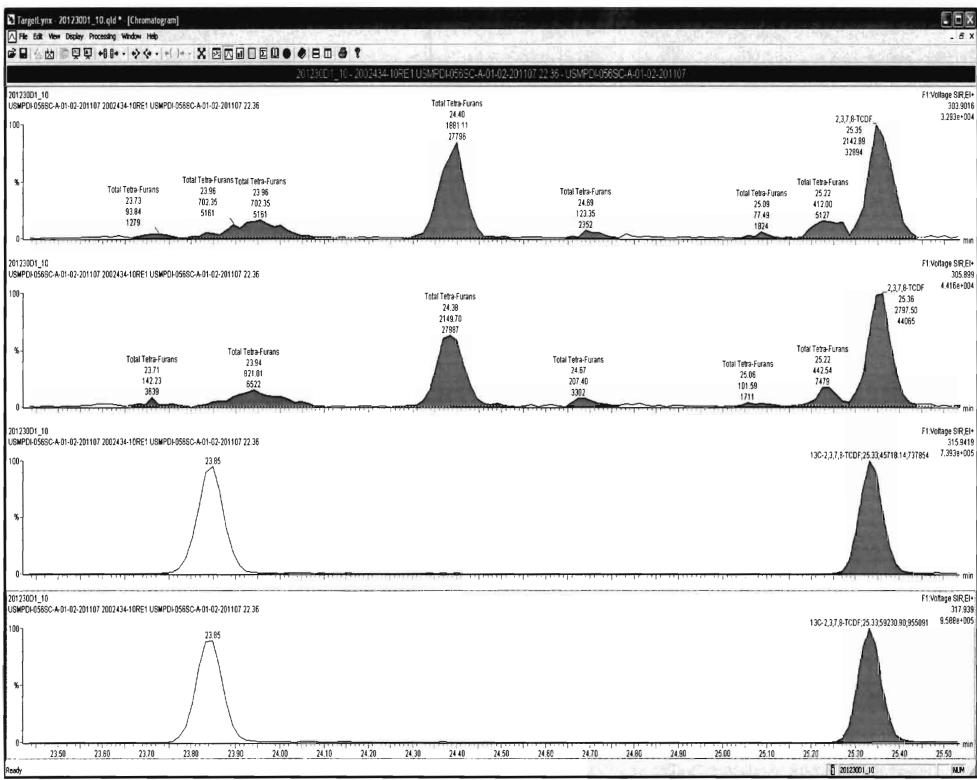
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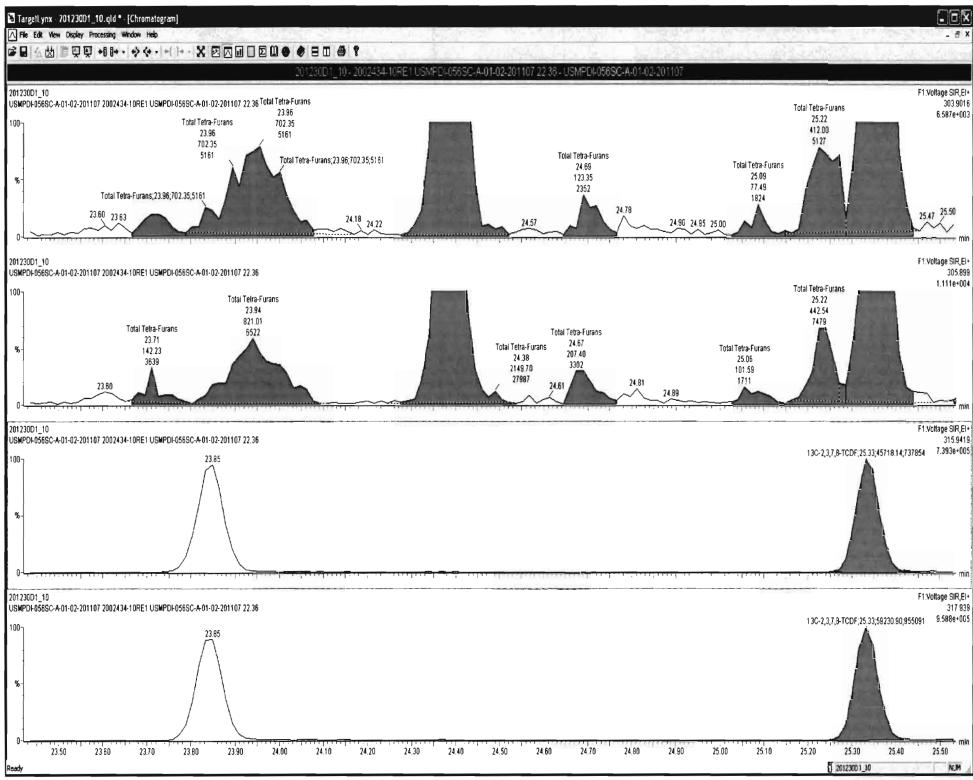


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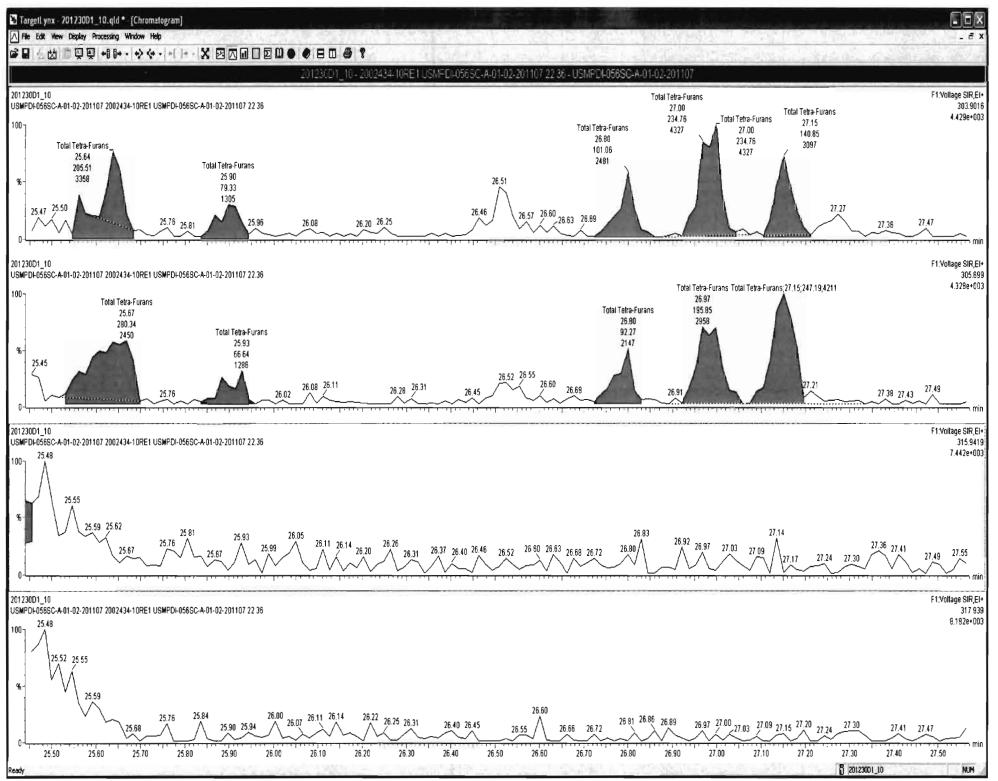








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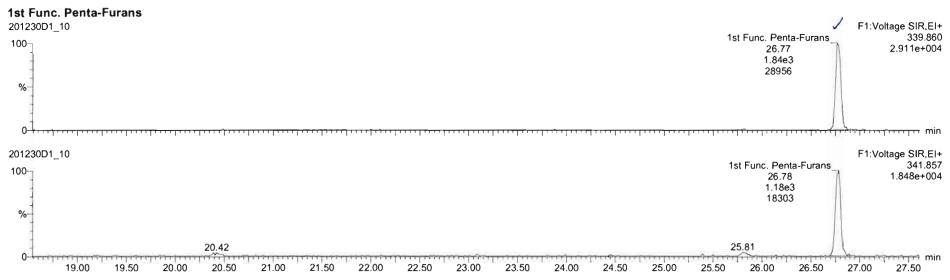


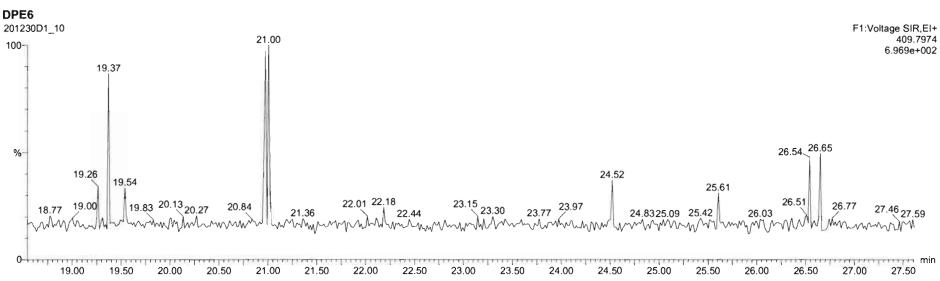
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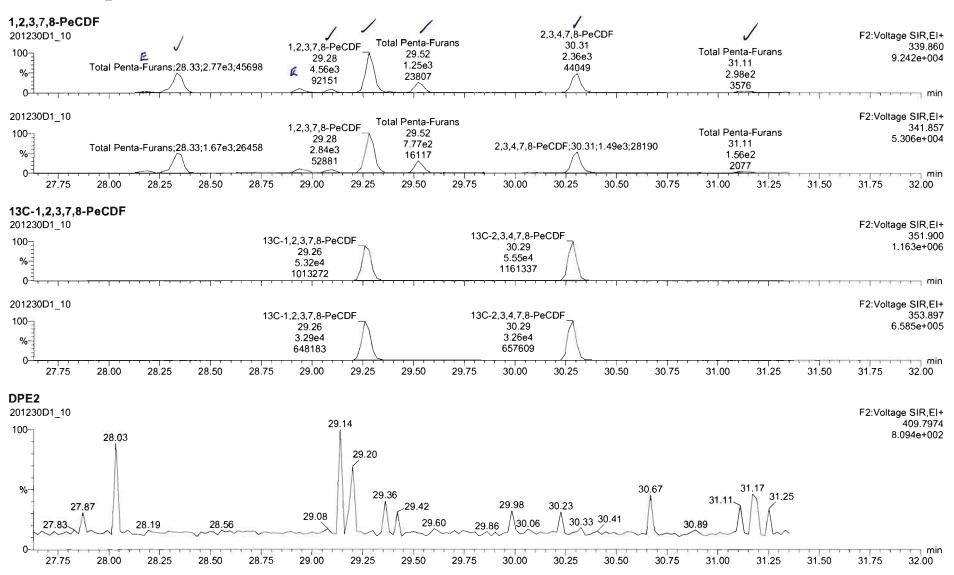


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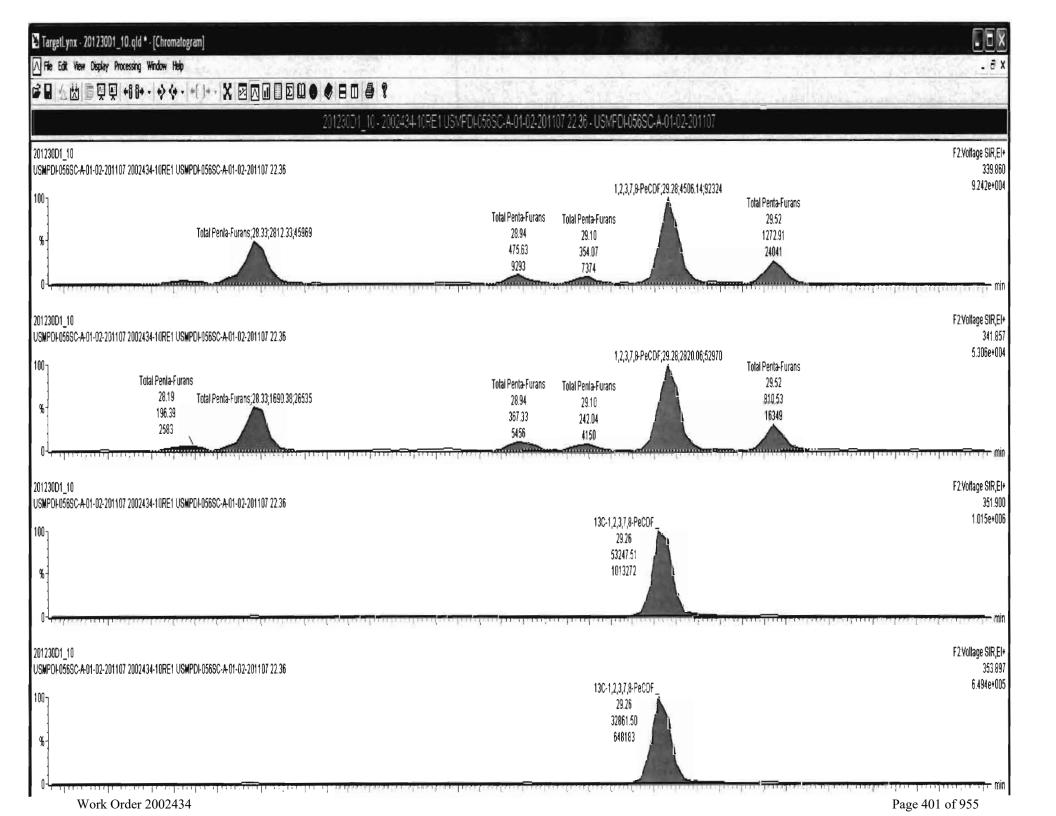
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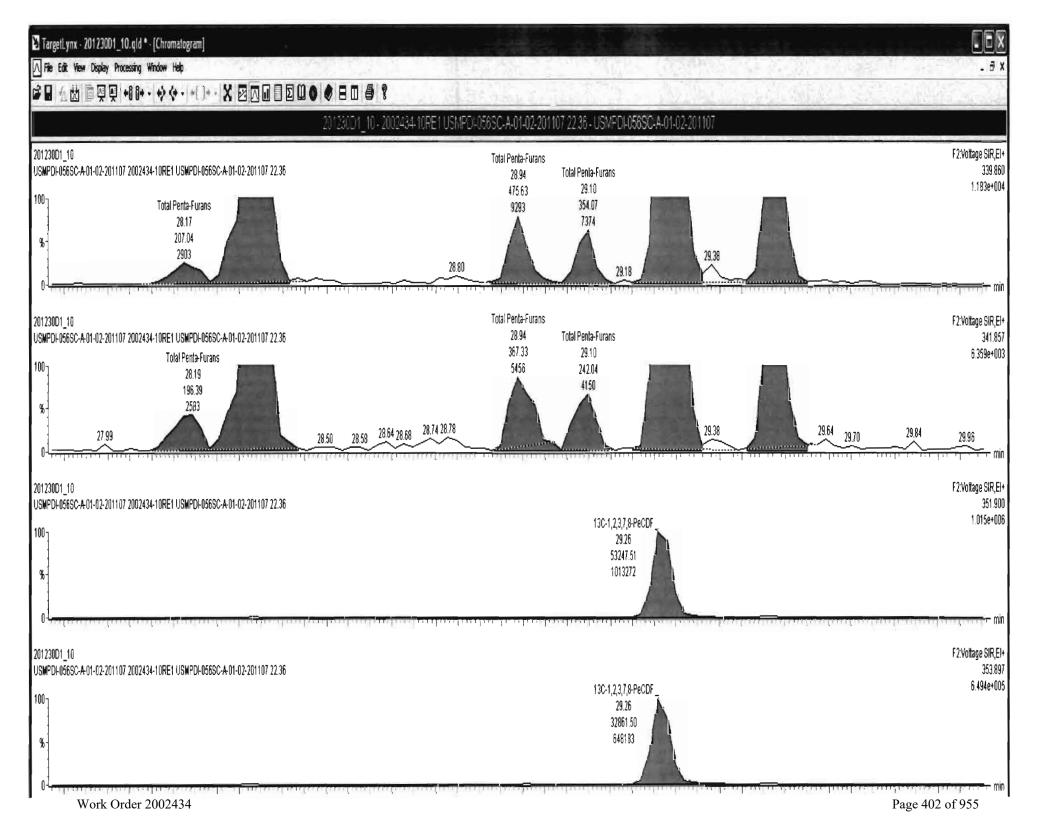
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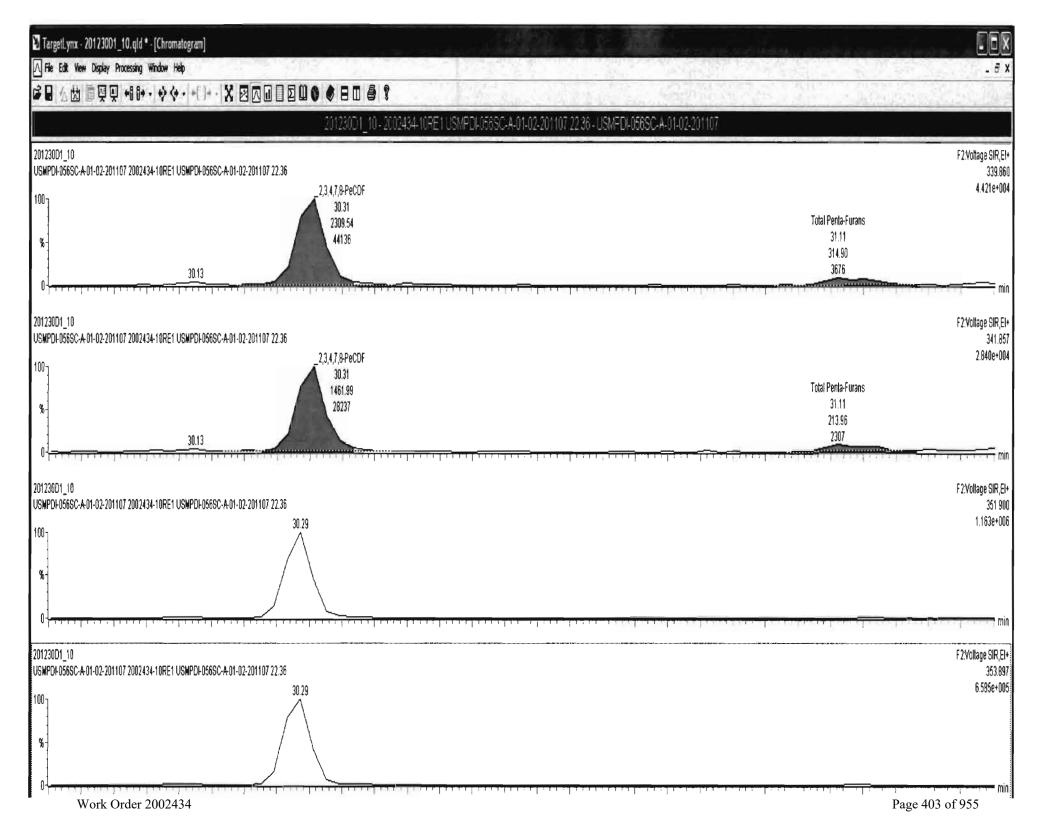
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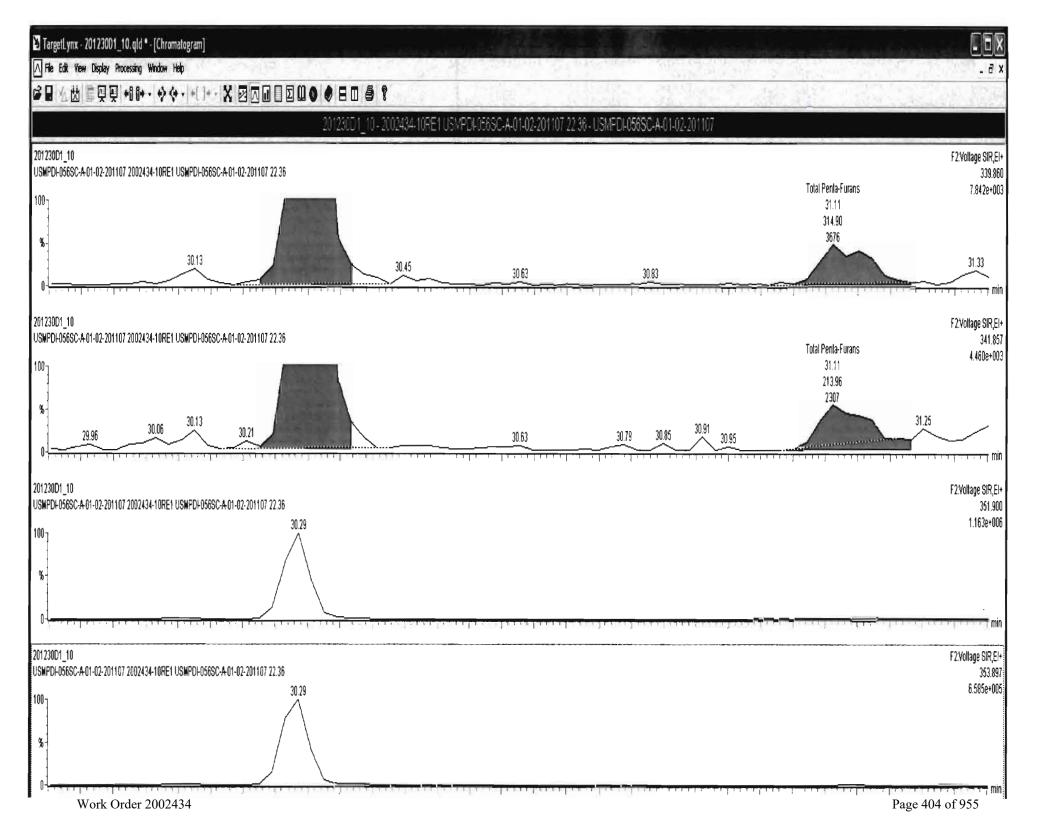


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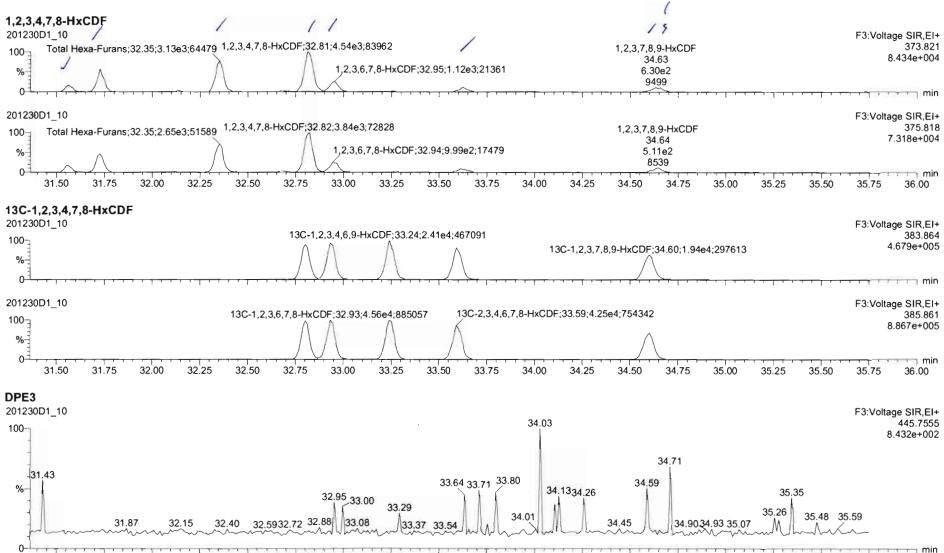




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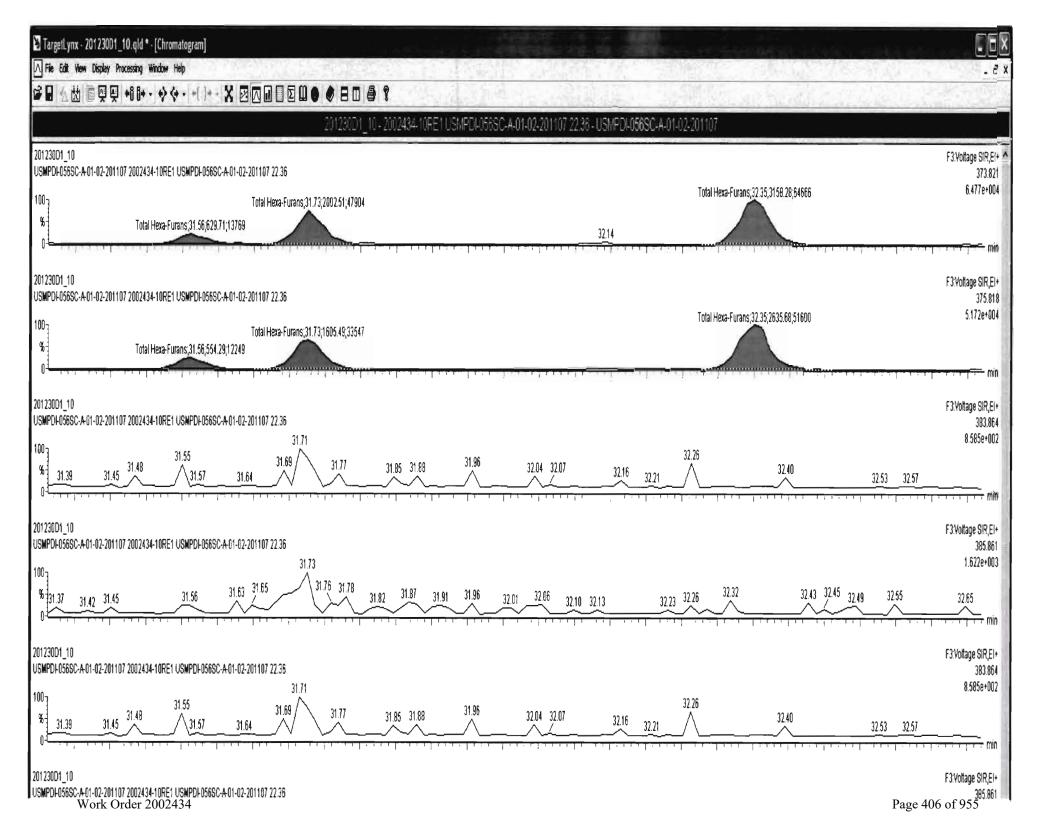
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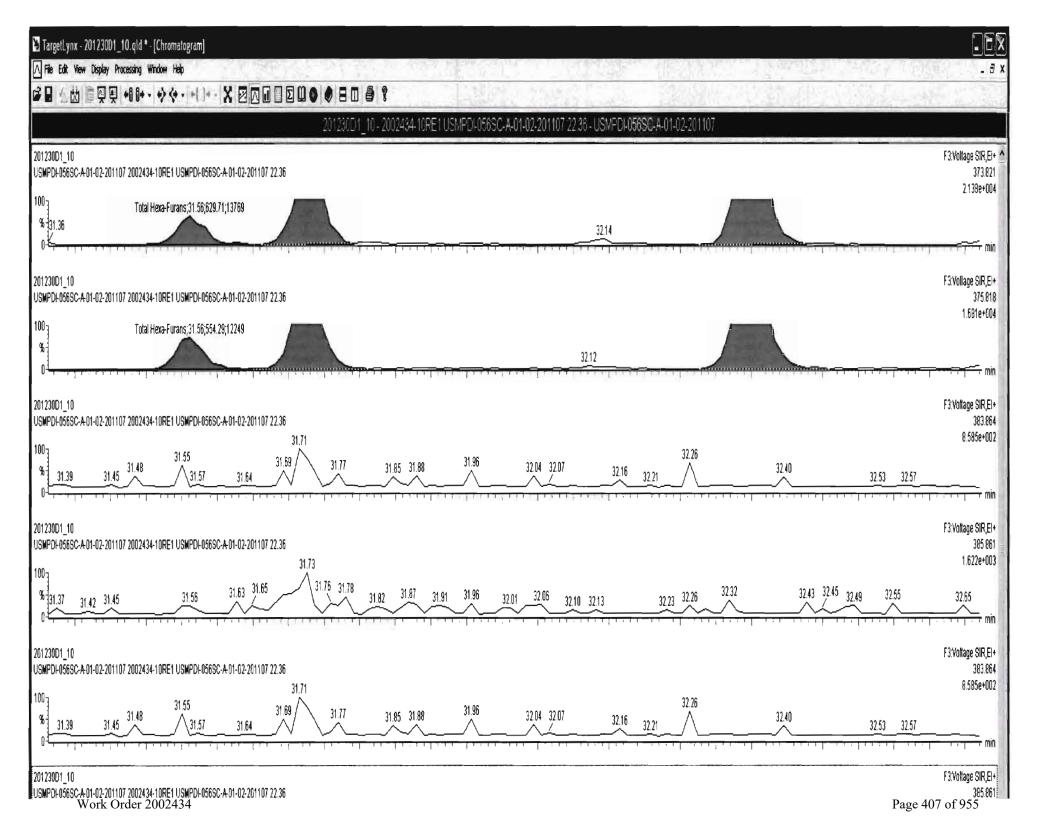
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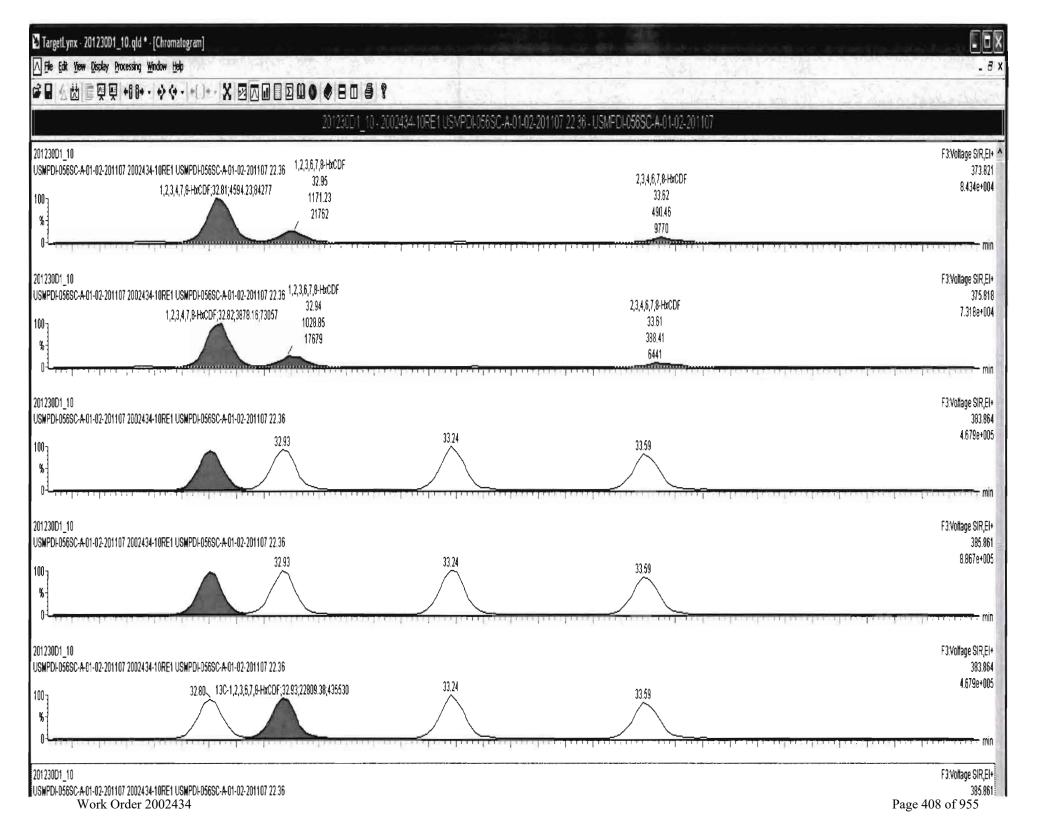
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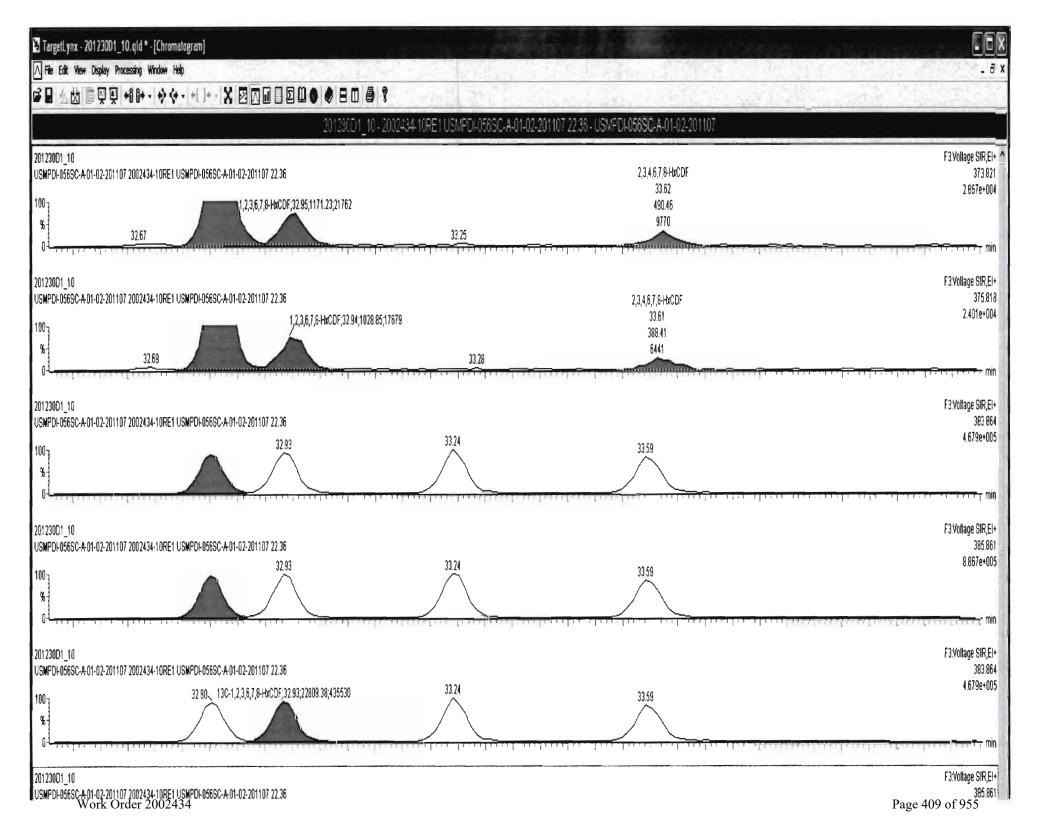
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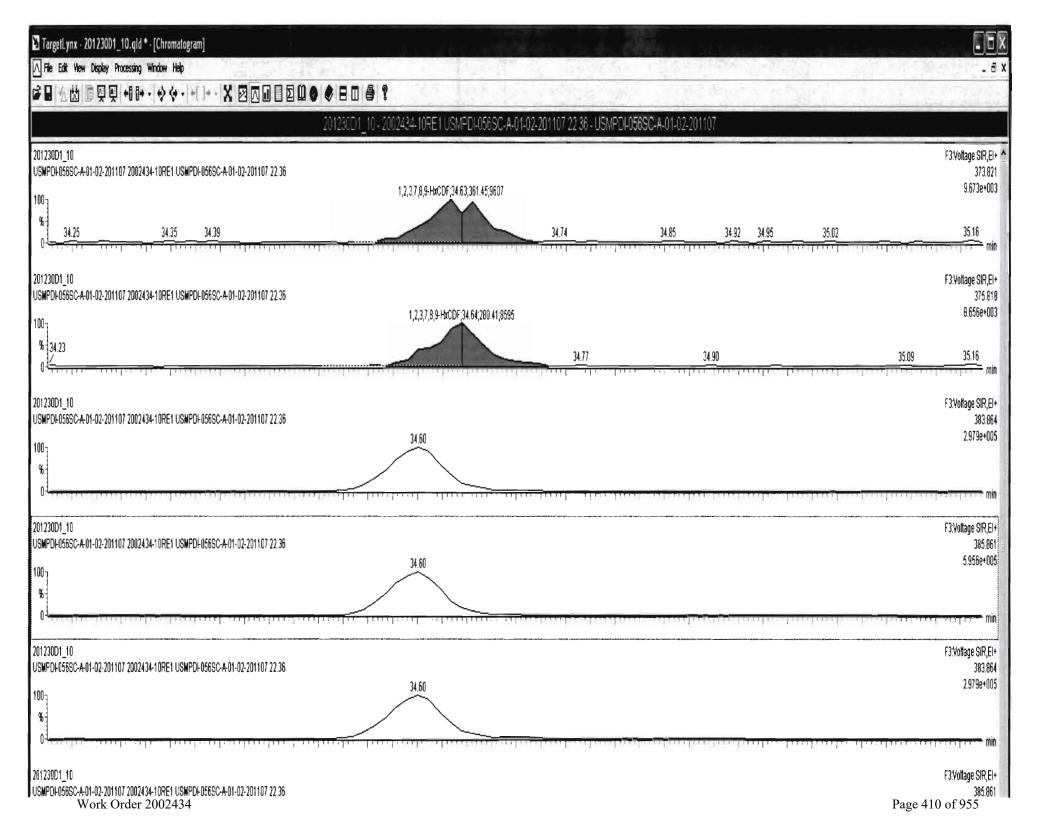
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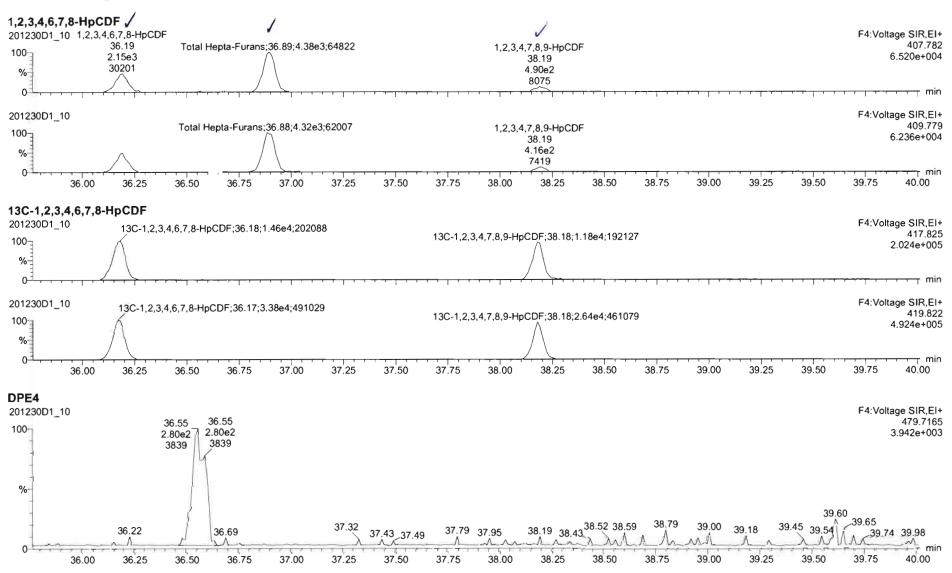


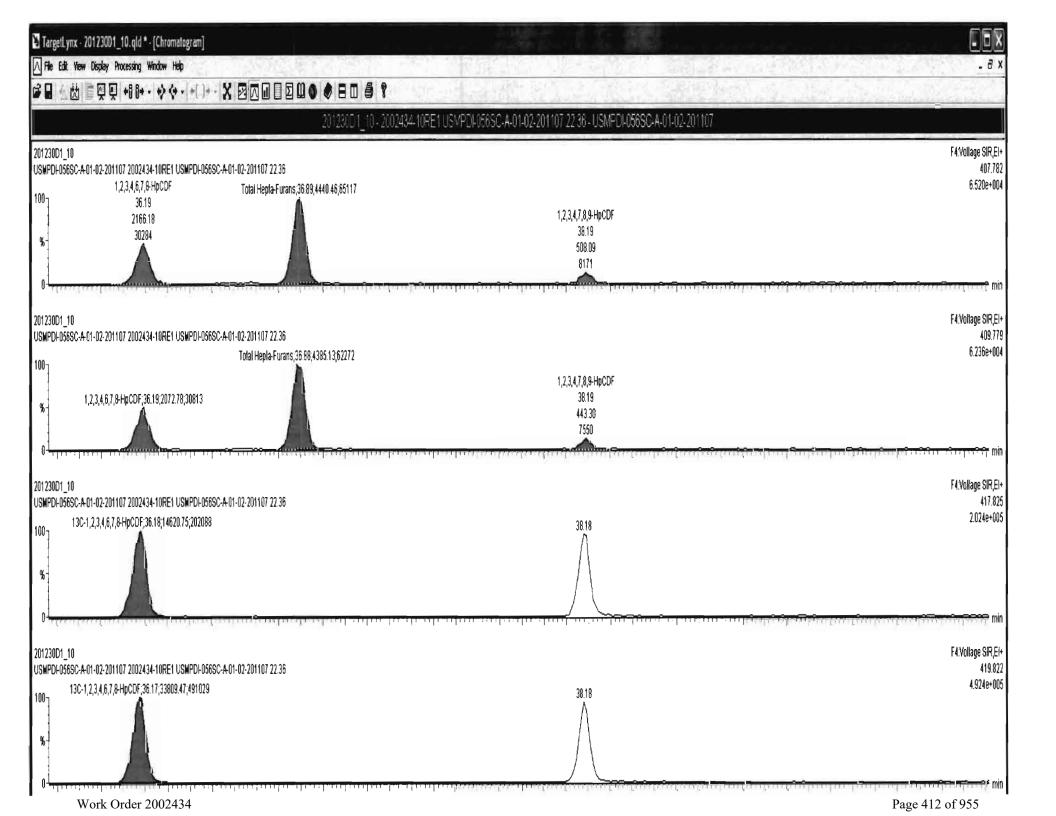
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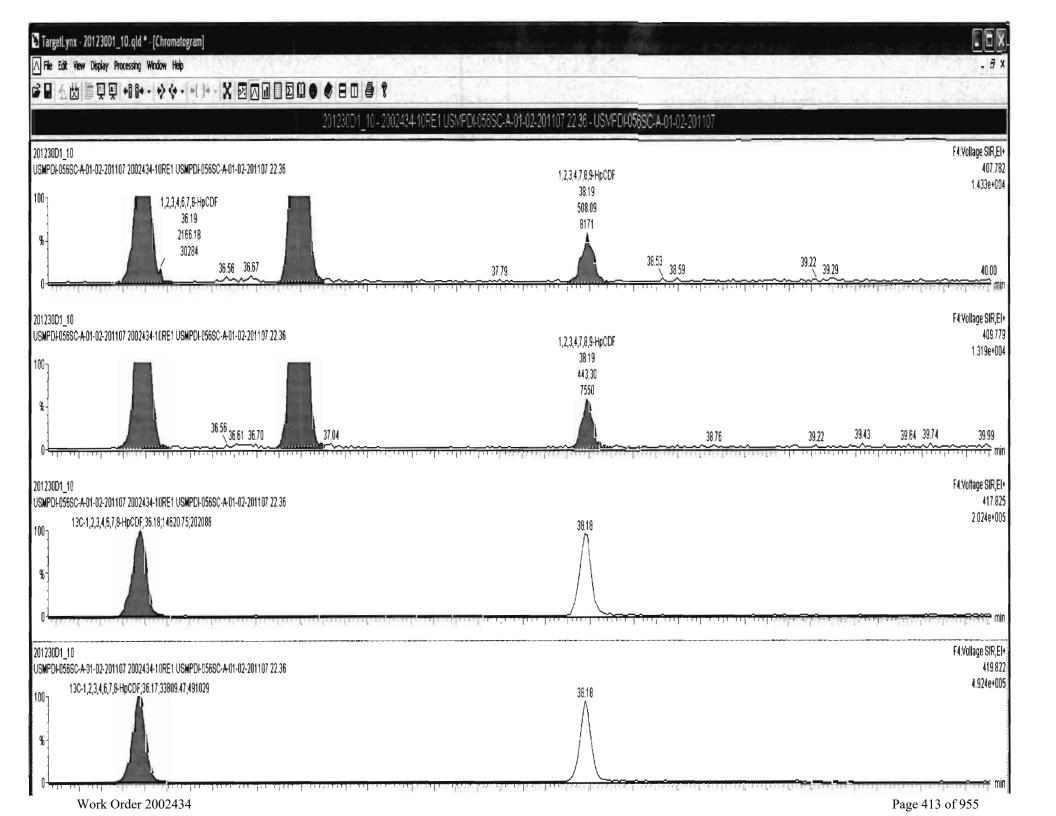
Last Altered: Printed:

Thursday, December 31, 2020 09:48:20 Pacific Standard Time Thursday, December 31, 2020 09:48:45 Pacific Standard Time

Name: 201230D1_10, Date: 30-Dec-2020, Time: 18:06:53, ID: 2002434-10RE1 USMPDI-056SC-A-01-02-201107 22:36, Description: USMPDI-056SC-A-01-02-201107



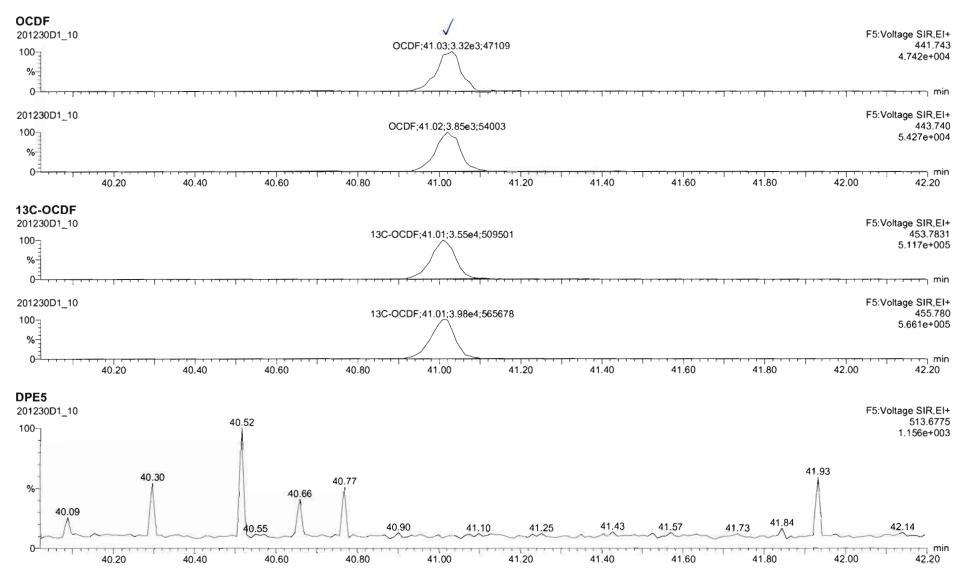




Dataset: U:\VG7.PRO\Results\201230D1\201230D1_10.qld

Last Altered: Thursday, December 31, 2020 09:48:20 Pacific Standard Time Thursday, December 31, 2020 09:48:45 Pacific Standard Time

Name: 201230D1_10, Date: 30-Dec-2020, Time: 18:06:53, ID: 2002434-10RE1 USMPDI-056SC-A-01-02-201107 22:36, Description: USMPDI-056SC-A-01-02-201107

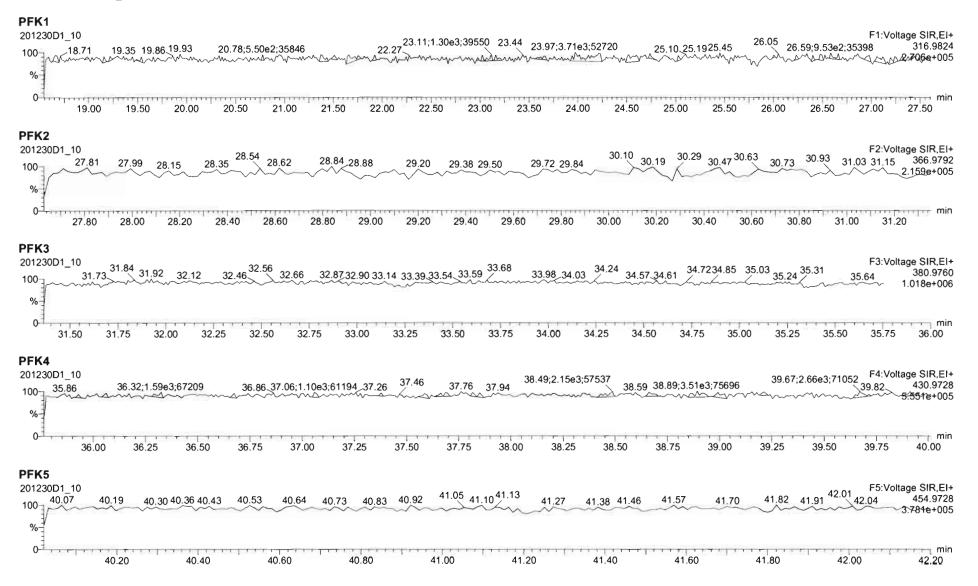


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Dataset: U:\VG7.PRO\Results\201230D1\201230D1_10.qld

Last Altered: Thursday, December 31, 2020 09:48:20 Pacific Standard Time Printed: Thursday, December 31, 2020 09:48:45 Pacific Standard Time

Name: 201230D1_10, Date: 30-Dec-2020, Time: 18:06:53, ID: 2002434-10RE1 USMPDI-056SC-A-01-02-201107 22:36, Description: USMPDI-056SC-A-01-02-201107



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Dataset:

U:\VG12.PRO\Results\201213R2\201213R2-12.qld

Last Altered: Printed:

Tuesday, December 15, 2020 12:06:30 PM Pacific Standard Time Tuesday, December 15, 2020 12:06:51 PM Pacific Standard Time

900 12/15/2020 MU-10/3/2020

Method: U:\VG12.PRO\MethDB\1613rrt-12-11-20.mdb 11 Dec 2020 08:35:32

Calibration: U:\VG12.PRO\CurveDB\dbDIOXIN_1613vg12-12-03-20.cdb 04 Dec 2020 11:36:07

Name: 201213R2_12, Date: 13-Dec-2020, Time: 18:24:12, ID: 2002434-11 USMPDI-056SC-A-02-03-201107 20.42, Description: USMPDI-056SC-A-02-03-201107

· · · · · · · · · · · · · · · · · · ·	# Name*	Resp.	I RAL	n/y	RRF	_ lovtw j	Pred.RT;	RT	Pred.RRT	RRT:	Conc	IL%Rec_L.	DL 1	EMPC
100	1 2,3,7,8-TCDD	2.54e3	0.64	YES	0.980	10.027	26.396	26.38	1.001	1.001	0.60494	200	0.0384	0.541
2	2 1,2,3,7,8-PeCDD	3.21e3	0.66	NO	0.932	10.027	31.079	31.06	1.001	1.000	0.70819		0.0590	0.708
3	3 1,2,3,4,7,8-HxCDD	3.74e3	1.34	NO	1.02	10.027	34.368	34.36 /	1.001	1.000	0.83750		0.157	0.837
4	4 1,2,3,6,7,8-HxCDD	2.92e4	1.24	NO	0.902	10.027	34.483	34.48 /	1.001	1.001	6.3652		0.159	6.37
5	5 1,2,3,7,8,9-HxCDD	1.48e4	1.24	NO	0.954	10.027	34.745	34.74	1.000	1.000	2.7309		0.132	2.73
67	6 1,2,3,4,6,7,8-HpCDD	4.00e5	1.02	NO	0.918	10.027	38.200	38.21	1.000	1.001	93.591		0.492	93.6
7,1-3 2 27	7 OCDD	2.73e6	0.88	NO	0.866	10.027	41.113	41.12	1.000	1.000	987.73		0.518	988
8	8 2,3,7,8-TCDF	2.31e4	0.72	NO	0.848	10.027	25.672	25.70	1.000	1.001	5.0830		0.0729	5.08
9	9 1,2,3,7,8-PeCDF	4.83e4	1.55	NO	0.960	10.027	29.785	29.80	1.000	1.000	7.3426		0.0616	7.34
10 1	10 2,3,4,7,8-PeCDF	1.92e4	1.61	NO	1.07	10.027	30.874	30.87	1.001	1.000	3.2871		0.0700	3.29
11, 12, 17,11	11 1,2,3,4,7,8-HxCDF	7.90e4	1.23	NO	0.986	10.027	33.447	33.46 -	1.000	1.001	14.377		0.0731	14.4
12	12 1,2,3,6,7,8-HxCDF	2.37e4	1.21	NO	1.04	10.027	33.592	33.58	1.001	1.000	3.9254		0.0667	3.93
13	13 2,3,4,6,7,8-HxCDF	8.26e3	1.15	NO	1.02	10.027	34.253	34.26 -	1.001	1.001	1.3370		0.0714	1.34
14.	14 1,2,3,7,8,9-HxCDF	2.44e3	1.08	NO	0.991	10.027	35.248	35.26 -	1.000	1.001	0.45605		0.0878	0.456
15	15 1,2,3,4,6,7,8-HpCDF	8.13e4	1.02	NO	1.05	10.027	36.824	36.82	1.000	1.000	17.366		0.144	17.4
16	16 1,2,3,4,7,8,9-HpCDF	1.18e4	1.10	NO	1.18	10.027	38.828	38.83	1.000	1.000	2.8599		0.119	2.86
17	17 OCDF	1.54e5	0.86	NO	0.896	10.027	41.406	41.41	1.000	1.000	47.905		0.122	47.9
	18 13C-2,3,7,8-TCDD	8.54e5	0.79	NO	1.06	10.027	26.368	26.36	1.030	1.030	96.997	48.6	0.0824	.
	19 13C-1,2,3,7,8-PeCDD	9.70e5	0.65	NO	0.785	10.027	31.211	31.05	1.219	1.213	148.24	74.3	0.135	
20	20 13C-1,2,3,4,7,8-HxCDD	8.73e5	1.29	NO	0.621	10.027	34.337	34.35 ~	1.014	1.014	186.76	93.6	0.300	
	21 13C-1,2,3,6,7,8-HxCDD	1.01e6	1.27	NO	0.734	10.027	34.459	34.46 -	1.017	1.017	183.27	91.9	0.253	
22	22 13C-1,2,3,7,8,9-HxCDD	1.13e6	1.25	NO	0.723	10.027	34.743	34.74 /	1.026	1.025	208.21	104	0.257	1
	23 13C-1,2,3,4,6,7,8-HpCDD	9.28e5	1.06	NO	0.568	10.027	38.243	38.19	1.129	1.127	217.06	109	0.582	
24	24 13C-OCDD	1.28e6	0.90	NO	0.496	10.027	41.180	41.10	1.216	1.213	341.42	85.6	0.360	
25'	25 13C-2,3,7,8-TCDF	1.07e6	0.78	NO	0.919	10.027	25.667	25.67	1.003	1.003	87.275	43.8	0.0827	
26	26 13C-1,2,3,7,8-PeCDF	1.37e6	1.59	NO	0.715	10.027	29.921	29.78	1.169	1.164	143.35	71.9	0.224	
27	27 13C-2,3,4,7,8-PeCDF	1.09e6	1.52	NO	0.689	10.027	31.008	30.85	1.212	1.205	118.77	59.5	0.232	
28],	28 13C-1,2,3,4,7,8-HxCDF	1.11e6	0.51	NO	0.873	10.027	33.442	33.44 /	0.987	0.987	168.89	84.7	0.288	
29	29 13C-1,2,3,6,7,8-HxCDF	1.16e6	0.51	NO	0.933	10.027	33.571	33.57 /	0.991	0.991	165.09	82.8	0.270	
30	30 13C-2,3,4,6,7,8-HxCDF	1.21e6	0.51	NO	0.843	10.027	34.238	34.23 /	1.011	1.011	190.16	95.3	0.299	
نسب سئي ۽ 31	31 13C-1,2,3,7,8,9-HxCDF	1.08e6	0.50	NO	0.780	10.027	35.238	35.24	1.040	1.040	183.37	91.9	0.323	

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Dataset: U:\VG12.PRO\Results\201213R2\201213R2-12.qld

Last Altered: Tuesday, December 15, 2020 12:06:30 PM Pacific Standard Time Tuesday, December 15, 2020 12:06:51 PM Pacific Standard Time

Name: 201213R2_12, Date: 13-Dec-2020, Time: 18:24:12, ID: 2002434-11 USMPDI-056SC-A-02-03-201107 20.42, Description: USMPDI-056SC-A-02-03-201107

7	# Name		iResp		"ny	K RRF	FAINOI &	Pred.RT	CRIS.	Pred RRT	LI RRT	Conc.	F%Rec 3	- 336 Dr 12	EMPC
32 15	귳 32 13C-1	.2.3.4.6.7.8-HpCDF	8.90e5	0.44	NO	0.726	10.027	36.813	36.81	1.087	1.086	162.54	81.5	0.356	
331	🐕 33 13C-1	,2,3,4,7,8,9-HpCDF	7.00e5	0.43	NO	0.491	10.027	38.822	38.82	1.146	1.146	189.22	94.9	0.526	
34	34 13C-C	OCDF	1.44e6	0.89	NO	0.565	10.027	41.396	41.40	1.222	1.222	337.05	84.5	0.330	
35	35 37CI-2	2,3,7,8-TCDD	4.05e5			1.22	10.027	26.363	26.38	1.030	1.031	39.889	50.0	0.0304	
36	1 36 13C-1	,2,3,4-TCDD	1.66e6	0.80	NO	1.00	10.027	25.640	25.59	1.000	1.000	199.47	100	0.0870	
37	Z 37 13C-1	1,2,3,4-TCDF	2.66e6	0.78	NO	1.00	10.027	24.130	24.10	1.000	1.000	199.47	100	0.0760	
38	🛂 38 13C-1	,2,3,4,6,9-HxCDF	1.50e6	0.51	NO	1.00	10.027	33.920	33.88	1.000	1.000	199.47	100	0.252	
39	39 Total	Tetra-Dioxins				0.980	10.027	24.620		0.000		2.3095		0.0334	2.99
40	40 Total	Penta-Dioxins				0.932	10.027	29.960		0.000		4.5316		0.0590	5.61
411 - 1	🚰 41 Total	Hexa-Dioxins				0.902	10.027	33.635		0.000		48.123		0.157	48.1
425	42 Total	Hepta-Dioxins				0.918	10.027	37.640		0.000		194.06		0.492	194
43	43 Total	Tetra-Furans				0.848	10.027	23.610		0.000		18.164		0.0729	20.7
44	44 1st Fu	unc. Penta-Furans				0.960	10.027	26.930		0.000		4.9171		0.0151	4.92
45	7 45 Total	Penta-Furans				0.960	10.027	29.275		0.000		21.289		0.0688	21.3
46	7 46 Total	Hexa-Furans				1.02	10.027	33.555		0.000		41.469		0.0736	41.5
47	7 47 Total	Hepta-Furans				1.05	10.027	37.835		0.000		49.246		0.140	49.2

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Quantify Totals Report MassLynx 4.1 SCN815 Page 1 of 5

Vista Analytical Laboratory

Dataset: U:\VG12.PRO\Results\201213R2\201213R2-12.qld

Last Altered: Tuesday, December 15, 2020 12:06:30 PM Pacific Standard Time Printed: Tuesday, December 15, 2020 12:06:51 PM Pacific Standard Time

Method: U:\VG12.PRO\MethDB\1613rrt-12-11-20.mdb 11 Dec 2020 08:35:32

Calibration: U:\VG12.PRO\CurveDB\dbDIOXIN_1613vg12-12-03-20.cdb 04 Dec 2020 11:36:07

Name: 201213R2_12, Date: 13-Dec-2020, Time: 18:24:12, ID: 2002434-11 USMPDI-056SC-A-02-03-201107 20.42, Description: USMPDI-056SC-A-02-03-201107

Tetra-Dioxins

1 [/ *]	Name '3 '4	de de la companya de	RT	n1 Height	n2 Height 14	m1 Resp	m2 Resp	, [RA]	[u/y]	₄ Resp_	LConc.	EMPC	, ¿DL
1.7.50	Total Tetra-Dic		22.59		2.021e4	9.652e2	1.424e3	0.68	NO	2.389e3	0.56949	0.56949	0.0334
2	Totat Tetra-Did	oxins	22.92	7.752e3	8.547e3	6.150e2	6.959e2	0.88	NO	1.311e3	0.31244	0.31244	0.0334
3 1	Total Tetra-Did	oxins	23.47	3.107e3	4.422e3	2.563e2	3.230e2	0.79	NO	5.793e2	0.13806	0.13806	0.0334
4-4	Total Tetra-Did	oxins	24.32	3.713e3	3.585e3	2.343e2	2.991e2	0.78	NO	5.334e2	0.12714	0.12714	0.0334
5	Total Tetra-Did	oxins	24.50	3.835e3	3.640e3	2.659e2	3.067e2	0.87	NO	5.726e2	0.13647	0.13647	0.0334
6	Total Tetra-Did	oxins	24.74	6.648e3	7.307e3	4.130e2	4.787e2	0.86	NO	8.917e2	0.21253	0.21253	0.0334
7	Total Tetra-Did	oxins	25.24	2.896e3	3.677e3	1.929e2	2.457e2	0.79	NO	4.386e2	0.10454	0.10454	0.0334
88	Total Tetra-Did	oxins	25.31	2.383e3	2.546e3	1.460e2	1.356e2	1.08	YES	0.000e0	0.00000	0.057218	0.0334
9-7-1	Total Tetra-Did	oxins	26.10	1.838e4	2.549e4	1.274e3	1.700e3	0.75	NO	2.974e3	0.70883	0.70883	0.0334
10	2,3,7,8-TCDD		26.38	1.457e4	2.619e4	9.881e2	1.550e3	0.64	YES	2.538e3	0.00000	0.54133	0.0334
1155	Total Tetra-Did	oxins	26.69	3.335e3	2.954e3	2.080e2	1.863e2	1.12	YES	0.000e0	0.00000	0.078590	0.0334

Penta-Dioxins

2.0	Name,		· E	RT	, m1 Heigh	t 1 m2 Height (m1 Resp	m2 Resp	į RAJ	Ju/y][Resp	Conc.	EMPC	DL
1 21	Total Penta	Dioxins		28.8	0 3.917e4	6.625 e 4	3.014e3	4.620e3	0.65	NO	7.635e3	1.6849	1.6849	0.0590
2	Total Penta	-Dioxins		29.2	8 9.243e3	3 1.650e4	4.503e2	7.648e2	0.59	NO	1.215e3	0.26818	0.26818	0.0590
3	Total Penta	Dioxins		29.8	0 2.510e4	4.108e4	1.601e3	2.241e3	0.71	NO	3.841e3	0.84780	0.84780	0.0590
4	Total Penta	-Dioxins		29.9	8 2.208e4	3.206e4	8.030e2	1.252e3	0.64	NO	0.000e0	0.00000	0.45354	0.0590
5	Total Penta-	-Dioxins		30.0	1 1.944e4	2.768e4	1.111e3	1.721e3	0.65	NO	0.000e0	0.00000	0.62510	0.0590
6	Total Penta	-Dioxins		30.2	5 1.447e4	2.087e4	1.092e3	1.663e3	0.66	NO	2.756e3	0.60820	0.60820	0.0590
7	Total Penta	-Dioxins		30.5	8 2.636e3	3 4.044e3	1.458e2	2.405e2	0.61	NO	3.863e2	0.085265	0.085265	0.0590
8 77.	1,2,3,7,8-Pe	CDD		31.0	6 2.537e	3.712e4	1.281e3	1.927e3	0.66	NO	3.209e3	0.70819	0.70819	0.0590
97.5	Total Penta	-Dioxins		31.1	1 6.592e3	3 7.356e3	2.566e2	3.625e2	0.71	NO	6.192e2	0.13665	0.13665	0.0590
10	Total Penta	-Dioxins		31.4	2 6.363e3	3 1.380e4	3.080e2	5.637e2	0.55	NO	8.717e2	0.19238	0.19238	0.0590

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Dataset:

U:\VG12.PRO\Results\201213R2\201213R2-12.qld

Last Altered: Printed: Tuesday, December 15, 2020 12:06:30 PM Pacific Standard Time Tuesday, December 15, 2020 12:06:51 PM Pacific Standard Time

Name: 201213R2_12, Date: 13-Dec-2020, Time: 18:24:12, ID: 2002434-11 USMPDI-056SC-A-02-03-201107 20.42, Description: USMPDI-056SC-A-02-03-201107

Hexa-Dioxins

	Name	4. 1	_RT_	y Ł.	m1 Height	m2 Height, լ	m1 Resp	m2 Resp	RA,	iu/y1L	Resp	[Conc.]	: EMPC	L. DL
1,	Total Hexa	-Dioxins	32.7	1	5.759e5	4.764e5	2.824e4	2.307e4	1.22	NO	5.131e4	11.264	11.264	0.157
2	Total Hexa	-Dioxins	33.3	2	6.318e4	5.198e4	3.350e3	2.608e3	1.28	NO	5.958e3	1.3080	1.3080	0.157
3	Total Hexa	-Dioxins	33.6	i 1	9.328e5	7.447e5	6.243e4	4.925e4	1.27	NO	1.117e5	24.520	24.520	0.157
4	Total Hexa	-Dioxins	33.6	8	3.327e4	2.538e4	1.711e3	1.295e3	1.32	NO	3.007e3	0.66012	0.66012	0.157
5	1,2,3,4,7,8	-HxCDD	34.3	6	3.988e4	3.269e4	2.145e3	1.595e3	1.34	NO	3.740e3	0.83750	0.83750	0.157
6	1,2,3,6,7,8	-HxCDD	34.4	8	2.887e5	2.292e5	1.617e4	1.301e4	1.24	NO	2.919e4	6.3652	6.3652	0.159
7	Total Hexa	-Dioxins	34.6	3	2.046e4	1.553e4	1.159e3	8.297e2	1.40	NO	1.989e3	0.43664	0.43664	0.157
8,	1,2,3,7,8,9	-HxCDD	34.7	4	1.424e5	1.283e5	8.187e3	6.620e3	1.24	NO	1.481e4	2.7309	2.7309	0.132

Hepta-Dioxins

٠	Name Total Hepta-Dioxins 1,2,3,4,6,7,8-HpCDD	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	[[RA]	n/y 1	ر_Resp	Conc. L	EMPC	DL
1-	Total Hepta-Dioxins	37.19	3.214e6	3.106e6	2.173e5	2.120e5	1.02	NO	4.293e5	100.47	100.47	0.492
2	1,2,3,4,6,7,8-HpCDD	38.21	3.897e6	3.757e6	2.024e5	1.975e5	1.02	NO	3.999e5	93.591	93.591	0.492

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Dataset: U:\VG12.PRO\Results\201213R2\201213R2-12.qld

Last Altered: Tuesday, December 15, 2020 12:06:30 PM Pacific Standard Time Printed: Tuesday, December 15, 2020 12:06:51 PM Pacific Standard Time

Name: 201213R2_12, Date: 13-Dec-2020, Time: 18:24:12, ID: 2002434-11 USMPDI-056SC-A-02-03-201107 20.42, Description: USMPDI-056SC-A-02-03-201107

Tetra-Furans

- Cigin 1960	Name		RT	m1 Height	m2 Height	m1 Resp	m2 Resp_I	RA'	n/y;L	Resp	Conc.	EMPC	. DL
11	Total Te	etra-Furans	20.32	5.993e3	6.808e3	4.829e2	6.716e2	0.72	NO	1.155e3	0.25410	0.25410	0.0729
2	Total Te	etra-Furans	20.86	6.929e3	9.223e3	5.428e2	6.771e2	0.80	NO	1.220e3	0.26849	0.26849	0.0729
3	Total Te	etra-Furans	21.68	3.575e4	5.227e4	3.273e3	4.752e3	0.69	NO	8.025e3	1.7663	1.7663	0.0729
4	Total Te	etra-Furans	22.05	3.365e3	4.328e3	2.435e2	3.157e2	0.77	NO	5.592e2	0.12309	0.12309	0.0729
5	Total Te	etra-Furans	22.14	8.448e3	1.181e4	9.141e2	1.278e3	0.72	NO	2.192e3	0.48250	0.48250	0.0729
6	5	etra-Furans	22.27	3.996e3	4.386e3	2.466e2	3.061e2	0.81	NO	5.528e2	0.12166	0.12166	0.0729
7	* Total Te	etra-Furans	22.62	2.908e4	3.892e4	2.933e3	3.806e3	0.77	NO	6.740e3	1.4834	1.4834	0.0729
8		etra-Furans	23.07	1.503e4	2.580e4	1.335e3	1.974e3	0.68	NO	3.309e3	0.72830	0.72830	0.0729
9	Total Te	etra-Furans	23.21	7.109e3	7.409e3	5.246e2	6.533e2	0.80	NO	1.178e3	0.25926	0.25926	0.0729
10 16	Total Te	etra-Furans	23.44	1.095e4	1.416e4	7.932e2	1.187e3	0.67	NO	1.980e3	0.43583	0.43583	0.0729
11	Total Te	etra-Furans	23.87	4.136e3	4.423e3	2.093e2	2.805e2	0.75	NO	4.898e2	0.10780	0.10780	0.0729
12	Total Te	etra-Furans	23.95	4.931e3	7.891e3	3.535e2	5.311e2	0.67	NO	8.846e2	0.19470	0.19470	0.0729
13	Total Te	etra-Furans	24.16	2.585e4	3.569e4	9.132e2	1.392e3	0.66	NO	0.000e0	0.00000	0.50741	0.0729
14	Total Te	etra-Furans	24.19	3.619e4	4.623e4	3.379e3	4.555e3	0.74	NO	0.000e0	0.00000	1.7463	0.0729
15	Total Te	etra-Furans	24.68	1.151e5	1.552e5	7.921e3	1.048e4	0.76	NO	1.840e4	4.0507	4.0507	0.0729
16	Total Te	etra-Furans	24.99	7.497e3	8.237e3	4.211e2	5.626e2	0.75	NO	9.837e2	0.21651	0.21651	0.0729
	Total Te	etra-Furans	25.09	5.108e3	5.876e3	3.207e2	3.692e2	0.87	NO	6.900e2	0.15186	0.15186	0.0729
18	Total Te	etra-Furans	25.40	4.572e3	5.617e3	2.959e2	3.543e2	0.84	NO	6.503e2	0.14312	0.14312	0.0729
19	Total Te	etra-Furans	25.57	4.130e4	4.597e4	2.585e3	3.417e3	0.76	NO	6.003e3	1.3212	1.3212	0.0729
20 1	2,3,7,8-1	TCDF	25.70	1.490e5	2.175e5	9.690e3	1.340e4	0.72	NO	2.309e4	5.0830	5.0830	0.0729
		etra-Furans	25.91	5.107e3	6.129e3	3.143e2	4.391e2	0.72	NO	7.533e2	0.16580	0.16580	0.0729
22	Total Te	etra-Furans	25.99	8.676e3	1.115e4	4.511e2	6.675e2	0.68	NO	0.000e0	0.00000	0.24619	0.0729
23	, Total Te	etra-Furans	26.25	3.929e3	5.104e3	2.378e2	2.718e2	0.87	NO	5.097e2	0.11217	0.11217	0.0729
24 1	Total Te	etra-Furans	27.19	8.785e3	1.136e4	5.229e2	6.983e2	0.75	NO	1.221e3	0.26878	0.26878	0.0729
	Total Te	etra-Furans	27.58	1.426e4	1.962e4	8.346e2	1.098e3	0.76	NO	1.933e3	0.42542	0.42542	0.0729

Penta-Furans function 1

Name Name	ا بیبار	m1 Height	m2 Height,	m1 Resp	_m2 Resp	, IRA; in/y,	Resp	Conc.	EMPC	DL_
		3.086e5				1.62 NO			4.9171	

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Dataset: U:\VG12.PRO\Results\201213R2\201213R2-12.qld

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Name: 201213R2_12, Date: 13-Dec-2020, Time: 18:24:12, ID: 2002434-11 USMPDI-056SC-A-02-03-201107 20.42, Description: USMPDI-056SC-A-02-03-201107

Penta-Furans

Name .	RT_J	m1 Height	m2 Height i	m1 Resp	m2 Resp	[RA]	[n/y]]	Resp	Conc.	EMPC	DL نیسا
1 Total Penta-Furans	28.67	2.413e4	1.972e4	1.724e3	1.209e3	1.43	NO	2.933e3	0.49654	0.49654	0.0688
2 Total Penta-Furans	28.82	2.772e5	1.697e5	1.898e4	1.213e4	1.56	NO	3.111e4	5.2665	5.2665	0.0688
3 Total Penta-Furans	29.45	9.542e4	5.720e4	5.269e3	3.352e3	1.57	NO	8.621e3	1.4593	1.4593	0.0688
4 Total Penta-Furans	29.60	3.697e4	2.989e4	2.153e3	1.598e3	1.35	NO	3.752e3	0.63511	0.63511	0.0688
5 1,2,3,7,8-PeCDF	29.80	5.601e5	3.884e5	2.931e4	1.894e4	1.55	NO	4.825e4	7.3426	7.3426	0.0616
6 Total Penta-Furans	29.89	8.915e3	4.621e3	4.124e2	3.008e2	1.37	NO	7.132e2	0.12073	0.12073	0.0688
7. Total Penta-Furans	30.05	1.560e5	9.173e4	7.971e3	5.391e3	1.48	NO	1.336e4	2.2620	2.2620	0.0688
8 Total Penta-Furans	30.67	1.681e4	1.103e4	7.521e2	4.295e2	1.75	NO	1.182e3	0.20002	0.20002	0.0688
92,3,4,7,8-PeCDF	30.87	2.448e5	1.471e5	1.183e4	7.335e3	1.61	NO	1.916e4	3.2871	3.2871	0.0700
10-13-1 Total Penta-Furans	31.77	1.241e4	8.016e3	7.521e2	5.419e2	1.39	NO	1.294e3	0.21906	0.21906	0.0688

Hexa-Furans

Name -	RT (m1 Height	m2 Height	m1 Resp	m2 Resp	, RA	ſu/y [Resp	Conc.	EMPC	DL زيخ
1,T, Total Hexa-Furans	32.19	1.789e5	1.450e5	7.876e3	6.706e3	1.17	NO	1.458e4	2.5023	2.5023	0.0736
2 Total Hexa-Furans	32.36	5.874e5	5.021e5	2.750e4	2.282e4	1.20	NO	5.032e4	8.6354	8.6354	0.0736
3 Total Hexa-Furans	32.78	9.427e3	6.638e3	5.595e2	4.224e2	1.32	NO	9.819e2	0.16850	0.16850	0.0736
4 Total Hexa-Furans	32.99	5.743e5	4.549e5	2.778e4	2.257e4	1.23	NO	5.035e4	8.6400	8.6400	0.0736
5 Total Hexa-Furans	33.32	1.417e4	1.245e4	7.349e2	6.574e2	1.12	NO	1.392e3	0.23894	0.23894	0.0736
6 1,2,3,4,7,8-HxCDF	33.46	8.739e5	7.045e5	4.349e4	3.548e4	1.23	NO	7.897e4	14.377	14.377	0.0731
7. 1,2,3,6,7,8-HxCDF	33.58	2.515e5	2.059e5	1.300e4	1.073e4	1.21	NO	2.373e4	3.9254	3.9254	0.0667
8 Total Hexa-Furans	33.91	6.607e3	5.978e3	3.405e2	3.005e2	1.13	NO	6.410e2	0.11000	0.11000	0.0736
9 2,3,4,6,7,8-HxCDF	34.26	7.714e4	6.247e4	4.419e3	3.840e3	1.15	NO	8.259e3	1.3370	1.3370	0.0714
10 1,2,3,7,8,9-HxCDF	35.26	5.011e4	4.096e4	1.269e3	1.173e3	1.08	NO	2.441e3	0.45605	0.45605	0.0878
11 Total Hexa-Furans	35.28	6.790e4	6.122e4	3.382e3	2.903e3	1.16	NO	6.285e3	1.0785	1.0785	0.0736

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Quantify Totals Report MassLynx 4.1 SCN815

Vista Analytical Laboratory

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Dataset:

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Tuesday, December 15, 2020 12:06:30 PM Pacific Standard Time Tuesday, December 15, 2020 12:06:51 PM Pacific Standard Time

Name: 201213R2_12, Date: 13-Dec-2020, Time: 18:24:12, ID: 2002434-11 USMPDI-056SC-A-02-03-201107 20.42, Description: USMPDI-056SC-A-02-03-201107

: Page 5 of 5

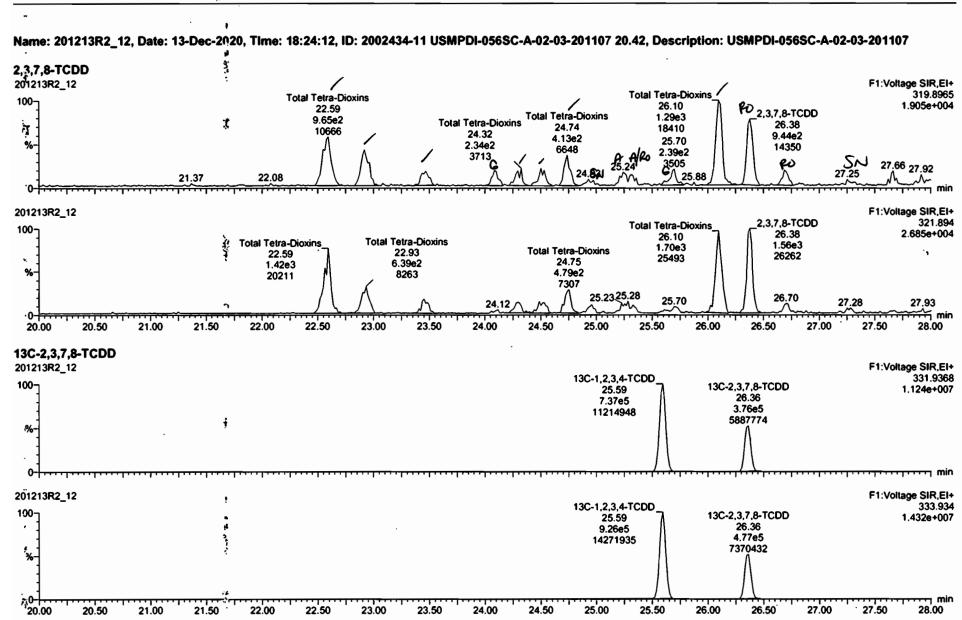
Hepta-Furans

Name •	LERTERL	m1 Height [m2 Height,	m1.Resp [m2 Resp	I RA	tu/y L	Resp	Conc. [EMPC L	DL
1,2,3,4,6,7,8-HpCDF	36.82	6.251e5	6.367e5	4.095e4	4.031e4	1.02	NO	8.126e4	17.366	17.366	0.144
2 Total Hepta-Furans	37.28	8.611e3	1.253e4	7.587e2	8.411e2	0.90	NO	1.600e3	0.38265	0.38265	0.140
3 Total Hepta-Furans	37.54	9.728e5	9.589e5	6.002e4	5.970e4	1.01	NO	1.197e5	28.638	28.638	0.140
4 1.2,3,4,7,8,9-HpCDF	38.83	1.195e5	1.145e5	6.187e3	5.616e3	1.10	NO	1.180e4	2.8599	2.8599	0.119

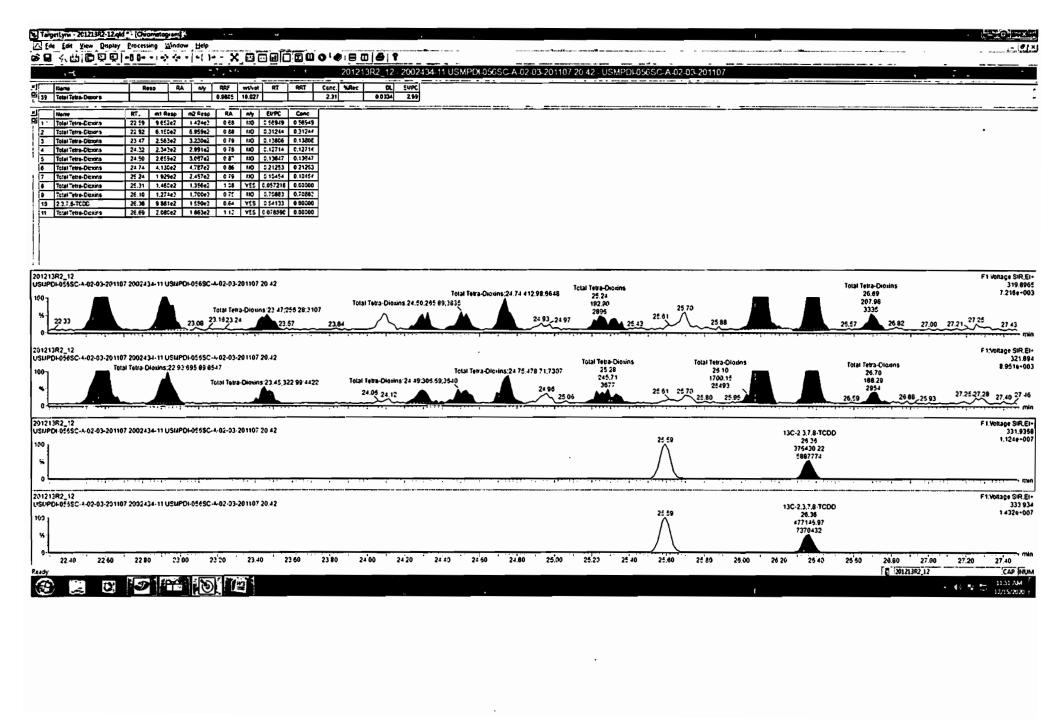
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Work Order 2002434



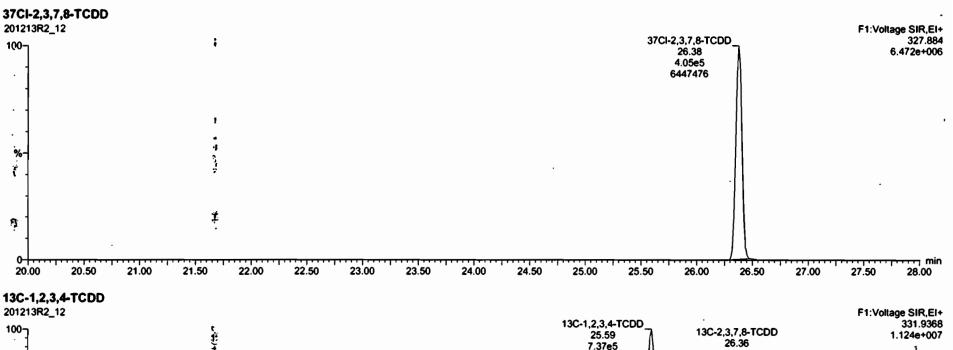
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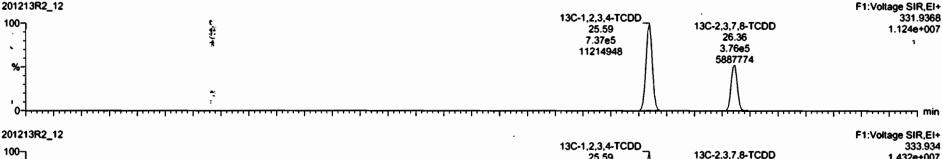
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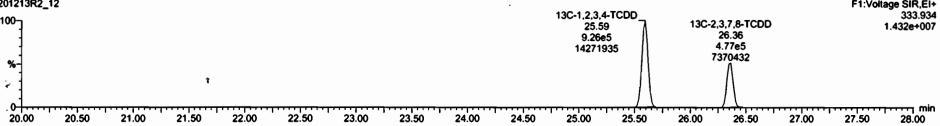
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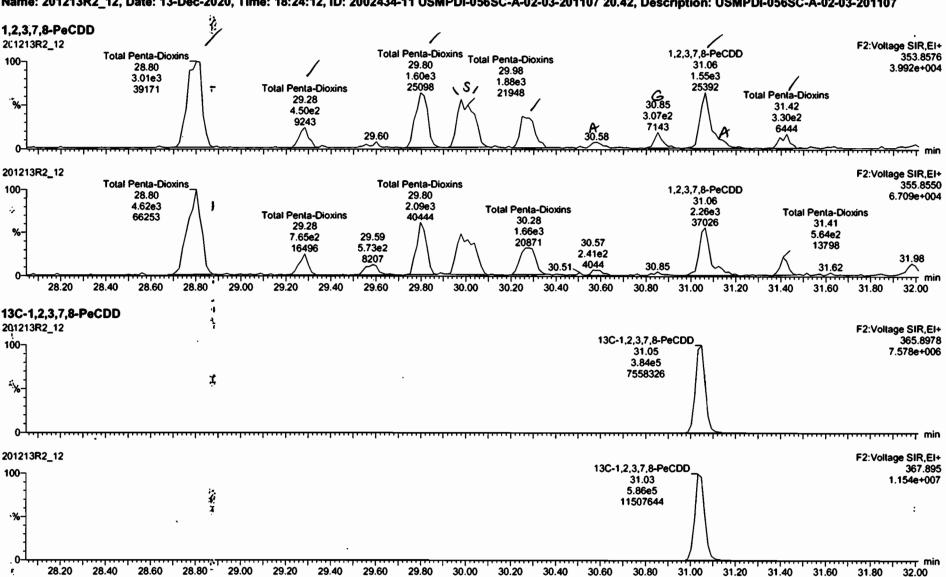


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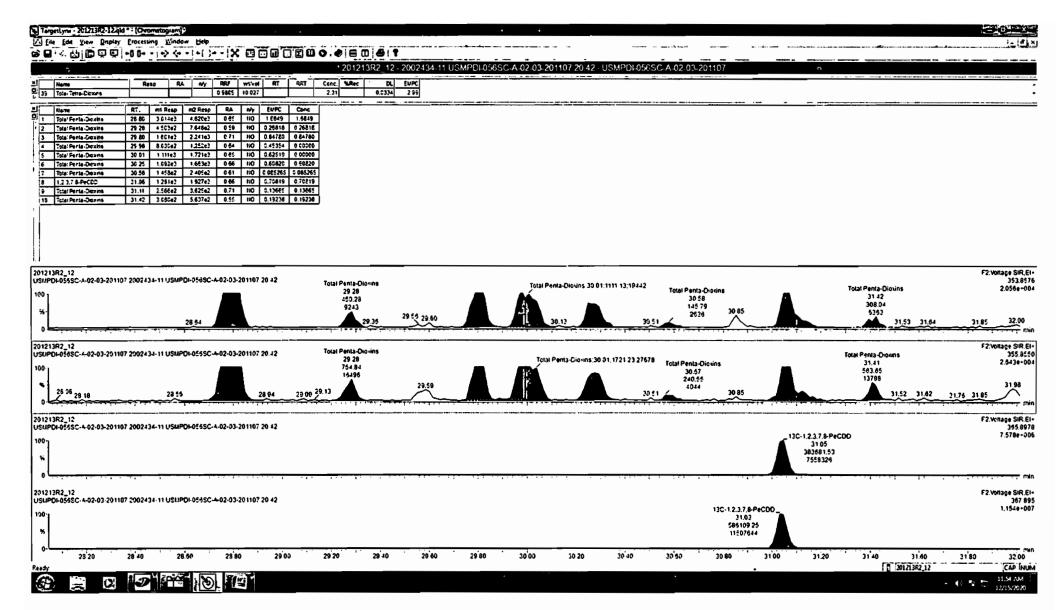
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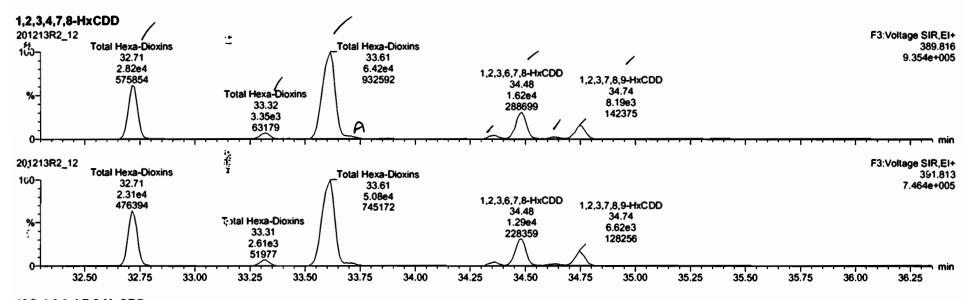
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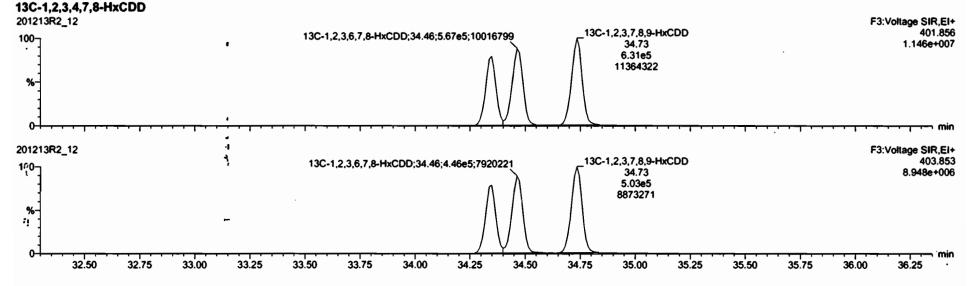


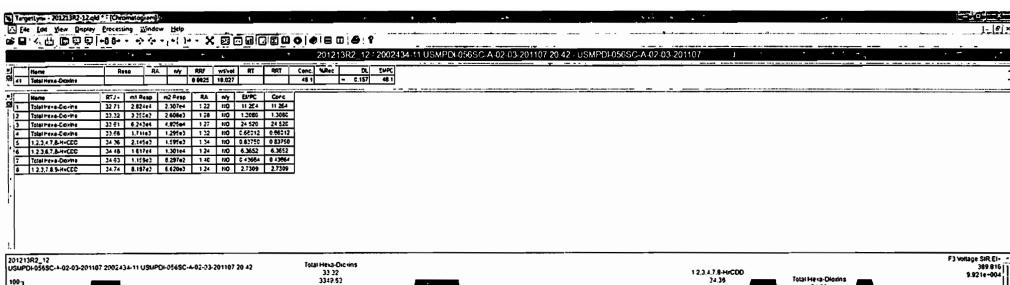
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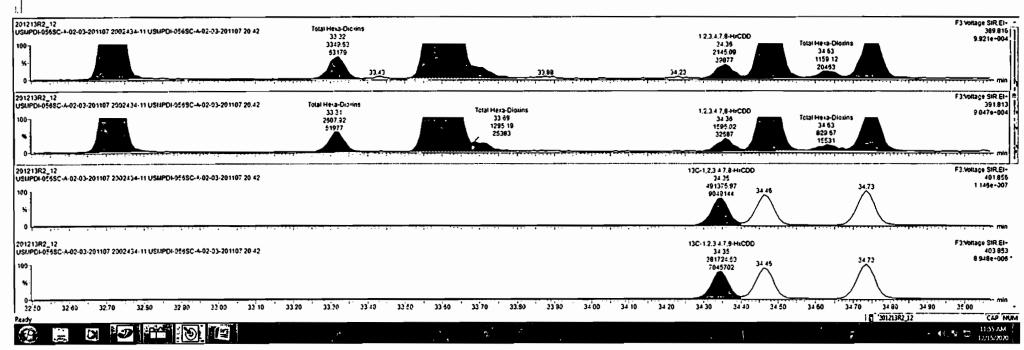
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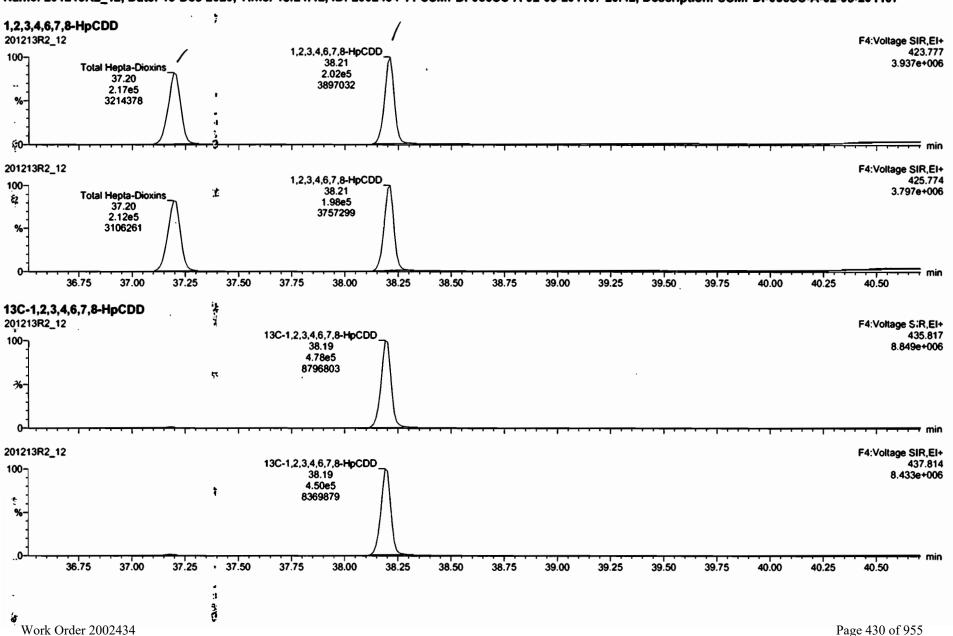


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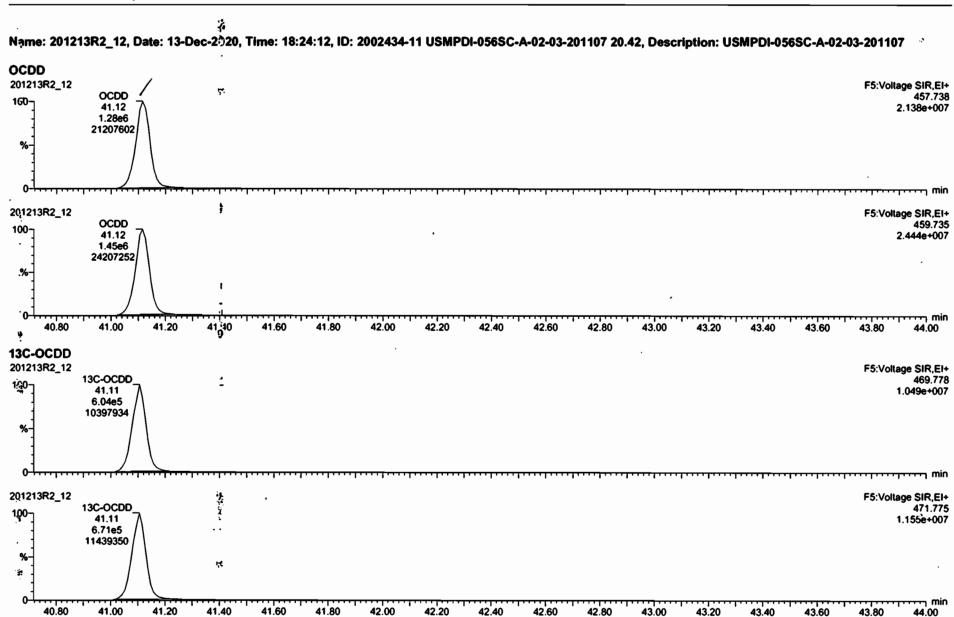
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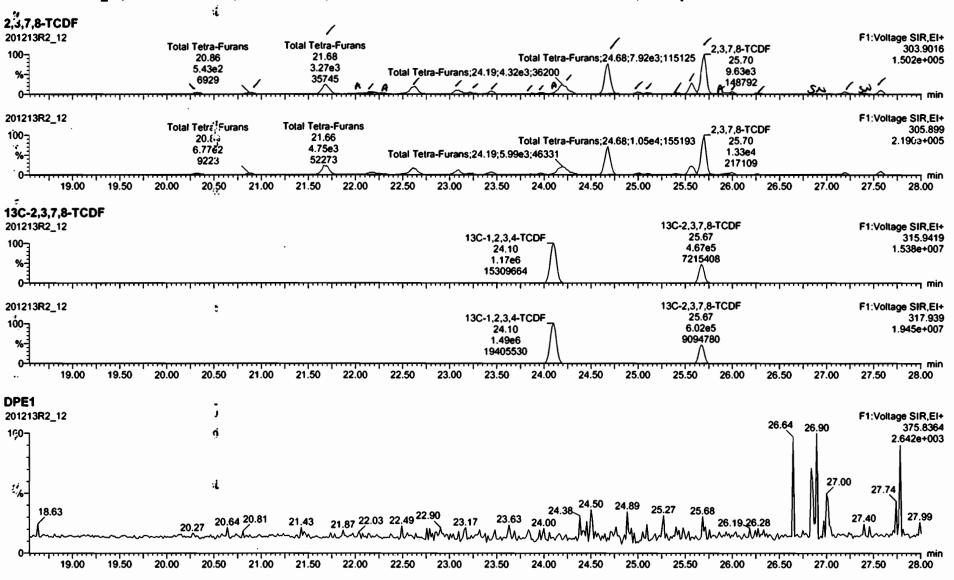
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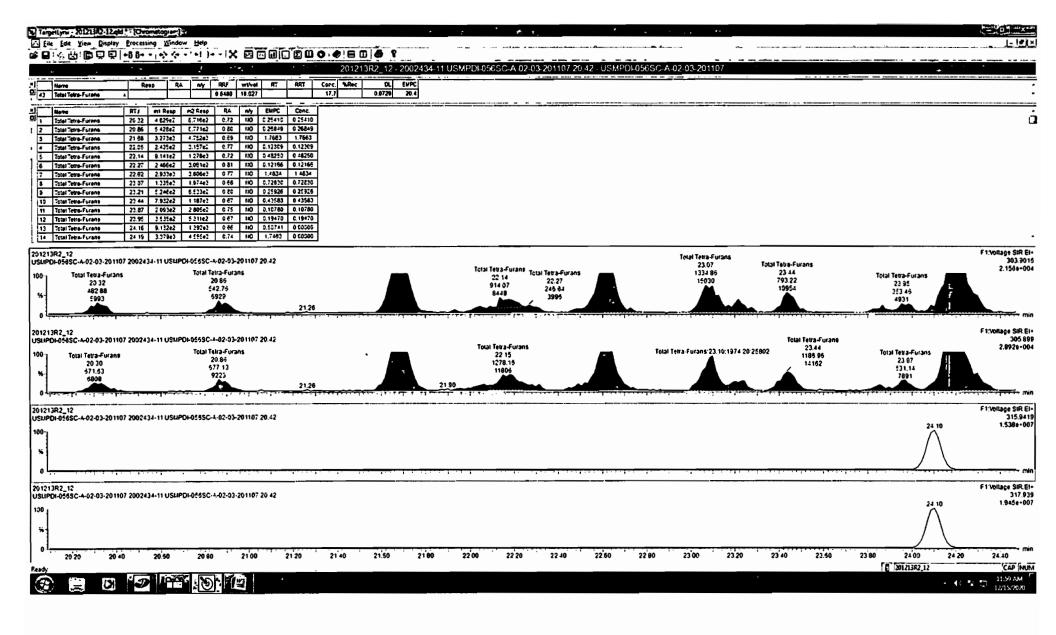
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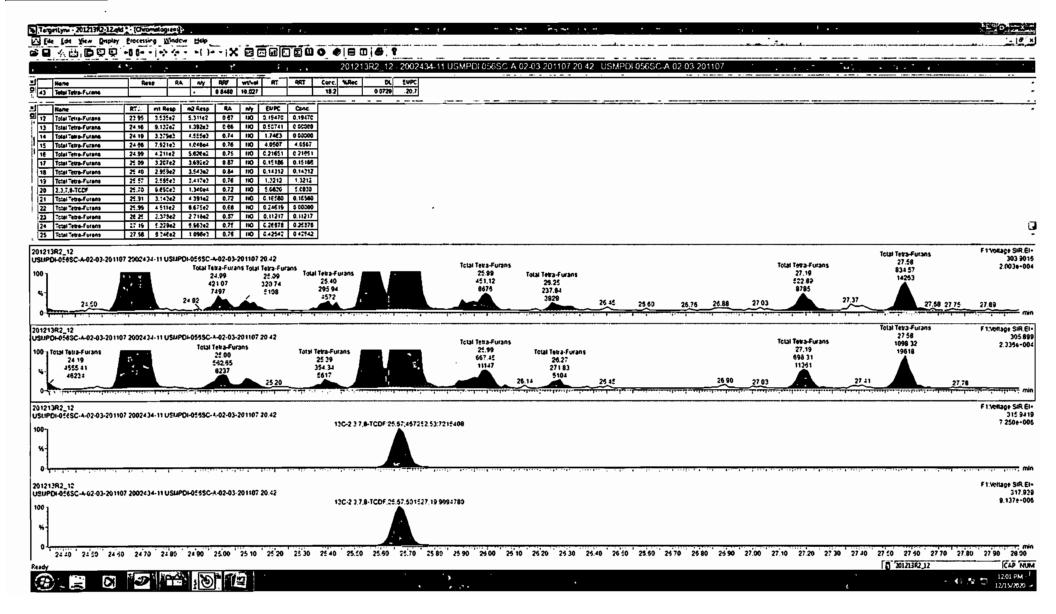




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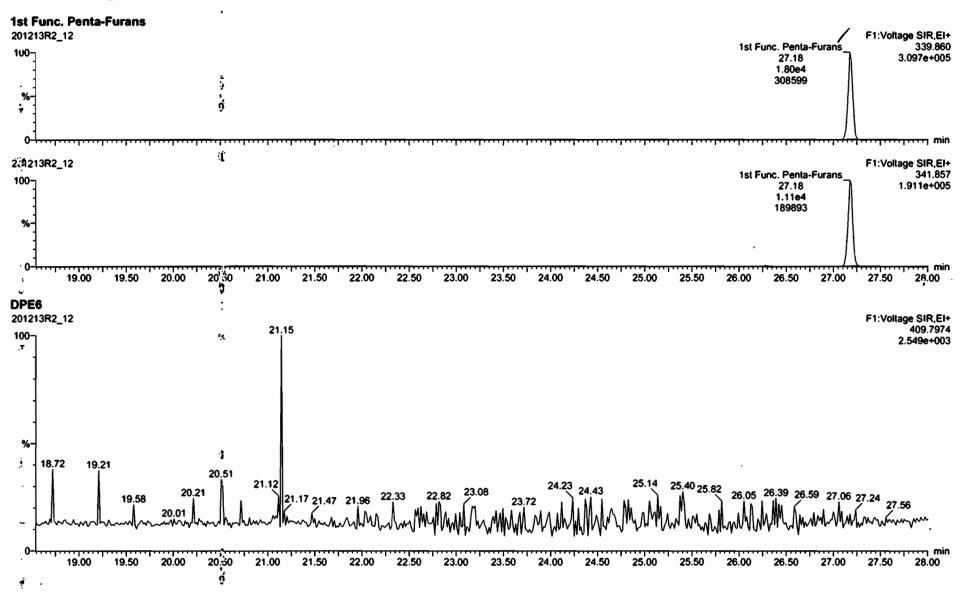
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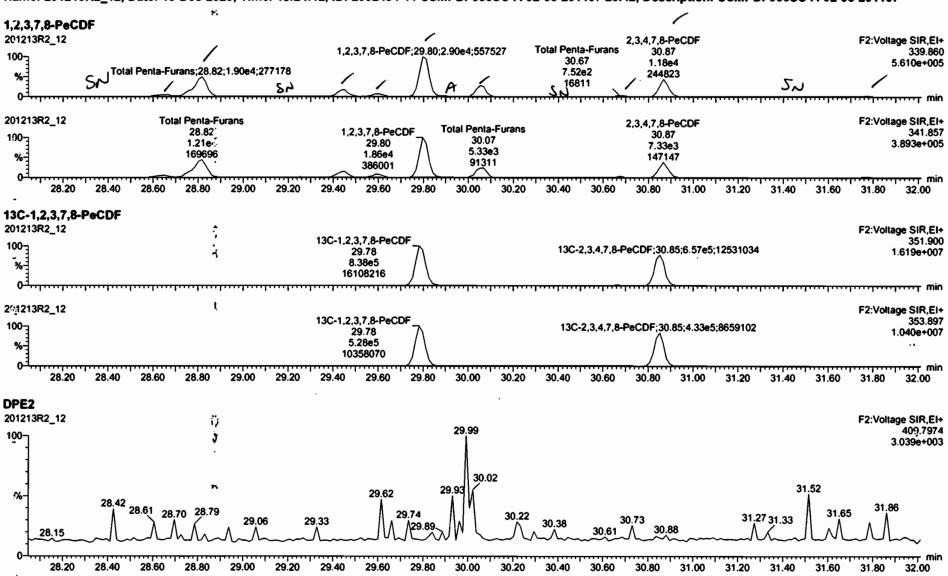
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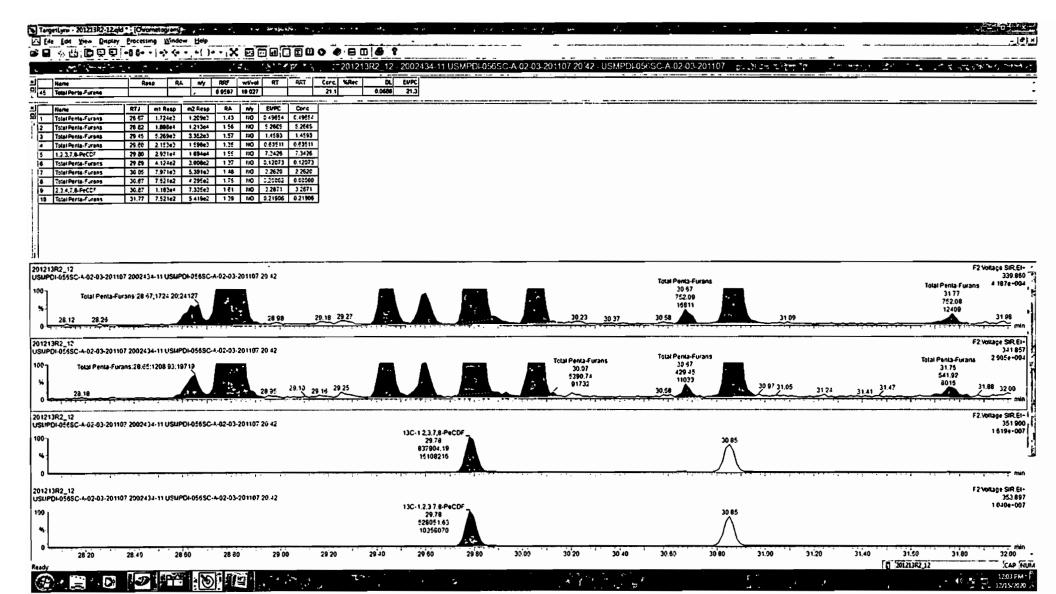
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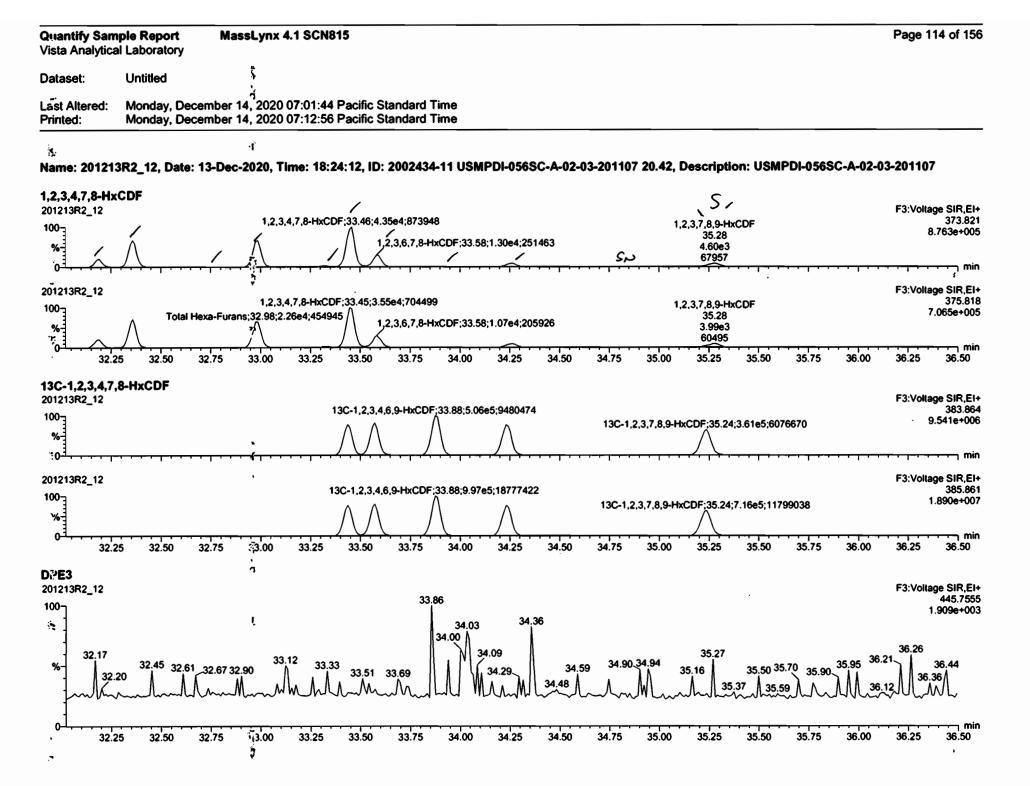
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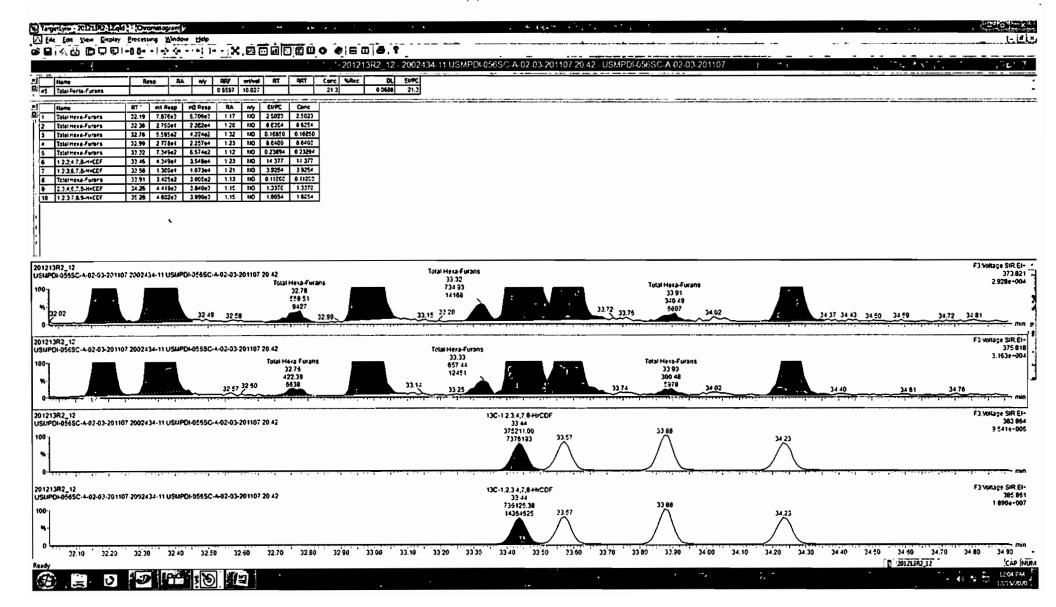
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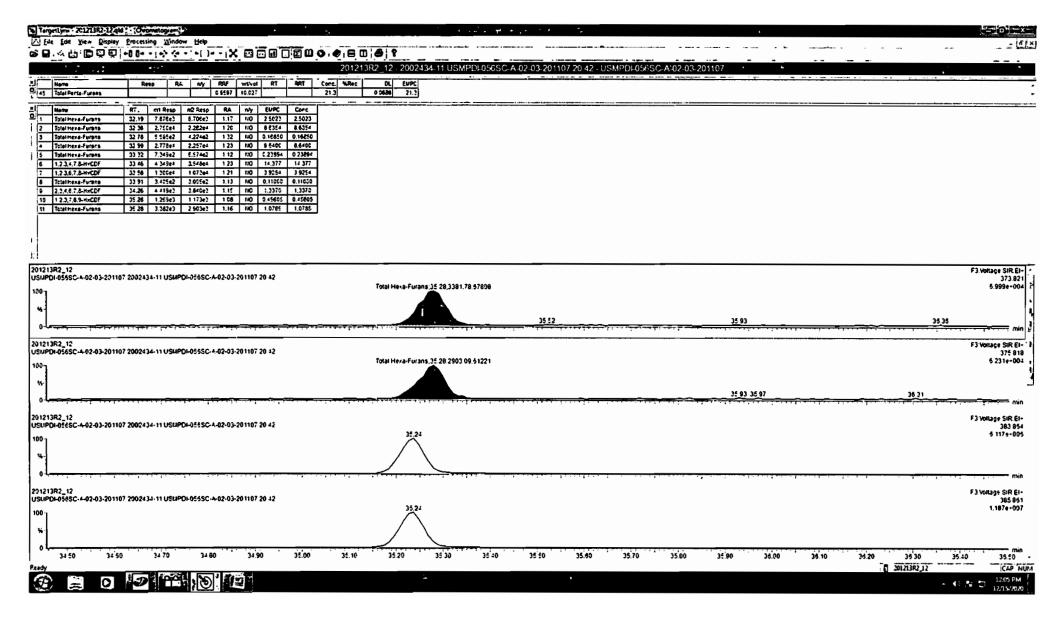


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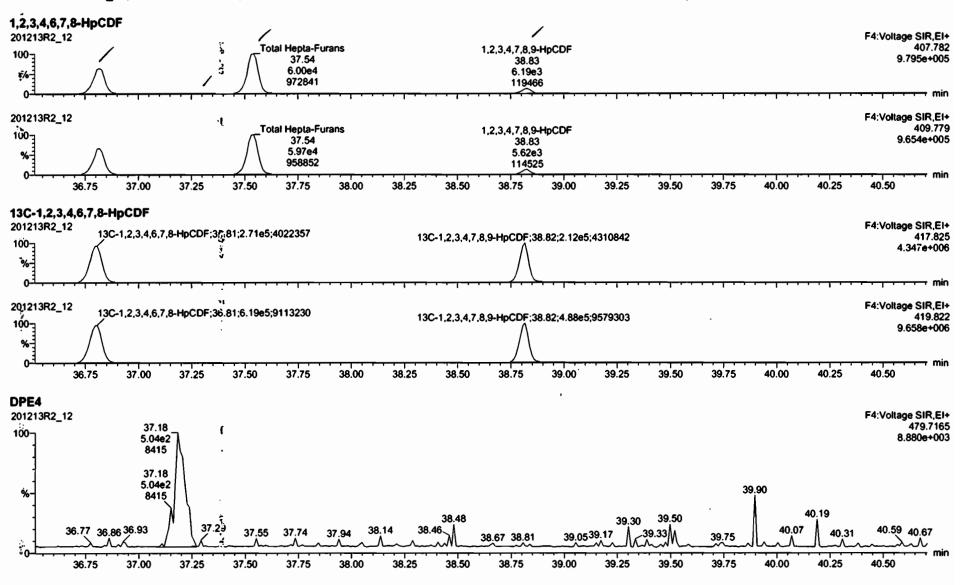
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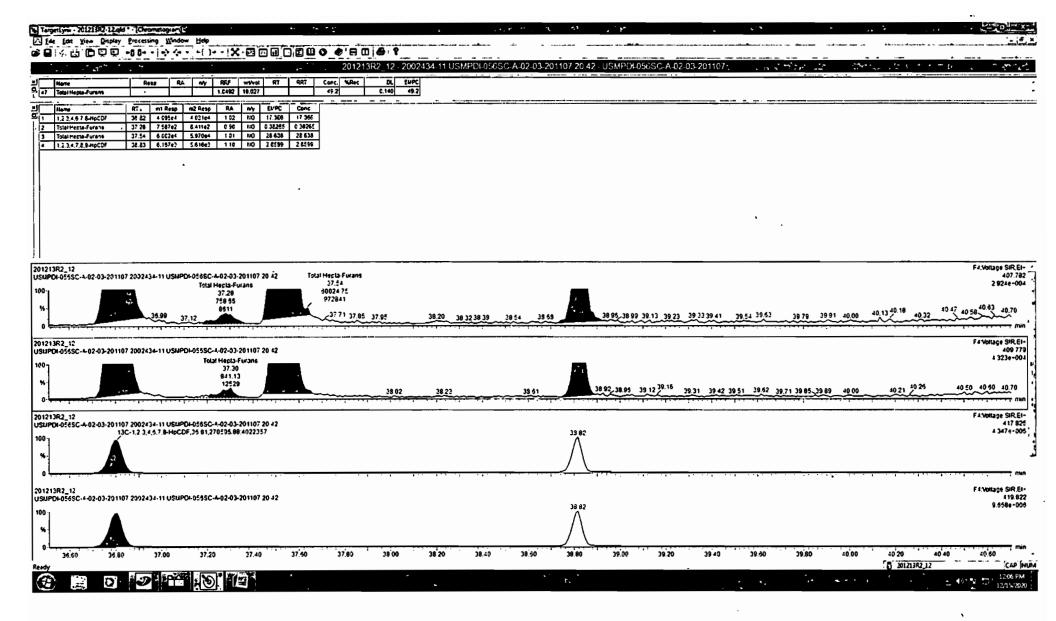
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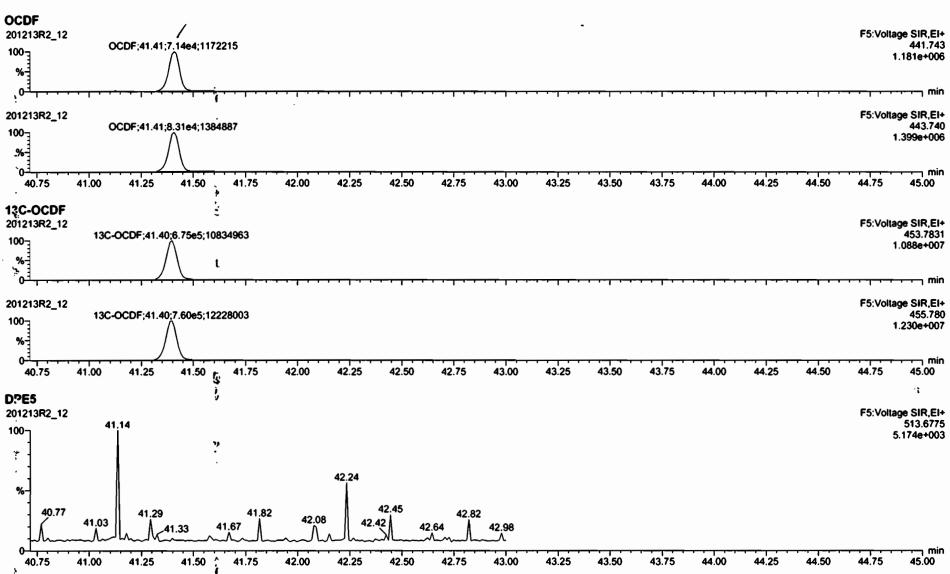
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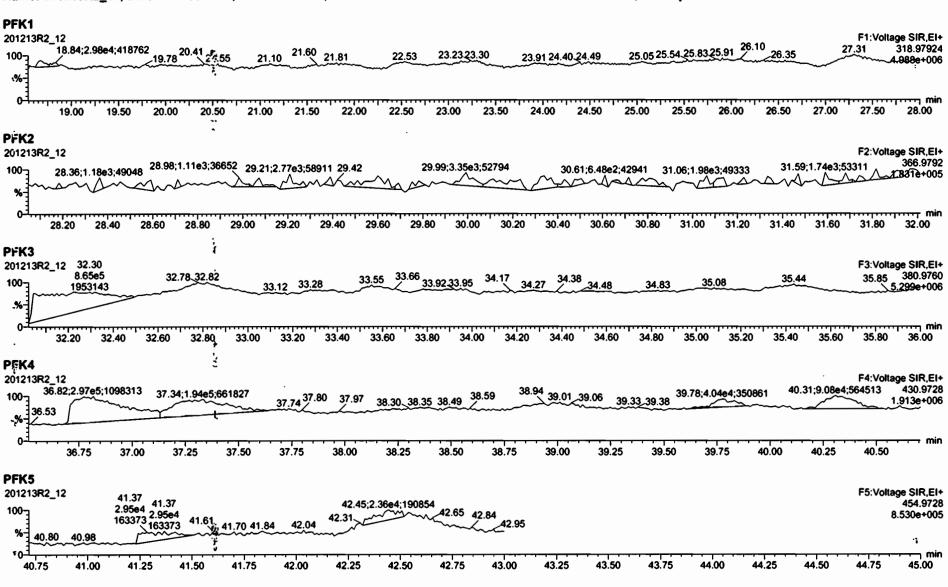


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Dataset:

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Tuesday, December 15, 2020 12:20:40 PM Pacific Standard Time Tuesday, December 15, 2020 12:21:20 PM Pacific Standard Time

GPB 12/15/2000

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C	# Name	Resp 1	RA_	L_n/y	RRF	T Mt/vol T	Pred.RT	_RT_	Pred.RRT	RRT	Conc.	DL	EMPC
1587	1 2,3,7,8-TCDD	1.45e3	0.23	YES	0.980	10.126	26.381	26.38	1.001	1.001	0.15860	0.9208	0.0687
2	2 1,2,3,7,8-PeCDD	1.09e3	0.66	NO	0.932	10.126	31.064	31.05	1.001	1.000	0.17223	0.0311	0.172
3	3 1,2,3,4,7,8-HxCDD	7.97e2	1.10	NO	1.02	10.126	34.358	34.35	1.001	1.000	0.15007	0.0840	0.150
4	4 1,2,3,6,7,8-HxCDD	6.56e3	1.22	NO	0.902	10.126	34.473	34.47	1.001	1.001	1.2424	0.0922	1.24
5.	5 1,2,3,7,8,9-HxCDD	2.45e3	1.30	NO	0.954	10.126	34.734	34.75	1.000	1.001	0.44940	0.0874	0.449
6	6 1,2,3,4,6,7,8-HpCDD	6.48e4	1.02	NO	0.918	10.126	38.201	38.21	1.000	1.001	15.598	0.237	15.6
7 -2 -2 -2 -1	7 OCDD	4.50e5	0.85	NO	0.866	10.126	41.113	41.12	1.000	1.000	168.14	0.245	168
8	8 2,3,7,8-TCDF	1.23e4	0.73	NO	0.848	10.126	25.672	25.68	1.000	1.001	1.1035	0.0246	1.10
9	9 1,2,3,7,8-PeCDF	3.20e4	1.58	NO	0.960	10.126	29.785	29.80	1.000	1.000	3.2473	0.0305	3.25
	10 2,3,4,7,8-PeCDF	1.63e4	1.56	NO	1.07	10.126	30.874	30.87	1.001	1.000	1.5649	0.0302	1.56
	11 1,2,3,4,7,8-HxCDF	2.96e4	1.22	NO	0.986	10.126	33.447	33.45	1.000	1.000	4.4023	0.0403	4.40
12	12 1,2,3,6.7,8-HxCDF	7.17e3	1.26	NO	1.04	10.126	33.582	33.57	1.001	1.000	1.0252	0.0385	1.03
	13 2,3,4,6,7,8-HxCDF	2.66e3	1.10	NO	1.02	10.126	34.243	34.26	1.001	1.001	0.40195	0.0428	0.402
14	14 1,2,3,7,8,9-HxCDF	1.21e3	1.14	NO	0.991	10.126	35.238	35.25	1.000	1.001	0.19163	0.0501	0.192
15	15 1,2,3,4,6,7,8-HpCDF	1.21e4	0.94	NO	1.05	10.126	36.814	36.81	1.000	1.000	2.5727	0.0528	2.57
16	16 1,2,3,4,7,8,9-HpCDF	1.98e3	1.01	NO	1.18	10.126	38.818	38.82	1.000	1.000	0.45534	0.0458	0.455
17	17 OCDF	1.47e4	0.89	NO	0.896	10.126	41.396	41.40	1.000	1.000	4.6726	0.0936	4.67
18	18 13C-2,3,7,8-TCDD	1.85e6	0.79	NO	1.06	10.126	26.353	26.35	1.030	1.030	198.98	101 0.0661	
19	19 13C-1,2,3,7,8-PeCDD	1.34e6	0.64	NO	0.785	10.126	31.192	31.03	1.219	1.213	193.79	98.1 0.119	
20	20 13C-1,2,3,4,7,8-HxCD	1.03e6	1.28	NO	0.621	10.126	34.337	34.34	1.014	1.014	209.66	106 0.270	
21	21 13C-1,2,3,6,7,8-HxCD0	1.16e6	1.27	NO	0.734	10.126	34.459	34.45	1.017	1.017	199.25	101 0.228	
	22 13C-1,2,3,7,8,9-HxCD0		1.26	NO	0.723	10.126	34.743	34.72	1.026	1.025	197.61	100 0.232	
	23 13C-1,2,3,4,6,7,8-HpC	DD 8.94e5	1.05	NO	0.568	10.126	38.243	38.19	1.129	1.127	199.35	101 0.512	
	24 13C-OCDD	1.22e6	0.91	NO	0.496	10.126	41.180	41.10	1.216	1.213	311.86	78.9 0.490	
	25 13C-2,3,7,8-TCDF	2.59e6	0.77	NO	0.919	10.126	25.652	25.67	1.003	1.003	200.29	101 0.0911	
26	26 13C-1,2,3,7,8-PeCDF	2.03e6	1.57	NO	0.715	10.126	29.903	29.78	1.169	1.164	201.71	102 0.230	
	27 13C-2,3,4,7,8-PeCDF	1.93e6	1.58	NO	0.689	10.126	30.990	30.85	1.212	1.206	199.37	101 0.238	
28	28 13C-1,2,3,4,7,8-HxCDF	1.35e6	0.51	NO	0.873	10.126	33.442	33.44	0.987	0.987	195.24	98.8 0.256	
	29 13C-1,2,3,6,7.8-HxCDF	1.33e6	0.51	NO	0.933	10.126	33.571	33.56	0.991	0.991	180.36	91.3 0.239	
30	30 13C-2,3,4,6,7,8-HxCDF	1.28e6	0.51	NO	0.843	10.126	34.238	34.22	1.011	1.010	192.16	97.3 0.265	
31	31 13C-1,2,3,7,8,9-HxCDF	1.26e6	0.51	NO	0.780	10.126	35.238	35.23	1.040	1.040	203.79	103 0.286	

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Dataset:

U:\VG12.PRO\Results\201213R2\201213R2-13.qld

Last Altered: Printed:

Tuesday, December 15, 2020 12:20:40 PM Pacific Standard Time Tuesday, December 15, 2020 12:21:20 PM Pacific Standard Time

Name: 201213R2_13, Date: 13-Dec-2020, Time: 19:08:25, ID: 2002434-12 USMPDI-056SC-A-03-04-201107 18.12, Description: USMPDI-056SC-A-03-04-201107

	# Name	Resp	JŁ RAL	: n/y	RRE	[MMO]] [Pred.RT	L RT 1€	[Pred.RRT	RRT	Conc.	լը%Rec չ	AT TOUR	EMPC
32	32 13C-1,2,3,4,6,7,8-HpCDF	8.85e5	0.43	NO	0.726	10.126	36.813	36.80	1.087	1.086	154.09	78.0	0.389	
33:	3. 33 13C-1,2,3,4,7,8,9-HpCDF	7.31e5	0.43	NO	0.491	10.126	38.822	38.81	1.146	1.146	188.31	95.3	0.575	
34	34 13C-OCDF	1.38e6	0.88	NO	0.565	10.126	41.396	41.39	1.222	1.222	309.44	78.3	0.331	
35	35 37Cl-2,3,7,8-TCDD	9.61e5			1.22	10.126	26.347	26.38	1.030	1.031	89.908	114	0.0279	
36	36 13C-1,2,3,4-TCDD	1.74e6	0.79	NO	1.00	10.126	25.640	25.58	1.000	1.000	197.51	100	0.0698	
37	7 37 13C-1,2,3,4-TCDF	2.78e6	0.79	NO	1.00	10.126	24.130	24.09	1.000	1.000	197.51	100	0.0837	
38	38 13C-1,2,3,4,6,9-HxCDF	1.56e6	0.51	NO	1.00	10.126	33.920	33.88	1.000	1.000	197.51	100	0.223	ľ
39 .	39 Total Tetra-Dioxins				0.980	10.126	24.620		0.000		0.42670		0.0208	0.495
40	40 Total Penta-Dioxins				0.932	10.126	29.960		0.000		0.70255		0.0311	1.29
41	41 Total Hexa-Dioxins				0.902	10.126	33.635		0.000		8.5441		0.0931	8.54
42	42 Total Hepta-Dioxins				0.918	10.126	37.640		0.000		31.994		0.237	32.0
43	3 43 Total Tetra-Furans				0.848	10.126	23.610		0.000		3.9298		0.0246	3.93
44	44 1st Func. Penta-Furans				0.960	10.126	26.930		0.000		1.4339		0.00829	1.43
45	45 Total Penta-Furans				0.960	10.126	29.275		0.000		8.4650		0.0320	8.47
46	46 Total Hexa-Furans				1.02	10.126	33.555		0.000		10.239		0.0423	10.2
47 b. "	र्वे 47 Total Hepta-Furans				1.05	10.126	37.835		0.000		6.8606		0.0521	6.86

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Dataset:

U:\VG12.PRO\Results\201213R2\201213R2-13.qld

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Tuesday, December 15, 2020 12:20:40 PM Pacific Standard Time Tuesday, December 15, 2020 12:21:20 PM Pacific Standard Time

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Name: 201213R2_13, Date: 13-Dec-2020, Time: 19:08:25, ID: 2002434-12 USMPDI-056SC-A-03-04-201107 18.12, Description: USMPDI-056SC-A-03-04-201107

Tetra-Dioxins

Name ,	RT /	m1 Height)	m2 Height !]	m1 Resp [m2 Resp	· {RAjin/y_i,	Resp_	Conc. EMPC	laDL
1 Total Tetra-Dioxins	22.58	8.263e3	9.002e3	6.528e2	8.031e2	0.81 NO	1.456e3	0.15891 0.15891	0.0208
2 Total Tetra-Dioxins	22.92	3.565e3	3.968e3	2.331e2	3.408e2	0.68 NO	5.739e2	0.062643 0.062643	0.0208
3 Total Tetra-Dioxins	23.44	2.059e3	2.210e3	1.410e2	1.674e2	0.84 NO	3.084e2	0.033663 0.033663	0.0208
4 Total Tetra-Dioxins	24.75	3.433e3	4.525e3	2.352e2	2.753e2	0.85 NO	5.106e2	0.055728 0.055728	0.0208
5 Total Tetra-Dioxins	26.08	6.784e3	9.114e3	4.696e2	5.909e2	0.79 NO	1.061e3	0.11576 0.11576	0.0208
6 2,3,7,8-TCDD	26.38	3.690e3	2.021e4	2.738e2	1.174e3	0.23 YES	1.447e3	0.00000 0.068697	0.0208

Penta-Dioxins

Name	I RT	m1 Height	m2 Height (m1 Resp	m2 Resp	I RA L	<u>∿y; Ľ.∴ F</u>	lesp	Conc.	EMPC (DL
1 Total Penta-Dioxins	28.80	1.149e4	1.854e4	8.854e2	1.347e3			232e3	0.35403	0.35403	0.0311
2 Total Penta-Dioxins	29.27	4.903e3	4.491e3	1.908e2	2.639e2	0.72	NO 0.0	000e0	0.00000	0.072122	0.0311
3 Total Penta-Dioxins	29.78	1.580e4	1.482e4	9.729e2	8.755e2	1.11 Y	/ES 0.0	000e0	0.00000	0.22634	0.0311
4 Total Penta-Dioxins	29.98	9.078e3	1.623e4	4.211e2	6.911e2	0.61	NO 0.0	000e0	0.00000	0.17639	0.0311
5 Total Penta-Dioxins	30.01	5.233e3	8.004e3	2.013e2	2.904e2	0.69	NO 0.0	000e0	0.00000	0.077985	0.0311
6 Total Penta-Dioxins	30.26	9.144e3	1.071e4	4.489e2	6.626e2	0.68	NO 1.	111e3	0.17629	0.17629	0.0311
7 1,2,3,7,8-PeCDD	31.05	9.094e3	1.575e4	4.336e2	6.522e2	0.66	NO 1.0)86e3	0.17223	0.17223	0.0311
8 Total Penta-Dioxins	31.41	2.666e3	2.687e3	1.092e2	1.362e2	0.80 Y	/ES 0.0	000e0	0.00000	0.035216	0.0311

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Dataset: U:\VG12.PRO\Results\201213R2\201213R2-13.qld

Last Altered: Tuesday, December 15, 2020 12:20:40 PM Pacific Standard Time Tuesday, December 15, 2020 12:21:20 PM Pacific Standard Time

Name: 201213R2_13, Date: 13-Dec-2020, Time: 19:08:25, ID: 2002434-12 USMPDI-056SC-A-03-04-201107 18.12, Description: USMPDI-056SC-A-03-04-201107

Hexa-Dioxins

Name Name	RT	m1 Height	m2 Height [7-	_m1 Resp [m2 Resp	· }RA	In/y-j	Resp	Conc.	EMPC	DL
1 Total Hexa-Dioxins	32.71	1.100e5	8.989e4	5.394e3	4.263e3	1.27	NO	9.656e3	1.9140	1.9140	0.0931
2 Total Hexa-Dioxins	33.31	1.324e4	9.948e3	6.297e2	5.210e2	1.21	NO	1.151e3	0.22807	0.22807	0.0931
3 F Total Hexa-Dioxins	33.60	1.735e5	1.330e5	1.229e4	9.526e3	1.29	NO	2.181e4	4.3237	4.3237	0.0931
4 Total Hexa-Dioxins	33.67	1.025e4	6.061e3	4.549e2	3.346e2	1.36	NO	7.895e2	0.15648	0.15648	0.0931
5_* 1,2,3,4,7,8-HxCDD	34.35	6.489e3	7.220e3	4.177e2	3.794e2	1.10	NO	7.971e2	0.15007	0.15007	0.0840
6 1,2,3,6,7,8-HxCDD	34.47	5.741e4	4.728e4	3.602e3	2.959e3	1.22	NO	6.561e3	1.2424	1.2424	0.0922
7 Total Hexa-Dioxins	34.62	3.336e3	4.827e3	2.216e2	1.816e2	1.22	NO	4.032e2	0.079918	0.079918	0.0931
8* · , 1,2,3,7,8,9-HxCDD	34.75	2.058e4	1.914e4	1.385e3	1.065e3	1.30	NO	2.450e3	0.44940	0.44940	0.0874

Hepta-Dioxins

Name	RT m	1 Height	m2 Height	m1 Resp	m2 Resp	<u>LRAL</u> [n/y. }	Resp\ \{'	.Conc.	EMPC	DL
1 Total Hepta-Dioxins	37.19	4.645e5	4.308e5	3.431e4	3.385e4	1.01	NO	6.816e4	16.396	16.396	0.237
2 1,2,3,4,6,7,8-HpCDD	38.21	5.647e5	5.571e5	3.268e4	3.216e4	1.02	NO	6.484e4	15.598	15.598	0.237

Tetra-Furans

* Name	<u>♣₹</u> RT	m1 Height	m2 Height }	m1 Resp	m2 Resp	TRA	n/yj L	Resp	Conc!	EMPC	LDL
1 Total Tetra-Furans	20.32	2.859e3	4.216e3	2.068e2	2.986e2	0.69	NO	5.054e2	0.045462	0.045462	0.0246
2 Total Tetra-Furans	20.86	3.706e3	4.825e3	3.308e2	4.838e2	0.68	NO	8.145e2	0.073270	0.073270	0.0246
3 Total Tetra-Furans	21.68	1.533e4	2.435e4	1.464e3	2.210e3	0.66	NO	3.674e3	0.33050	0.33050	0.0246
4 Total Tetra-Furans	22.61	2.465e4	2.676e4	1.930e3	2.545e3	0.76	NO	4.475e3	0.40252	0.40252	0.0246
5 Total Tetra-Furans	23.07	1.124e4	1.583e4	9.957e2	1.353e3	0.74	NO	2.349e3	0.21126	0.21126	0.0246
6 Total Tetra-Furans	23.22	5.447e3	7.715e3	2.876e2	3.783e2	0.76	NO	6.659e2	0.059899	0.059899	0.0246
7 Total Tetra-Furans	23.42	7.705e3	6.861e3	5.029e2	6.173e2	0.81	NO	1.120e3	0.10077	0.10077	0.0246
8f_ Total Tetra-Furans	24.16	1.160e4	1.537e4	1.335e3	1.869e3	0.71	NO	3.203e3	0.28815	0.28815	0.0246
9 Total Tetra-Furans	24.66	6.523e4	8.79 6e4	4.645e3	6.685e3	0.69	NO	1.133e4	1.0192	1.0192	0.0246
10 Total Tetra-Furans	25.55	1.158e4	1.581e4	7.682e2	1.099e3	0.70	NO	1.867e3	0.16794	0.16794	0.0246
11 2,3,7,8-TCDF	25.68	8.063e4	1.058e5	5.189e3	7.079e3	0.73	NO	1.227e4	1.1035	1.1035	0.0246
12 · Total Tetra-Furans	27.19	3.802e3	5.631e3	2.537e2	3.163e2	0.80	NO	5.701e2	0.051279	0.051279	0.0246
13 Total Tetra-Furans	27.58	6.852e3	1.047e4	3.702e2	4.753e2	0.78	NO	8.455e2	0.076055	0.076055	0.0246

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Dataset:

U:\VG12.PRO\Results\201213R2\201213R2-13.qld

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Tuesday, December 15, 2020 12:20:40 PM Pacific Standard Time Tuesday, December 15, 2020 12:21:20 PM Pacific Standard Time

Name: 201213R2_13, Date: 13-Dec-2020, Time: 19:08:25, ID: 2002434-12 USMPDI-056SC-A-03-04-201107 18.12, Description: USMPDI-056SC-A-03-04-201107

Penta-Furans function 1

Name Y	RT:	m1 Height	m2 Height	m1 Resp	m2 Resp	<u>í IRA</u> ;	n/y j	Resp_2	Conc.	EMPC	LEDL
1 1st Func. Penta-Furans			9.673e4	8.494e3					1.4339		0.00829

Penta-Furans

Name -	Tal E RT	m1 Height	m2 Height J	m1 Resp	m2 Resp	(RA)	U\\Y\	Resp	Conc.	EMPC	DL
1. Total Penta-Furans	28.65	1.091e4	5.604e3	6.567e2	3.890e2	1.69	NO	1.046e3	0.10870	0.10870	0.0320
2 Total Penta-Furans	28.80	1.608e5	1.078e5	1.053e4	6.750e3	1.56	NO	1.728e4	1.7962	1.7962	0.0320
3 Total Penta-Furans	29.43	2.439e4	1.676e4	1.410e3	9.628e2	1.46	NO	2.373e3	0.24664	0.24664	0.0320
Total Penta-Furans	29.59	3.046e4	2.282e4	1.694e3	1.185e3	1.43	NO	2.879e3	0.29924	0.29924	0.0320
51,2,3,7,8-PeCDF	29.80	3.753e5	2.312e5	1.962e4	1.239e4	1.58	NO	3.202e4	3.2473	3.2473	0.0305
6 Total Penta-Furans	30.05	1.365e5	9.061e4	6.604e3	4.286e3	1.54	NO	1.089e4	1.1319	1.1319	0.0320
7. 2,3,4,7,8-PeCDF	30.87	1.834e5	1.207e5	9.956e3	6.371e3	1.56	NO	1.633e4	1.5649	1.5649	0.0302
8". Total Penta-Furans	31.77	9.053e3	7.845e3	4.029e2	2.713e2	1.49_	NO	6.741e2	0.070074	0.070074	0.0320

Hexa-Furans

Name Name	TAME IN THE	m1 Height	m2 Height	m1 Resp	m2 Resp	۱RA	[u/y]	Resp *	Conci	EMPC	<u>ني</u> DL
1 Total Hexa-Furans	32.18	3.519e4	2.997e4	1.870e3	1.416e3	1.32	NO	3.286e3	0.48809	0.48809	0.0423
2 Total Hexa-Furans	32.36	1.282e5	1.001e5	5.918e3	4.688e3	1.26	NO	1.061e4	1.5752	1.5752	0.0423
3 Total Hexa-Furans	32.98	1.297e5	1.020e5	6.278e3	5.192e3	1.21	NO	1.147e4	1.7035	1.7035	0.0423
4 Total Hexa-Furans	33.30	4.345e3	3.958e3	2.187e2	1.681e2	1.30	NO	3.868e2	0.057454	0.057454	0.0423
1,2,3,4,7,8-HxCDF	33.45	3.056e5	2.452e5	1.625e4	1.337e4	1.22	NO	2.961e4	4.4023	4.4023	0.0403
6 1 1,2,3,6,7,8-HxCDF	33.57	6.900e4	5.453e4	4.004e3	3.170e3	1.26	NO	7.174e3	1.0252	1.0252	0.0385
7 2,3,4,6,7,8-HxCDF	34.26	2.214e4	1.923e4	1.393e3	1.265e3	1.10	NO	2.658e3	0.40195	0.40195	0.0428
8, 1,2,3,7,8,9-HxCDF	35.25	2.430e4	1.970e4	6.435e2	5.641e2	1.14	NO	1.208e3	0.19163	0.19163	0.0501
9 Total Hexa-Furans	35.27	2.986e4	2.514e4	1.460e3	1.189e3	1.23	NO	2.649e3	0.39346	0.39346	0.0423

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Quantify Totals Report MassLynx 4.1 SCN815

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Dataset:

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Tuesday, December 15, 2020 12:21:20 PM Pacific Standard Time

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Hepta-Furans

Name	RT-1	n1 Height [m2 Height	m1 Resp	m2 Resp	JIRAJI	n/y [Resp 1	Conc:	EMPC)	. DL
1,2,3,4,6,7,8-HpCDF		8.613e4		5.861e3				1.209e4	2.5727		
2 Total Hepta-Furans	37.53	1.142e5	1.170e5	8.188e3	8.257e3	0.99	NO	1.644e4	3.8325	3.8325	0.0521
3 1,2,3,4,7,8,9-HpCDF	38.82	1.845e4	1.639e4	9.947e2	9.866e2	1.01	NO	1.981e3	0.45534	0.45534	0.0458

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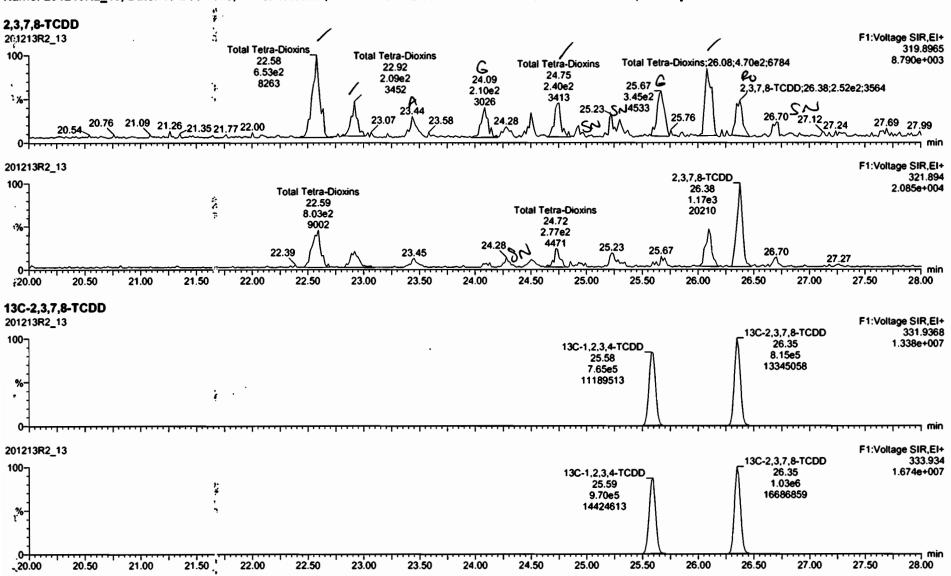
Quantify Sample Report Vista Analytical Laboratory

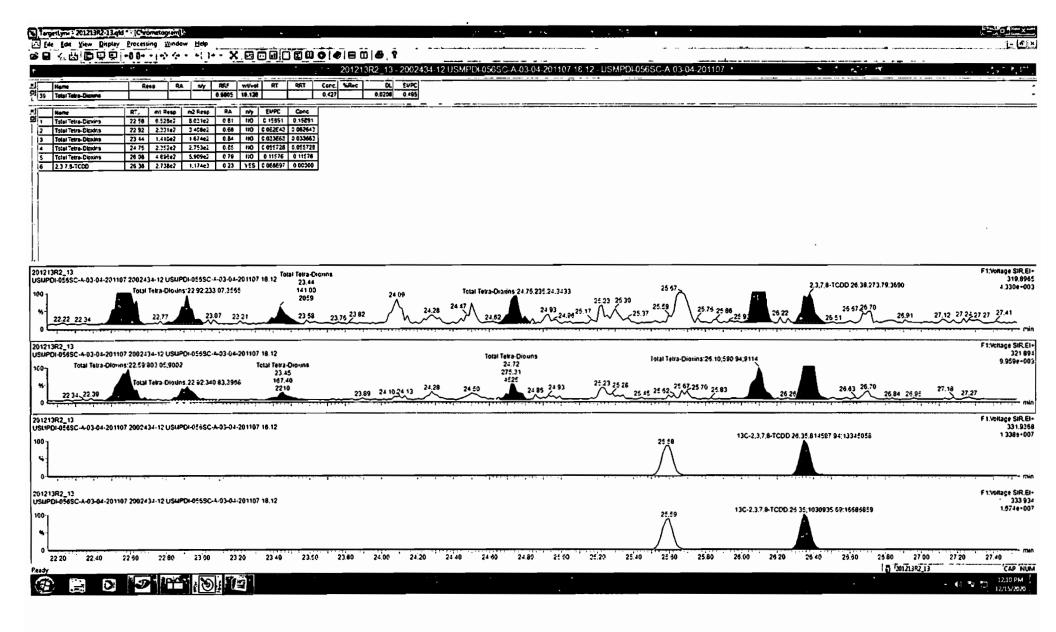
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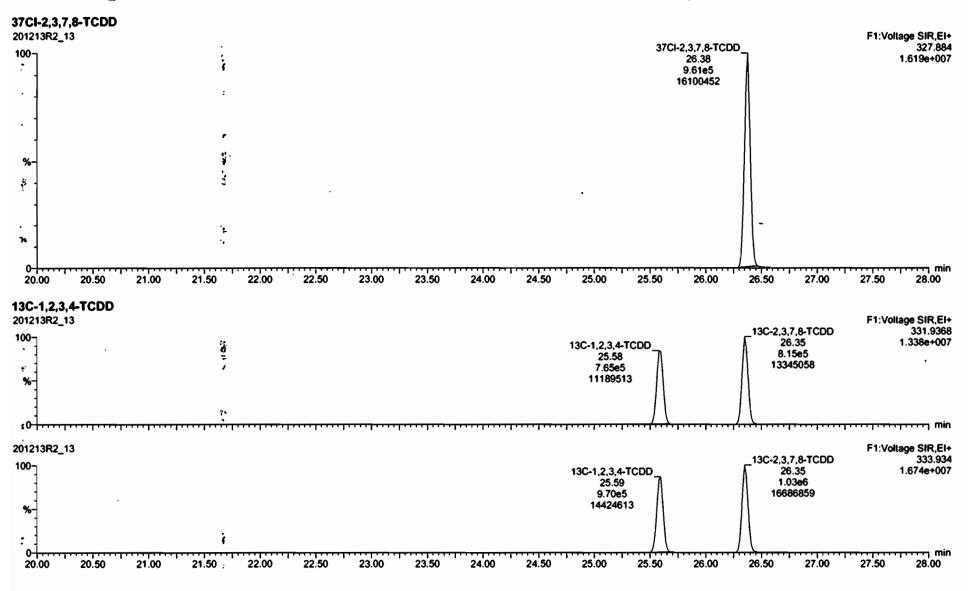
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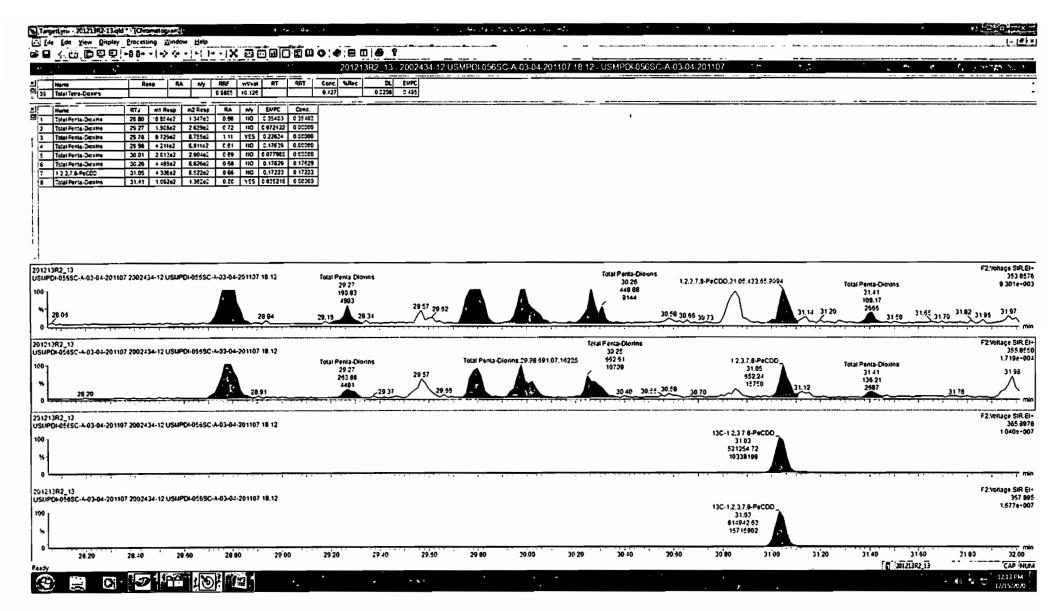
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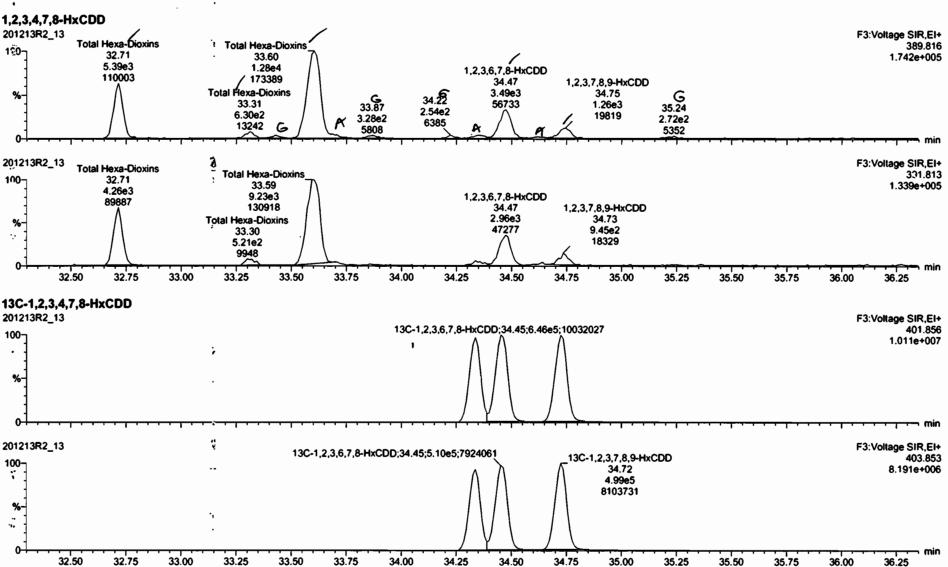


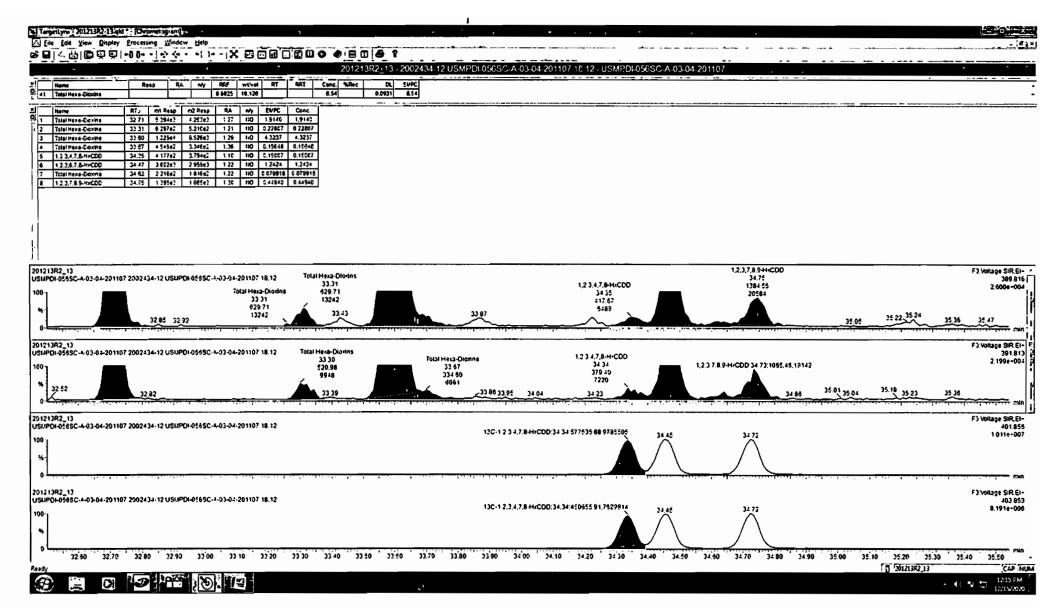
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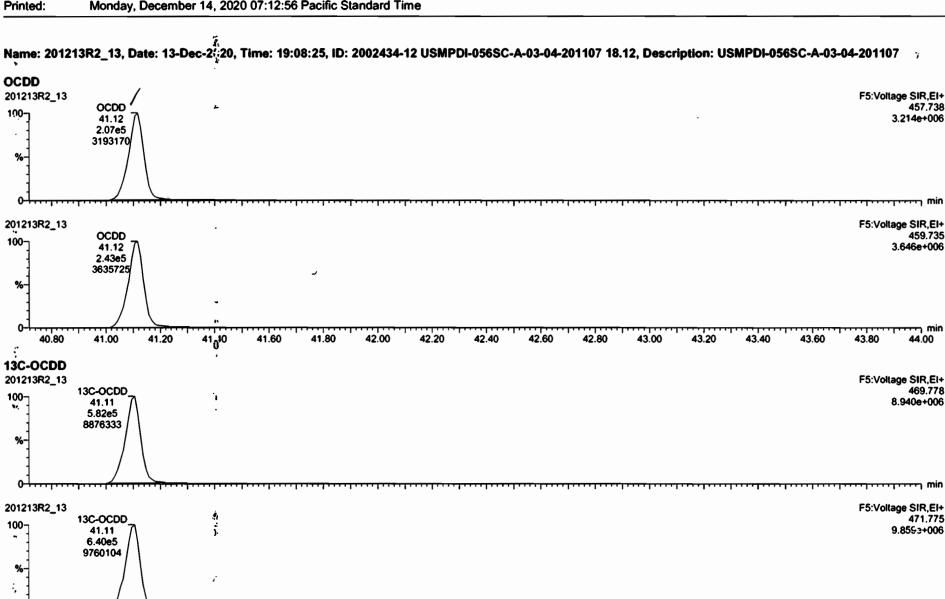
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Last Altered: Monday, December 14, 2020 07:01:44 Pacific Standard Time Printed: Monday, December 14, 2020 07:12:56 Pacific Standard Time



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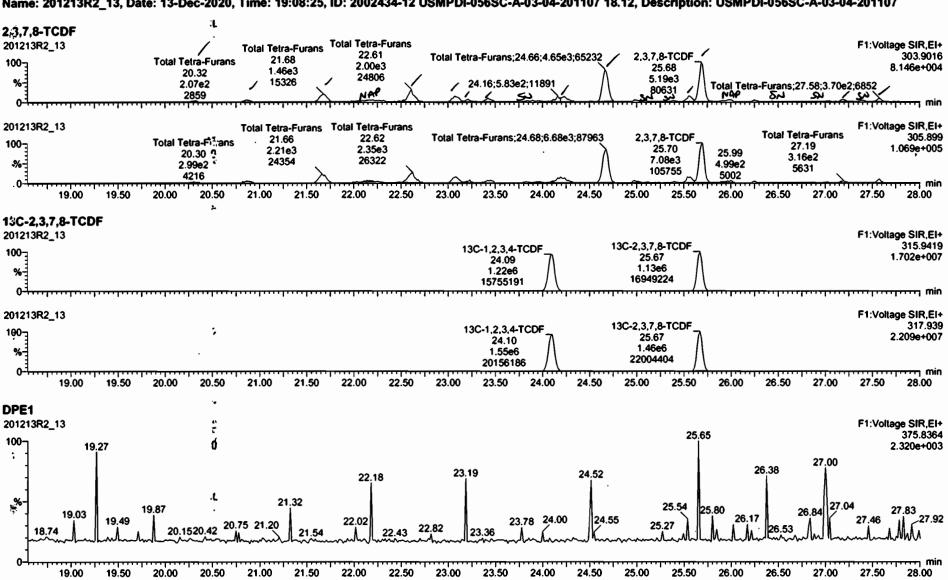
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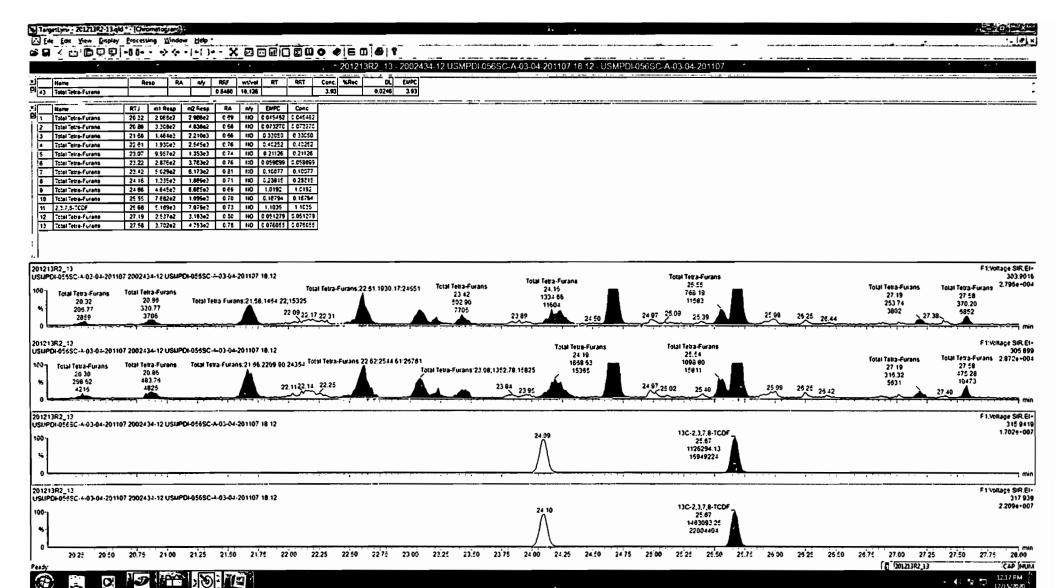
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Monday, December 14, 2020 07:01:44 Pacific Standard Time Monday, December 14-2020 07:12:56 Pacific Standard Time

Name: 201213R2_13, Date: 13-Dec-2020, Time: 19:08:25, ID: 2002434-12 USMPDI-056SC-A-03-04-201107 18.12, Description: USMPDI-056SC-A-03-04-201107



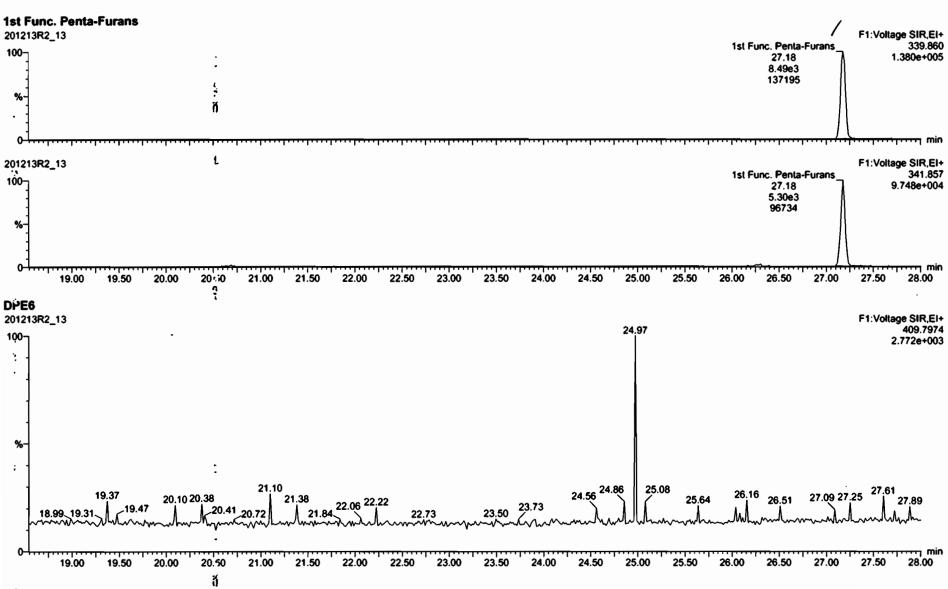


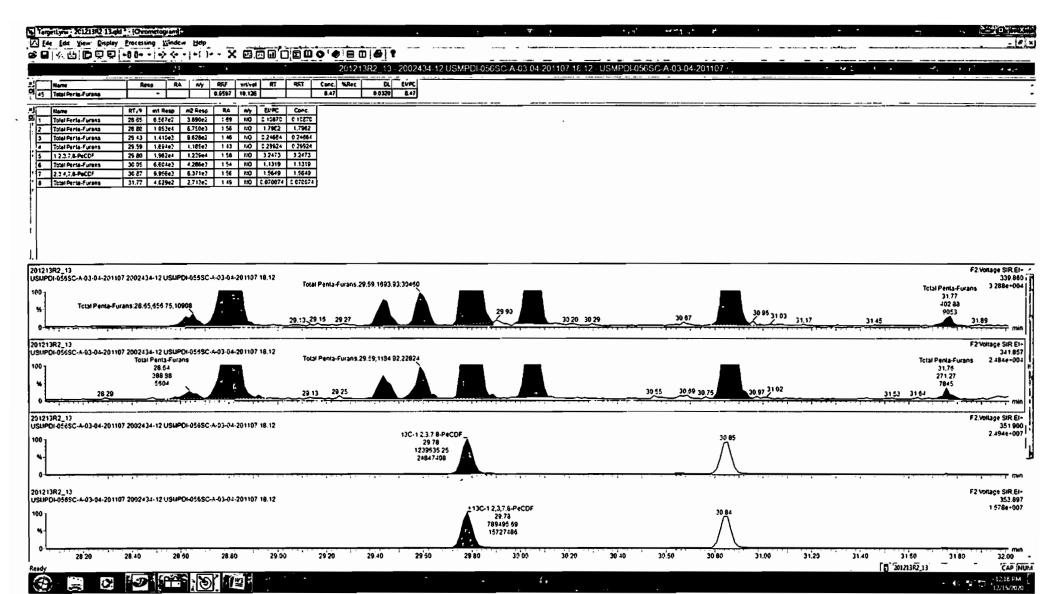
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Last Altered: Monday, December 14, 2020 07:01:44 Pacific Standard Time Printed: Monday, December 14, 2020 07:12:56 Pacific Standard Time

Name: 201213R2_13, Date: 13-Dec-2/20, Time: 19:08:25, ID: 2002434-12 USMPDI-056SC-A-03-04-201107 18.12, Description: USMPDI-056SC-A-03-04-201107



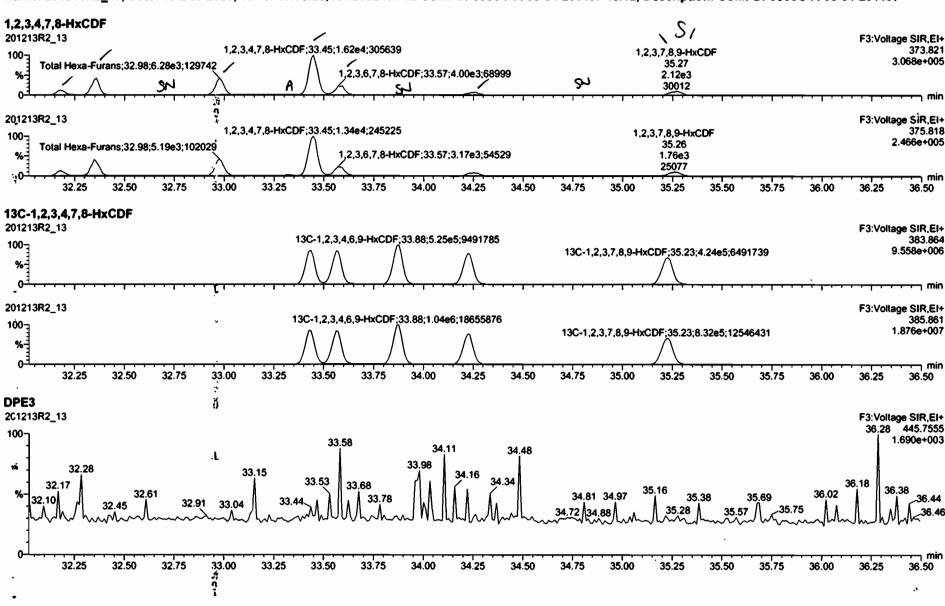


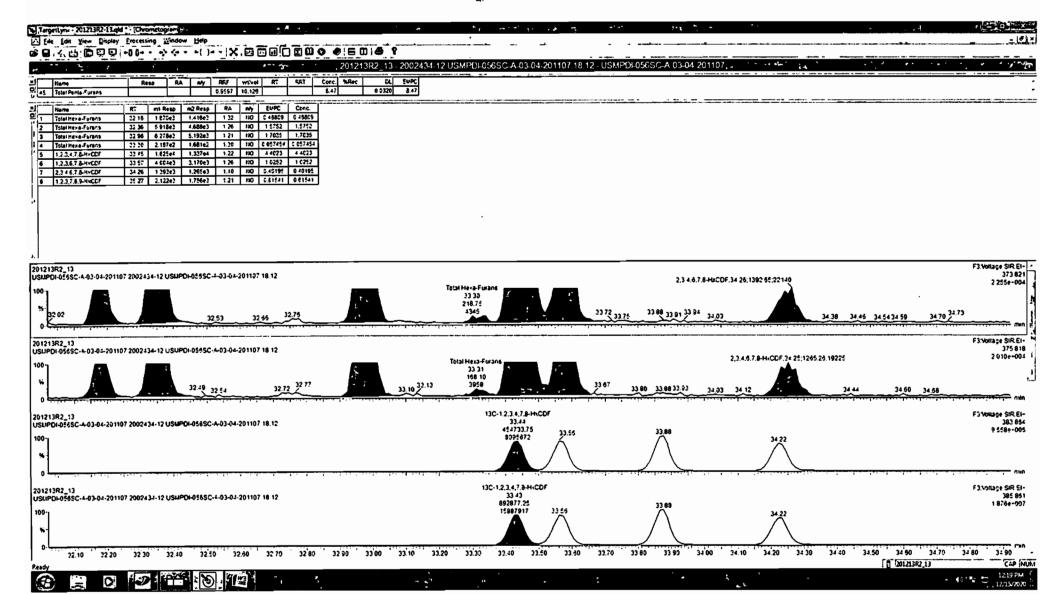
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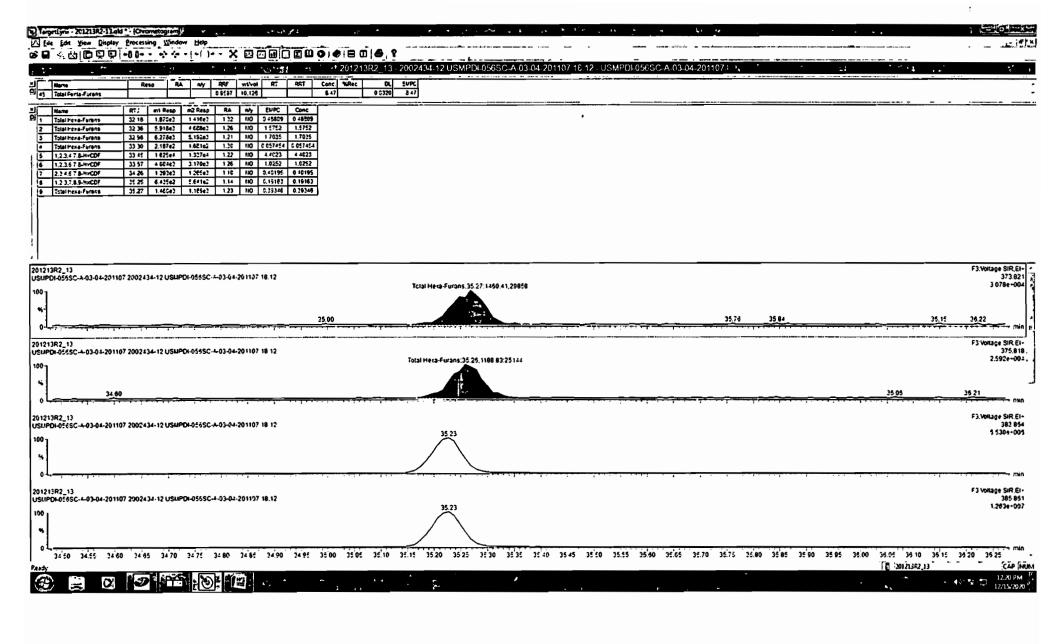
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Name: 201213R2_13, Date: 13-Dec-2020, Time: 19:08:25, ID: 2002434-12 USMPDI-056SC-A-03-04-201107 18.12, Description: USMPDI-056SC-A-03-04-201107





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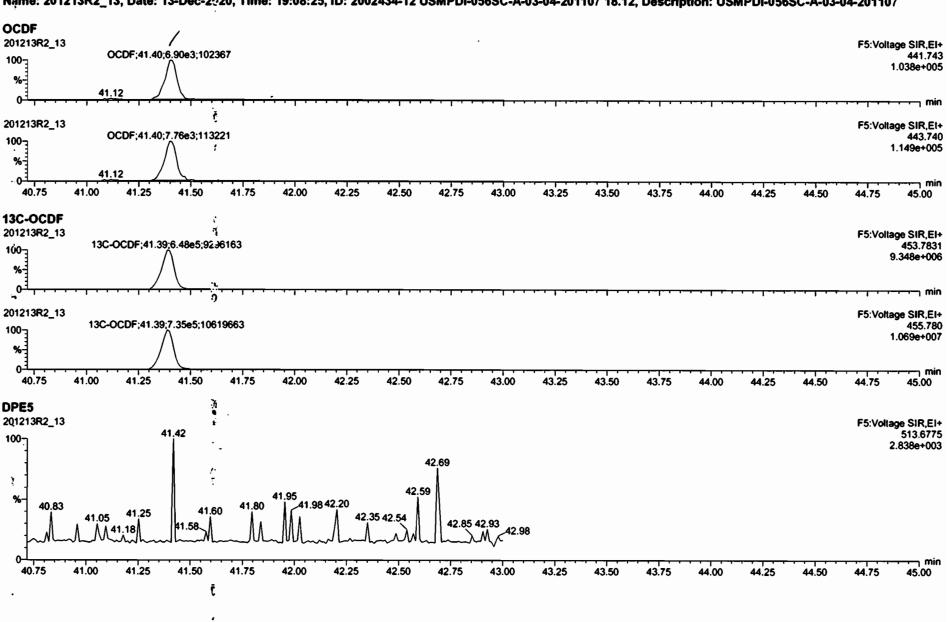
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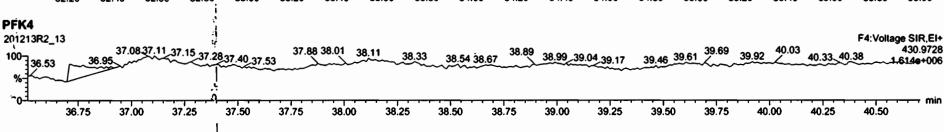
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Monday, December 14 2020 07:01:44 Pacific Standard Time Last Altered: Monday, December 14, 2020 07:12:56 Pacific Standard Time Printed:

Name: 201213R2_13, Date: 13-Dec-2920, Time: 19:08:25, ID: 2002434-12 USMPDI-056SC-A-03-04-201107 18.12, Description: USMPDI-056SC-A-03-04-201107





PFK5 201213R2_13 F5:Voltage SIR,EI+ 41.82 41.82 42.48;4.37e4;225160 454.9728 42.75 100-5.34e4 5.34e4 8.671e+005 92059 41.87 42.03 92059 40.87 40.95 41.11 41.37 , min 41.25 41.50 41.75 42.00 42.25 42.50 42.75 43.00 43.25 43.50 43.75 44.00 44.25 44.50 44.75 41.00 45.00 **40.75**

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Dataset:

U:\VG12.PRO\Results\201214R1\201214R1_10.qld

Last Altered:

Tuesday, December 15, 2020 12:39:12 PM Pacific Standard Time

Printed:

Tuesday, December 15, 2020 12:39:32 PM Pacific Standard Time

GPB 12/15/2020

Method: U:\VG12.PRO\MethDB\1613rrt-12-11-20.mdb 11 Dec 2020 08:35:32

Calibration: U:\VG12.PRO\CurveDB\dbDIOXIN_1613vg12-12-03-20.cdb 04 Dec 2020 11:36:07

Name: 201214R1_10, Date: 14-Dec-2020, Time: 17:37:57, ID: 2002434-13 USMPDI-056SC-A-04-05-201107 17.65, Description: USMPDI-056SC-A-04-05-201107

<u> </u>	# Name	Resp :	[RA	n/y`-';	_RRF_	[wt/vol_] [Pred.RT	RT	Pred.RRT	RRT	TW Conc. PI	%Recultation DL	L~~, EMPC
1-7	1 2,3,7,8-TCDD	3.03e3	0.46	YES	0.980	10.171	26.381	26.38	1.001	1.001	0.39389	0.0258	0.285
2	2 1,2,3,7,8-PeCDD	6.66e3	0.61	NO	0.932	10.171	31.079	31.06	1.001	1.000	1.0876	0.0362	
3 7	3 1,2,3,4,7,8-HxCDD	6.06e3	1.20	NO	1.02	10.171	34.358	34.35	1.001	1.000	1.2441	0.182	1.24
4	4 1,2,3,6,7,8-HxCDD	4.64e4	1.22	NO	0.902	10.171	34.484	34.47	1.001	1.000	9.5843	0.189	9.58
5	5 1,2,3,7,8,9-HxCDD	1.70e4	1.17	NO	0.954	10.171	34.745	34.74	1.000	1.000	3.4141	0.182	3.41
6	6 1,2,3,4,6,7,8-HpCDD	5.91e5	1.02	NO	0.918	10.171	38.201	38.20	1.000	1.000	155.89	0.794	156
7	7 OCDD	4.27e6	0.88	NO	0.866	10.171	41.113	41.12	1.000	1.000	1691.9	0.863	1690
8:	8 2,3,7,8-TCDF	1.15e5	0.73	NO	0.848	10.171	25.672	25.68	1.000	1.001	13.000	0.0406	13.0
9 []	9 1,2,3,7,8-PeCDF	1.63e5	1.54	NO	0.960	10.171	29.800	29.81	1.000	1.000	17.980	0.0566	18.0
10	10 2,3,4,7,8-PeCDF	9.40e4	1.57	NO	1.07	10.171	30.874	30.87	1.001	1.000	10.141	0.0517	10.1
11:	11 1,2,3,4,7,8-HxCDF	2.32e5	1.20	NO	0.986	10.171	33.447	33.45	1.000	1.000	39.110	0.0936	39.1
12	12 1,2,3,6,7,8-HxCDF	5.36e4	1.20	NO	1.04	10.171	33.593	33.58	1.001	1.000	8.5736	0.0937	8.57
13	13 2,3,4,6,7,8-HxCDF	1.58e4	1.23	NO	1.02	10.171	34.253	34.26	1.001	1.001	2.7328	0.105	2.73
14	14 1,2,3,7,8,9-HxCDF	4.43e3	1.10	NO	0.991	10.171	35.238	35.25	1.000	1.001	0.86164	0.128	0.862
15	15 1,2,3,4,6,7,8-HpCDF	1.31e5	1.00	NO	1.05	10.171	36.814	36.81	1.000	1.000	32.024	0.206	32.0
16	16 1,2,3,4,7,8,9-HpCDF	2.40e4	1.00	NO	1.18	10.171	38.829	38.83	1.000	1.000	6.4043	0.189	6.40
17	17 OCDF	1.64e5	0.87	NO	0.896	10.171	41.406	41.41	1.000	1.000	61.709	0.203	61.7
1877	18 13C-2,3,7,8-TCDD	1.54e6	0.77	NO	1.06	10.171	26.353	26.35	1.030	1.030	185.00	94.1 0.0948	
19	19 13C-1,2,3,7,8-PeCDD	1.29e6	0.63	NO	0.785	10.171	31.192	31.05	1.219	1.214	208.63	106 0.154	
20 V.h.	20 13C-1,2,3,4,7,8-HxCDD	9.39e5	1.28	NO	0.621	10.171	34.337	34.34/	1.014	1.014	215.92	110 0.294	
21.3	21 13C-1,2,3,6,7,8-HxCDD	1.05e6	1.26	NO	0.734	10.171	34.459	34.46	1.017	1.017	204.89	104 0.249	
22	22 13C-1,2,3,7,8,9-HxCDD	1.03e6	1.25	NO	0.723	10.171	34.743	34.74	1.026	1.025	203.06	103 0.253	
	23 13C-1,2,3,4,6,7,8-HpCDD	8.12e5	1.04	NO	0.568	10.171	38.243	38.19	1.129	1.127	204.13	104 0.631	
24	24 13C-OCDD	1.15e6	0.92	NO	0.496	10.171	41.180	41.10	1.216	1.213	330.22	84.0 0.369	
	25 13C-2,3,7,8-TCDF	2.05e6	0.77	NO	0.919	10.171	25.652	25.67	1.003	1.003	187.05	95.1 0.131	
	26 13C-1,2,3,7,8-PeCDF	1.86e6	1.58	NO	0.715	10.171	29.903	29.80	1.169	1.165	218.34	111 0.261	
	27 13C-2,3,4,7,8-PeCDF	1.71e6	1.59	NO	0.689	10.171	30.990	30.85	1.212	1.206	208.40	106 0.272	
2877	28 13C-1,2,3,4,7,8-HxCDF	1.18e6	0.50	NO	0.873	10.171	33.442	33.44	0.987	0.987	193.20	98.3 0.359	
	29 13C-1,2,3,6,7,8-HxCDF	1.18e6	0.51	NO	0.933	10.171	33.571	33.57	0.991	0.991	180.99	92.0 0.336	
	30 13C-2,3,4,6,7,8-HxCDF	1.12e6	0.50	NO	0.843	10.171	34.238	34.23	1.011	1.011	189.07	96.2 0.372	
31	31 13C-1,2,3,7,8,9-HxCDF	1.02e6	0.51	NO_	0.780	10.171	35.238	35.23	1.040	1.040	186.72	95.0 0.402	

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Last Altered: Printed:

Tuesday, December 15, 2020 12:39:12 PM Pacific Standard Time Tuesday, December 15, 2020 12:39:32 PM Pacific Standard Time

Name: 201214R1_10, Date: 14-Dec-2020, Time: 17:37:57, ID: 2002434-13 USMPDI-056SC-A-04-05-201107 17:65, Description: USMPDI-056SC-A-04-05-201107

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3	#	Name :	aid.	Resp	# CRA	IL-n/y_	RRF	MWOLX E	Pred.RT	RT	S Pred.RRT	RRT	Conc.12	**Rec.	WAR OF DE PAR	EMPC
32	32	13C-1,2,3,4,6,7,8-HpCDF		7.64e5	0.43	NO	0.726	10.171	36.813	36.80	1.087	1.086	150.18	76.4	0.441	
33 7	33	13C-1,2,3,4,7,8,9-HpCDF		6.26e5	≀: 0.42	NO	0.491	10.171	38.822	38.82	· 1.146	1.146	181.98	92.5	0.652	
34.	34	13C-OCDF	i ·	1.16e6	· 0.88	NO	0.565	10.171	41.396	41.40	1.222	1.222	293.61	74.7	0.345	
35	35	37CI-2,3,7,8-TCDD	1	7.31e5	n		1.22 ·	10.171	26.347	26.38	1.030	1.031	76.180	96.9	0.0454	
36	36	13C-1,2,3,4-TCDD		1.55e6	."0.79	NO	1.00	10.171	25.640	25.58	1.000	1.000	196.63	100	0.100	
37-	37	13C-1,2,3,4-TCDF		2.34e6	· 0.78	NO	1.00	10.171	24.130	24.09	1.000	1.000	196.63	100	0.120	
38	38	13C-1,2,3,4,6,9-HxCDF		1.38e6	0.51 ئ	NO	1.00	10.171	33.920	33.88	1.000	1.000	196.63	100	0.313	
39	39	Total Tetra-Dioxins	1				0.980	10.171	24:620		0.000		2.8047		0.0253	3.20
40	40	Total Penta-Dioxins					0.932	10.171	29.960		0.000		7.0934		0.0362	8.32
41	41	Total Hexa-Dioxins	•		37		0.902	10.171	33.635		0.000		67.346		0.195	67.3
42	42	Total Hepta-Dioxins	1				0.918	10.171	37.640		0.000		321.36		0.794	321
43	43	Total Tetra-Furans			1/		0.848	10.171	23.610		0.000		37.670		0.0406	39.5
44	44	1st Func. Penta-Furans					0.960	10.171	26.930		0.000		10.824		0.0212	10.8
45.	45	Total Penta-Furans					0.960	10.171	29.275		0.000		52.232		0.0570	52.3
46 4	46	Total Hexa-Furans	i		Giv.		1.02	10.171	33.555		0.000		90.080		0.103	90.1
477	47	Total Hepta-Furans			A2		1.05	10.171	37.835		0.000		82.805		0.208	82.8

Dataset:

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Last Altered: Tuesday, December 15, 2020 12:39:12 PM Pacific Standard Time Tuesday, December 15, 2020 12:39:32 PM Pacific Standard Time Printed:

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Calibration: U:\VG12.PRO\CurveDB\dbDIOXIN_1613vg12-12-03-20.cdb 04 Dec 2020 11:36:07

Name: 201214R1_10, Date: 14-Dec-2020, Time: 17:37:57, ID: 2002434-13 USMPDI-056SC-A-04-05-201107 17.65, Description: USMPDI-056SC-A-04-05-201107

Tetra-Dioxins

	Name	به بند وت المالية	RT.JI	m1 Height	m2 Height	m1 Resp	m2 Resp	, [RA]	[n/y][Resp	1 Conc.	_ EMPC	DL
9	Total	Tetra-Dioxins	22.56	2.413e4	2.965e4	2.308e3	2.707e3	0.85	NO	5.015e3	0.65293	0.65293	0.0253
2	Total	Tetra-Dioxins	22.90	1.328e4	1.745e4	9.912e2	1.374e3	0.72	NO	2.365e3	0.30791	0.30791	0.0253
3	Total	Tetra-Dioxins	23.44	8.992e3	1.149 e 4	7.066e2	8.627e2	0.82	NO	1.569e3	0.20431	0.20431	0.0253
4	Total	Tetra-Dioxins	24.26	8.648e3	8.035e3	5.162e2	6.157e2	0.84	NO	1.132e3	0.14737	0.14737	0.0253
5	Total	Tetra-Dioxins	24.52	6.341e3	1.043e4	5.699e2	6.738e2	0.85	NO	1.244e3	0.16191	0.16191	0.0253
6	Total	Tetra-Dioxins	24.74	1.365e4	1.743 e 4	1.075e3	1.277e3	0.84	ŇΟ	2.352e3	0.30619	0.30619	0.0253
7	Total	Tetra-Dioxins	24.94	5.037e3	5.719e3	2.931e2	3.451e2	0.85	NO .	6.382e2	0.083087	0.083087	0.0253
8	Total	Tetra-Dioxins	25.24	8.697e3	1.042e4	4.642e2	5.848e2	0.79	NO	1.049e3	0.13657	0.13657	0.0253
9	Total	Tetra-Dioxins	25.30	6.420e3	6.904e3	4.568e2	5.164e2	0.88	NO	9.732e2	0.12670	0.12670	0.0253
10	Total	Tetra-Dioxins	25.65	5.928e3	2.537e3	2.883e2	1.514e2	1.90	YES	0.000e0	0.00000	0.034899	0.0253
11	Total	Tetra-Dioxins	25.68	1.022e4	4.533e3	3.592e2	3.241e2	1.11	YES	0.000e0	0.00000	0.074689	0.0253
12,	Total	Tetra-Dioxins	26.08	2.685e4	3.532e4	1.876e3	2.391e3	0.78	NO	4.267e3	0.55555	0.55555	0.0253
13	2,3,7	.8-TCDD	26.38	1.530e4	3.485e4	9.527e2	2.073e3	0.46	YES	3.025e3	0.00000	0.28511	0.0253
14, 1	Total	Tetra-Dioxins	26.69	6.523e3	1.004e4	4.139e2	5.249e2	0.79	NO	9.387e2	0.12221	0.12221	0.0253

Penta-Dioxins

Name 1 2	RT	m1 Height	m2 Height	m1 Resp	m2 Resp	[RA]	n/y1L	Resp`	Conc.	EMPC	r DĽ
1 Total Penta-Dioxins	28.80	7.001e4	1.051e5	5.518e3	8.497e3	0.65	NO	1.402e4	2.2898	2.2898	0.0362
2 Total Penta-Dioxins	29.28	1.943e4	3.108e4	1.021e3	1.753e3	0.58	NO	2.774e3	0.45318	0.45318	0.0362
3 Total Penta-Dioxins	29.81	5.453e4	7.79 9e 4	3.062e3	4.335e3	0.71	NO	7.396e3	1.2084	1.2084	0.0362
4 Total Penta-Dioxins	29.98	5.708e4	8.166e4	2.479e3	3.586e3	0.69	NO	0.000e0	0.00000	0.99101	0.0362
5: 1 d Total Penta-Dioxins	30.04	3.221e4	5.078e4	1.565e3	2.229e3	0.70	NO	3.794e3	0.61992	0.61992	0.0362
6 Total Penta-Dioxins	30.29	4.257e4	6.071e4	2.705e3	4.217e3	0.64	NO	6.922e3	1.1310	1.1310	0.0362
7. Total Penta-Dioxins	30.61	4.549e3	7.517e3	2.860e2	4.239e2	0.67	NO	7.099e2	0.11598	0.11598	0.0362
8	31.06	5.083e4	8.556e4	2.516e3	4.142e3	0.61	NO	6.657e3	1.0876	1.0876	0.0362
9 Total Penta-Dioxins	31.15	1.391e4	1.643e4	4.603e2	6.876e2	0.67	NO	1.148e3	0.18753	0.18753	0.0362
10 Total Penta-Dioxins	31.41	1.331e4	2.018e4	5.580e2	1.067e3	0.52	YES	0.000e0	0.00000	0.23588	0.0362

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Dataset:

U:\VG12.PRO\Results\201214R1\201214R1_10.qld

Last Altered: Printed:

Tuesday, December 15, 2020 12:39:12 PM Pacific Standard Time Tuesday, December 15, 2020 12:39:32 PM Pacific Standard Time

Name: 201214R1_10, Date: 14-Dec-2020, Time: 17:37:57, ID: 2002434-13 USMPDI-056SC-A-04-05-201107 17.65, Description: USMPDI-056SC-A-04-05-201107

Hexa-Dioxins

Name	L RT	m1 Height	m2 Height	m1 Resp	m2 Resp	:}RA{	Iu/Ail	Resp	Conc.	EMPC	ین DL
1 Total Hexa-Dioxins	32.72	8.773e5	7.059e5	4.381e4	3.556e4	1.23	NO	7.938e4	17.176	17.176	0.195
Total Hexa-Dioxins	33.31	8.959e4	7.202e4	4.819e3	3.860e3	1.25	NO	8.679e3	1.8779	1.8779	0.195
3 Total Hexa-Dioxins	33.60	1.258e6	1.014e6	8.320e4	6.617e4	1.26	NO	1.494e5	32.321	32.321	0.195
4 Total Hexa-Dioxins	33.68	6.884e4	4.888e4	2.807e3	2.247e3	1.25	NO	5.054e3	1.0936	1.0936	0.195
5, 1,2,3,4,7,8-HxCDD	34.35	6.286e4	4.413e4	3.310e3	2.750e3	1.20	NO	6.060e3	1.2441	1.2441	0.182
6 1,2,3,6,7,8-HxCDD	34.47	4.230e5	3.530e5	2.549e4	2.086e4	1.22	NO	4.635e4	9.5843	9.5843	0.189
7 Total Hexa-Dioxins	34.63	2.405e4	2.274e4	1.556e3	1.380e3	1.13	NO	2.936e3	0.63530	0.63530	0.195
8-1.2.3,7,8,9-HxCDD	34.74	1.452e5	1.332e5	9.186e3	7.847e3	1.17	NO	1.703e4	3.4141	3.4141	0.182

Hepta-Dioxins

1 Total Hepta-Dioxins 2 1,2,3,4,6,7,8-HpCDD	RT. EL	m1 Height	m2 Height	m1.Resp	m2 Resp	JIRA;	ַרַעַעַ	Resp	Conc. L	- EMPC L	, DL
1 Total Hepta-Dioxins	37.20	4.033e6	3.994e6	3.169e5	3.104e5	1.02	NO	6.273e5	165.47	165.47	0.794
2 1,2,3,4,6,7,8-HpCDD	38.20	4.719e6	4.769e6	2.986e5	2.923e5	1.02	NO	5.910e5	155.89	155.89	0.794

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Dataset: U:\VG12.PRO\Results\201214R1\201214R1_10.qld

Last Altered: Tuesday, December 15, 2020 12:39:12 PM Pacific Standard Time Printed: Tuesday, December 15, 2020 12:39:32 PM Pacific Standard Time

Name: 201214R1_10, Date: 14-Dec-2020, Time: 17:37:57, ID: 2002434-13 USMPDI-056SC-A-04-05-201107 17.65, Description: USMPDI-056SC-A-04-05-201107

Tetra-Furans

Name	<u> </u>	ST_11/m	l Height i	n2 Height	m1 Resp	m2 Resp	RAIL	n/y L	Resp i [Conc. L	EMPC	DL.
Total Tel	tra-Furans 2	20.32	1.333e4	1.448e4	8.970e2	1.218e3	0.74	NO	2.115e3	0.23965	0.23965	0.0406
2 Total Tel	tra-Furans 2	20.89	1.815e4	2.426e4	1.726e3	2.203e3	0.78	NO	3.929e3	0.44515	0.44515	0.0406
3 Total Tel	tra-Furans 2	21.68	7.12 4e 4	9.392e4	6.252e3	8.748e3	0.71	NO	1.500e4	1.6993	1.6993	0.0406
4 Total Tel	tra-Furans 2	22.03	8.408e3	1.298e4	7.639e2	1.009e3	0.76	NO	1.773e3	0.20083	0.20083	0.0406
5 Total Tet	tra-Furans 2	22.17	2.557e4	3.676e4	2.111e3	3.114e3	0.68	NO	5.225e3	0.59191	0.59191	0.0406
	tra-Furans 2	22.24	1.026e4	1.485e4	9.149e2	1.228e3	0.75	NO	2.143e3	0.24276	0.24276	0.0406
7 Total Tel	tra-Furans 2	22.59	1.345e5	1.835e5	1.268e4	1.686e4	0.75	NO	2.955e4	3.3472	3.3472	0.0406
8 Total Tel	tra-Furans 2	23.07	6.325e4	8.263e4	5.373e3	6.796e3	0.79	NO	1.217e4	1.3786	1.3786	0.0406
9 Total Tel	tra-Furans 2	23.20	1.959e4	2.590e4	1.414e3	2.081e3	0.68	NO	3.494e3	0.39585	0.39585	0.0406
10 Total Tel	tra-Furans 2	23.42	3.997e4	4.407e4	2.988e3	4.062e3	0.74	NO	7.050e3	0.79871	0.79871	0.0406
	tra-Furans 2	23.84	6.116e3	1.022e4	4.877e2	7.122e2	0.68	NO	1.200e3	0.13592	0.13592	0.0406
	tra-Furans 2	23.95	1.33 9e4	1.698e4	9.270e2	1.244e3	0.75	NO	2.171e3	0.24598	0.24598	0.0406
13 Total Tel	tra-Furans 2	24.16	3.540e4	4.229e4	1.491e3	1.982e3	0.75	NO	0.000e0	0.00000	0.39352	0.0406
1474 Total Tel	tra-Furans 2	24.19	5.150e4	6.463e4	5.130e3	6.883e3	0.75	NO	0.000e0	0.00000	1.3610	0.0406
15 Total Tel	tra-Furans 2	24.66	5.963e5	8.569e5	4.238e4	5.881e4	0.72	NO	1.012e5	11.463	11.463	0.0406
16Total Tel	tra-Furans 2	24.99	2.420e4	2.950e4	1.451e3	2.042e3	0.71	NO	3.493e3	0.39569	0.39569	0.0406
17 Total Tel	tra-Furans 2	25.42	9.855e3	1.486e4	6.378e2	8.189e2	0.78	NO	1.457e3	0.16503	0.16503	0.0406
	tra-Furans 2	25.55	4.887e4	7.028e4	3.346e3	4.660e3	0.72	NO	8.006e3	0.90695	0.90695	0.0406
19 2.3.7.8-T	CDF 2	25.68	7.190e5	1.007e6	4.854e4	6.622e4	0.73	NO	1.148e5	13.000	13.000	0.0406
20 Total Tel	tra-Furans 2	25.89	1.087e4	1.490e4	6.934e2	8.799e2	0.79	NO	1.573e3	0.17823	0.17823	0.0406
21 Total Tel	tra-Furans 2	25.99	2.621e4	4.005e4	1.798e3	2.664e3	0.67	NO	4.462e3	0.50545	0.50545	0.0406
22Total Tel	tra-Furans 2	26.26	1.021e4	1.054e4	6.560e2	8.146e2	0.81	NO	1.471e3	0.16661	0.16661	0.0406
23 Total Tel	tra-Furans 2	27.19	2.279 e 4	3.271e4	1.450e3	1.945e3	0.75	NO	3.395e3	0.38460	0.38460	0.0406
24 Total Tet	tra-Furans 2	27.40	1.460e4	8.327e3	8.017e2	5.298e2	1.51	YES	0.000e0	0.00000	0.10624	0.0406
25 1 Total Tel	tra-Furans 2	27.58	4.955e4	7.415e4	2.856e3	4.055e3_	0.70	NO	6.911e3	0.78293	0.78293	0.0406

Penta-Furans function 1

Name Name	niRT	m1 Height,	m2 Height	m1 Resp	m2,Resp	, RA	n/y1t	Resp	Conc.	EMPC	DL
1 - 1 - 1st Func. Penta-Furans		1.003e6		5.841e4					10.824		

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Dataset:

U:\VG12.PRO\Results\201214R1\201214R1_10.qld

Last Altered: Printed:

Tuesday, December 15, 2020 12:39:12 PM Pacific Standard Time Tuesday, December 15, 2020 12:39:32 PM Pacific Standard Time

Name: 201214R1_10, Date: 14-Dec-2020, Time: 17:37:57, ID: 2002434-13 USMPDI-056SC-A-04-05-201107 17.65, Description: USMPDI-056SC-A-04-05-201107

Penta-Furans

Name	RT.	m1 Height	m2 Height 1	m1 Resp	m2 Resp	IRA	lu/y}[Resp	Conc.	EMPC	<u>-</u> DL
1Total Penta-Furans	28.65	5.911e4	3.849e4	4.077e3	2.695e3	1.51	NO	6.772e3	0.77787	0.77787	0.0570
2 Total Penta-Furans	28.82	1.036e6	6.653e5	6.350e4	4.090e4	1.55	NO	1.044e5	11.992	11.992	0.0570
3 Total Penta-Furans	29.19	6.551e3	4.850e3	3.856e2	3.362e2	1.15	YES	0.000e0	0.00000	0.072869	0.0570
4 Total Penta-Furans	29.27	1.063e4	8.755e3	7.593e2	5.539e2	1.37	NO	1.313e3	0.15083	0.15083	0.0570
512 Total Penta-Furans	29.45	1.386e5	8.463e4	8.185e3	5.031e3	1.63	NO	1.322e4	1.5180	1.5180	0.0570
6 Total Penta-Furans	29.60	1.771e5	1.146e5	9.263e3	6.280e3	1.47	NO	1.554e4	1.7853	1.7853	0.0570
7. 1,2,3,7,8-PeCDF	29.81	1.887e6	1.222e6	9.889e4	6.425e4	1.54	NO	1.631e5	17.980	17.980	0.0566
8 Total Penta-Furans	29.89	3.171e4	2.698e4	1.196e3	7.966e2	1.50	NO	1.993e3	0.22892	0.22892	0.0570
9Total Penta-Furans	30.05	6.753e5	4.707e5	3.575e4	2.375e4	1.51	NO	5.950e4	6.8343	6.8343	0.0570
10 Ta Total Penta-Furans	30.69	3.567e4	1.859e4	1.546e3	1.028e3	1.50	NO	2.573e3	0.29559	0.29559	0.0570
11 2.3.4.7.8-PeCDF	30.87	1.205e6	7.625e5	5.740e4	3.663e4	1.57	NO	9.403e4	10.141	10.141	0.0517
12 Total Penta-Furans	31.77	5.323e4	3.466e4	2.911e3	1.689e3	1.72	NO	4.600e3	0.52836	0.52836	0.0570

Hexa-Furans

Name	RT	m1 Height	m2 Height	m1 Resp	m2 Resp] RAJ	Ju/yJ	Resp_	Conc.	EMPC	DL
1 Total Hexa-Furans	32.19	3.208e5	2.449e5	1.478e4	1.262e4	1.17	NO	2.740e4	4.6913	4.6913	0.103
2 Total Hexa-Furans	32.36	9.203e5	7.721e5	4.683e4	3.845e4	1.22	NO	8.528e4	14.601	14.601	0.103
31 Total Hexa-Furans	32.77	1.972e4	1.560e4	9.520e2	7.782e2	1.22	NO	1.730e3	0.29621	0.29621	0.103
4 Total Hexa-Furans	32.99	1.082e6	8.493e5	5.286e4	4.314e4	1.23	NO	9.599e4	16.435	16.435	0.103
5 Total Hexa-Furans	33.32	2.593e4	1.920e4	1.169e3	1.046e3	1.12	NO	2.215e3	0.37918	0.37918	0.103
1,2,3,4,7,8-HxCDF	33.45	2.344e6	1.999e6	1.266e5	1.053e5	1.20	NO	2.318e5	39.110	39.110	0.0936
74-1-1 1.2.3.6.7.8-HxCDF	33.58	5.397e5	4.346e5	2.929e4	2.433e4	1.20	NO	5.362e4	8.5736	8.5736	0.0937
8 Total Hexa-Furans	33.90	1.077e4	8.461e3	5.670e2	4.888e2	1.16	NO	1.056e3	0.18077	0.18077	0.103
9, 1 2.3,4,6,7,8-HxCDF	34.26	1.304e5	1.123e5	8.740e3	7.094e3	1.23	NO	1.583e4	2.7328	2.7328	0.105
10 1.2.3,7,8,9-HxCDF	35.25	9.585e4	9.012e4	2.319e3	2.112e3	1.10	NO	4.431e3	0.86164	0.86164	0.128
11 Total Hexa-Furans	35.27	1.348e5	1.152e5	6.971e3	5.984e3	1.16	NO	1.295e4	2.2180	2.2180	0.103

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Quantify Totals Report MassLynx 4.1 SCN815 Page 5 of 5

Vista Analytical Laboratory

Dataset: U:\VG12.PRO\Results\201214R1\201214R1_10.qld

Last Altered: Tuesday, December 15, 2020 12:39:12 PM Pacific Standard Time Printed: Tuesday, December 15, 2020 12:39:32 PM Pacific Standard Time

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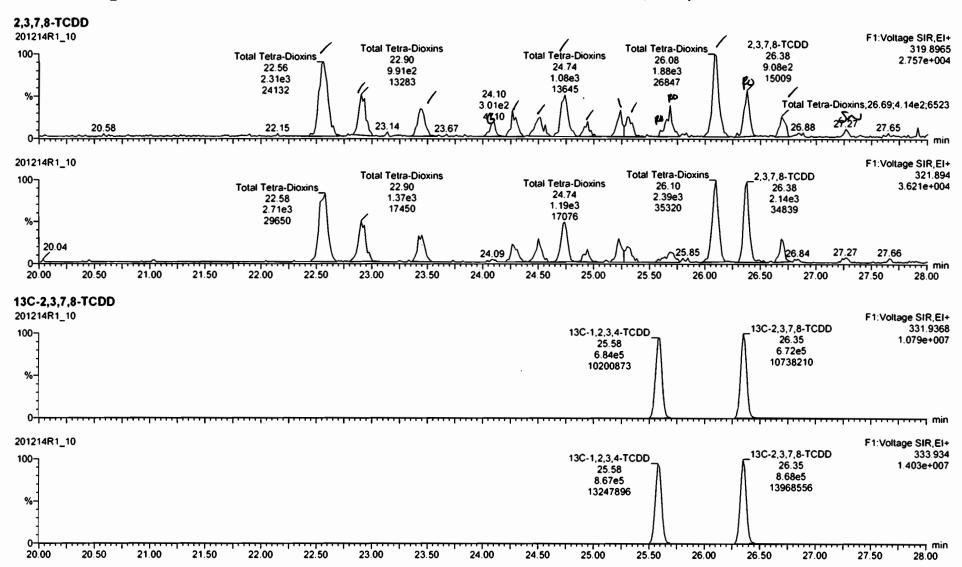
Hepta-Furans

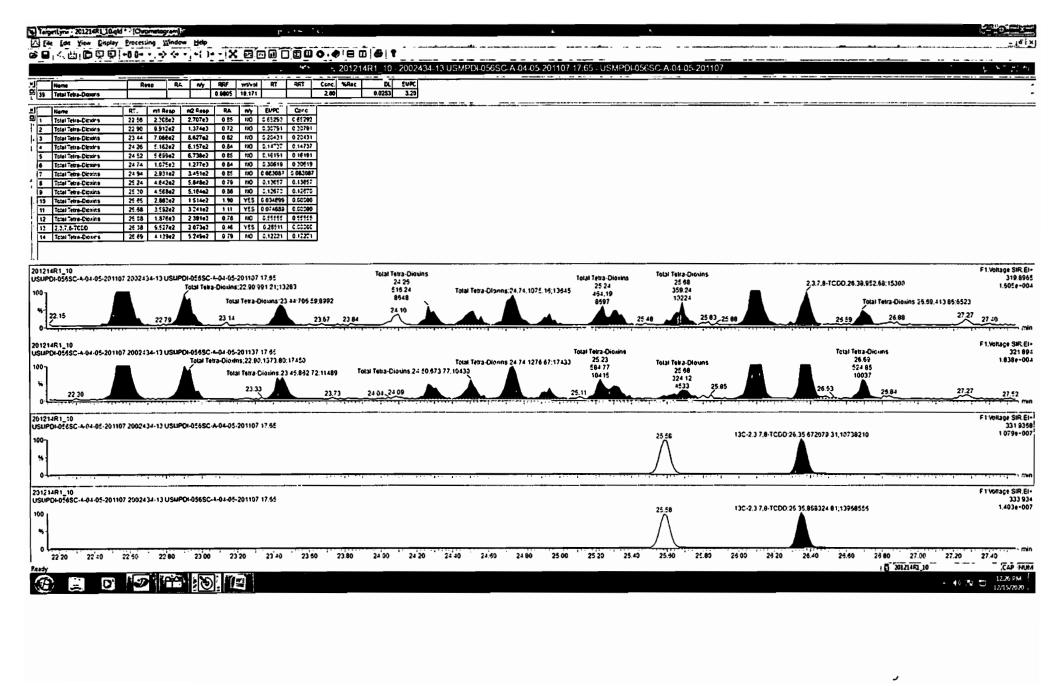
Name Name	RT . I	m1 Height	m2 Height	L,m1₁Resp ı	m2 Resp	RA	ľu/y*ľ	Resp	Conc.	EMPC	- Pr. DI
1,2,3,4,6,7,8-HpCDF	36.81	9.334e5			6.540e4	1.00	NO	1.306e5	32.024	32.024	0.206
2 Total Hepta-Furans	37.28	1.199 e4	1.167e4	1.303e3	1.097e3	1.19	NO	2.400e3	0.64692	0.64692	0.208
3 Total Hepta-Furans	37.53	1.128e6	1.151e6	8.092e4	8.131e4	1.00	NO	1.622e5	43.730	43.730	0.208
4, 1,2,3,4,7,8,9-HpCDF	38.83	2.012e5	1.944e5	1.198e4	1.200e4	1.00	NO	2.398e4	6.4043	6.4043	0.189

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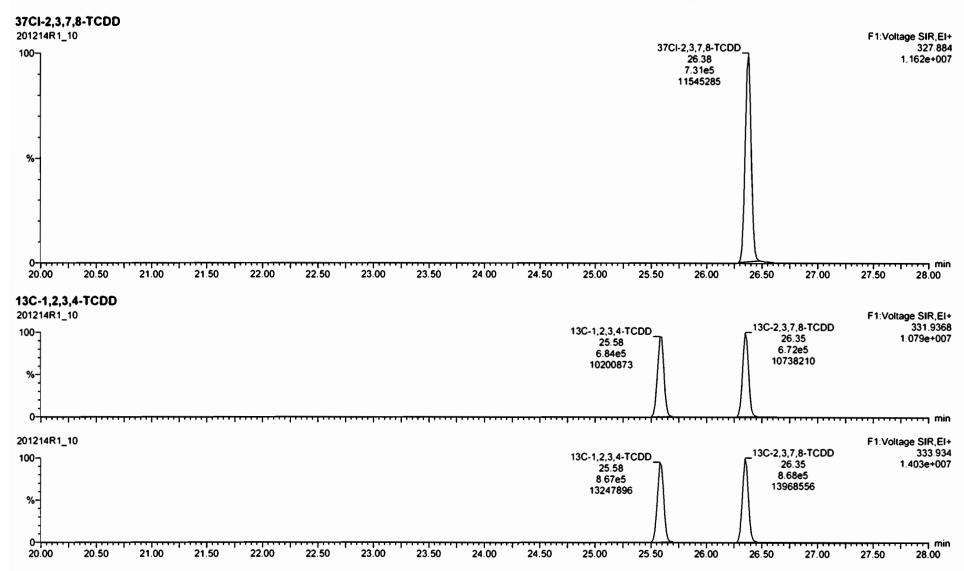


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Tuesday, December 15, 2020 6:59:17 AM Pacific Standard Time Tuesday, December 15, 2020 7:04:33 AM Pacific Standard Time

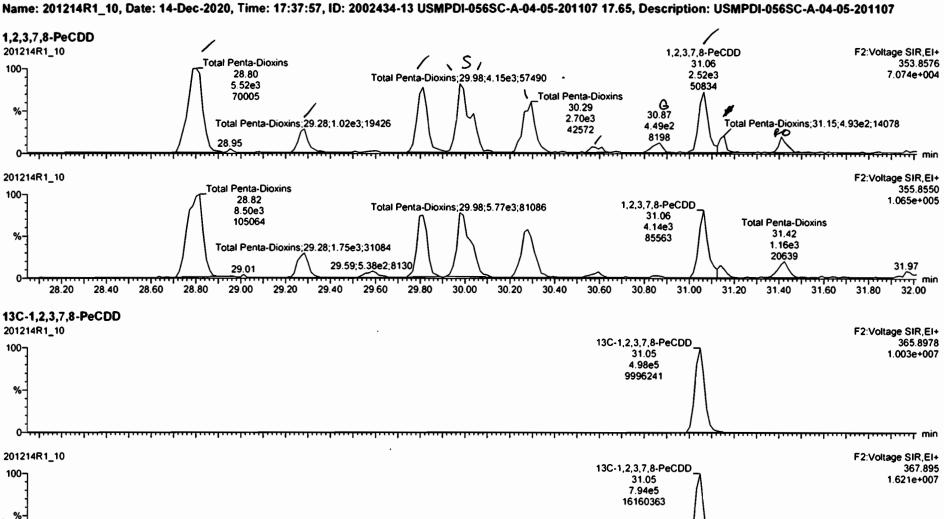


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Work Order 2002434

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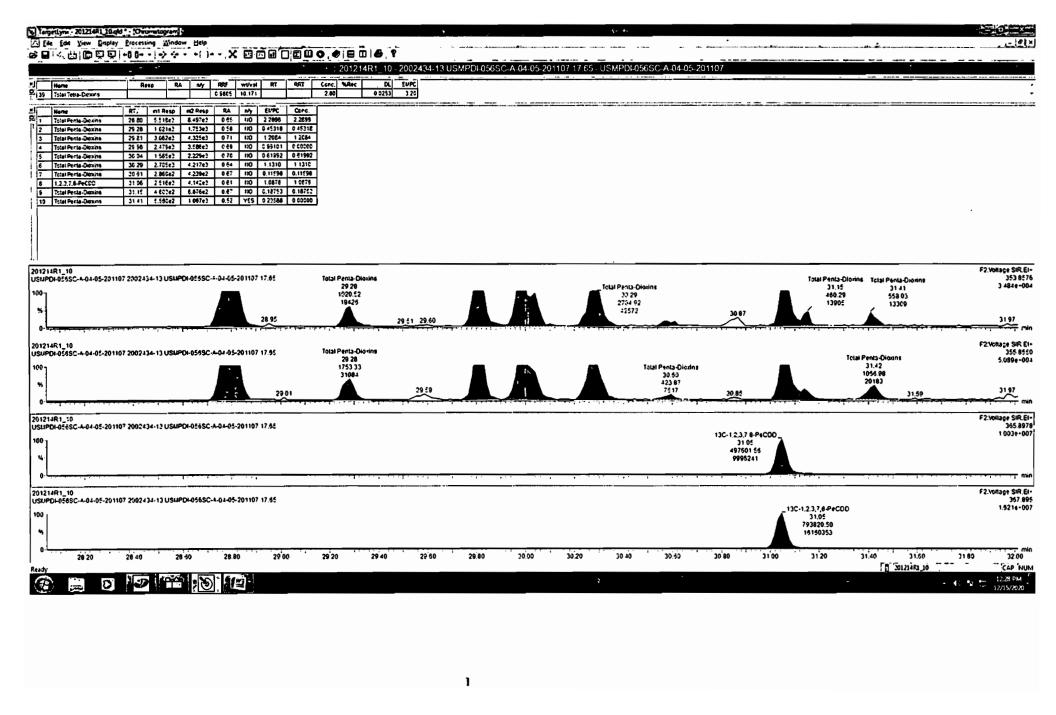
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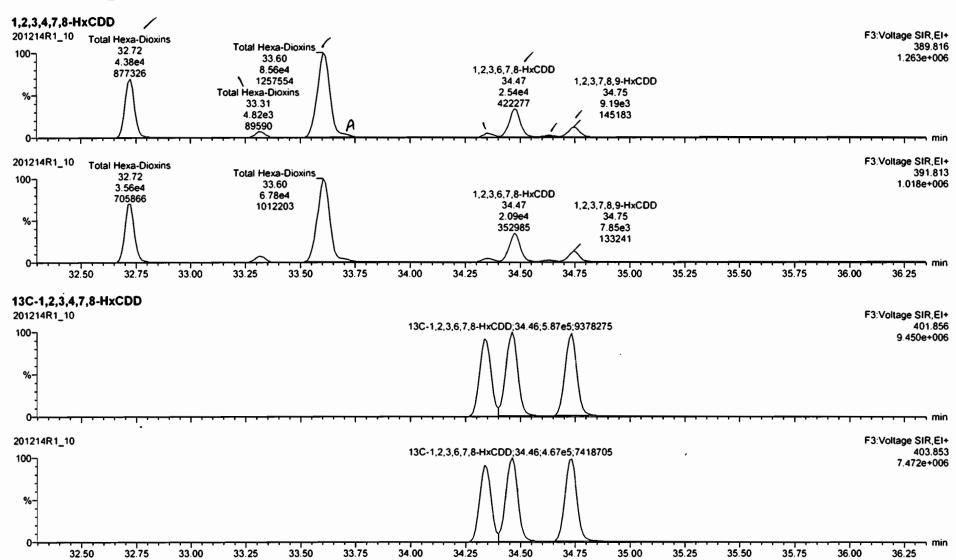


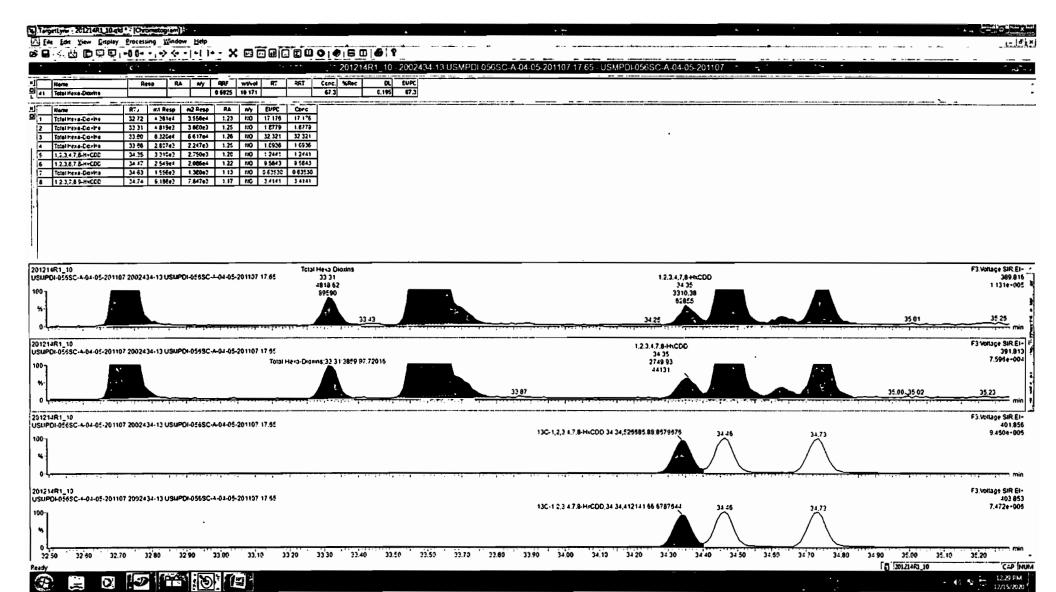
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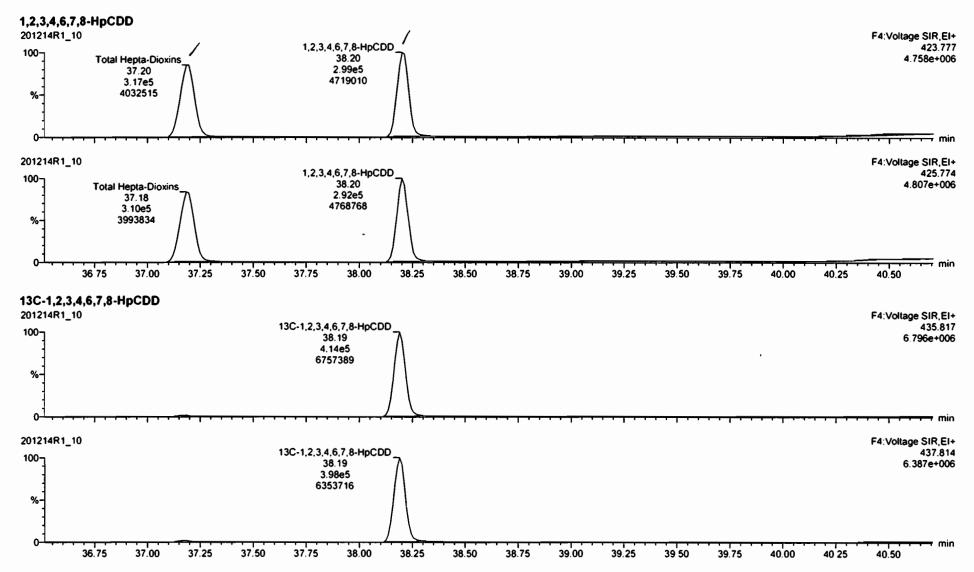


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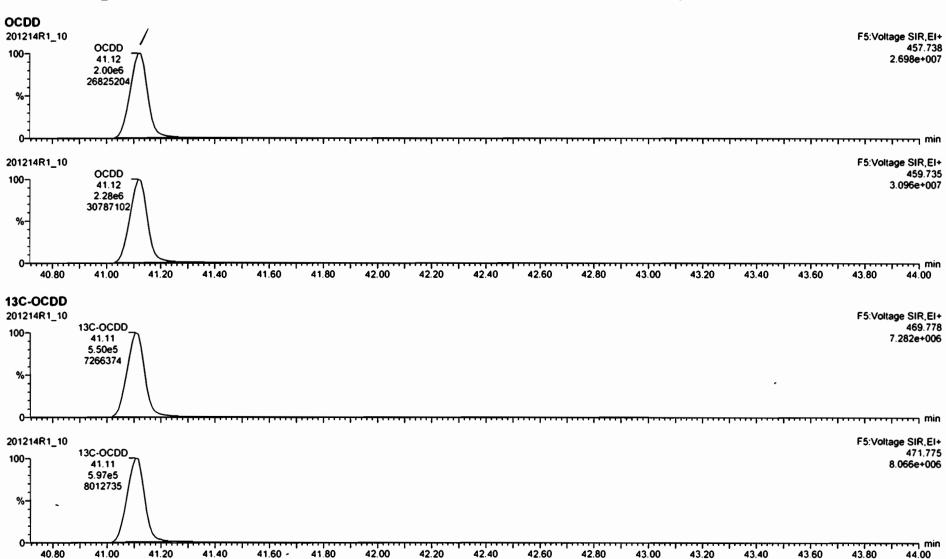
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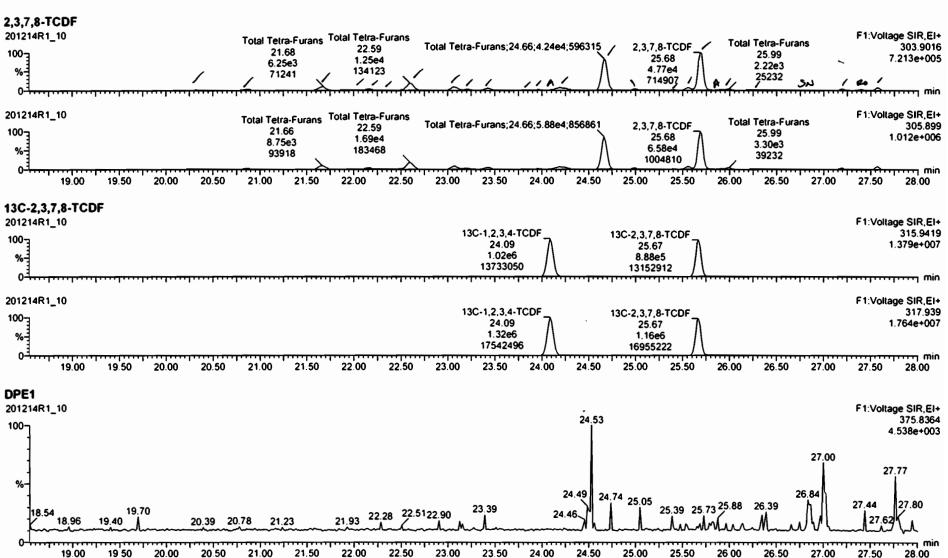
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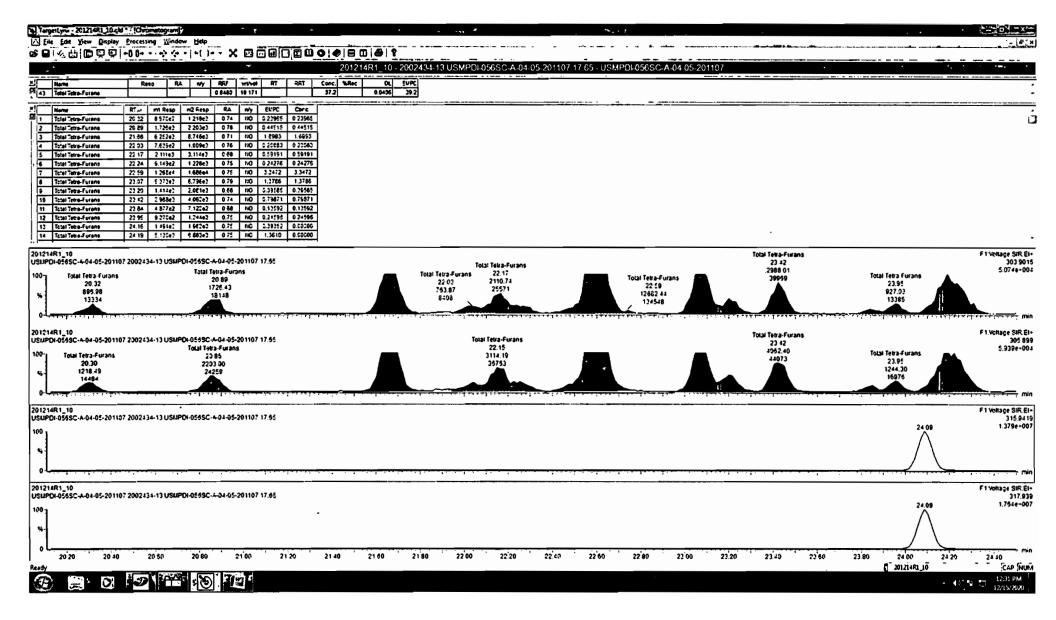
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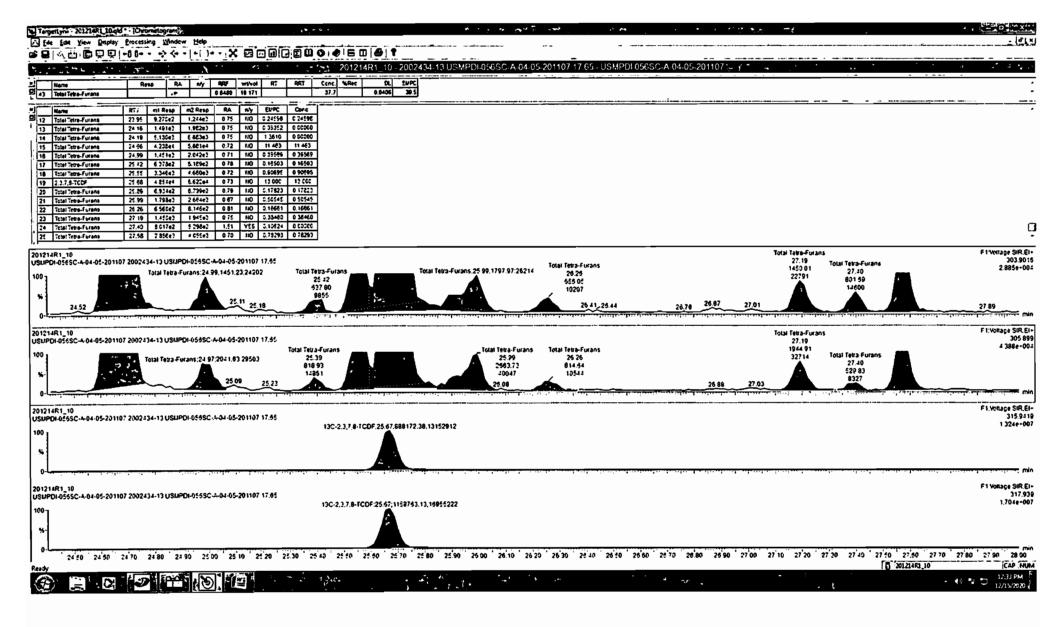
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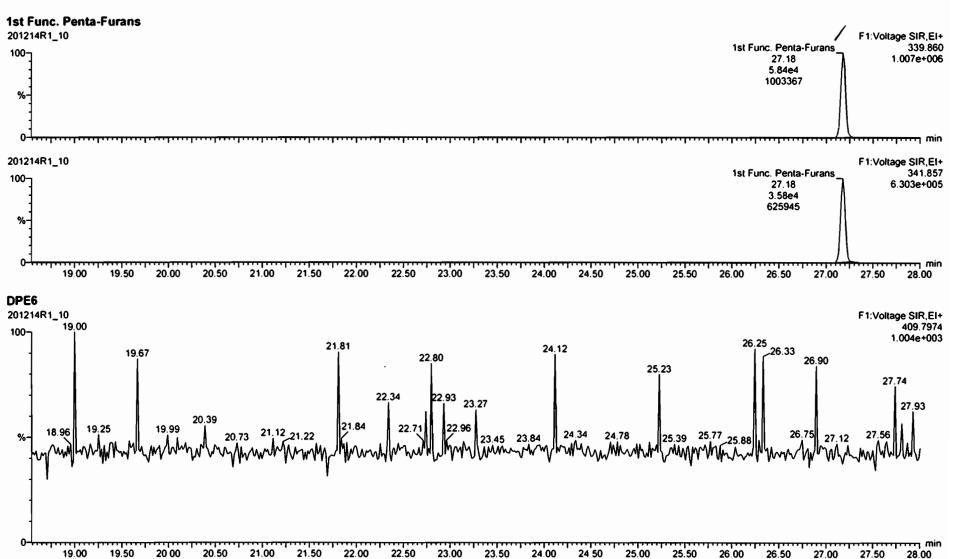
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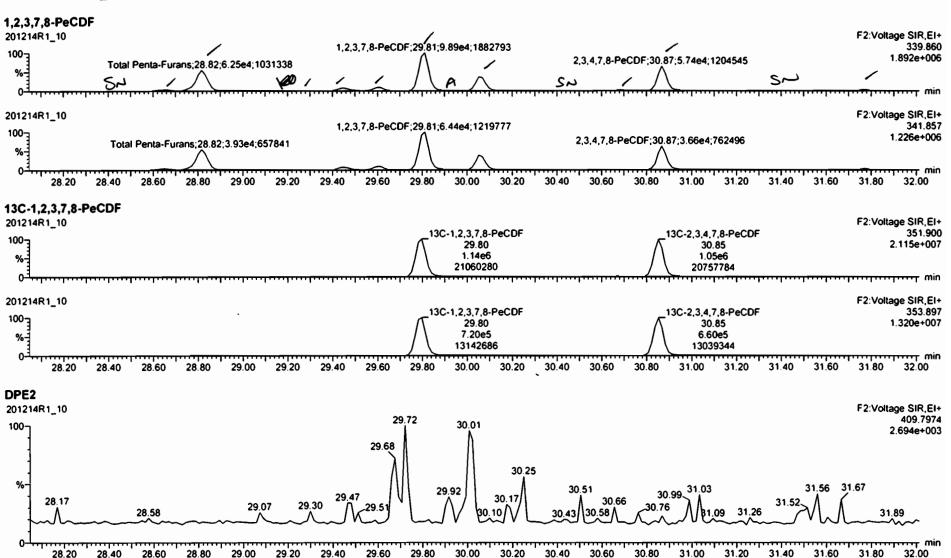
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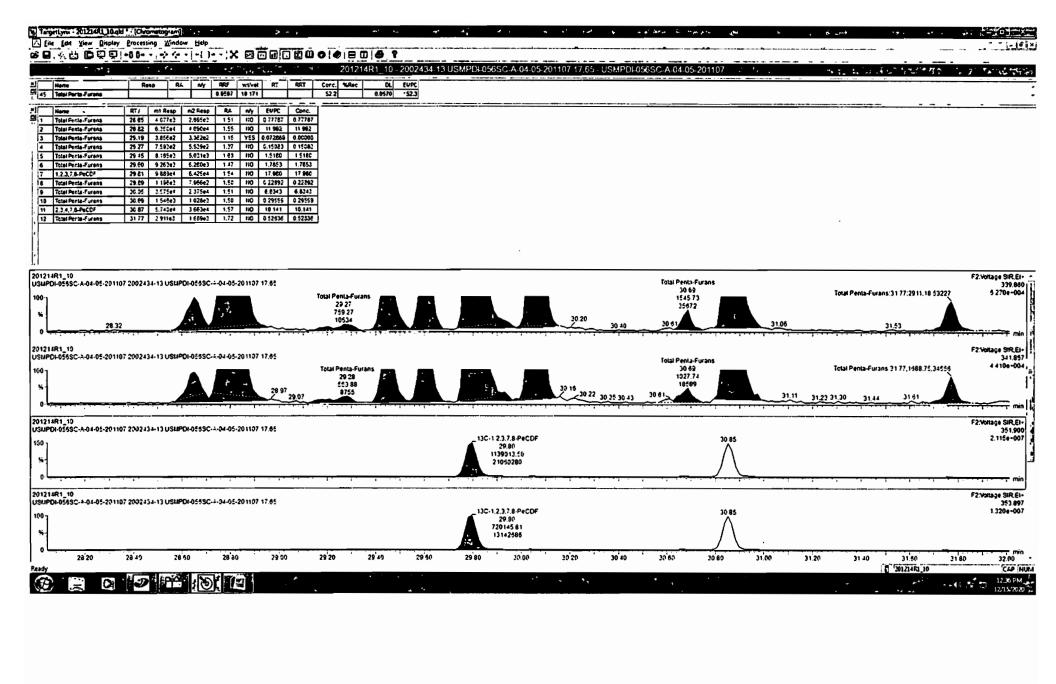


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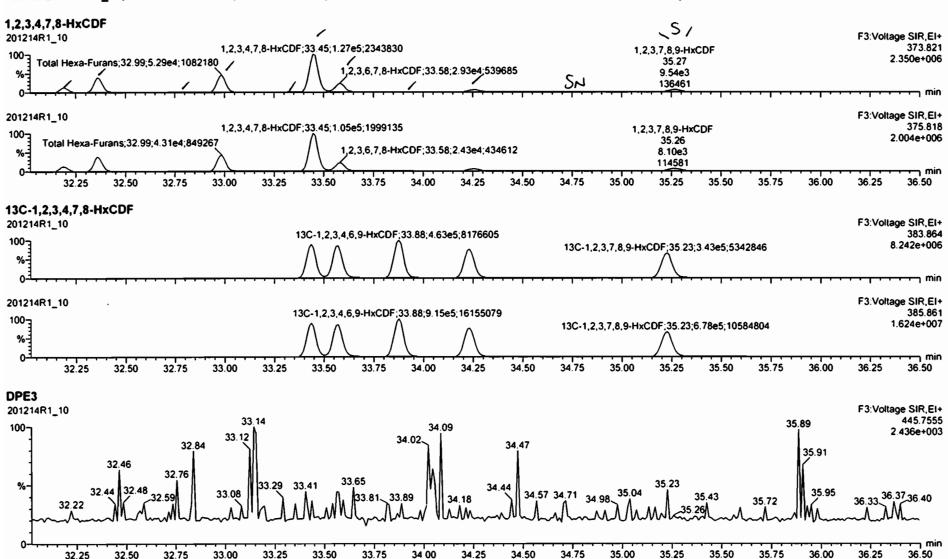


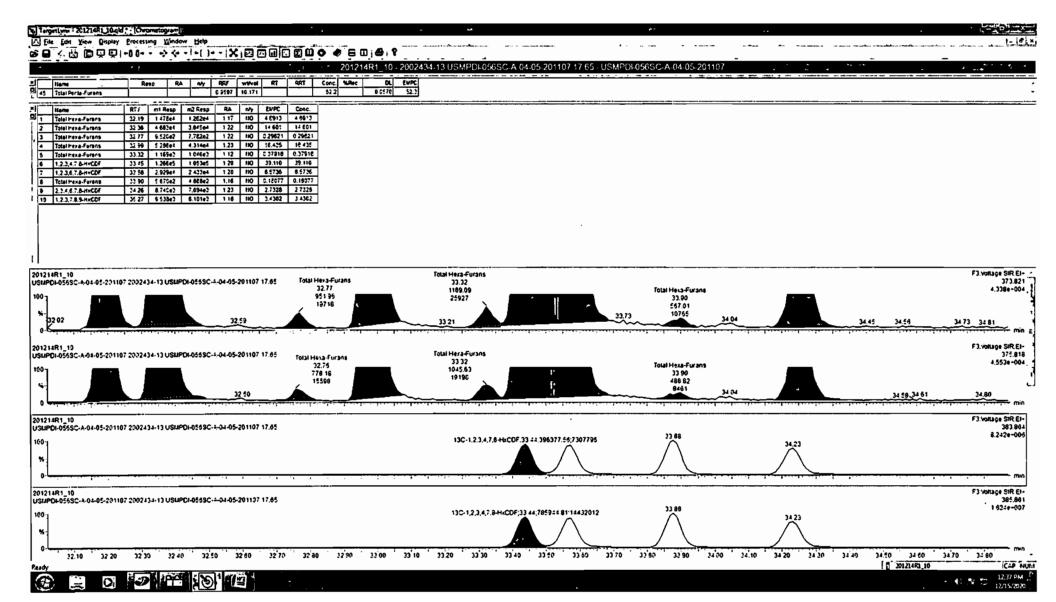
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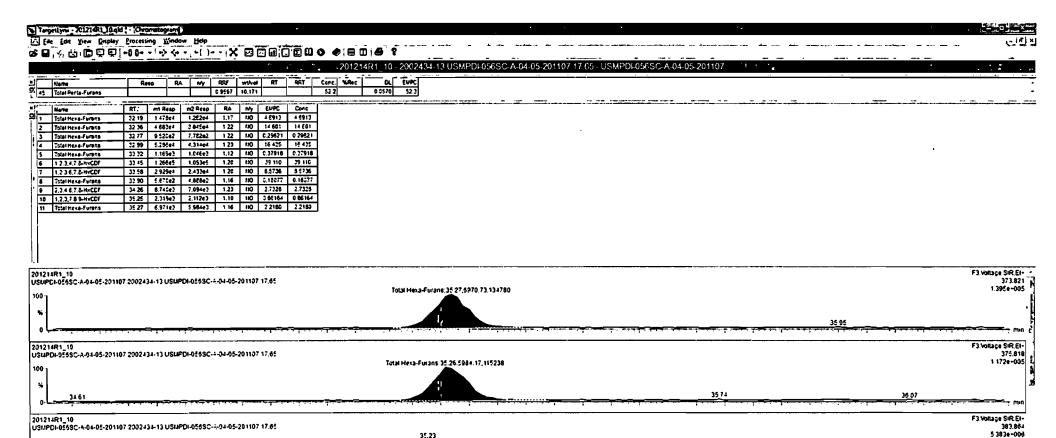
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Tuesday, December 15, 2020 6:59:17 AM Pacific Standard Time Tuesday, December 15, 2020 7:04:33 AM Pacific Standard Time





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3460 3465 3470 3475 3480

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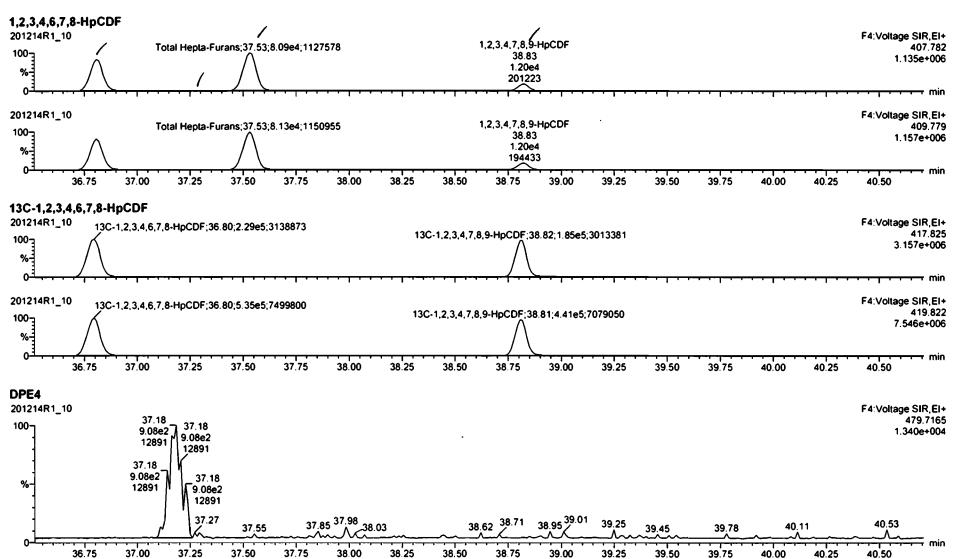
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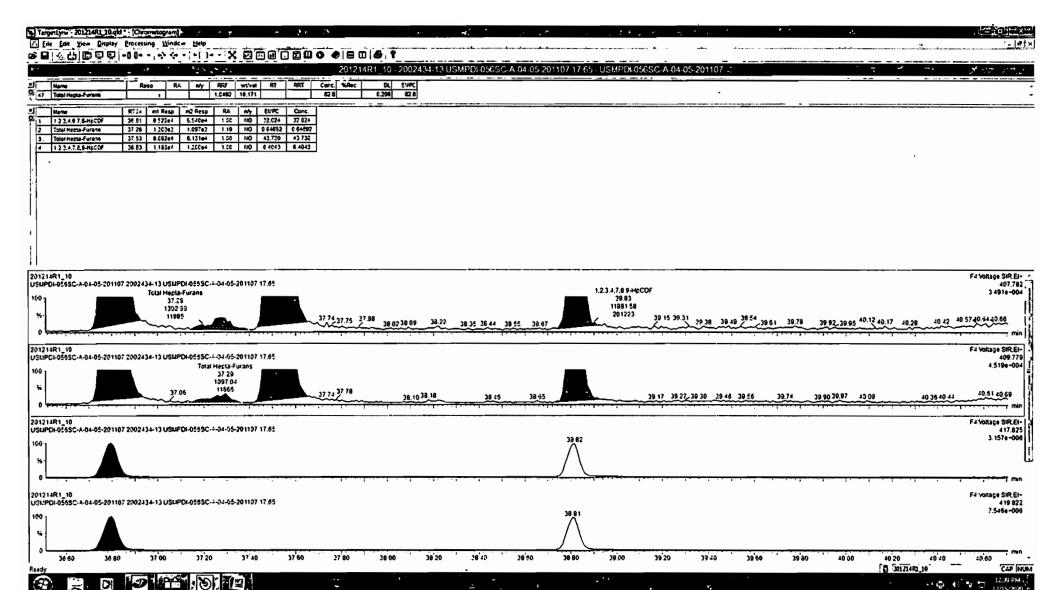
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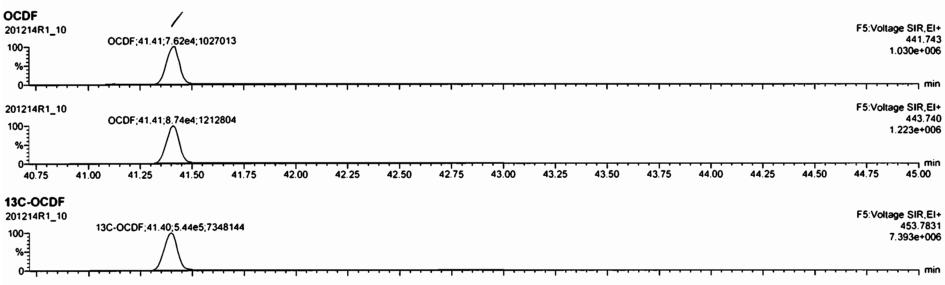


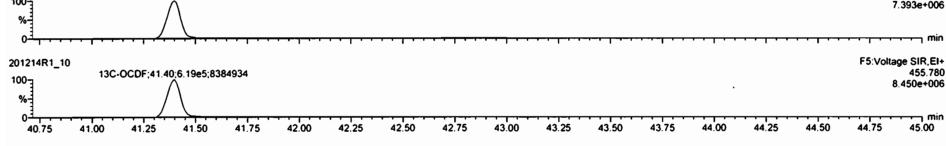
Work Order 2002434 Page 497 of 955

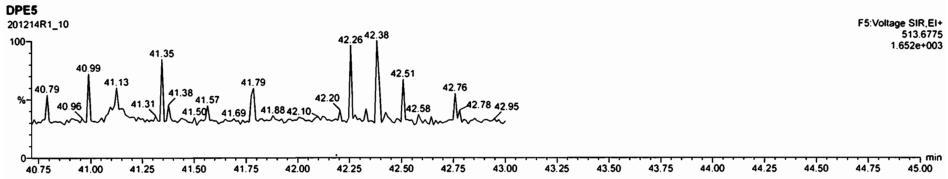
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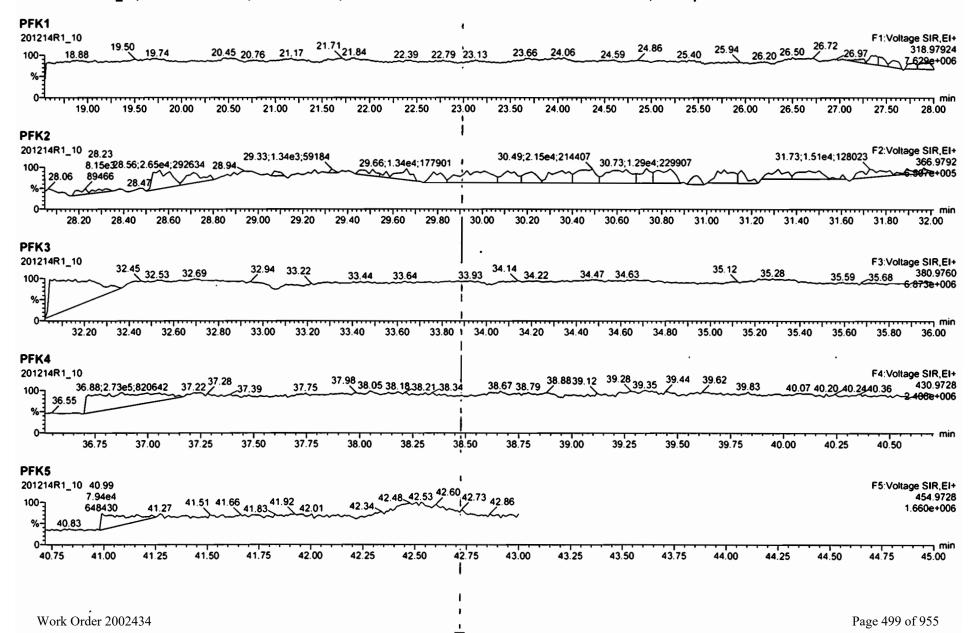




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Last Altered: Printed:

Tuesday, December 15, 2020 6:59:17 AM Pacific Standard Time Tuesday, December 15, 2020 7:04:33 AM Pacific Standard Time



CONTINUING CALIBRATION

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memo Calibration STANDARDS REVIEW CHECKLIST

Beg. Calbration ID: ST2012117-	_		Reviewed By: GRB 12/14/2020	".
End Calibration ID: 57201211821-4-	_	Mark of the	initials & Date	Dog End
Ion abundance within QC limits?	Beg.	End	Mass resolution ≥	Beg. End
Concentrations within criteria?	\exists	1	□ 5k □ 6-8K □ 8K ☑ 10K 1614 1699 429 1613/1668/8280	
TCDD/TCDF Vaileys <25%	7	7	Intergrated peaks display correctly?	
First and last eluters present?	\checkmark	1	GC Break <20%	1
Retention Times within criteria?		1	8280 CS1 End Standard:	+ IN 12/12/202
Verification Std. named correctly?	P	>	- Ratios within limits, S/N <2.54, CS1 within 12 hours	AA A
(ST-Year-Month-Day-VG ID)	-	/		
Forms signed and dated?	\supset		Comments:	
Correct ICAL referenced?	FIN	HM		
Run Log:	7		14	
- Correct Instrument listed?	V		· ·	:
- Samples within 12 hour clock?	Ŷ	N		
- Bottle position verfied?	FIN			· · · · · · · · · · · · · · · · · · ·

Page: 1 of 1

Cataset:

U:\VG12.PRO\Results\201211R1\201211R1_1.qld

Last Altered: Printed:

Saturday, December 12, 2020 9:29:43 AM Pacific Standard Time Saturday, December 12, 2020 9:33:15 AM Pacific Standard Time

12/12/2020 GBB 12/14/2020

Method: U:\VG12.PRO\MethDB\1613rrt-12-11-20.mdb 11 Dec 2020 08:35:32

Calibration: U:\VG12.PRO\CurveDB\dbDIOXIN_1613vg12-12-03-20.cdb 04 Dec 2020 11:36:07

Name: 201211R1_1, Date: 11-Dec-2020, Time: 10:31:54, ID: ST201211R1_1 1613 CS3 20L0301, Description: 1613 CS3 20L0301

A STATE OF	# Name	Resp	IS Resp	RA	n/y	RRF	Pred.RT	RT	RT Flag	Pred.RRT	RRT	Conc.	%Rec	STD out
1	1 2,3,7,8-TCDD	1.49e5	1.46e6	0.77	NO	0.980	26.41	26.39	NO	1.001	1.001	10.377	104	NO
2	2 1,2,3,7,8-PeCDD	5.07e5	1.02e6	0.63	NO	0.932	31.08	31.06	NO	1.001	1.000	53.406	107	NO
3	3 1,2,3,4,7,8-HxCDD	4.18e5	7.94e5	1.24	NO	1.02	34.37	34.36	NO	1.001	1.000	51.623	103	NO
2	4 1,2,3,6,7,8-HxCDD	4.20e5	8.93e5	1.24	NO	0.902	34.49	34.48	NO	1.001	1.000	52.163	104	NO
5	5 1,2,3,7,8,9-HxCDD	4.25e5	8.72e5	1.23	NO	0.954	34.75	34.76	NO	1.000	1.001	51.073	102	NO
6	6 1,2,3,4,6,7,8-HpCDD	3.09e5	6.86e5	1.02	NO	0.918	38.20	38.21	NO	1.000	1.001	49.025	98.0	NO
7	7 OCDD	5.08e5	1.13e6	0.87	NO	0.866	41.10	41.10	NO	1.000	1.000	104.27	104	NO
8	8 2,3,7,8-TCDF	1.61e5	2.02e6	0.74	NO	0.848	25.69	25.70	NO	1.000	1.001	9.4147	94.1	NO
9	9 1,2,3,7,8-PeCDF	7.09e5	1.46e6	1.59	NO	0.960	29.80	29.81	NO	1.000	1.001	50.628	101	NO
10	10 2,3,4,7,8-PeCDF	7.52e5	1.35e6	1.56	NO	1.07	30.87	30.87	NO	1.001	1.000	52.087	104	NO
11	11 1,2,3,4,7,8-HxCDF	4.74e5	9.87e5	1.21	NO	0.986	33.45	33.46	NO	1.000	1.001	48.694	97.4	NO
12	12 1,2,3,6,7,8-HxCDF	4.93e5	9.81e5	1.20	NO	1.04	33.59	33.59	NO	1.001	1.001	48.371	96.7	NO
13	13 2,3,4,6,7,8-HxCDF	4.62e5	9.38e5	1.20	NO	1.02	34.25	34.25	NO	1.001	1.001	48.243	96.5	NO
14	14 1,2,3,7,8,9-HxCDF	4.14e5	8.60e5	1.23	NO	0.991	35.25	35.25	NO	1.000	1.000	48.590	97.2	NO
15	15 1,2,3,4,6,7,8-HpCDF	3.36e5	6.57e5	1.01	NO	1.05	36.82	36.82	NO	1.000	1.000	48.755	97.5	NO
16	16 1,2,3,4,7,8,9-HpCDF	3.12e5	5.41e5	1.00	NO	1.18	38.82	38.82	NO	1.000	1.000	49.026	98.1	NO
17	17 OCDF	5.33e5	1.20e6	0.88	NO	0.896	41.40	41.40	NO	1.000	1.000	99.034	99.0	NO
13	18 13C-2,3,7,8-TCDD	1.46e6	1.33e6	0.79	NO	1.06	26.37	26.38	NO	1.030	1.031	104.08	104	NO
13	19 13C-1,2,3,7,8-PeCDD	1.02e6	1.33e6	0.63	NO	0.785	31.21	31.05	NO	1.219	1.213	97.402	97.4	NO
20	20 13C-1,2,3,4,7,8-HxCDD	7.94e5	1.10e6	1.28	NO	0.621	34.34	34.35	NO	1.014	1.014	116.74	117	NO
21	21 13C-1,2,3,6,7,8-HxCDD	8.93e5	1.10e6	1.28	NO	0.734	34.46	34.47	NO	1.017	1.018	110.95	111	NO
22	22 13C-1,2,3,7,8,9-HxCDD	8.72e5	1.10e6	1.26	NO	0.723	34.74	34.73	NO	1.026	1.025	110.06	110	NO
23	23 13C-1,2,3,4,6,7,8-HpCDD	6.86e5	1.10e6	1.04	NO	0.568	38.24	38.19	NO	1.129	1.127	110.23	110	NO
24	24 13C-OCDD	1.13e6	1.10e6	0.90	NO	0.496	41.18	41.09	NO	1.216	1.213	206.99	103	NO
25	25 13C-2,3,7,8-TCDF	2.02e6	2.14e6	0.78	NO	0.919	25.67	25.68	NO	1.003	1.003	102.58	103	NO
26	26 13C-1,2,3,7,8-PeCDF	1.46e6	2.14e6	1.55	NO	0.715	29.92	29.80	NO	1.169	1.164	95.269	95.3	NO
27	27 13C-2,3,4,7,8-PeCDF	1.35e6	2.14e6	1.61	NO	0.689	31.01	30.85	NO	1.212	1.205	91.671	91.7	NO
28	28 13C-1,2,3,4,7,8-HxCDF	9.87e5	1.10e6	0.51	NO	0.873	33.44	33.44	NO	0.987	0.987	103.07	103	NO
29	29 13C-1,2,3,6,7,8-HxCDF	9.81e5	1.10e6	0.51	NO	0.933	33.57	33.57	NO	0.991	0.991	95.890	95.9	NO
50	30 13C-2,3,4,6,7,8-HxCDF	9.38e5	1.10e6	0.50	NO	0.843	34.24	34.23	NO	1.011	1.011	101.49	101	NO
21	31 13C-1,2,3,7,8,9-HxCDF	8.60e5	1.10e6	0.51	NO	0.780	35.24	35.24	NO	1.040	1.040	100.64	101	NO

U:\VG12.PRO\Results\201211R1\201211R1_1.qld

Last Altered: Printed:

Saturday, December 12, 2020 9:29:43 AM Pacific Standard Time Saturday, December 12, 2020 9:33:15 AM Pacific Standard Time

Name: 201211R1_1, Date: 11-Dec-2020, Time: 10:31:54, ID: ST201211R1_1 1613 CS3 20L0301, Description: 1613 CS3 20L0301

200	# Name	Resp	IS Resp	RA	n/y	RRF	Pred.RT	RT	RT Flag	Pred.RRT	RRT	Cone.	%Rec	STD out
32	32 13C-1,2,3,4,6,7,8-HpCDF	6.57e5	1.10e6	0.43	NO	0.726	36.81	36.81	NO	1.087	1.086	82.500	82.5	NO
25	33 13C-1,2,3,4,7,8,9-HpCDF	5.41e5	1.10e6	0.42	NO	0.491	38.82	38.81	NO	1.146	1.146	100.51	101	NO
34	34 13C-OCDF	1.20e6	1.10e6	0.87	NO	0.565	41.40	41.39	NO	1.222	1.222	193.85	96.9	NO
35	35 37Cl-2,3,7,8-TCDD	1.86e5	1.33e6			1.22	26.36	26.39	NO	1.030	1.031	11.481	115	NO
Ş	36 13C-1,2,3,4-TCDD	1.33e6	1.33e6	0.79	NO	1.00	25.64	25.59	NO	1.000	1.000	100.00	100	NO
3/	37 13C-1,2,3,4-TCDF	2.14e6	2.14e6	0.78	NO	1.00	24.13	24.10	NO	1.000	1.000	100.00	100	NO
38	38 13C-1,2,3,4,6,9-HxCDF	1.10e6	1.10e6	0.51	NO	1.00	33.92	33.88	NO	1.000	1.000	100.00	100	YES C

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Untitled

Last Altered: Printed:

Saturday, December 12, 2020 9:57:48 AM Pacific Standard Time Saturday, December 12, 2020 9:58:22 AM Pacific Standard Time

Method: U:\VG12.PRO\MethDB\1613rrt-12-11-20.mdb 11 Dec 2020 08:35:32 Calibration: U:\VG12.PRO\CurveDB\dbDIOXIN_1613vg12-12-03-20.cdb 04 Dec 2020 11:36:07

Compound name: 2,3,7,8-TCDD

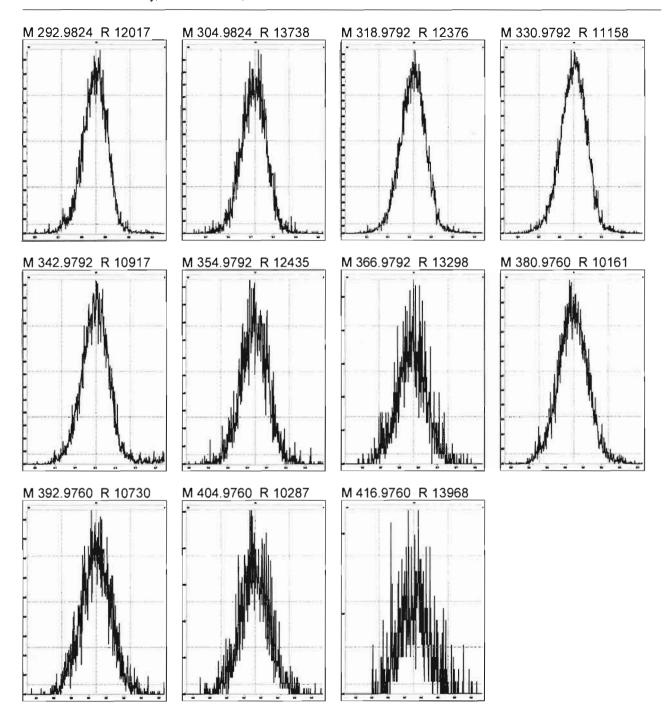
	110	Name	ID	Acq.Date	Acq.Time
1 4		201211R1_1	ST201211R1_1 1613 CS3 20L0301	11-Dec-20	10:31:54
2		201211R1_2	B0L0084-BS7	11-Dec-20	11:19:56
3		201211R1_3	B0L0016-BS1 OPR 10	11-Dec-20	12:04:46
4		201211R1_4	B0L0020-BS1 OPR 1	11-Dec-20	12:50:20
5		201211R1_5	SOLVENT BLANK	11-Dec-20	13:36:44
6	(A)	201211R1_6			
7	0	201211R1_7	B0L0064-BS1 OPR 1	11-Dec-20	15:19:18
8		201211R1_8	SOLVENT BLANK	11-Dec-20	16:08:14
9		201211R1_9	B0L0064-BLK1 Method Blank 1	11-Dec-20	16:52:33
10		201211R1_10	B0L0020-BLK1 Method Blank 1	11-Dec-20	17:36:51
11	*	201211R1_11	B0L0016-BLK1 Method Blank 10	11-Dec-20	18:21:08
12	-	201211R1_12	2002661-01 OF-031A BiWeekly Composite D/	11-Dec-20	19:05:29
13		201211R1_13	2002459-04 GW-1216 0.935	11-Dec-20	19:49:45
14		201211R1_14	2002528-01 BLEACH PLANT EFFLUENT 0.8	11-Dec-20	20:34:03
15		201211R1_15	2002433-01 USMPDI-026SC-A-09-10-201106	11-Dec-20	21:18:19
16		201211R1_16	2002433-01@10X USMPDI-026SC-A-09-10-2	11-Dec-20	22:02:37
17		201211R2_1	SOLVENT BLANK	11-Dec-20	22:55:51
18	1	201211R2_2	ST201211R2_1 1613 CS3 20L0301	11-Dec-20	23:40:08

@ Instrument paused, reinjected sample at * +10 12/12/2020

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File: Experiment: OCDD_DIOXIN.exp Reference: Pfk.ref Function: 1 @ 200 (ppm)

Printed: Friday, December 11, 2020 10:24:18 Pacific Standard Time



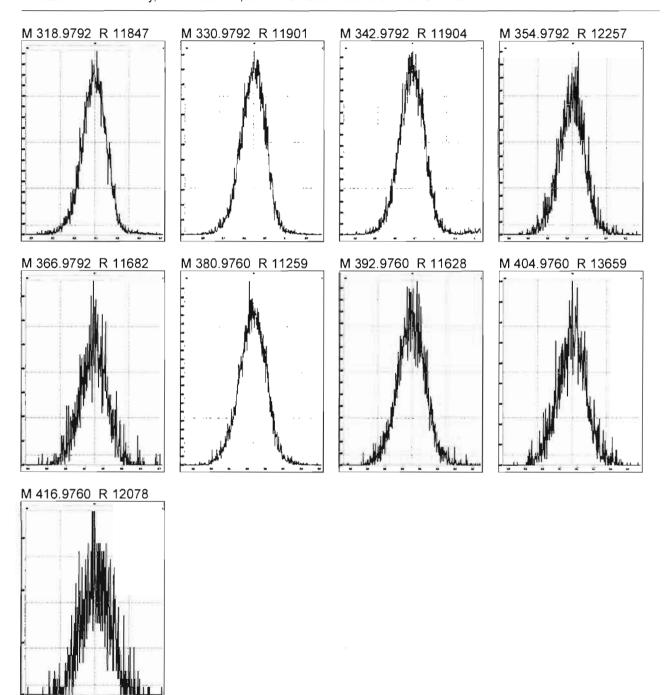
Work Order 2002434 Page 505 of 955

File:

Experiment: OCDD_DIOXIN.exp Reference: Pfk.ref Function: 2 @ 200 (ppm)

Printed:

Friday, December 11, 2020 10:26:22 Pacific Standard Time



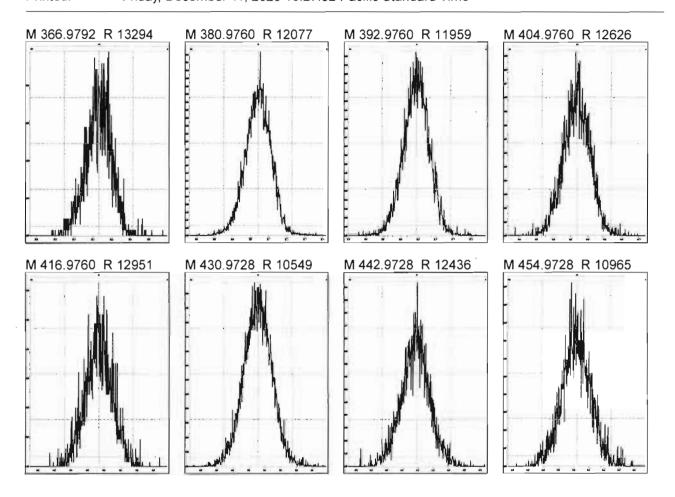
Work Order 2002434 Page 506 of 955

File:

Experiment: OCDD_DIOXIN.exp Reference: Pfk.ref Function: 3 @ 200 (ppm)

Printed:

Friday, December 11, 2020 10:27:32 Pacific Standard Time



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Experiment Calibration Report

MassLynx 4.1 SCN815

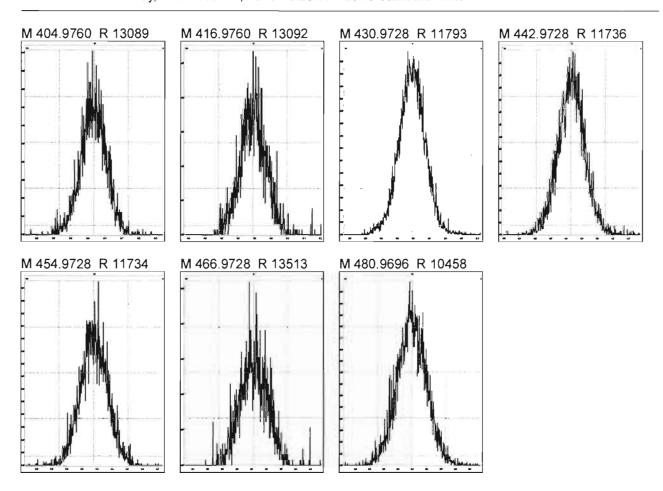
Page 1 of 1

File:

Experiment: OCDD_DIOXIN.exp Reference: Pfk.ref Function: 4 @ 200 (ppm)

Printed:

Friday, December 11, 2020 10:28:37 Pacific Standard Time



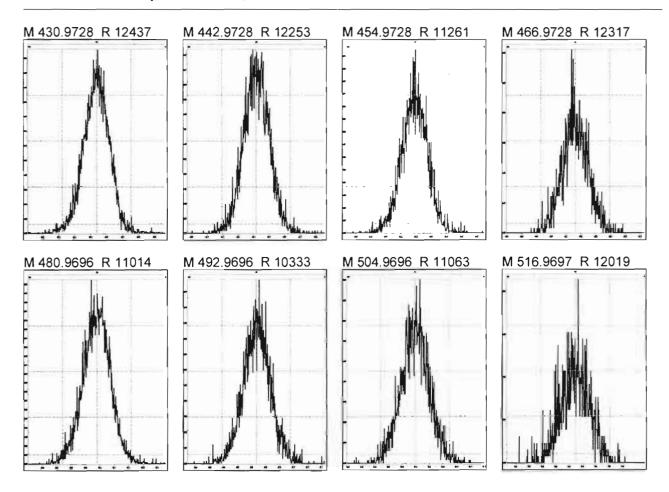
Work Order 2002434 Page 508 of 955

File:

Experiment: OCDD_DIOXIN.exp Reference: Pfk.ref Function: 5 @ 200 (ppm)

Printed:

Friday, December 11, 2020 10:29:40 Pacific Standard Time



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Page 1 of 1

Dataset:

U:\VG12.PRO\Results\201211R1\201211R1_CPSM.qld

Last Altered:

Saturday, December 12, 2020 9:33:41 AM Pacific Standard Time

Printed:

Saturday, December 12, 2020 9:34:16 AM Pacific Standard Time

Method: U:\VG12.PRO\MethDB\CPSM.:ndb 11 Dec 2020 14:14:32

Calibration: U:\VG12.PRO\CurveDB\dbDIOXIN_1613vg12-12-03-20.cdb 04 Dec 2020 11:36:07

Name: 201211R1_1, Date: 11-Dec-2020, Time: 10:31:54, ID: ST201211R1_1 1613 CS3 20L0301, Description: 1613 CS3 20L0301

	# Name	RT
1	1 1,3,6,8-TCDD (First)	22.59
2	2 1,2,8,9-TCDD (Last)	27.28
3	3 1,2,4,7,9-PeCDD (First)	28.82
4	4 1,2,3,8,9-PeCDD (Last)	31.42
5	5 1,2,4,6,7,9-HxCDD (First)	32.72
3	6 1,2,3,7,8,9-HxCDD (Last)	34.76
7	7 1,2,3,4,6,7,9-HpCDD (First)	37.20
8	8 1,2,3,4,6,7,8-HpCDD (Last)	38.21
9	9 1,3,6,8-TCDF (First)	20.32
10	10 1,2,8,9-TCDF (Last)	27.59
11	11 1,3,4,6,8-PeCDF (First)	27.15
12	12 1,2,3,8,9-PeCDF (Last)	31.77
13	13 1,2,3,4,6,8-HxCDF (First)	32.19
14	14 1,2,3,7,8,9-HxCDF (Last)	35.25
15	15 1,2,3,4,6,7,8-HpCDF (First)	36.82
16	16 1,2,3,4,7,8,9-HpCDF (Last)	38.82

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Vista Analytical Laboratory VG-11

Dataset:

U:\VG12.PRO\Results\201211R1\201211R1 CPSM.qld

Last Altered:

Saturday, December 12, 2020 9:33:41 AM Pacific Standard Time

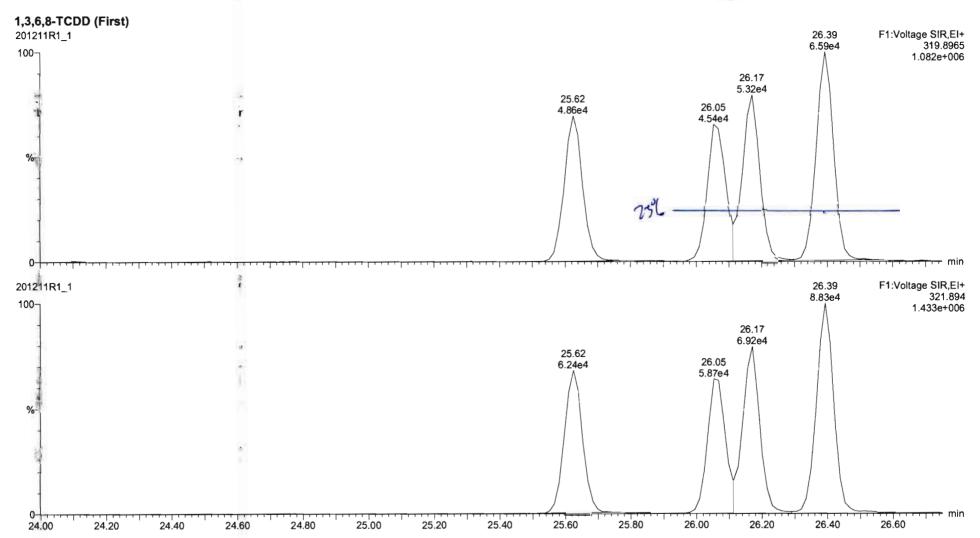
Printed:

Saturday, December 12, 2020 9:34:16 AM Pacific Standard Time

Method: U:\VG12.PRO\MethDB\CPSM.mdb 11 Dec 2020 14:14:32

Calibration: U:\VG12.PRO\CurveDB\dbDIOXIN 1613vg12-12-03-20.cdb 04 Dec 2020 11:36:07

GRB 12/12/2020



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Vista Analytical Laboratory VG-11

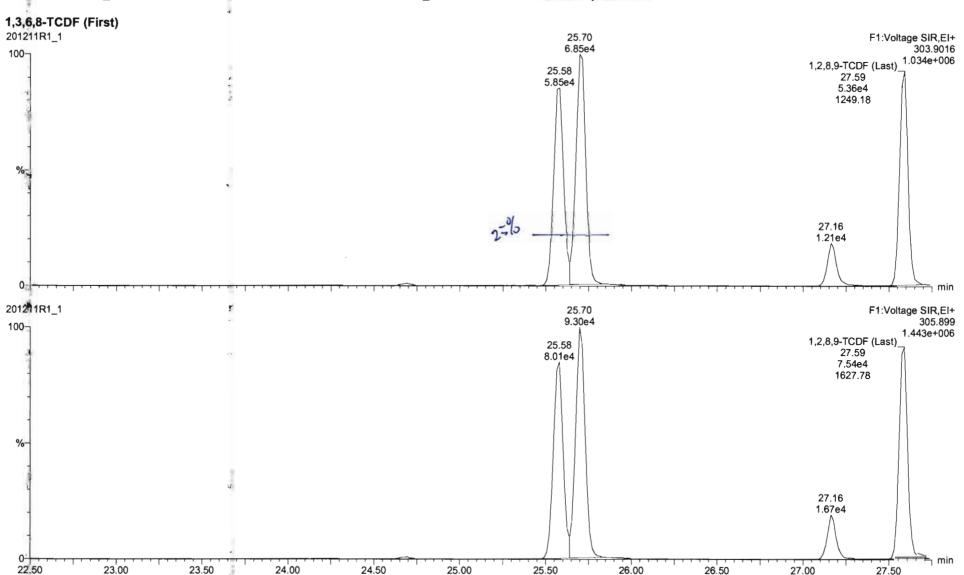
Dataset:

U:\VG12.PRO\Results\201211R1\201211R1_CPSM.qld

Last Altered:

Saturday, December 12, 2020 9:33:41 AM Pacific Standard Time Saturday, December 12, 2020 9:34:16 AM Pacific Standard Time

HN 12/12/2020



Dataset:

U:\VG12.PRO\Results\201211R1\201211R1 1.qld

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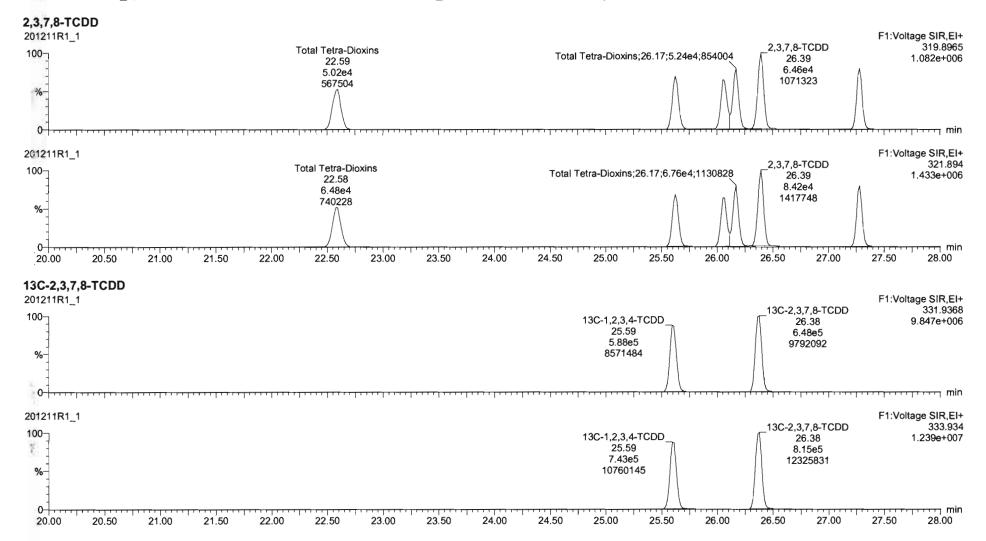
Saturday, December 12, 2020 9:29:43 AM Pacific Standard Time

Printed: Saturday, I

Saturday, December 12, 2020 9:31:29 AM Pacific Standard Time

Method: U:\VG12.PRO\MethDB\1613rrt-12-11-20.mdb 11 Dec 2020 08:35:32

Calibration: U:\VG12.PRO\CurveDB\dbDIOXIN_1613vg12-12-03-20.cdb 04 Dec 2020 11:36:07

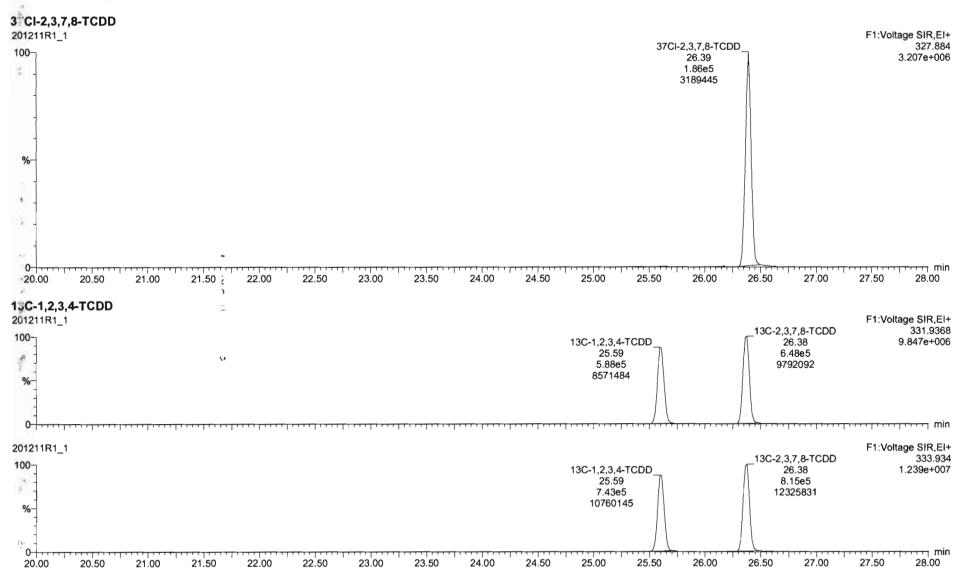


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Dataset:

U:\VG12.PRO\Results\201211R1\201211R1 1.qld

Last Altered: Printed: Saturday, December 12, 2020 9:29:43 AM Pacific Standard Time Saturday, December 12, 2020 9:31:29 AM Pacific Standard Time

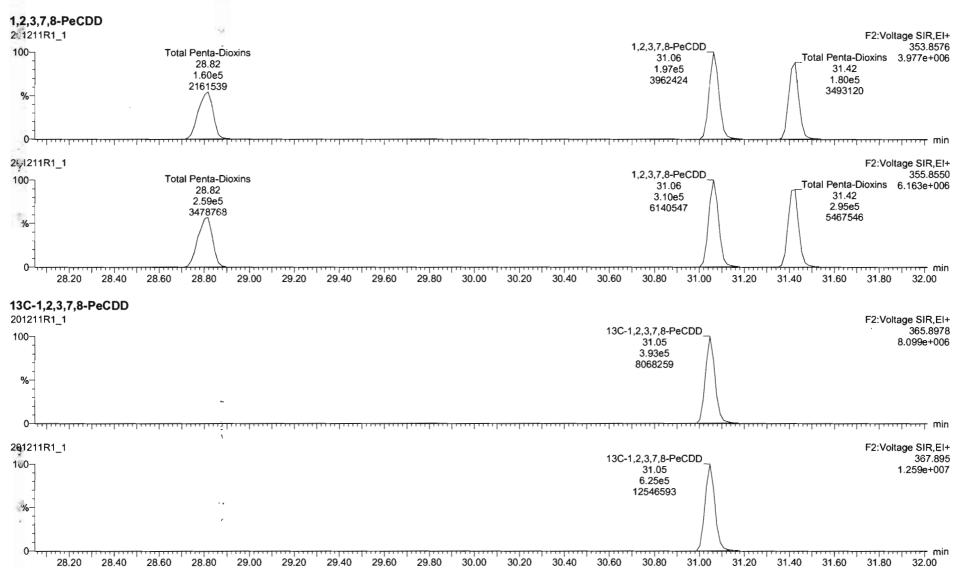


Vista Analytical Laboratory

Dataset:

U:\VG12.PRO\Results\201211R1\201211R1_1.qld

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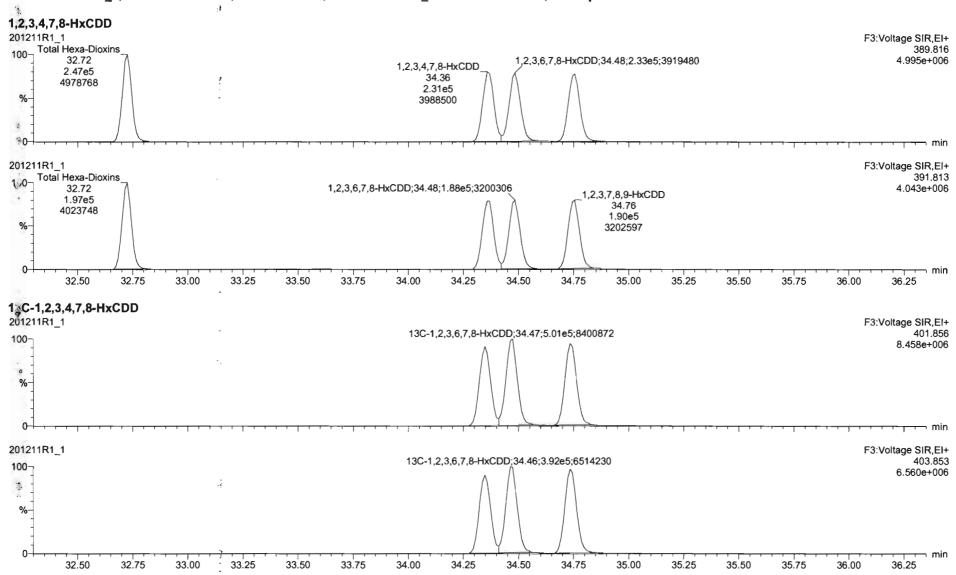
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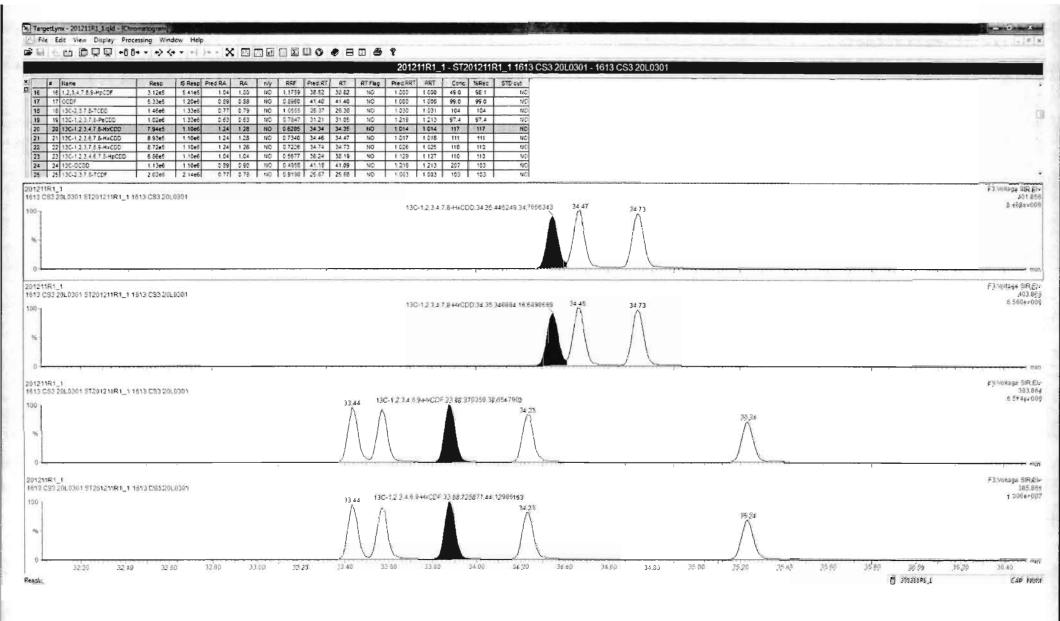
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U:\VG12.PRO\Results\201211R1\201211R1_1.qld

Last Altered:

Saturday, December 12, 2020 9:29:43 AM Pacific Standard Time Saturday, December 12, 2020 9:31:29 AM Pacific Standard Time



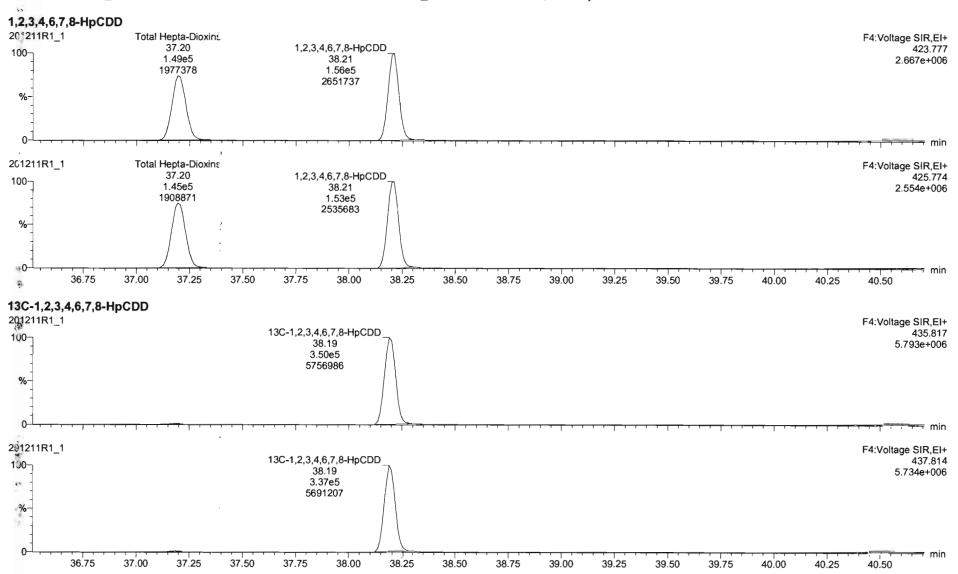


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Dataset:

U:\VG12.PRO\Results\201211R1\201211R1__1.qld

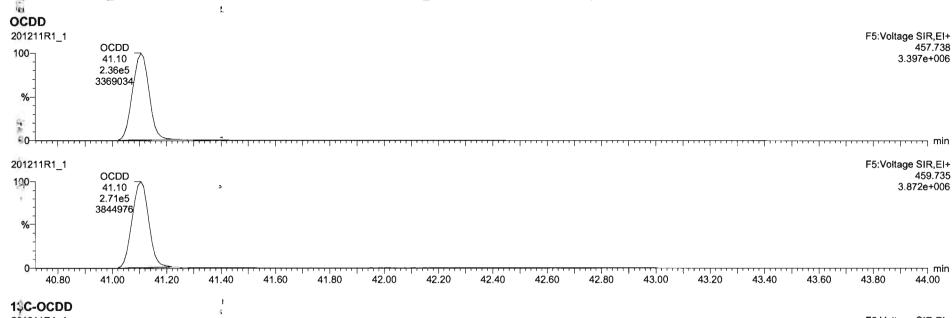
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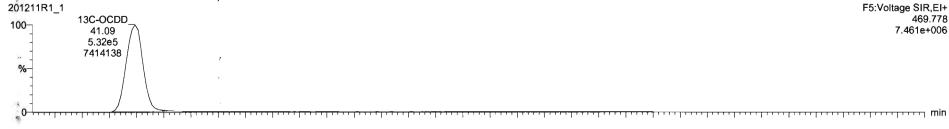
Vista Analytical Laboratory

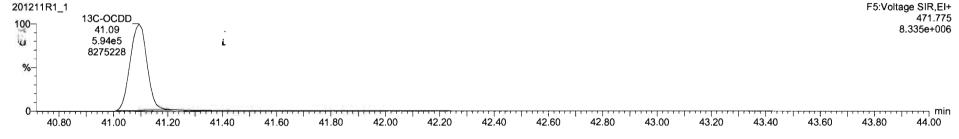
Dataset: U:\VG12.PRO\Results\201211R1\201211R1 1.gld

Last Altered: Saturday, December 12, 2020 9:29:43 AM Pacific Standard Time Plinted: Saturday, December 12, 2020 9:31:29 AM Pacific Standard Time



Name: 201211R1 1, Date: 11-Dec-2030, Time: 10:31:54, ID: ST201211R1 1 1613 CS3 20L0301, Description: 1613 CS3 20L0301





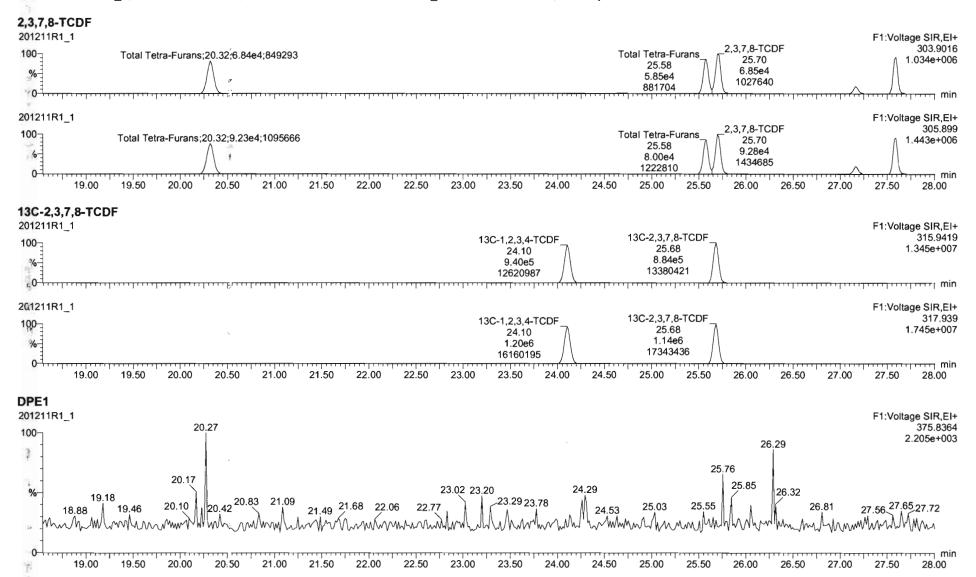
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Dataset:

U;\VG12.PRO\Results\201211R1\201211R1 1.qld

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Saturday, December 12, 2020 9:29:43 AM Pacific Standard Time Saturday, December 12, 2020 9:31:29 AM Pacific Standard Time



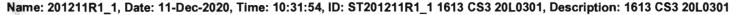
Vista Analytical Laboratory

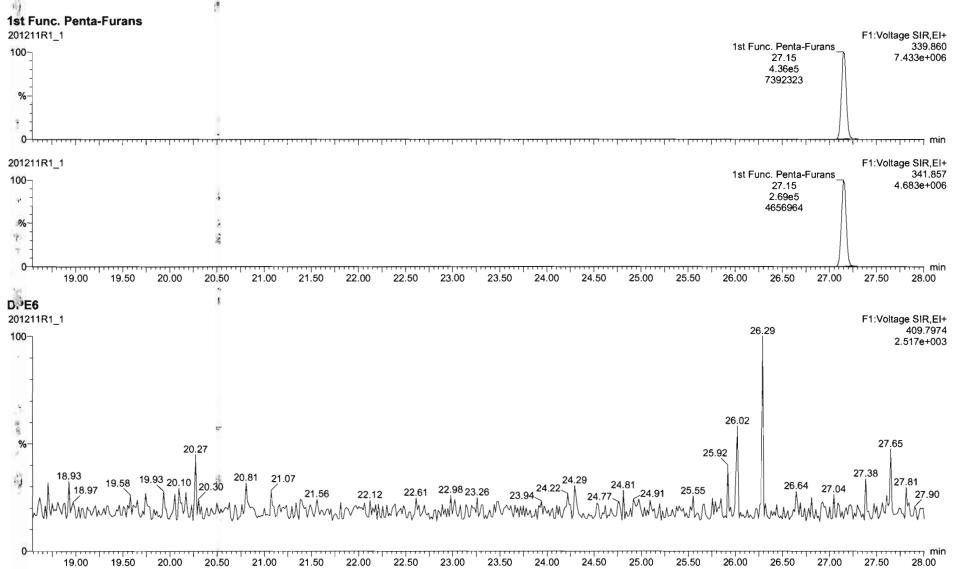
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U:\VG12.PRO\Results\201211R1\201211R1_1.qld

Last Altered: Saturday, Dec Frinted: Saturday, Dec

Saturday, December 12, 2020 9:29:43 AM Pacific Standard Time Saturday, December 12, 2020 9:31:29 AM Pacific Standard Time



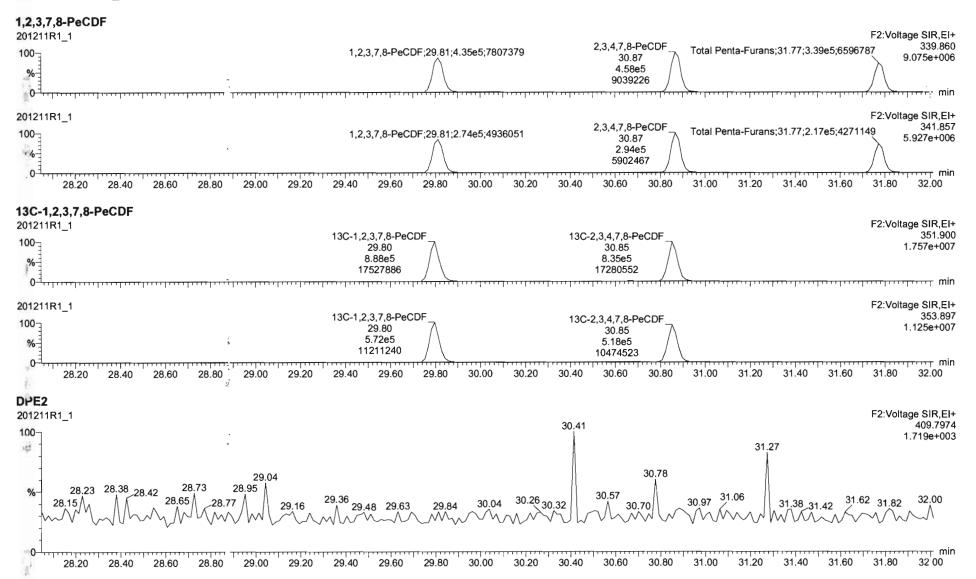


Vista Analytical Laboratory

Dataset:

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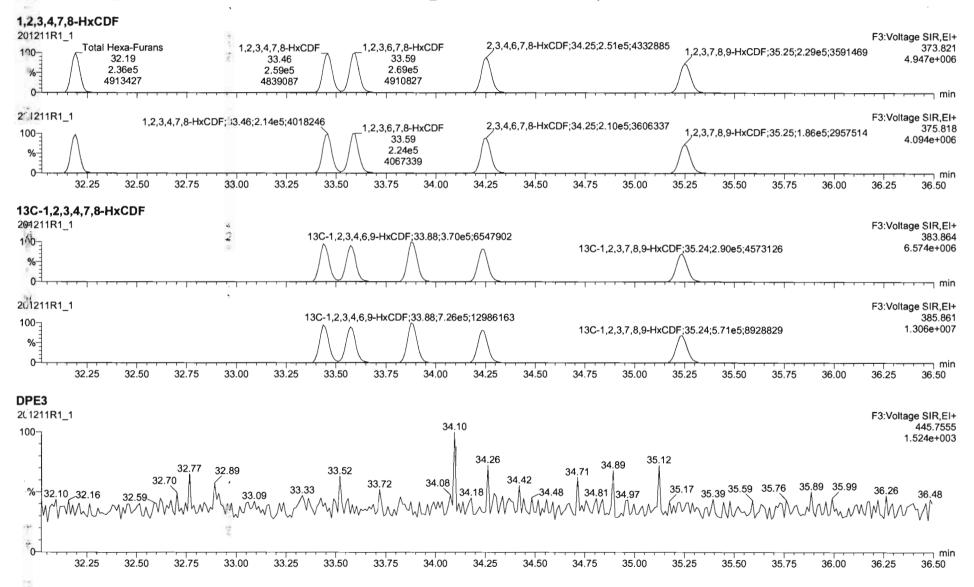


Dataset:

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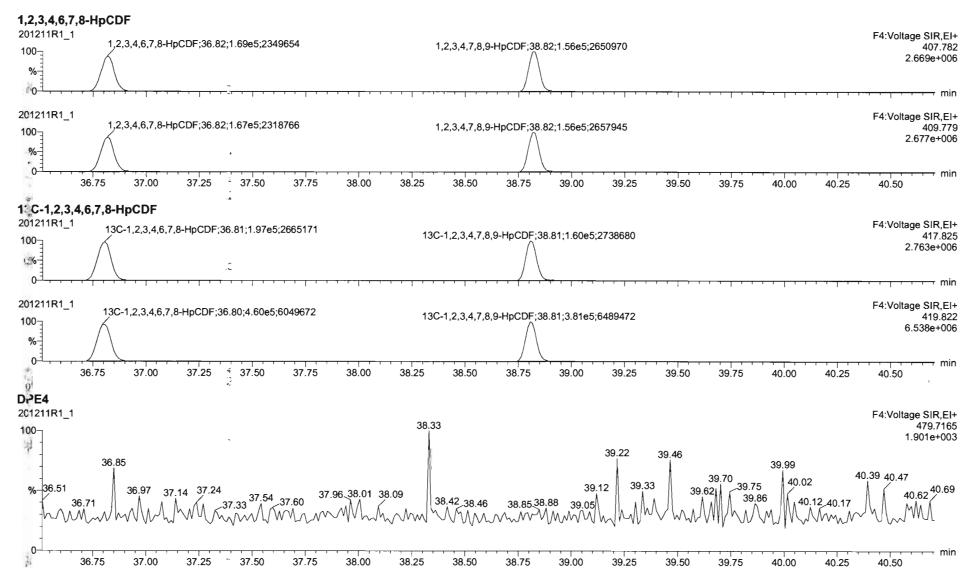
Saturday, December 12, 2020 9:29:43 AM Pacific Standard Time Saturday, December 12, 2020 9:31:29 AM Pacific Standard Time



Chtaset:

U:\VG12.PRO\Results\201211R1\201211R1_1.qld

Låst Altered: Printed: Saturday, December 12, 2020 9:29:43 AM Pacific Standard Time Saturday, December 12, 2020 9:31:29 AM Pacific Standard Time

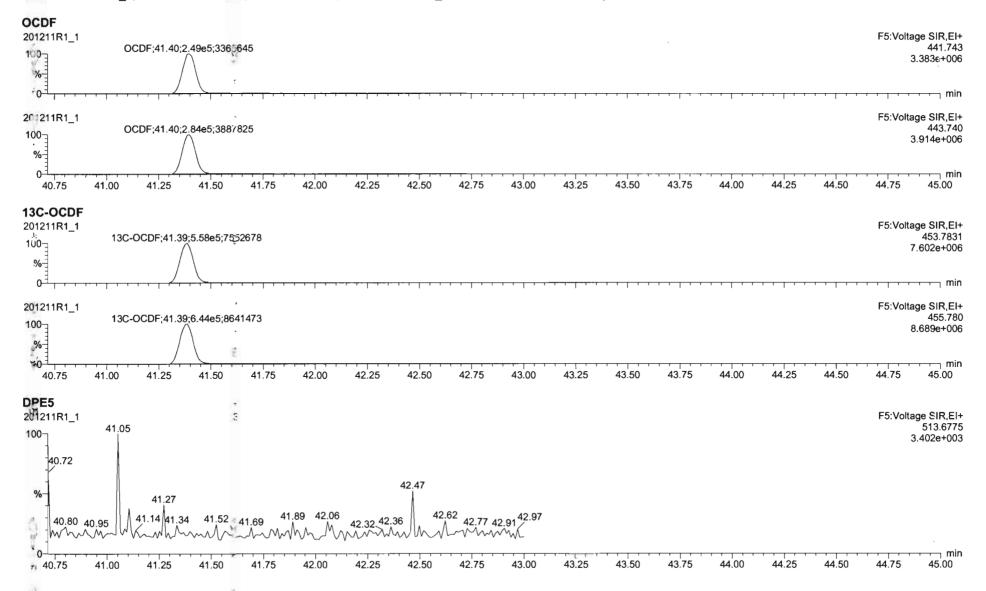


Vista Analytical Laboratory

Dataset:

U:\VG12.PRO\Results\201211R1\201211R1 1.qld

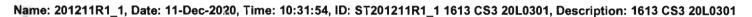
Lest Altered: Saturday, December 12, 2020 9:29:43 AM Pacific Standard Time Saturday, December 12, 2020 9:31:29 AM Pacific Standard Time

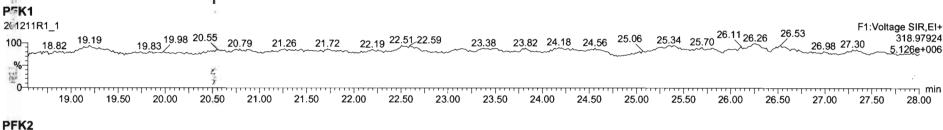


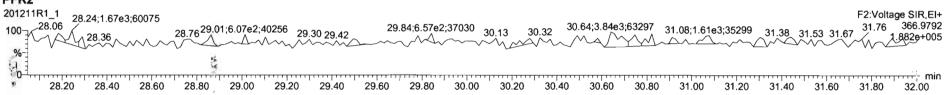
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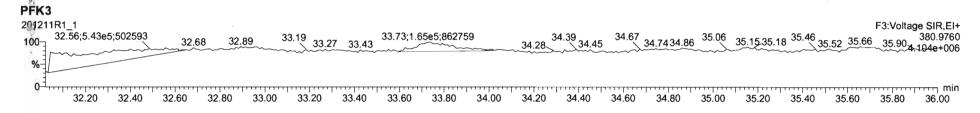
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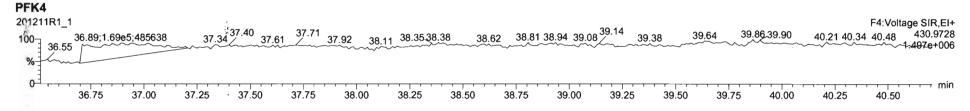
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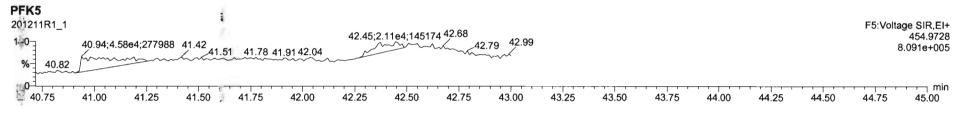






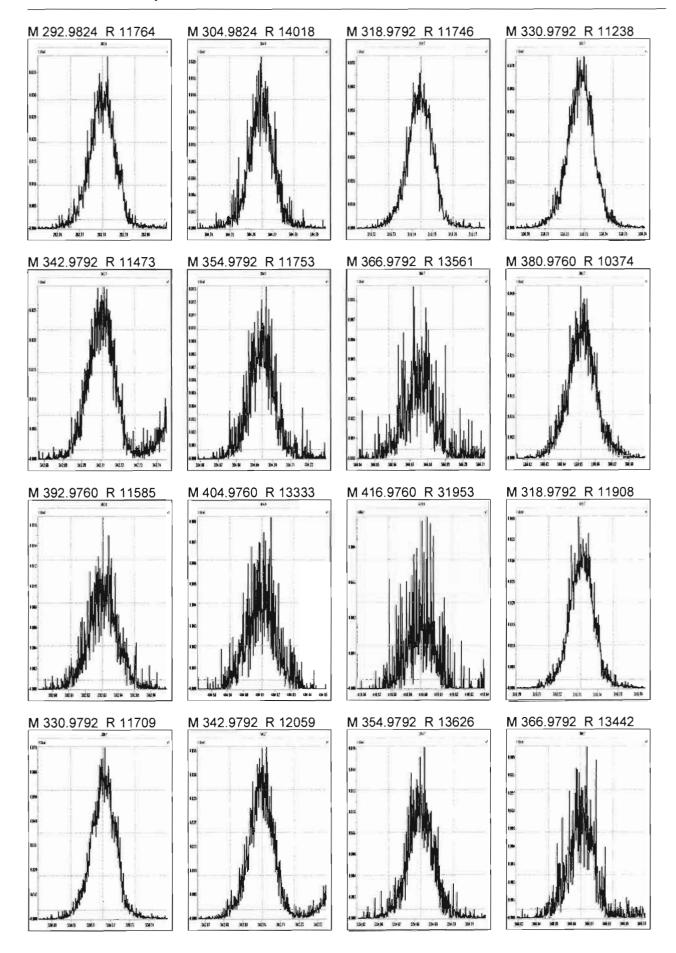






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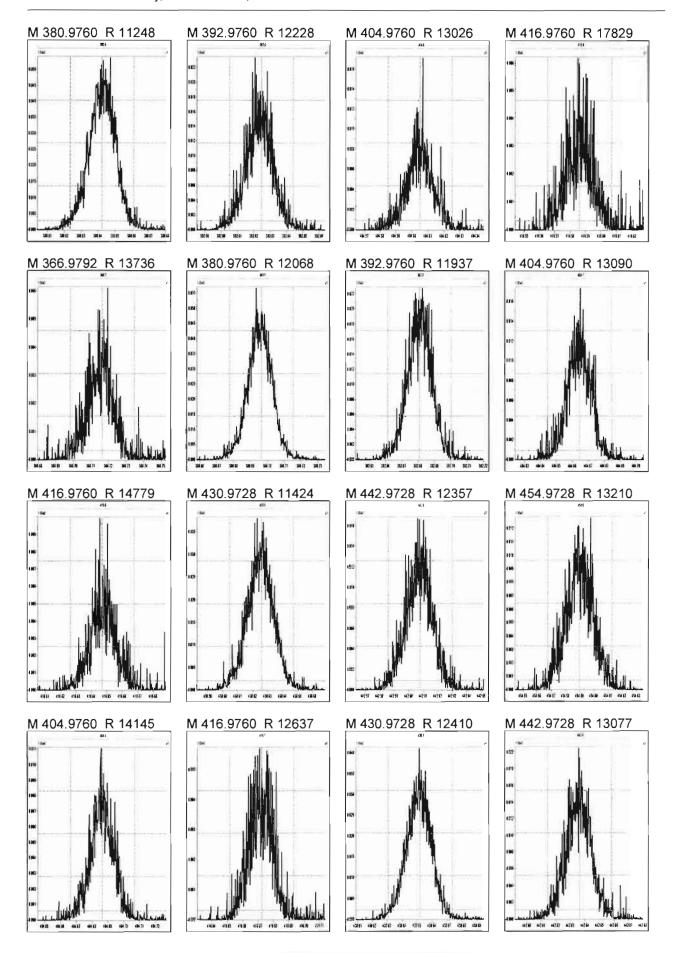
Friday, December 11, 2020 22:55:48 Pacific Standard Time



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Printed:

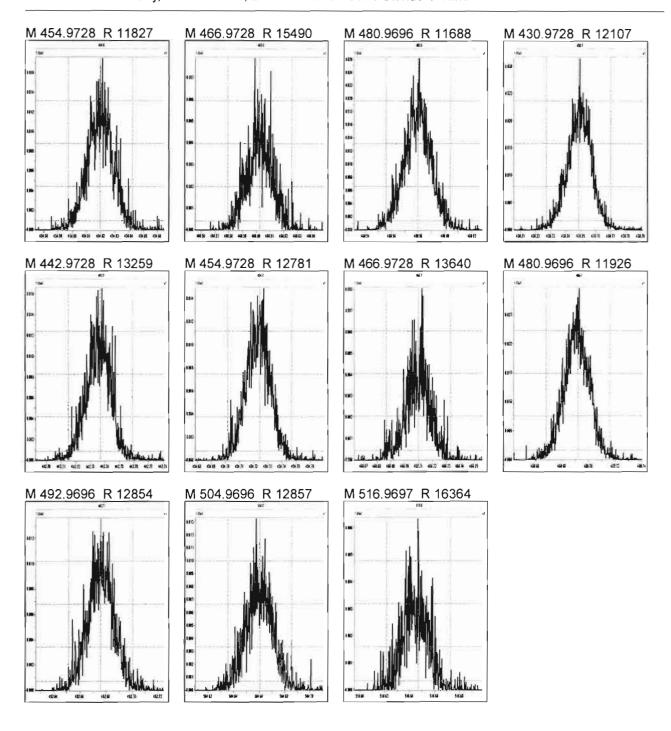
Friday, December 11, 2020 22:55:48 Pacific Standard Time



Work Order 2002434 Page 528 of 955

Printed:

Friday, December 11, 2020 22:55:48 Pacific Standard Time



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TIRMS CALIBRATION STANDARDS REVIEW CHECKLIST

Beg. Calbration ID: STZ01212121-1			Reviewed By: Geb 12/14/2020	At.
End Calibration ID:	_		Initials & Date	A
Ion abundance within QC limits?	Beg.	End	Mass resolution ≥	End
Concentrations within criteria?	I	ф	□ 5k □ 6-8K □ 8K ₩10K 1614 1699 429 1613/1668/8280	
TCDD/TCDF Valleys <25%	1		intergrated peaks display correctly?	Лц
First and last eluters present?	I		GC Break <20%	
Retention Times within criteria?			8280 CS1 End Standard:	
Verification Std. named correctly?	7		- Ratios within limits, S/N <2.5%, CS1 within 12 hours	M
(ST-Year-Month-Day-VG ID)			·	
Forms signed and dated?			@ End calibration filed, instrument nauged	
Correct ICAL referenced?	HC	7		
Run Log:			15	
- Correct Instrument listed?	\checkmark	NA	₩	
- Samples within 12 hour clock?	Y	N		
- Bottle position verfled?	- H	1		

Rev. No.: 0 Rev. Date: 06/06/2017 Pege: 1 of 1

Page 1 of 2

Dataset:

U:\VG12.PRO\Results\201212R1\201212R1-1.qld

Last Altered:

Sunday, December 13, 2020 11:37:04 Pacific Standard Time

Printed:

Sunday, December 13, 2020 11:37:43 Pacific Standard Time

He 12.13.200 GPB 12/14/2020

Method: U:\VG12.PRO\MethDB\1613rrt-12-11-20.mdb 11 Dec 2020 08:35:32

Calibration: U:\VG12.PRO\CurveDB\dbDIOXIN_1613vg12-12-03-20.cdb 04 Dec 2020 11:36:07

Name: 201212R1_1, Date: 12-Dec-2020, Time: 11:44:35, ID: ST201212R1_1 1613 CS3 20L0301, Description: 1613 CS3 20L0301

#-Name	Resp	; IS Resp;	RA	- n/y	: RRF	Pred.RT-	RT	- RT Flag -	Pred.RRT;	RRT :	Conc.	· %Rec ·	STD out
1 2,3,7,8-TCDD	1.92e5	1.86e6	0.77	NO	0.980	26.42	26.41	NO	1.001	1.001	10.519	105	NO
2 1,2,3,7,8-PeCDD	7.11e5	1.45e6	0.62	NO	0.932	31.09	31.08	NO	1.001	1.000	52.764	106	NO
3 3 1,2,3,4,7,8-HxCDD	6.21e5	1.14e6	1.24	NO	1.02	34.39	34.38	NO	1.001	1.000	53.215	106	NO
4 1,2,3,6,7,8-HxCDD	6.03e5	1.27e6	1.24	NO	0.902	34.50	34.50	NO	1.001	1.001	52.694	105	NO
5 1,2,3,7,8,9-HxCDD	6.12 e 5	1.25e6	1.24	NO	0.954	34.77	34.77	NO	1.000	1.000	51.288	103	NO
6 1,2,3,4,6,7,8-HpCDD	4.38e5	9.51e5	1.03	NO	0.918	38.22	38.23	NO	1.000	1.001	50.182	100	NO
7 OCDD	7.14 e 5	1.55e6	0.87	NO	0.866	41.15	41.15	NO	1.000	1.000	106.66	107	NO
8 2,3,7,8-TCDF	2.11e5	2.57e6	0.75	NO	0.848	25.70	25.73	NO	1.000	1.001	9.6537	96.5	NO
9 1,2,3,7,8-PeCDF	1.04e6	2.09e6	1.55	NO	0.960	29.81	29.83	NO	1.000	1.001	52.165	104	NO
10 , 10 2,3,4,7,8-PeCDF	1.08e6	1.96e6	1.54	NO	1.07	30.89	30.88	NO	1.001	1.000	51.574	103	NO
11 1,2,3,4,7,8-HxCDF	7.22e5	1.44e6	1.21	NO	0.986	33.47	33.47	NO	1.000	1.000	50.856	102	NO
12 1,2,3,6,7,8-HxCDF	7.65e5	1.47e6	1.22	NO	1.04	33.61	33.60	NO	1.001	1.000	50.185	100	NO
13 2,3,4,6,7,8-HxCDF	7.30 e 5	1.41e6	1.21	NO	1.02	34.27	34.27	NO	1.001	1.001	50.630	101	NO
14 1,2,3,7,8,9-HxCDF	6.32e5	1.26e6	1.22	NO	0.991	35.27	35.27	NO	1.000	1.000	50.487	101	NO
15 1,2,3,4,6,7,8-HpCDF	5.21e5	9.91e5	1.01	NO	1.05	36.85	36.84	NO	1.000	1.000	50.069	100	NO
16 1,2,3,4,7,8,9-HpCDF	4.69e5	7.82e5	1.01	NO	1.18	38.85	38.85	NO	1.000	1.000	51.009	102	NO
17 CCDF	7.64e5	1.66e6	0.89	NO	0.896	41.44	41.44	NO	1.000	1.000	102.74	103	NO
18 13C-2,3,7,8-TCDD	1.86e6	1.69e6	0.79	NO	1.06	26.40	26.39	NO	1.030	1.030	103.94	104	NO
19	1.45e6	1.69e6	0.64	NO	0.785	31.25	31.06	NO	1.219	1.212	108.73	109	NO
20 13C-1,2,3,4,7,8-HxCDD	1.14e6	1.68e6	1.29	NO	0.621	34.36	34.37	NO	1.014	1.014	109.64	110	NO
21 13C-1,2,3,6,7,8-HxCDD	1.27e6	1.68e6	1.27	NO	0.734	34.48	34.48	NO	1.017	1.017	102.68	103	NO
22 · 22 13C-1,2,3,7,8,9-HxCDD	1.25e6	1.68e6	1.27	NO	0.723	34.76	34.76	NO	1.026	1.025	102.85	103	NO
23 13C-1,2,3,4,6,7,8-HpCDD	9.51e5	1.68e6	1.06	NO	0.568	38.27	38.21	NO	1.129	1.127	99.617	99.6	NO
24 13C-OCDD	1.55e6	1.68e6	0.90	NO	0.496	41.21	41.14	NO	1.216	1.214	185.49	92.7	NO
25 13C-2,3,7,8-TCDF	2.57e6	2.63e6	0.78	NO	0.919	25.70	25.70	NO	1.003	1.003	106.50	106	NO
26 , 26 13C-1,2,3,7,8-PeCDF	2.09e6	2.63e6	1.58	NO	0.715	29.96	29.81	NO	1.169	1.163	110.97	111	NO
27 27 13C-2,3,4,7,8-PeCDF	1.96e6	2.63e6	1.59	NO	0.689	31.04	30.87	NO	1.212	1.205	108.47	108	NO
28 13C-1,2,3,4,7,8-HxCDF	1.44e6	1.68e6	0.51	NO	0.873	33.46	33.46	NO	0.987	0.987	98.034	98.0	NO
29 + 29 13C-1,2,3,6,7,8-HxCDF	1.47e6	1.68e6	0.51	NO	0.933	33.59	33.59	NO	0.991	0.991	93.481	93.5	NO
30 13C-2,3,4,6,7,8-HxCDF	1.41e6	1.68e6	0.51	NO	0.843	34.26	34.25	NO	1.011	1.011	99.707	99.7	NO
31 · 31 13C-1,2,3,7,8,9-HxCDF	1.26e6	1.68e6	0.51	NO	0.780	35.26	35.26	NO	1.040	1.040	96.255	96.3	NO

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Page 2 of 2

Dataset:

U:\VG12.PRO\Results\201212R1\201212R1-1.qld

Last Altered:

Sunday, December 13, 2020 11:37:04 Pacific Standard Time Sunday, December 13, 2020 11:37:43 Pacific Standard Time

Printed:

	#-Name	Resp	; IS Resp;	RA	- n/y	RRF	: Pred.RT	RT	- RT Flag -	Pred.RRT	RRT :	Conc.	. %Rec -	STD out
32	32 13C-1,2,3,4,6,7,8-HpCDF	9.91e5	1.68e6	0.44	NO	0.726	36.84	36.83	NO	1.087	1.086	81.134	81.1	NO
33	33 13C-1,2,3,4,7,8,9-HpCDF	7.82e5	1.68e6	0.43	NO	0.491	38.85	38.84	NO	1.146	1.146	94.659	94.7	NO
34	34 13C-OCDF	1.66e6	1.68e6	0.88	NO	0.565	41.42	41.43	NO	1.222	1.222	174.59	87.3	NO
35	35 37CI-2,3,7,8-TCDD	2.34e5	1.69e6			1.22	26.39	26.41	NO	1.030	1.031	11.351	114	NO
36		1.69e6	1.69e6	0.79	NO	1.00	25.64	25.63	NO	1.000	1.000	100.00	100	NO
37	37 13C-1,2,3,4-TCDF	2.63e6	2.63e6	0.78	NO	1.00	24.13	24.13	NO	1.000	1.000	100.00	100	NO K
38	38 13C-1,2,3,4,6,9-HxCDF	1.68e6	1.68e6	0.51	NO	1.00	33.92	33.90	NO	1.000	1.000	100.00	100	YES 0 1

Page 1 of 1

Dataset:

Untitled

Last Altered: Printed:

Sunday, December 13, 2020 08:38:08 Pacific Standard Time Sunday, December 13, 2020 08:38:26 Pacific Standard Time

Method: U:\VG12.PRO\MethDB\1613rrt-12-11-20.mdb 11 Dec 2020 08:35:32 Calibration: U:\VG12.PRO\CurveDB\dbDIOXIN 1613vg12-12-03-20.cdb 04 Dec 2020 11:36:07

Compound name: 2,3,7,8-TCDD

	Name	ID	Acq.Date	Acq.Time
1	201212R1_1	ST201212R1_1 1613 CS3 20L0301	12-Dec-20	11:44:35
2	201212R1_2	SOLVENT BLANK	12-Dec-20	12:29:35
3	201212R1_3	SOLVENT BLANK	12-Dec-20	13:14:37
4	201212R1_4	B0L0064-BLK1 Method Blank 1	12-Dec-20	13:59:44
5	201212R1_5	2002431-07 USMPDI-044SC-A-11-12-201104 .	12-Dec-20	14:46:49
6	201212R1_6	2002431-08 USMPDI-049SC-A-14-15-201104 .	12-Dec-20	15:31:05
7	201212R1_7	2002431-09 USMPDI-049SC-A-15-16-201104 .	12-Dec-20	16:15:19
8	201212R1_8	2002434-01 USMPDI-021SC-A-01-02-201107 .	12-Dec-20	16:59:35
9	201212R1_9	2002434-02 USMPDI-021SC-A-02-03-201107 .	12-Dec-20	17:43:49
10	201212R1_10	2002434-03 USMPDI-021SC-A-03-04-201107 .	12-Dec-20	18:28:04
11	201212R1_11	2002434-04 USMPDI-021SC-A-04-05-201107 .	12-Dec-20	19:12:18

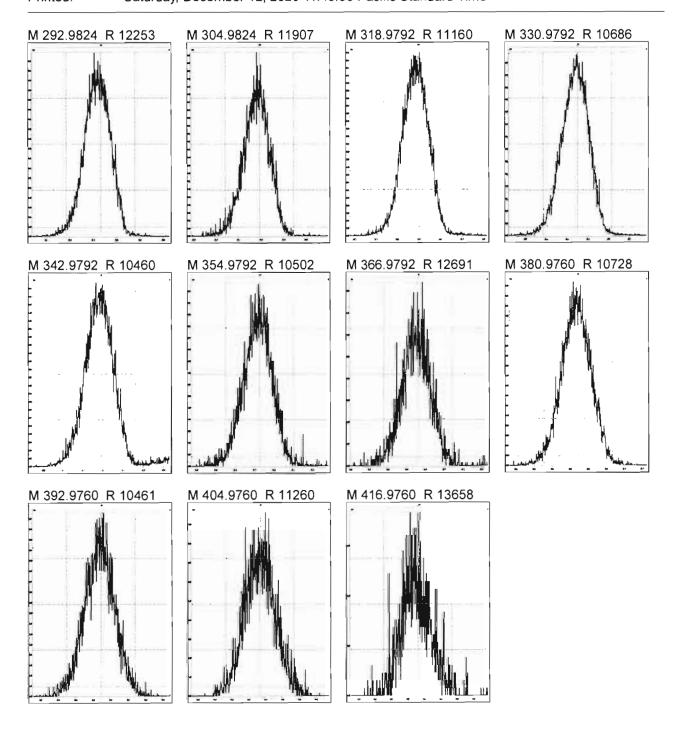
Work Order 2002434 Page 533 of 955

File:

Experiment: OCDD_DIOXIN.exp Reference: Pfk.ref Function: 1 @ 200 (ppm)

Printed:

Saturday, December 12, 2020 11:40:53 Pacific Standard Time



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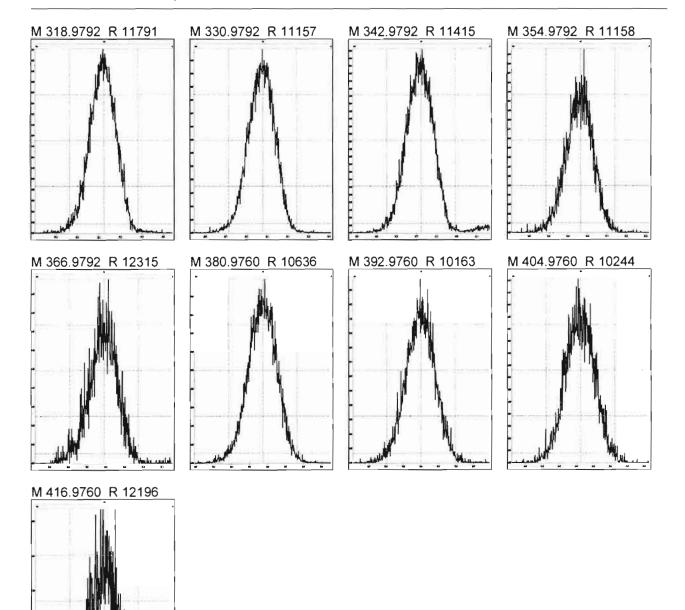
Page 1 of 1

File:

Experiment: OCDD_DIOXIN.exp Reference: Pfk.ref Function: 2 @ 200 (ppm)

Printed:

Saturday, December 12, 2020 11:41:53 Pacific Standard Time



Work Order 2002434 Page 535 of 955

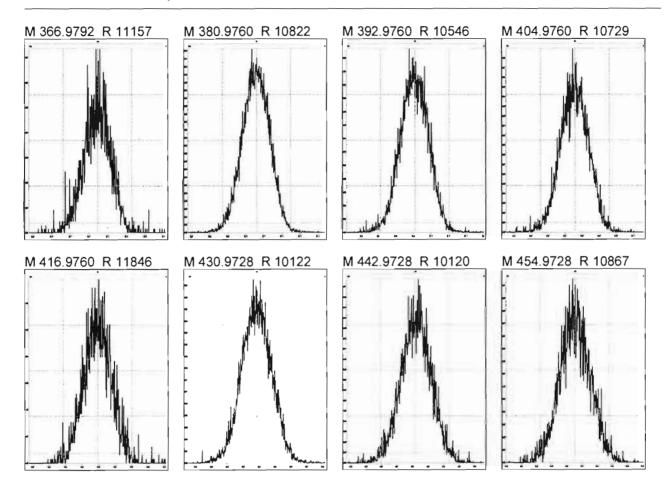
Page 1 of 1

File:

Experiment: OCDD_DIOXIN.exp Reference: Pfk.ref Function: 3 @ 200 (ppm)

Printed:

Saturday, December 12, 2020 11:42:23 Pacific Standard Time



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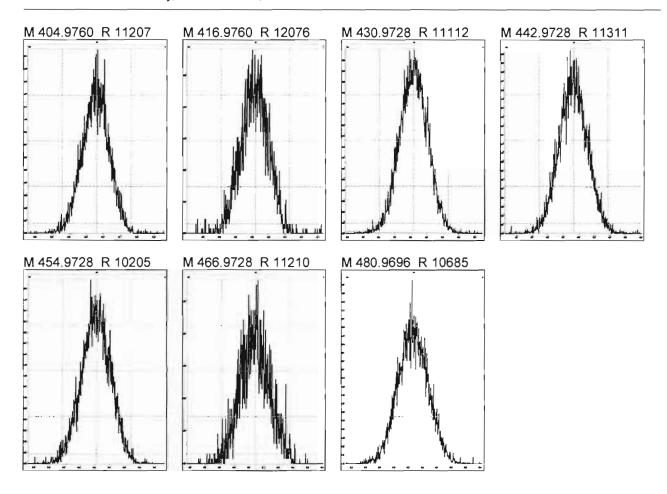
Page 1 of 1

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Experiment: OCDD_DIOXIN.exp Reference: Pfk.ref Function: 4 @ 200 (ppm)

Printed:

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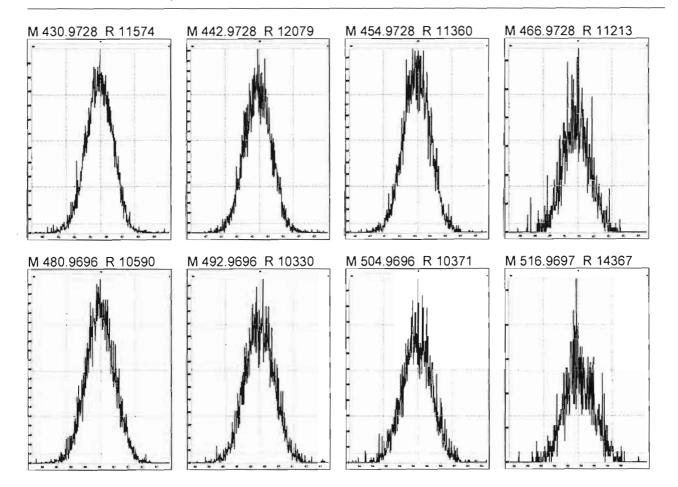
Work Order 2002434 Page 537 of 955

File:

Experiment: OCDD_DIOXIN.exp Reference: Pfk.ref Function: 5 @ 200 (ppm)

Printed:

Saturday, December 12, 2020 11:42:58 Pacific Standard Time



Work Order 2002434 Page 538 of 955

Dataset:

Untitled

Last Altered:

Sunday, December 13, 2020 08:46:44 Pacific Standard Time

Printed:

Sunday, December 13, 2020 08:48:55 Pacific Standard Time

Method: U:\VG12.PRO\MethDB\CPSM.mdb 11 Dec 2020 14:14:32

Calibration: U:\VG12.PRO\CurveDB\dbDIOXIN_1613vg12-12-03-20.cdb 04 Dec 2020 11:36:07

TUISE	# Name	RT
1	1 1,3,6,8-TCDD (First)	22.62
2	2 1,2,8,9-TCDD (Last)	27.30
3	3 1,2,4,7,9-PeCDD (First)	28.83
4	4 1,2,3,8,9-PeCDD (Last)	31.44
5	5 1,2,4,6,7,9-HxCDD (First)	32.74
6	6 1,2,3,7,8,9-HxCDD (Last)	34.77
7	7 1,2,3,4,6,7,9-HpCDD (First)	37.23
8	8 1,2,3,4,6,7,8-HpCDD (Last)	38.23
9	9 1,3,6,8-TCDF (First)	20.36
10	10 1,2,8,9-TCDF (Last)	27.61
11	11 1,3,4,6,8-PeCDF (First)	27.18
12	12 1,2,3,8,9-PeCDF (Last)	31.79
13	13 1,2,3,4,6,8-HxCDF (First)	32.21
14	14 1,2,3,7,8,9-HxCDF (Last)	35.27
15	15 1,2,3,4,6,7,8-HpCDF (First)	36.84
16	16 1,2,3,4,7,8,9-HpCDF (Last)	38.85

Vista Analytical Laboratory VG-11

Dataset:

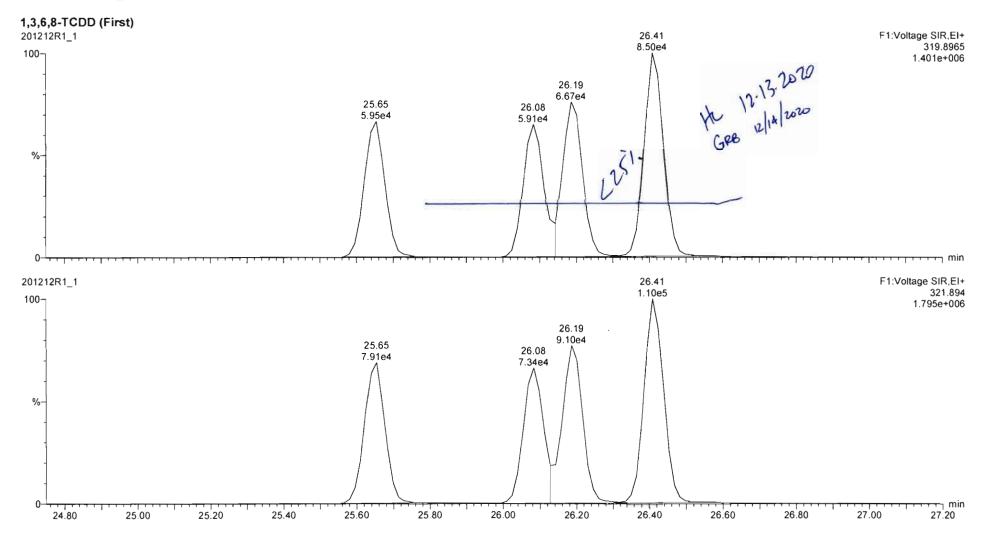
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Last Altered: Printed:

Sunday, December 13, 2020 08:46:44 Pacific Standard Time Sunday, December 13, 2020 08:48:55 Pacific Standard Time

Method: U:\VG12.PRO\MethDB\CPSM.mdb 11 Dec 2020 14:14:32

Calibration: U:\VG12.PRO\CurveDB\dbDIOXIN 1613vg12-12-03-20.cdb 04 Dec 2020 11:36:07



Vista Analytical Laboratory VG-11

Dataset:

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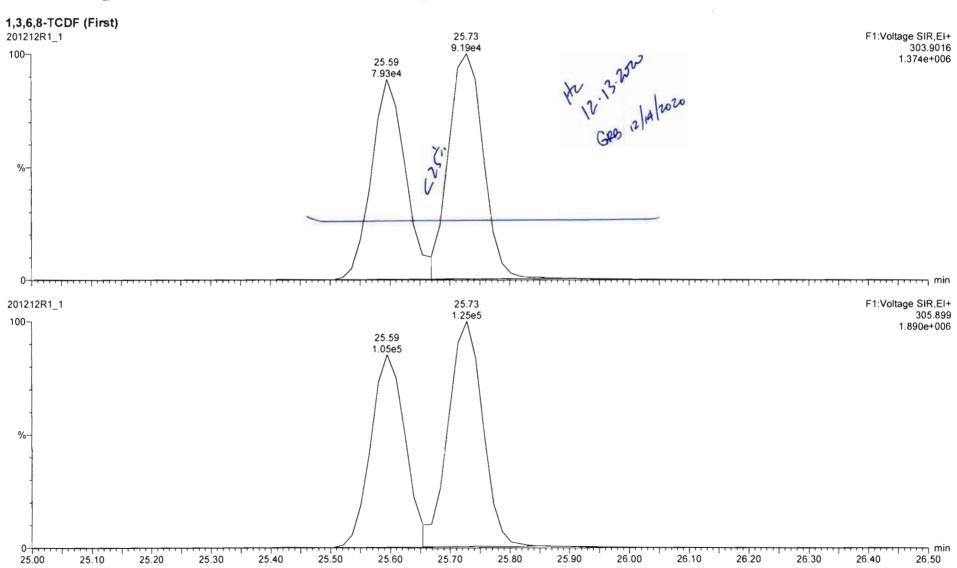
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Sunday, December 13, 2020 08:48:55 Pacific Standard Time



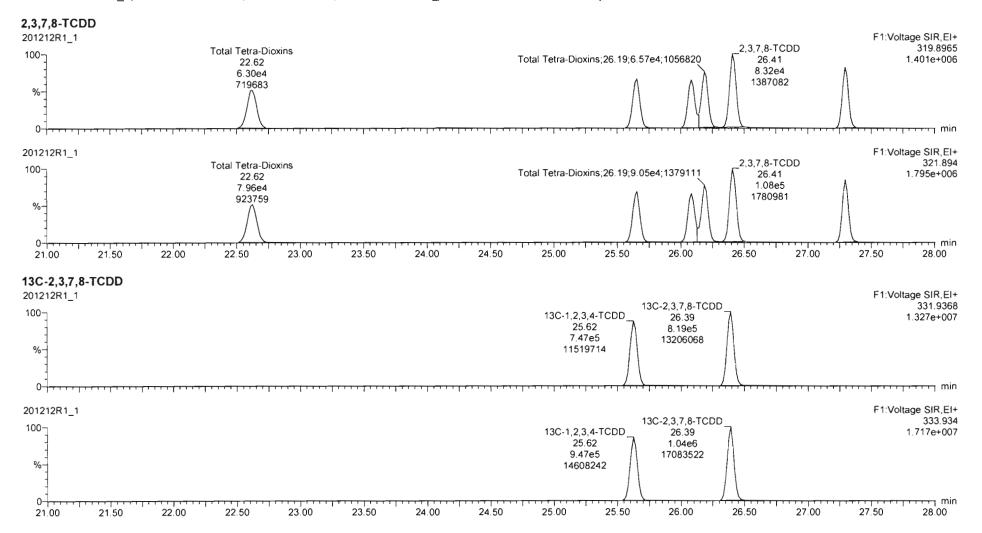


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Last Altered: Printed:

Sunday, December 13, 2020 08:38:08 Pacific Standard Time Sunday, December 13, 2020 08:39:24 Pacific Standard Time

Method: U:\VG12.PRO\MethDB\1613rrt-12-11-20.mdb 11 Dec 2020 08:35:32 Calibration: U:\VG12.PRO\CurveDB\dbDIOXIN 1613vg12-12-03-20.cdb 04 Dec 2020 11:36:07



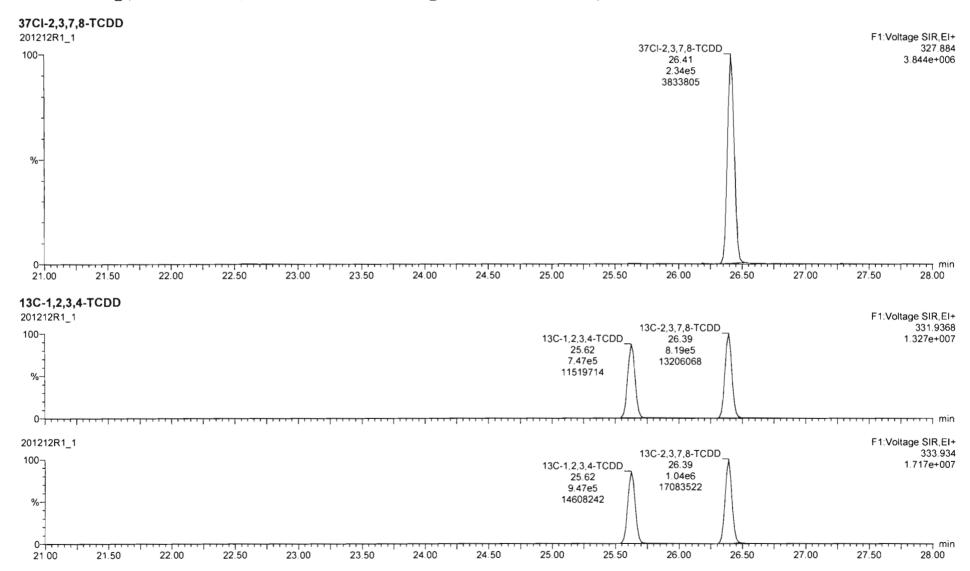
Page 2 of 117

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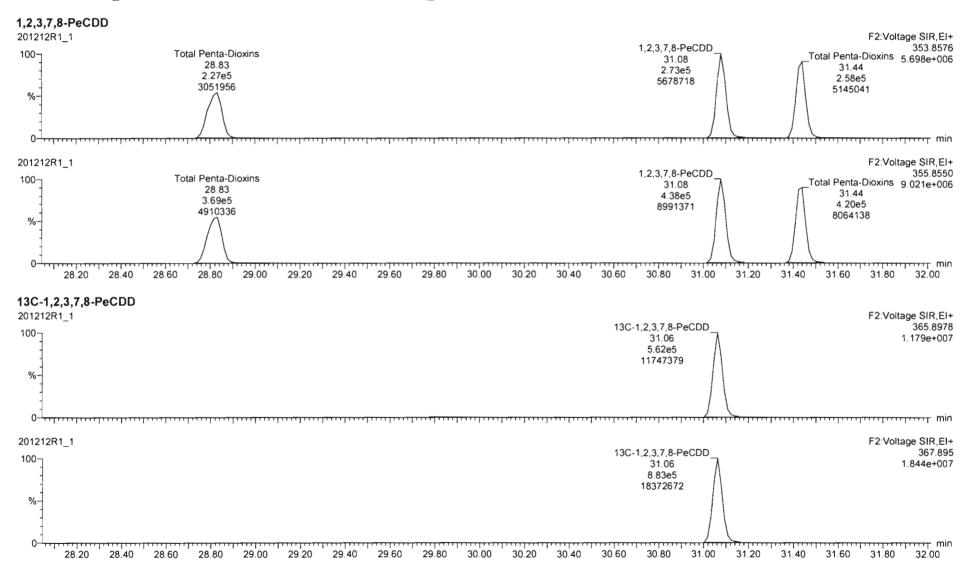


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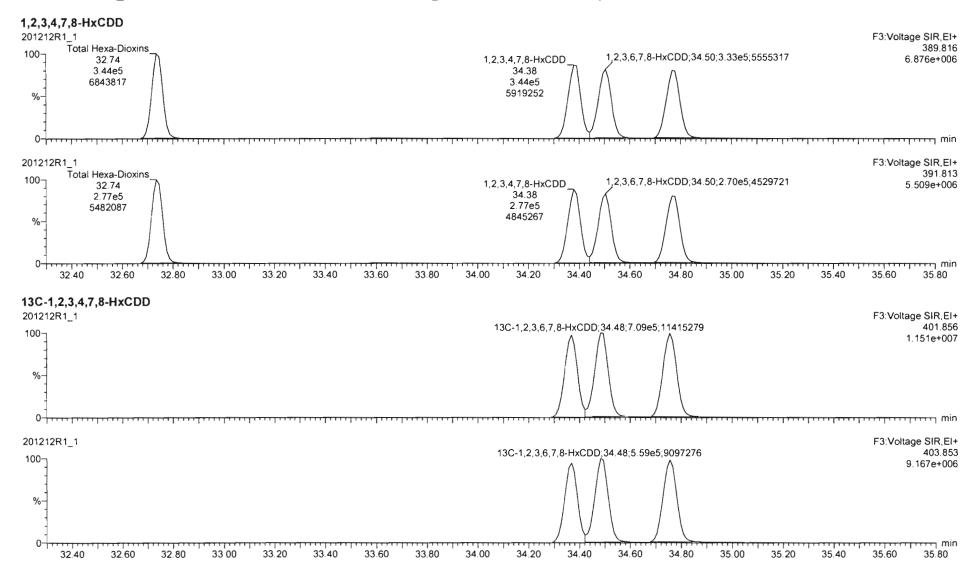
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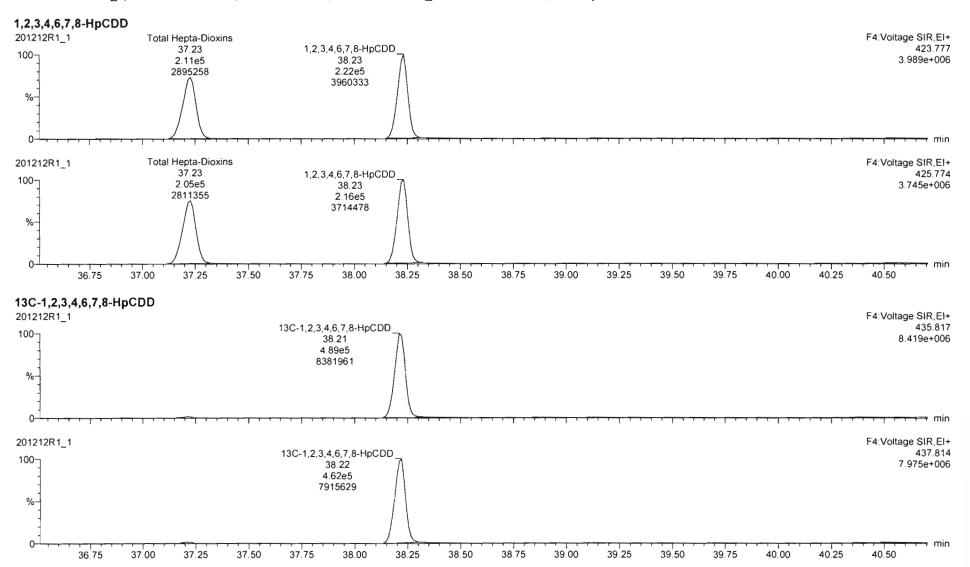
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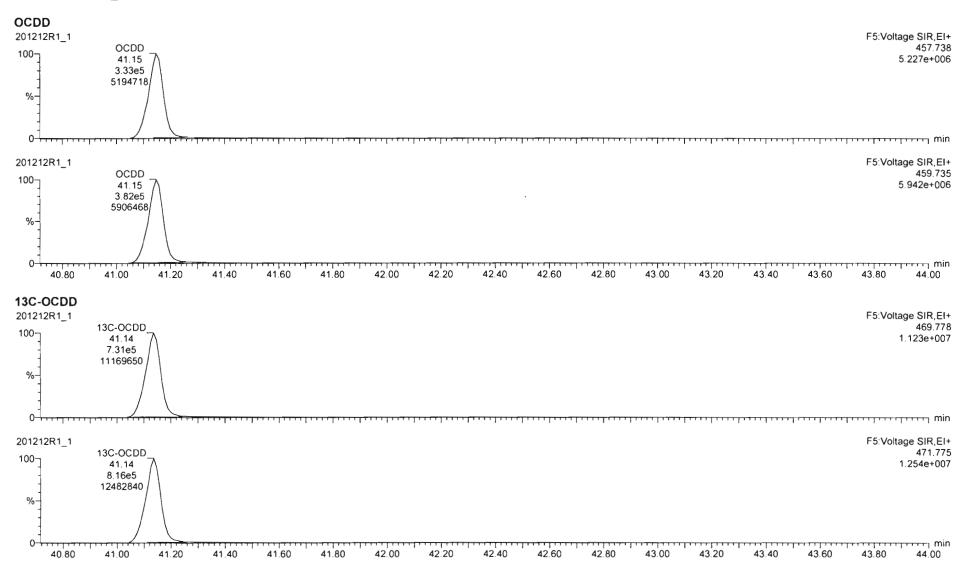
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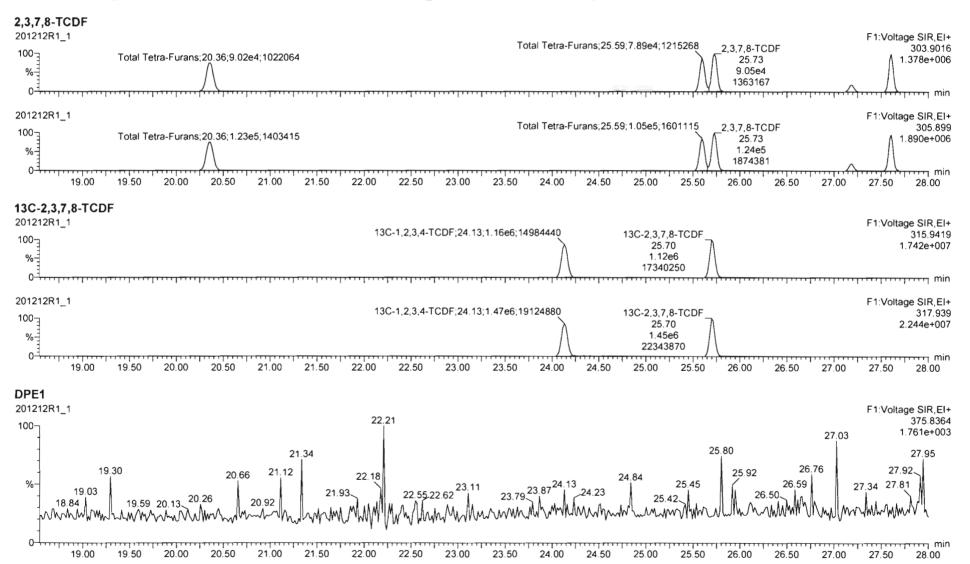
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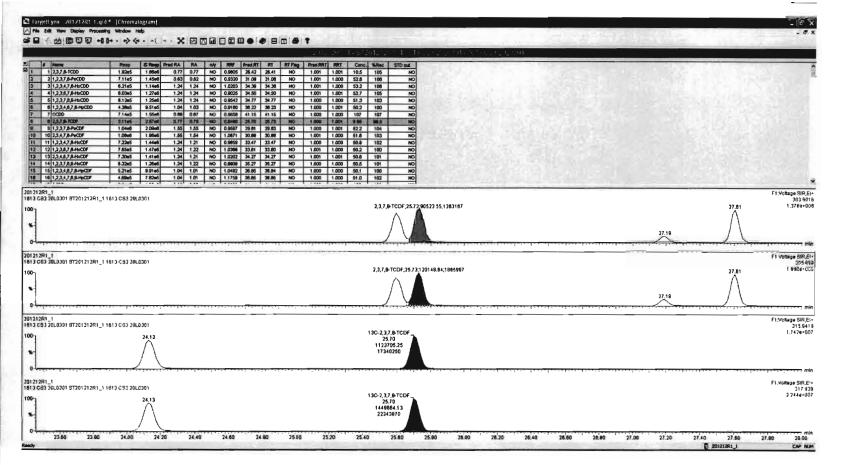
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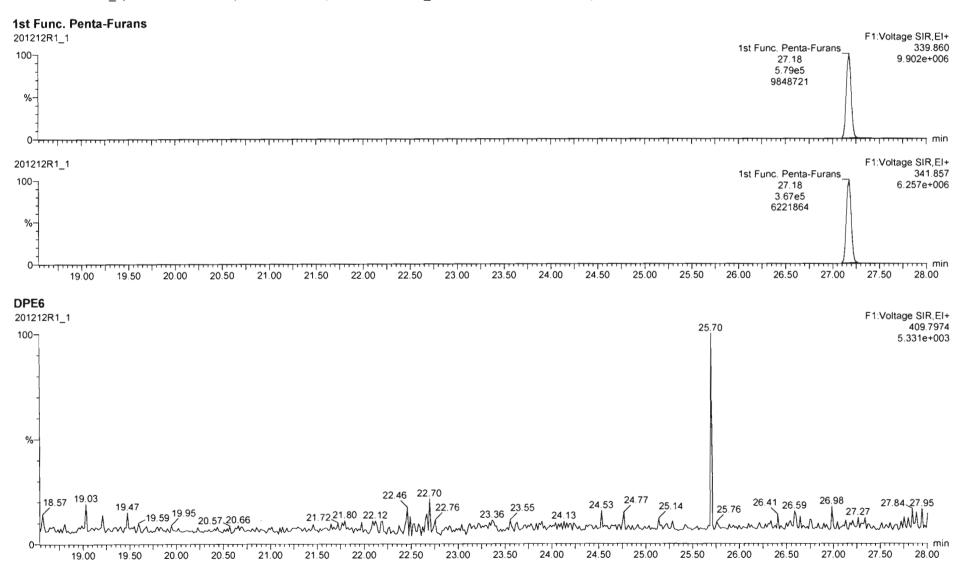




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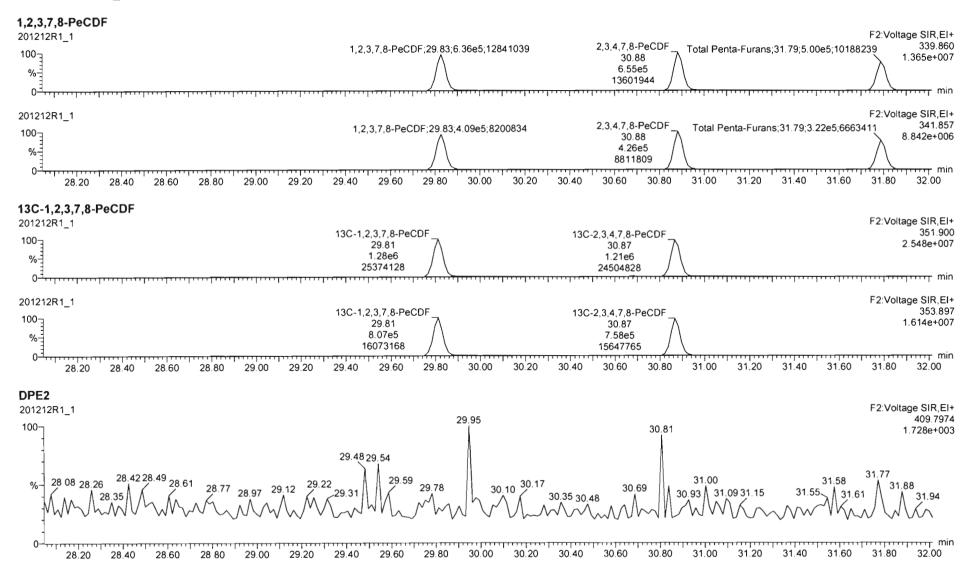


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Sunday, December 13, 2020 08:39:24 Pacific Standard Time

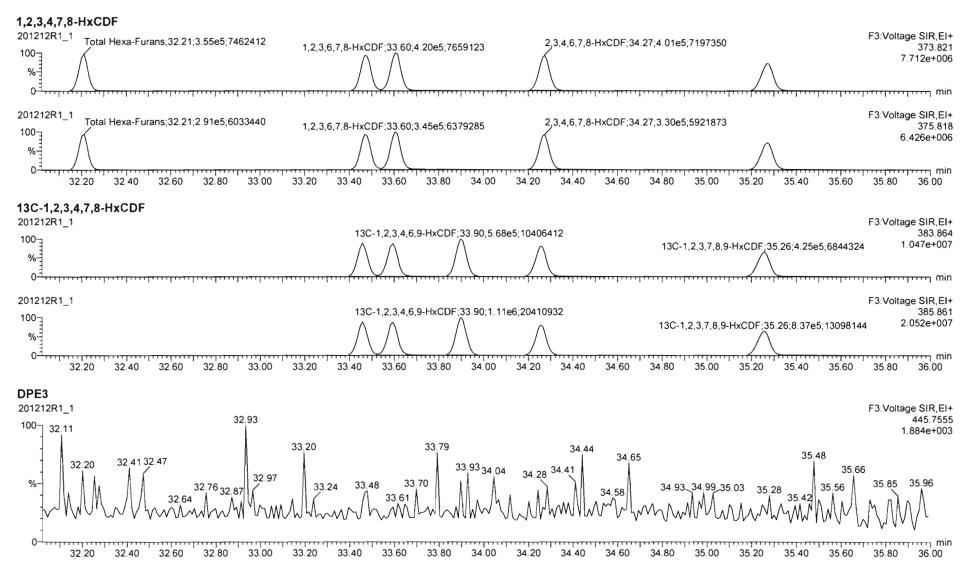


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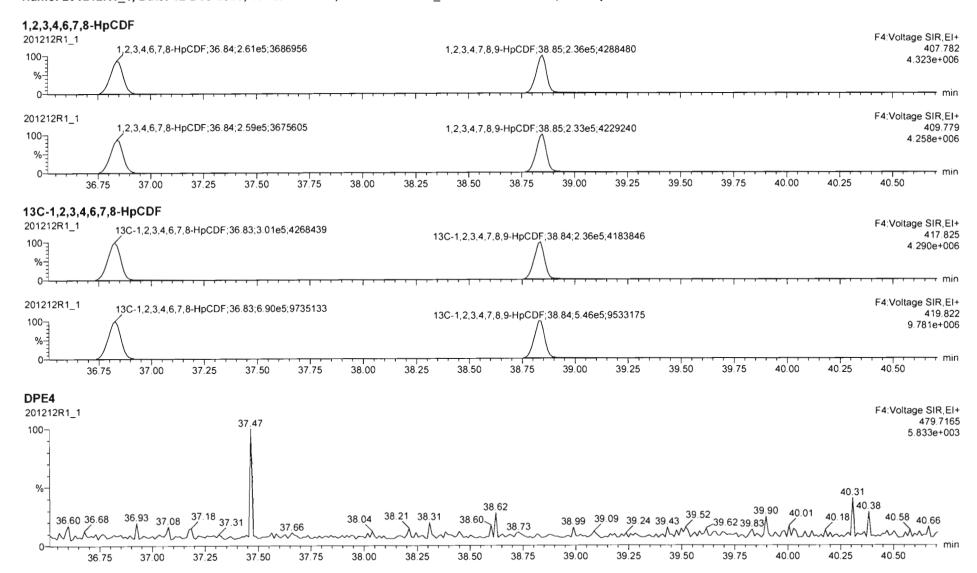
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Printed: Sunday, December 13, 2020 08:39:24 Pacific Standard Time



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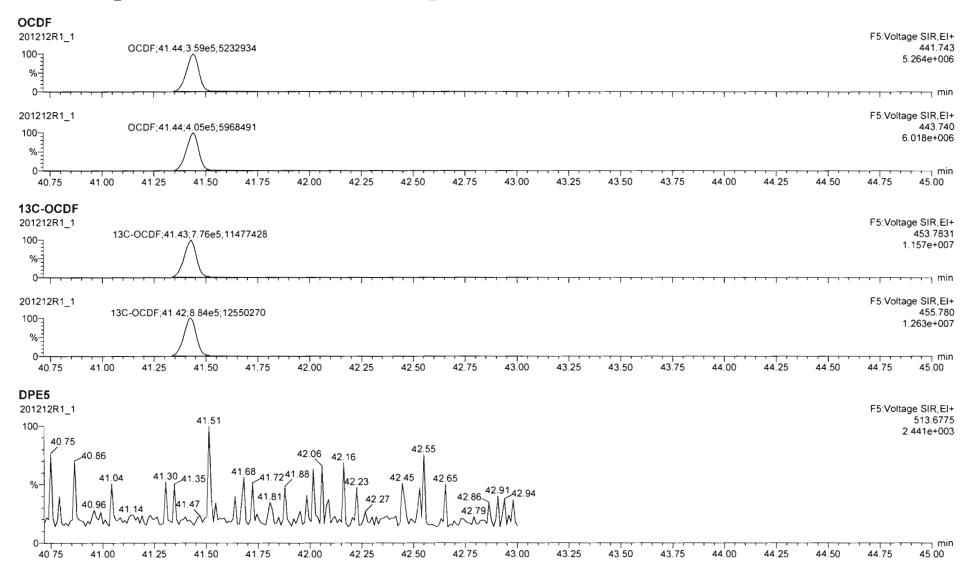
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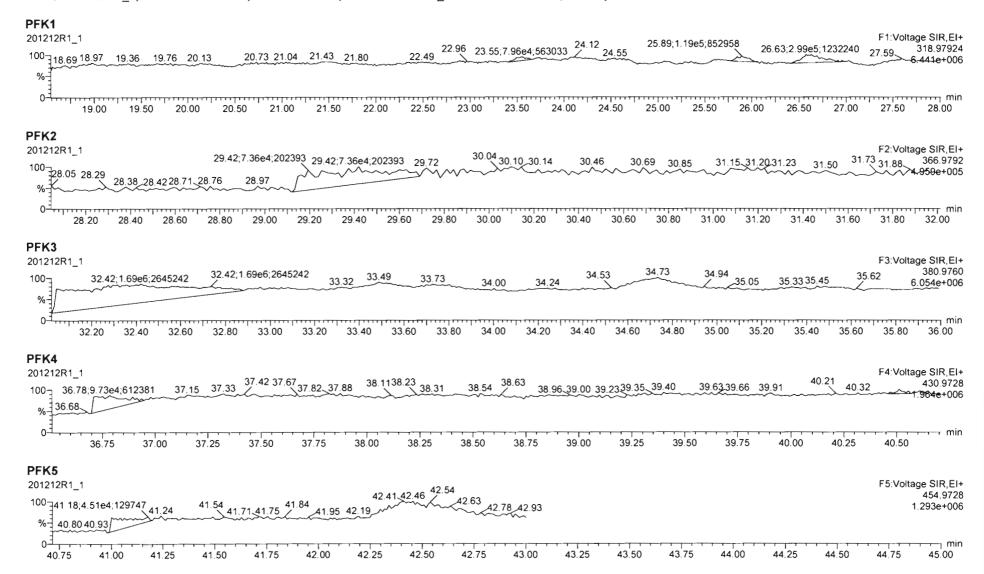
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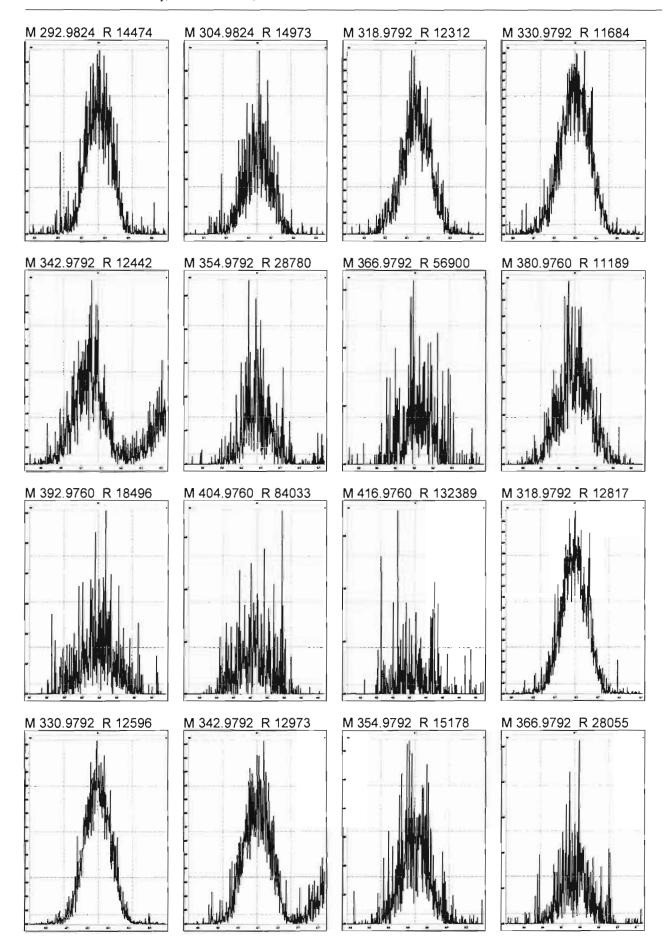
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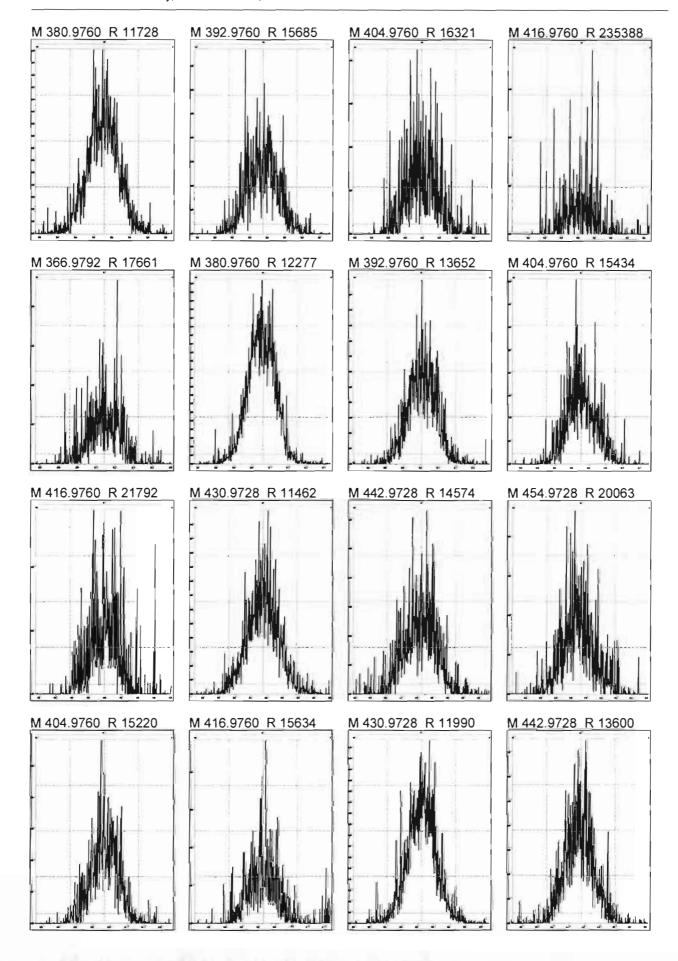
Sunday, December 13, 2020 08:34:45 Pacific Standard Time



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Printed:

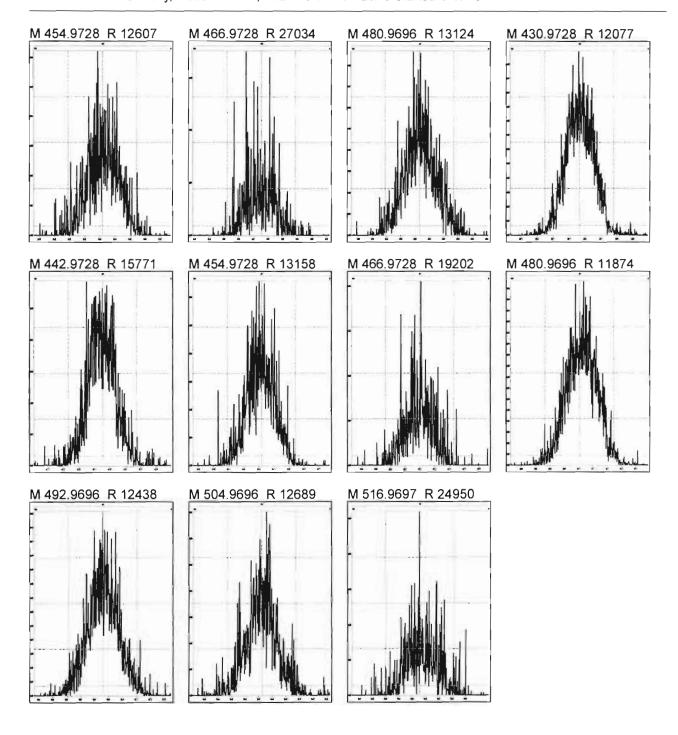
Sunday, December 13, 2020 08:34:45 Pacific Standard Time



Work Order 2002434 Page 557 of 955

Printed:

Sunday, December 13, 2020 08:34:45 Pacific Standard Time



Work Order 2002434 Page 558 of 955

TIKMS CALIBRATION STANDARDS REVIEW CHECKLIST

Ion abundance within QC limits? Concentrations within criteria?	
Beg. End Be	
ion abundance within QC limits? Concentrations within criteria?	
Concentrations within criteria?	<u>nd</u>
TCDD/TCDF Valleys <25% First and last eluters present? Intergrated peaks display correctly? GC Break <20% NA	
TCDD/TCDF Valleys <25% Intergrated peaks display correctly? GC Break <20% NA	
NA NA	Ja.
Retention Times within criteria? 8280 CS1 End Standard:	
Verification Std. named correctly? - Ratios within limits, S/N <2.5½, CS1 within 12 hours	ja
(ST-Year-Month-Day-VG ID)	
Forms signed and dated?	
Correct ICAL referenced?	^`
Run Log:	.
- Correct Instrument listed?	*
- Samples within 12 hour clock? - Bottle position verifed? Off	

ID: LR - HCSRC

Rev. No.: 0 Rev. Date: 06/06/2017

Page: 1 of 1

Page 1 of 2

Dataset:

U:\VG12.PRO\Results\201213R2\201213R2-1.qld

Last Altered: Printed:

Monday, December 14, 2020 07:31:05 Pacific Standard Time Monday, December 14, 2020 07:31:43 Pacific Standard Time

GPB 12/14/2020 Hr 12.15.2020

Method: U:\VG12.PRO\MethDB\1613rrt-12-11-20.mdb 11 Dec 2020 08:35:32

Calibration: U:\VG12.PRO\CurveDB\dbDIOXIN_1613vg12-12-03-20.cdb 04 Dec 2020 11:36:07

Name: 201213R2_1, Date: 13-Dec-2020, Time: 10:15:18, ID: ST201213R2_1 1613 CS3 20L0301, Description: 1613 CS3 20L0301

	# Name	Resp	IS Resp	RA	n/y	RRF	Pred.RT	RT	RT Flag	Pred.RRT	RRT	Conc.	%Rec	STD out
1	1 2,3,7,8-TCDD	1.60e5	1.56e6	0.76	NO	0.980	26.41	26.41	NO	1.001	1.001	10.462	105	NO
2	2 1,2,3,7,8-PeCDD	5.68e5	1.12e6	0.62	NO	0.932	31.08	31.06	NO	1.001	1.000	54.227	108	NO
3	3 1,2,3,4,7,8-HxCDD	4.67e5	8.51e5	1.23	NO	1.02	34.38	34.37	NO	1.001	1.000	53.815	108	NO
4	4 1,2,3,6,7,8-HxCDD	4.58e5	9.70e5	1.24	NO	0.902	34.49	34.49	NO	1.001	1.001	52.277	105	NO
5	5 1,2,3,7,8,9-HxCDD	4.62e5	9.36e5	1.22	NO	0.954	34.76	34.76	NO	1.000	1.000	51.736	103	NO
6	6 1,2,3,4,6,7,8-HpCDD	3.44e5	7.58e5	1.05	NO	0.918	38.21	38.21	NO	1.000	1.000	49.462	98.9	NO
7	7 OCDD	5.93e5	1.31e6	0.88	NO	0.866	41.11	41.12	NO	1.000	1.000	104.77	105	NO
8	8 2,3,7,8-TCDF	1.78e5	2.21e6	0.73	NO	0.848	25.70	25.73	NO	1.000	1.001	9.4961	95.0	NO
9	9 1,2,3,7,8-PeCDF	8.47e5	1.70e6	1.56	NO	0.960	29.80	29.81	NO	1.000	1.001	51.873	104	NO
10	10 2,3,4,7,8-PeCDF	8.70e5	1.58e6	1.56	NO	1.07	30.89	30.87	NO	1.001	1.000	51.645	103	NO
11	11 1,2,3,4,7,8-HxCDF	5.41e5	1.10e6	1.21	NO	0.986	33.46	33.46	NO	1.000	1.000	49.746	99.5	NO
12	12 1,2,3,6,7,8-HxCDF	5.68e5	1.13e6	1.20	NO	1.04	33.60	33.59	NO	1.001	1.000	48.425	96.8	NO
13	13 2,3,4,6,7,8-HxCDF	5.35e5	1.06e6	1.21	NO	1.02	34.26	34.26	NO	1.001	1.001	49.404	98.8	NO
14	14 1,2,3,7,8,9-HxCDF	4.73e5	9.62e5	1.22	NO	0.991	35.26	35.26	NO	1.000	1.000	49.563	99.1	NO
15	15 1,2,3,4,6,7,8-HpCDF	3.99e5	7.74e5	1.00	NO	1.05	36.83	36.83	NO	1.000	1.001	49.169	98.3	NO
16	16 1,2,3,4,7,8,9-HpCDF	3.66e5	6.31e5	0.99	NO	1.18	38.83	38.83	NO	1.000	1.000	49.340	98.7	NO
17	17 OCDF	6.29e5	1.39e6	0.87	NO	0.896	41.41	41.41	NO	1.000	1.000	100.97	101	NO
18	18 13C-2,3,7,8-TCDD	1.56e6	1.46e6	0.78	NO	1.06	26.40	26.38	NO	1.030	1.029	101.59	102	NO
19	19 13C-1,2,3,7,8-PeCDD	1.12e6	1.46e6	0.63	NO	0.785	31.25	31.05	NO	1.219	1.212	98.261	98.3	NO
20	20 13C-1,2,3,4,7,8-HxCDD	8.51e5	1.23e6	1.29	NO	0.621	34.35	34.36	NO	1.014	1.014	111.96	112 .	NO
21	21 13C-1,2,3,6,7,8-HxCDD	9.70e5	1.23e6	1.27	NO	0.734	34.47	34.47	NO	1.017	1.017	107.88	108	NO
22	22 13C-1,2,3,7,8,9-HxCDD	9.36e5	1.23e6	1.27	NO	0.723	34.75	34.74	NO	1.026	1.025	105.65	106	NO
23	23 13C-1,2,3,4,6,7,8-HpCDD	7.58e5	1.23e6	1.05	NO	0.568	38.26	38.20	NO	1.129	1.127	108.94	109	NO
24	24 13C-OCDD	1.31e6	1.23e6	0.93	NO	0.496	41.19	41.11	NO	1.216	1.213	215.35	108	NO
25	25 13C-2,3,7,8-TCDF	2.21e6	2.29e6	0.78	NO	0.919	25.70	25.70	NO	1.003	1.003	104.96	105	NO
26	26 13C-1,2,3,7,8-PeCDF	1.70e6	2.29e6	1.60	NO	0.715	29.96	29.80	NO	1.169	1.163	103.72	104	NO
27	27 13C-2,3,4,7,8-PeCDF	1.58e6	2.29e6	1.59	NO	0.689	31.04	30.87	NO	1.212	1.205	99.989	100	NO
28	28 13C-1,2,3,4,7,8-HxCDF	1.10e6	1.23e6	0.51	NO	0.873	33.45	33.45	NO	0.987	0.987	103.08	103	NO
29	29 13C-1,2,3,6,7,8-HxCDF	1.13e6	1.23e6	0.50	NO	0.933	33.58	33.58	NO	0.991	0.991	98.726	98.7	NO
30	30 13C-2,3,4,6,7,8-HxCDF	1.06e6	1.23e6	0.50	NO	0.843	34.25	34.24	NO	1.011	1.011	102.73	103	NO

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Page 2 of 2

Dataset:

U:\VG12.PRO\Results\201213R2\201213R2-1.qld

Last Altered: Printed:

Monday, December 14, 2020 07:31:05 Pacific Standard Time Monday, December 14, 2020 07:31:43 Pacific Standard Time

Name: 201213R2_1, Date: 13-Dec-2020, Time: 10:15:18, ID: ST201213R2_1 1613 CS3 20L0301, Description: 1613 CS3 20L0301

	# Name	Resp	IS Resp	RA	n/y	RRF	Pred.RT	RT	RT Flag	Pred.RRT	RRT	Conc.	%Rec	STD out
31	31 13C-1,2,3,7,8,9-HxCDF	9.62e5	1.23e6	0.51	NO	0.780	35.25	35.25	NO	1.040	1.040	100.67	101	NO
32	32 13C-1,2,3,4,6,7,8-HpCDF	7.74e5	1.23e6	0.43	NO	0.726	36.83	36.81	NO	1.087	1.086	86.979	87.0	NO
33	33 13C-1,2,3,4,7,8,9-HpCDF	6.31e5	1.23e6	0.43	NO	0.491	38.83	38.82	NO	1.146	1.145	104.87	105	NO
34	34 13C-OCDF	1.39e6	1.23e6	0.88	NO	0.565	41.41	41.40	NO	1.222	1.222	200.66	100	NO
35	35 37CI-2,3,7,8-TCDD	1.98e5	1.46e6			1.22	26.39	26.41	NO	1.030	1.031	11.160	112	NO
36	36 13C-1,2,3,4-TCDD	1.46e6	1.46e6	0.79	NO	1.00	25.64	25.63	NO	1.000	1.000	100.00	100	NO
37	37 13C-1,2,3,4-TCDF	2.29e6	2.29e6	0.78	NO	1.00	24.13	24.13	NO	1.000	1.000	100.00	100	NO
38	38 13C-1,2,3,4,6,9-HxCDF	1.23e6	1.23e6	0.51	NO	1.00	33.92	33.89	NO	1.000	1.000	100.00	100	YESOK

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Untitled

Last Altered: Printed: Monday, December 14, 2020 07:30:16 Pacific Standard Time Monday, December 14, 2020 07:30:30 Pacific Standard Time

Method: U:\VG12.PRO\MethDB\1613rrt-12-11-20.mdb 11 Dec 2020 08:35:32 Calibration: U:\VG12.PRO\CurveDB\dbDIOXIN_1613vg12-12-03-20.cdb 04 Dec 2020 11:36:07

Compound name: 2,3,7,8-TCDD

	Name	ID	Acq.Date	Acq.Time
1	201213R2_1	ST201213R2_1 1613 CS3 20L0301	13-Dec-20	10:15:18
2	201213R2_2	B0L0034-BS1 OPR 10	13-Dec-20	11:01:37
3	201213R2_3	SOLVENT BLANK	13-Dec-20	11:45:51
4	201213R2_4	B0L0034-BLK1 Method Blank 10	13-Dec-20	12:30:07
5	201213R2_5	B0L0016-DUP1 Duplicate 11.62	13-Dec-20	13:14:22
6	201213R2_6	2002434-05 USMPDI-023SC-A-01-02-201107	13-Dec-20	13:58:39
7	201213R2_7	2002434-06 USMPDI-023SC-A-02-03-201107	13-Dec-20	14:42:54
8	201213R2_8	2002434-07 USMPDI-023SC-A-03-04-201107	13-Dec-20	15:27:08
9	201213R2_9	2002434-08 USMPDI-023SC-A-04-05-201107	13-Dec-20	16:11:26
10	201213R2_10	2002434-09 USMPDI-1023SC-A-02-03-20110	13-Dec-20	16:55:42
11	201213R2_11	2002434-10 USMPDI-056SC-A-01-02-201107	13-Dec-20	17:39:57
12	201213R2_12	2002434-11 USMPDI-056SC-A-02-03-201107	13-Dec-20	18:24:12
13	201213R2_13	2002434-12 USMPDI-056SC-A-03-04-201107	13-Dec-20	19:08:25
14	201213R2_14	2002431-08@20X USMPDI-049SC-A-14-15-2	13-Dec-20	19:52:41
15	201213R2_15	2002431-09@20X USMPDI-049SC-A-15-16-2	13-Dec-20	20:36:55

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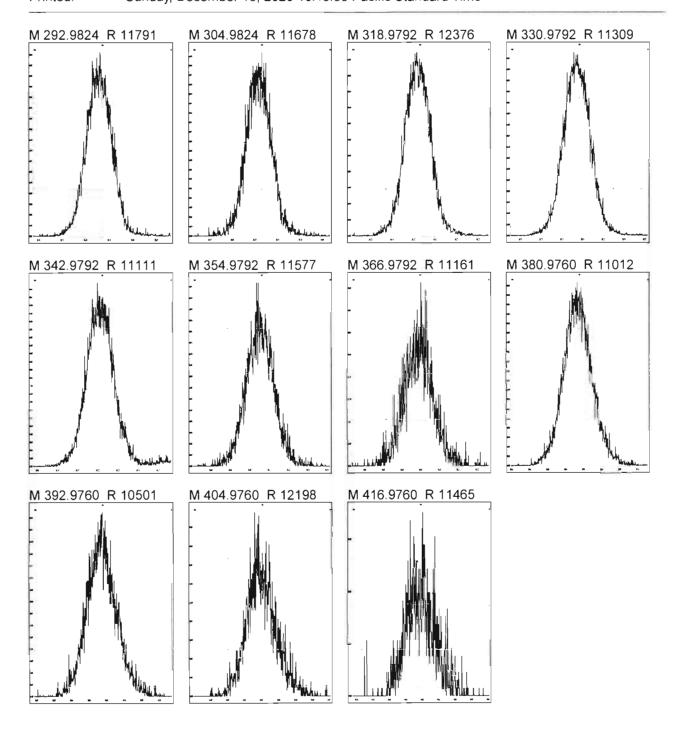
Page 1 of 1

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Experiment: OCDD_DIOXIN.exp Reference: Pfk.ref Function: 1 @ 200 (ppm)

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Sunday, December 13, 2020 10:13:35 Pacific Standard Time



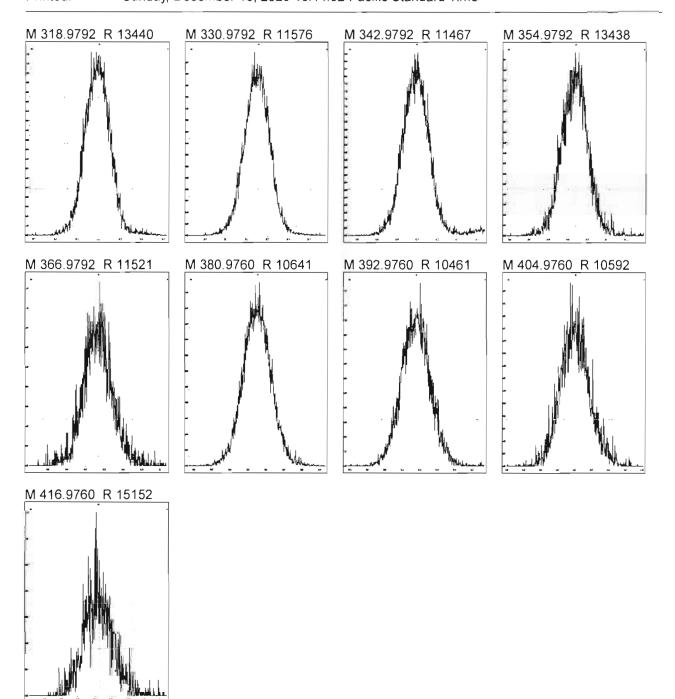
Work Order 2002434 Page 563 of 955

File:

Experiment: OCDD_DIOXIN.exp Reference: Pfk.ref Function: 2 @ 200 (ppm)

Printed:

Sunday, December 13, 2020 10:14:02 Pacific Standard Time



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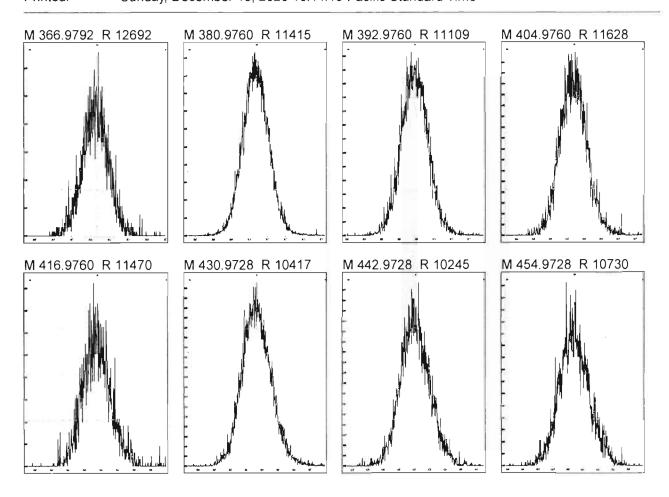
Page 1 of 1

File:

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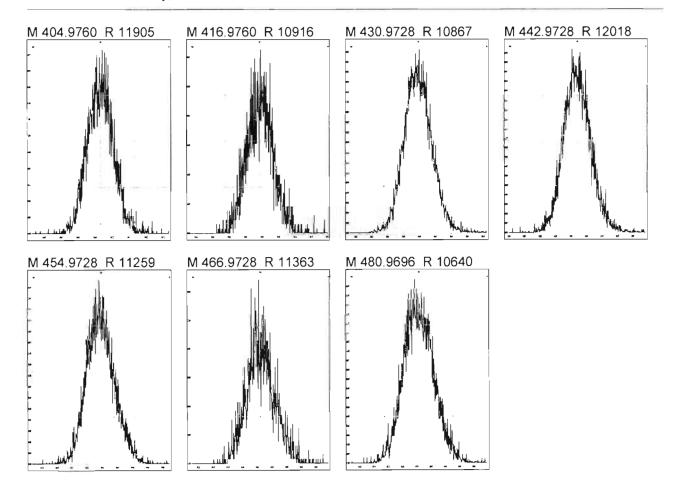
Work Order 2002434 Page 565 of 955

File:

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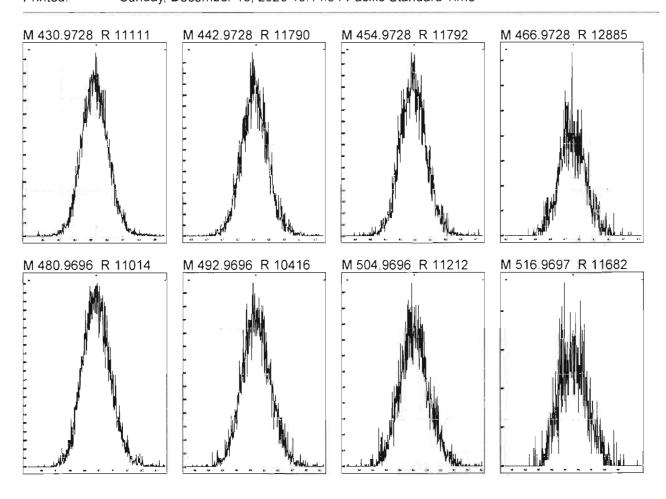
Work Order 2002434 Page 566 of 955

File:

Experiment: OCDD_DIOXIN.exp Reference: Pfk.ref Function: 5 @ 200 (ppm)

Printed:

Sunday, December 13, 2020 10:14:54 Pacific Standard Time



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Page 1 of 1

Dataset:

Untitled

Last Altered:

Monday, December 14, 2020 07:21:16 Pacific Standard Time

Printed:

Monday, December 14, 2020 07:22:48 Pacific Standard Time

Method: U:\VG12.PRO\MethDB\CPSM.mdb 11 Dec 2020 14:14:32

Calibration: U:\VG12.PRO\CurveDB\dbDIOXIN_1613vg12-12-03-20.cdb 04 Dec 2020 11:36:07

Name: 201213R2_1, Date: 13-Dec-2020, Time: 10:15:18, ID: ST201213R2_1 1613 CS3 20L0301, Description: 1613 CS3 20L0301

	# Name	RT
1	1 1,3,6,8-TCDD (First)	22.61
2	2 1,2,8,9-TCDD (Last)	27.28
3	3 1,2,4,7,9-PeCDD (First)	28.82
4	4 1,2,3,8,9-PeCDD (Last)	31.42
5	5 1,2,4,6,7,9-HxCDD (First)	32.72
6	6 1,2,3,7,8,9-HxCDD (Last)	34.76
7	7 1,2,3,4,6,7,9-HpCDD (First)	37.21
8	8 1,2,3,4,6,7,8-HpCDD (Last)	38.21
9	9 1,3,6,8-TCDF (First)	20.35
10	10 1,2,8,9-TCDF (Last)	27.59
11	11 1,3,4,6,8-PeCDF (First)	27.16
12	12 1,2,3,8,9-PeCDF (Last)	31.79
13	13 1,2,3,4,6,8-HxCDF (First)	32.20
14	14 1,2,3,7,8,9-HxCDF (Last)	35.26
15	15 1,2.3,4,6,7,8-HpCDF (First)	36.83
16	16 1,2,3,4,7,8,9-HpCDF (Last)	38.83

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MassLynx 4.1 SCN815

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Vista Analytical Laboratory VG-11

Dataset:

Untitled

Last Altered:

Monday, December 14, 2020 07:21:16 Pacific Standard Time

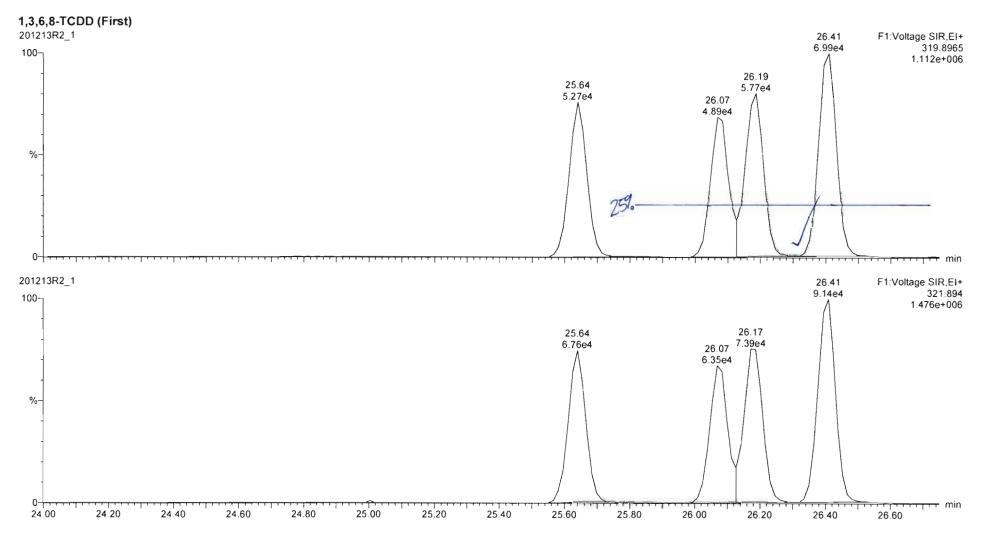
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Monday, December 14, 2020 07:22:48 Pacific Standard Time

GRB 12/14/2020 He 12/15.2020

Method: U:\VG12.PRO\MethDB\CPSM.mdb 11 Dec 2020 14:14:32

Calibration: U:\VG12.PRO\CurveDB\dbDIOXIN 1613vq12-12-03-20.cdb 04 Dec 2020 11:36:07



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Vista Analytical Laboratory VG-11

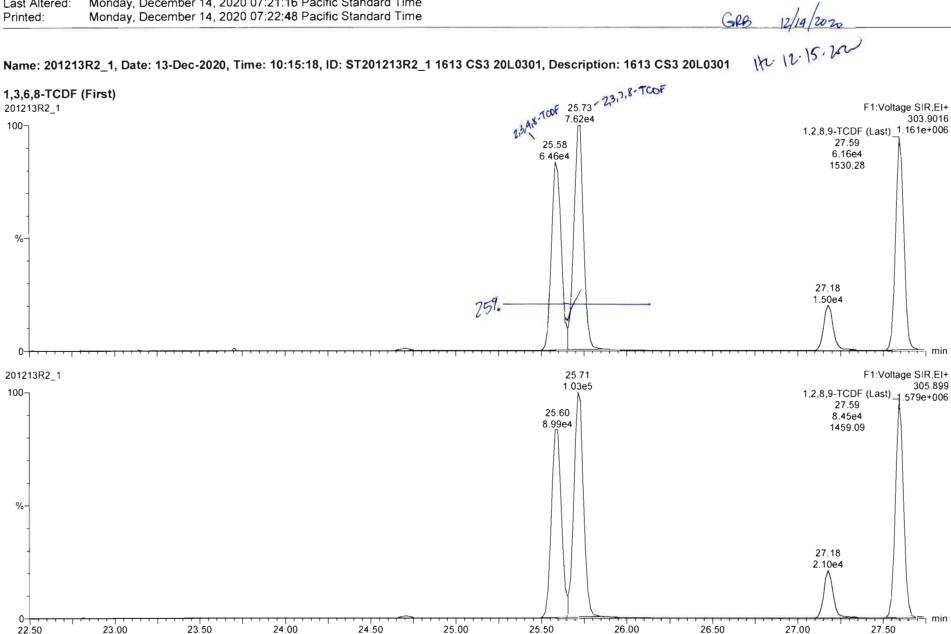
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Monday, December 14, 2020 07:22:48 Pacific Standard Time Printed:



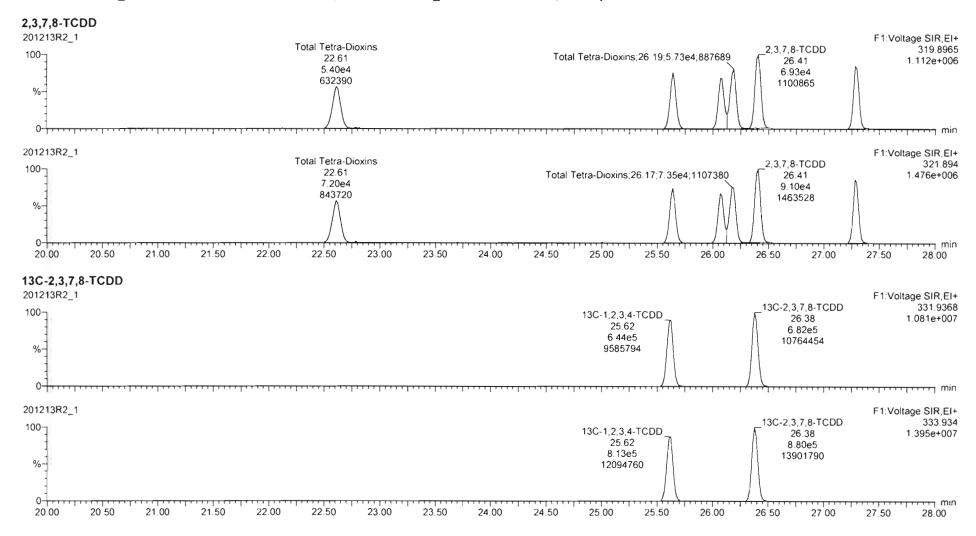
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Last Altered: Printed:

Monday, December 14, 2020 07:23:11 Pacific Standard Time Monday, December 14, 2020 07:23:14 Pacific Standard Time

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Calibration: U:\VG12.PRO\CurveDB\dbDIOXIN_1613vg12-12-03-20.cdb 04 Dec 2020 11:36:07

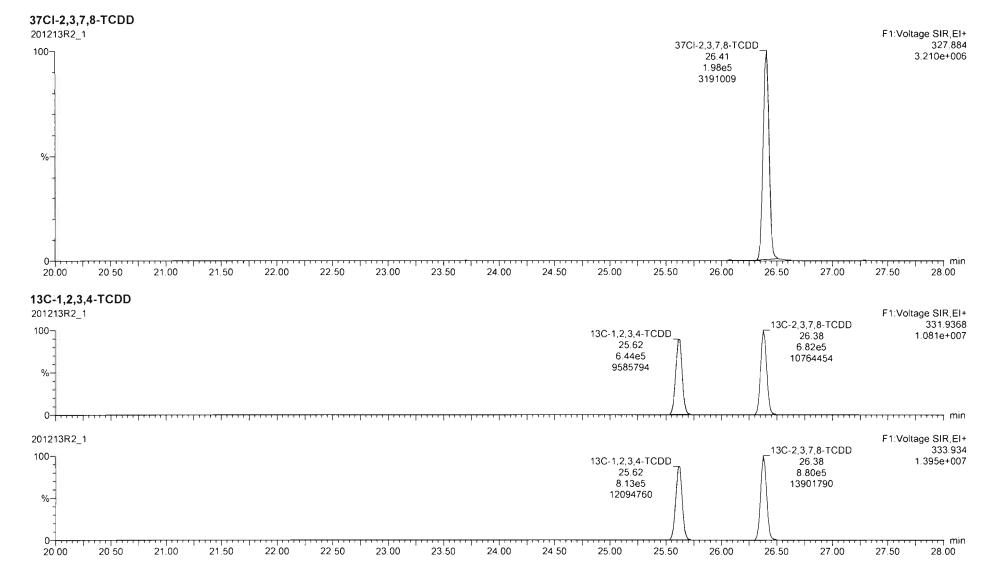


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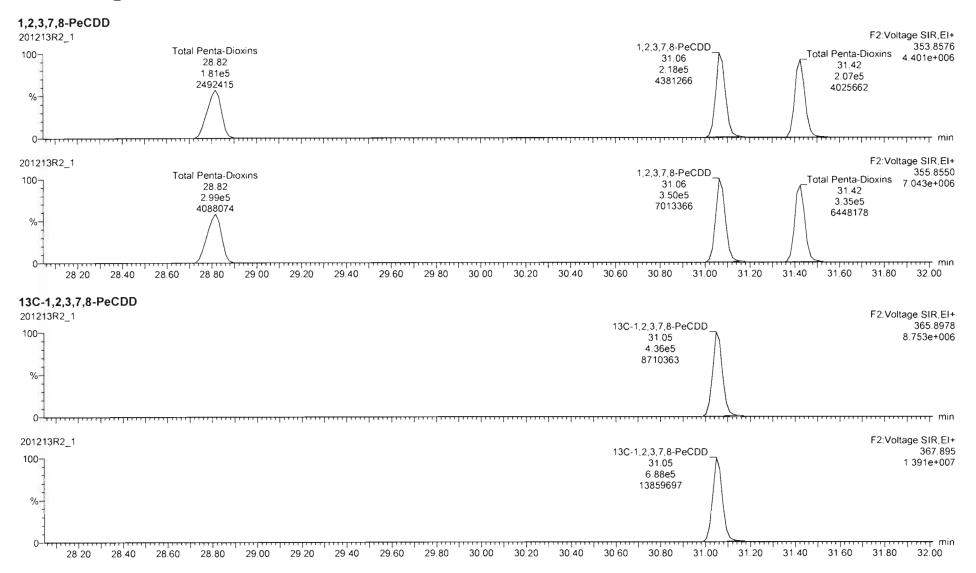
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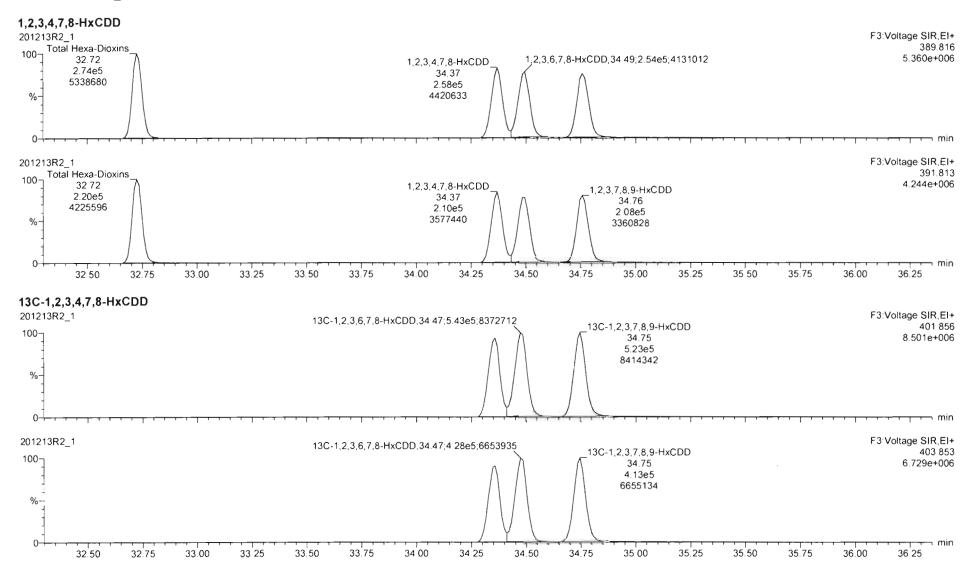
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Monday, December 14, 2020 07:23:11 Pacific Standard Time Monday, December 14, 2020 07:23:14 Pacific Standard Time



Page 5 of 13

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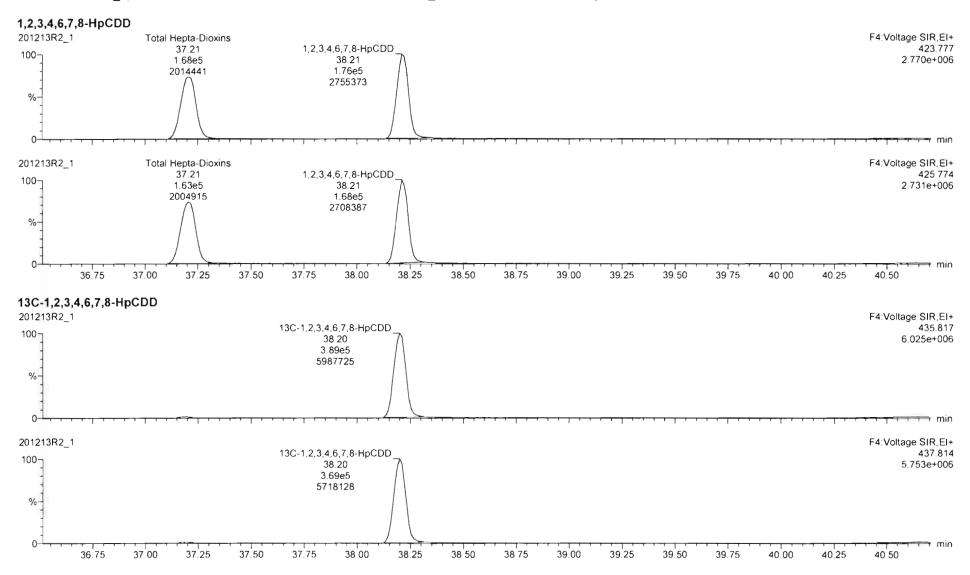
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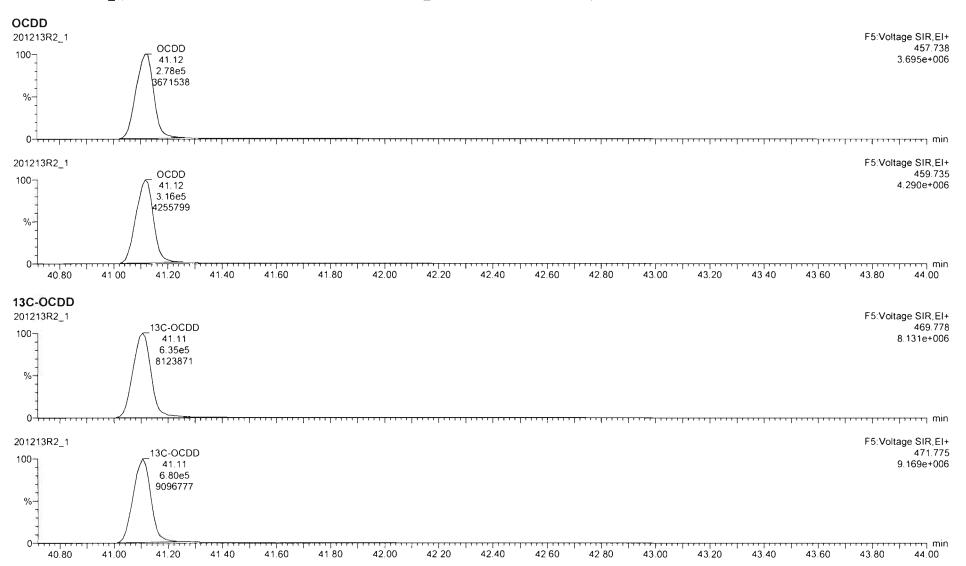
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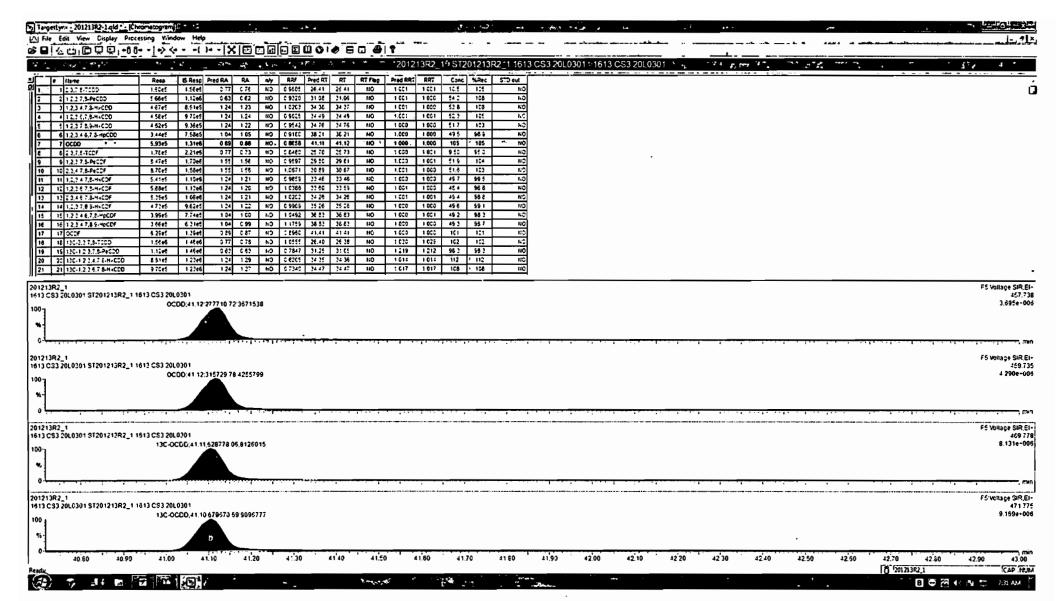


Work Order 2002434

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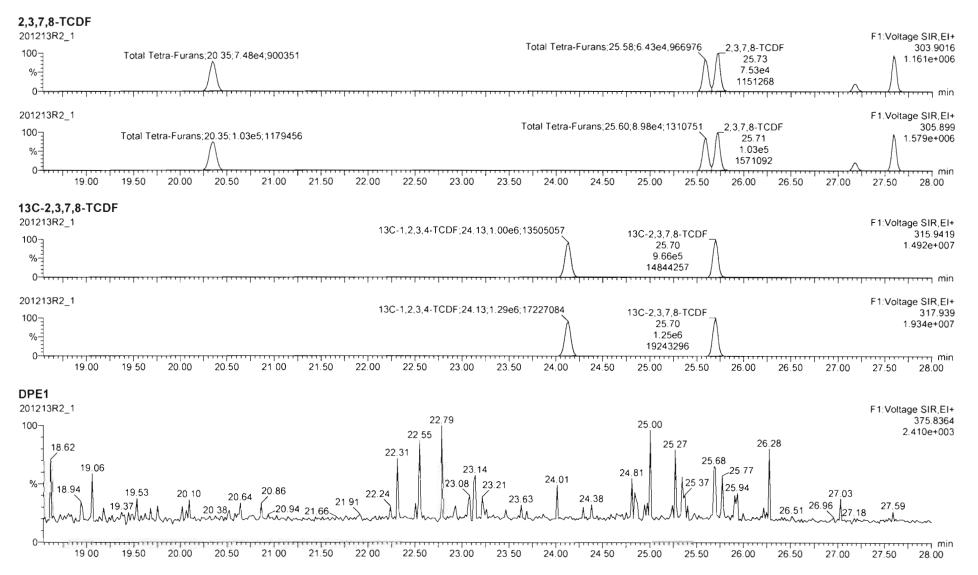


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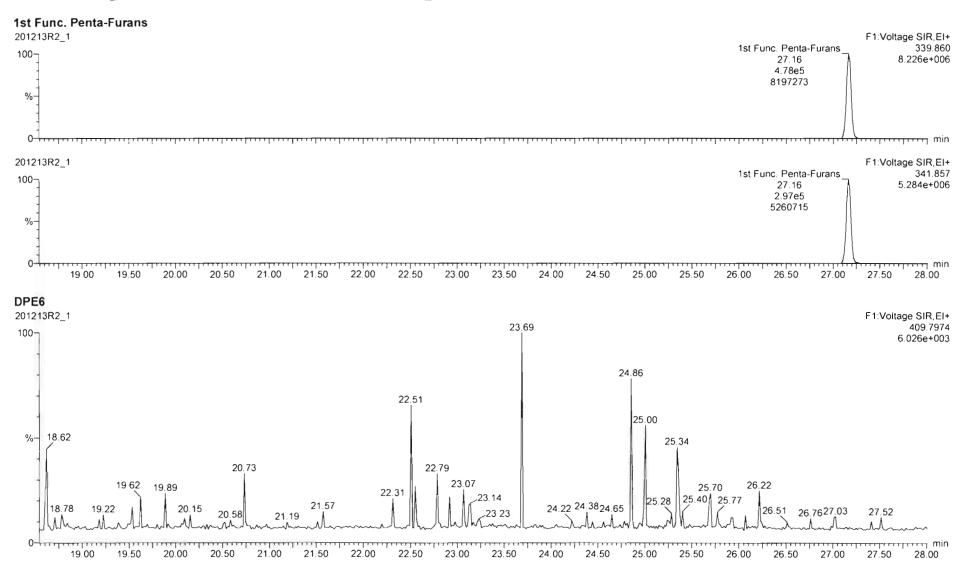
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Monday, December 14, 2020 07:23:14 Pacific Standard Time

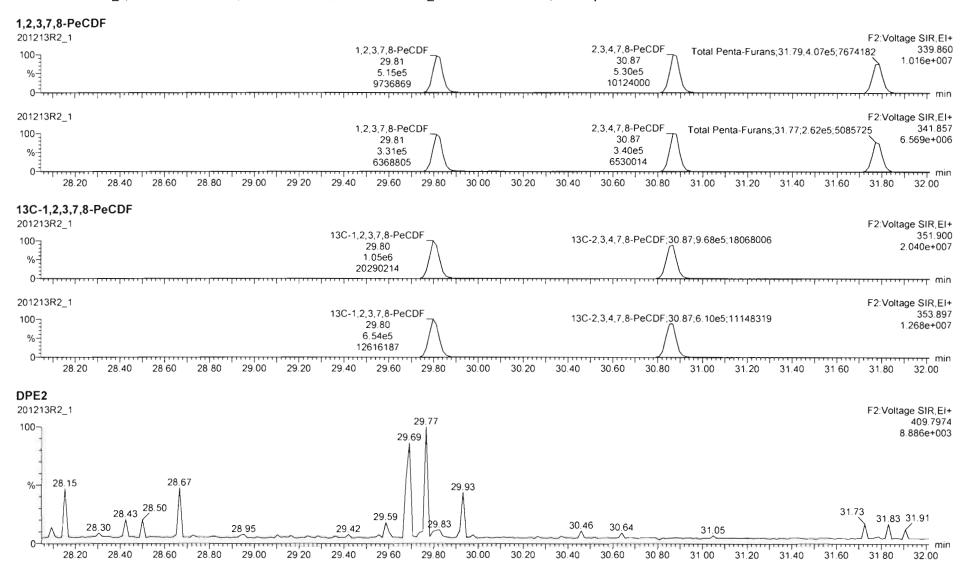
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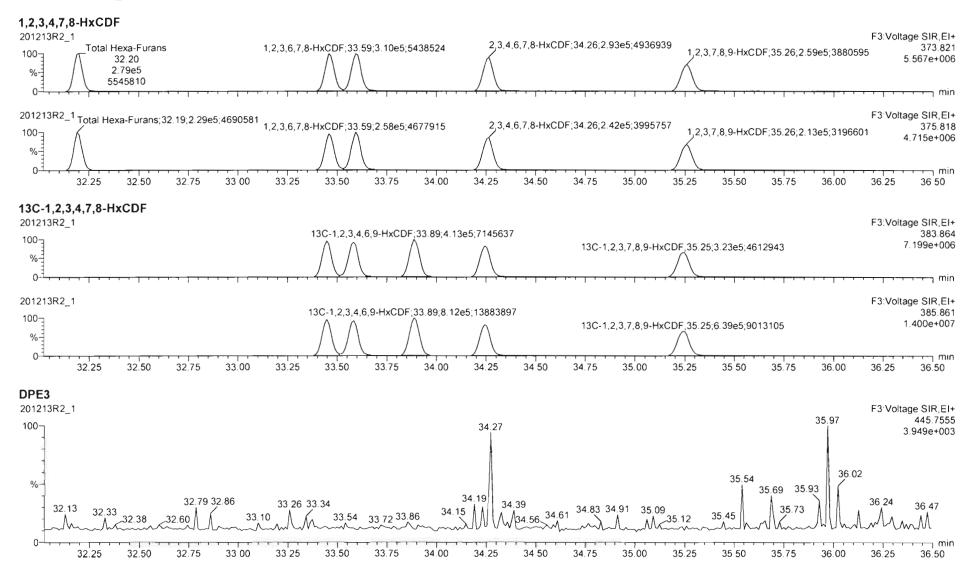
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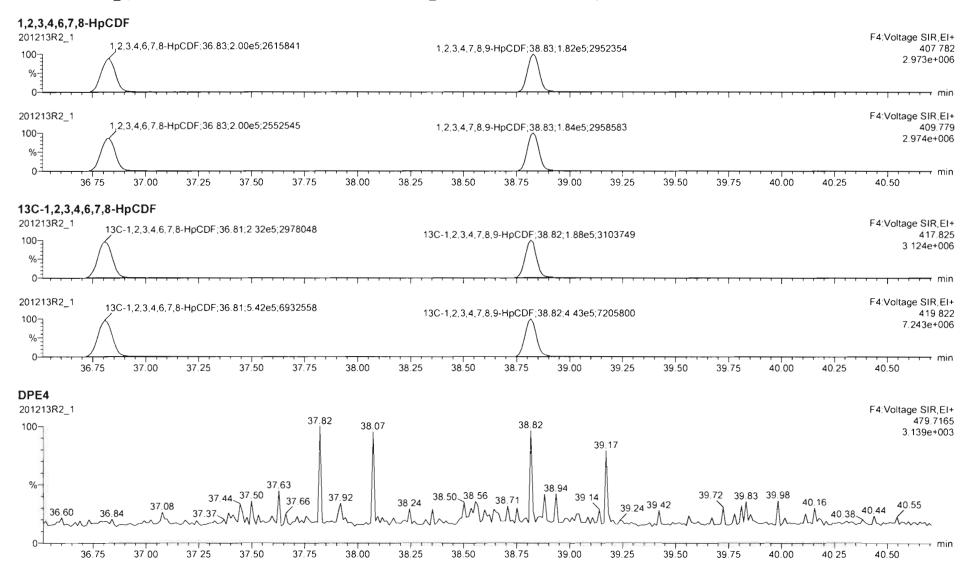
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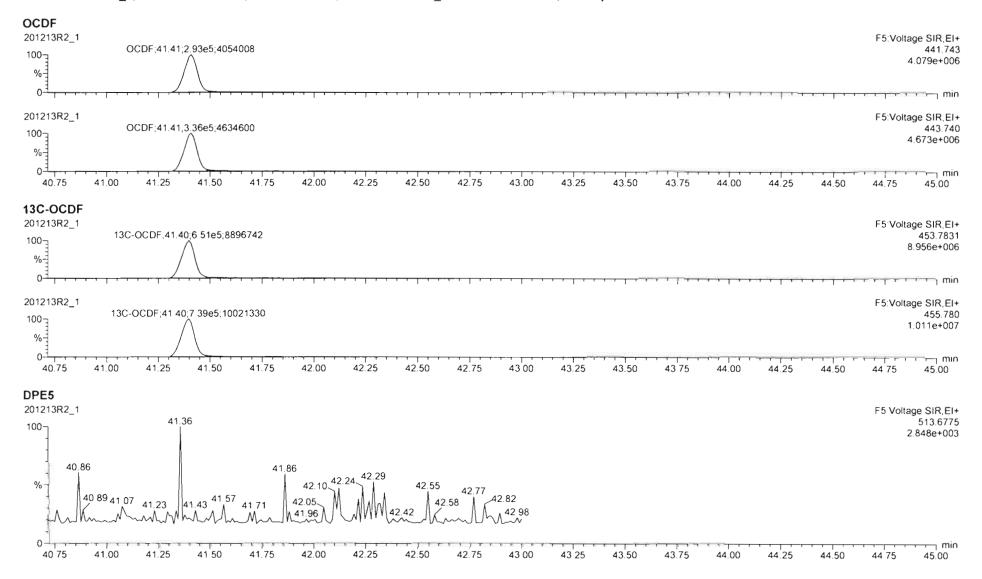
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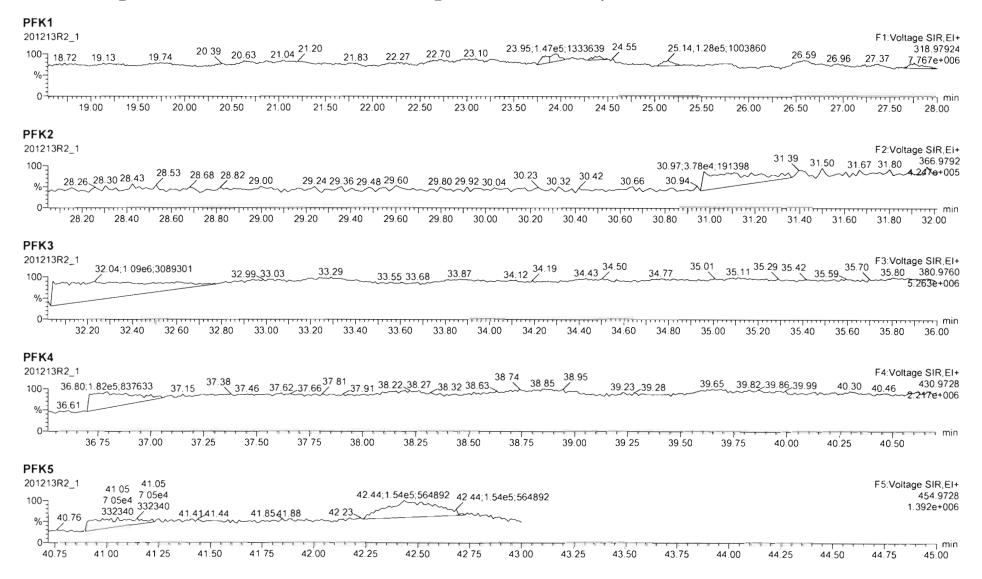
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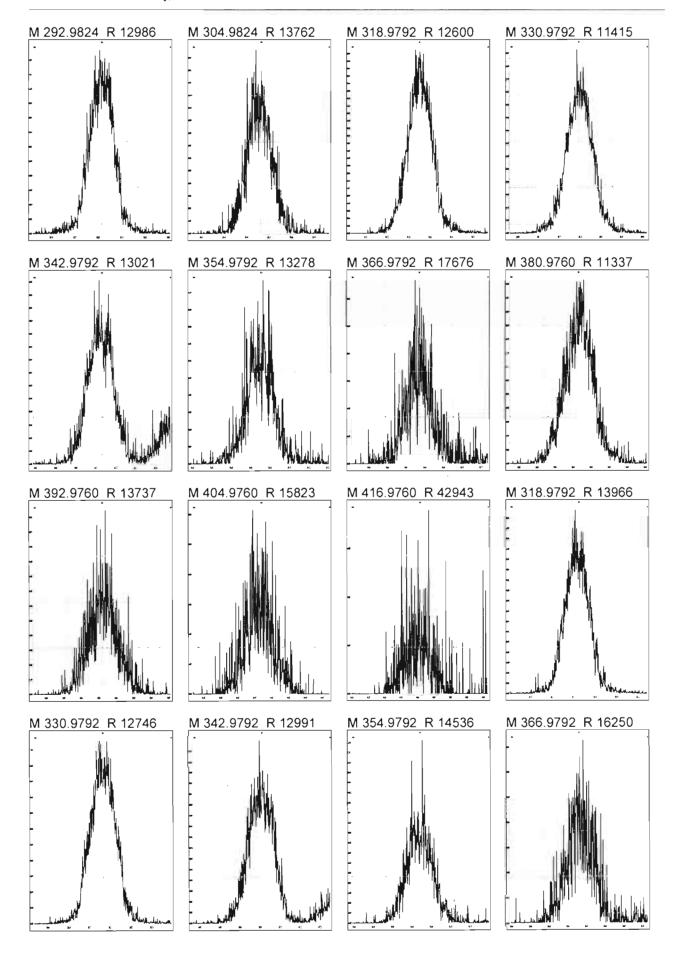
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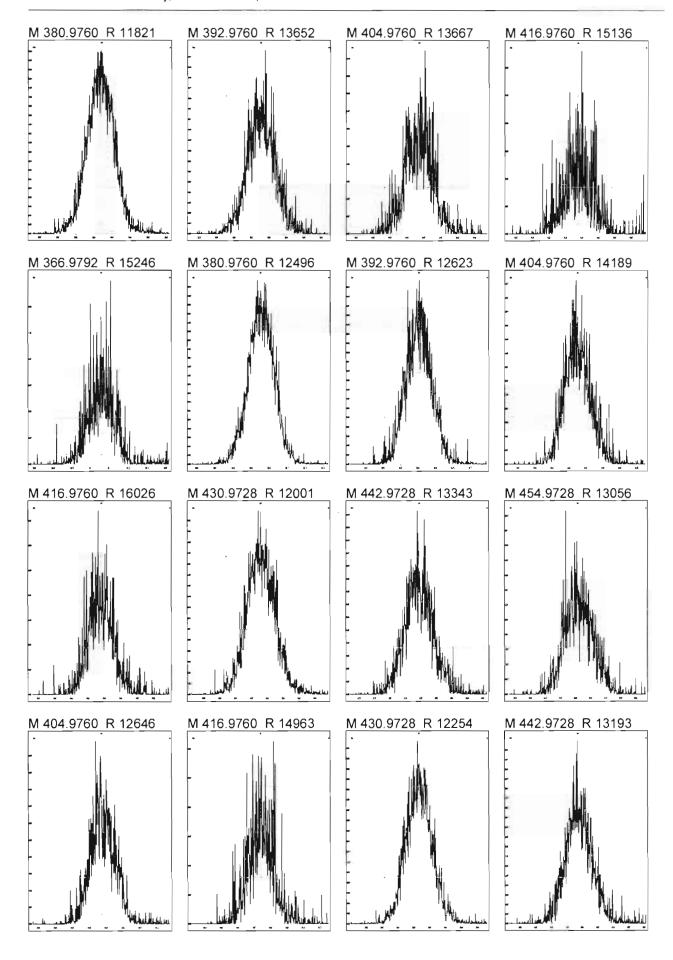
Sunday, December 13, 2020 21:30:04 Pacific Standard Time



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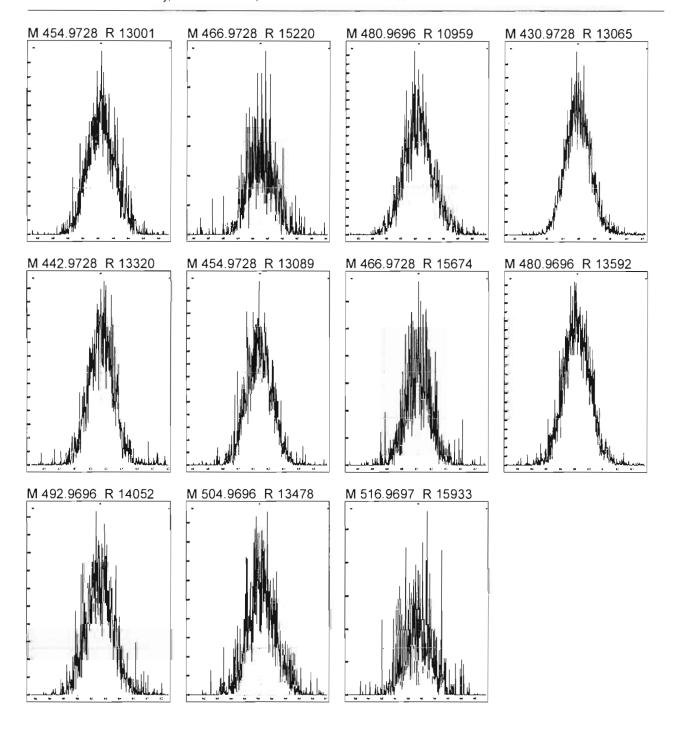
Sunday, December 13, 2020 21:30:04 Pacific Standard Time



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Printed:

Sunday, December 13, 2020 21:30:04 Pacific Standard Time



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...... JALIBRATION STANDARDS REVIEW CHECKLIST

Beg. Salbration ID: ST2012 14R1_2	_	.1	Reviewed By: 6PB 12/15/2020	As.	
End Calibration ID: NA			initials & Date		
	Beg.	End	₹ŧ	Beg. End	<u>d</u> /
ion abundance within QC limits?	V	MA	Mass resolution ≥	~ ~	3
Concentrations within criteria?		ф	□ 5k □ 6-8K □ 8K ☑ 10K 1614 1699 429 1613/1668/8280		
TCDD/TCDF Valleys <25%		Ф	Intergrated peaks display correctly?	MA	+
First and last eluters present?		ф	GC Break <20%		
Retention Times within criteria?	7	Ф	8280 CS1 End Standard:		
Verification Std. named correctly?	V	中	- Ratios within limits, S/N <2.54, CS1 within 12 hours	NA	1
(ST-Year-Month-Day-VG ID)					
Forms signed and dated?		\Box	Comments:		
Correct ICAL referenced?	HIN			۸۰	٠.
Run Log:			14	غ	
- Correct instrument listed?	V			•	:
- Samples within 12 hour clock? - Bottle position verfied?	Y	N			

ID: LR - HCSRC

Rev. No.: 0 Rev. Date: 06/06/2017

Page: 1 of 1

MassLynx 4.1 SCN815

Page 1 of 2

Dataset:

U:\VG12.PRO\Results\201214R1\201214R1_2.qld

Last Altered:

Monday, December 14, 2020 12:09:46 Pacific Standard Time

Printed:

Monday, December 14, 2020 12:20:55 Pacific Standard Time

GPB 12/15/2020

Method: U:\VG12.PRO\MethDB\1613rrt-12-11-20.mdb 11 Dec 2020 08:35:32

Calibration: U:\VG12.PRO\CurveDB\dbDIOXIN_1613vg12-12-03-20.cdb 04 Dec 2020 11:36:07

Name: 201214R1_2, Date: 14-Dec-2020, Time: 11:24:15, ID: ST201214R1_2 1613 CS3 20L0301, Description: 1613 CS3 20L0301

48.8	# Name	Resp	IS Resp	RA	n/y	RRF	Pred.RT	RT	RT Flag	Pred.RRT	RRT	Conc.	%Rec	STD out
1	1 2,3,7,8-TCDD	1.27e5	1.26e6	0.77	NO	0.980	26.38	26.38	NO	1.001	1.001	10.271	103	NO
2	2 1,2,3,7,8-PeCDD	4.85e5	9.68e5	0.62	NO	0.932	31.06	31.05	NO	1.001	1.000	53.732	107	NO
3	3 1,2,3,4,7,8-HxCDD	4.10e5	7.69e5	1.24	NO	1.02	34.36	34.36	NO	1.001	1.001	52.228	104	NO
4	4 1,2,3,6,7,8-HxCDD	4.19e5	8.78e5	1.23	NO	0.902	34.48	34.47	NO	1.001	1.000	52.902	106	NO
5	5 1,2,3,7,8,9-HxCDD	4.12e5	8.51e5	1.23	NO	0.954	34.74	34.74	NO	1.000	1.000	50.742	101	NO
6	6 1,2,3,4,6,7,8-HpCDD	3.17e5	6.97e5	1.03	NO	0.918	38.20	38.20	NO	1.000	1.000	49.520	99.0	NO
7	7 OCDD	5.02e5	1.09e6	0.88	NO	0.866	41.10	41.10	NO	1.000	1.000	106.32	106	NO
8	8 2,3,7,8-TCDF	1.42e5	1.77e6	0.74	NO	0.848	25.67	25.68	NO	1.000	1.001	9.4613	94.6	NO
9	9 1,2,3,7,8-PeCDF	7.35e5	1.46e6	1.55	NO	0.960	29.78	29.80	NO	1.000	1.000	52.529	105	NO
10	10 2,3,4,7,8-PeCDF	7.53e5	1.36e6	1.52	NO	1.07	30.86	30.85	NO	1.001	1.000	51.840	104	NO
11	11 1,2,3,4,7,8-HxCDF	4.79e5	9.93e5	1.21	NO	0.986	33.44	33.45	NO	1.000	1.001	48.986	98.0	NO
12	12 1,2,3,6,7,8-HxCDF	5.12e5	9.95e5	1.21	NO	1.04	33.58	33.58	NO	1.001	1.001	49.544	99.1	NO
13	13 2,3,4,6,7,8-HxCDF	4.73e5	9.34e5	1.23	NO	1.02	34.25	34.24	NO	1.001	1.000	49.707	99.4	NO
14	14 1,2,3,7,8,9-HxCDF	4.54e5	9.23e5	1.24	NO	0.991	35.24	35.25	NO	1.000	1.001	49.674	99.3	NO
15	15 1,2,3,4,6,7,8-HpCDF	3.67e5	7.01e5	1.01	NO	1.05	36.81	36.82	NO	1.000	1.001	49.825	99.6	NO
16	16 1,2,3,4,7,8,9-HpCDF	3.32e5	5.66e5	1.01	NO	1.18	38.82	38.82	NO	1.000	1.000	49.839	99.7	NO
17	17 OCDF	5.54e5	1.23e6	0.87	NO	0.896	41.38	41.39	NO	1.000	1.000	100.54	101	NO
18	18 13C-2,3,7,8-TCDD	1.26e6	1.18e6	0.79	NO	1.06	26.35	26.35	NO	1.030	1.030	101.23	101	NO
19	19 13 C -1,2,3,7,8-PeCDD	9.68e5	1.18e6	0.63	NO	0.785	31.19	31.03	NO	1.219	1.213	104.90	105	NO
20	20 13C-1,2,3,4,7,8-HxCDD	7.69e5	1.10e6	1.29	NO	0.621	34.34	34.34	NO	1.014	1.014	112.32	112	NO
21	21 13C-1,2,3,6,7,8-HxCDD	8.78e5	1.10e6	1.25	NO	0.734	34.46	34.46	NO	1.017	1.017	108.34	108	NO
22	22 13C-1,2,3,7,8,9-HxCDD	8.51e5	1.10e6	1.27	NO	0.723	34.74	34.73	NO	1.026	1.025	106.69	107	NO
23	23 13C-1,2,3,4,6,7,8-HpCDD	6.97e5	1.10e6	1.04	NO	0.568	38.24	38.19	NO	1.129	1.127	111.25	111	NO
24	24 13C-OCDD	1.09e6	1.10e6	0.90	NO	0.496	41.18	41.09	NO	1.216	1.213	199.47	99.7	NO
25	25 13C-2,3,7,8-TCDF	1.77e6	1.87e6	0.77	NO	0.919	25.65	25.67	NO	1.003	1.003	102.83	103	NO
26	26 13C-1,2,3,7,8-PeCDF	1.46e6	1.87e6	1.59	NO	0.715	29.90	29.78	NO	1.169	1.164	109.00	109	NO
27	27 13C-2,3,4,7,8-PeCDF	1.36e6	1.87e6	1.58	NO	0.689	30.99	30.84	NO	1.212	1.206	105.79	106	NO
28	28 13C-1,2,3,4,7,8-HxCDF	9.93e5	1.10e6	0.50	NO	0.873	33.44	33.43	NO	0.987	0.987	102.95	103	NO
29	29 13C-1,2,3,6,7,8-HxCDF	9.95e5	1.10e6	0.51	NO	0.933	33.57	33.56	NO	0.991	0.991	96.583	96.6	NO
30	30 13C-2,3,4,6,7,8-HxCDF	9.34e5	1.10e6	0.51	NO	0.843	34.24	34.23	NO	1.011	1.010	100.33	100	NO
31	31 13C-1,2,3,7,8,9-HxCDF	9.23e5	1.10e6	0.51	NO	0.780	35.24	35.23	NO	1.040	1.040	107.16	107	NO

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Quantify Sample Summary Report

MassLynx 4.1 SCN815

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Vista Analytical Laboratory

Dataset:

U:\VG12.PRO\Results\201214R1\201214R1_2.qld

Last Altered:

Monday, December 14, 2020 12:09:46 Pacific Standard Time

Printed: Monday, December 14, 2020 12:20:55 Pacific Standard Time

Name: 201214R1_2, Date: 14-Dec-2020, Time: 11:24:15, ID: ST201214R1_2 1613 CS3 20L0301, Description: 1613 CS3 20L0301

1000	# Name	Resp	IS Resp	RA	n/y	RRF	Pred.RT	RT	RT Flag	Pred.RRT	RRT	Conc.	%Rec	STD out
32	32 13C-1,2,3,4,6,7,8-HpCDF	7.01e5	1.10e6	0.42	NO	0.726	36.81	36.79	NO	1.087	1.086	87.439	87.4	NO
33	33 13C-1,2,3,4,7,8,9-HpCDF	5.66e5	1.10e6	0.43	NO	0.491	38.82	38.81	NO	1.146	1.145	104.38	104	NO
34	34 13C-OCDF	1.23e6	1.10e6	0.87	NO	0.565	41.40	41.38	NO	1.222	1.221	197.00	98.5	NO
35	35 37CI-2,3,7,8-TCDD	1.59e5	1.18e6			1.22	26.35	26.38	NO	1.030	1.031	11.077	111	NO
36	36 13C-1,2,3,4-TCDD	1.18e6	1.18e6	0.80	NO	1.00	25.64	25.58	NO	1.000	1.000	100.00	100	NO
37	37 13C-1,2,3,4-TCDF	1.87e6	1.87e6	0.79	NO	1.00	24.13	24.09	NO	1.000	1.000	100.00	100	NO
38	38 13C-1,2,3,4,6,9-HxCDF	1.10e6	1.10e6	0.51	NO	1.00	33.92	33.88	NO	1.000	1.000	100.00	100	YES OK

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Untitled

Last Altered:

Tuesday, December 15, 2020 6:52:02 AM Pacific Standard Time

Printed:

Tuesday, December 15, 2020 6:53:09 AM Pacific Standard Time

Method: U:\VG12.PRO\MethDB\1613rrt-12-11-20.mdb 11 Dec 2020 08:35:32

Calibration: U:\VG12.PRO\CurveDB\dbDIOXIN_1613vg12-12-03-20.cdb 04 Dec 2020 11:36:07

Compound name: 2,3,4,7,8-PeCDF

		Name	ID	Acq.Date	Acq.Time
1		201214R1_1	ST201214R1_1 1613 CS3 20L0301	14-Dec-20	10:05:30
2		201214R1_2	ST201214R1_2 1613 CS3 20L0301	14-Dec-20	11:24:15
3		201214R1_3	SOLVENT BLANK	14-Dec-20	12:12:55
4		201214R1_4	SOLVENT BLANK	14-Dec-20	13:02:53
5		201214R1_5	B0L0040-BS1 OPR 10	14-Dec-20	13:49:10
6	(\widehat{A})	201214R1_6			
7	•	201214R1_7	B0L0040-BLK1 Method Blank 10	14-Dec-20	15:22:36
8		201214R1_8	2002431-06@10X USMPDI-044SC-A-10-11-2	14-Dec-20	16:09:29
9		201214R1_9	2002434-10 USMPDI-056SC-A-01-02-201107	14-Dec-20	16:53:43
10		201214R1_10	$2002434\text{-}13 \; \text{USMPDI-}056\text{SC-A-}04\text{-}05\text{-}201107 \; \dots \\$	14-Dec-20	17:37:57
11		201214R1_11	80L0034-DUP1 Duplicate 16.99	14-Dec-20	18:22:12
12		201214R1_12	B0L0034-DUP2 Duplicate 17.17	14-Dec-20	19:06:26
13		201214R1_13	2002435-01 USMPDI-013SC-A-01-02-201108	14-Dec-20	19:50:42
14		201214R1_14	2002435-02 USMPDI-013SC-A-02-03-201108	14-Dec-20	20:34:57

A) Instrument paused, allowed solvent blank (CH) to go through GC cycle, no dutu acquired HN 12/15/2020

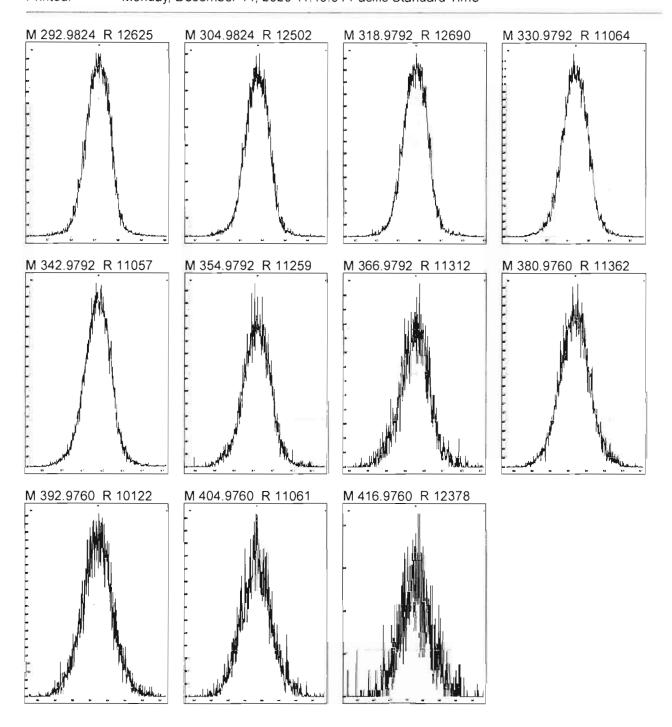
Work Order 2002434 Page 591 of 955

File:

Experiment: OCDD_DIOXIN.exp Reference: Pfk.ref Function: 1 @ 200 (ppm)

Printed:

Monday, December 14, 2020 11:19:04 Pacific Standard Time



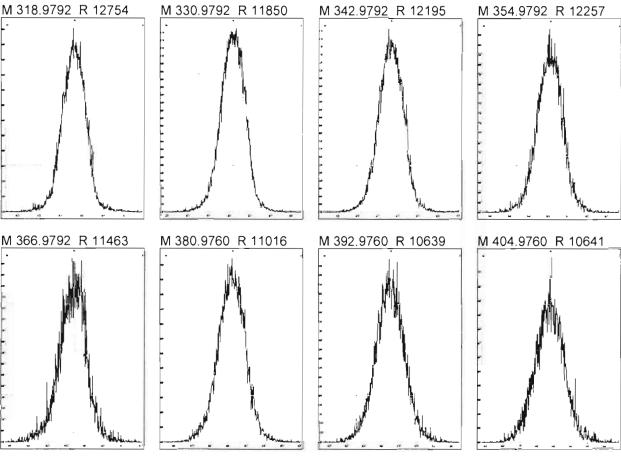
Work Order 2002434 Page 592 of 955

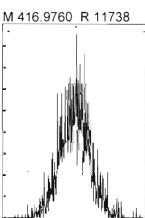
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Experiment: OCDD_DIOXIN.exp Reference: Pfk.ref Function: 2 @ 200 (ppm)

Printed:

Monday, December 14, 2020 11:20:11 Pacific Standard Time

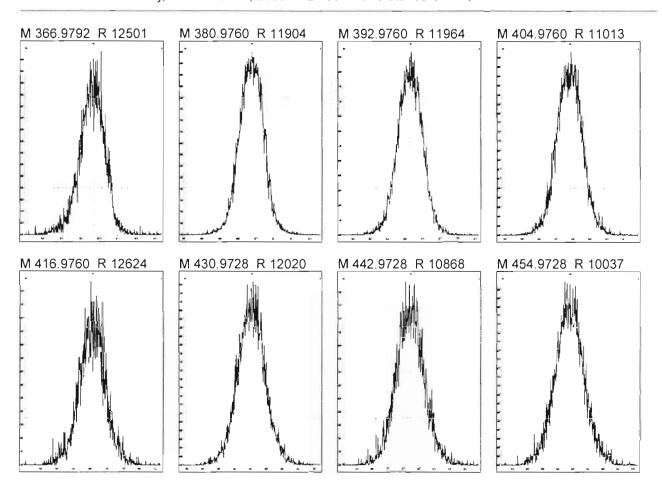




Work Order 2002434 Page 593 of 955

File: Experiment: OCDD_DIOXIN.exp Reference: Pfk.ref Function: 3 @ 200 (ppm)

Printed: Monday, December 14, 2020 11:21:09 Pacific Standard Time



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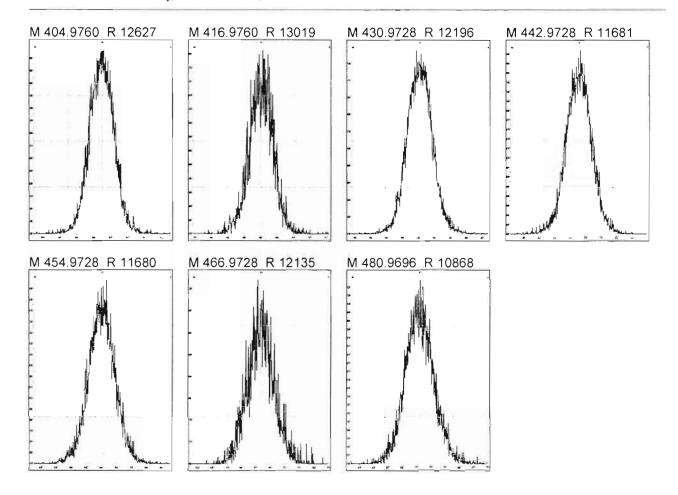
Page 1 of 1

File:

Experiment: OCDD_DIOXIN.exp Reference: Pfk.ref Function: 4 @ 200 (ppm)

Printed:

Monday, December 14, 2020 11:22:03 Pacific Standard Time



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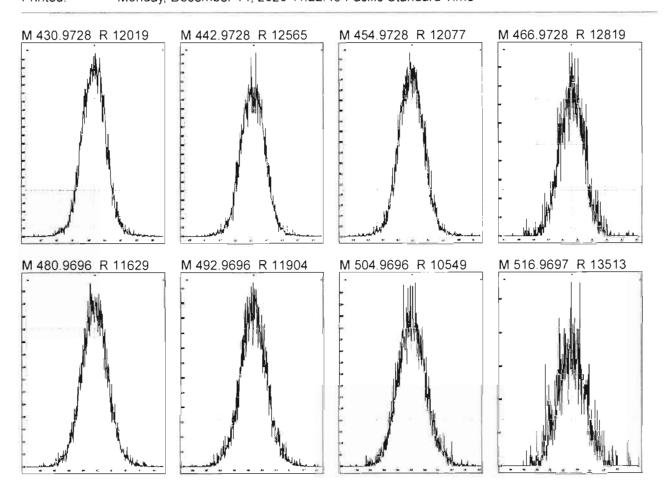
Page 1 of 1

File:

Experiment: OCDD_DIOXIN.exp Reference: Pfk.ref Function: 5 @ 200 (ppm)

Printed:

Monday, December 14, 2020 11:22:48 Pacific Standard Time



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Dataset: U:\VG12.PRO\Results\201214R1\201214R1_CPSM.qld

Last Altered: Monday, December 14, 2020 12:15:08 Pacific Standard Time Printed: Monday, December 14, 2020 12:15:48 Pacific Standard Time

Method: U:\VG12.PRO\MethDB\CPSM.mdb 11 Dec 2020 14:14:32

Calibration: U:\VG12.PRO\CurveDB\dbDIOXIN_1613vg12-12-03-20.cdb 04 Dec 2020 11:36:07

Name: 201214R1_2, Date: 14-Dec-2020, Time: 11:24:15, ID: ST201214R1_2 1613 CS3 20L0301, Description: 1613 CS3 20L0301

	# Name	RT
1	1 1,3,6,8-TCDD (First)	22.56
2	2 1,2,8,9-TCDD (Last)	27.27
3	3 1,2,4,7,9-PeCDD (First)	28.79
4	4 1,2,3,8,9-PeCDD (Last)	31.41
5	5 1,2,4,6,7,9-HxCDD (First)	32.71
6	6 1,2,3,7,8,9-HxCDD (Last)	34.74
7	7 1,2,3,4,6,7,9-HpCDD (First)	37.20
8	8 1,2,3,4,6,7,8-HpCDD (Last)	38.20
9	9 1,3,6,8-TCDF (First)	20.30
10	10 1,2,8,9-TCDF (Last)	27.56
11	11 1,3,4,6,8-PeCDF (First)	27.13
12	12 1,2,3,8,9-PeCDF (Last)	31.76
13	13 1,2,3,4,6,8-HxCDF (First)	32.18
14	14 1,2,3,7,8,9-HxCDF (Last)	35.25
15	15 1,2,3,4,6,7,8-HpCDF (First)	36.82
16	16 1,2,3,4,7,8,9-HpCDF (Last)	38.82

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Quantify Sample Report MassLynx 4.1 SCN815

Vista Analytical Laboratory VG-11

Dataset: U:\VG12.PRO\Results\201214R1\201214R1_CPSM.qld

Last Altered: Monday, December 14, 2020 12:15:08 Pacific Standard Time Printed: Monday, December 14, 2020 12:15:48 Pacific Standard Time

FIN 12/14/20

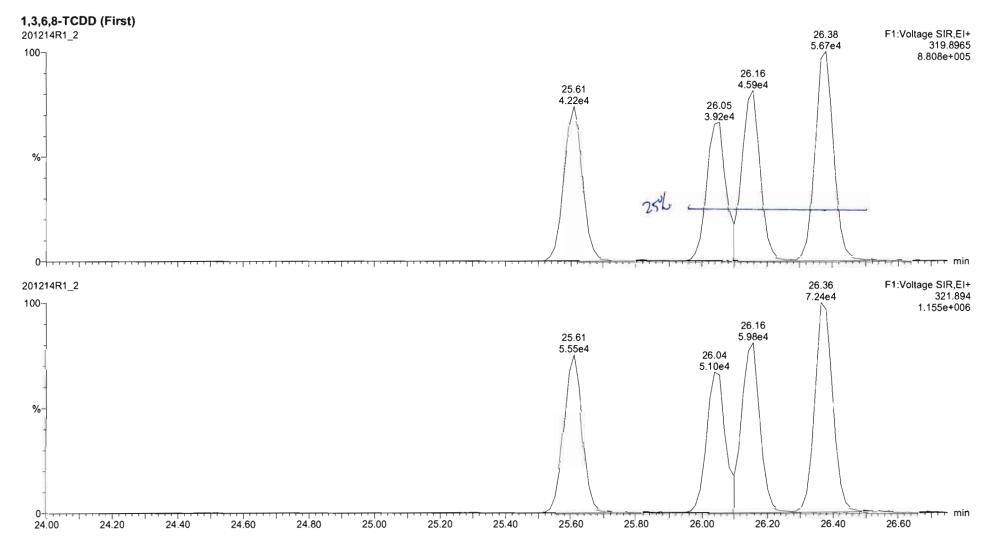
GPB 12/15/2020

Page 1 of 2

Method: U:\VG12.PRO\MethDB\CPSM.mdb 11 Dec 2020 14:14:32

Calibration: U:\VG12.PRO\CurveDB\dbDIOXIN_1613vg12-12-03-20.cdb 04 Dec 2020 11:36:07

Name: 201214R1_2, Date: 14-Dec-2020, Time: 11:24:15, ID: ST201214R1_2 1613 CS3 20L0301, Description: 1613 CS3 20L0301



Work Order 2002434

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Quantify Sample Report

MassLynx 4.1 SCN815

Page 2 of 2

Vista Analytical Laboratory VG-11

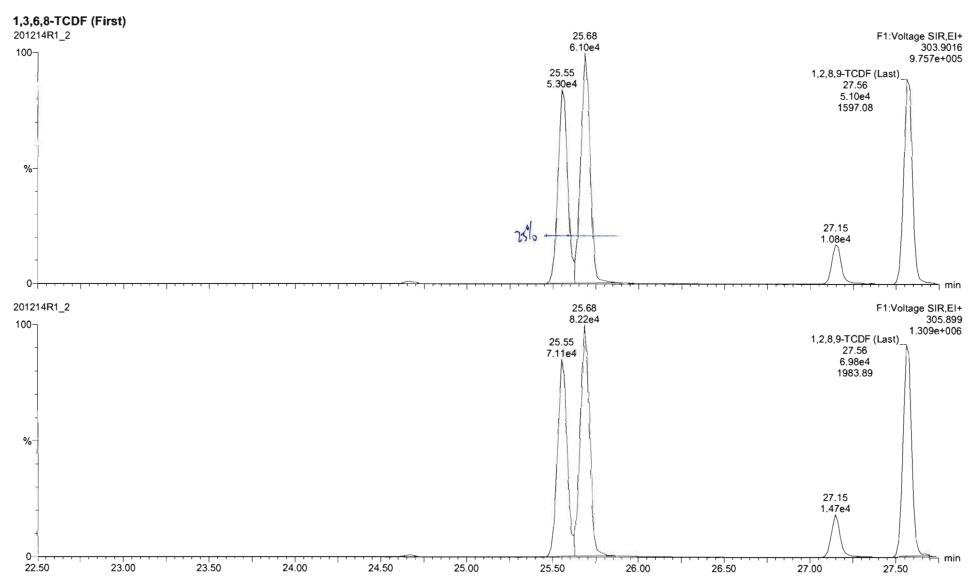
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Last Altered: Monday, December 14, 2020 12:15:08 Pacific Standard Time

Printed: Monday, December 14, 2020 12:15:48 Pacific Standard Time

LIN 12/14/2020 GPB 12/15/2020

Name: 201214R1_2, Date: 14-Dec-2020, Time: 11:24:15, ID: ST201214R1_2 1613 CS3 20L0301, Description: 1613 CS3 20L0301



Dataset:

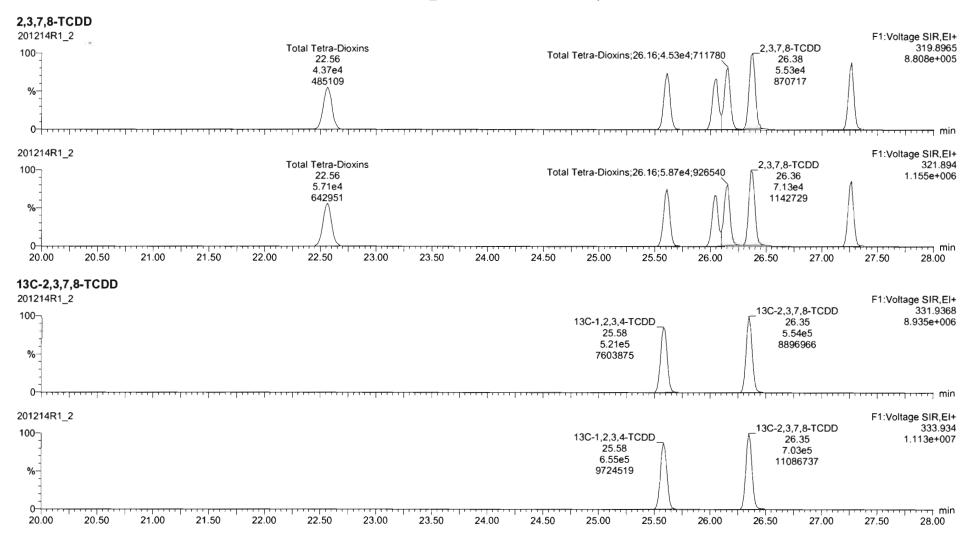
U:\VG12.PRO\Results\201214R1\201214R1_2.qld

Last Altered: Printed: Monday, December 14, 2020 12:09:46 Pacific Standard Time Monday, December 14, 2020 12:14:47 Pacific Standard Time

Method: U:\VG12.PRO\MethDB\1613rrt-12-11-20.mdb 11 Dec 2020 08:35:32

Calibration: U:\VG12.PRO\CurveDB\dbDIOXIN 1613vg12-12-03-20.cdb 04 Dec 2020 11:36:07

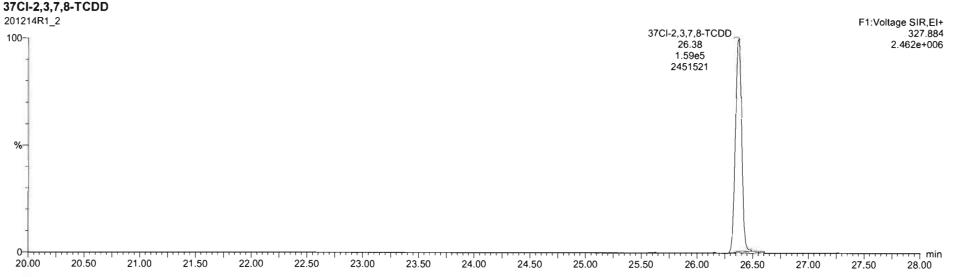
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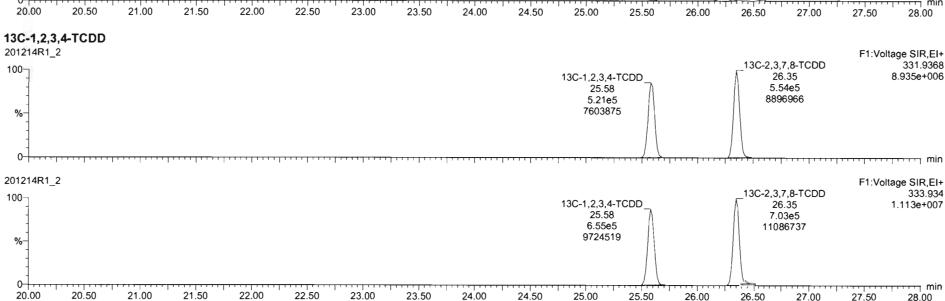


Dataset: U:\VG12.PRO\Results\201214R1\201214R1_2.qld

Last Altered: Monday, December 14, 2020 12:09:46 Pacific Standard Time Printed: Monday, December 14, 2020 12:14:47 Pacific Standard Time

Name: 201214R1_2, Date: 14-Dec-2020, Time: 11:24:15, ID: ST201214R1_2 1613 CS3 20L0301, Description: 1613 CS3 20L0301





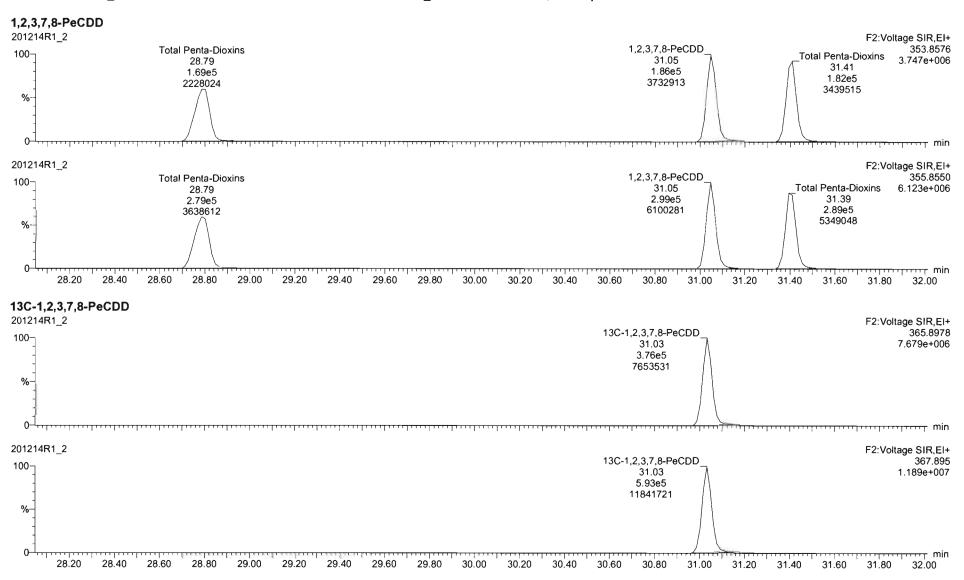
Work Order 2002434 Page 601 of 955

Dataset:

U:\VG12.PRO\Results\201214R1\201214R1_2.qld

Last Altered: Monday, December 14, 2020 12:09:46 Pacific Standard Time Printed: Monday, December 14, 2020 12:14:47 Pacific Standard Time

Name: 201214R1_2, Date: 14-Dec-2020, Time: 11:24:15, ID: ST201214R1_2 1613 CS3 20L0301, Description: 1613 CS3 20L0301



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Quantify Sample Report

MassLynx 4.1 SCN815

Vista Analytical Laboratory

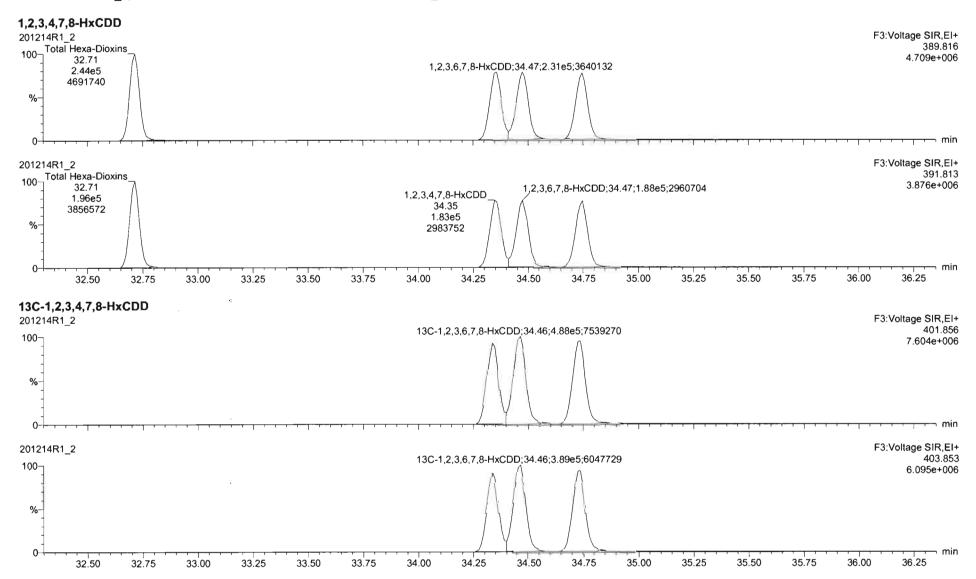
Dataset:

U:\VG12.PRO\Results\201214R1\201214R1_2.qld

Last Altered: Printed:

Monday, December 14, 2020 12:09:46 Pacific Standard Time Monday, December 14, 2020 12:14:47 Pacific Standard Time

Name: 201214R1_2, Date: 14-Dec-2020, Time: 11:24:15, ID: ST201214R1_2 1613 CS3 20L0301, Description: 1613 CS3 20L0301



Quantify Sample Report

MassLynx 4.1 SCN815

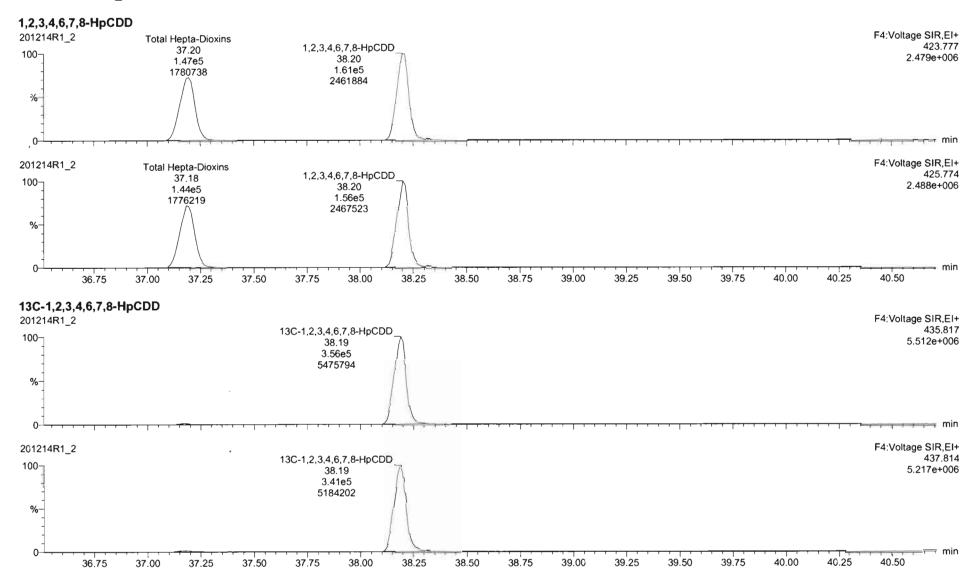
Vista Analytical Laboratory

Dataset:

U:\VG12.PRO\Results\201214R1\201214R1_2.qld

Last Altered: Printed: Monday, December 14, 2020 12:09:46 Pacific Standard Time Monday, December 14, 2020 12:14:47 Pacific Standard Time

Name: 201214R1_2, Date: 14-Dec-2020, Time: 11:24:15, ID: ST201214R1_2 1613 CS3 20L0301, Description: 1613 CS3 20L0301



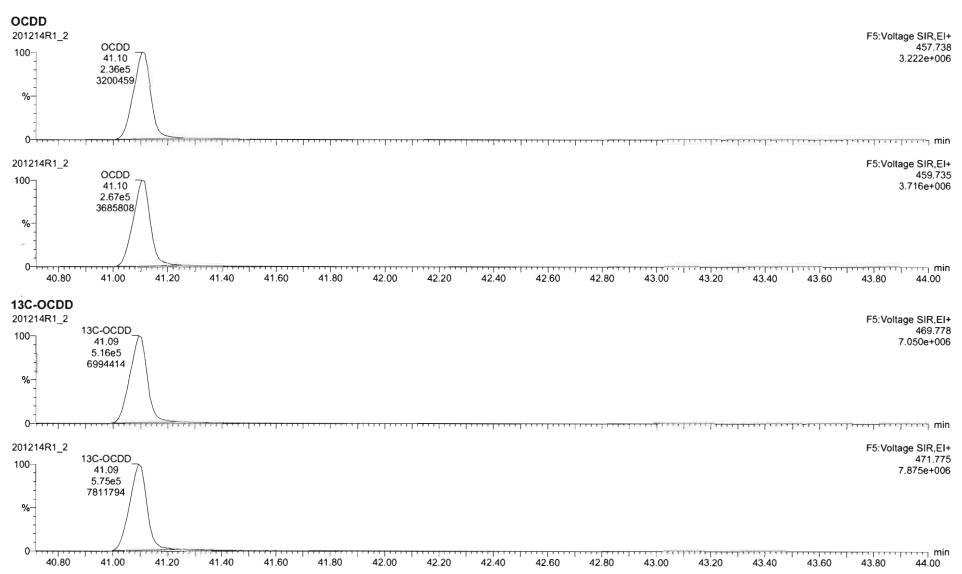
Dataset:

U:\VG12.PRO\Results\201214R1\201214R1_2.qld

Last Altered: Printed:

Monday, December 14, 2020 12:09:46 Pacific Standard Time Monday, December 14, 2020 12:14:47 Pacific Standard Time

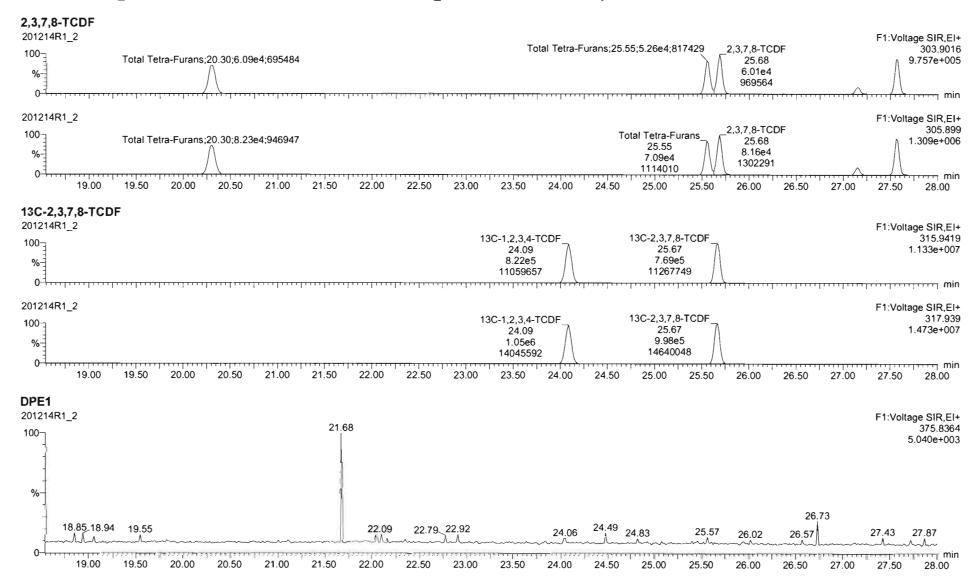
Name: 201214R1_2, Date: 14-Dec-2020, Time: 11:24:15, ID: ST201214R1_2 1613 CS3 20L0301, Description: 1613 CS3 20L0301



U:\VG12.PRO\Results\201214R1\201214R1 2.qld

Last Altered: Printed: Monday, December 14, 2020 12:09:46 Pacific Standard Time Monday, December 14, 2020 12:14:47 Pacific Standard Time

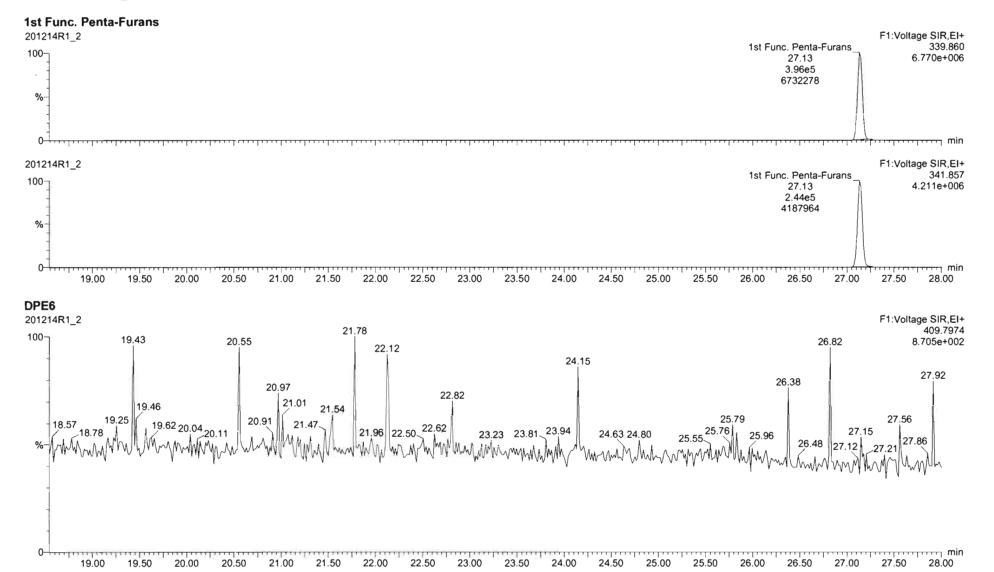
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Dataset: U:\VG12.PRO\Results\201214R1\201214R1_2.qld

Last Altered: Monday, December 14, 2020 12:09:46 Pacific Standard Time Printed: Monday, December 14, 2020 12:14:47 Pacific Standard Time

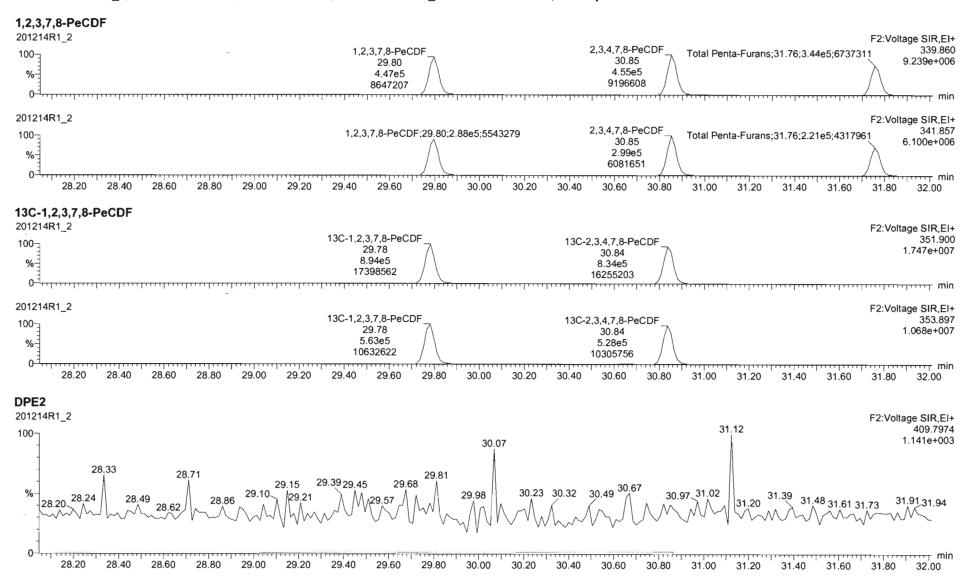
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Dataset: U:\VG12.PRO\Results\201214R1\201214R1_2.qld

Last Altered: Monday, December 14, 2020 12:09:46 Pacific Standard Time Printed: Monday, December 14, 2020 12:14:47 Pacific Standard Time

Name: 201214R1_2, Date: 14-Dec-2020, Time: 11:24:15, ID: ST201214R1_2 1613 CS3 20L0301, Description: 1613 CS3 20L0301

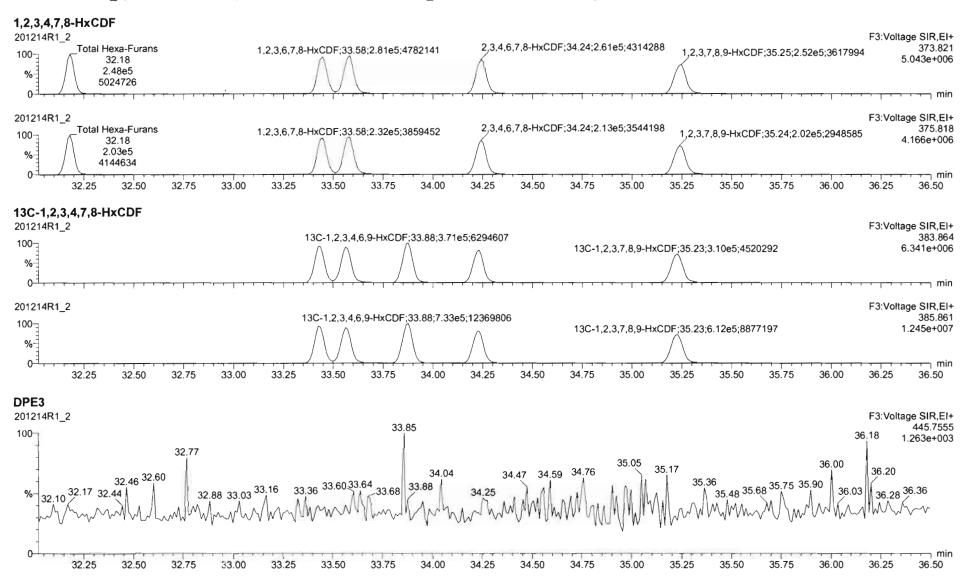


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Dataset: U:\VG12.PRO\Results\201214R1\201214R1_2.qld

Last Altered: Monday, December 14, 2020 12:09:46 Pacific Standard Time Printed: Monday, December 14, 2020 12:14:47 Pacific Standard Time

Name: 201214R1 2, Date: 14-Dec-2020, Time: 11:24:15, ID: ST201214R1_2 1613 CS3 20L0301, Description: 1613 CS3 20L0301

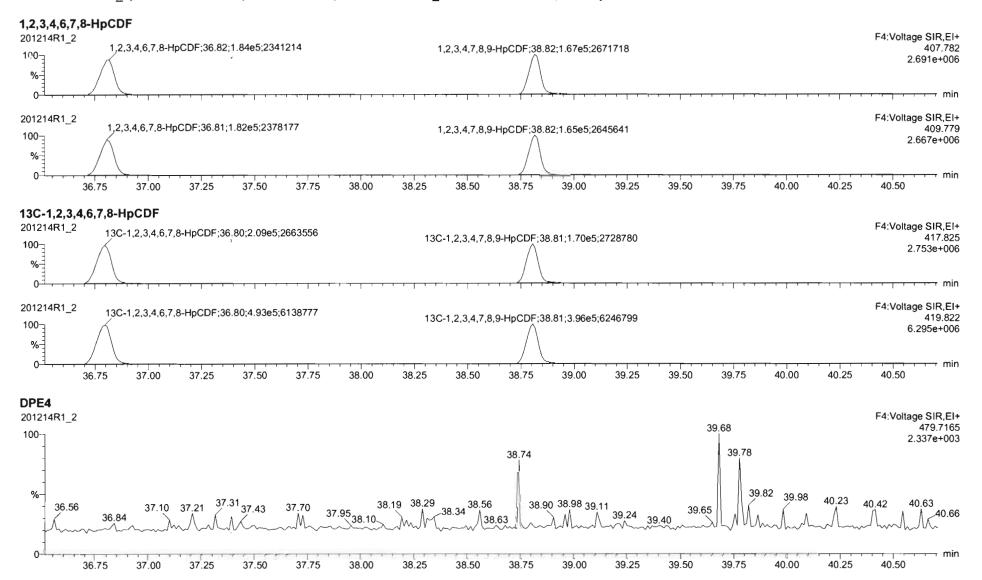


Dataset:

U:\VG12.PRO\Results\201214R1\201214R1_2.qld

Last Altered: Printed: Monday, December 14, 2020 12:09:46 Pacific Standard Time Monday, December 14, 2020 12:14:47 Pacific Standard Time

Name: 201214R1_2, Date: 14-Dec-2020, Time: 11:24:15, ID: ST201214R1_2 1613 CS3 20L0301, Description: 1613 CS3 20L0301

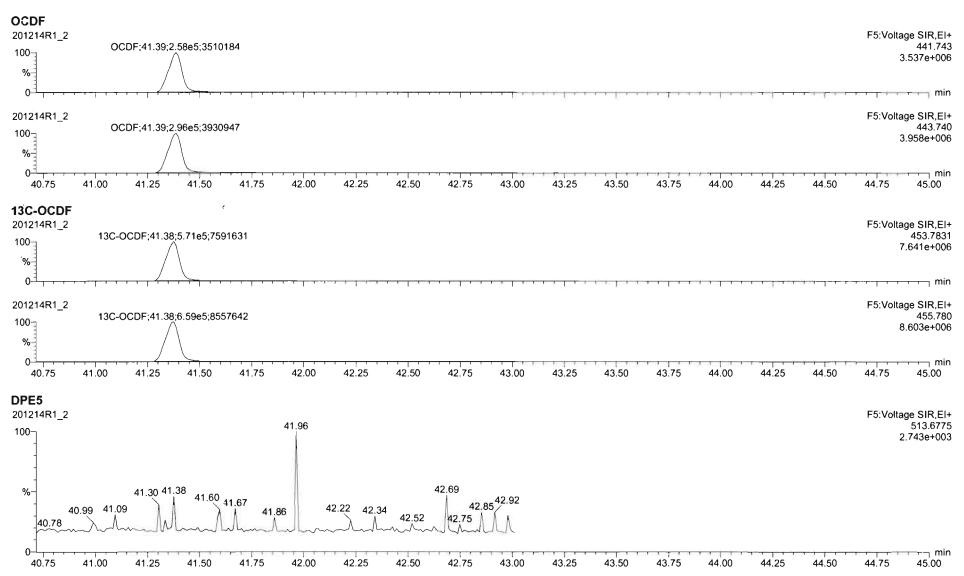


Page 11 of 13

Dataset: U:\VG12.PRO\Results\201214R1\201214R1_2.qld

Last Altered: Monday, December 14, 2020 12:09:46 Pacific Standard Time Printed: Monday, December 14, 2020 12:14:47 Pacific Standard Time

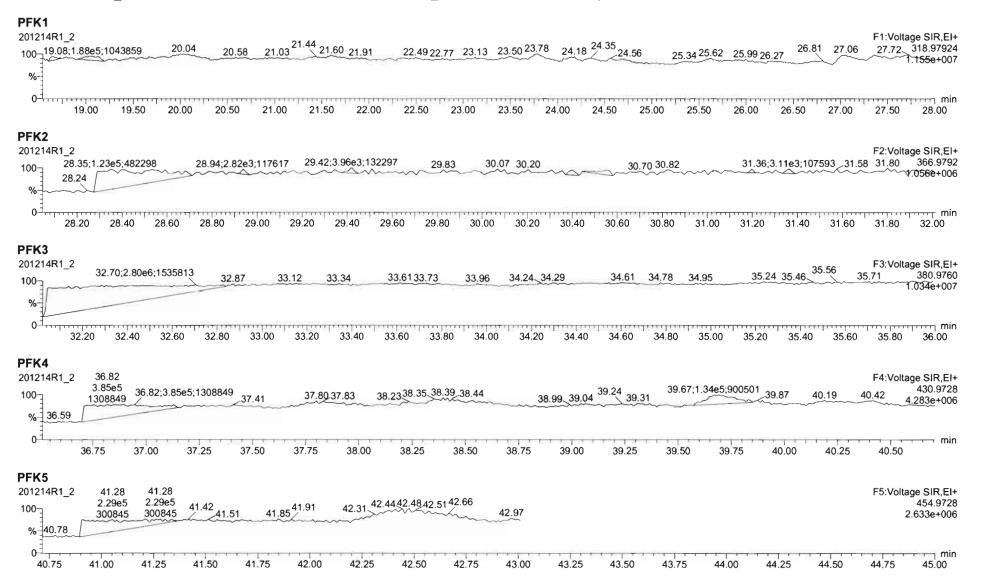
Name: 201214R1_2, Date: 14-Dec-2020, Time: 11:24:15, ID: ST201214R1_2 1613 CS3 20L0301, Description: 1613 CS3 20L0301



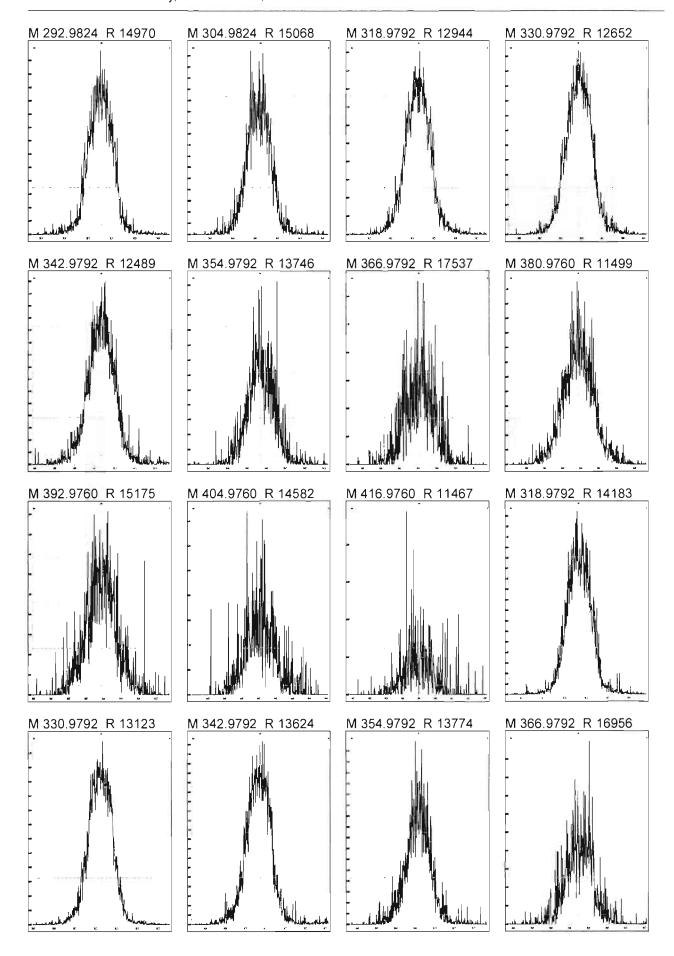
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Last Altered: Monday, December 14, 2020 12:09:46 Pacific Standard Time Printed: Monday, December 14, 2020 12:14:47 Pacific Standard Time

Name: 201214R1_2, Date: 14-Dec-2020, Time: 11:24:15, ID: ST201214R1_2 1613 CS3 20L0301, Description: 1613 CS3 20L0301

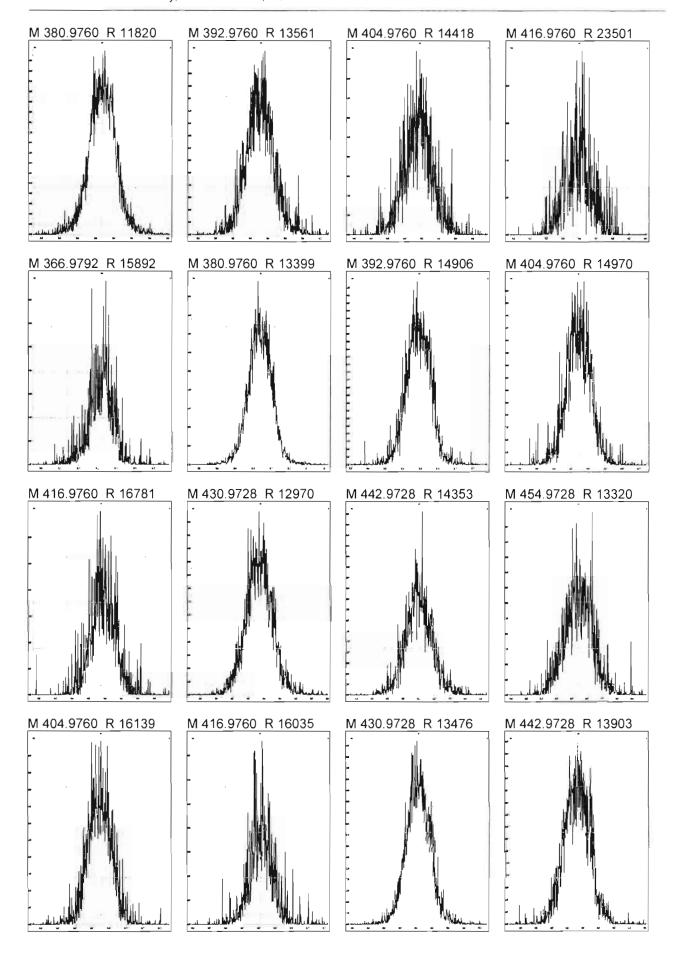


Tuesday, December 15, 2020 07:00:00 Pacific Standard Time



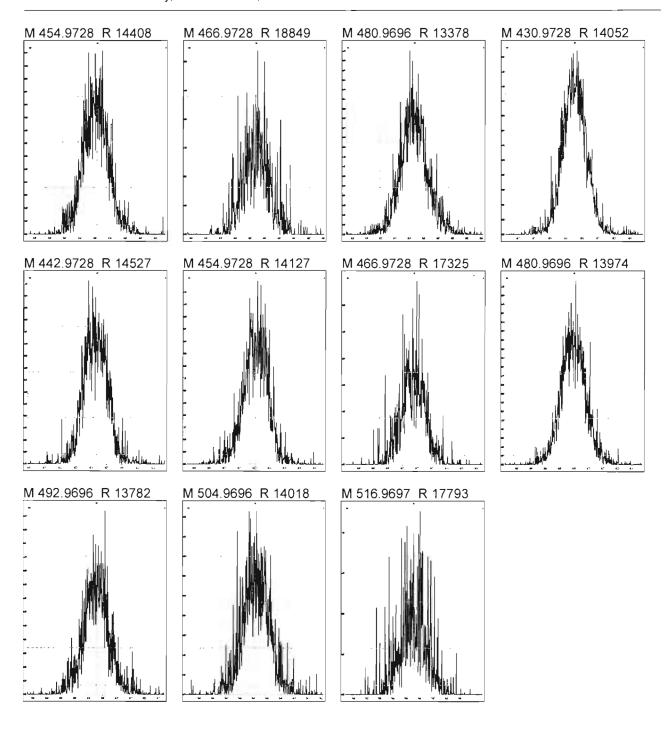
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Tuesday, December 15, 2020 07:00:00 Pacific Standard Time



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Tuesday, December 15, 2020 07:00:00 Pacific Standard Time



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HRMS CALIBRATION STANDARDS REVIEW CHECKLIST

Beg. Calbration ID:	•	,	Reviewed By: HC 12.31.7020		
End Calibration ID:	_		Initiais & Date		
Ion abundance within QC limits?	Beg.	End NA	Mass resolution ≥	Beg.	End
Concentrations within criteria?		ф	□ 5k □ 6-8K □ 8K ₪ 10K 1614 1699 429 1613/1668/8280		
TCDD/TCDF Valleys <25%		中	Intergrated peaks display correctly?		NA
First and last eluters present?		中	GC Break <20%	۲	;
Retention Times within criteria?		Ф	8280 CS1 End Standard:		
Verification Std. named correctly?		ф	- Ratios within limits, S/N <2.5:1, CS1 within 12 hours		NA
(ST-Year-Month-Day-VG ID)					
Forms signed and dated?		Ф	Comments:		
Correct ICAL referenced? Run Log:	<u>DB</u> _				
- Correct instrument listed?		V			
Samples within 12 hour clock?Bottle position verfied?	(V) XX	N			

Vista Analytical Laboratory El Dorado Hills, CA 95762 MassLynx 4.1

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Dataset:

U:\VG7.PRO\Results\201230D1\201230D1_1.qld

Last Altered:

Wednesday, December 30, 2020 11:57:45 Pacific Standard Time

Printed:

Wednesday, December 30, 2020 11:58:15 Pacific Standard Time

DB 12/30/20

le 12.31.2020

Method: C:\MassLynx\Default.PRO\MethDB\1613_rrt.mdb 10 Dec 2020 12:07:43 Callbration: U:\VG7.PRO\CurveDB\ZB_DIOXIN_1613vg7-9-30-20.cdb 01 Oct 2020 09:27:37

Name: 201230D1_1, Date: 30-Dec-2020, Time: 11:12:23, ID: ST201230D1-1 1613 CS3 20L0706, Description: 1613 CS3 20L0706

	# Name	Resp	RA	n/y	RRF	wt/vol	Pred.RT	RT	Pred.RRT	RRT	Conc.	%Rec	DL	EMPC
1	1 2,3,7,8-TCDD	4.70e3	0.71	NO	1.00	1.000	26.005	25.99	1.001	1.001	10.291	10382 173		10.3
2	2 1,2,3,7,8-PeCDD	1.53e4	0.62	NO	0.935	1.000	30.489	30.47	1.001	1.000	50.763		0.353	50.8
3	3 1,2,3,4,7,8-HxCDD	1.44e4	1.26	NO	1.15	1.000	33.722	33.72	1.000	1.000	52.007	104 78-128	0.574	52.0
4	4 1,2,3,6,7,8-HxCDD	1.47e4	1.31	NO	1.02	1.000	33.833	33.84	1.000	1.000	49.659	99.3 78-128	0.647	49.7
5	5 1,2,3,7,8,9-HxCDD	1.38e4	1.32	NO	1.06	1.000	34.130	34.12	1.001	1.001	48.732	97.5 82 -122	0.662	48.7
6	6 1,2,3,4,6,7,8-HpCDD	1.12e4	1.08	NO	1.00	1.000	37.553	37.54	1.000	1.000	50.278	101 86-116	0.745	50.3
7	7 OCDD	1.72e4	0.87	NO	0.952	1.000	40.702	40.70	1.000	1.000	104.54	105 79-176	1.00	105
8	8 2,3,7,8-TCDF	6.78e3	0.72	NO	1.01	1.000	25.342	25.35	1.001	1.001	9.5262	95.3 86 - 11L	0.203	9.53
9	9 1,2,3,7,8-PeCDF	2.60e4	1.58	NO	0.998	1.000	29.280	29.28	1.001	1.001	52.084		0.365	52.1
10	10 2,3,4,7,8-PeCDF	2.87e4	1.62	NO	1.07	1.000	30.317	30.29	1.001	1.000	54.663	109 82 - 120	0.321	54.7
11	11 1,2,3,4,7,8-HxCDF	2.18e4	1.27	NO	1.05	1.000	32.812	32.82	1.000	1.000	51.022	102 90 - 112	0.435	51.0
12	12 1,2,3,6,7,8-HxCDF	2.34e4	1.25	NO	1.10	1.000	32.943	32.96	1.000	1.001	51.141	102 88 - 114	0.463	51.1
13	13 2,3,4,6,7,8-HxCDF	2.18e4	1.22	NO	1.09	1.000	33.636	33.61	1.001	1.000	51.786	104 88 - 114	0.542	51.8
14	14 1,2,3,7,8,9-HxCDF	1.64e4	1.24	NO	1.08	1.000	34.612	34.62	1.000	1.000	51.975	104 90 -112	0.762	52.0
15	15 1,2,3,4,6,7,8-HpCDF	1.73e4	1.06	NO	1.13	1.000	36.217	36.19	1.001	1.000	50.495	101 90-110	0.629	50.5
16	16 1,2,3,4,7,8,9-HpCDF	1.33e4	0.99	NO	1.29	1.000	38.189	38.20	1.000	1.000	49.898	99.886-116	0.646	49.9
17	17 OCDF	2.33e4	0.90	NO	0.953	1.000	41.009	41.03	1.000	1.001	108.80	109 63-/59	0.631	109
18	18 13C-2,3,7,8-TCDD	4.55e4	0.77	NO	1.17	1.000	25.912	25.97	1.026	1.028	96.158	96.2 82-171	0.762	1
19	19 13C-1,2,3,7,8-PeCDD	3.22e4	0.57	NO	0.914	1.000	30.455	30.47	1.206	1.206	87.219	87.262-160	0.470	
20	20 13C-1,2,3,4,7,8-HxCDD	2.41e4	1.31	NO	0.634	1.000	33.706	33.71	1.014	1.014	89.781	89.8 85-117	0.878	1
21	21 13C-1,2,3,6,7,8-HxCDD	2.90e4	1.27	NO	0.724	1.000	33.815	33.83	1.017	1.018	94.521	94.5 85 -118	0.768	
22	22 13C-1,2,3,7,8,9-HxCDD	2.67e4	1.21	NO	0.716	1.000	34.085	34.10	1.025	1.026	88.254	88.3 85 -118	0.777	
23	23 13C-1,2,3,4,6,7,8-HpCDD	2.22e4	1.03	NO	0.660	1.000	37.528	37.54	1.129	1.129	79.440	79.4 72-138	1.00	
24	24 13C-OCDD	3.45e4	0.92	NO	0.587	1.000	40.533	40.70	1.219	1.224	139.15	69.6 48 - 207	0.591	
25	25 13C-2,3,7,8-TCDF	7.02e4	0.78	NO	1.02	1.000	25.313	25.32	1.002	1.002	104.05	104 71 - 140	0.740	
26	26 13C-1,2,3,7,8-PeCDF	4.99e4	1.67	NO	0.842	1.000	29.188	29.26	1.156	1.159	89.853	89.9 76-130	1.03	
27	27 13C-2,3,4,7,8-PeCDF	4.89e4	1.55	NO	0.802	1.000	30.079	30.29	1.191	1.199	92.483	92.5 77-130	1.08	
28	28 13C-1,2,3,4,7,8-HxCDF	4.06e4	0.51	NO	1.00	1.000	32.841	32.81	0.988	0.987	95.692	95.7 76- 131	0.932	
29	29 13C-1,2,3,6,7,8-HxCDF	4.16e4	0.53	NO	1.02	1.000	32.974	32.93	0.992	0.991	96.507	96.5 70-143	0.917	
30	30 13C-2,3,4,6,7,8-HxCDF	3.88e4	0.50	NO	0.955	1.000	33.543	33.60	1.009	1.011	95.925	95.9 7 <i>3</i> -137	0.978	
31	31 13C-1,2,3,7,8,9-HxCDF	2.91e4	0.50	NO	0.851	1.000	34.616	34.61	1.041	1.041	80.869	80.9 74-135	1.10	

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Vista Analytical Laboratory

Dataset:

U:\VG7.PRO\Results\201230D1\201230D1_1.qld

Last Altered:

Wednesday, December 30, 2020 11:57:45 Pacific Standard Time

Printed:

Wednesday, December 30, 2020 11:58:15 Pacific Standard Time

	# Name	Resp	RA	n/y	RRF	wt/vol	Pred.RT	RT	Pred.RRT	RRT	Conc.	%Rec	DL	. EMPC
32	32 13C-1,2,3,4,6,7,8-HpCDF	3.03e4	0.44	NO	0.848	1.000	36.132	36.18	1.087	1.088	84.334	84.3 78-129	1.11	
33	33 13C-1,2,3,4,7,8,9-HpCDF	2.08e4	0.44	NO	0.624	1.000	38.127	38.19	1.147	1.149	78.531	78.5 77-129	1.51	
34	34 13C-OCDF	4.50e4	0.87	NO	0.730	1.000	40.686	41.01	1.224	1.234	145.81	72.9 48- <i>2</i> 07	0.696	
35	35 37CI-2,3,7,8-TCDD	5.71e3			1.21	1.000	25.909	25.99	1.026	1.029	11.720	117 79-127	0.143	
36	36 13C-1,2,3,4-TCDD	4.04e4	0.79	NO	1.00	1.000	25.300	25.26	1.000	1.000	100.00	100	0.893	
37	37 13C-1,2,3,4-TCDF	6.60e4	0.76	NO	1.00	1.000	23.880	23.82	1.000	1.000	100.00	100	0.757	
38	38 13C-1,2,3,4,6,9-HxCDF	4.23e4	0.50	NO	1.00	1.000	33.310	33.24	1.000	1.000	100.00	100	0.934	

Vista Analytical Laboratory VG-11

Dataset: Untitled

Last Altered: Thursday, December 31, 2020 09:13:48 Pacific Standard Time Printed: Thursday, December 31, 2020 09:14:03 Pacific Standard Time

Method: C:\MassLynx\Default.PRO\MethDB\1613_rrt.mdb 10 Dec 2020 12:07:43 Calibration: U:\VG7.PRO\CurveDB\ZB_DIOXIN_1613vg7-9-30-20.cdb 01 Oct 2020 09:27:37

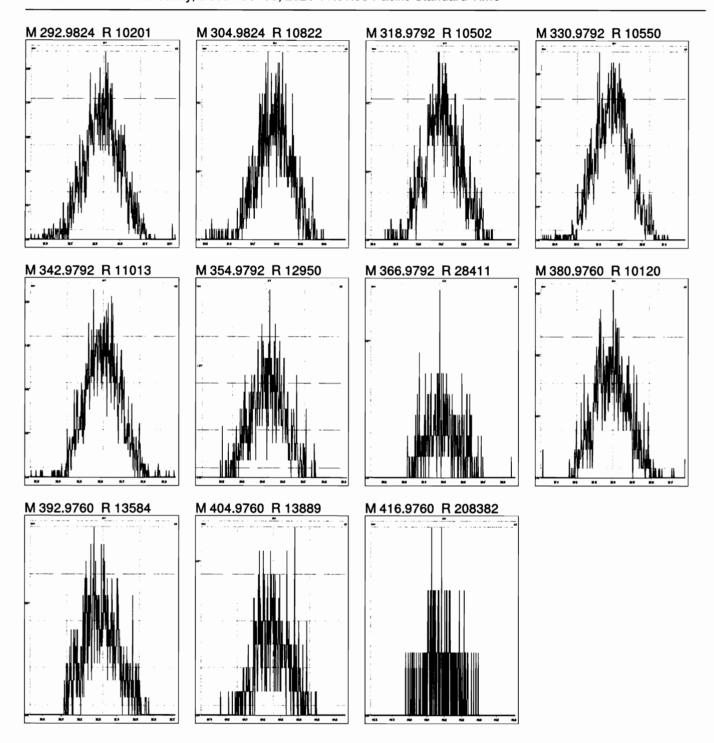
Compound name: 2,3,7,8-TCDD

	Name	ID	Acq.Date	Acq.Time
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2	201230D1_2	B0L0154-BS1 OPR 10	30-Dec-20	11:57:31
3	201230D1_3	B0L0162-BS1 OPR 5	30-Dec-20	12:43:41
4	201230D1_4	SOLVENT BLANK	30-Dec-20	13:29:50
5 .	201230D1_5	B0L0154-BLK1 Method Blank 10	30-Dec-20	14:16:03
8	201230D1_6	B0L0162-BLK1 Method Blank 5	30-Dec-20	15:02:13
7	201230D1_7	2002647-01 Cod Liver Oil 5.06	30-Dec-20	15:48:22
3	201230D1_8	2002647-02 Cod Liver Oil Lemon Flavor (Fortif	30-Dec-20	16:34:32
9	201230D1_9	2002647-03 Liquid Baby DHA (Fortified D3) 5.06	30-Dec-20	17:20:41
10	201230D1_10	2002434-10RE1 USMPDI-056SC-A-01-02-201	30-Dec-20	18:06:53
11	201230D1_11	2002714-01 WC-C033-7-9 8.7	30-Dec-20	18:52:57
12	201230D1_12	2002714-02 WC-C034-5-7 9.21	30-Dec-20	19:39:06
13	201230D1_13	2002714-03 WC-S040-5-7 7.11	30-Dec-20	20:25:14

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File: Experiment: ocdd_db5.exp Reference: Pfk.ref Function: 1 @ 200 (ppm)

Printed: Wednesday, December 30, 2020 11:01:55 Pacific Standard Time



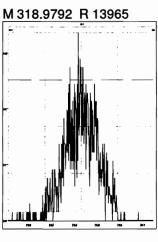
Work Order 2002434 Page 620 of 955

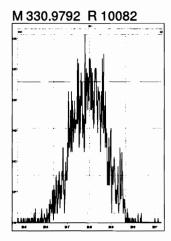
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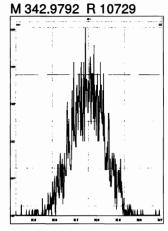
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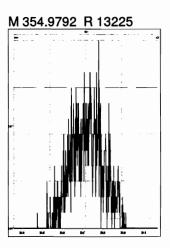
Printed:

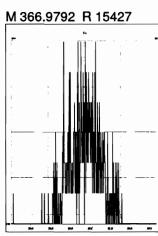
Wednesday, December 30, 2020 11:02:30 Pacific Standard Time

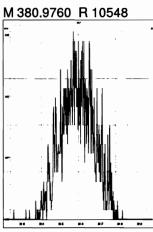


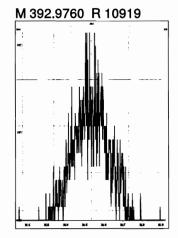


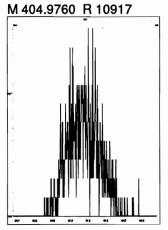


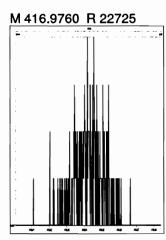








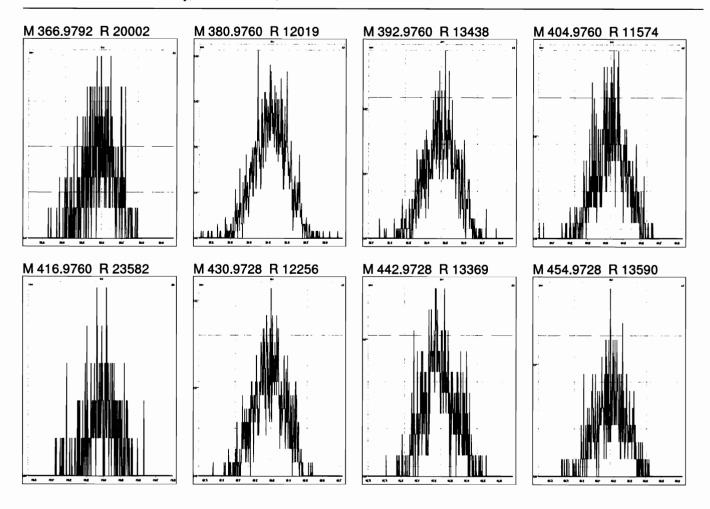




Work Order 2002434 Page 621 of 955

File: Experiment: ocdd_db5.exp Reference: Pfk.ref Function: 3 @ 200 (ppm)

Printed: Wednesday, December 30, 2020 11:03:05 Pacific Standard Time



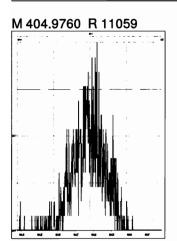
Work Order 2002434 Page 622 of 955

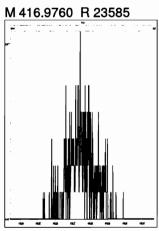
File:

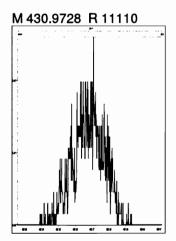
Experiment: ocdd_db5.exp Reference: Pfk.ref Function: 4 @ 200 (ppm)

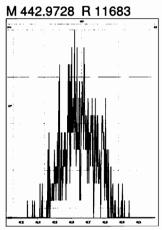
Printed:

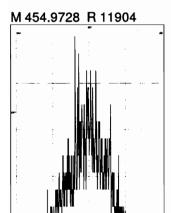
Wednesday, December 30, 2020 11:03:39 Pacific Standard Time

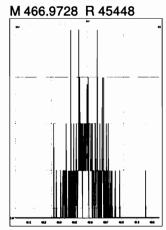


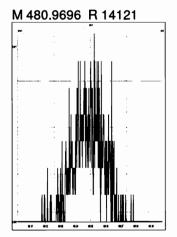






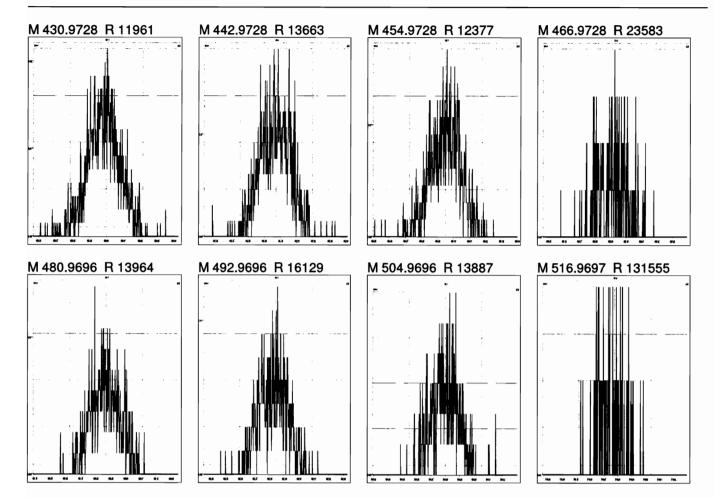






Work Order 2002434 Page 623 of 955 File: Experiment: ocdd_db5.exp Reference: Pfk.ref Function: 5 @ 200 (ppm)

Printed: Wednesday, December 30, 2020 11:04:19 Pacific Standard Time



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Quantify Sample Summary Report Vista Analytical Laboratory

MassLynx 4.1

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Dataset:

Untitled

Last Altered:

Thursday, December 31, 2020 09:44:44 Pacific Standard Time

Printed:

Thursday, December 31, 2020 09:45:01 Pacific Standard Time

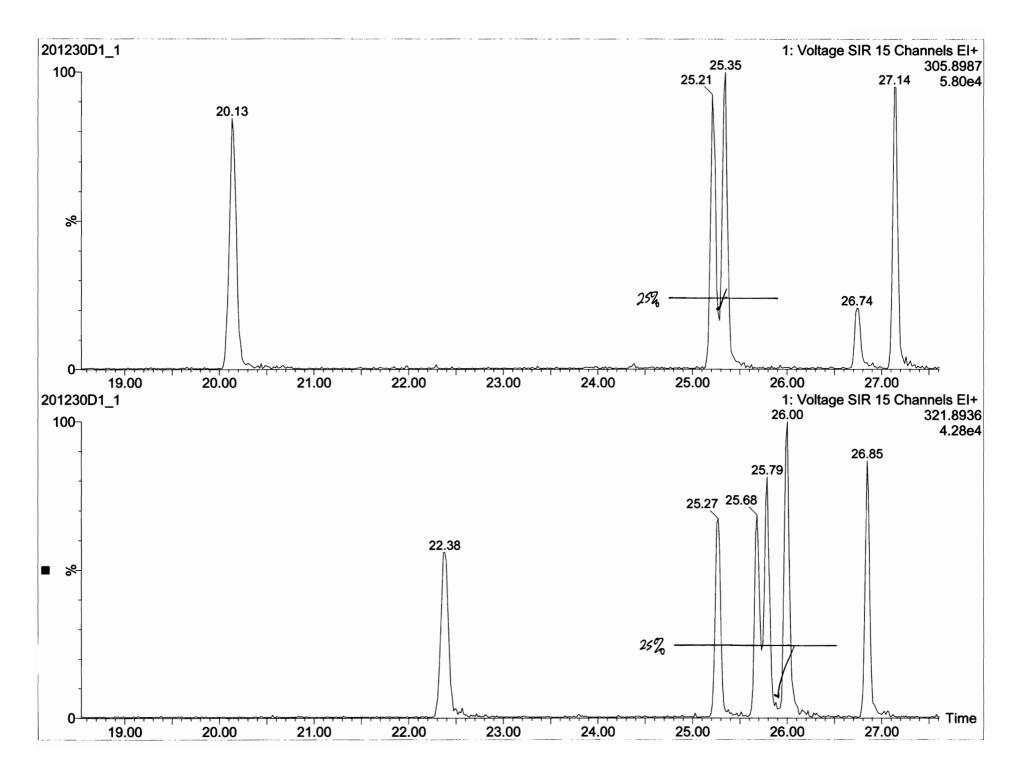
Method: Untitled 10 Dec 2020 12:26:49

Calibration: U:\VG7.PRO\CurveDB\ZB_DIOXIN_1613vg7-9-30-20.cdb 01 Oct 2020 09:27:37

Name: 201230D1_1, Date: 30-Dec-2020, Time: 11:12:23, ID: ST201230D1-1 1613 CS3 20L0706, Description: 1613 CS3 20L0706

	# Name	RT
1	1 1,3,6,8-TCDD (First)	22.37
2	2 1,2,8,9-TCDD (Last)	26.85
3	3 1,2,4,7,9-PeCDD (First)	28.31
4	4 1,2,3,8,9-PeCDD (Last)	30.83
5	5 1,2,4,6,7,9-HxCDD (First)	32.09
6	6 1,2,3,7,8,9-HxCDD (Last)	34.12
7	7 1,2,3,4,6,7,9-HpCDD (First)	36.59
8	8 1,2,3,4,6,7,8-HpCDD (Last)	37.54
9	9 1,3,6,8-TCDF (First)	20.15
10	10 1,2,8,9-TCDF (Last)	27.15
11	11 1,3,4,6,8-PeCDF (First)	26.72
12	12 1,2,3,8,9-PeCDF (Last)	31.17
13	13 1,2,3,4,6,8-HxCDF (First)	31.56
14	14 1,2,3,7,8,9-HxCDF (Last)	34.62
15	15 1,2,3,4,6,7,8-HpCDF (First)	36.19
16	16 1,2,3,4,7,8,9-HpCDF (Last)	38.20

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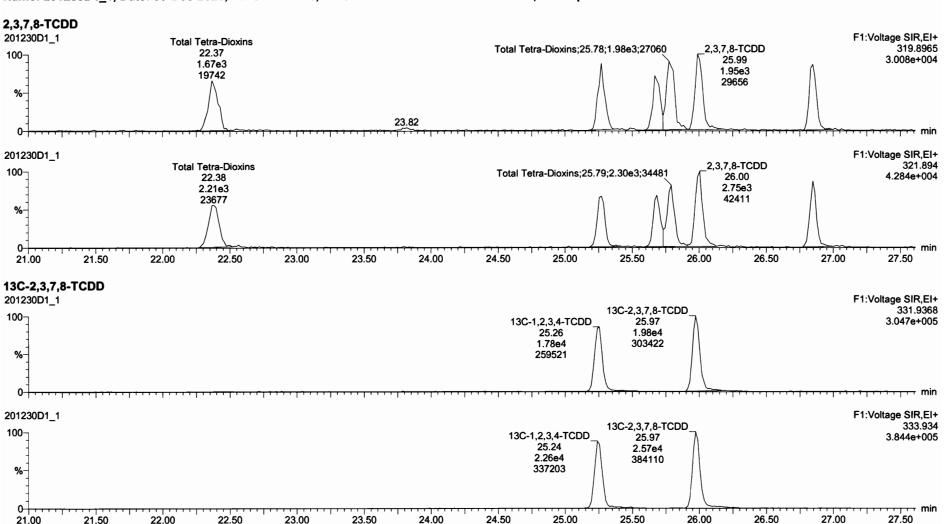
Work Order 2002434 Page 626 of 955

Dataset: U:\VG7.PRO\Results\201230D1\201230D1_1.qld

Last Altered: Wednesday, December 30, 2020 11:57:45 Pacific Standard Time Wednesday, December 30, 2020 11:58:30 Pacific Standard Time

Method: C:\MassLynx\Default.PRO\MethDB\1613_rrt.mdb 10 Dec 2020 12:07:43
Calibration: U:\VG7.PRO\CurveDB\ZB_DIOXIN_1613vg7-9-30-20.cdb 01 Oct 2020 09:27:37

Name: 201230D1_1, Date: 30-Dec-2020, Time: 11:12:23, ID: ST201230D1-1 1613 CS3 20L0706, Description: 1613 CS3 20L0706



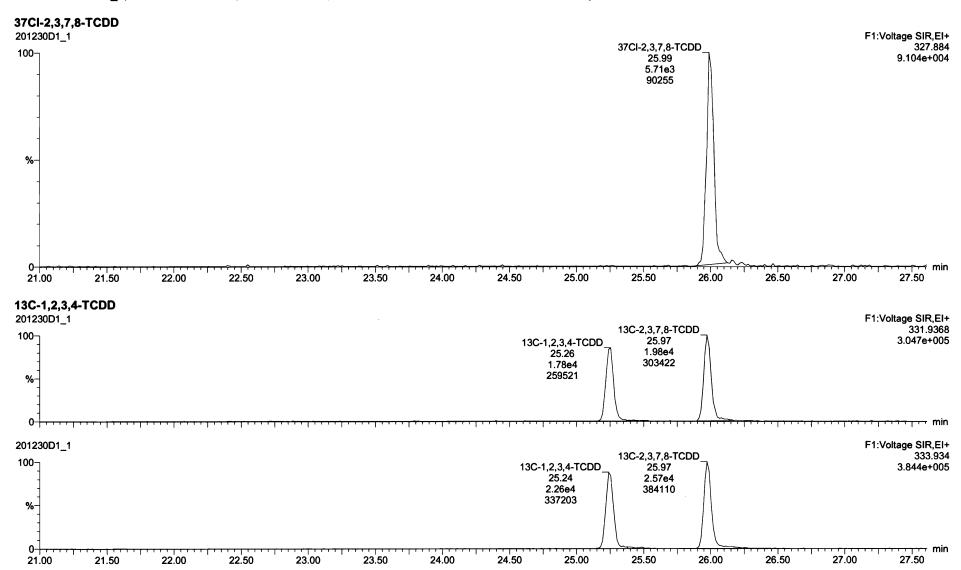
Work Order 2002434 Page 627 of 955

Dataset:

U:\VG7.PRO\Results\201230D1\201230D1_1.qld

Last Altered: Printed:

Wednesday, December 30, 2020 11:57:45 Pacific Standard Time Wednesday, December 30, 2020 11:58:30 Pacific Standard Time



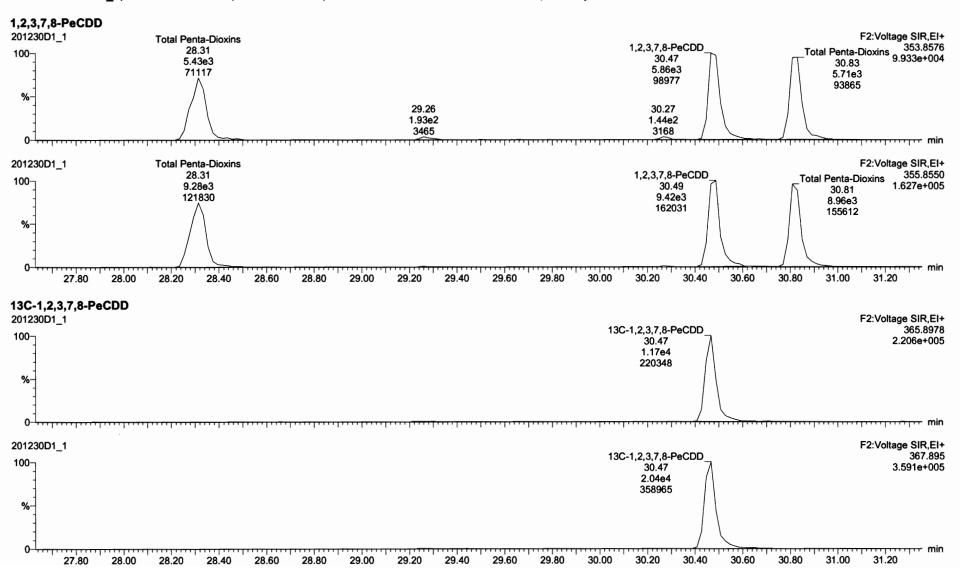
Page 3 of 13

Dataset:

U:\VG7.PRO\Results\201230D1\201230D1_1.qld

Last Altered: Printed:

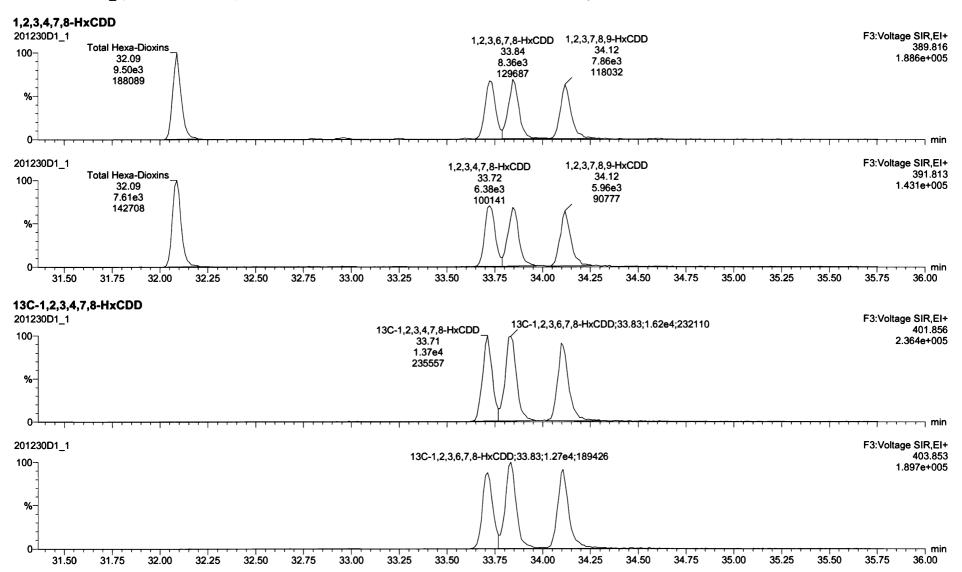
Wednesday, December 30, 2020 11:57:45 Pacific Standard Time Wednesday, December 30, 2020 11:58:30 Pacific Standard Time



Vista Analytical Laboratory

Dataset: U:\VG7.PRO\Results\201230D1\201230D1_1.qld

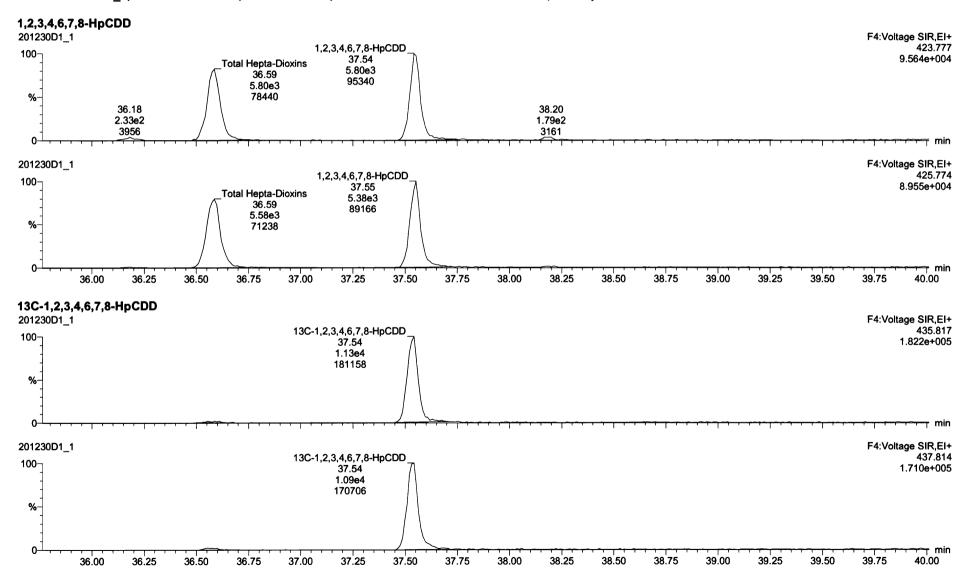
Last Altered: Wednesday, December 30, 2020 11:57:45 Pacific Standard Time Printed: Wednesday, December 30, 2020 11:58:30 Pacific Standard Time



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Dataset: U:\VG7.PRO\Results\201230D1\201230D1_1.qld

Last Altered: Wednesday, December 30, 2020 11:57:45 Pacific Standard Time Printed: Wednesday, December 30, 2020 11:58:30 Pacific Standard Time

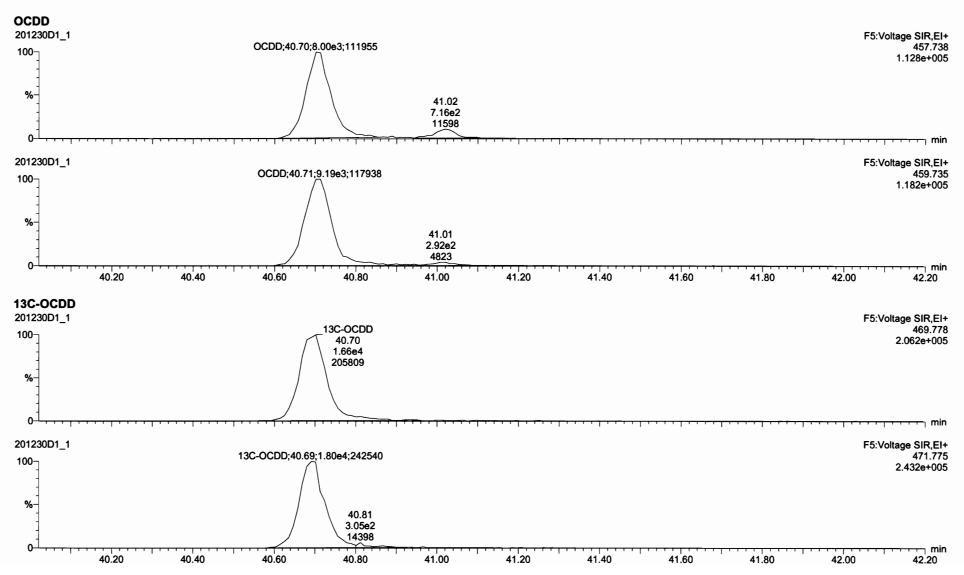


Vista Analytical Laboratory

Dataset: U:\VG7.PRO\Results\201230D1\201230D1_1.qld

Last Altered: Wednesday, December 30, 2020 11:57:45 Pacific Standard Time Printed: Wednesday, December 30, 2020 11:58:30 Pacific Standard Time

Name: 201230D1_1, Date: 30-Dec-2020, Time: 11:12:23, ID: ST201230D1-1 1613 CS3 20L0706, Description: 1613 CS3 20L0706



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Dataset: U:\VG7.PRO\Results\201230D1\201230D1 1.qld

20.00

19.00

19.50

20.50

21.00

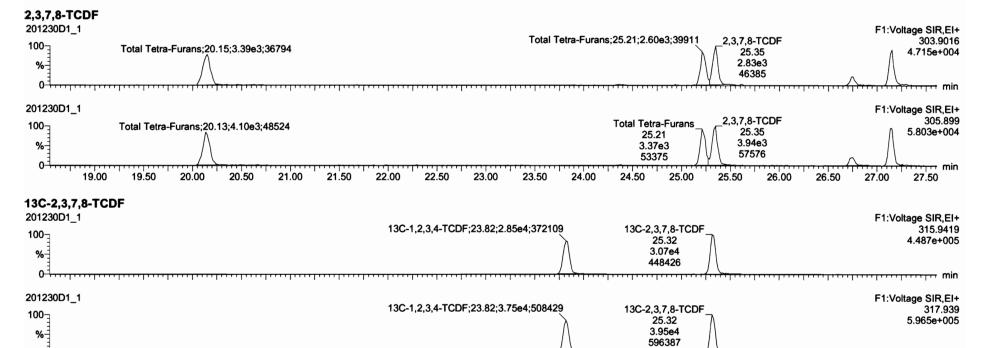
21.50

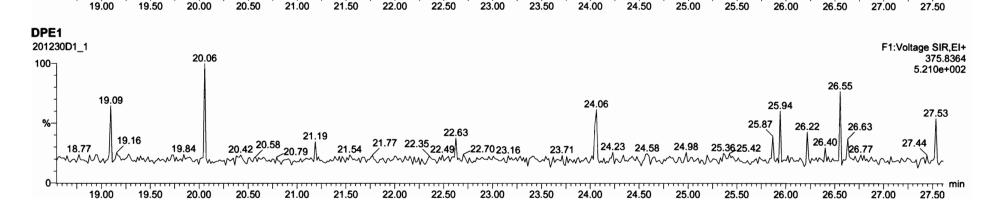
22.00

22.50

Last Altered: Wednesday, December 30, 2020 11:57:45 Pacific Standard Time Printed: Wednesday, December 30, 2020 11:58:30 Pacific Standard Time

Name: 201230D1_1, Date: 30-Dec-2020, Time: 11:12:23, ID: ST201230D1-1 1613 CS3 20L0706, Description: 1613 CS3 20L0706





23.00

23.50

24.00

24.50

25.00

25.50

26.00

26.50

min ----

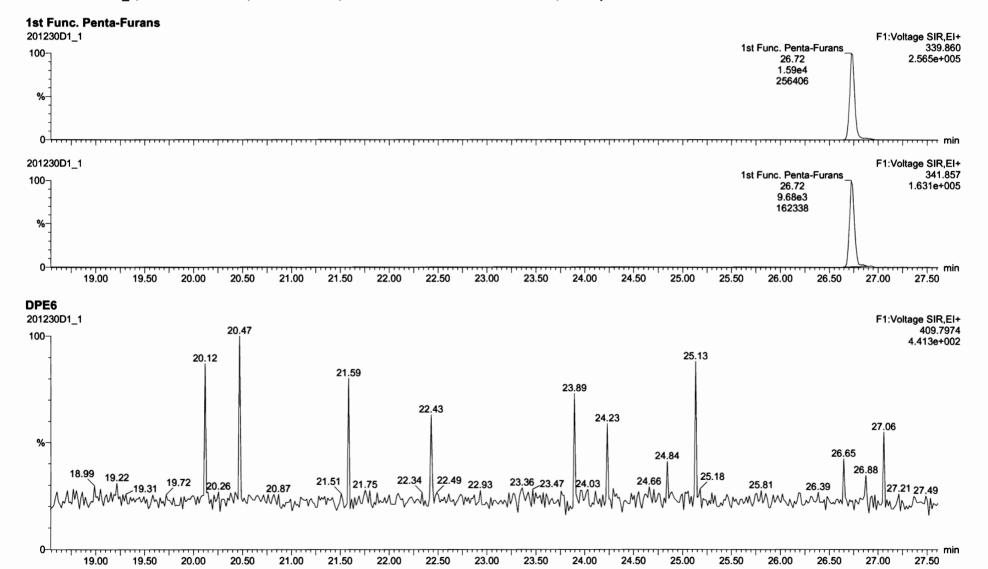
27.50

Work Order 2002434 Page 633 of 955 Dataset:

U:\VG7.PRO\Results\201230D1\201230D1 1.qld

Last Altered: Printed:

Wednesday, December 30, 2020 11:57:45 Pacific Standard Time Wednesday, December 30, 2020 11:58:30 Pacific Standard Time

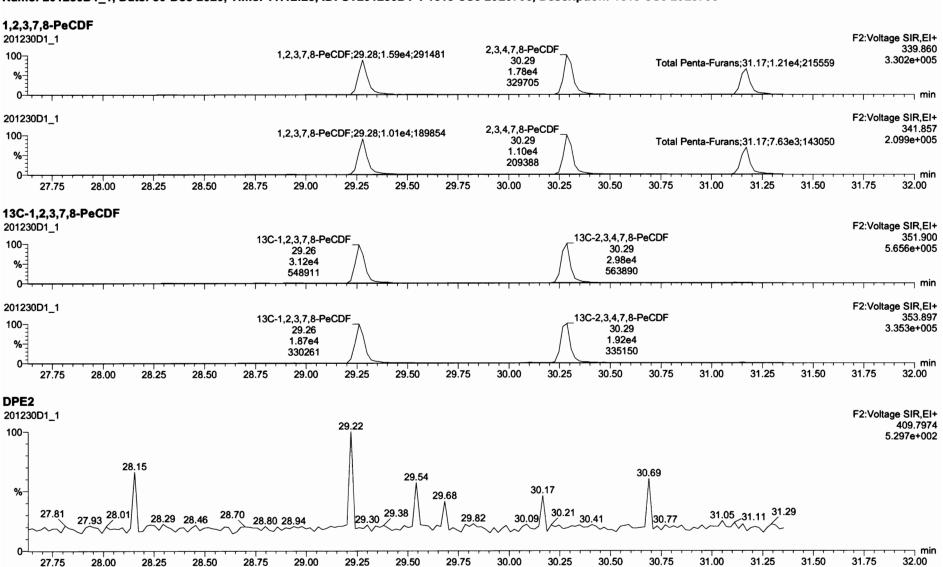


Vista Analytical Laboratory

Dataset: U:\VG7.PRO\Results\201230D1\201230D1_1.qld

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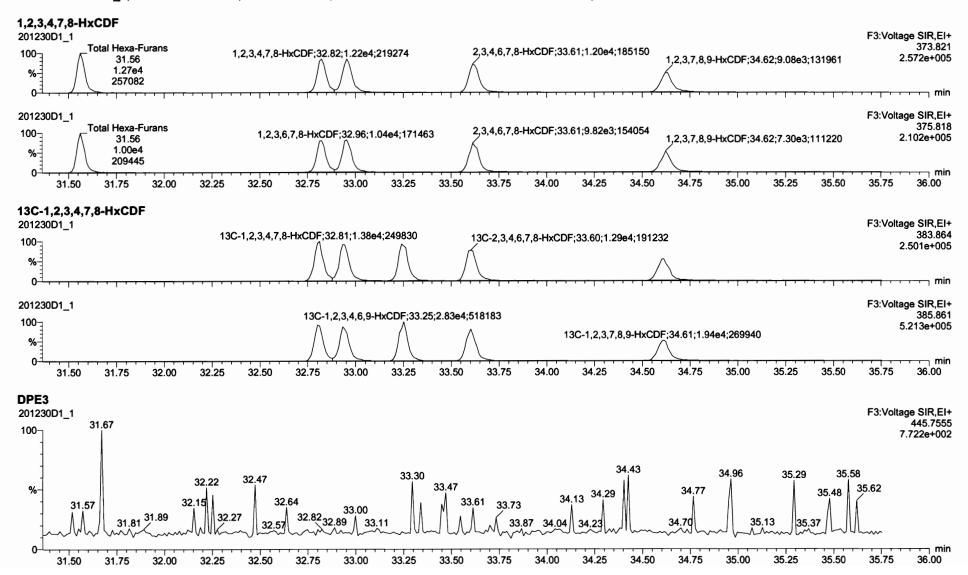
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Quantify Sample Report Vista Analytical Laboratory

Dataset: U:\VG7.PRO\Results\201230D1\201230D1_1.qld

Last Altered: Wednesday, December 30, 2020 11:57:45 Pacific Standard Time Wednesday, December 30, 2020 11:58:30 Pacific Standard Time

Name: 201230D1_1, Date: 30-Dec-2020, Time: 11:12:23, ID: ST201230D1-1 1613 CS3 20L0706, Description: 1613 CS3 20L0706



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38.00

38.25

38.50

37.75

36.50

36.25

36.00

37.00

36.75

37.25

37.50

38.75

39.00

39.25

39.50

39.75

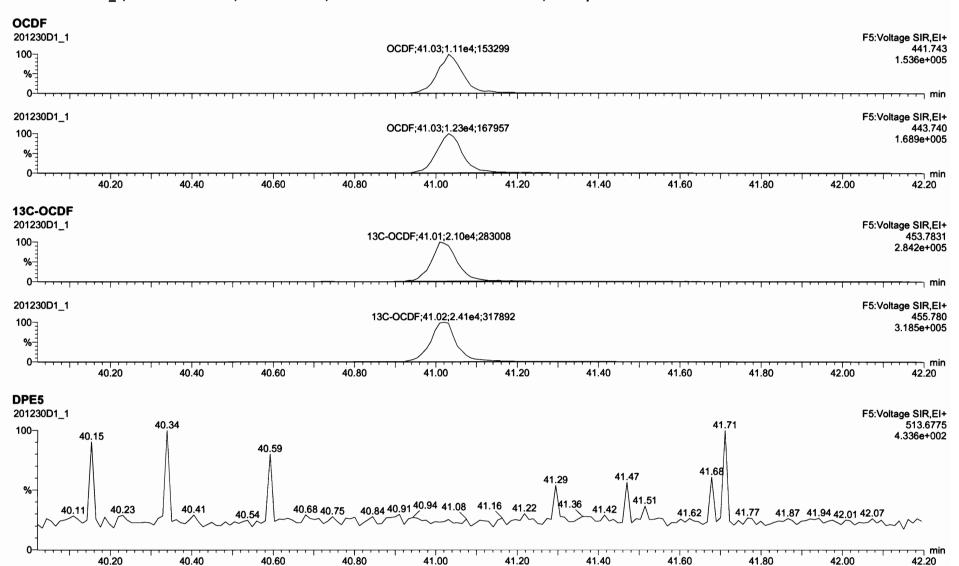
min

40.00

Vista Analytical Laboratory

Dataset: U:\VG7.PRO\Results\201230D1\201230D1_1.qld

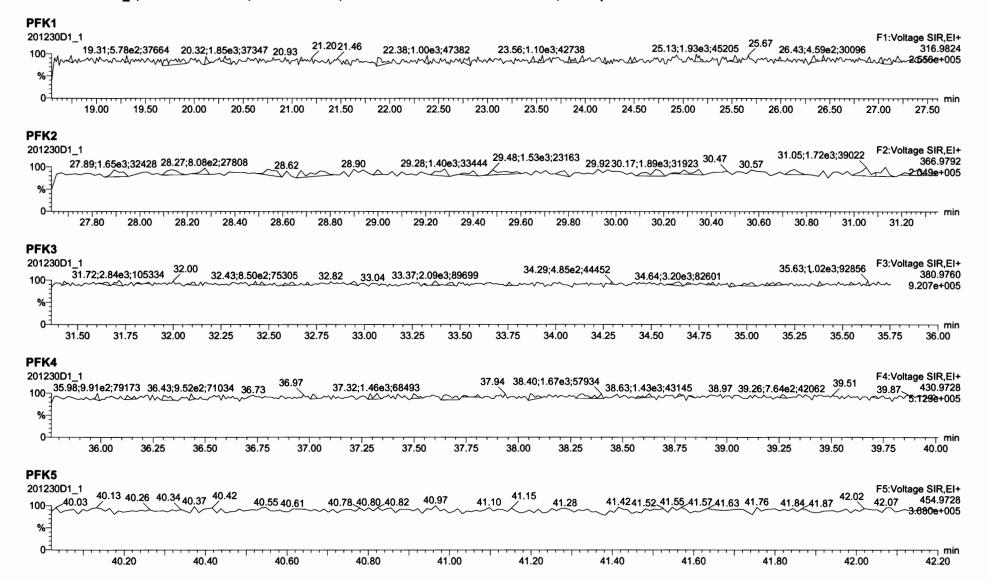
Last Altered: Wednesday, December 30, 2020 11:57:45 Pacific Standard Time Printed: Wednesday, December 30, 2020 11:58:30 Pacific Standard Time



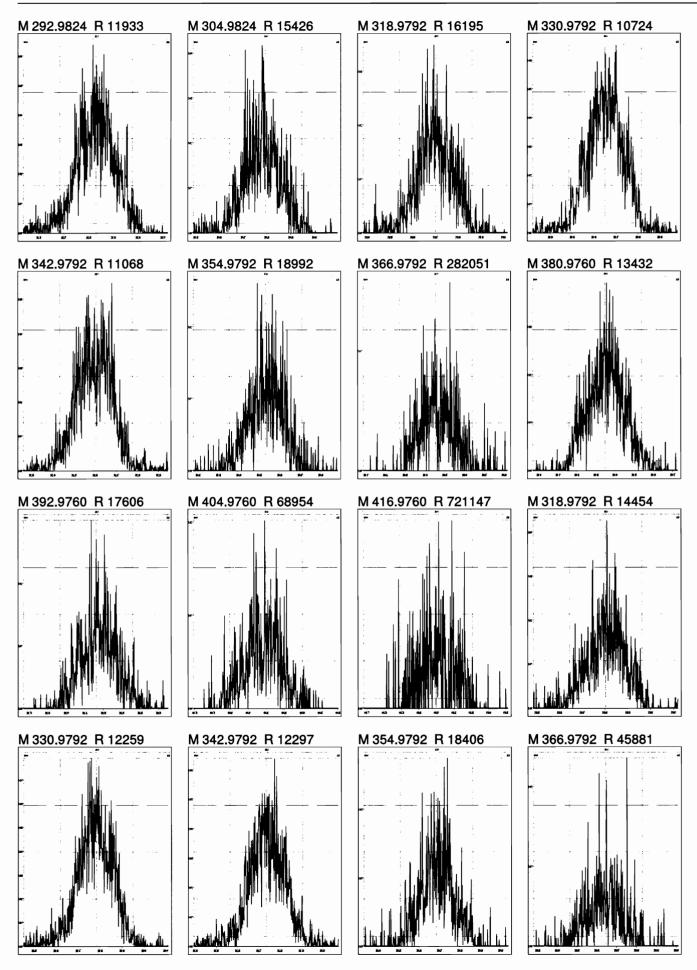
Dataset:

U:\VG7.PRO\Results\201230D1\201230D1_1.qld

Last Altered: Wednesday, December 30, 2020 11:57:45 Pacific Standard Time Printed: Wednesday, December 30, 2020 11:58:30 Pacific Standard Time

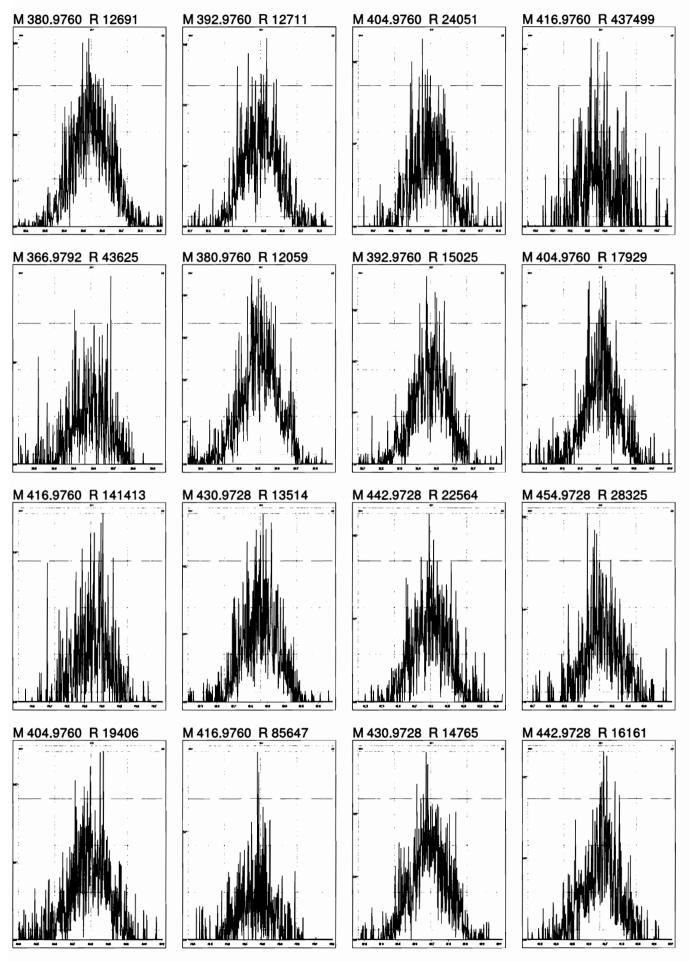


Printed: Wednesday, December 30, 2020 21:20:09 Pacific Standard Time



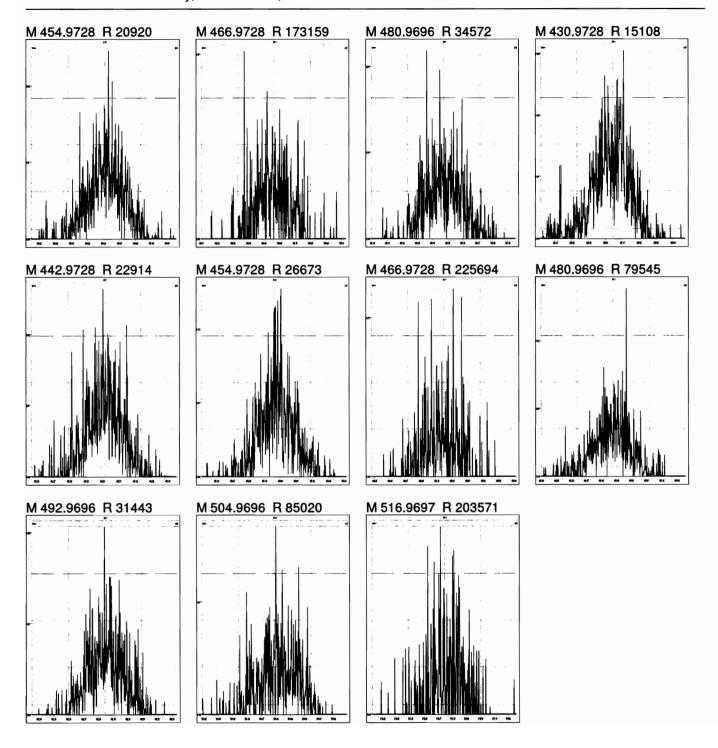
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Wednesday, December 30, 2020 21:20:09 Pacific Standard Time



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INITIAL CALIBRATION

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Quantify Compound Summary Report MassLynx 4.1

Vista Analytical Laboratory

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Dataset:

U:\VG7.PRO\Results\200930D2\200930D2 CRV.qld

Last Altered: Printed:

Thursday, October 01, 2020 10:27:41 Pacific Daylight Time Thursday, October 01, 2020 10:31:30 Pacific Daylight Time

10/1/20 CT 10/01/2020

Method: C:\MassLynx\Default.PRO\MethDB\1613_rrt.mdb 11 Sep 2020 15:14:27

Calibration: U:\VG7.PRO\CurveDB\ZB_DIOXIN 1613vg7-9-30-20.cdb 01 Oct 2020 10:27:37

Compound name: 2,3,7,8-TCDD

Response Factor: 1.00219

RRF SD: 0.105409, Relative SD: 10.5178

Response type: Internal Std (Ref 18), Area * (IS Conc. / IS Area)

Curve type: RF

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	200930D2_1	0.250	0.67	NO	25.79	1.001	4.43e2	1.74e5	0.254	1.5	1.02	MM
2	200930D2_2	0.500	0.78	NO	25.82	1.001	8.87e2	1.77e5	0.501	0.1	1.00	MM
3	200930D2_3	2.00	0.80	NO	25.79	1.001	3.35e3	1.92e5	1.75	-12.7	0.875	bb
4	200930D2_4	10.0	0.77	NO	25.81	1.001	1.39e4	1.46e5	9.51	-4.9	0.953	dd
5	200930D2_5	40.0	0.76	NO	25.81	1.001	7.37e4	1.89e5	38.9	-2.9	0.973	bb
6	200930D2_6	300	0.78	NO	25.82	1.001	7.58e5	2.12e5	357	18.9	1.19	bb

Compound name: 1,2,3,7,8-PeCDD

Response Factor: 0.93495

RRF SD: 0.119844, Relative SD: 12.8182

Response type: Internal Std (Ref 19), Area * (IS Conc. / IS Area)

Curve type: RF

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	200930D2_1	1.25	0.62	NO	30.15	1.000	1.49e3	1.32e5	1.21	-3.3	0.904	MM
2	200930D2_2	2.50	0.66	NO	30.17	1.001	2.83e3	1.43e5	2.12	-15.1	0.793	MM
3	200930D2_3	10.0	0.59	NO	30.15	1.000	1.29e4	1.55e5	8.94	-10.6	0.836	bb
4	200930D2_4	50.0	0.59	NO	30.17	1.001	5.42e4	1.17e5	49.7	-0.6	0.929	bb
5	200930D2_5	200	0.60	NO	30.17	1.001	2.74e5	1.32e5	222	11.0	1.04	bb
6	200930D2_6	1500	0.62	NO	30.17	1.001	2.85e6	1.71e5	1780	18.7	1.11	bb

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Quantify Compound Summary Report MassLynx 4.1

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Dataset: U:\VG7.PRO\Results\200930D2\200930D2_CRV.qld

Last Altered: Thursday, October 01, 2020 10:27:41 Pacific Daylight Time Printed: Thursday, October 01, 2020 10:31:30 Pacific Daylight Time

Compound name: 1,2,3,4,7,8-HxCDD

Response Factor: 1.15193

RRF SD: 0.107646, Relative SD: 9.34488

Response type: Internal Std (Ref 20), Area * (IS Conc. / IS Area)

Curve type: RF

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	200930D2_1	1.25	1.21	NO	33.40	1.001	1.43e3	1.01e5	1.22	-2.2	1.13	MM
2	200930D2_2	2.50	1.42	NO	33.40	1.000	2.77e3	1.06e5	2.27	-9.4	1.04	dd
3	200930D2_3	10.0	1.33	NO	33.39	1.000	1.21e4	1.17e5	8.93	-10.7	1.03	dd
4	200930D2_4	50.0	1.26	NO	33.40	1.000	5.14e4	8.84e4	50.4	8.0	1.16	bd
5	200930D2_5	200	1.29	NO	33.40	1.000	2.76e5	1.09e5	219	9.6	1.26	bd
6	200930D2_6	1500	1.27	NO	33.42	1.001	2.71e6	1.40e5	1680	11.7	1.29	bd

Compound name: 1,2,3,6,7,8-HxCDD

Response Factor: 1.02368

RRF SD: 0.0855683, Relative SD: 8.35893

Response type: Internal Std (Ref 21), Area * (IS Conc. / IS Area)

Curve type: RF

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	200930D2_1	1.25	1.19	NO	33.50	1.000	1.43e3	1.19e5	1.17	-6.4	0.958	MM
2	200930D2_2	2.50	1.19	NO	33.53	1.000	2.93e3	1.21e5	2.37	-5.0	0.972	db
3	200930D2_3	10.0	1.26	NO	33.51	1.000	1.28e4	1.36e5	9.16	-8.4	0.937	db
4	200930D2_4	50.0	1.26	NO	33.53	1.001	5.15e4	1.01e5	49.8	-0.3	1.02	db
5	200930D2_5	200	1.23	NO	33.53	1.001	2.74e5	1.24e5	216	8.2	1.11	db
6	200930D2_6	1500	1.28	NO	33.54	1.001	2.69e6	1.56e5	1680	12.0	1.15	db

Compound name: 1,2,3,7,8,9-HxCDD

Response Factor: 1.06096

RRF SD: 0.104523, Relative SD: 9.85175

Response type: Internal Std (Ref 22), Area * (IS Conc. / IS Area)

Curve type: RF

N. P.	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	200930D2_1	1.25	1.28	NO	33.80	1.000	1.50e3	1.15e5	1.23	-1.9	1.04	MM
2	200930D2_2	2.50	1.26	NO	33.81	1.000	2.90e3	1.22e5	2.25	-10.0	0.955	bb

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Quantify Compound Summary Report MassLynx 4.1

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Vista Analytical Laboratory

Dataset: U:\VG7.PRO\Results\200930D2\200930D2_CRV.qld

Last Altered: Thursday, October 01, 2020 10:27:41 Pacific Daylight Time Printed: Thursday, October 01, 2020 10:31:30 Pacific Daylight Time

Compound name: 1,2,3,7,8,9-HxCDD

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
3	200930D2_3	10.0	1.33	NO	33.79	1.000	1.28e4	1.34e5	9.01	-9.9	0.956	bb
4	200930D2_4	50.0	1.29	NO	33.80	1.000	5.21e4	9.97e4	49.2	-1.6	1.04	bb
5	200930D2_5	200	1.25	NO	33.81	1.001	2.84e5	1.22e5	220	9.8	1.16	bb
6	200930D2_6	1500	1.28	NO	33.82	1.001	2.81e6	1.55e5	1700	13.6	1.21	bb

Compound name: 1,2,3,4,6,7,8-HpCDD

Response Factor: 1.00136

RRF SD: 0.124298, Relative SD: 12.4129

Response type: Internal Std (Ref 23), Area * (IS Conc. / IS Area)

Curve type: RF

11300	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	200930D2_1	1.25	0.92	NO	37.19	1.000	1.19e3	1.07e5	1.11	-11.0	0.891	MM
2	200930D2_2	2.50	0.95	NO	37.20	1.000	2.68e3	1.13e5	2.37	-5.3	0.948	bb
3	200930D2_3	10.0	1.04	NO	37.18	1.000	1.09e4	1.22e5	8.94	-10.6	0.895	bb
4	200930D2_4	50.0	1.05	NO	37.19	1.000	4.59e4	9.48e4	48.4	-3.2	0.969	bb
5	200930D2_5	200	1.04	NO	37.20	1.001	2.47e5	1.12e5	221	10.6	1.11	bb
6	200930D2_6	1500	1.04	NO	37.21	1.000	2.53e6	1.41e5	1790	19.6	1.20	bb

Compound name: OCDD

Response Factor: 0.952

RRF SD: 0.102145, Relative SD: 10.7295

Response type: Internal Std (Ref 24), Area * (IS Conc. / IS Area)

Curve type: RF

1	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	200930D2_1	2.50	0.95	NO	40.38	1.001	2.06e3	1.81e5	2.39	-4.4	0.910	MM
2	200930D2_2	5.00	0.84	NO	40.39	1.000	4.26e3	2.08e5	4.30	-14.0	0.819	bb
3	200930D2_3	20.0	0.91	NO	40.37	1.000	1.88e4	2.10e5	18.8	-6.0	0.895	bď
4	200930D2_4	100	0.91	NO	40.39	1.001	7.84e4	1.63e5	101	1.1	0.963	bd
5	200930D2_5	400	0.90	NO	40.39	1.000	4.22e5	2.08e5	426	6.6	1.01	bb
6	200930D2_6	3000	0.91	NO	40.42	1.000	4.25e6	2.55e5	3500	16.7	1,11	bb

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Vista Analytical Laboratory

Dataset: U:\VG7.PRO\Results\200930D2\200930D2_CRV.qld

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Compound name: 2,3,7,8-TCDF

Response Factor: 1.01297

RRF SD: 0.140498, Relative SD: 13.8699

Response type: Internal Std (Ref 25), Area * (IS Conc. / IS Area)

Curve type: RF

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	200930D2_1	0.250	0.79	NO	25.15	1.001	7.60e2	2.52e5	0.298	19.2	1.21	MM
2	200930D2_2	0.500	0.76	NO	25.16	1.001	1.27e3	2.58e5	0.484	-3.1	0.981	MM
3	200930D2_3	2.00	0.74	NO	25.15	1.001	4.49e3	2.68e5	1.66	-17.2	0.839	bb
4	200930D2_4	10.0	0.74	NO	25.16	1.001	1.88e4	2.10e5	8.88	-11.2	0.899	bb
5	200930D2_5	40.0	0.77	NO	25.15	1.001	1.04e5	2.57e5	39.8	-0.4	1.01	bd
6	200930D2_6	300 1	0.76	NO	25.16	1.001	9.86e5	2.88e5	338	12.7	1.14	bb

Compound name: 1,2,3,7,8-PeCDF

Response Factor: 0.997733

RRF SD: 0.105042, Relative SD: 10.528

Response type: Internal Std (Ref 26), Area * (IS Conc. / IS Area)

Curve type: RF

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	200930D2_1	1.25	1.56	NO	29.00	1.001	2.34e3	1.96e5	1.19	-4.5	0.952	MM
2	200930D2_2	2.50	1.49	NO	29.02	1.001	4.41e3	2.00e5	2.21	-11.5	0.882	bb
3	200930D2_3	10.0	1.59	NO	29.00	1.001	2.02e4	2.22e5	9.14	-8.6	0.912	bd
4	200930D2_4	50.0	1.63	NO	29.00	1.000	8.94e4	1.79e5	50.0	-0.0	0.998	dd
5	200930D2_5	200	1.61	NO	29.00	1.001	4.62e5	2.12e5	218	9.2	1.09	bb
6	200930D2_6	1500	1.61	NO	29.02	1.001	4.38e6	2.53e5	1730	15.5	1.15	bd

Compound name: 2,3,4,7,8-PeCDF

Response Factor: 1.07418

RRF SD: 0.141641, Relative SD: 13.186

Résponse type: Internal Std (Ref 27), Area * (IS Conc. / IS Area)

Curve type: RF

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	200930D2_1	1.25	1.58	NO	29.96	1.001	2.16e3	1.91e5	1.05	-15.7	0.905	MM
2	200930D2_2	2.50	1.60	NO	29.96	1.001	4.71e3	1.98e5	2.22	-11.3	0.952	bb

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Dataset: U:\VG7.PRO\Results\200930D2\200930D2_CRV.qld

Last Altered: Thursday, October 01, 2020 10:27:41 Pacific Daylight Time Thursday, October 01, 2020 10:31:30 Pacific Daylight Time

Compound name: 2,3,4,7,8-PeCDF

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
3	200930D2_3	10.0	1.62	NO	29.96	1.001	2.12e4	2.10e5	9.39	-6.1	1.01	bb
4	200930D2_4	50.0	1.62	NO	29.96	1.001	8.96e4	1.61e5	51.9	3.7	1.11	bb
5	200930D2_5	200	1.60	NO	29.96	1.001	4.79e5	1.98e5	226	12.9	1.21	bb
6	200930D2_6	1500 ₹	1.58	NO	29.96	1.000	4.65 e 6	2.47e5	1750	16.6	1.25	bb

Compound name: 1,2,3,4,7,8-HxCDF

Response Factor: 1.05155

RRF SD: 0.122186, Relative SD: 11.6195

Response type: Internal Std (Ref 28), Area * (IS Conc. / IS Area)

Curve type: RF

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	200930D2_1	1.25	1.19	NO	32.50	1.000	2.00e3	1.64e5	1.16	-7.0	0.978	MM
2	200930D2_2	2.50	1.29	NO	32.52	1.000	3.98e3	1.72e5	2.21	-11.7	0.929	bd
3	200930D2_3	10.0	1.25	NO	32.50	1.001	1.75e4	1.84e5	9.00	-10.0	0.947	bd
4	200930D2_4	50.0	1.27	NO	32.50	1.000	7.44e4	1.40e5	50.5	1.0	1.06	bd
5	200930D2_5	200	1.25	NO	32.51	1.000	4.05e5	1.72e5	224	12.0	1.18	bd
6	200930D2_6	1500	1.26	NO	32.52	1.000	3.93e6	2.16e5	1740	15.7	1.22	bd

Compound name: 1,2,3,6,7,8-HxCDF

Response Factor: 1.09956

RRF SD: 0.12428, Relative SD: 11.3027

Response type: Internal Std (Ref 29), Area * (IS Conc. / IS Area)

Curve type: RF

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	200930D2_1	1.25	1.24	NO	32.64	1.000	2.15e3	1.66e5	1.18	-5.8	1.04	MM
2	200930D2_2	2.50	1.33	NO	32.65	1.000	4.33e3	1.77e5	2.23	-10.9	0.980	db
3	200930D2_3	10.0	1.24	NO	32.64	1.001	1.87e4	1.88e5	9.03	-9.7	0.993	db
4	200930D2_4	50.0	1.26	NO	32.64	1.000	7.93e4	1.45 e 5	49.7	-0.5	1.09	db
5	200930D2_5	200	1.24	NO	32.64	1.000	4.22e5	1.75e5	219	9.6	1.20	db
6	200930D2_6	1500	1.24	NO	32.65	1.000	4.09e6	2.11e5	1760	17.4	1.29	db

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Dataset:

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Last Altered: Thursday, October 01, 2020 10:27:41 Pacific Daylight Time Thursday, October 01, 2020 10:31:30 Pacific Daylight Time Printed:

Compound name: 2,3,4,6,7,8-HxCDF

Response Factor: 1.08752

RRF SD: 0.136992, Relative SD: 12.5967

Response type: Internal Std (Ref 30), Area * (IS Conc. / IS Area)

Curve type: RF

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	200930D2_1	1.25	1.25	NO	33.27	1.000	1.91e3	1.58e5	1.11	-11.0	0.968	MM
2	200930D2_2	2.50	1.28	NO	33.28	1.000	3.96e3	1.61e5	2.26	-9.6	0.983	bb
3	200930D2_3	10.0	1.26	NO	33.28	1.001	1.77e4	1.81e5	8.97	-10.3	0.976	bb
4	200930D2_4	50.0	1.23	NO	33.28	1.000	7.34e4	1.35e5	50.2	0.3	1.09	bb
5	200930D2_5	200	1.24	NO	33.29	1.001	3.94e5	1.60e5	226	13.0	1.23	bb
6	200930D2_6	1500	1.24	NO	33.29	1.000	3.89e6	2.03e5	1760	17.5	1.28	bb

Compound name: 1,2,3,7,8,9-HxCDF

Response Factor: 1.08188

RRF SD: 0.11347, Relative SD: 10.4883

Response type: Internal Std (Ref 31), Area * (IS Conc. / IS Area)

Curve type: RF

9	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	200930D2_1	1.25	1.20	NO	34.29	1.001	1.74e3	1.36e5	1.19	-5.2	1.03	MM
2	200930D2_2	2.50	1.35	NO	34.30	1.000	3.56e3	1.44e5	2.28	-8.6	0.989	bb
3	200930D2_3	10.0	1.23	NO	34.29	1.001	1.49e4	1.55e5	8.87	-11.3	0.960	bb
4	200930D2_4	50.0	1.26	NO	34.29	1.000	6.56e4	1.20e5	50.6	1.3	1.10	bb
5	200930D2_5	200	1.29	NO	34.29	1.000	3.46e5	1.49e5	215	7.7	1.17	bb
6	200930D2_6	1500	1.25	NO	34.30	1.000	3.50e6	1.86e5	1740	16.1	1.26	bb

Compound name: 1,2,3,4,6,7,8-HpCDF

Response Factor: 1.13056

RRF SD: 0.148448, Relative SD: 13.1304

Rosponse type: Internal Std (Ref 32), Frea * (IS Conc. / IS Area)

Curve type: RF

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	200930D2_1	1.25	0.96	NO	35.93	1.001	1.81e3	1.38e5	1.16	-7.6	1.04	MM
2	200930D2_2	2.50	1.10	NO	35.95	1.001	3.59e3	1.45e5	2.19	-12.5	0.989	bb

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Dataset: U:\VG7.PRO\Results\209930D2\200930D2_CRV.qld

Last Altered: Thursday, October 01, 2020 10:27:41 Pacific Daylight Time Printed: Thursday, October 01, 2020 10:31:30 Pacific Daylight Time

Compound name: 1,2,3,4,6,7,8-HpCDF

1 7 2	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
3	200930D2_3	10.0	0.98	NO	35.92	1.000	1.52e4	1.54e5	8.72	-12.8	0.986	bb
4	200930D2_4	50.0	1.02	NO	35.94	1.001	6.77e4	1.17e5	51.2	2.4	1.16	bd
5	200930D2_5	200	1.04	NO	35.94	1.001	3.79e5	1.49e5	225	12.3	1.27	bb
6	200930D2_6	1500	1.03	NO	35.95	1.001	3.65e6	1.82e5	1770	18.1	1.34	bb

Compound name: 1,2,3,4,7,8,9-HpCDF

Response Factor: 1.28584

RRF SD: 0.156323, Relative SD: 12.1572

Response type: Internal Std (Ref 33), Area * (IS Conc. / IS Area)

Curve type: RF

- 10	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	200930D2_1	1.25	1.01	NO	37.84	1.000	1.49e3	9.84 e 4	1.17	-6.0	1.21	MM
2	200930D2_2	2.50	1.11	NO	37.85	1.000	2.96e3	1.07e5	2.16	-13.7	1.11	bb
3	200930D2_3	10.0	1.04	NO	37.83	1.000	1.31e4	1.10e5	9.19	-8.1	1.18	bb
4	200930D2_4	50.0	1.02	NO	37.84	1.000	5.55e4	8.69e4	49.6	-0.7	1.28	bd
5	200930D2_5	200	1.03	NO	37.84	1.000	3.19e5	1.13 e 5	219	9.7	1.41	bb
6	200930D2_6	1500	1.03	NO	37.86	1.001	3.13e6	1.37e5	1780	18.8	1.53	bb

Compound name: OCDF Response Factor: 0.952821

RRF SD: 0.11104, Relative SD: 11.6538

Response type: Internal Std (Ref 34), Frea * (IS Conc. / IS Area)

Curve type: RF

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	200930D2_1	2.50	0.92	NO	40.69	1.000	2.42e3	2.27e5	2.24	-10.4	0.854	MM
2	200930D2_2	5.00	0.88	NO	40.71	1.000	5.45e3	2.52e5	4.54	-9.2	0.866	bb
3	200930D2_3	20.0	0.87	NO	40.69	1.000	2.28e4	2.61e5	18.3	-8.6	0.871	bb
4	200930D2_4	100	0.90	NO	40.71	1.001	9.70e4	2.04e5	99.6	-0.4	0.949	bb
5	200930D2_5	400	0.89	NO	40.71	1.001	5.52e5	2.58e5	449	12.4	1.07	bb
6	200930D2_6	3000	0.90	NO	40.73	1.001	5.35e6	3.22e5	3480	16.2	1.11	bb

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Dataset:

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Last Altered: Printed: Thursday, October 01, 2020 10:27:41 Pacific Daylight Time Thursday, October 01, 2020 10:31:30 Pacific Daylight Time

Compound name: 13C-2,3,7,8-TCDD

Response Factor: 1.17295

RRF SD: 0.0331012, Relative SD: 2.82204

Response type: Internal Std (Ref 36), Area * (IS Conc. / IS Area)

Curve type: RF

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	200930D2_1	100	0.78	NO	25.77	1.027	1.74e5	1.48e5	101	0.5	1,18	bb
2	200930D2_2	100	0.78	NO	25.79	1.026	1.77e5	1.56e5	96.8	-3.2	1.14	bb
3	200930D2_3	100	0.75	NO	25.78	1.026	1.92e5	1.60e5	102	2.2	1.20	bb
4	200930D2_4	100	0.79	NO	25.79	1.027	1.46e5	1.27e5	97.9	-2.1	1.15	bb
5	200930D2_5	100	0.79	NO	25.78	1.026	1.89e5	1.64e5	98.4	-1.6	1.15	bb
6	200930D2_6	100	0.79	NO	25.81	1.027	2.12e5	1.74e5	104	4.2	1.22	bb

Compound name: 13C-1,2,3,7,8-PeCDD

Response Factor: 0.914327

RRF SD: 0.0634254, Relative SD: 6.93683

Response type: Internal Std (Ref 36), Area * (IS Conc. / IS Area)

Curve type: RF

es.	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	200930D2_1	100	0.62	NO	30.15	1.201	1.32e5	1.48e5	97.3	-2.7	0.890	bb
2	200930D2_2	100	0.61	NO	30.15	1.199	1.43e5	1.56e5	100	0.2	0.916	bb
3	200930D2_3	100	0.63	NO	30.15	1.200	1.55e5	1.60e5	106	5.9	0.968	bb
4	200930D2_4	100	0.63	NO	30.15	1.200	1.17e5	1.27e5	101	0.6	0.920	bb
5	200930D2_5	100	0.63	NO	30.15	1.200	1.32e5	1.64 e 5	88.2	-11.8	0.807	bb
6	200930D2_6	100	0.64	NO	30.15	1.199	1.71e5	1.74e5	108	7.7	0.985	bb

Compound name: 13C-1,2,3,4,7,8-HxCDD

Response Factor: 0.633572

RRF SD: 0.0302093, Relative SD: 4.7681

Response type: Internal Std (Ref 38), Area * (IS Conc. / IS Area)

Curve type: RF

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	200930D2_1	100	1.30	NO	33.38	1.014	1.01e5	1.67e5	95.7	-4.3	0.607	bd
2 .	200930D2_2	100	1.29	NO	33.39	1.014	1.06e5	1.70e5	98.5	-1.5	0.624	bd

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Last Altered: Thursday, October 01, 2020 10:27:41 Pacific Daylight Time Printed: Thursday, October 01, 2020 10:31:30 Pacific Daylight Time

Compound name: 13C-1,2,3,4,7,8-HxCDD

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
3	200930D2_3	100	1.28	NO	33.38	1.014	1.17e5	1.90e5	97.5	-2.5	0.618	bd
4	200930D2_4	100	1.27	NO	33.39	1.014	8.84 e 4	1.41e5	98.7	-1.3	0.625	bd
5	200930D2_5	100	1.28	NO	33.39	1.014	1.09e5	1.72e5	100	0.3	0.636	bd
6	200930D2_6	100	1.26	NO	33.39	1.014	1.40e5	2.03e5	109	9.2	0.692	bd

Compound name: 13C-1,2,3,6,7,8-HxCDD

Response Factor: 0.724314

RRF SD: 0.022761, Relative SD: 3.14242

Response type: Internal Std (Ref 38), Area * (IS Conc. / IS Area)

Curve type: RF

	Name	Std. Conc ·	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	200930D2_1	100	1.29	NO	33.50	1.018	1.19e5	1.67e5	98.7	-1.3	0.715	db
2	200930D2_2	100	1.25	NO	33.51	1.017	1.21e5	1.70e5	98.0	-2.0	0.710	db
3	200930D2_3	100	1.28	NO	33.50	1.018	1.36 e 5	1.90e5	99.3	-0.7	0.719	db
4	200930D2_4	100	1.26	NO	33.50	1.017	1.01e5	1.41e5	98.5	-1.5	0.714	db
5	200930D2_5	100	1.28	NO	33.50	1.017	1.24e5	1.72e5	99.3	-0.7	0.719	dd
6	200930D2_6	100	1.25	NO	33.51	1.017	1.56e5	2.03e5	106	6.3	0.770	db

Compound name: 13C-1,2,3,7,8,9-HxCDD

Response Factor: 0.7157

RRF SD: 0.0260814, Relative SD: 3.64419

Response type: Internal Std (Ref 38), Area * (IS Conc. / IS Area)

Curve type: RF

1000	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	200930D2_1	100	1.25	NO	33.79	1.026	1.15e5	1.67e5	96.6	-3.4	0.691	bb
2	200930D2_2	100	1.30	NO	33.80	1.026	1.22e5	1.70e5	100	0.0	0.716	bd
3	200930D2_3	100	1.26	NO	33.78	1.026	1.34e5	1.90e5	98.7	-1.3	0.706	bb
4	200930D2_4	100	1.21	NO	33.79	1.026	9.97e4	1.41e5	98.5	-1.5	0.705	bb
5	200930D2_5	100	1.23	NO	33.79	1.026	1.22e5	1.72e5	99.2	-0.8	0.710	bb
6	200930D2_6	100	1.28	NO	33.80	1.026	1.55e5	2.03e5	107	7.1	0.766	bb

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Dataset:

U:\VG7.PRO\Results\200930D2\200930D2_CRV.qld

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Compound name: 13C-1,2,3,4,6,7,8-HpCDD

Response Factor: 0.660425

RRF SD: 0.0212049, Relative SD: 3.21079

Response type: Internal Std (Ref 38), Area * (IS Conc. / IS Area)

Curve type: RF

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	PPF	X = dropped
. 7				-								
1	200930D2_1	100	1.09	NO	37.18	1.129	1.07e5	1.67 e 5	96.7	-3.3	0.639	bd
2	200930D2_2	100	1.06	NO	37.19	1.129	1.13e5	1.70e5	101	0.8	0.666	bd
3	200930D2_3	100	1.12	NO	37.17	1.129	1.22e5	1.90e5	97.4	-2.6	0.643	bd
4	200930D2_4	100	1.06	NO	37.18	1.129	9.48e4	1.41e5	101	1.5	0.670	bb
5	200930D2_5	100	1.04	NO	37.18	1.129	1.12e5	1.72e5	98.2	-1.8	0.649	bb
6	200930D2_6	100	1.06	NO	37.20	1.129	1.41e5	2.03e5	105	5.3	0.695	bb

Compound name: 13C-OCDD

Response Factor: 0.586504

RRF SD: 0.0345068, Relative SD: 5.88547

Response type: Internal Std (Ref 38), Area * (IS Conc. / IS Area)

Curve type: RF

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	200930D2_1	200	0.88	NO	40.36	1.226	1.81e5	1.67e5	185	-7.4	0.543	bb
2	200930D2_2	200	0.87	NO	40.38	1.226	2.08e5	1.70e5	209	4.6	0.613	bd
3	200930D2_3	200	0.90	NO	40.36	1.226	2.10e5	1.90e5	189	-5.7	0.553	bb
4	200930D2_4	200	0.88	NO	40.37	1.226	1.63e5	1.41e5	196	-1.9	0.575	bb
5	200930D2_5	200	0.90	NO	40.38	1.226	2.08e5	1.72e5	206	3.1	0.604	bd
6	200930D2_6	200	0.91	NO	40.41	1.226	2.55e5	2.03e5	215	7.3	0.629	bb

Compound name: 13C-2,3,7,8-TCDF

Response Factor: 1.02208

RRF SD: 0.0125198, Relative SD: 1.22493

Response type: Internal Std (Ref 37), Area * (IS Conc. / IS Area)

Curve type: RF

18.85	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	200930D2_1	100	0.76	NO	25.12	1.001	2.52e5	2.46e5	100	0.1	1.02	bb
2	200930D2_2	100	0.80	NO	25.13	1.000	2.58e5	2.51e5	101	0.7	1.03	bd

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Dataset: U:\VG7.PRO\Results\200930D2\200930D2_CRV.qld

Last Altered: Thursday, October 01, 2020 10:27:41 Pacific Daylight Time Printed: Thursday, October 01, 2020 10:31:30 Pacific Daylight Time

Compound name: 13C-2,3,7,8-TCDF

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
3	200930D2_3	100	0.80	NO	25.12	1.000	2.68e5	2.62e5	99.9	-0.1	1.02	bb
4	200930D2_4	100	0.78	NO	25.13	1.001	2.10e5	2.07e5	99.1	-0.9	1.01	bb
5	200930D2_5	100	0.78	NO	25.13	1.001	2.57e5	2.56e5	98.3	-1.7	1.00	bb
6	200930D2_6	100	0.77	NO	25.15	1.001	2.88e5	2.77e5	102	1.8	1.04	bb

Compound name: 13C-1,2,3,7,8-PeCDF

Response Factor: 0.841931

RRF SD: 0.0454656, Relative SD: 5.40016

Response type: Internal Std (Ref 37), Area * (IS Conc. / IS Area)

Curve type: RF

_	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
17	200930D2_1	100	1.64	NO	28.98	1.154	1.96e5	2.46e5	94.8	-5.2	0.798	bb
2	200930D2_2	100	1.58	NO	29.00	1.154	2.00e5	2.51e5	94.6	-5.4	0.797	bb
3	200930D2_3	100	1.59	NO	28.98	1.154	2.22e5	2.62e5	100	0.4	0.845	bb
4	200930D2_4	100	1.59	NO	29.00	1.154	1.79e5	2.07e5	103	3.0	0.867	bb
5	200930D2_5	100	1.62	NO	28.98	1.154	2.12e5	2.56e5	98.3	-1.7	0.828	bb
6	200930D2_6	100	1.56	NO	29.00	1.154	2.53e5	2.77e5	109	8.9	0.916	bb

Compound name: 13C-2,3,4,7,8-PeCDF

Response Factor: 0.801596

RRF SD: 0.0468311, Relative SD: 5.84223

Response type: Internal Std (Ref 37), Area * (IS Conc. / IS Area)

Curve type: RF

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	200930D2_1	100	1.62	NO	29.94	1.193	1.91e5	2.46e5	96.9	-3.1	0.777	bb
2	200930D2_2	100	1.56	NO	29.94	1.191	1.98e5	2.51e5	98.3	-1.7	0.788	bb
3	200930D2_3	100	1.68	NO	29.94	1.192	2.10e5	2.62e5	100	0.0	0.802	bb
4 -	200930D2_4	100	1.67	NO	29.94	1.192	1.61e5	2.07e5	97.0	-3.0	0.777	bb
5	200930D2_5	100	1.60	NO	29.94	1.192	1.98e5	2.56e5	96.2	-3.8	0.771	bb
6	200930D2_6	100	1.63	NO	29.96	1.192	2.47e5	2.77e5	112	11.6	0.895	bb

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Dataset:

U:\VG7.PRO\Results\200930D2\200930D2 CRV.qld

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Compound name: 13C-1,2,3,4,7,8-HxCDF

Response Factor: 1.00275

RRF SD: 0.0328953, Relative SD: 3.28051

Response type: Internal Std (Ref 38), Area * (IS Conc. / IS Area)

Curve type: RF

Std. Conc Name RA n/y RT RRT Resp IS Resp Conc. %Dev RRF X = dropped 200930D2_1 100 0.50 NO 32.49 0.987 1.64e5 1.67e5 97.7 -2.3 0.980 bd 200930D2_2 100 0.50 NO 32.50 0.987 1.72e5 0.7 1.70e5 101 1.01 bd 200930D2 3 100 0.50 NO 32.48 0.987 1.84e5 1.90e5 97.0 -3.0 0.972 bd 200930D2 4 100 0.49 NO 32.49 0.987 1.40e5 1.41e5 98.8 -1.2 0.991 bd 200930D2_5 100 0.51 NO 32.49 0.987 1.72e5 1.72e5 99.7 -0.3 bd 1.00 200930D2 6 100 0.51 NO 32.51 0.987 2.16e5 2.03e5 106 6.1 1.06 bd

Compound name: 13C-1,2,3,6,7,8-HxCDF

Response Factor: 1.01877

RRF SD: 0.0214481, Relative SD: 2.1053

Response type: Internal Std (Ref 38), Area * (IS Conc. / IS Area)

Curve type: RF

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	200930D2_1	100	0.50	NO	32.63	0.991	1.66e5	1.67e5	97.7	-2.3	0.995	db
2	200930D2_2	100	0.49	NO	32.64	0.991	1.77 e 5	1.70e5	102	2.1	1.04	db
3	200930D2_3	100	0.49	NO	32.61	0.991	1.88e5	1.90e5	97.4	-2.6	0.992	db
4 .	200930D2_4	100	0.50	NO	32.63	0.991	1.45e5	1.41e5	101	0.6	1.02	db
5	200930D2_5	100	0.51	NO	32.63	0.991	1.75e5	1.72e5	100	-0.0	1.02	dd
6	200930D2_6	100	0.51	NO	32.64	0.991	2.11e5	2.03e5	102	2.3	1.04	db

Compound name: 13C-2,3,4,6,7,8-HxCDF

Response Factor: 0.954976

RRF SD: 0.0233865, Relative SD: 2.44891

Response type: Internal Std (Ref 38), Area * (IS Conc. / IS Area)

Curve type: RF

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	200930D2_1	100	0.50	NO	33.26	1.010	1.58e5	1.67e5	98.9	-1.1	0.944	bd
2	200930D2_2	100	0.51	NO	33.27	1.010	1.61e5	1.70e5	99.2	-0.8	0.947	bd

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Dataset:

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Compound name: 13C-2,3,4,6,7,8-HxCDF

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
3	200930D2_3	100	0.50	NO	33.26	1.010	1.81e5	1.90e5	100	0.0	0.955	bb
4	200930D2_4	100	0.50	NO	33.27	1.010	1.35e5	1.41e5	99.6	-0.4	0.951	bb
5	200930D2_5	100	0.51	NO	33.27	1.010	1.60e5	1.72e5	97.6	-2.4	0.932	bb
6	200930D2_6	100	0.50	NO	3 3 .28	1.010	2.03e5	2.03e5	105	4.7	1.00	bb

Compound name: 13C-1,2,3,7,8,9-HxCDF

Response Factor: 0.851129

RRF SD: 0.0371274, Relative SD: 4.36213

Response type: Internal Std (Ref 38), Area * (IS Conc. / IS Area)

Curve type: RF

- 15	Name	Std. Conc 1	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	200930D2_1	100	0.51	NO	34.27	1.041	1.36e5	1.67e5	95.7	-4.3	0.814	bb
2	200930D2_2	100	0.49	NO	34.29	1.041	1.44e5	1.70e5	99.8	-0.2	0.849	bb
3	200930D2_3	100	0.52	NO	34.27	1.041	1.55e5	1.90e5	96.0	-4.0	0.817	bd
4	200930D2_4	100	0.50	NO	34.28	1.041	1.20e5	1.41e5	99.4	-0.6	0.846	bb
5	200930D2_5	100	0.52	NO	34.28	1.041	1.49e5	1.72e5	102	1.5	0.864	bd
6	200930D2_6	100	0.50	NO	34.29	1.041	1.86e5	2.03e5	108	7.6	0.916	bb

Compound name: 13C-1,2,3,4,6,7,8-HpCDF

Response Factor: 0.848459

RRF SD: 0.0316015, Relative SD: 3.72458

Response type: Internal Std (Ref 38), Area * (IS Conc. / IS Area)

Curve type: RF

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	200930D2_1	100	0.43	NO	35.91	1.091	1.38e5	1.67e5	97.7	-2.3	0.829	bd
2	200930D2_2	100	0.41	NO	35.93	1.091	1.45e5	1.70e5	101	0.6	0.854	bb
3	200930D2_3	100	0.42	NO	35.91	1.091	1.54e5	1.90e5	95.9	-4.1	0.814	bb
4	200930D2_4	100	0.43	NO	35.92	1.091	1.17e5	1.41e5	97.4	-2.6	0.827	bb
5	200930D2_5	100	0.42	NO	35.92	1.091	1.49e5	1.72e5	102	2.3	0.868	bb
6	200930D2_6	100	0.42	NO	35.93	1.091	1.82e5	2.03e5	106	6.0	0.899	bb

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Compound name: 13C-1,2,3,4,7,8,9-HpCDF

Response Factor: 0.624316

RRF SD: 0.0366881, Relative SD: 5.87653

Response type: Internal Std (Ref 38), Area * (IS Conc. / IS Area)

Curve type: RF

1	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	200930D2_1	100	0.42	NO	37.83	1.149	9.84e4	1.67e5	94.4	-5.6	0.589	bb
2	200930D2_2	100	0.44	NO	37.84	1.149	1.07e5	1.70e5	100	0.5	0.627	bd
3	200930D2_3	100	0.43	NO	37.82	1.149	1.10e5	1.90e5	93.3	-6.7	0.582	bb
4	200930D2_4	100	0.41	NO	37.83	1.149	8.69e4	1.41e5	98.4	-1.6	0.615	bb
5	200930D2_5	100	0.41	NO	37.83	1.149	1.13e5	1.72e5	105	5.4	0.658	bb
6	200930D2_6	100	0.43	NO	37.84	1.149	1.37e5	2.03e5	108	8.0	0.674	bb

Compound name: 13C-OCDF Response Factor: 0.72976

RRF SD: 0.042457, Relative SD: 5.81794

Response type: Internal Std (Ref 38), Area * (IS Conc. / IS Area)

Curve type: RF

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	200930D2_1	200	0.87	NO	40.68	1.236	2.27e5	1.67e5	186	-6.8	0.680	bb
2	200930D2_2	200	0.87	NO	40.70	1.235	2.52e5	1.70e5	203	1.7	0.742	bb
3	200930D2_3	200	0.88	NO	40.68	1.236	2.61e5	1.90e5	189	-5.6	0.689	bb
4	200930D2_4	200	0.88	NO	40.69	1.236	2.04e5	1.41e5	198	-1.0	0.722	bb
5	200930D2_5	200	0.88	NO	40.69	1.236	2.58e5	1.72e5	206	2.8	0.750	bb
6	200930D2_6	200	0.90	NO	40.71	1.236	3.22e5	2.03e5	218	8.9	0.795	bb

Compound name: 37CI-2,3,7,8-TCDD

Response Factor: 1.2073

RRF SD: 0.177075, Relative SD: 14.667

Response type: Internal Std (Ref 36), Area * (IS Conc. / IS Area)

Curve type: RF

1000	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	200930D2_1	0.250			25.79	1.027	3.48e2	1.48e5	0.195	-22.0	0.941	bb
2	200930D2_2	0.500			25.81	1.027	8.95e2	1.56e5	0.476	-4.9	1.15	bb

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Compound name: 37CI-2,3,7,8-TCDD

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
3	200930D2_3	2.00			25.81	1.027	3.83e3	1.60e5	1.99	-0.7	1.20	bb
4	200930D2_4	10.0			25.81	1.027	1.49e4	1.27e5	9.73	-2.7	1.17	bd
5	200930D2_5	40.0			25.81	1.027	8.56e4	1.64e5	43.2	8.1	1.31	bd
6	200930D2_6	200			25.82	1.027	5.12e5	1.74e5	244	22.2	1.48	bb

Compound name: 13C-1,2,3,4-TCDD

Response Factor: 1

RRF SD: 1.11022e-016, Relative SD: 1.11022e-014

Response type: Internal Std (Ref 36), Area * (IS Conc. / IS Area)

Curve type: RF

	Name	Std. Conc :	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	200930D2_1	100	0.78	NO	25.10	1.000	1.48e5	1.48e5	100	-0.0	1.00	bb
2	200930D2_2	100	0.77	NO	25.13	1.000	1.56e5	1.56e5	100	0.0	1.00	bb
3	200930D2_3	100	0.78	NO	25.12	1.000	1.60e5	1.60e5	100	0.0	1.00	bb
4	200930D2_4	100	0.80	NO	25.12	1.000	1.27e5	1.27e5	100	0.0	1.00	bb
5	200930D2_5	100	0.79	NO	25.12	1.000	1.64 e 5	1.64 e 5	100	0.0	1.00	bb
6	200930D2_6	100	0.81	NO	25.13	1.000	1.74e5	1.74e5	100	0.0	1.00	bb

Compound name: 13C-1,2,3,4-TCDF

Response Factor: 1

RRF SD: 1.11022e-016, Relative SD: 1.11022e-014

Response type: Internal Std (Ref 37), Area * (IS Conc. / IS Area)

Curve type: RF

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	200930D2_1	100	0.79	NO	23.76	1.000	2.46e5	2.46e5	100	0.0	1.00	bb
2	200930D2_2	100	0.79	NO	23.79	1.000	2.51e5	2.51e5	100	0.0	1.00	bb
3	200930D2_3	100	0.79	NO	23.77	1.000	2.62e5	2.62e5	100	0.0	1.00	bb
4	200930D2_4	100	0.80	NO	23.77	1.000	2.07e5	2.07e5	100	-0.0	1.00	bb
5	200930D2_5	100	0.78	NO	23.77	1.000	2.56e5	2.56e5	100	0.0	1.00	bb
6	200930D2 6	100	0.77	NO	23.79	1.000	2.77e5	2.77e5	100	0.0	1.00	bb

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Quantify Compound Summary Report

MassLynx 4.1

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Dataset:

U:\VG7.PRO\Results\200930D2\200930D2_CRV.qld

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Thursday, October 01, 2020 10:31:30 Pacific Daylight Time

Compound name: 13C-1,2,3,4,6,9-HxCDF

Response Factor: 1

RRF SD: 0, Relative SD: 0

Response type: Internal Std (Ref 38), Area * (IS Conc. / IS Area)

Curve type: RF

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	200930D2_1	100	0.50	NO	32.92	1.000	1.67e5	1.67e5	100	0.0	1.00	bb
2	200930D2_2	100	0.49	NO	32.94	1.000	1.70e5	1.70e5	100	0.0	1.00	bb
3	200930D2_3	100	0.50	NO	32.92	1.000	1.90e5	1.90e5	100	0.0	1.00	bd
4	200930D2_4	100	0.50	NO	32.93	1.000	1.41e5	1.41e5	100	0.0	1.00	bb
5	200930D2_5	100	0.50	NO	32.93	1.000	1.72e5	1.72e5	100	0.0	1.00	bb
6	200930D2_6	100	0.50	NO	32.94	1.000	2.03e5	2.03e5	100	0.0	1.00	bb

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Dataset: U:\VG7.PR0

U:\VG7.PRO\Results\200930D2\200930D2_CRV.qld

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Method: C:\MassLynx\Default.PRO\MethDB\1613_rrt.mdb 11 Sep 2020 15:14:27

Calibration: U:\VG7.PRO\CurveDB\ZB_DIOXIN_1613vg7-9-30-20.cdb 01 Oct 2020 10:27:37

Name: 200930D2_1, Date: 30-Sep-2020, Time: 12:06:04, ID: ST200930D2-1 1613 CS0 20F1102, Description: 1613 CS0 20F1102

11 (29)	# Name	Resp	RA	n/y	RRF	wt/vol	Pred.RT	RT	Pred.RRT	RRT	Conc.	%Rec	DL	EMPÇ
1	1 2,3,7,8-TCDD	4.43e2	0.67	NO	1.00	1.000	25.806	25.79	1.001	1.001	0.25382	102	0.0728	0.254
2	2 1,2,3,7,8-PeCDD	1.49e3	0.62	NO	0.935	1.000	30.166	30.15	1.001	1.000	1.2082	96.7	0.0691	1.21
3	3 1,2,3,4,7,8-HxCDD	1.43e3	1.21	NO	1.15	1.000	33.393	33.40	1.000	1.001	1.2230	97.8	0.0942	1.22
4	4 1,2,3,6,7,8-HxCDD	1.43e3	1.19	NO	1.02	1.000	33.503	33.50	1.000	1.000	1,1702	93.6	0.0968	1,17
5	5 1,2,3,7,8,9-HxCDD	1.50e3	1.28	NO	1.06	1.000	33.822	33.80	1.001	1.000	1.2264	98.1	0.0981	1.23
6	6 1,2,3,4,6,7,8-HpCDD	1.19e3	0.92	NO	1.00	1.000	37.190	37.19	1.000	1.000	1.1122	89.0	0.126	1.11
7	7 OCDD	2.06e3	0.95	NO	0.952	1.000	40.361	40.38	1.000	1.001	2.3892	95.6	0.133	2.39
8	8 2,3,7,8-TCDF	7.60e2	0.79	NO	1.01	1.000	25.143	25.15	1.001	1.001	0.29805	119	0.0517	0.298
9	9 1,2,3,7,8-PeCDF	2.34e3	1.56	NO	0.998	1.000	28.998	29.00	1.001	1.001	1.1933	95.5	0.0539	1.19
10	10 2,3,4,7,8-PeCDF	2.16e3	1.58	NO	1.07	1.000	29.974	29.96	1.001	1.001	1.0532	84.3	0.0475	1.05
11	11 1,2,3,4,7,8-HxCDF	2.00e3	1.19	NO	1.05	1.000	32.494	32.50	1.000	1.000	1.1620	93.0	0.0554	1.16
12	12 1,2,3,6,7,8-HxCDF	2.15e3	1.24	NO	1.10	1.000	32.635	32.64	1.000	1.000	1.1771	94.2	0.0541	1.18
13	13 2,3,4,6,7,8-HxCDF	1.91e3	1.25	NO	1.09	1.000	33.295	33.27	1.001	1.000	1.1126	89.0	0.0620	1.11
14	14 1,2,3,7,8,9-HxCDF	1.74e3	1.20	NO	1.08	1.000	34.271	34.29	1.000	1.001	1.1851	94.8	0.0794	1.19
15	15 1,2,3,4,6,7,8-HpCDF	1.81e3	0.96	NO	1.13	1.000	35.942	35.93	1.001	1.001	1.1552	92.4	0.0711	1.16
16	16 1,2,3,4,7,8,9-HpCDF	1.49e3	1.01	NO	1.29	1.000	37.826	37.84	1.000	1.000	1.1745	94.0	0.0684	1.17
17	17 OCDF	2.42e3	0.92	NO	0.953	1.000	40.680	40.69	1.000	1.000	2.2409	89.6	0.0901	2.24
18	18 13C-2,3,7,8-TCDD	1.74e5	0.78	NO	1.17	1.000	25.755	25.77	1.026	1.027	100.51	101	0.402	
19	19 13C-1,2,3,7,8-PeCDD	1.32e5	0.62	NO	0.914	1.000	29.937	30.15	1.193	1.201	97.346	97.3	0.269	
20	20 13C-1,2,3,4,7,8-HxCDD	1.01e5	1.30	NO	0.634	1.000	33.383	33.38	1.014	1.014	95.728	95.7	0.421	
21	21 13C-1,2,3,6,7,8-HxCDD	1.19e5	1.29	NO	0.724	1.000	33.491	33.50	1.017	1.018	98.682	98.7	0.368	
22	22 13C-1,2,3,7,8,9-HxCDD	1.15e5	1.25	NO	0.716	1.000	33.758	33.79	1.025	1.026	96.579	96.6	0.373	
23	23 13C-1,2,3,4,6,7,8-HpCDD	1.07e5	1.09	NO	0.660	1.000	37.169	37.18	1.129	1.129	96.706	96.7	0.575	
24	24 13C-OCDD	1.81e5	0.88	NO	0.587	1.000	40.145	40.36	1.219	1.226	185.28	92.6	0.361	
25	25 13C-2,3,7,8-TCDF	2.52e5	0.76	NO	1.02	1.000	24.851	25.12	0.990	1.001	100.09	100	0.369	
26	26 13C-1,2,3,7,8-PeCDF	1.96e5	1.64	NO	0.842	1.000	29.011	28.98	1.156	1.154	94.839	94.8	0.310	
27	27 13C-2,3,4,7,8-PeCDF	1.91e5	1.62	NO	0.802	1.000	29.897	29.94	1.191	1.193	96.912	96.9	0.326	
28	28 13C-1,2,3,4,7,8-HxCDF	1.64e5	0.50	NO	1.00	1.000	32.527	32.49	0.988	0.987	97.726	97.7	0.445	
29	29 13C-1,2,3,6,7,8-HxCDF	1.66e5	0.50	NO	1.02	1.000	32.658	32.63	0.992	0.991	97.658	97.7	0.438	
30	30 13C-2,3,4,6,7,8-HxCDF	1.58e5	0.50	NO	0.955	1.000	33.221	33.26	1.009	1.010	98.888	98.9	0.467	
31	31 13C-1,2,3,7,8,9-HxCDF	1.36e5	0.51	NO	0.851	1.000	34.285	34.27	1.041	1.041	95.657	95.7	0.524	

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Name: 200930D2_1, Date: 30-Sep-2020, Time: 12:06:04, ID: ST200930D2-1 1613 CS0 20F1102, Description: 1613 CS0 20F1102

1	# Name	Resp	RA	n/y	RRF	wt/vol	Pred.RT	RT	Pred.RRT	RRT	Conc.	%Rec	DL	EMPC
32	32 13C-1,2,3,4,6,7,8-HpCDF	1.38e5	0.43	NO	0.848	1.000	35.786	35.91	1.087	1.091	97.740	97.7	0.497	- 3
33	33 13C-1,2,3,4,7,8,9-HpCDF	9.84e4	0.42	NO	0.624	1.000	37.761	37.83	1.147	1.149	94.399	94.4	0.675	
34	34 13C-OCDF	2.27e5	0.87	NO	0.730	1.000	40.296	40.68	1.224	1.236	186.36	93.2	0.394	
35	35 37CI-2,3,7,8-TCDD	3.48e2			1.21	1.000	25.752	25.79	1.026	1.027	0.19492	78.0	0.0690	
36	36 13C-1,2,3,4-TCDD	1.48e5	0.78	NO	1.00	1.000	25.260	25.10	1.000	1.000	100.00	100	0.471	
37	37 13C-1,2,3,4-TCDF	2.46e5	0.79	NO	1.00	1.000	23.930	23.76	1.000	1.000	100.00	100	0.377	
38	38 13C-1,2,3,4,6,9-HxCDF	1.67e5	0.50	NO	1.00	1.000	32.990	32.92	1.000	1.000	100.00	100	0.446	

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U:\VG7.PRO\Results\200930D2\200930D2_CRV.qld

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Name: 200930D2_2, Date: 30-Sep-2020, Time: 12:51:13, ID: ST200930D2-2 1613 CS1 20F1103, Description: 1613 CS1 20F1103

	# Name	Resp	RA	n/y	RRF	wt/vol	Pred.RT	RT	Pred.RRT	RRT	Conc.	%Rec	DL	EMPC
1	1 2,3,7,8-TCDD	8.87e2	0.78	NO	1.00	1.000	25.821	25.82	1.001	1.001	0.50055	100	0.0605	0.501
2	2 1,2,3,7,8-PeCDD	2.83e3	0.66	NO	0.935	1.000	30.166	30.17	1.001	1.001	2.1217	84.9	0.0704	2.12
3	3 1,2,3,4,7,8-HxCDD	2.77e3	1.42	NO	1.15	1.000	33.404	33.40	1.000	1.000	2.2660	90.6	0.138	2.27
4	4 1,2,3,6,7,8-HxCDD	2.93e3	1.19	NO	1.02	1.000	33.514	33.53	1.000	1.000	2.3742	95.0	0.153	2.37
5	5 1,2,3,7,8,9-HxCDD	2.90e3	1.26	NO	1.06	1.000	33.833	33.81	1.001	1.000	2.2497	90.0	0.161	2.25
6	6 1,2,3,4,6,7,8-HpCDD	2.68e3	0.95	NO	1.00	1.000	37.201	37.20	1.000	1.000	2.3665	94.7	0.0876	2.37
7	7 OCDD	4.26e3	0.84	NO	0.952	1.000	40.383	40.39	1.000	1.000	4.3012	86.0	0.144	4.30
8	8 2,3,7,8-TCDF	1.27e3	0.76	NO	1.01	1.000	25.158	25.16	1.001	1.001	0.48435	96.9	0.0533	0.484
9	9 1,2,3,7,8-PeCDF	4.41e3	1.49	NO	0.998	1.000	29.018	29.02	1.001	1.001	2.2113	88.5	0.0589	2.21
10	10 2,3,4,7,8-PeCDF	4.71e3	1.60	NO	1.07	1.000	29.974	29.96	1.001	1.001	2.2165	88.7	0.0554	2.22
11	11 1,2,3,4,7,8-HxCDF	3.98e3	1.29	NO	1.05	1.000	32.505	32.52	1.000	1.000	2.2085	88.3	0.0509	2.21
12	12 1,2,3,6,7,8-HxCDF	4.33e3	1.33	NO	1.10	1.000	32.646	32.65	1.000	1.000	2.2276	89.1	0.0487	2.23
13	13 2,3,4,6,7,8-HxCDF	3.96e3	1.28	NO	1.09	1.000	33.306	33.28	1.001	1.000	2.2609	90.4	0.0596	2.26
14	14 1,2,3,7,8,9-HxCDF	3.56e3	1.35	NO	1.08	1.000	34.293	34.30	1.000	1.000	2.2843	91.4	0.0732	2.28
15	15 1,2,3,4,6,7,8-HpCDF	3.59e3	1.10	NO	1.13	1.000	35.964	35.95	1.001	1.001	2.1875	87.5	0.0754	2.19
16	16 1,2,3,4,7,8,9-HpCDF	2.96e3	1.11	NO	1.29	1.000	37.838	37.85	1.000	1.000	2.1582	86.3	0.0750	2.16
17	17 OCDF	5.45e3	0.88	NO	0.953	1.000	40.701	40.71	1.000	1.000	4.5423	90.8	0.0888	4.54
18	18 13C-2,3,7,8-TCDD	1.77e5	0.78	NO	1.17	1.000	25.786	25.79	1.026	1.026	96.769	96.8	0.372	
19	19 13C-1,2,3,7,8-PeCDD	1.43e5	0.61	NO	0.914	1.000	29.974	30.15	1.193	1.199	100.22	100	0.199	
20	20 13C-1,2,3,4,7,8-HxCDD	1.06e5	1.29	NO	0.634	1.000	33.405	33.39	1.014	1.014	98.510	98.5	0.441	
21	21 13C-1,2,3,6,7,8-HxCDD	1.21e5	1.25	NO	0.724	1.000	33.514	33.51	1.017	1.017	97.961	98.0	0.386	
22	22 13C-1,2,3,7,8,9-HxCDD	1.22e5	1.30	NO	0.716	1.000	33.780	33.80	1.025	1.026	100.00	100	0.390	
23	23 13C-1,2,3,4,6,7,8-HpCDD	1.13e5	1.06	NO	0.660	1.000	37.193	37.19	1.129	1.129	100.83	101	0.613	
24	24 13C-OCDD	2.08e5	0.87	NO	0.587	1.000	40.172	40.38	1.219	1.226	209.10	105	0.471	
25	25 13C-2,3,7,8-TCDF	2.58e5	0.80	NO	1.02	1.000	24.882	25.13	0.990	1.000	100.73	101	0.338	}
26	26 13C-1,2,3,7,8-PeCDF	2.00e5	1.58	NO	0.842	1.000	29.046	29.00	1.156	1.154	94.617	94.6	0.364	
27	27 13C-2,3,4,7,8-PeCDF	1.98e5	1.56	NO	0.802	1.000	29.933	29.94	1.191	1.191	98.287	98.3	0.382	
28	28 13C-1,2,3,4,7,8-HxCDF	1.72e5	0.50	NO	1.00	1.000	32.548	32.50	0.988	0.987	100.71	101	0.407	
29	29 13C-1,2,3,6,7,8-HxCDF	1.77e5	0.49	NO	1.02	1.000	32.680	32.64	0.992	0.991	102.10	102	0.401	
30	30 13C-2,3,4,6,7,8-HxCDF	1.61e5	0.51	NO	0.955	1.000	33.243	33.27	1.009	1.010	99.175	99.2	0.428	
31	31 13C-1,2,3,7,8,9-HxCDF	1.44e5	0.49	NO	0.851	1.000	34.308	34.29	1.041	1.041	99.754	99.8	0.480	
32	32 13C-1,2,3,4,6,7,8-HpCDF	1.45e5	0.41	NO	0.848	1.000	35.810	35.93	1.087	1.091	100.64	101	0.494	
33	33 13C-1,2,3,4,7,8,9-HpCDF	1.07e5	0.44	NO	0.624	1.000	37.786	37.84		1.149	100.46	100	0.671	
34	34 13C-OCDF	2.52e5	0.87	NO	0.730	1.000	40.323	40.70	1.224	1.235	203.36	102	0.391	

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Name: 200930D2_2, Date: 30-Sep-2020, Time: 12:51:13, ID: ST200930D2-2 1613 CS1 20F1103, Description: 1613 CS1 20F1103

	# Name	Resp	RA	n/y	RRF	wt/vol	Pred.RT	RT	Pred.RRT	RRT	Conc.	%Rec	DL	EMPC
35	35 37CI-2,3,7,8-TCDD	8.95e2			1.21	1.000	25.784	25.81	1.026	1.027	0.47558	95.1	0.0525	
36	36 13C-1,2,3,4-TCDD	1.56e5	0.77	NO	1.00	1.000	25.260	25.13	1.000	1.000	100.00	100	0.436	
37	37 13C-1,2,3,4-TCDF	2.51e5	0.79	NO	1.00	1.000	23.930	23.79	1.000	1.000	100.00	100	0.345	
38	38 13C-1,2,3,4,6,9-HxCDF	1.70e5	0.49	NO	1.00	1.000	32.990	32.94	1.000	1.000	100.00	100	0.408	

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Name: 200930D2_3, Date: 30-Sep-2020, Time: 13:37:23, ID: ST200930D2-3 1613 CS2 20F1104, Description: 1613 CS2 20F1104

100	# Name	Resp	RA	n/y	RRF	wt/vol	Pred.RT	RT	Pred.RRT	RRT	Conc.	%Rec	DL	EMPC
1	1 2,3,7,8-TCDD	3.35e3	0.80	NO	1.00	1.000	25.806	25.79	1.001	1.001	1.7454	87.3	0.0590	1.75
2	2 1,2,3,7,8-PeCDD	1.29e4	0.59	NO	0.935	1.000	30.166	30.15	1.001	1.000	8.9436	89.4	0.0709	8.94
3	3 1,2,3,4,7,8-HxCDD	1.21e4	1.33	NO	1.15	1.000	33.393	33.39	1.000	1.000	8.9337	89.3	0.114	8.93
4	4 1,2,3,6,7,8-HxCDD	1.28e4	1.26	NO	1.02	1.000	33.503	33.51	1.000	1.000	9.1556	91.6	0.120	9.16
5	5 1,2,3,7,8,9-HxCDD	1.28e4	1.33	NO	1.06	1.000	33.811	33.79	1.001	1.000	9.0082	90.1	0.115	9.01
6	6 1,2,3,4,6,7,8-HpCDD	1.09e4	1.04	NO	1.00	1.000	37.179	37.18	1.000	1.000	8.9356	89.4	0.134	8.94
7	7 OCDD	1.88e4	0.91	NO	0.952	1.000	40.361	40.37	1.000	1.000	18.794	94.0	0.105	18.8
8	8 2,3,7,8-TCDF	4.49e3	0.74	NO	1.01	1.000	25.143	25.15	1.001	1.001	1.6566	82.8	0.0457	1.66
9	9 1,2,3,7,8-PeCDF	2.02e4	1.59	NO	0.998	1.000	28.998	29.00	1.001	1.001	9.1384	91.4	0.0784	9.14
10	10 2,3,4,7,8-PeCDF	2.12e4	1.62	NO	1.07	1.000	29.974	29.96	1.001	1.001	9.3871	93.9	0.0692	9.39
11	11 1,2,3,4,7,8-HxCDF	1.75e4	1.25	NO	1.05	1.000	32.483	32.50	1.000	1.001	9.0042	90.0	0.0728	9.00
12	12 1,2,3,6,7,8-HxCDF	1.87e4	1.24	NO	1.10	1.000	32.624	32.64	1.000	1.001	9.0344	90.3	0.0761	9.03
13	13 2,3,4,6,7,8-HxCDF	1.77e4	1.26	NO	1.09	1.000	33.295	33.28	1.001	1.001	8.9732	89.7	0.0765	8.97
14	14 1,2,3,7,8,9-HxCDF	1.49e4	1.23	NO	1.08	1.000	34.271	34.29	1.000	1.001	8.8694	88.7	0.111	8.87
15	15 1,2,3,4,6,7,8-HpCDF	1.52e4	0.98	NO	1.13	1.000	35.942	35.92	1.001	1.000	8.7232	87.2	0.121	8.72
16	16 1,2,3,4,7,8,9-HpCDF	1.31e4	1.04	NO	1.29	1.000	37.816	37.83	1.000	1.000	9.1888	91.9	0.123	9.19
17	17 OCDF	2.28e4	0.87	NO	0.953	1.000	40.680	40.69	1.000	1.000	18.281	91.4	0.0889	18.3
18	18 13C-2,3,7,8-TCDD	1.92e5	0.75	NO	1.17	1.000	25.771	25.78	1.026	1.026	102.22	102	0.316	
19	19 13C-1,2,3,7,8-PeCDD	1.55e5	0.63	NO	0.914	1.000	29.955	30.15	1.193	1.200	105.86	106	0.332	
20	20 13C-1,2,3,4,7,8-HxCDD	1.17e5	1.28	NO	0.634	1.000	33.383	33.38	1.014	1.014	97.531	97.5	0.351	1
21	21 13C-1,2,3,6,7,8-HxCDD	1.36e5	1.28	NO	0.724	1.000	33.491	33.50	1.017	1.018	99.251	99.3	0.307	
22	22 13C-1,2,3,7,8,9-HxCDD	1.34e5	1.26	NO	0.716	1.000	33.758	33.78	1.025	1.026	98.689	98.7	0.310	
23	23 13C-1,2,3,4,6,7,8-HpCDD	1.22e5	1.12	NO	0.660	1.000	37.169	37.17	1.129	1.129	97.425	97.4	0.540	
24	24 13C-OCDD	2.10e5	0.90	NO	0.587	1.000	40.145	40.36	1.219	1.226	188.69	94.3	0.406	
25	25 13C-2,3,7,8-TCDF	2.68e5	0.80	NO	1.02	1.000	24.866	25.12	0.990	1.000	99.924	99.9	0.356	
26	26 13C-1,2,3,7,8-PeCDF	2.22e5	1.59	NO	0.842	1.000	29.028	28.98	1.156	1.154	100.40	100	0.366	
27	27 13C-2,3,4,7,8-PeCDF	2.10e5	1.68	NO	0.802	1.000	29.915	29.94	1.191	1.192	100.05	100	0.385	
28	28 13C-1,2,3,4,7,8-HxCDF	1.84e5	0.50	NO	1.00	1.000	32.527	32.48	0.988	0.987	96.954	97.0	0.452	
29	29 13C-1,2,3,6,7,8-HxCDF	1.88e5	0.49	NO	1.02	1.000	32.658	32.61	0.992	0.991	97.404	97.4	0.445	
30	30 13C-2,3,4,6,7,8-HxCDF	1.81e5	0.50	NO	0.955	1.000	33.221	33.26	1.009	1.010	100.01	100	0.475	
31	31 13C-1,2,3,7,8,9-HxCDF	1.55e5	0.52	NO	0.851	1.000	34.285	34.27	1.041	1.041	96.035	96.0	0.532	
32	32 13C-1,2,3,4,6,7,8-HpCDF	1.54e5	0.42	NO	0.848	1.000	35.786	35.91	1.087	1.091	95.936	95.9	0.449	
33	33 13C-1,2,3,4,7,8,9-HpCDF	1.10e5	0.43	NO	0.624	1.000	37.761	37.82	1.147	1.149	93.270	93.3	0.610	
34	34 13C-OCDF	2.61e5	0.88	NO	0.730	1.000	40.296	40.68	1.224	1.236	188.84	94.4	0.327	

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Vista Analytical Laboratory

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Name: 200930D2_3, Date: 30-Sep-2020, Time: 13:37:23, ID: ST200930D2-3 1613 CS2 20F1104, Description: 1613 CS2 20F1104

Value of the	# Name	Resp	RA	n/y	RRF	wt/vol	Pred.RT	RT	Pred.RRT	RRT	Conc.	%Rec	DL	EMPC
35	35 37CI-2,3,7,8-TCDD	3.83e3			1.21	1.000	25.768	25.81	1.026	1.027	1.9864	99.3	0.0538	
36	36 13C-1,2,3,4-TCDD	1.60e5	0.78	NO	1.00	1.000	25.260	25.12	1.000	1.000	100.00	100	0.370	
37	37 13C-1,2,3,4-TCDF	2.62e5	0.79	NO	1.00	1.000	23.930	23.77	1.000	1.000	100.00	100	0.363	
38	38 13C-1,2,3,4,6,9-HxCDF	1.90e5	0.50	NO	1.00	1.000	32.990	32.92	1.000	1.000	100.00	100	0.453	

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Name: 200930D2_4, Date: 30-Sep-2020, Time: 14:23:39, ID: ST200930D2-4 1613 CS3 20F1105, Description: 1613 CS3 20F1105

3-172	# Name	Resp	RA	n/y	RRF	wt/vol	Pred.RT	RT	Pred.RRT	RRT	Conc.	%Rec	DL	EMPC
1	1 2,3,7,8-TCDD	1.39e4	0.77	NO	1.00	1.000	25.821	25.81	1.001	1.001	9.5080	95.1	0.111	9.51
2	2 1,2,3,7,8-PeCDD	5.42e4	0.59	NO	0.935	1.000	30.166	30.17	1.001	1.001	49.698	99.4	0.181	49.7
3	3 1,2,3,4,7,8-HxCDD	5.14e4	1.26	NO	1.15	1.000	33.404	33.40	1.000	1.000	50.422	101	0.242	50.4
4	4 1,2,3,6,7,8-HxCDD	5.15e4	1.26	NO	1.02	1.000	33.503	33.53	1.000	1.001	49.826	99.7	0.270	49.8
5	5 1,2,3,7,8,9-HxCDD .	5.21e4	1.29	NO	1.06	1.000	33.822	33.80	1.001	1.000	49.221	98.4	0.250	49.2
6	6 1,2,3,4,6,7,8-HpCDD	4.59e4	1.05	NO	1.00	1.000	37.190	37.19	1.000	1.000	48.395	96.8	0.334	48.4
7	7 OCDD	7.84e4	0.91	NO	0.952	1.000	40.372	40.39	1.000	1.001	101.14	101	0.308	101
8	8 2,3,7,8-TCDF	1.88e4	0.74	NO	1.01	1.000	25.158	25.16	1.001	1.001	8.8783	88.8	0.0922	8.88
9	9 1,2,3,7,8-PeCDF	8.94e4	1.63	NO	0.998	1.000	29.019	29.00	1.001	1.000	49.989	100	0.142	50.0
10	10 2,3,4,7,8-PeCDF	8.96e4	1.62	NO	1.07	1.000	29.974	29.96	1.001	1.001	51.857	104	0.130	51.9
11	11 1,2,3,4,7,8-HxCDF	7.44e4	1.27	NO	1.05	1.000	32.494	32.50	1.000	1.000	50.500	101	0.220	50.5
12	12 1,2,3,6,7,8-HxCDF	7.93e4	1.26	NO	1.10	1.000	32.635	32.64	1.000	1.000	49.738	99.5	0.206	49.7
13	13 2,3,4,6,7,8-HxCDF	7.34e4	1.23	NO	1.09	1.000	33.306	33.28	1.001	1.000	50.165	100	0.237	50.2
14	14 1,2,3,7,8,9-HxCDF	6.56e4	1.26	NO	1.08	1.000	34.282	34.29	1.000	1.000	50.648	101	0.288	50.6
15	15 1,2,3,4,6,7,8-HpCDF	6.77e4	1.02	NO	1.13	1.000	35.953	35.94	1.001	1.001	51.219	102	0.334	51.2
16	16 1,2,3,4,7,8,9-HpCDF	5.55e4	1.02	NO	1.29	1.000	37.827	37.84	1.000	1.000	49.634	99.3	0.356	49.6
17	17 OCDF	9.70e4	0.90	NO	0.953	1.000	40.690	40.71	1.000	1.001	99.596	99.6	0.263	99.6
18	18 13C-2,3,7,8-TCDD	1.46e5	0.79	NO	1.17	1.000	25.771	25.79	1.026	1.027	97.942	97.9	0.382	
1.9	19 13C-1,2,3,7,8-PeCDD	1.17e5	0.63	NO	0.914	1.000	29.955	30.15	1.193	1.200	100.61	101	0.290	
20	20 13C-1,2,3,4,7,8-HxCDD	8.84e4	1.27	NO	0.634	1.000	33.394	33.39	1.014	1.014	98.658	98.7	0.415	1
21	21 13C-1,2,3,6,7,8-HxCDD	1.01e5	1.26	NO	0.724	1.000	33.503	33.50	1.017	1.017	98.518	98.5	0.363	
22	22 13C-1,2,3,7,8,9-HxCDD	9.97e4	1.21	NO	0.716	1.000	33.769	33.79	1.025	1.026	98.480	98.5	0.367	1
23	23 13C-1,2,3,4,6,7,8-HpCDD	9.48e4	1.06	NO	0.660	1.000	37.181	37.18	1.129	1.129	101.49	101	0.587	
24	24 13C-OCDD	1.63e5	0.88	NO	0.587	1.000	40.158	40.37	1.219	1.226	196.23	98.1	0.349	
25	25 13C-2,3,7,8-TCDF	2.10e5	0.78	NO	1.02	1.000	24.866	25.13	0.990	1.001	99.133	99.1	0.390	[
26	26 13C-1,2,3,7,8-PeCDF	1.79e5	1.59	NO	0.842	1.000	29.028	29.00	1.156	1.154	102.97	103	0.440	
27	27 13C-2,3,4,7,8-PeCDF	1.61e5	1.67	NO	0.802	1.000	29.915	29.94	1.191	1.192	96.981	97.0	0.462	1
28	28 13C-1,2,3,4,7,8-HxCDF	1.40e5	0.49	NO	1.00	1.000	32.538	32.49	0.988	0.987	98.799	98.8	0.562	
29	29 13C-1,2,3,6,7,8-HxCDF	1.45e5	0.50	NO	1.02	1.000	32.669	32.63	0.992	0.991	100.59	101	0.554	
30	30 13C-2,3,4,6,7,8-HxCDF	1.35e5	0.50	NO	0.955	1.000	33.233	33.27	1.009	1.010	99.579	99.6	0.591	
31	31 13C-1,2,3,7,8,9-HxCDF	1.20e5	0.50	NO	0.851	1.000	34.296	34.28	1.041	1.041	99.429	99.4	0.663	
32	32 13C-1,2,3,4,6,7,8-HpCDF	1.17e5	0.43	NO	0.848	1.000	35.798	35.92	1.087	1.091	97.444	97.4	0.468	
33	33 13C-1,2,3,4,7,8,9-HpCDF	8.69e4	0.41	NO	0.624	1.000	37.774	37.83	1.147	1.149	98.450	98.4	0.635	
34	34 13C-OCDF	2.04e5	0.88	NO	0.730	1.000	40.310	40.69	1.224	1.236	197.95	99.0	0.428	

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Dataset:

U:\VG7.PRO\Results\200930D2\200930D2_CRV.qld

Last Altered: Printed:

Thursday, October 01, 2020 10:27:41 Pacific Daylight Time Thursday, October 01, 2020 10:33:19 Pacific Daylight Time

Name: 200930D2_4, Date: 30-Sep-2020, Time: 14:23:39, ID: ST200930D2-4 1613 CS3 20F1105, Description: 1613 CS3 20F1105

	# Name	Resp	RA	n/y	RRF	wt/vol	Pred.RT	RT	Pred.RRT	RRT	Conc.	%Rec	DL	EMPC
35	35 37CI-2,3,7,8-TCDD	1.49e4			1.21	1.000	25.768	25.81	1.026	1.027	9.7292	97.3	0.0917	
36	36 13C-1,2,3,4-TCDD	1.27e5	0.80	NO	1.00	1.000	25.260	25.12	1.000	1.000	100.00	100	0.448	
37	37 13C-1,2,3,4-TCDF	2.07e5	0.80	NO	1.00	1.000	23.930	23.77	1.000	1.000	100.00	100	0.399	
38	38 13C-1,2,3,4,6,9-HxCDF	1.41e5	0.50	NO	1.00	1.000	32.990	32.93	1.000	1.000	100.00	100	0.564	

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Dataset:

U:\VG7.PRO\Results\200930D2\200930D2_CRV.qld

Last Altered:

Thursday, October 01, 2020 10:27:41 Pacific Daylight Time

Printed:

Thursday, October 01, 2020 10:33:19 Pacific Daylight Time

Name: 200930D2_5, Date: 30-Sep-2020, Time: 15:49:01, ID: ST200930D2-5 1613 CS4 20F1106, Description: 1613 CS4 20F1106

A THE SE	# Name	Resp	RA	n/y	RRF	wt/vol	Pred.RT	RT	Pred.RRT	RRT	Conc.	%Rec	DL	EMPC
1	1 2,3,7,8-TCDD	7.37e4	0.76	NO	1.00	1.000	25.806	25.81	1.001	1.001	38.854	97.1	0.0708	38.9
2	2 1,2,3,7,8-PeCDD	2.74e5	0.60	NO	0.935	1.000	30.167	30.17	1.001	1.001	221.90	111	0.133	222
3	3 1,2,3,4,7,8-HxCDD	2.76e5	1.29	NO	1.15	1.000	33.404	33.40	1.000	1.000	219.24	110	0.210	219
4	4 1,2,3,6,7,8-HxCDD	2.74e5	1.23	NO	1.02	1.000	33.504	33.53	1.000	1.001	216.34	108	0.225	216
5	5 1,2,3,7,8,9-HxCDD	2.84e5	1.25	NO	1.06	1.000	33.823	33.81	1.001	1.001	219.54	110	0.229	220
6	6 1,2,3,4,6,7,8-HpCDD	2.47e5	1.04	NO	1.00	1.000	37.191	37.20	1.000	1.001	221.28	111	0.516	221
7	7 OCDD	4.22e5	0.90	NO	0.952	1.000	40.384	40.39	1.000	1.000	426.28	107	0.374	426
8	8 2,3,7,8-TCDF	1.04e5	0.77	NO	1.01	1.000	25.158	25.15	1.001	1.001	39.830	99.6	0.0601	39.8
9	9 1,2,3,7,8-PeCDF	4.62e5	1.61	NO	0.998	1.000	28.999	29.00	1.001	1.001	218.35	109	0.201	218
10	10 2,3,4,7,8-PeCDF	4.79e5	1.60	NO	1.07	1.000	29.974	29.96	1.001	1.001	225.85	113	0.162	226
11	11 1,2,3,4,7,8-HxCDF	4.05e5	1.25	NO	1.05	1.000	32.494	32.51	1.000	1.000	223.95	112	0.297	224
12	12 1,2,3,6,7,8-HxCDF	4.22e5	1.24	NO	1.10	1.000	32.636	32.64	1.000	1.000	219.12	110	0.284	219
13	13 2,3,4,6,7,8-HxCDF	3.94e5	1.24	NO	1.09	1.000	33.306	33.29	1.001	1.001	225.95	113	0.334	226
14	14 1,2,3,7,8,9-HxCDF	3.46e5	1.29	NO	1.08	1.000	34.283	34.29	1.000	1.000	215.45	108	0.399	215
15	15 1,2,3,4,6,7,8-HpCDF	3.79e5	1.04	NO	1.13	1.000	35.954	35.94	1.001	1.001	224.59	112	0.460	225
16	16 1,2,3,4,7,8,9-HpCDF	3.19e5	1.03	NO	1.29	1.000	37.827	37.84	1.000	1.000	219.44	110	0.460	219
17	17 OCDF	5.52e5	0.89	NO	0.953	1.000	40.691	40.71	1.000	1.001	449.43	112	0.339	449
18	18 13C-2,3,7,8-TCDD	1.89e5	0.79	NO	1.17	1.000	25.771	25.78	1.026	1.026	98.388	98.4	0.296	
19	19 13C-1,2,3,7,8-PeCDD	1.32e5	0.63	NO	0.914	1.000	29.956	30.15	1.193	1.200	88.219	88.2	0.204	
20	20 13C-1,2,3,4,7,8-HxCDD	1.09e5	1.28	NO	0.634	1.000	33.394	33.39	1.014	1.014	100.34	100	0.403	
21	21 13C-1,2,3,6,7,8-HxCDD	1.24e5	1.28	NO	0.724	1.000	33.503	33.50	1.017	1.017	99.250	99.3	0.353	
22	22 13C-1,2,3,7,8,9-HxCDD	1.22e5	1.23	NO	0.716	1.000	33.769	33.79	1.025	1.026	99.176	99.2	0.357	ĺ
23	23 13C-1,2,3,4,6,7,8-HpCDD	1.12e5	1.04	NO	0.660	1.000	37.181	37.18	1.129	1.129	98.247	98.2	0.525	
24	24 13C-OCDD	2.08e5	0.90	NO	0.587	1.000	40.159	40.38	1.219	1.226	206.10	103	0.403	
25	25 13C-2,3,7,8-TCDF	2.57e5	0.78	NO	1.02	1.000	24.867	25.13	0.990	1.001	98.299	98.3	0.313	
26	26 13C-1,2,3,7,8-PeCDF	2.12e5	1.62	NO	0.842	1.000	29.029	28.98	1.156	1.154	98.319	98.3	0.497	1
27	27 13C-2,3,4,7,8-PeCDF	1.98e5	1.60	NO	0.802	1.000	29.915	29.94	1.191	1.192	96.177	96.2	0.522	
28	28 13C-1,2,3,4,7,8-HxCDF	1.72e5	0.51	NO	1.00	1.000	32.538	32.49	0.988	0.987	99.701	99.7	0.382	
29	29 13C-1,2,3,6,7,8-HxCDF	1.75e5	0.51	NO	1.02	1.000	32.670	32.63	0.992	0.991	99.974	100	0.376	
3,0	30 13C-2,3,4,6,7,8-HxCDF	1.60e5	0.51	NO	0.955	1.000	33.233	33.27	1.009	1.010	97.627	97.6	0.401	
31	31 13C-1,2,3,7,8,9-HxCDF	1.49e5	0.52	NO	0.851	1.000	34.296	34.28	1.041	1.041	101.52	102	0.450	
32	32 13C-1,2,3,4,6,7,8-HpCDF	1.49e5	0.42	NO	0.848	1.000	35.798	35.92	1.087	1.091	102.27	102	0.410	
33	33 13C-1,2,3,4,7,8,9-HpCDF	1.13e5	0.41	NO	0.624	1.000	37.774	37.83	1.147	1.149	105.42	105	0.557	
34	34 13C-OCDF	2.58e5	0.88	NO	0.730	1.000	40.310	40.69	1.224	1.236	205.63	103	0.367	

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Dataset: U:\VG7.PRO\Results\200930D2\200930D2_CRV.qld

Last Altered: Thursday, October 01, 2020 10:27:41 Pacific Daylight Time Printed: Thursday, October 01, 2020 10:33:19 Pacific Daylight Time

Name: 200930D2_5, Date: 30-Sep-2020, Time: 15:49:01, ID: ST200930D2-5 1613 CS4 20F1106, Description: 1613 CS4 20F1106

	# Name	Resp	RA	n/y	RRF	wt/vol	Pred.RT	RT	Pred.RRT	RRT	Conc.	%Rec	DL	EMPC
35	35 37Cl-2,3,7,8-TCDD	8.56e4			1.21	1.000	25.768	25.81	1.026	1.027	43.240	108	0.0718	
36	36 13C-1,2,3,4-TCDD	1.64e5	0.79	NO	1.00	1.000	25.260	25.12	1.000	1.000	100.00	100	0.348	
37	37 13C-1,2,3,4-TCDF	2.56e5	0.78	NO	1.00	1.000	23.930	23.77	1.000	1.000	100.00	100	0.319	
38	38 13C-1,2,3,4,6,9-HxCDF	1.72e5	0.50	NO	1.00	1.000	32.990	32.93	1.000	1.000	100.00	100	0.383	

Work Order 2002434

Dataset: U:\VG7.PRO\Results\200930D2\200930D2_CRV.qld

Last Altered: Thursday, October 01, 2020 10:27:41 Pacific Daylight Time Thursday, October 01, 2020 10:33:19 Pacific Daylight Time

Name: 200930D2_6, Date: 30-Sep-2020, Time: 16:35:44, ID: ST200930D2-6 1613 CS5 20F1107, Description: 1613 CS5 20F1107

THE LAND	# Name	Resp	RA	n/y	RRF	wt/vol	Pred.RT	RT	Pred.RRT	RRT	Conc.	%Rec	DL	EMPC
1	1 2,3,7,8-TCDD	7.58e5	0.78	NO	1.00	1.000	25.837	25.82	1.001	1.001	356.63	119	0.0966	357
2	2 1,2,3,7,8-PeCDD	2.85e6	0.62	NO	0.935	1.000	30.167	30.17	1.001	1.001	1780.4	119	0.172	1780
3	3 1,2,3,4,7,8-HxCDD	2.71e6	1.27	NO	1.15	1.000	33.404	33.42	1.000	1.001	1675.8	112	0.517	1680
4	4 1,2,3,6,7,8-HxCDD	2.69e6	1.28	NO	1.02	1.000	33.514	33.54	1.000	1.001	1680.7	112	0.531	1680
5	5 1,2,3,7,8,9-HxCDD	2.81e6	1.28	NO	1.06	1.000	33.834	33.82	1.001	1.001	1704.1	114	0.514	1700
6	6 1,2,3,4,6,7,8-HpCDD	2.53e6	1.04	NO	1.00	1.000	37.212	37.21	1.000	1.000	1793.7	120	1.10	1790
7	7 OCDD	4.25e6	0.91	NO	0.952	1.000	40.405	40.42	1.000	1.000	3501.8	117	0.640	3500
8	8 2,3,7,8-TCDF	9.86e5	0.76	NO	1.01	1.000	25.173	25.16	1.001	1.001	338.16	113	0.0928	338
9	9 1,2,3,7,8-PeCDF	4.38e6	1.61	NO	0.998	1.000	29.019	29.02	1.001	1.001	1733.2	116	0.290	1730
10	10 2,3,4,7,8-PeCDF	4.65e6	1.58	NO	1.07	1.000	29.994	29.96	1.001	1.000	1748.5	117	0.254	1750
11	11 1,2,3,4,7,8-HxCDF	3.93e6	1.26	NO	1.05	1.000	32.505	32.52	1.000	1.000	1735.3	116	0.598	1740
12	12 1,2,3,6,7,8-HxCDF	4.09e6	1.24	NO	1.10	1.000	32.646	32.65	1.000	1.000	1760.3	117	0.578	1760
13	13 2,3,4,6,7,8-HxCDF	3.89e6	1.24	NO	1.09	1.000	33.317	33.29	1.001	1.000	1762.8	118	0.677	1760
14	14 1,2,3,7,8,9-HxCDF	3.50e6	1.25	NO	1.08	1.000	34.293	34.30	1.000	1.000	1741.6	116	0.787	1740
15	15 1,2,3,4,6,7,8-HpCDF	3.6 5 e6	1.03	NO	1.13	1.000	35.964	35.95	1.001	1.001	1771.8	118	1.17	1770
16	16 1,2,3,4,7,8,9-HpCDF	3.13e6	1.03	NO	1.29	1.000	37.838	37.86	1.000	1.001	1782.6	119	1.19	1780
17	17 OCDF	5.35e6	0.90	NO	0.953	1.000	40.713	40.73	1.000	1.001	3484.8	116	0.570	3480
18	18 13C-2,3,7,8-TCDD	2.12e5	0.79	NO	1.17	1.000	25.786	25.81	1.026	1.027	104.16	104	0.286	
1/9	19 13C-1,2,3,7,8-PeCDD	1.71e5	0.64	NO	0.914	1.000	29.974	30.15	1.193	1.199	107.75	108	0.215	
20	20 13C-1,2,3,4,7,8-HxCDD	1.40e5	1.26	NO	0.634	1.000	33.405	33.39	1.014	1.014	109.23	109	0.282	
21	21 13C-1,2,3,6,7,8-HxCDD	1.56e5	1.25	NO	0.724	1.000	33.514	33.51	1.017	1.017	106.34	106	0.247	1
22	22 13C-1,2,3,7,8,9-HxCDD	1.55e5	1.28	NO	0.716	1.000	33.781	33.80	1.025	1.026	107.07	107	0.250	
23	23 13C-1,2,3,4,6,7,8-HpCDD	1.41e5	1.06	NO	0.660	1.000	37.194	37.20	1.129	1.129	105.30	105	0.429	
24	24 13C-OCDD	2.55e5	0.91	NO	0.587	1.000	40.172	40.41	1.219	1.226	214.60	107	0.280	
25	25 13C-2,3,7,8-TCDF	2.88e5	0.77	NO	1.02	1.000	24.882	25.15	0.990	1.001	101.82	102	0.296	
26	26 13C-1,2,3,7,8-PeCDF	2.53e5	1.56	NO	0.842	1.000	29.046	29.00	1.156	1.154	108.85	109	0.302	
27	27 13C-2,3,4,7,8-PeCDF	2.47e5	1.63	NO	0.802	1.000	29.933	29.96	1.191	1.192	111.60	112	0.317	
28	28 13C-1,2,3,4,7,8-HxCDF	2.16e5	0.51	NO	1.00	1.000	32.549	32.51	0.988	0.987	106.11	106	0.327	
29	29 13C-1,2,3,6,7,8-HxCDF	2.11e5	0.51	NO	1.02	1.000	32.680	32.64	0.992	0.991	102.28	102	0.322	
30	30 13C-2,3,4,6,7,8-HxCDF	2.03e5	0.50	NO	0.955	1.000	33.244	33.28	1.009	1.010	104.72	105	0.344	
31	31 13C-1,2,3,7,8,9-HxCDF	1.86e5	0.50	NO	0.851	1.000	34.308	34.29	1.041	1.041	107.61	108	0.386	
32	32 13C-1,2,3,4,6,7,8-HpCDF	1.82e5	0.42	NO	0.848	1.000	35.810	35.93	1.087	1.091	105.97	106	0.366	
33	33 13C-1,2,3,4,7,8,9-HpCDF	1.37e5	0.43	NO	0.624	1.000	37.787	37.84	1.147	1.149	108.00	108	0.497	
34	34 13C-OCDF	3.22e5	0.90	NO	0.730	1.000	40.323	40.71	1.224	1.236	217.87	109	0.278	

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Vista Analytical Laboratory

Dataset:

U:\VG7.PRO\Results\200930D2\200930D2_CRV.qld

Last Altered:

Thursday, October 01, 2020 10:27:41 Pacific Daylight Time

Printed:

Thursday, October 01, 2020 10:33:19 Pacific Daylight Time

Name: 200930D2_6, Date: 30-Sep-2020, Time: 16:35:44, ID: ST200930D2-6 1613 CS5 20F1107, Description: 1613 CS5 20F1107

	# Name	Resp	RA	n/y	RRF	wt/vol	Pred.RT	RT	Pred.RRT	RRT	Conc.	%Rec	DL	EMPC
35	35 37CI-2,3,7,8-TCDD	5.12e5			1.21	1.000	25.784	25.82	1.026	1.027	244.41	122	0.0655	
36	36 13C-1,2,3,4-TCDD	1.74e5	0.81	NO	1.00	1.000	25.260	25.13	1.000	1.000	100.00	100	0.335	
37	37 13C-1,2,3,4-TCDF	2.77e5	0.77	NO	1.00	1.000	23.930	23.79	1.000	1.000	100.00	100	0.302	
38	38 13C-1,2,3,4,6,9-HxCDF	2.03e5	0.50	NO	1.00	1.000	32.990	32.94	1.000	1.000	100.00	100	0.328	

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Dataset: Untitled

Last Altered: Thursday, October 01, 2020 10:37:09 Pacific Daylight Time Printed: Thursday, October 01, 2020 10:37:36 Pacific Daylight Time

Method: C:\MassLynx\Default.pro\Methdb\CPSM.mdb 22 Sep 2020 09:44:55 Calibration: U:\VG7.PRO\CurveDB\ZB_DIOXIN_1613vg7-9-30-20.cdb 01 Oct 2020 10:27:37

Name: 200930D2_4, Date: 30-Sep-2020, Time: 14:23:39, ID: ST200930D2-4 1613 CS3 20F1105, Description: 1613 CS3 20F1105

1100	# Name	RT
1	1 1,3,6,8-TCDD (First)	22.41
2	2 1,2,8,9-TCDD (Last)	26.63
3	3 1,2,4,7,9-PeCDD (First)	28.07
4	4 1,2,3,8,9-PeCDD (Last)	30.51
5	5 1,2,4,6,7,9-HxCDD (First)	31.78
6	6 1,2,3,7,8,9-HxCDD (Last)	33.80
7	7 1,2,3,4,6,7,9-HpCDD (First)	36.29
8	8 1,2,3,4,6,7,8-HpCDD (Last)	37.19
9	9 1,3,6,8-TCDF (First)	20.29
10	10 1,2,8,9-TCDF (Last)	26.91
11	11 1,3,4,6,8-PeCDF (First)	26.55
12	12 1,2,3,8,9-PeCDF (Last)	30.83
13	13 1,2,3,4,6,8-HxCDF (First)	31.26
14	14 1,2,3,7,8,9-HxCDF (Last)	34.29
15	15 1,2,3,4,6,7,8-HpCDF (First)	35.94
16	16 1,2,3,4,7,8,9-HpCDF (Last)	37.84

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Dataset:

Untitled

Last Altered: Printed:

Thursday, October 01, 2020 10:38:02 Pacific Daylight Time Thursday, October 01, 2020 10:38:09 Pacific Daylight Time

Method: C:\MassLynx\Default.pro\Methdb\1613_rrt.mdb 11 Sep 2020 15:14:27 Calibration: U:\VG7.PRO\CurveDB\ZB_DIOXIN_1613vg7-9-30-20.cdb 01 Oct 2020 10:27:37

Compound name: 2,3,7,8-TCDD

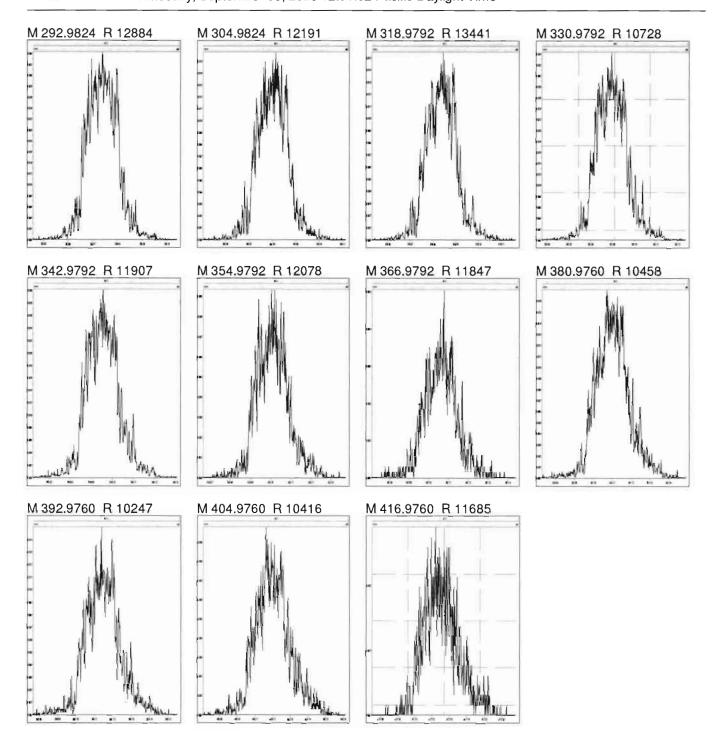
	Name	ID	Acq.Date	Acq.Time
1	200930D2_1	ST200930D2-1 1613 CS0 20F1102	30-Sep-20	12:06:04
2	200930D2_2	ST200930D2-2 1613 CS1 20F1103	30-Sep-20	12:51:13
3	200930D2_3	ST200930D2-3 1613 CS2 20F1104	30-Sep-20	13:37:23
4	200930D2_4	ST200930D2-4 1613 CS3 20F1105	30-Sep-20	14:23:39
5	200930D2_5	ST200930D2-5 1613 CS4 20F1106	30-Sep-20	15:49:01
6	200930D2_6	ST200930D2-6 1613 CS5 20F1107	30-Sep-20	16:35:44
7	200930D2_7	SOLVENT BLANK	30-Sep-20	17:21:53
8	200930D2_8	SS200930D2-1 1613 SSS 20F1108	30-Sep-20	18:08:02
9	200930D2_9	QC200930D2-1 TCDF CPSM	30-Sep-20	18:54:11
10	200930D2_10	B0I0193-BS1 OPR 10	30-Sep-20	19:40:20
11	200930D2_11	SOLVENT BLANK	30-Sep-20	20:26:29
12	200930D2_12	B0I0193-BLK1 Method Blank 10	30-Sep-20	21:11:54
13	200930D2_13	2002003-01 PDI-018SC-A-00-01-190926 10.15	30-Sep-20	21:57:18
14	200930D2_14	2002003-02 PDI-018SC-A-01-02-190926 11.65	30-Sep-20	22:43:26
15	200930D2_15	2002003-03 PDI-018SC-A-02-03-190926 10.16	30-Sep-20	23:29:40
16	200930D2_16	2002003-04 PDI-018SC-A-03-04-190926 11.5	01-Oct-20	00:15:48
17	200930D2_17	2002003-05 PDI-018SC-A-04-05-190926 10.06	01-Oct-20	01:01:11
18	200930D2_18	2002003-06 PDI-018SC-A-05-06-190926 10.33	01-Oct-20	01:46:37

Work Order 2002434 Page 673 of 955

Experiment: ocdd_db5.exp Reference: Pfk.ref Function: 1 @ 200 (ppm)

Printed:

Wednesday, September 30, 2020 12:01:52 Pacific Daylight Time

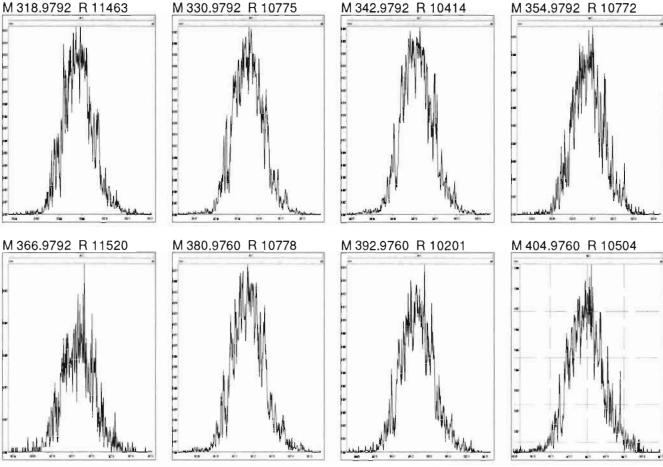


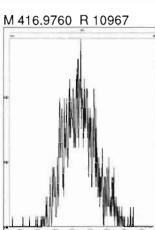
Work Order 2002434 Page 674 of 955

Experiment: ocdd_db5.exp Reference: Pfk.ref Function: 2 @ 200 (ppm)

Printed:

Wednesday, September 30, 2020 12:02:33 Pacific Daylight Time



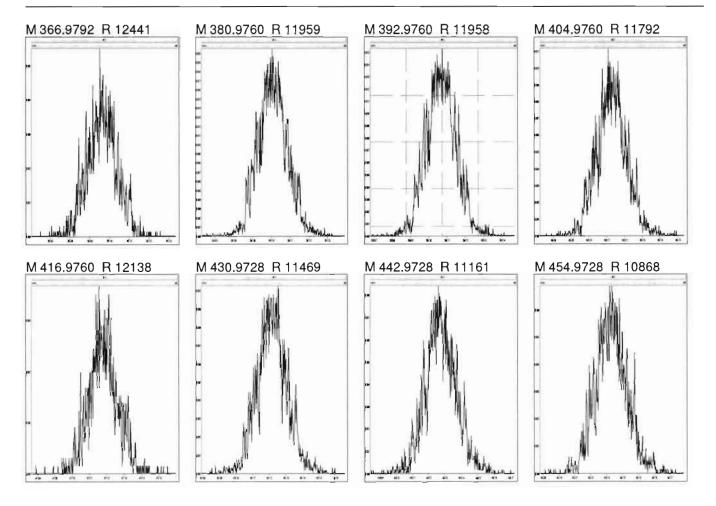


Work Order 2002434 Page 675 of 955

Experiment: ocdd_db5.exp Reference: Pfk.ref Function: 3 @ 200 (ppm)

Printed:

Wednesday, September 30, 2020 12:03:12 Pacific Daylight Time

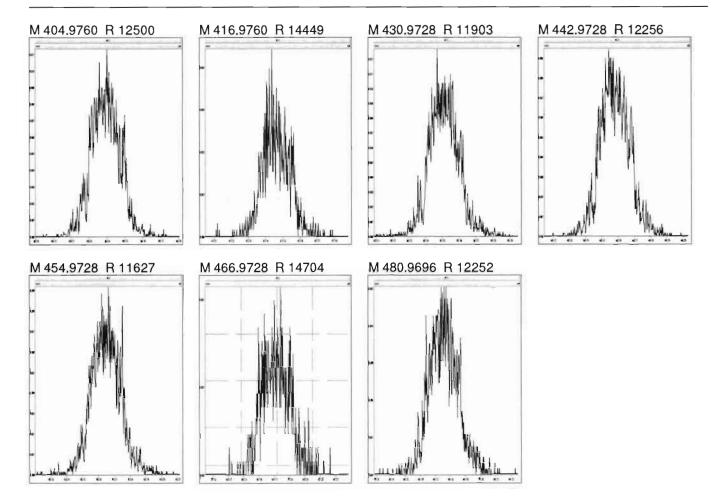


Work Order 2002434 Page 676 of 955

Experiment: ocdd_db5.exp Reference: Pfk.ref Function: 4 @ 200 (ppm)

Printed:

Wednesday, September 30, 2020 12:03:51 Pacific Daylight Time

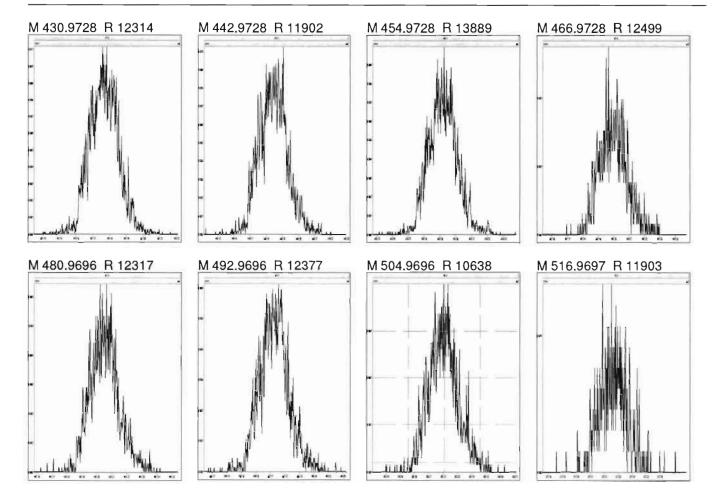


Work Order 2002434 Page 677 of 955

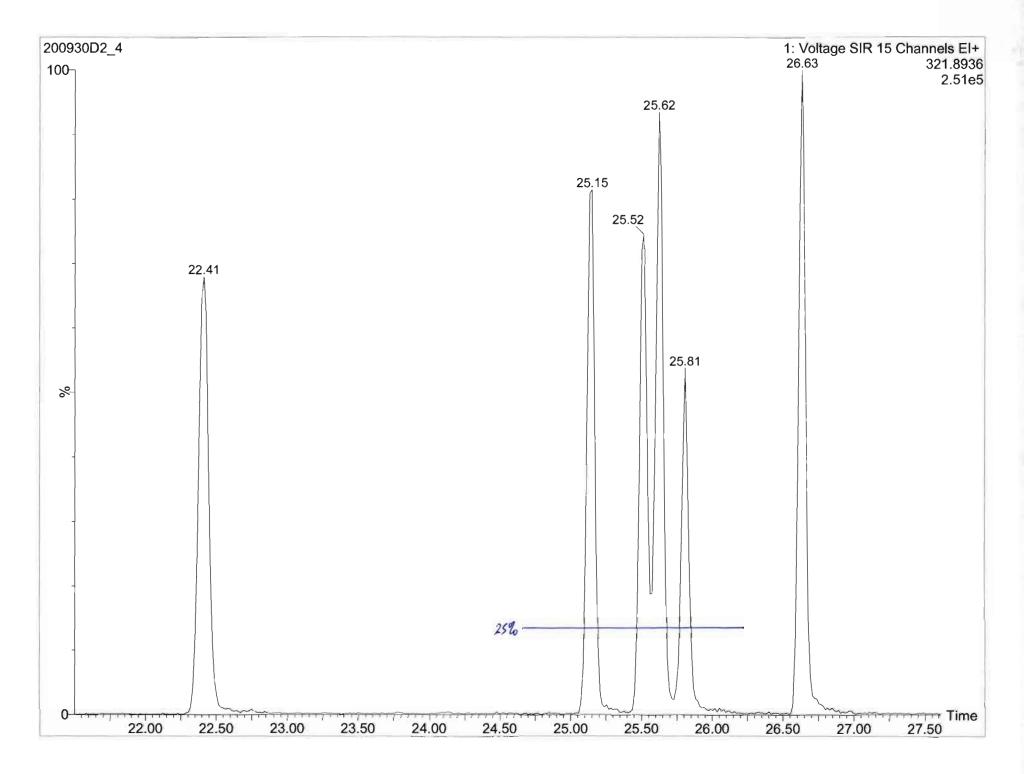
Experiment: ocdd_db5.exp Reference: Pfk.ref Function: 5 @ 200 (ppm)

Printed:

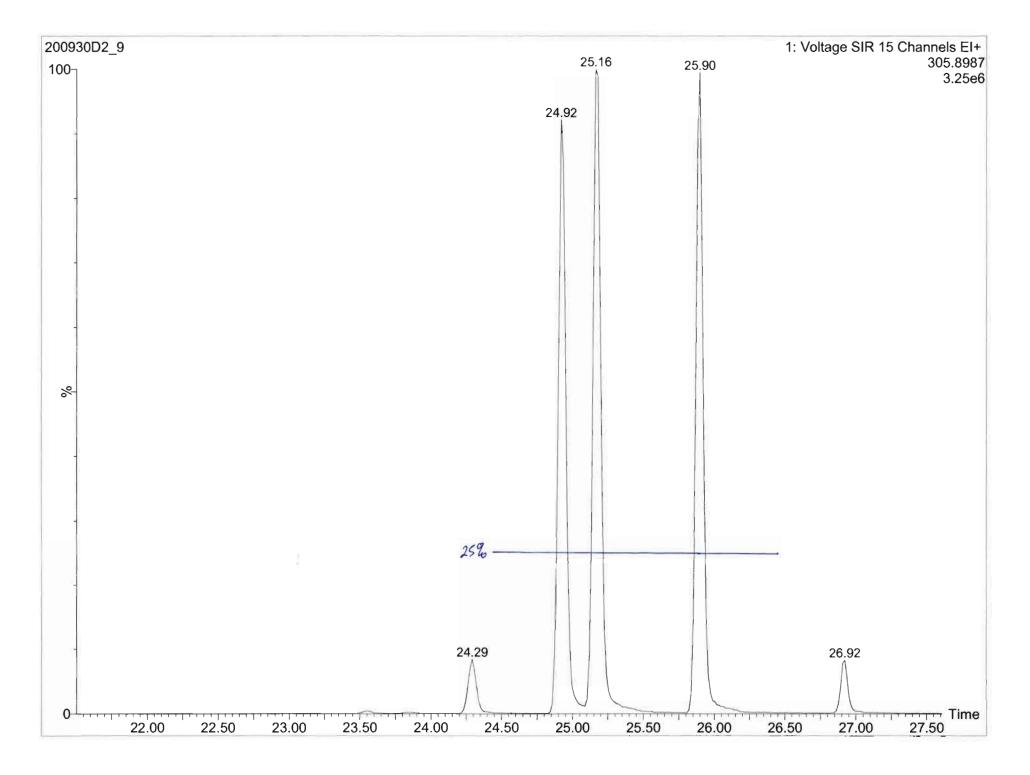
Wednesday, September 30, 2020 12:04:30 Pacific Daylight Time



Work Order 2002434 Page 678 of 955



Work Order 2002434 Page 679 of 955



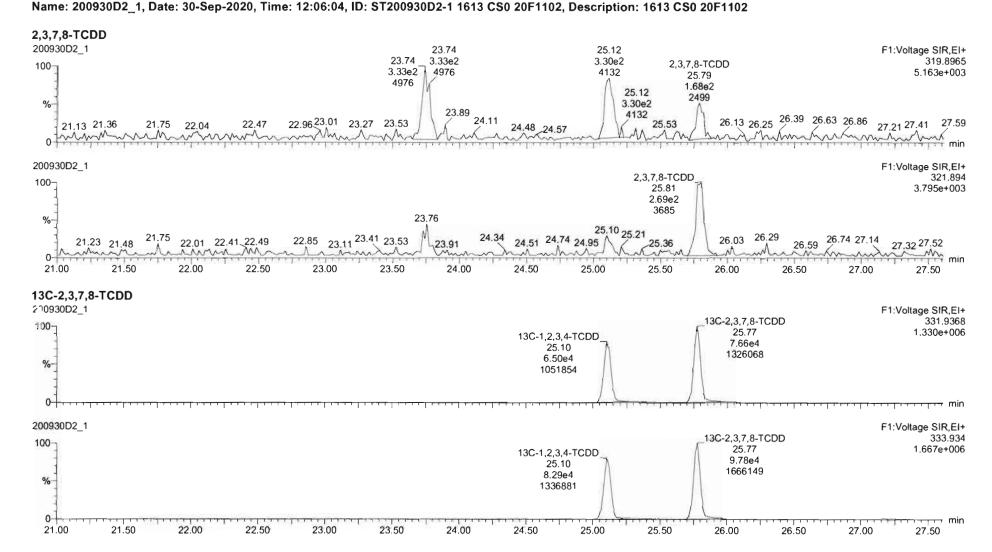
Work Order 2002434 Page 680 of 955

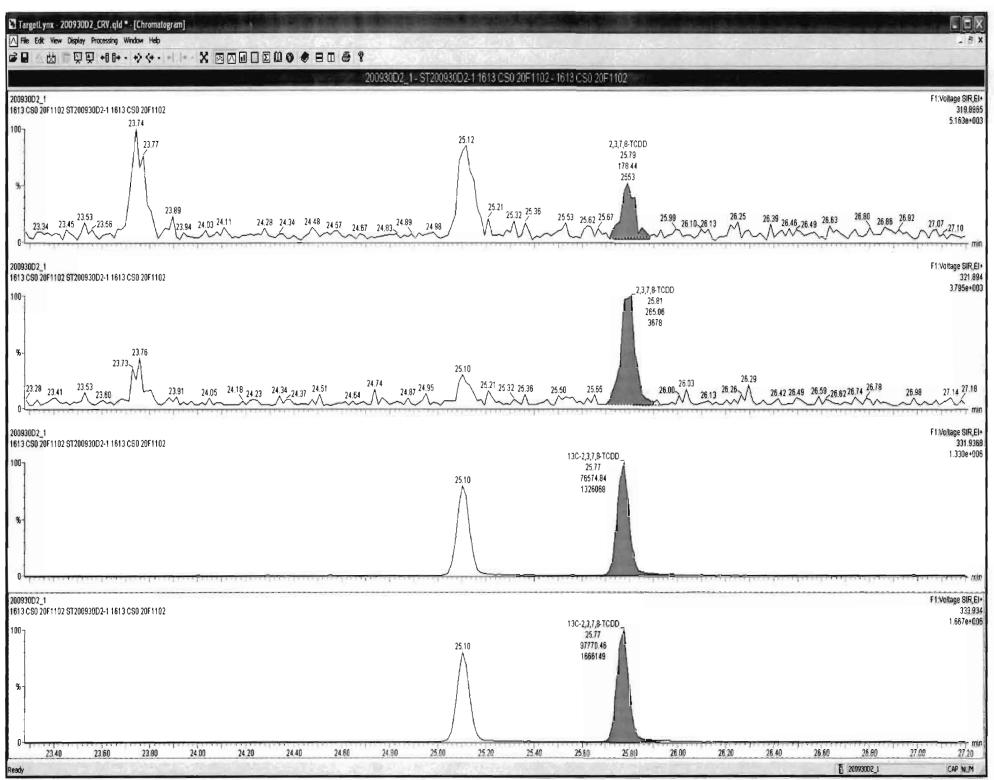
Dataset:

U:\VG7.PRO\Results\200930D2\200930D2_CRV.qld

Last Altered: Printed: Thursday, October 01, 2020 09:56:59 Pacific Daylight Time Thursday, October 01, 2020 09:58:35 Pacific Daylight Time

Method: C:\MassLynx\Default.PRO\MethDB\1613_rrt.mdb 11 Sep 2020 15:14:27 Calibration: U:\VG7.PRO\CurveDB\ZB_DIOXIN_1613vg7-8-20-20.cdb 21 Aug 2020 10:10:46



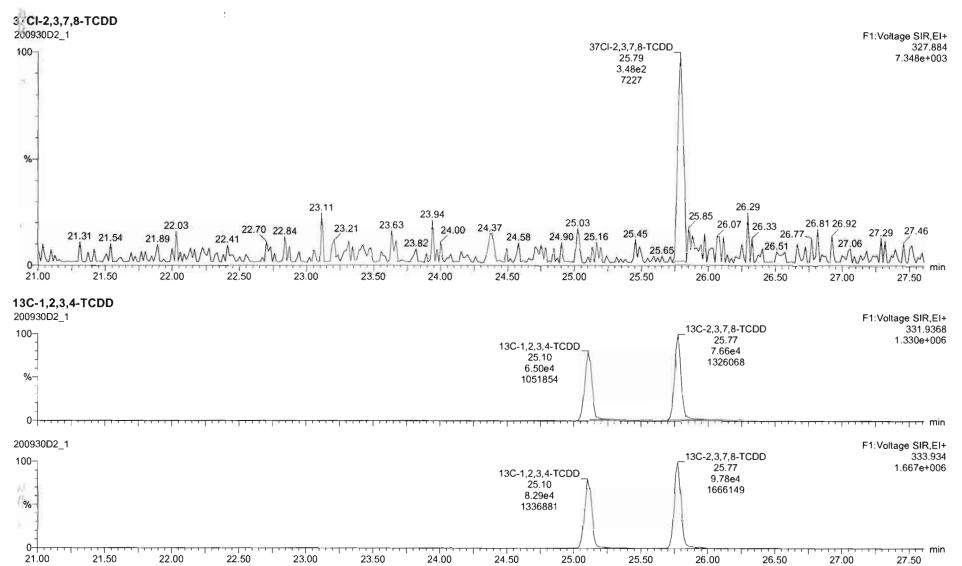


Dátaset:

U:\VG7.PRO\Results\2\00930D2\200930D2_CRV.qld

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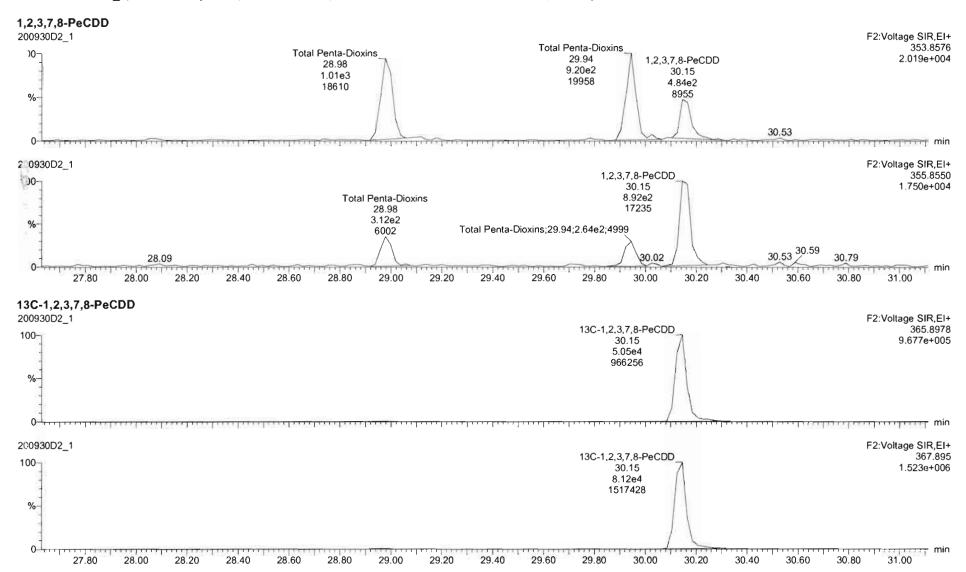


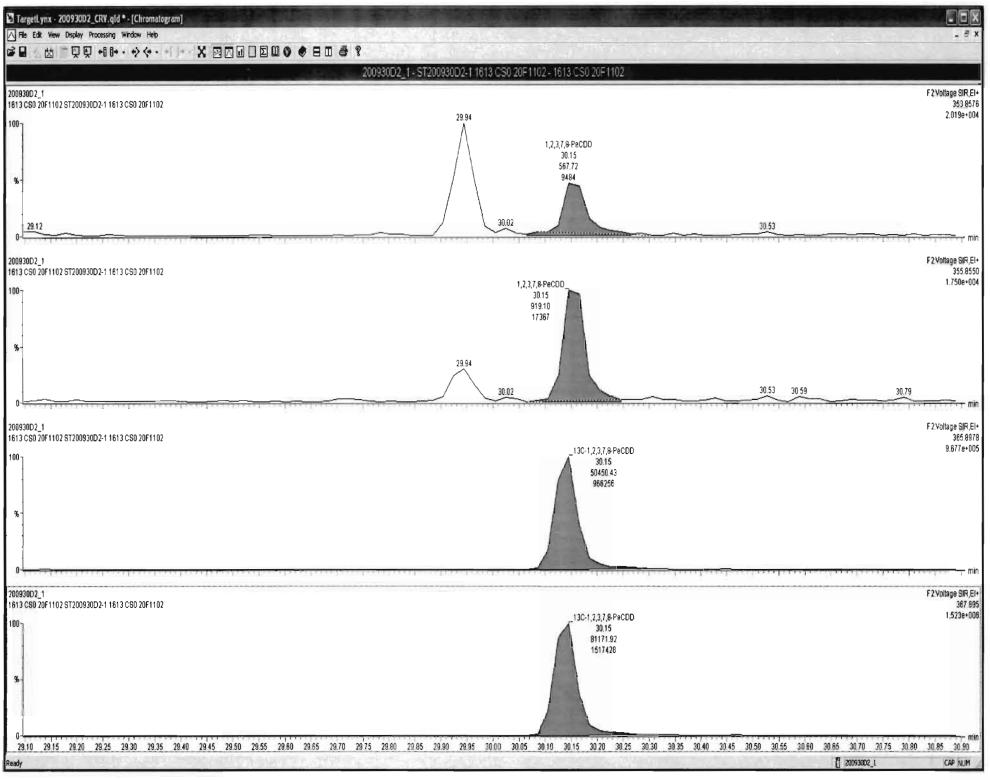
Dataset:

U:\VG7.PRO\Results\200930D2\200930D2_CRV.qld

Last Altered: Thursday, October 01, 2020 09:56:59 Pacific Daylight Time Printed: Thursday, October 01, 2020 09:58:35 Pacific Daylight Time

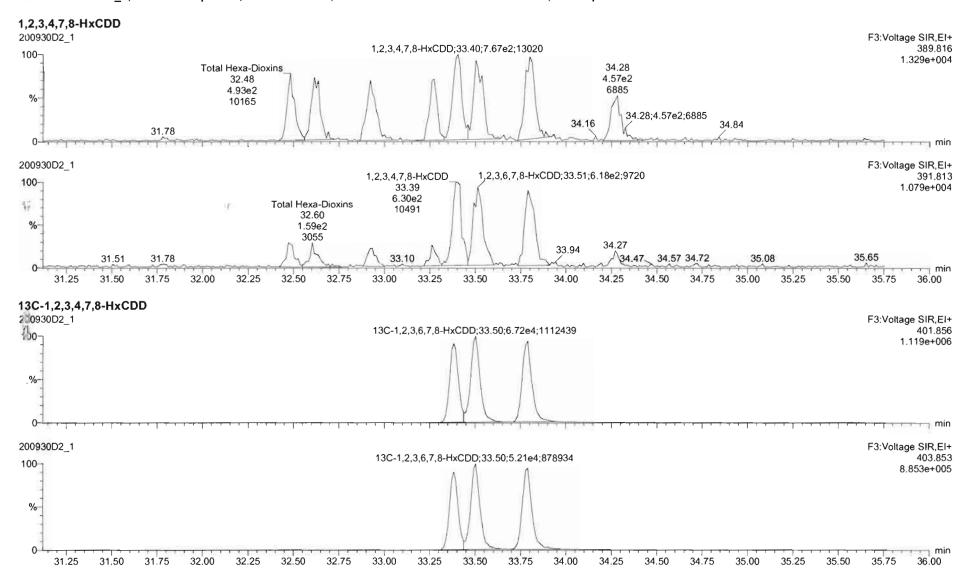
Name: 200930D2 1, Date: 30-Sep-2020, Time: 12:06:04, ID: ST200930D2-1 1613 CS0 20F1102, Description: 1613 CS0 20F1102

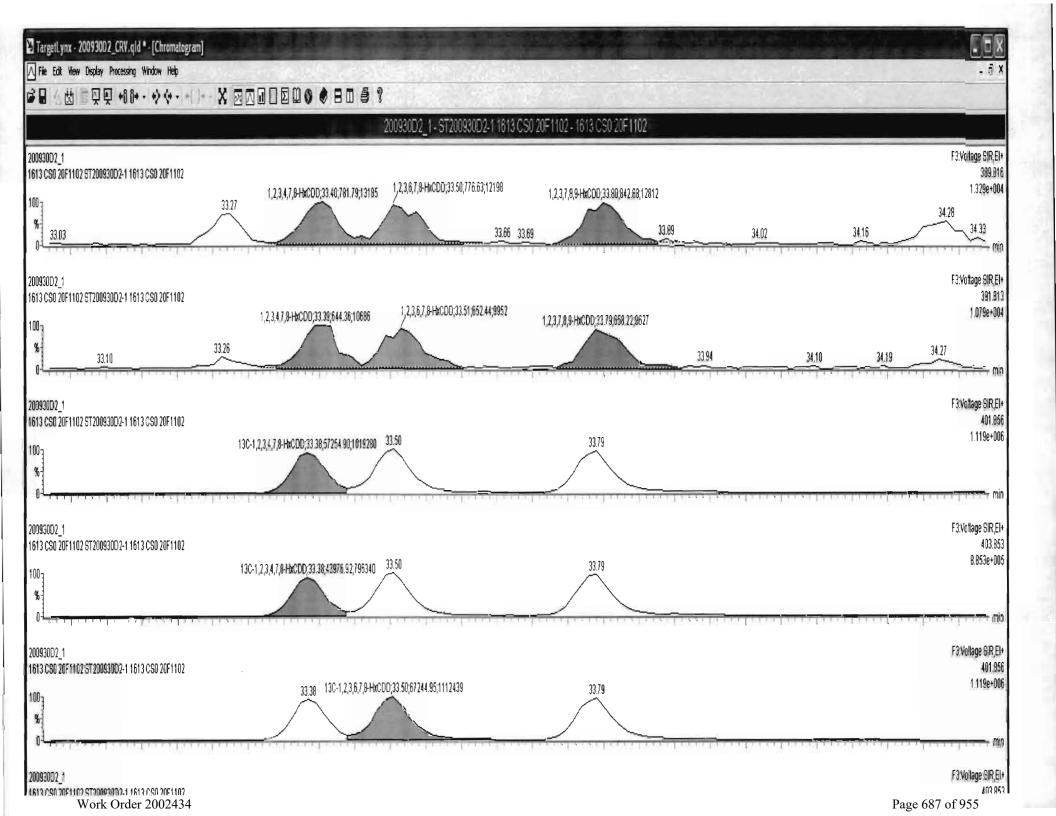




U:\VG7.PRO\Results\200930D2\200930D2_CRV.qld

Last Altered: Thursday, October 01, 2020 09:56:59 Pacific Daylight Time Thursday, October 01, 2020 09:58:35 Pacific Daylight Time

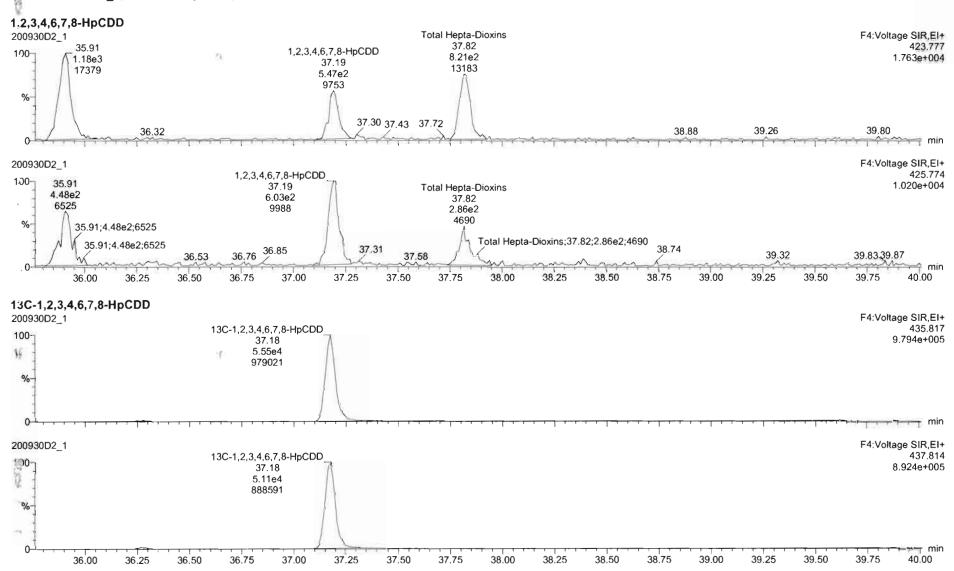


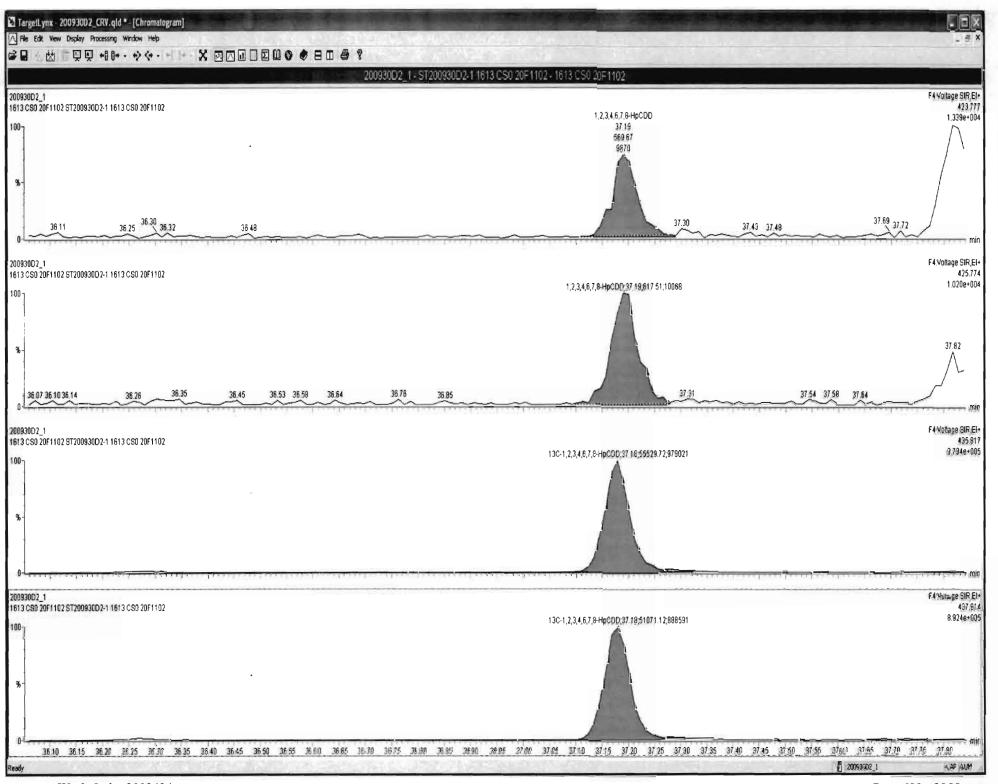


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Last Altered: Printed:

Thursday, October 01, 2020 09:56:59 Pacific Daylight Time Thursday, October 01, 2020 09:58:35 Pacific Daylight Time



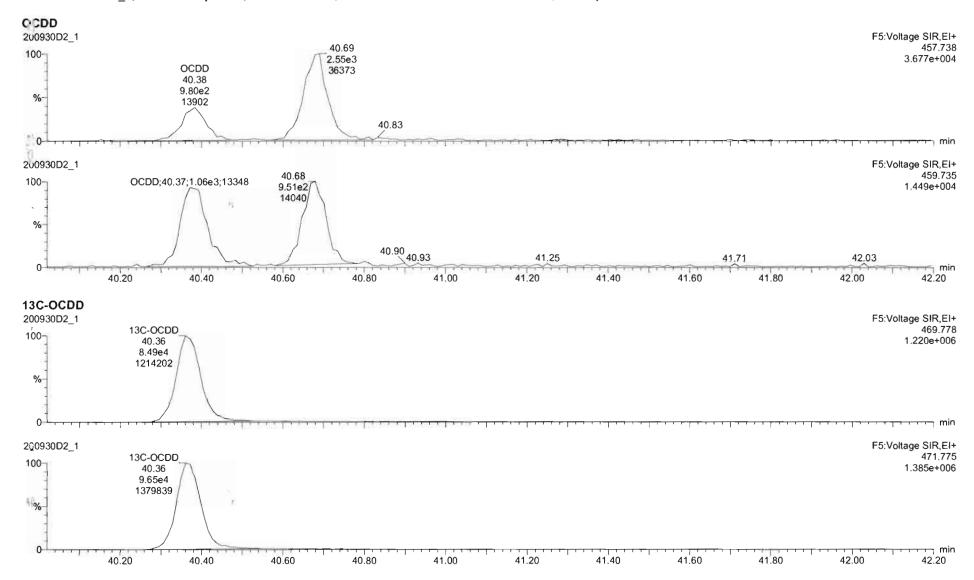


D 1---1

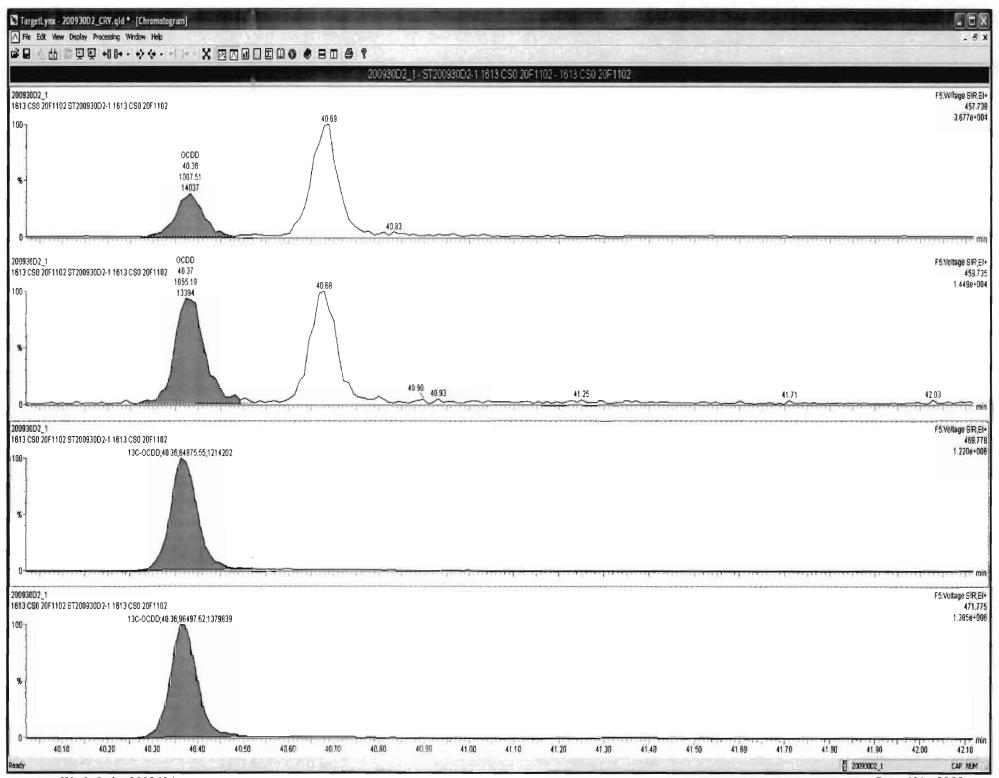
Dataset: U:\VG7.PRO\Results\200930D2\200930D2_CRV.qld

Last Altered: Thursday, October 01, 2020 09:56:59 Pacific Daylight Time Printed: Thursday, October 01, 2020 09:58:35 Pacific Daylight Time

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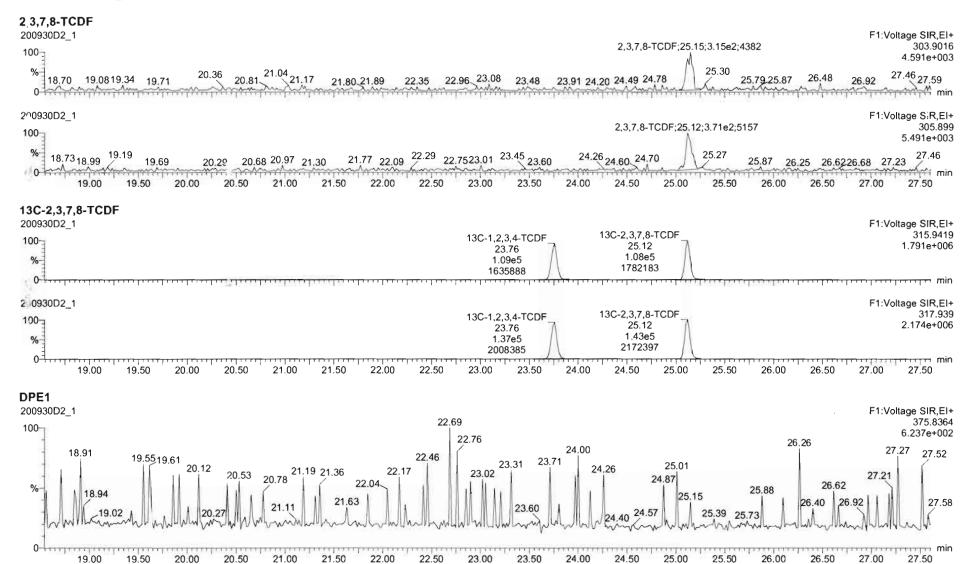


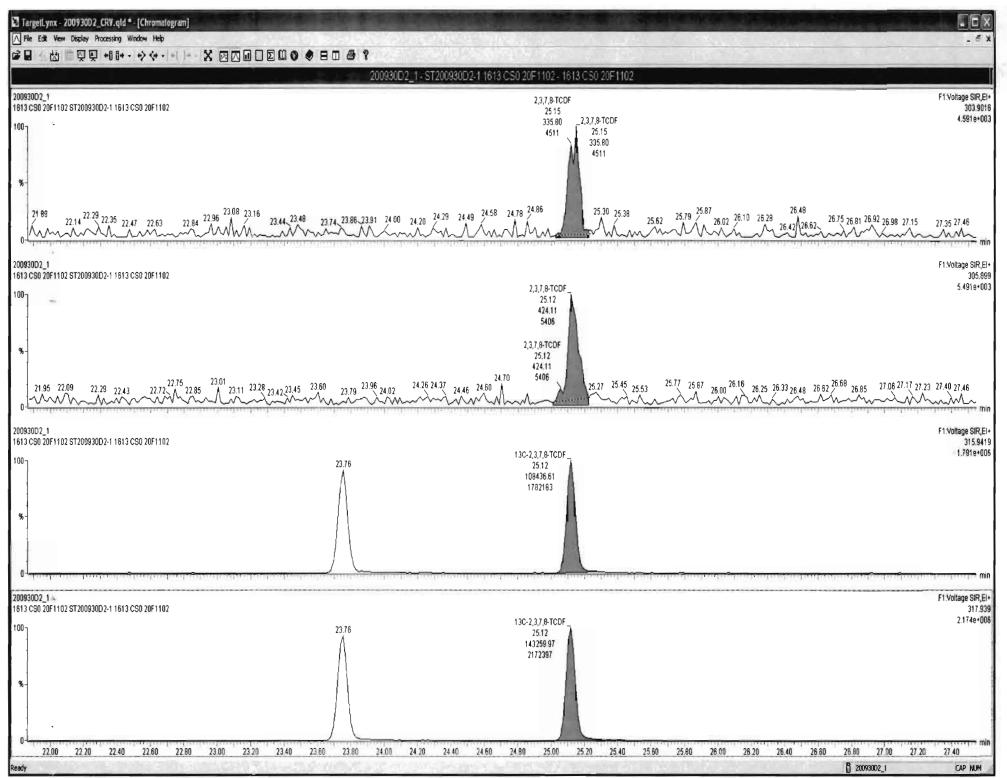
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Dataset: U:\VG7.PRO\Results\200930D2\200930D2_CRV.qld

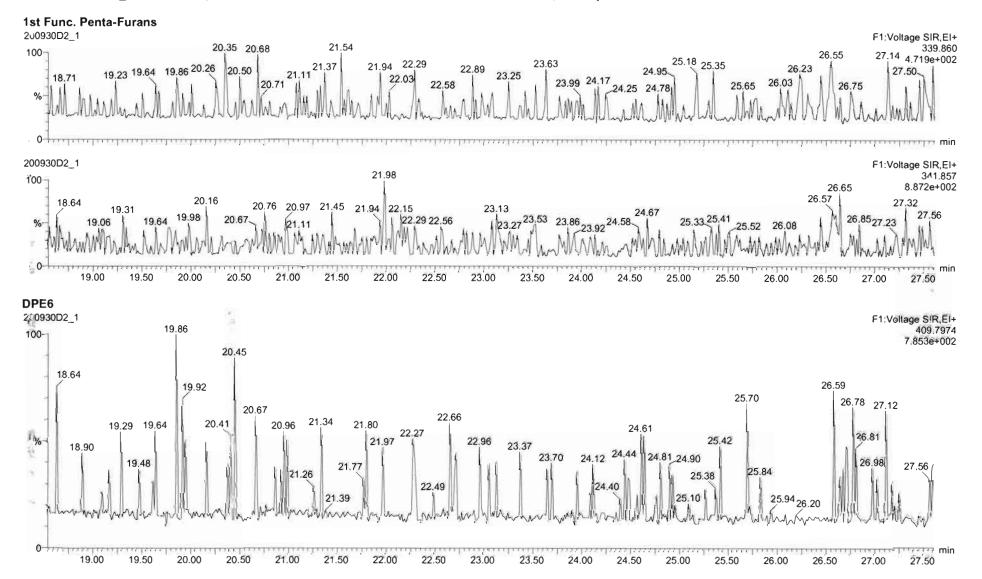
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U:\VG7.PRO\Results\200930D2\200930D2 CRV.qld

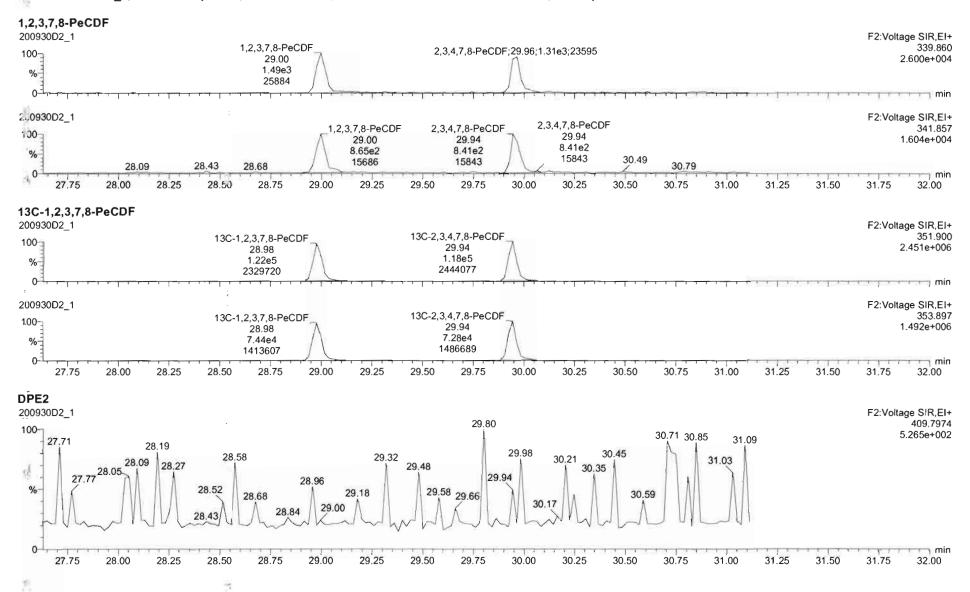
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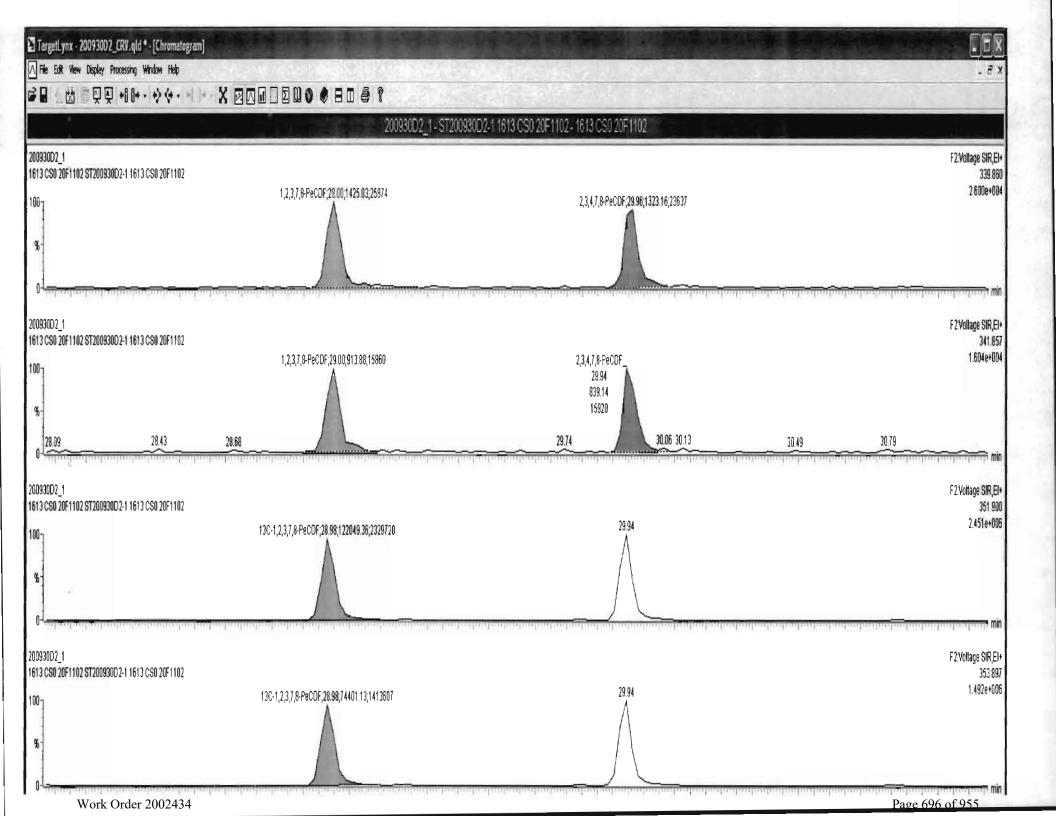


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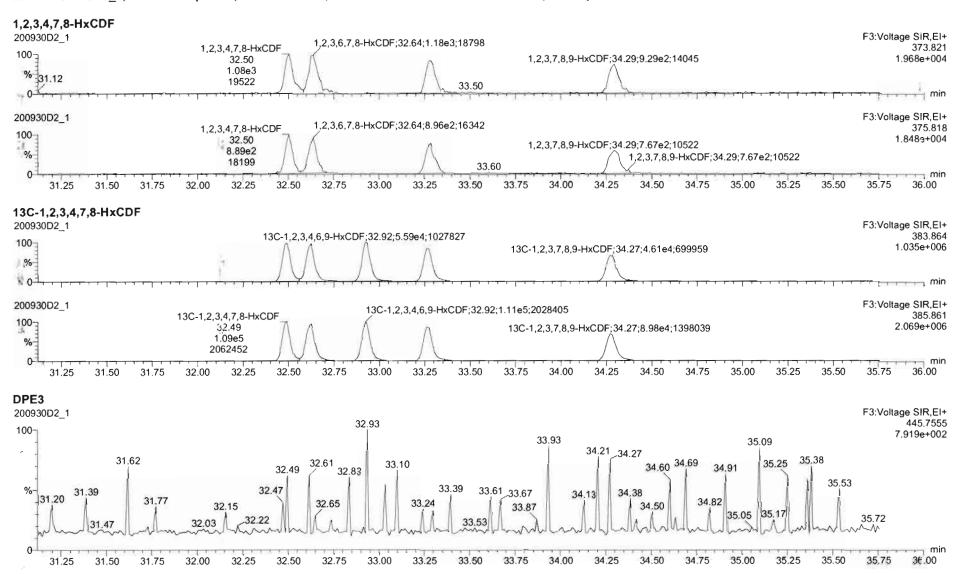
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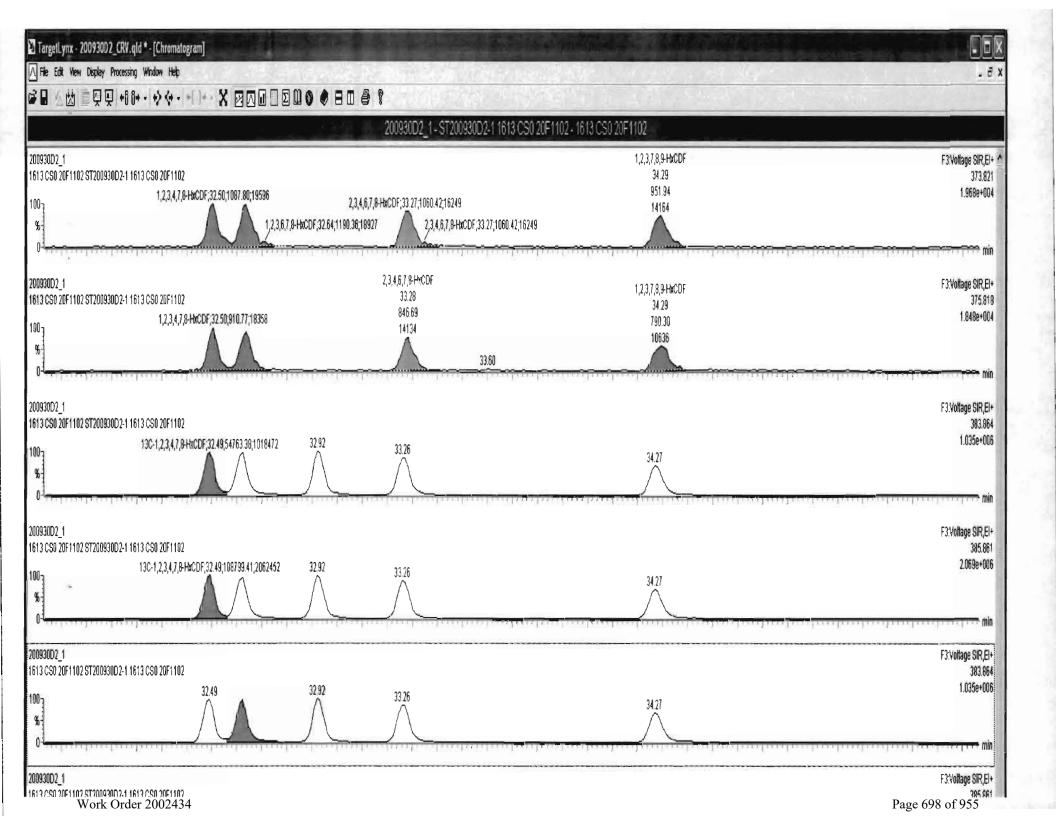




Dataset: U:\VG7.PRO\Results\200930D2\200930D2_CRV.qld

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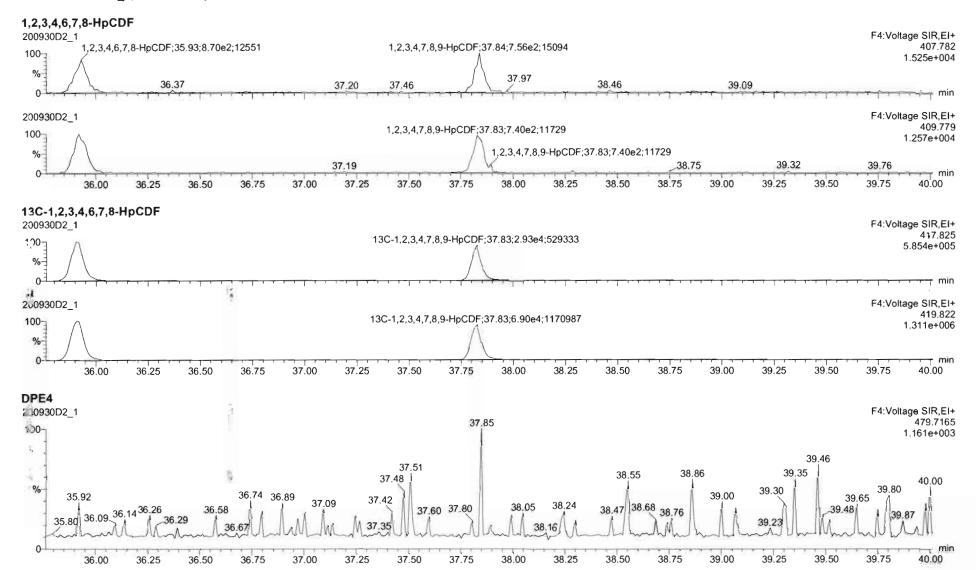


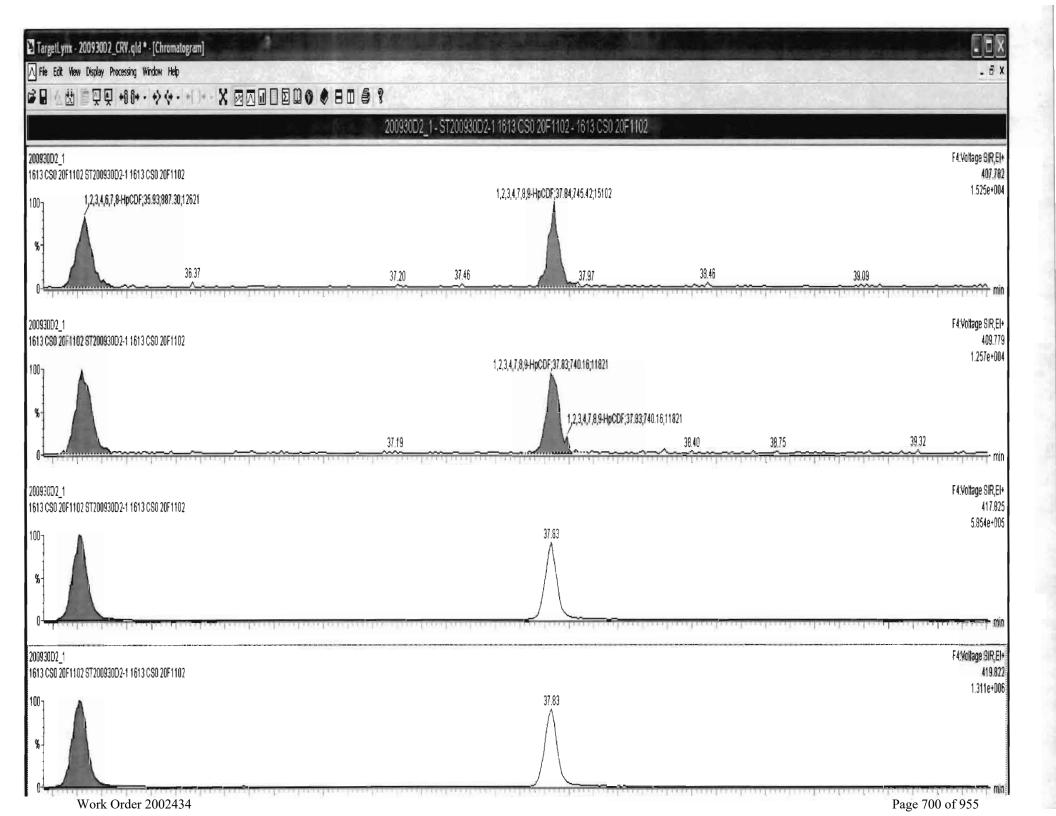


U:\VG7.PRO\Results\200930D2\200930D2 CRV.qld

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Thursday, October 01, 2020 09:56:59 Pacific Daylight Time Thursday, October 01, 2020 09:58:35 Pacific Daylight Time



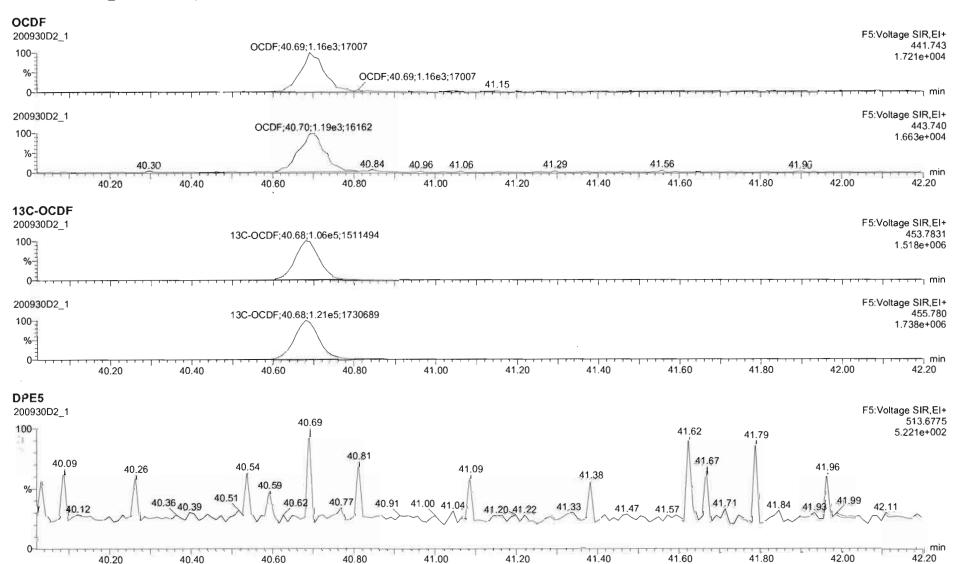


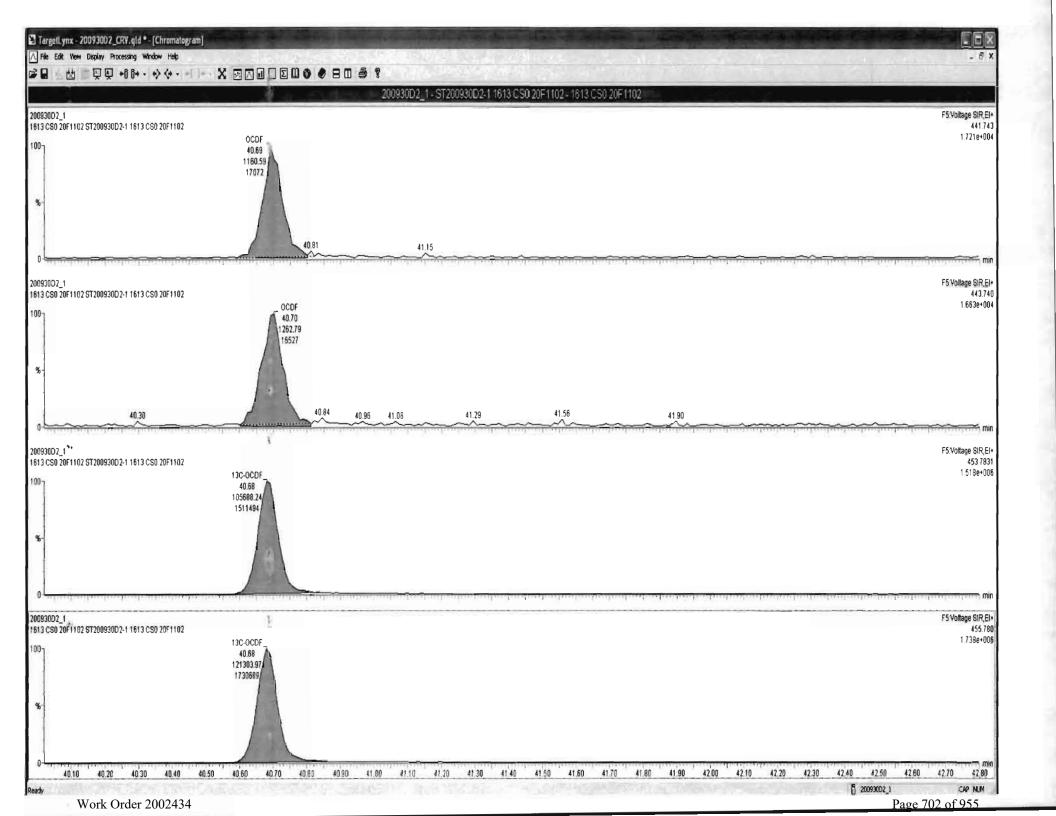
U:\VG7.PRO\Results\200930D2\200930D2 CRV.qld

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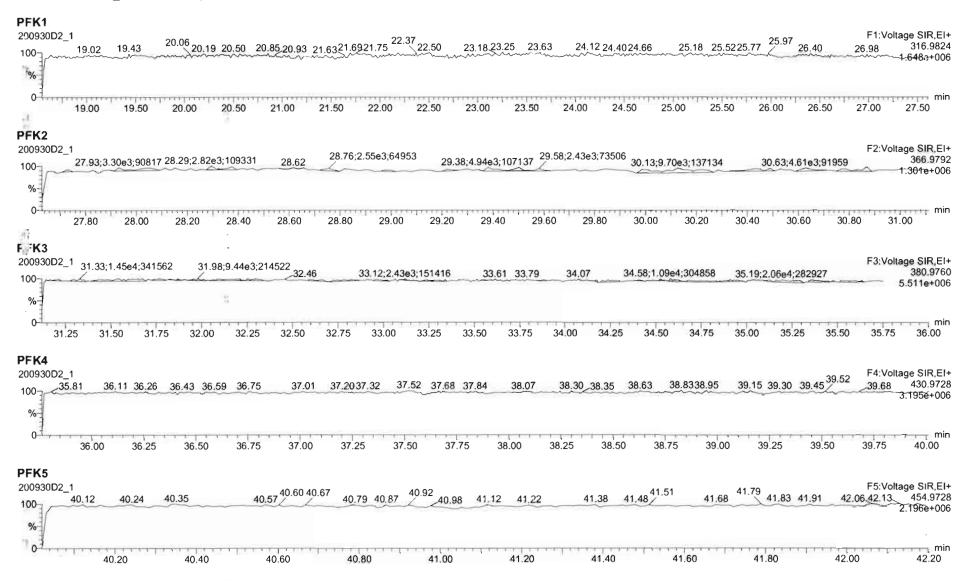
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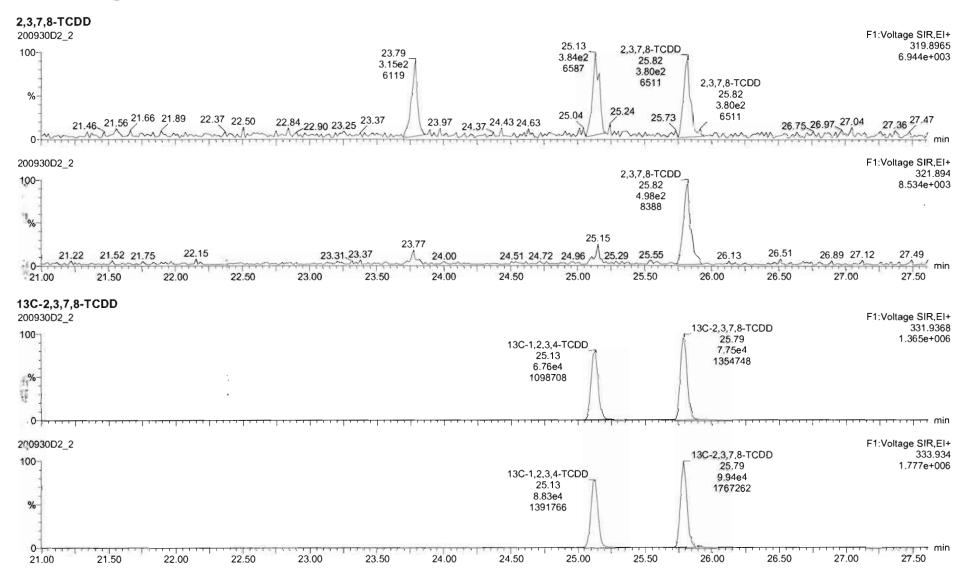
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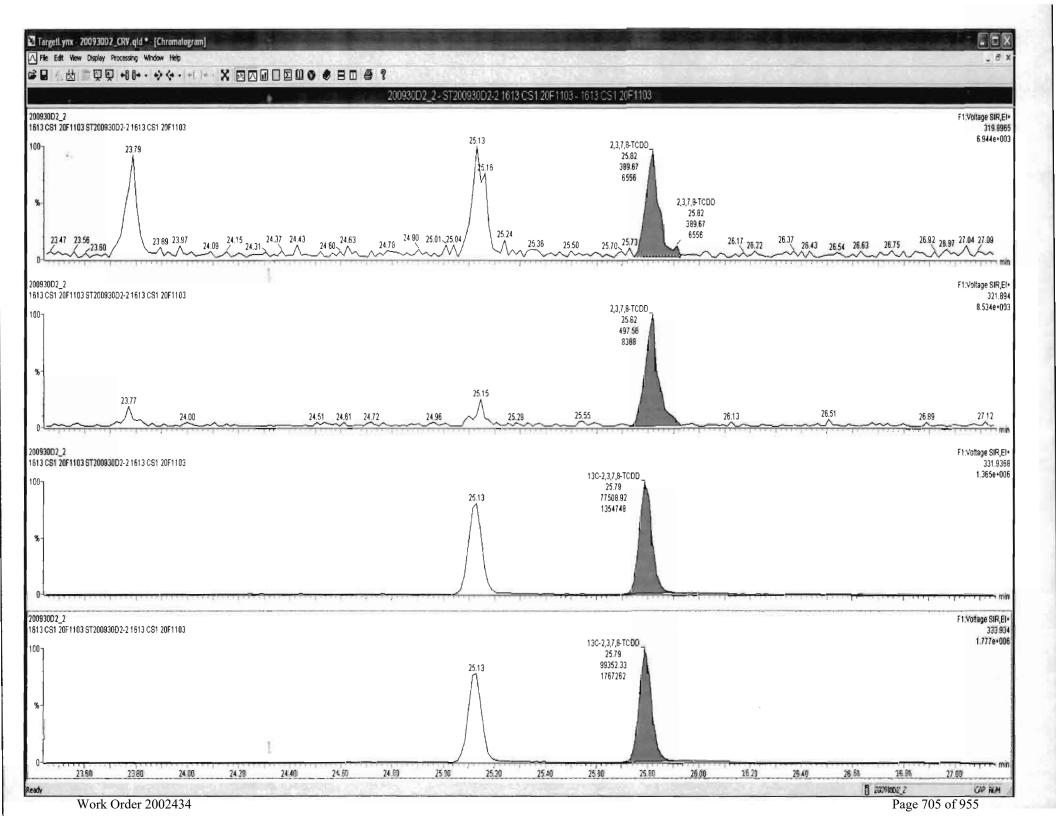
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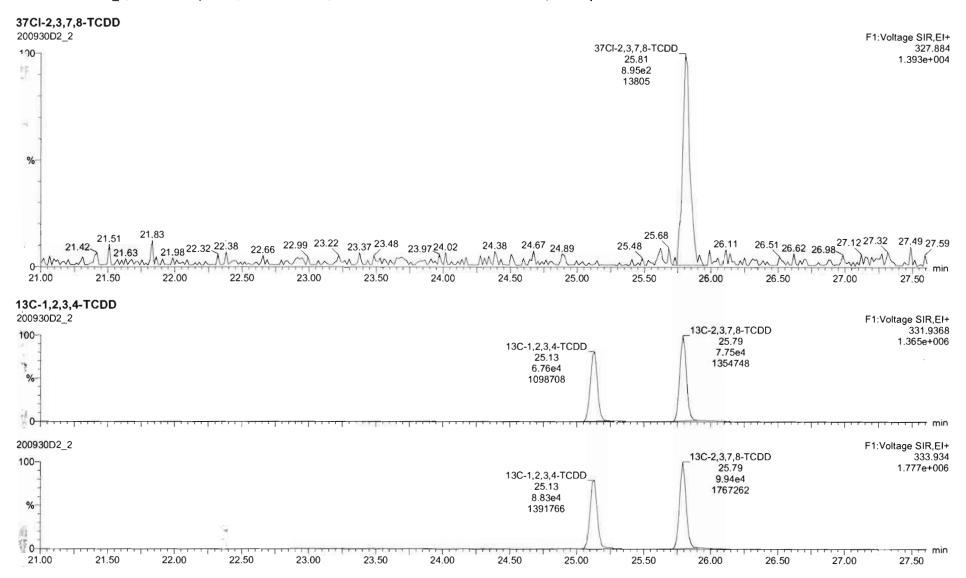




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Thursday, October 01, 2020 09:56:59 Pacific Daylight Time Thursday, October 01, 2020 09:58:35 Pacific Daylight Time

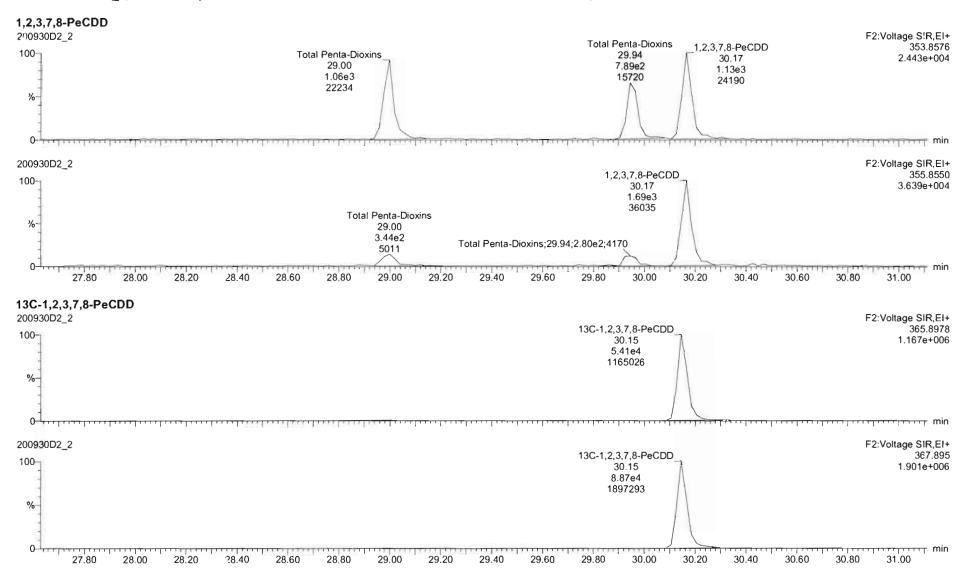


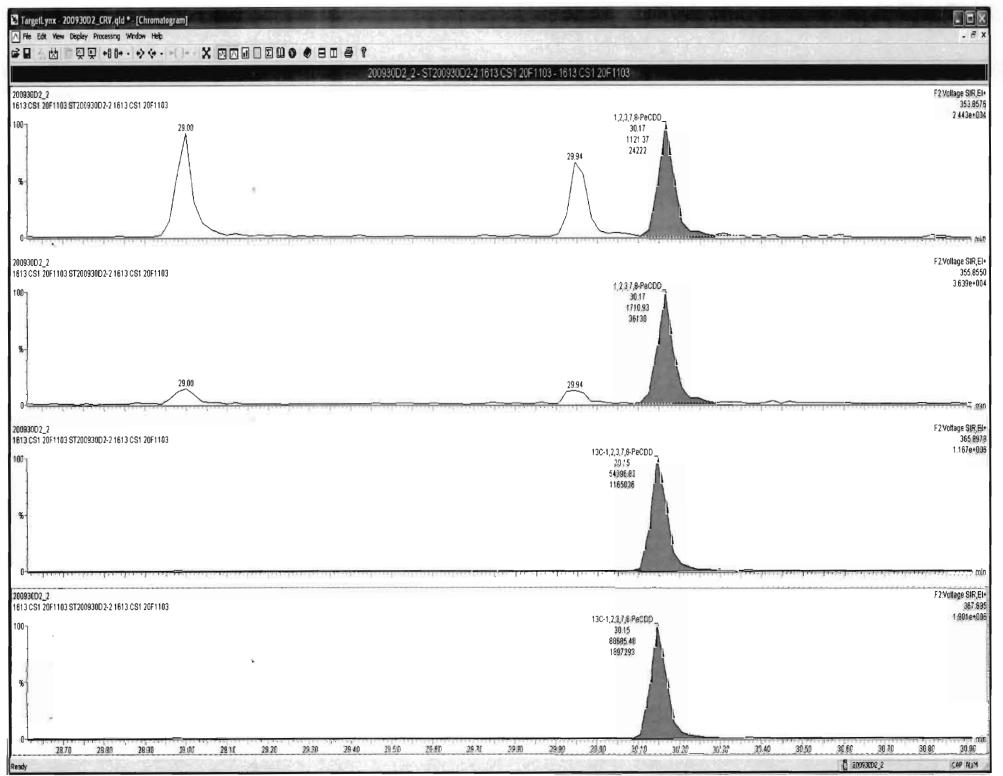
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Dataset:

Thursday, October 01, 2020 09:56:59 Pacific Daylight Time Thursday, October 01, 2020 09:58:35 Pacific Daylight Time

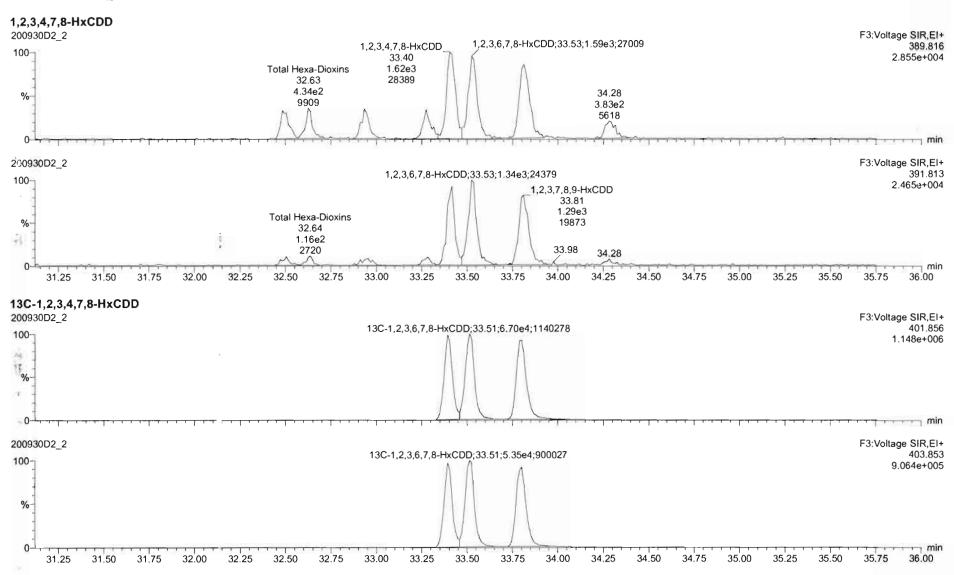




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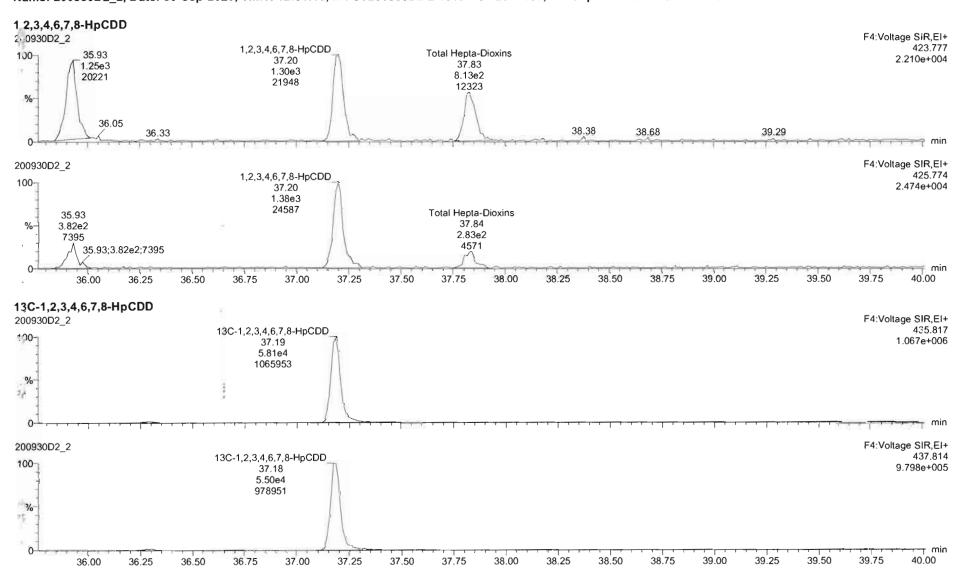
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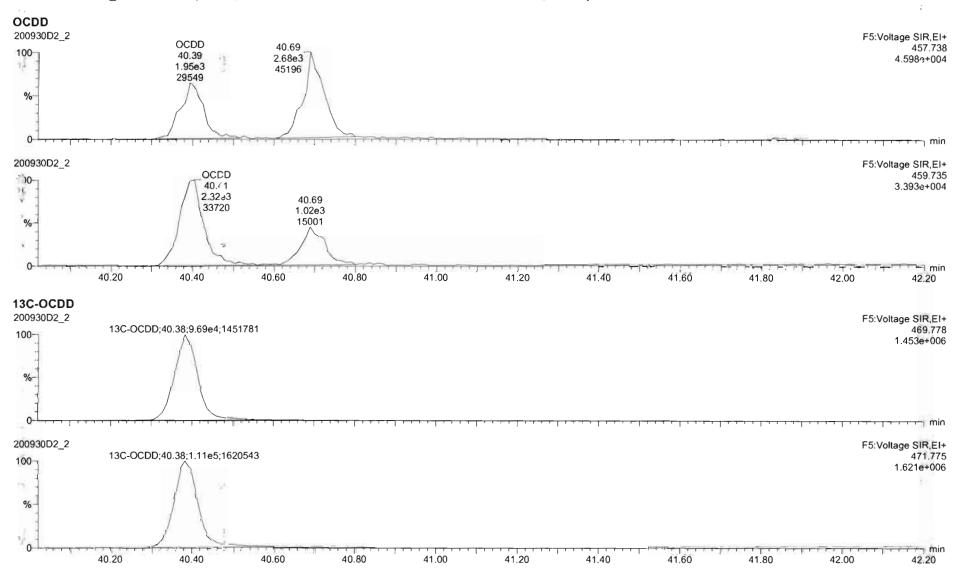
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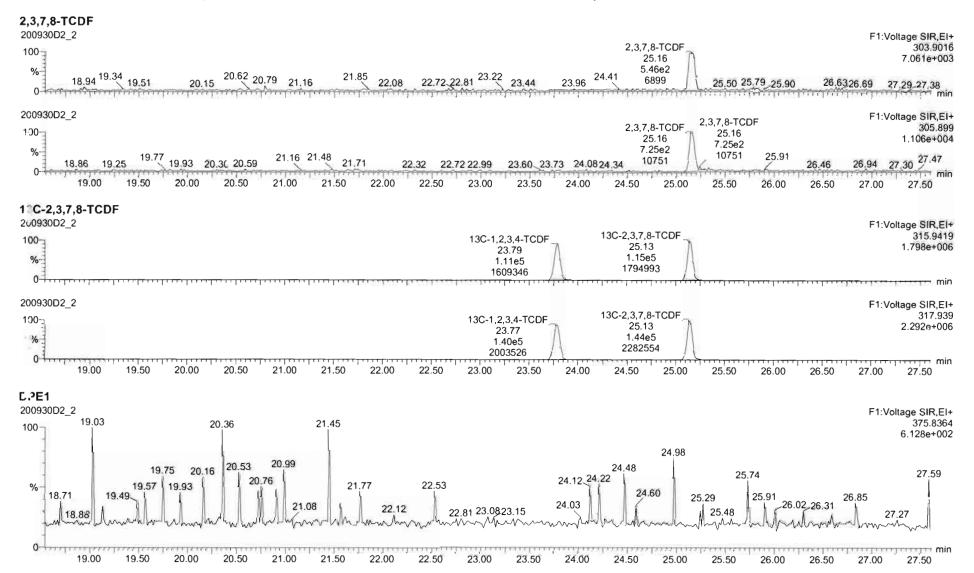
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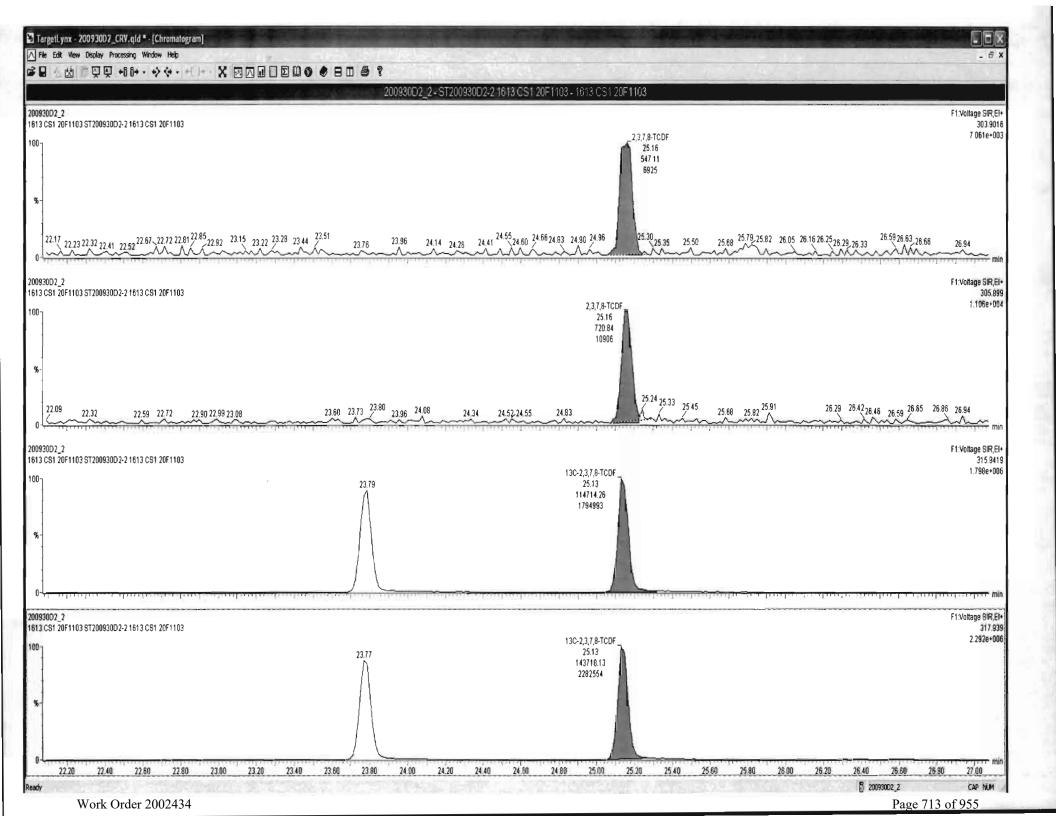


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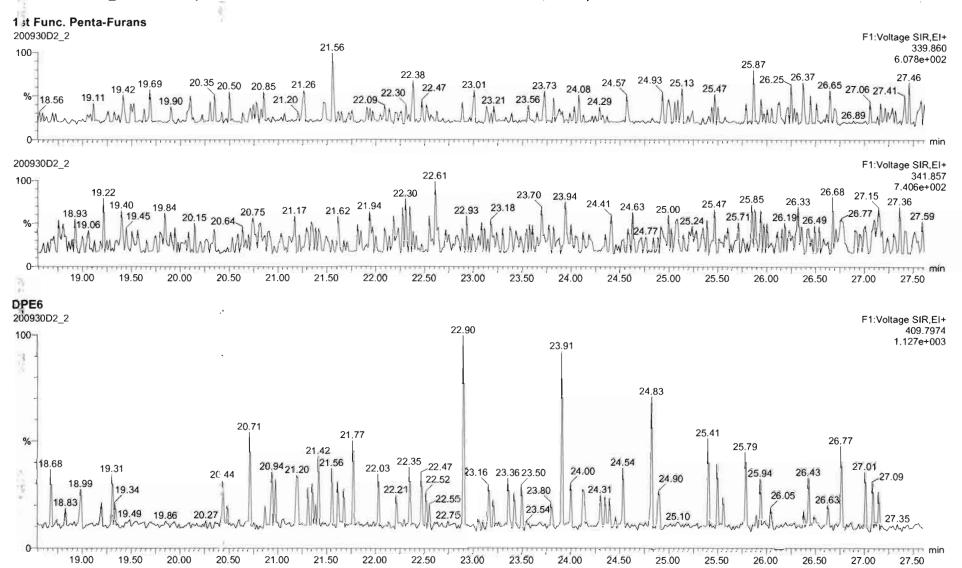




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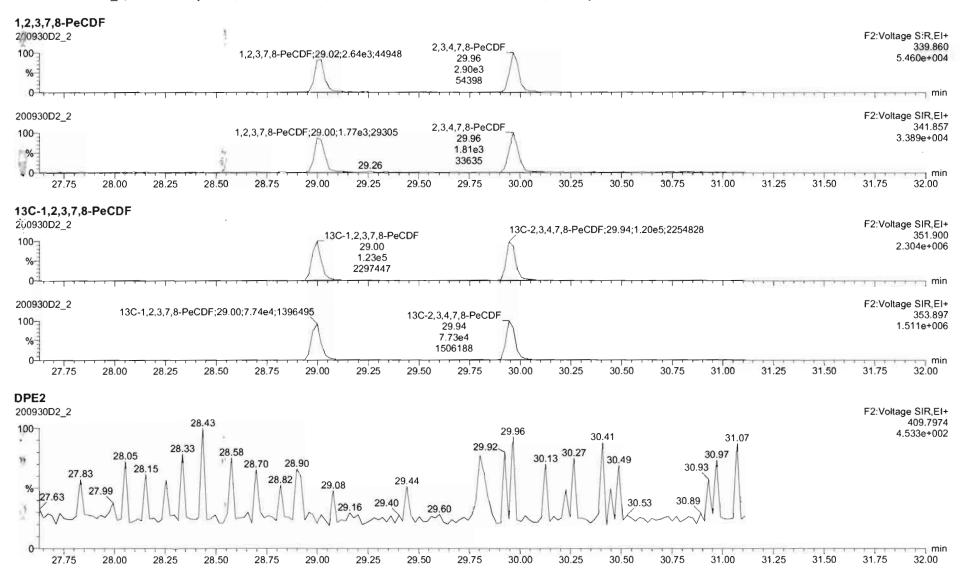
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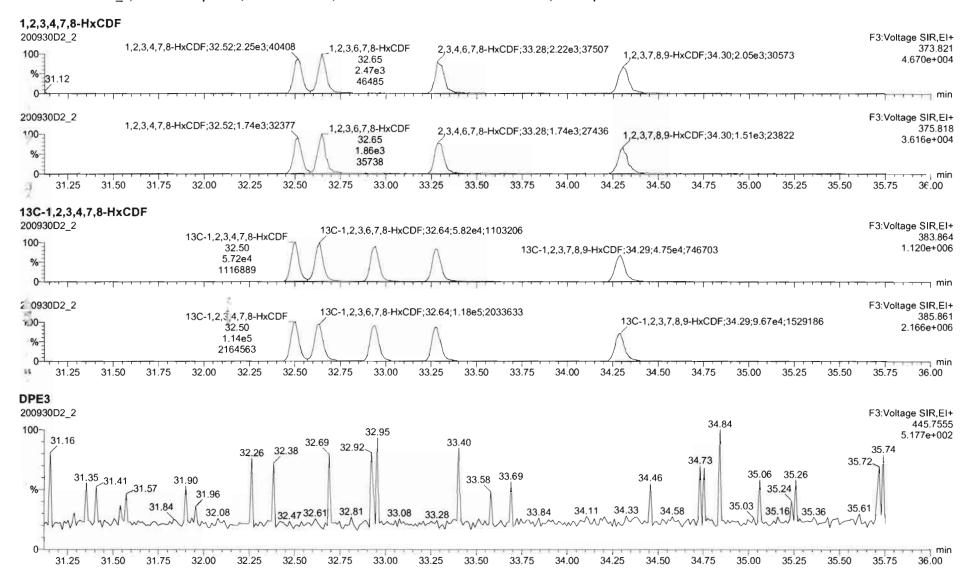
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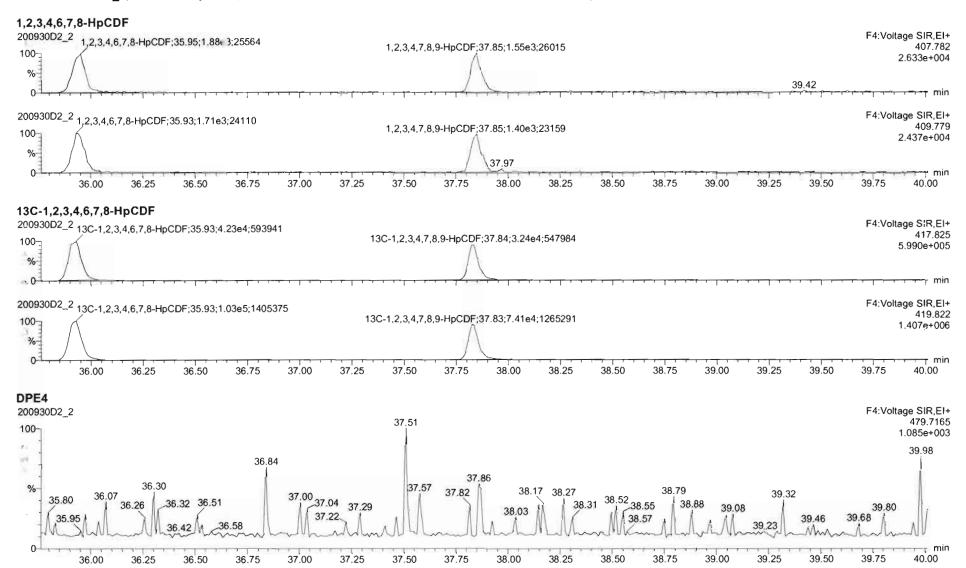
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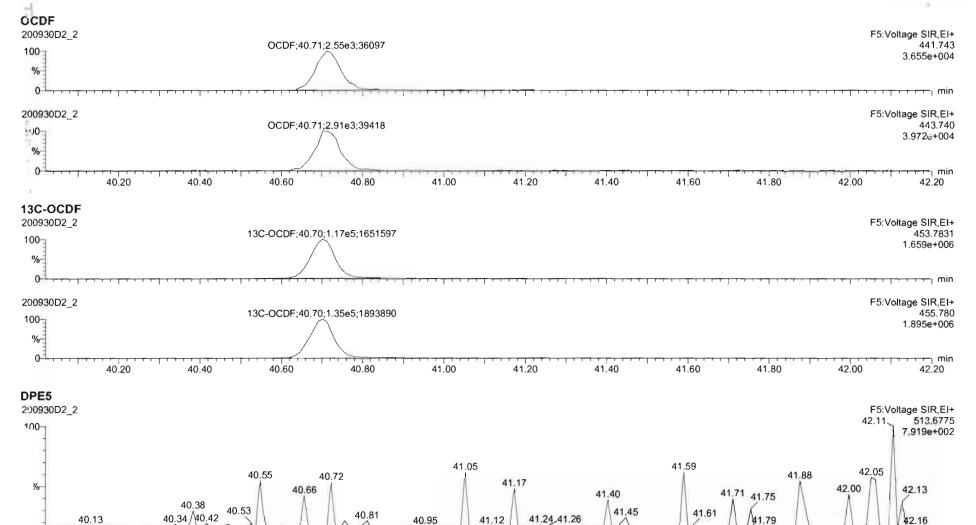
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U:\VG7.PRO\Results\200930D2\200930D2_CRV.qld

Last Altered: Printed: Thursday, October 01, 2020 09:56:59 Pacific Daylight Time Thursday, October 01, 2020 09:58:35 Pacific Daylight Time

Name: 200930D2_2, Date: 30-Sep-2020, Time: 12:51:13, ID: ST200930D2-2 1613 CS1 20F1103, Description: 1613 CS1 20F1103



40.20

40.40

40.60

40.80

41.00

41.20

41.40

41.60

41.80

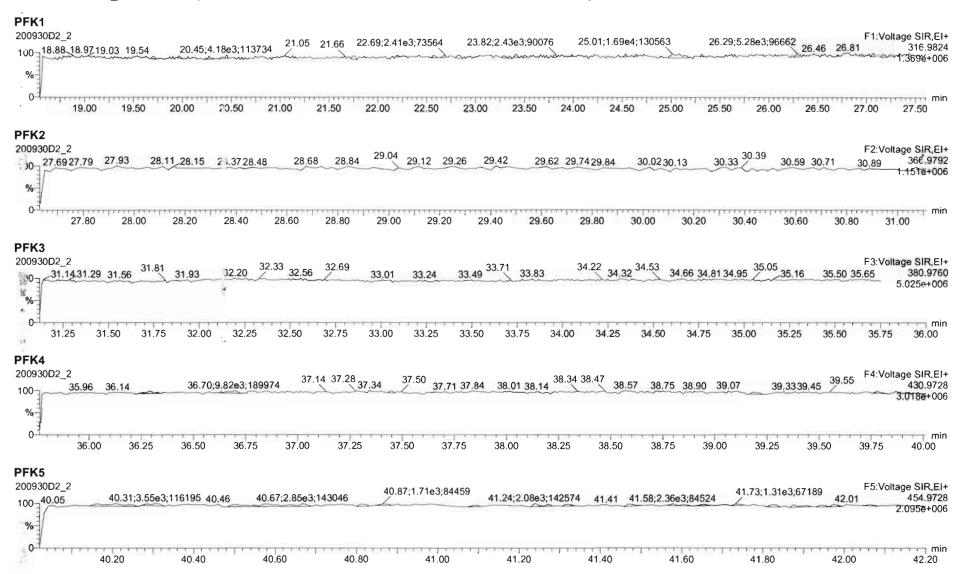
42.00

min

42.20

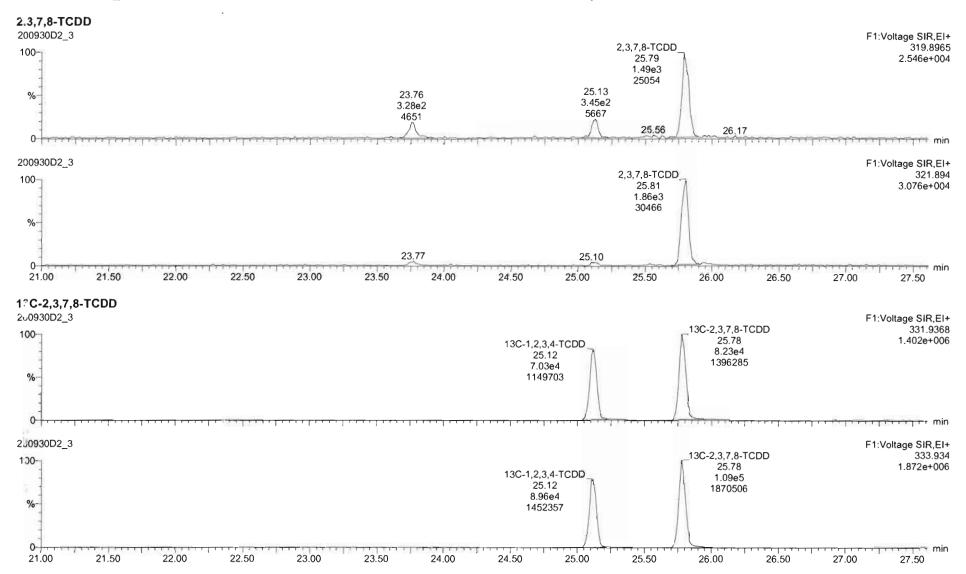
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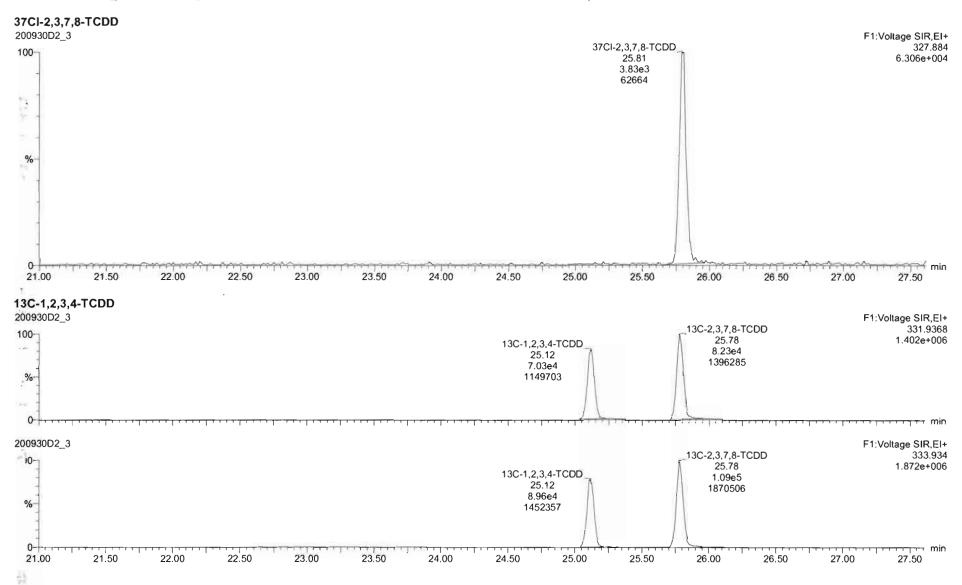
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Dataset: U:\VG7.PRO\Results\200930D2\200930D2_CRV.qld

Lost Altered: Thursday, October 01, 2020 09:56:59 Pacific Daylight Time Printed: Thursday, October 01, 2020 09:58:35 Pacific Daylight Time

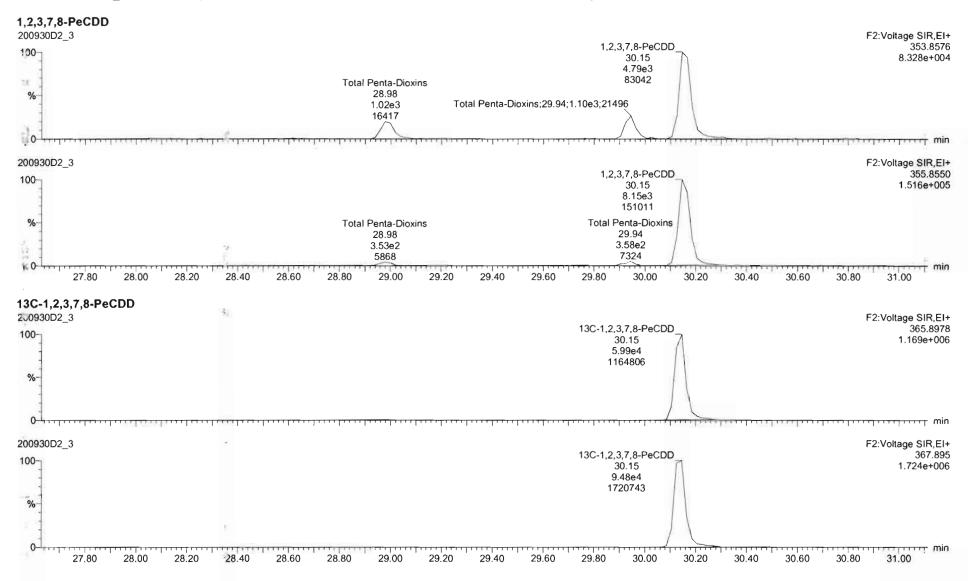


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Dataset:

U:\VG7.PRO\Results\200930D2\200930D2_CRV.qld

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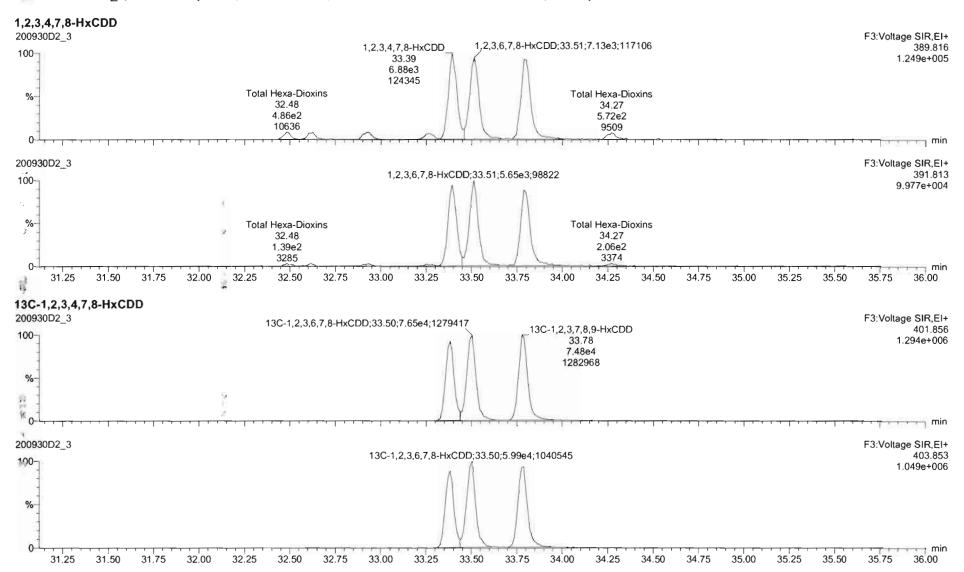


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Dataset:

U:\VG7.PRO\Results\200930D2\200930D2_CRV.qld

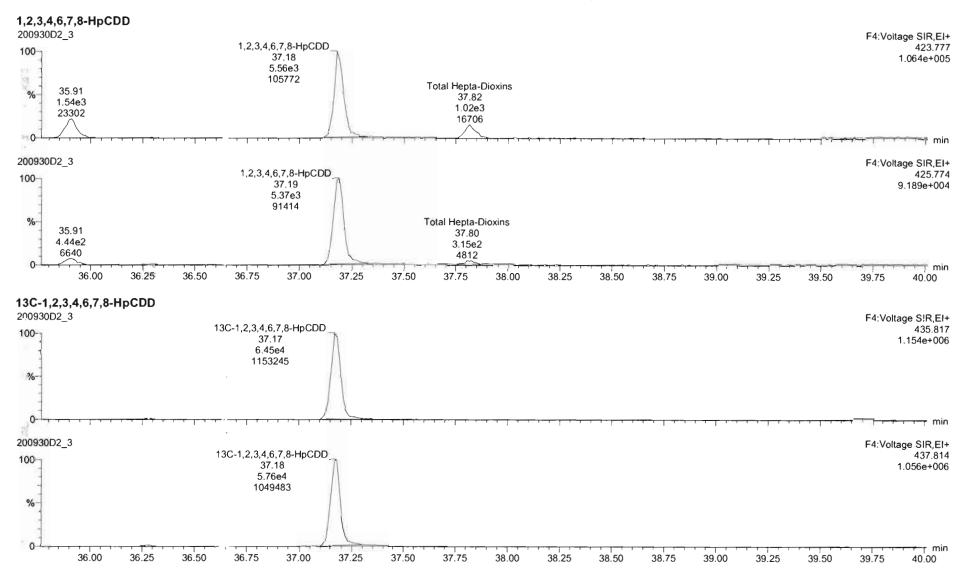
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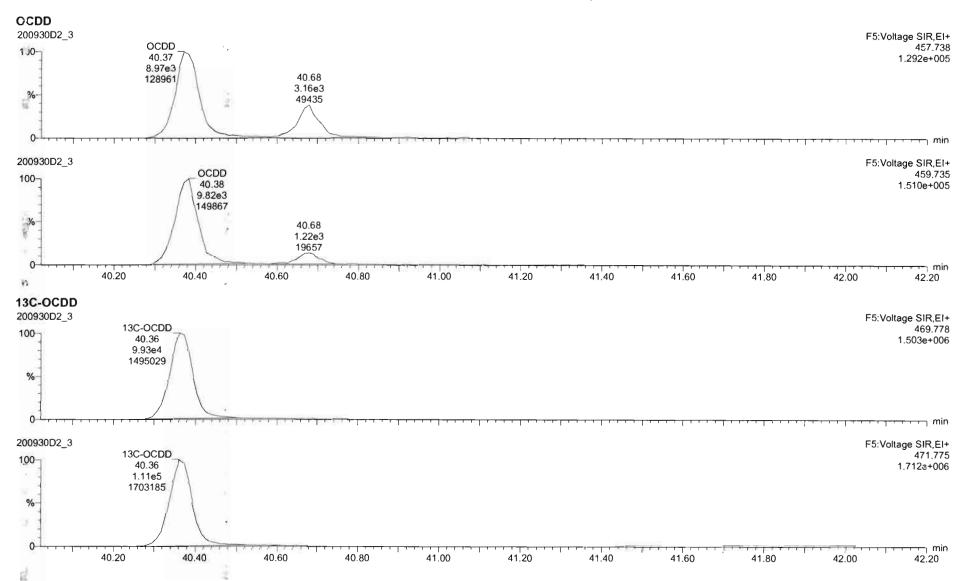
U:\VG7.PRO\Results\200930D2\200930D2 CRV.qld

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Dataset: U:\VG7.PRO\Results\200930D2\200930D2_CRV.qld

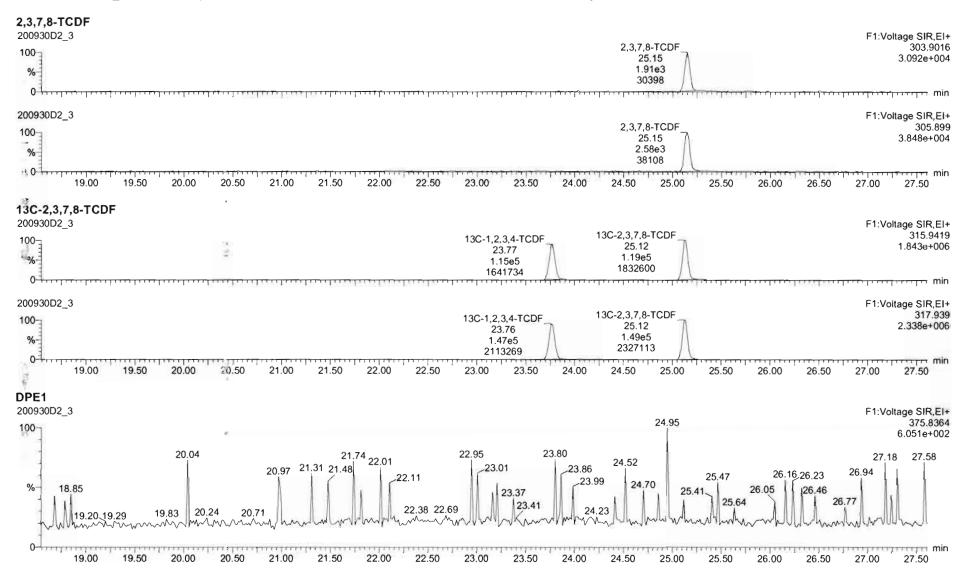
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Lataset:

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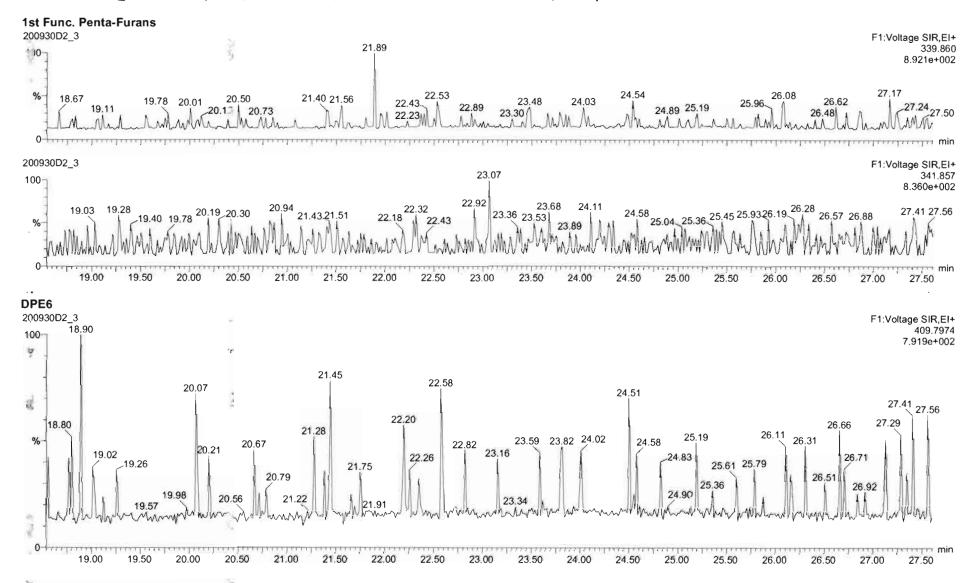
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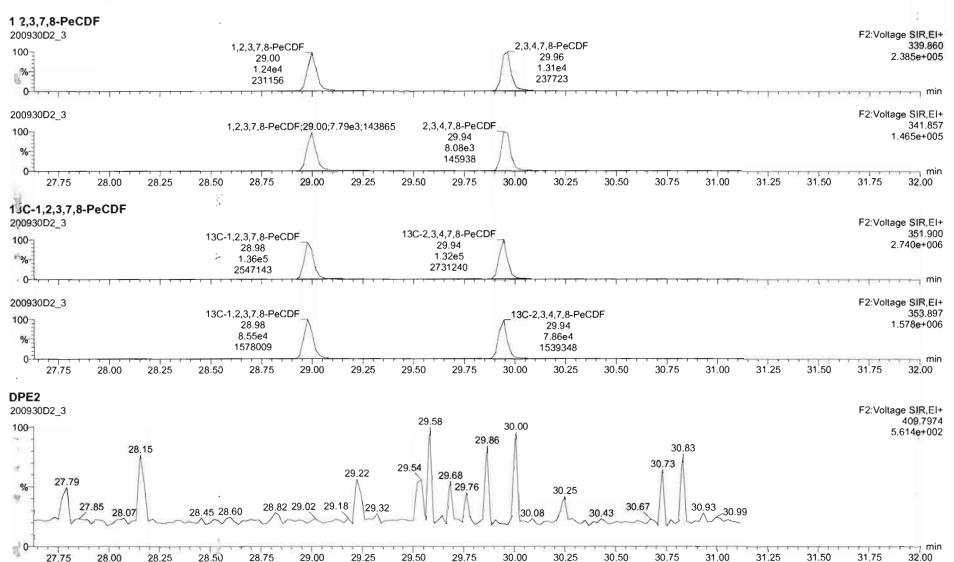
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Thursday, October 01, 2020 09:56:59 Pacific Daylight Time Thursday, October 01, 2020 09:58:35 Pacific Daylight Time



U:\VG7.PRO\Results\200930D2\200930D2_CRV.qld

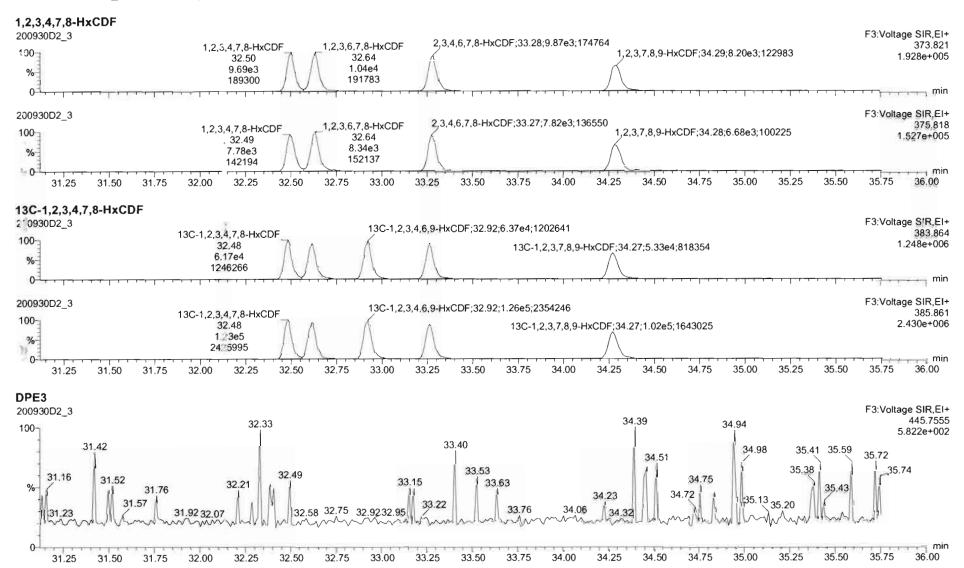
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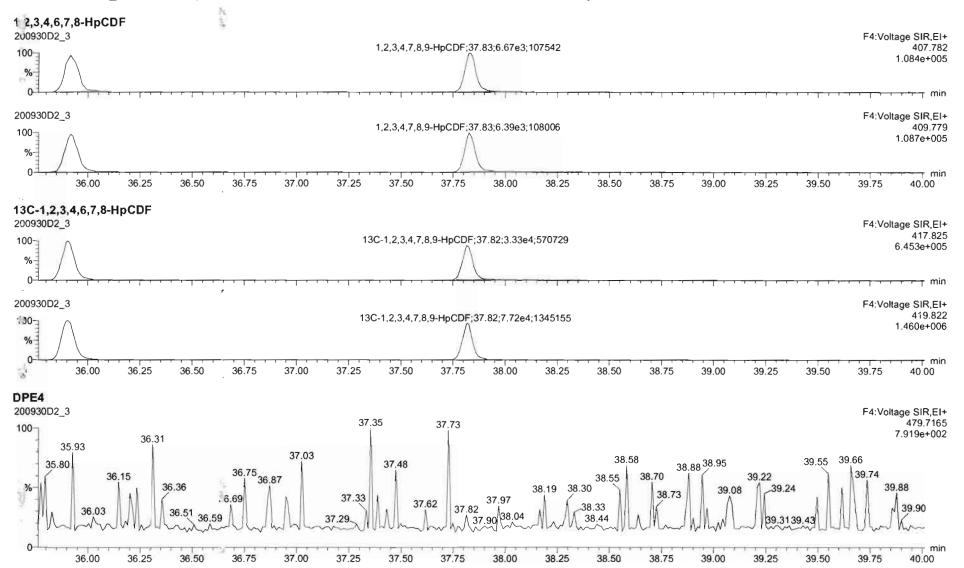
Thursday, October 01, 2020 09:56:59 Pacific Daylight Time Thursday, October 01, 2020 09:58:35 Pacific Daylight Time



U:\VG7.PRO\Results\2J0930D2\200930D2_CRV.qld

Last Altered: Printed:

Thursday, October 01, 2020 09:56:59 Pacific Daylight Time Thursday, October 01, 2020 09:58:35 Pacific Daylight Time

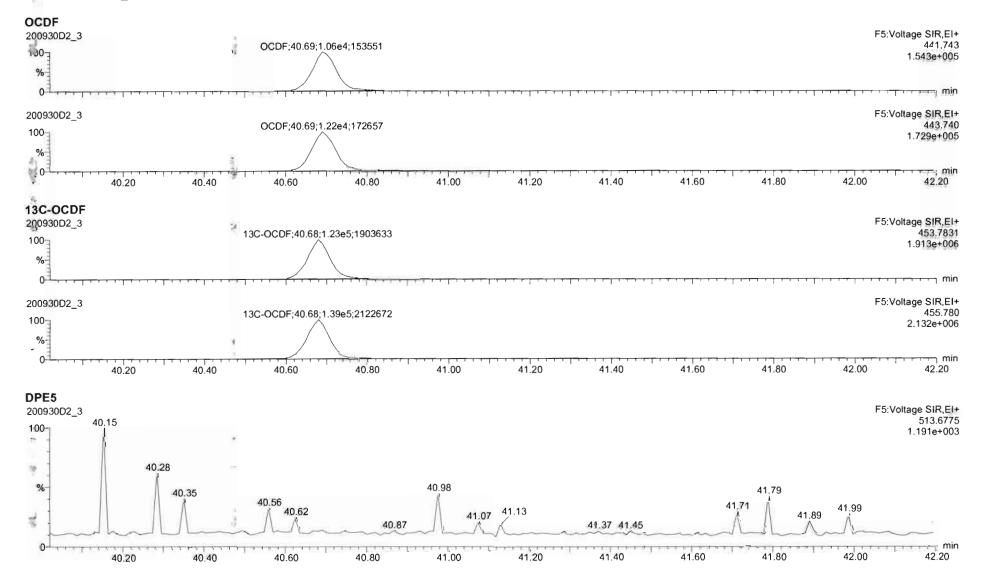


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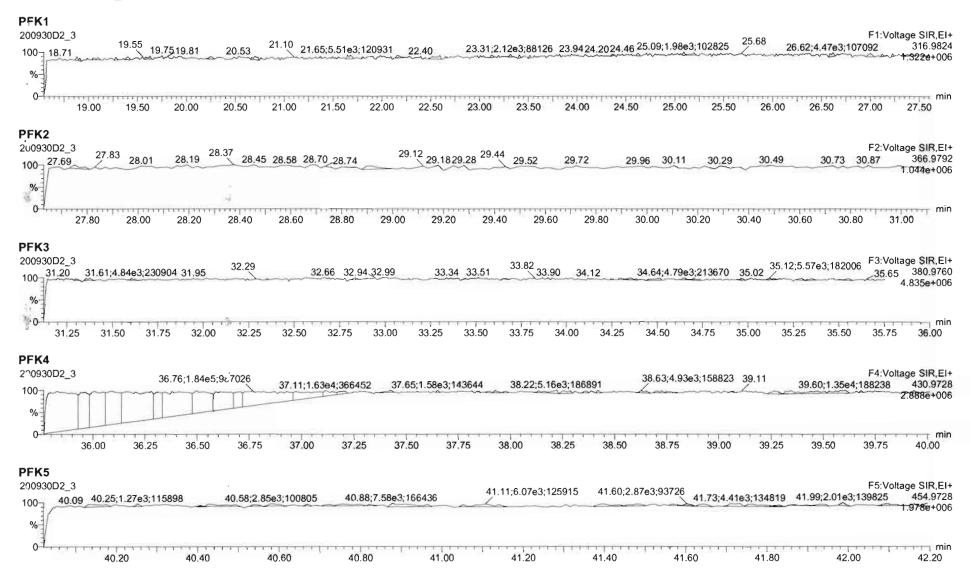
Thursday, October 01, 2020 09:56:59 Pacific Daylight Time Thursday, October 01, 2020 09:58:35 Pacific Daylight Time



U:\VG7.PRO\Results\2J0930D2\200930D2_CRV.qld

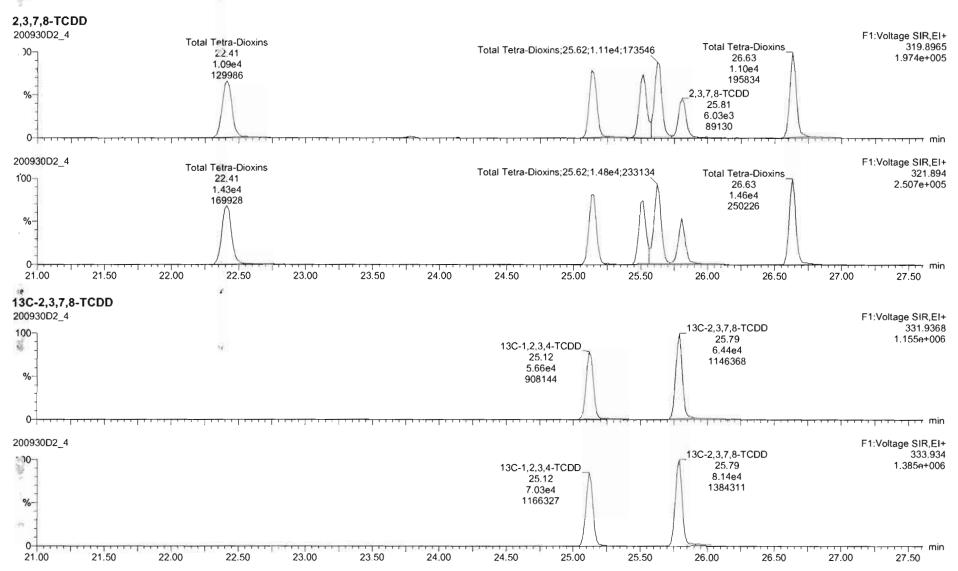
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Thursday, October 01, 2020 09:56:59 Pacific Daylight Time Thursday, October 01, 2020 09:58:35 Pacific Daylight Time



Dataset: U:\VG7.PRO\Results\200930D2\200930D2_CRV.qld

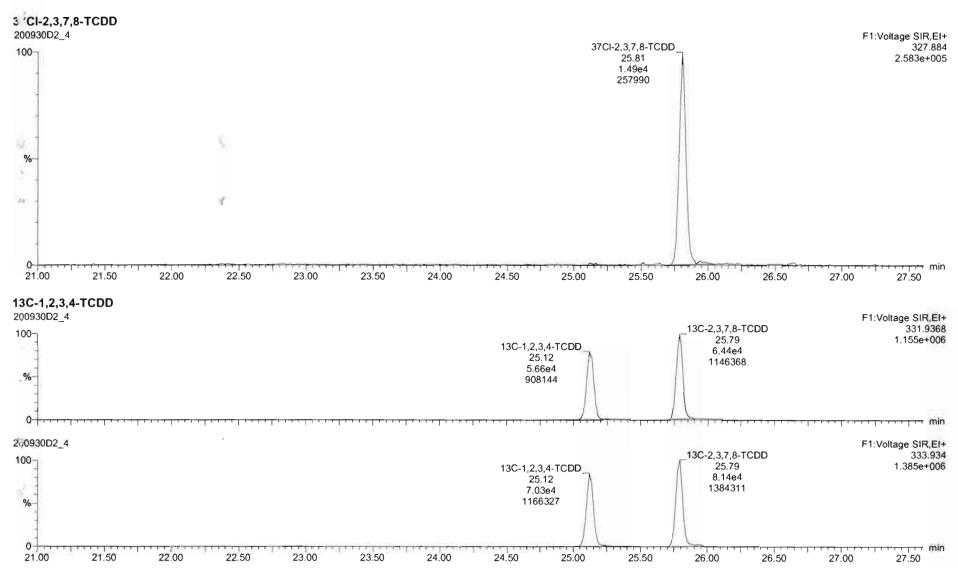
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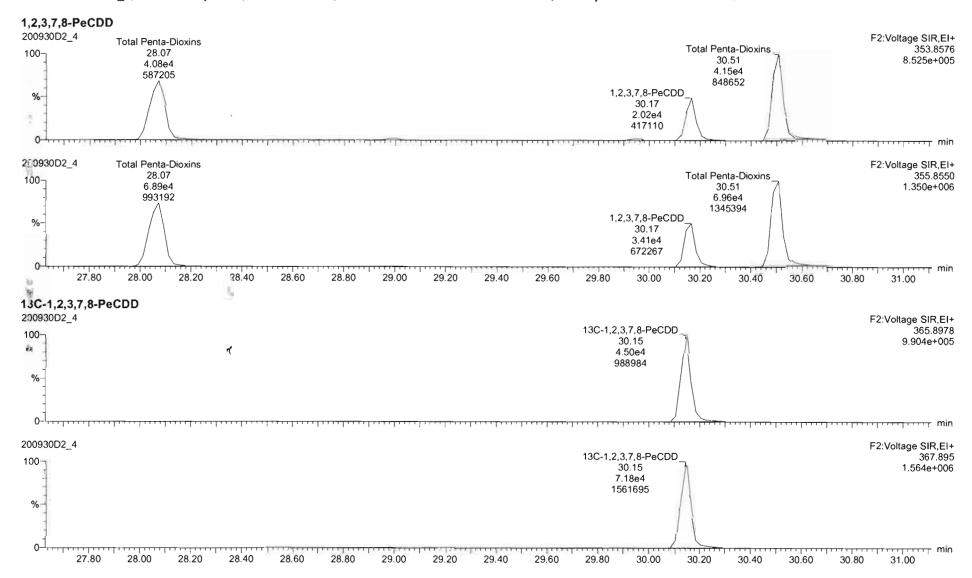
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Thursday, October 01, 2020 09:56:59 Pacific Daylight Time Thursday, October 01, 2020 09:58:35 Pacific Daylight Time



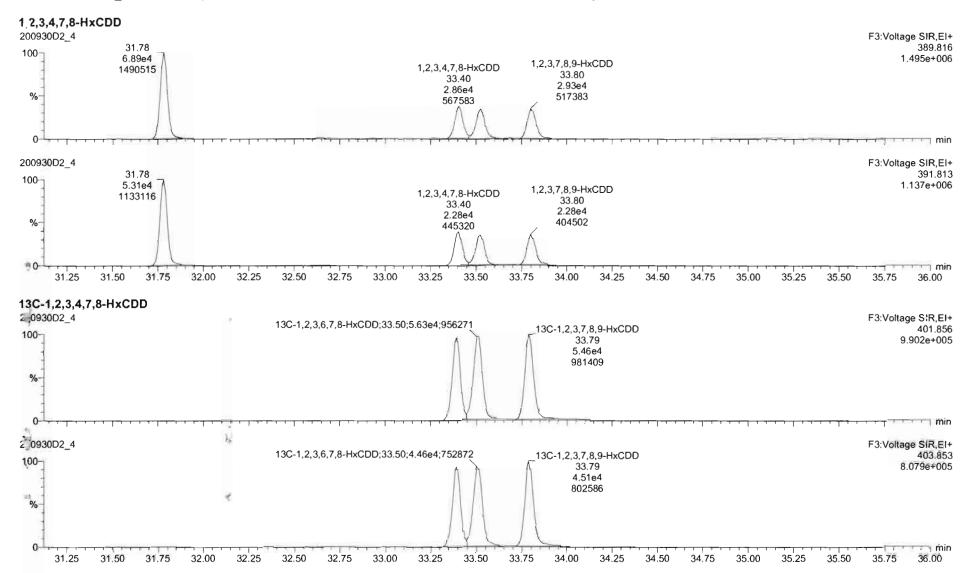
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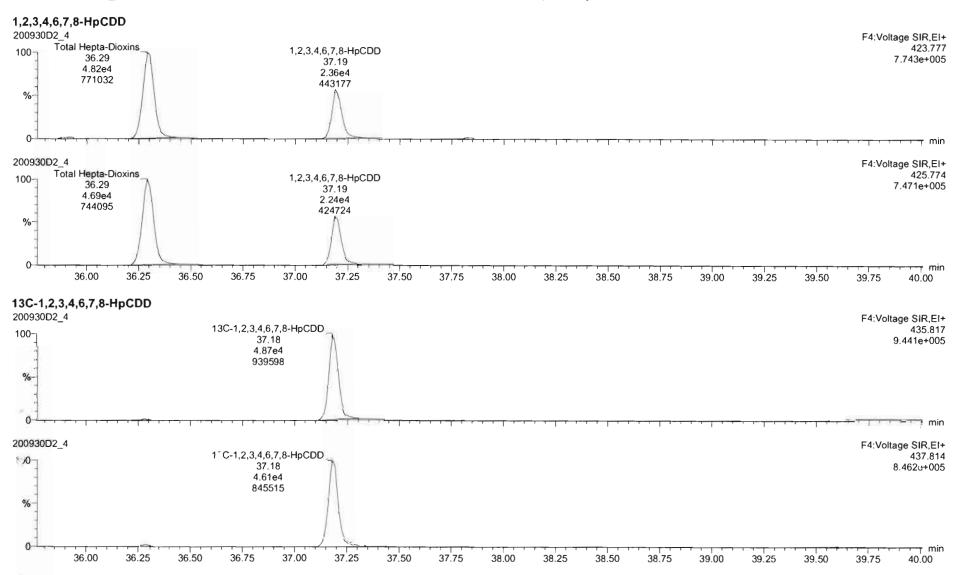
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Last Altered: Printed: Thursday, October 01, 2020 09:56:59 Pacific Daylight Time Thursday, October 01, 2020 09:58:35 Pacific Daylight Time



Dataset: U:\VG7.PRO\Results\200930D2\200930D2 CRV.qld

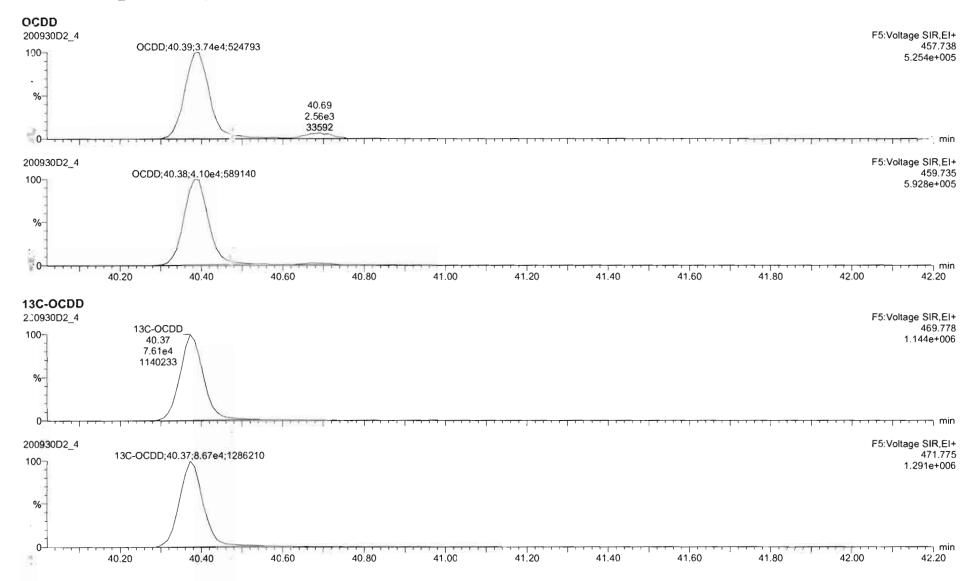
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Vista Analytical Laboratory

Dataset: U:\VG7.PRO\Results\200930D2\200930D2_CRV.qld

Last Altered: Thursday, October 01, 2020 09:56:59 Pacific Daylight Time Printed: Thursday, October 01, 2020 09:58:35 Pacific Daylight Time

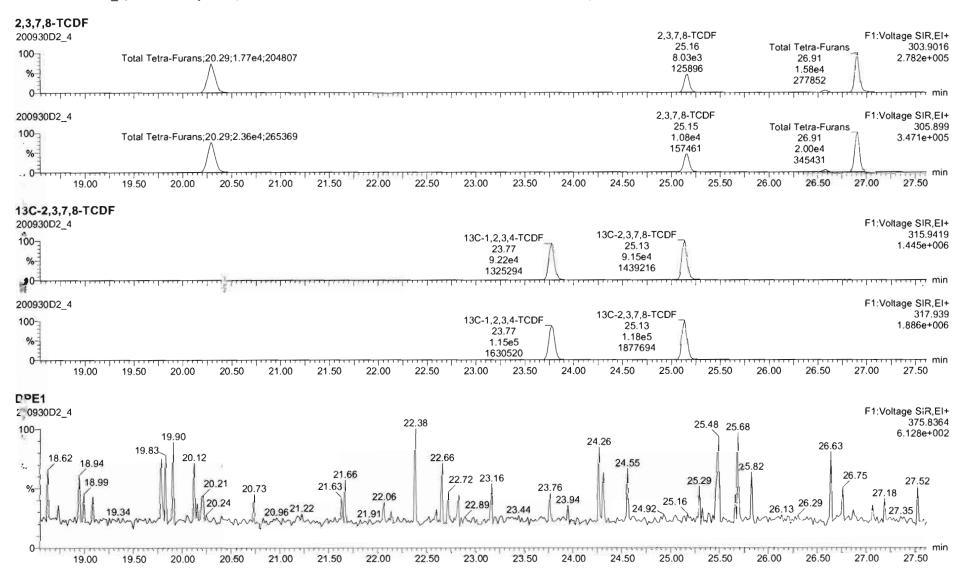


U:\VG7.PRO\Results\200930D2\200930D2 CRV.qld

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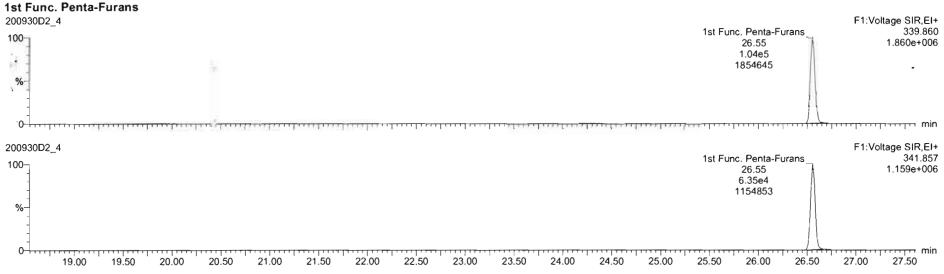
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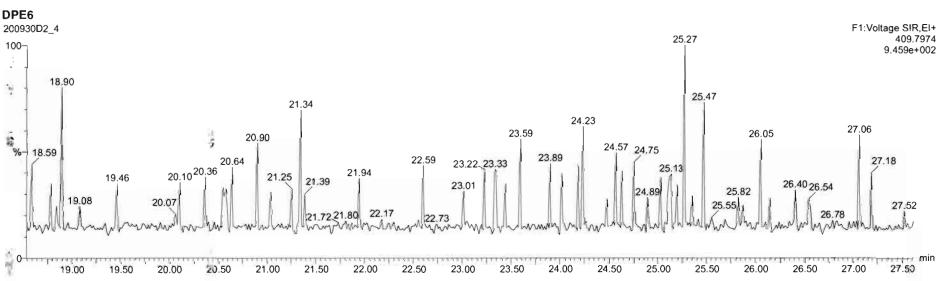
Thursday, October 01, 2020 09:56:59 Pacific Daylight Time Thursday, October 01, 2020 09:58:35 Pacific Daylight Time



U:\VG7.PRO\Results\2)0930D2\200930D2 CRV.qld

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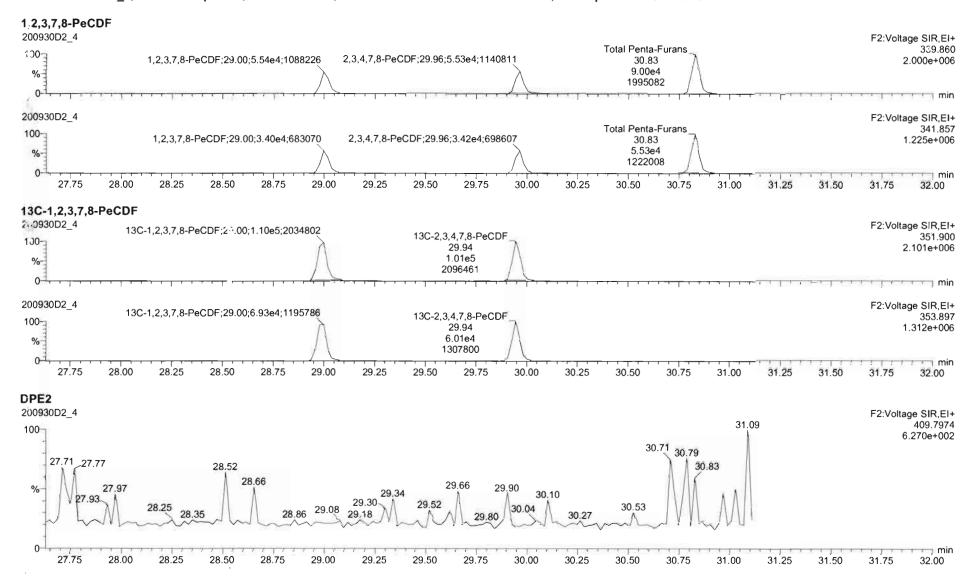


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Dataset: U:\VG7.

U:\VG7.PRO\Results\200930D2\200930D2_CRV.qld

Last Altered: Thursday, October 01, 2020 09:56:59 Pacific Daylight Time Printed: Thursday, October 01, 2020 09:58:35 Pacific Daylight Time

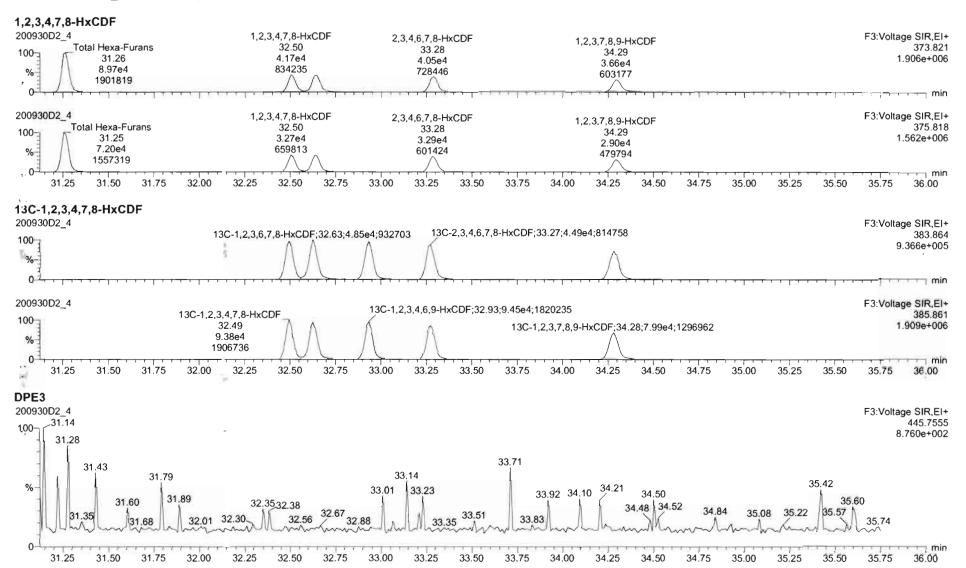


Cataset:

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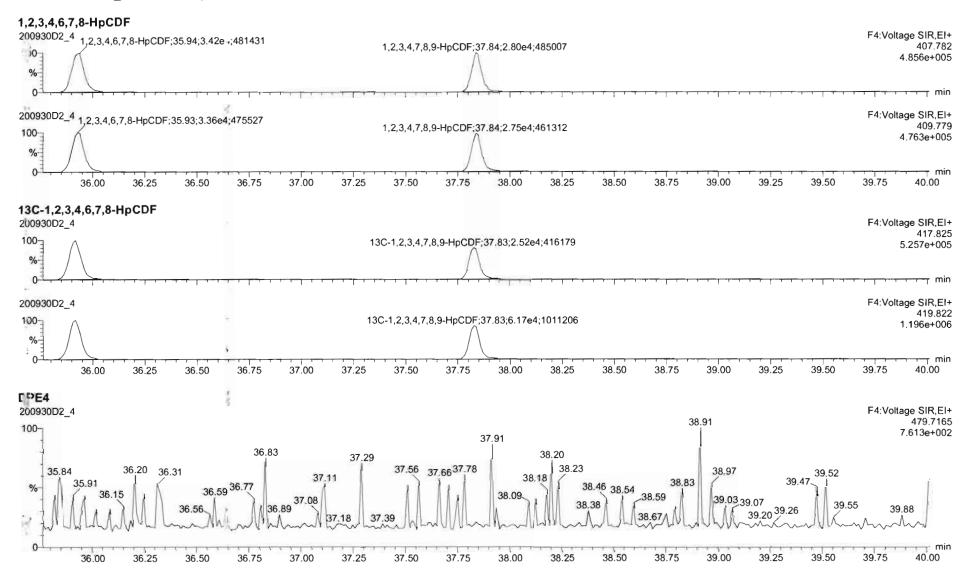
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Thursday, October 01, 2020 09:56:59 Pacific Daylight Time Thursday, October 01, 2020 09:58:35 Pacific Daylight Time



U:\VG7.PRO\Results\200930D2\200930D2_CRV.qld

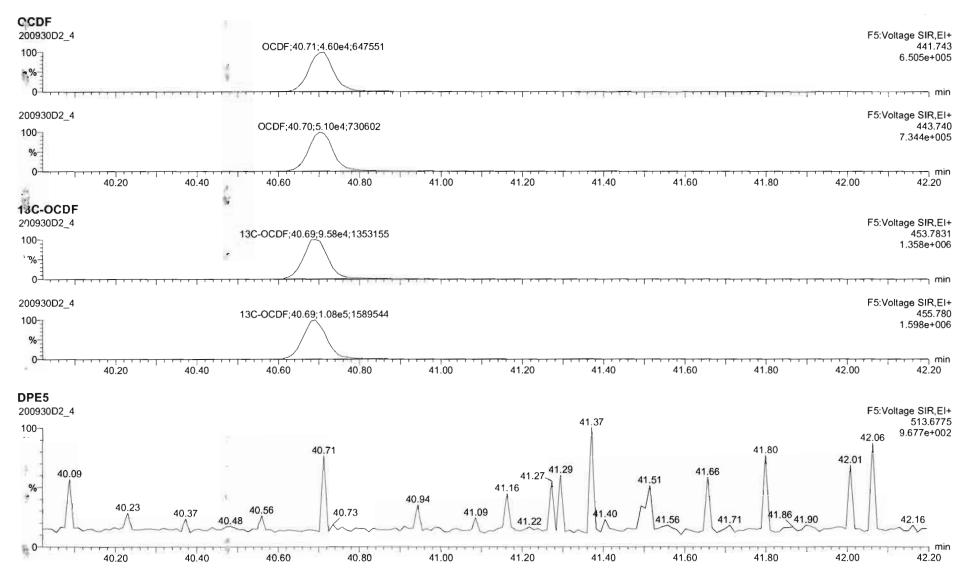
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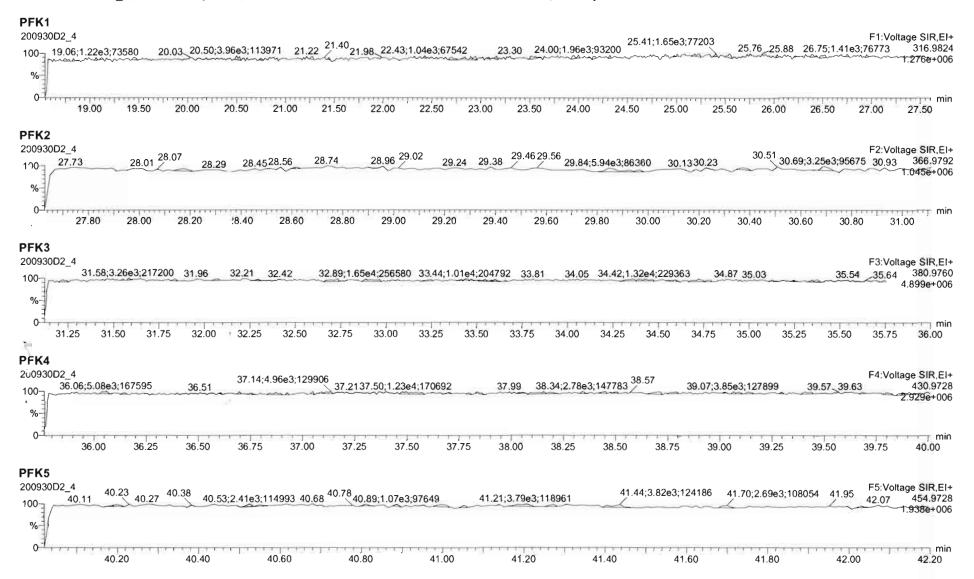
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Thursday, October 01, 2020 09:56:59 Pacific Daylight Time Thursday, October 01, 2020 09:58:35 Pacific Daylight Time



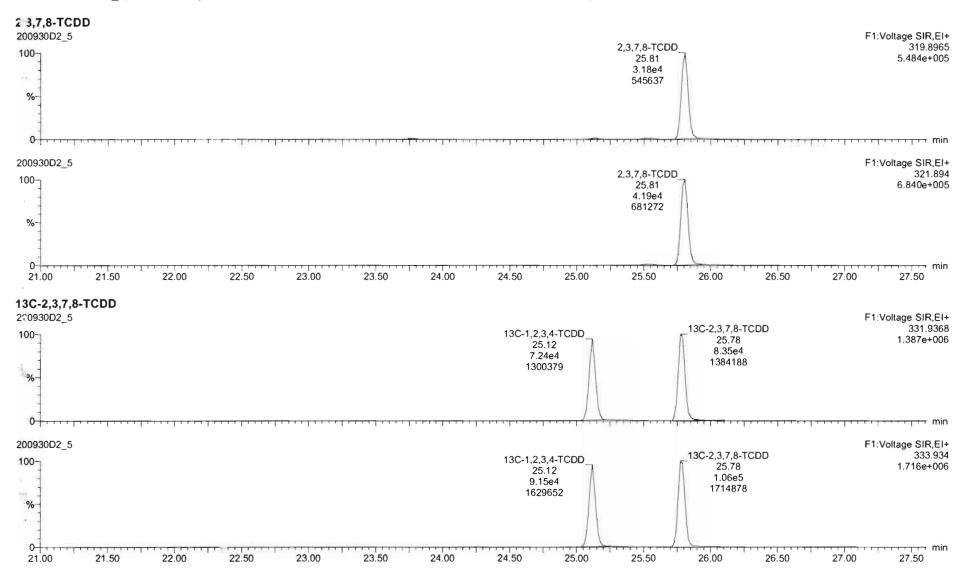
Dataset: U:\VG7.PRO\Results\200930D2\200930D2_CRV.qld

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U:\VG7.PRO\Results\200930D2\200930D2 CRV.qld

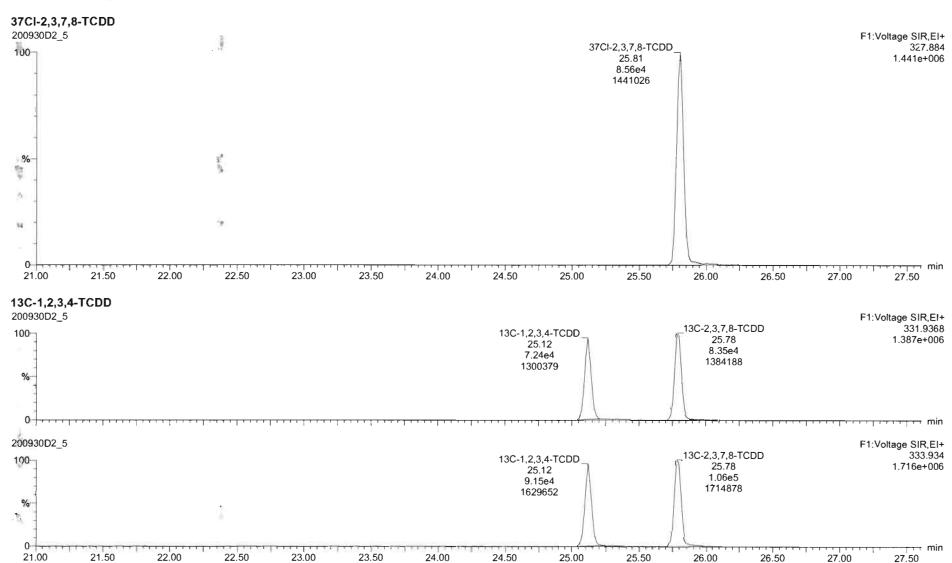
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Vista Analytical Laboratory

Dataset: U:\VG7.PRO\Results\200930D2\200930D2_CRV.qld

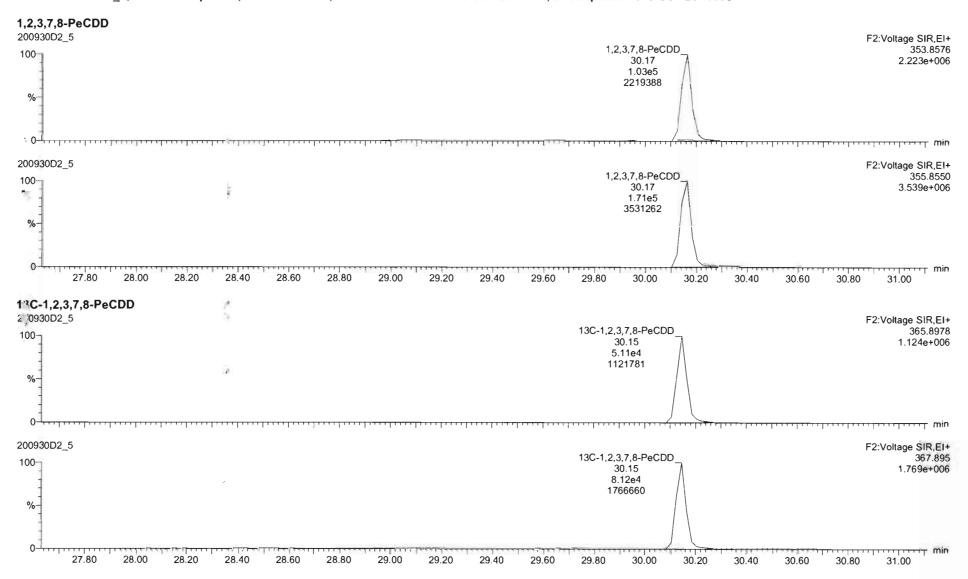
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Dataset: U:\VG7.PRO\Results\200930D2\200930D2_CRV.qld

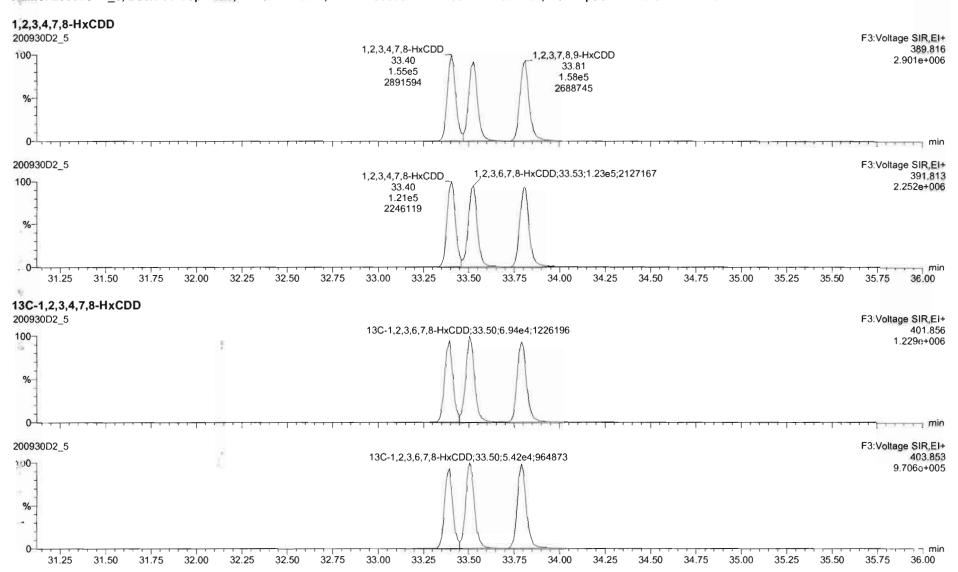
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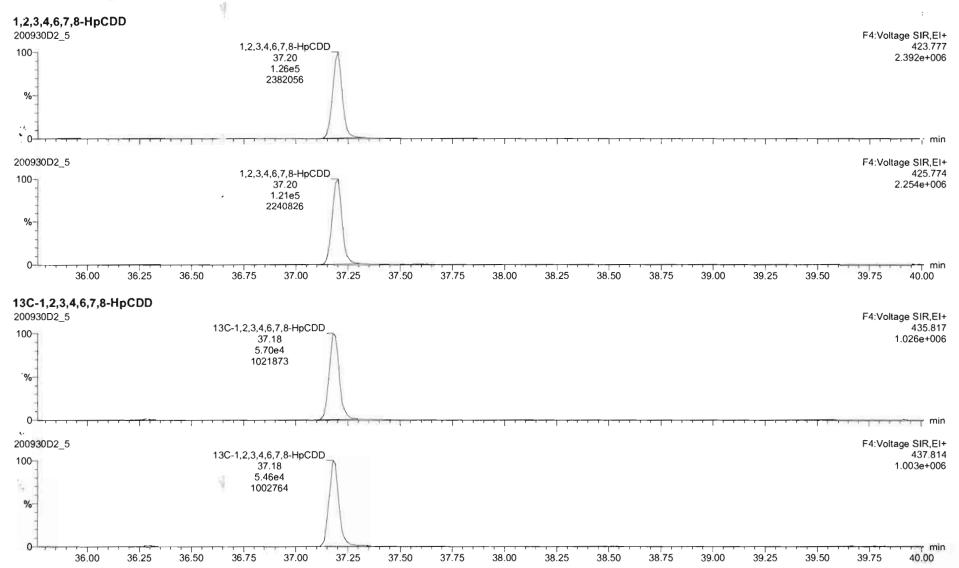
Thursday, October 01, 2020 09:56:59 Pacific Daylight Time Thursday, October 01, 2020 09:58:35 Pacific Daylight Time



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Dataset: U:\VG7.PRO\Results\200930D2\200930D2_CRV.qld

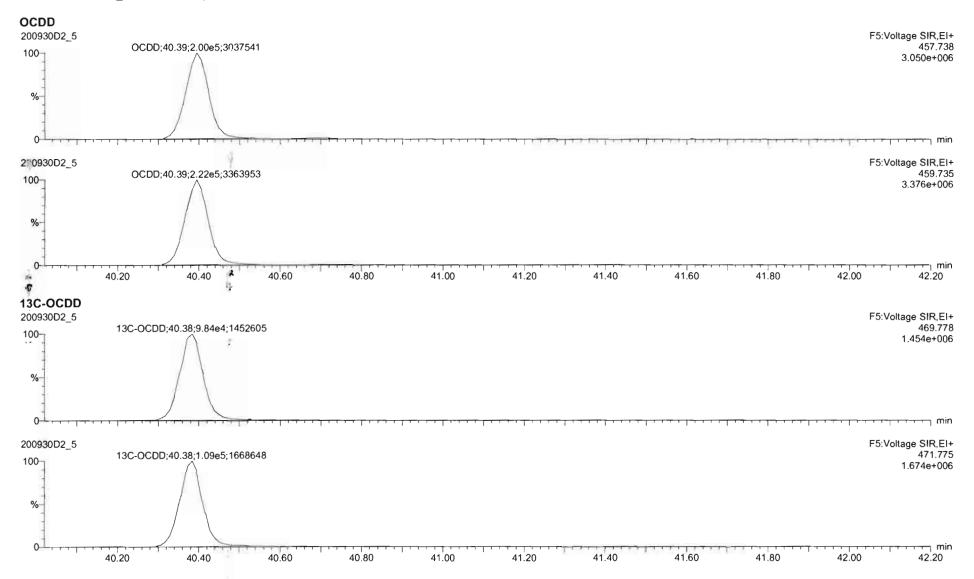
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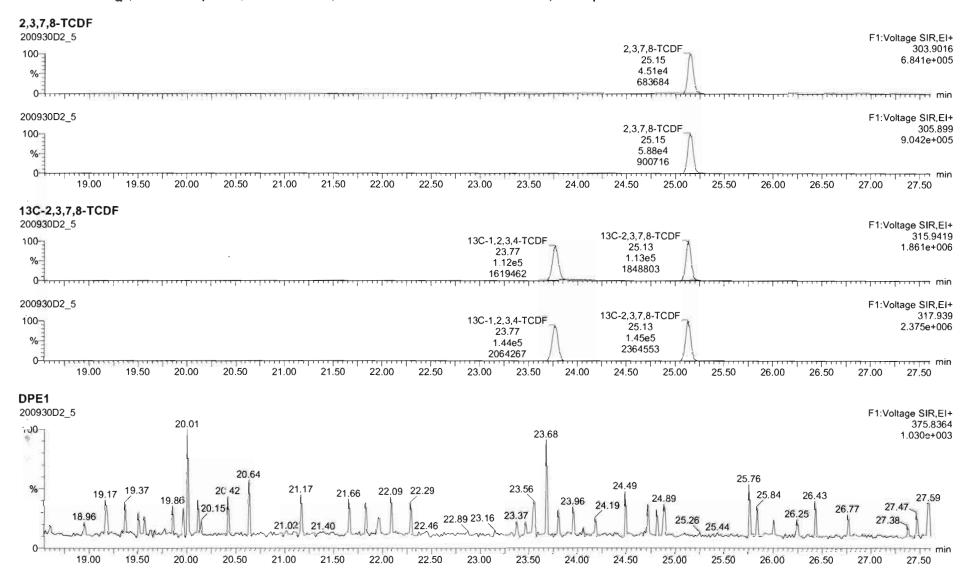
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Thursday, October 01, 2020 09:56:59 Pacific Daylight Time Thursday, October 01, 2020 09:58:35 Pacific Daylight Time



U:\VG7.PRO\Results\200930D2\200930D2_CRV.qld

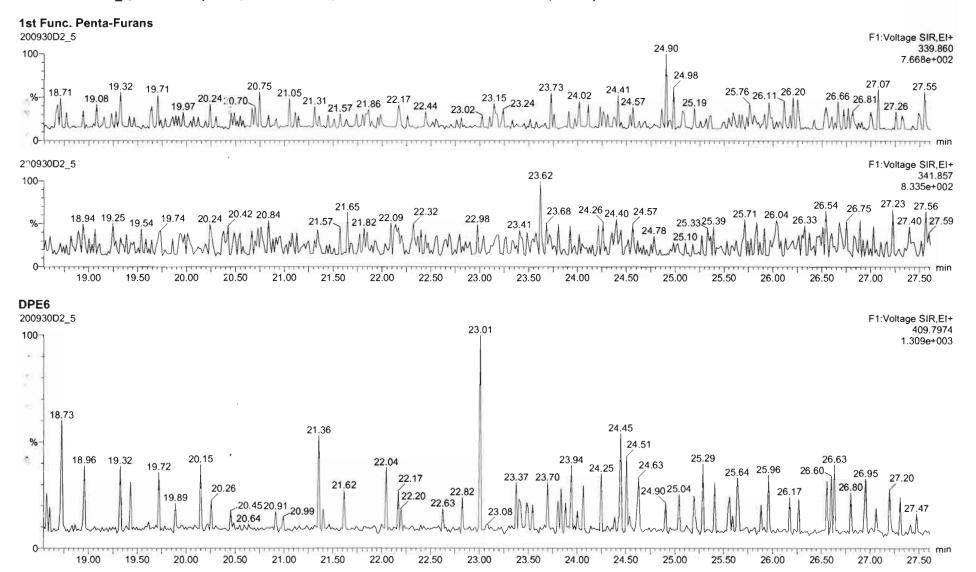
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U:\VG7.PRO\Results\200930D2\200930D2_CRV.qld

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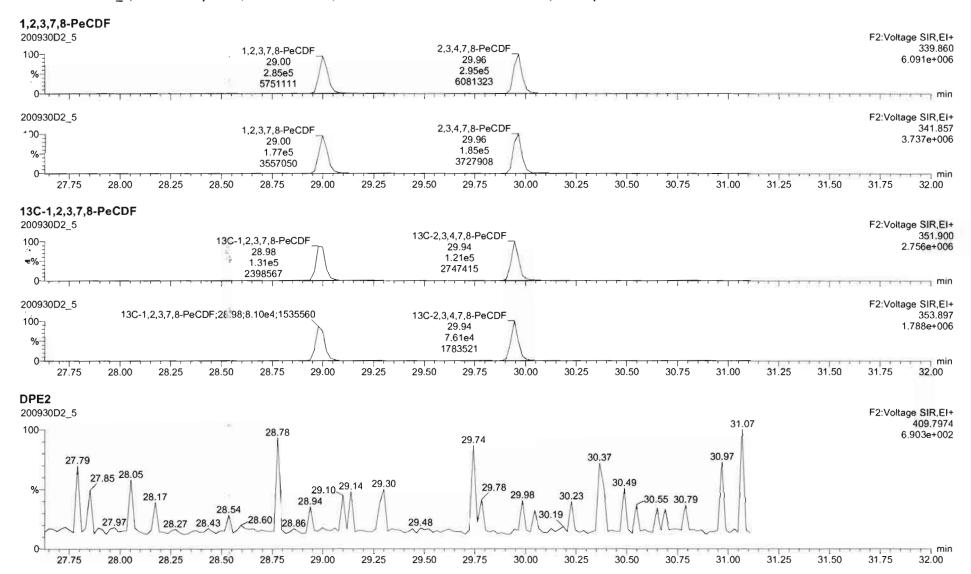
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34

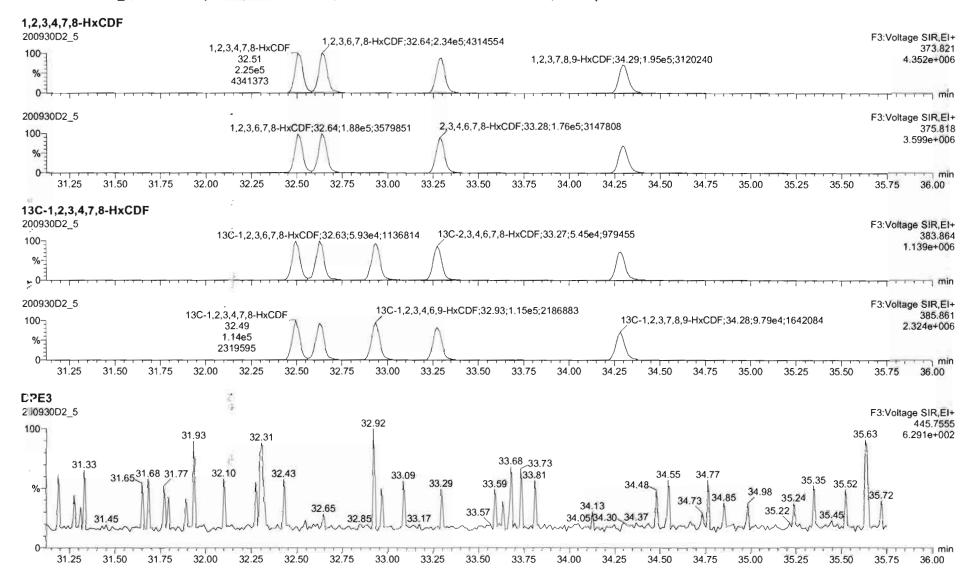
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Last Altered: Printed: Thursday, October 01, 2020 09:56:59 Pacific Daylight Time Thursday, October 01, 2020 09:58:35 Pacific Daylight Time



Dataset: U:\VG7.PRO\Results\200930D2\200930D2 CRV.qld

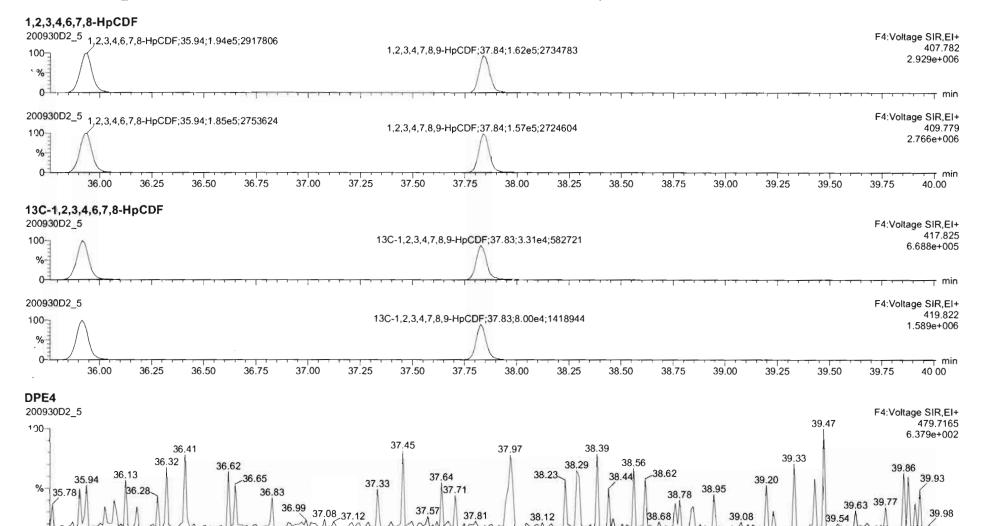
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U:\VG7.PRO\Results\2)0930D2\200930D2_CRV.qld

Last Altered: Printed: Thursday, October 01, 2020 09:56:59 Pacific Daylight Time Thursday, October 01, 2020 09:58:35 Pacific Daylight Time

Name: 200930D2_5, Date: 30-Sep-2020, Time: 15:49:01, ID: ST200930D2-5 1613 CS4 20F1106, Description: 1613 CS4 20F1106



36.00

36.25

36.50

36.75

37.00

37.25

37.50

37.75

38.00

38.25

38.50

38.75

39.00

39.25

39.50

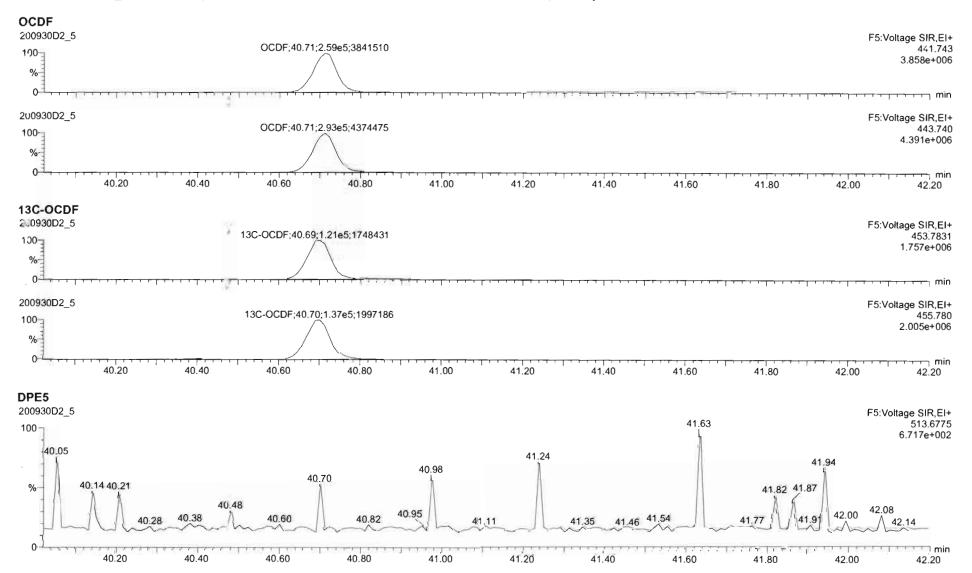
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40.00

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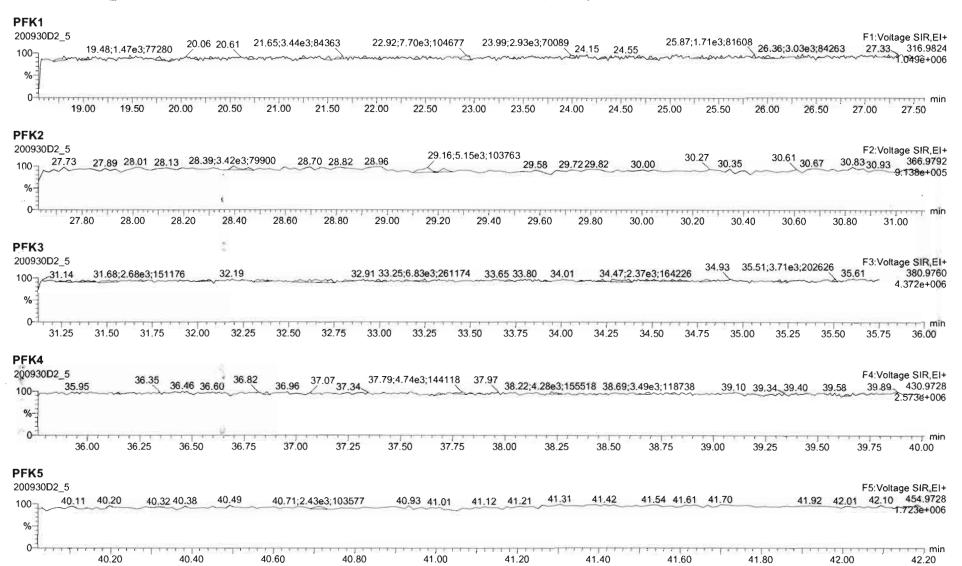
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Thursday, October 01, 2020 09:56:59 Pacific Daylight Time Thursday, October 01, 2020 09:58:35 Pacific Daylight Time



U:\VG7.PRO\Results\2)0930D2\200930D2_CRV.qld

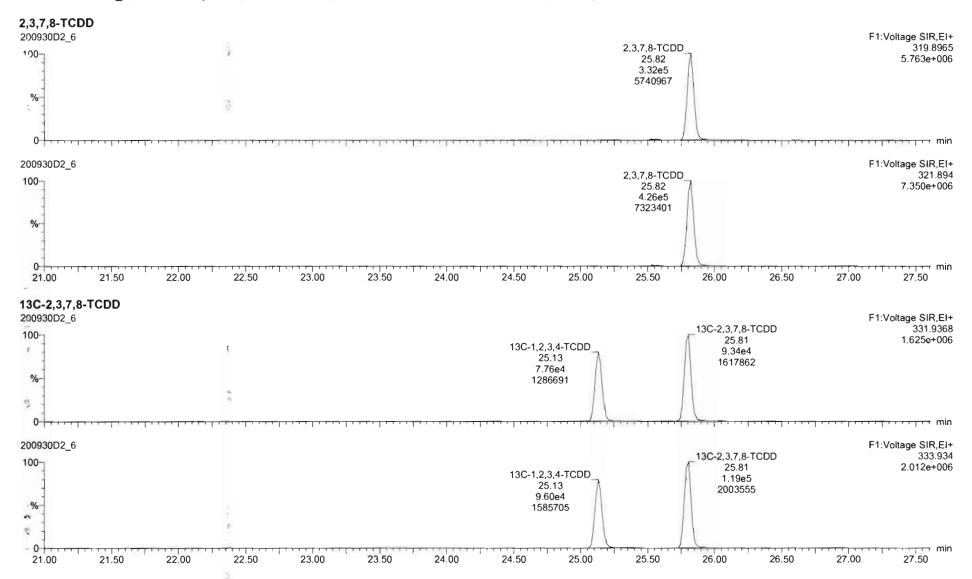
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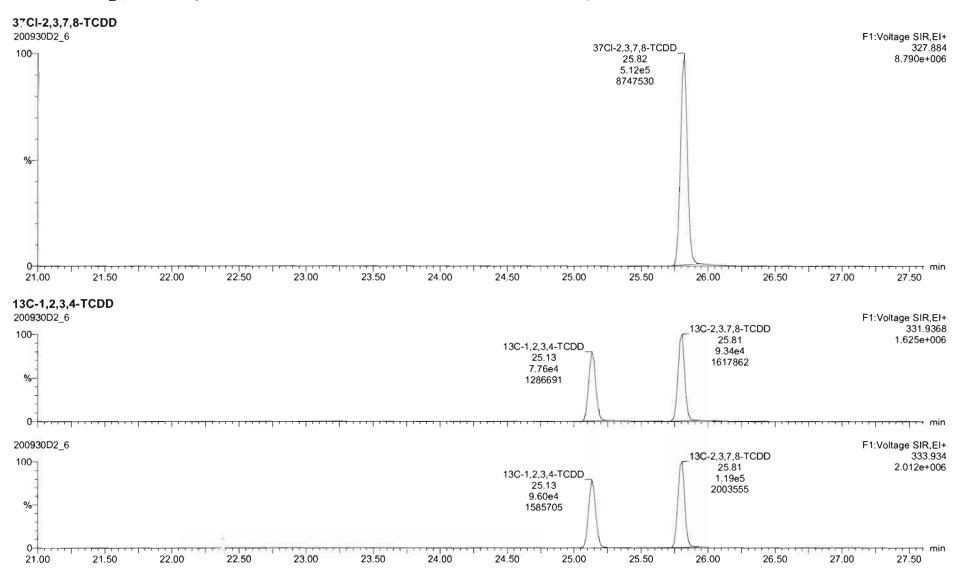
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Thursday, October 01, 2020 09:56:59 Pacific Daylight Time Thursday, October 01, 2020 09:58:35 Pacific Daylight Time



U:\VG7.PRO\Results\200930D2\200930D2_CRV.qld

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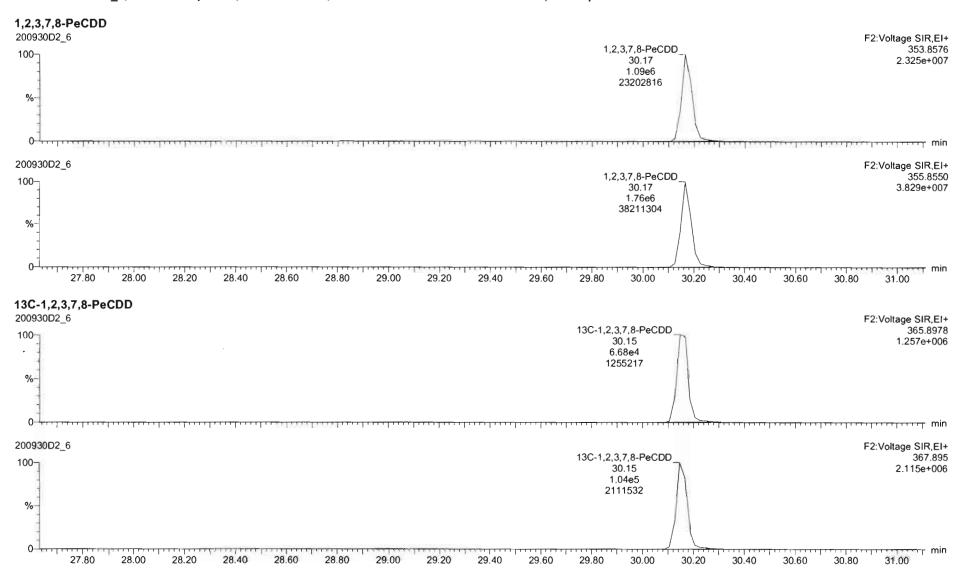


Vista Analytical Laboratory

Dataset:

U:\VG7.PRO\Results\200930D2\200930D2_CRV.qld

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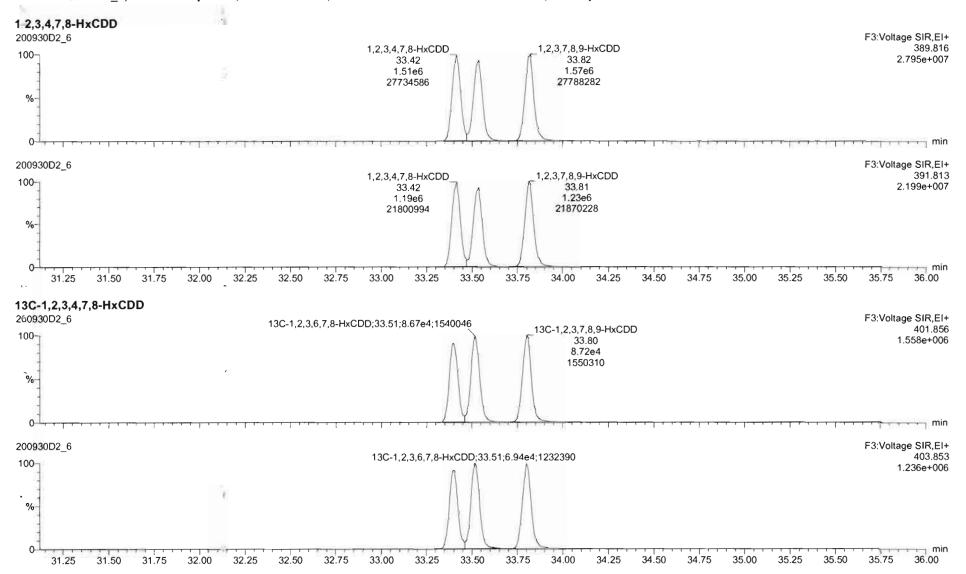


Vista Analytical Laboratory

Dataset:

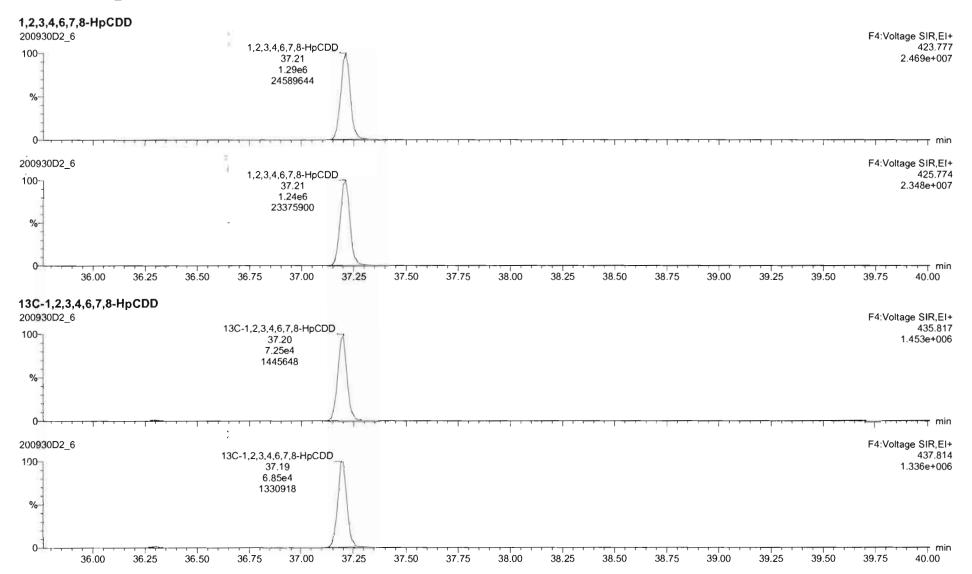
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Last Altered: Thursday, October 01, 2020 09:56:59 Pacific Daylight Time Printed: Thursday, October 01, 2020 09:58:35 Pacific Daylight Time



U:\VG7.PRO\Results\200930D2\200930D2_CRV.qld

Last Altered: Printed: Thursday, October 01, 2020 09:56:59 Pacific Daylight Time Thursday, October 01, 2020 09:58:35 Pacific Daylight Time

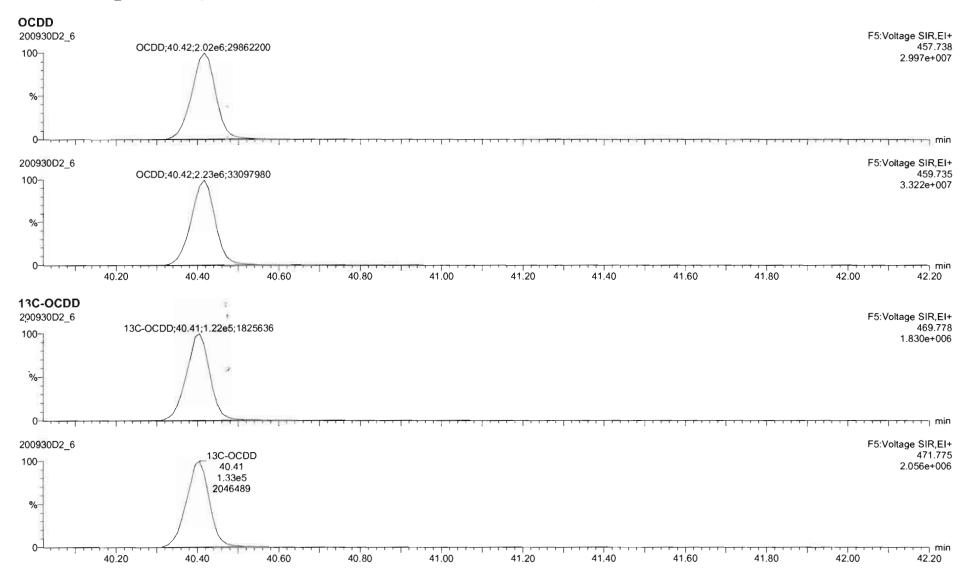


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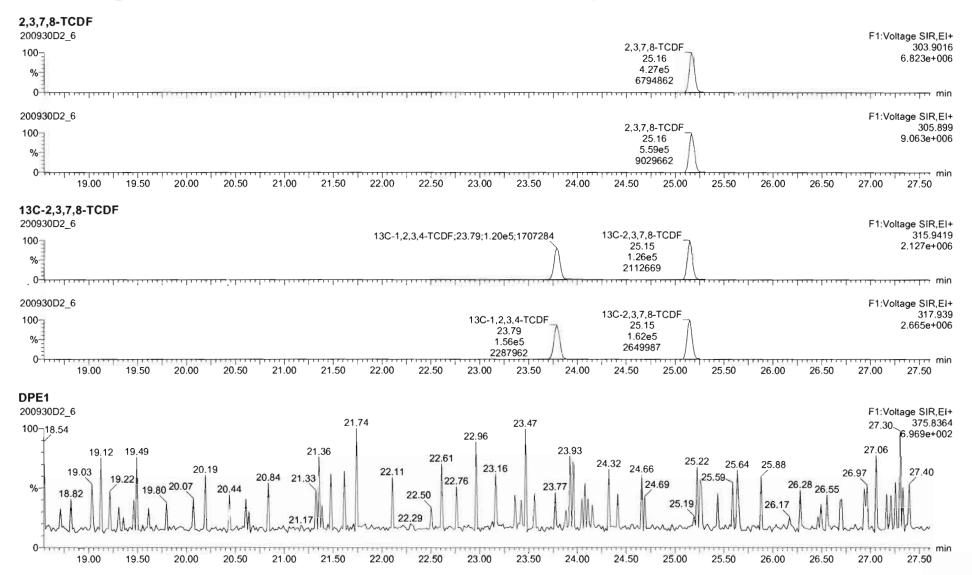
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Thursday, October 01, 2020 09:56:59 Pacific Daylight Time Thursday, October 01, 2020 09:58:35 Pacific Daylight Time



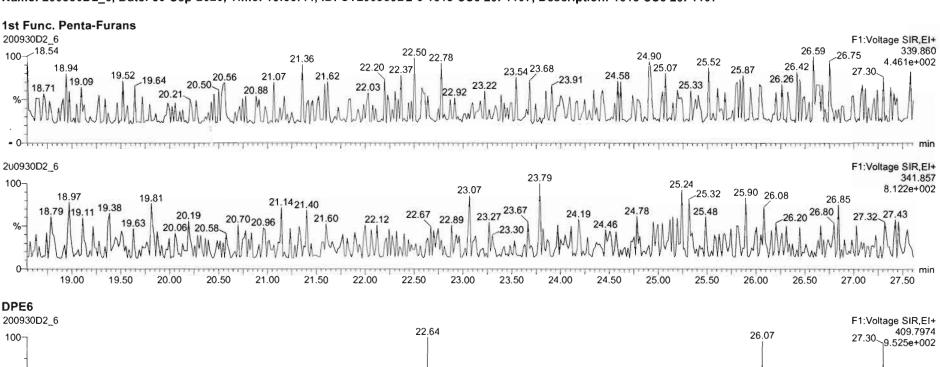
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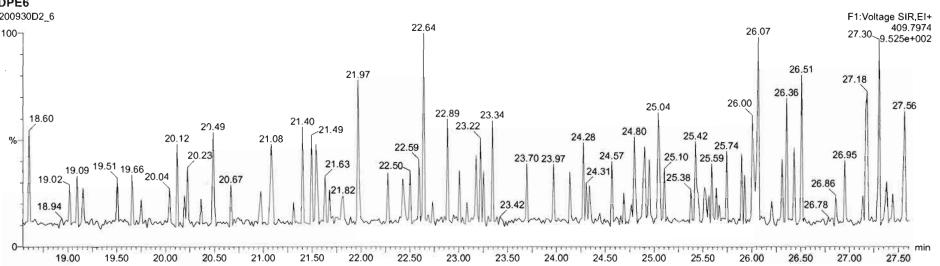
Last Altered: Thursday, October 01, 2020 09:56:59 Pacific Daylight Time Thursday, October 01, 2020 09:58:35 Pacific Daylight Time



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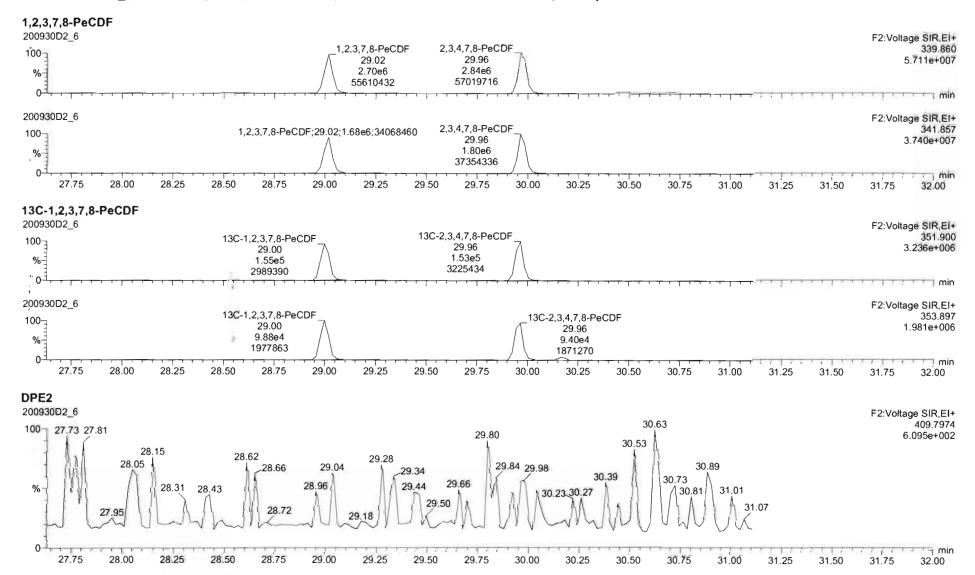
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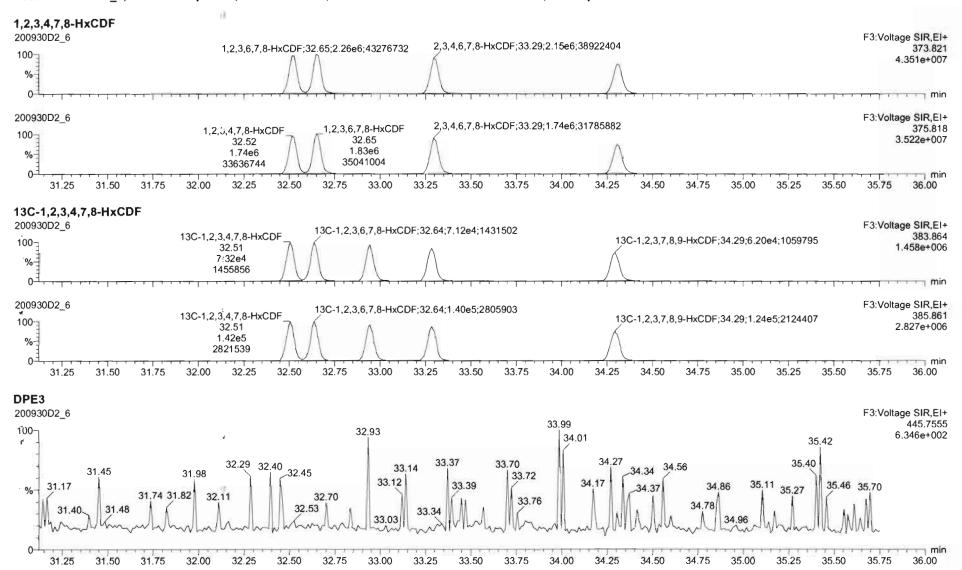
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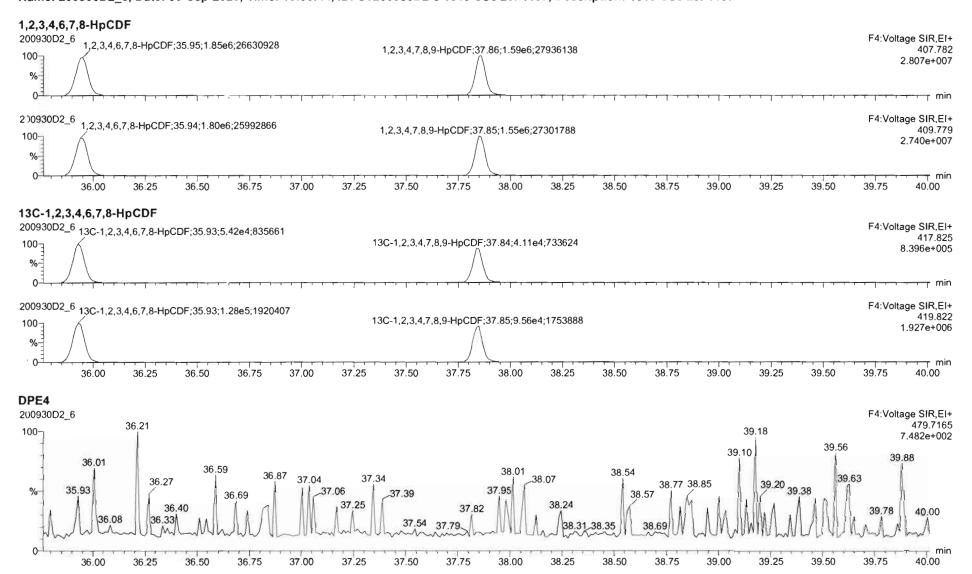
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U:\VG7.PRO\Results\200930D2\200930D2 CRV.qld

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Thursday, October 01, 2020 09:56:59 Pacific Daylight Time Thursday, October 01, 2020 09:58:35 Pacific Daylight Time



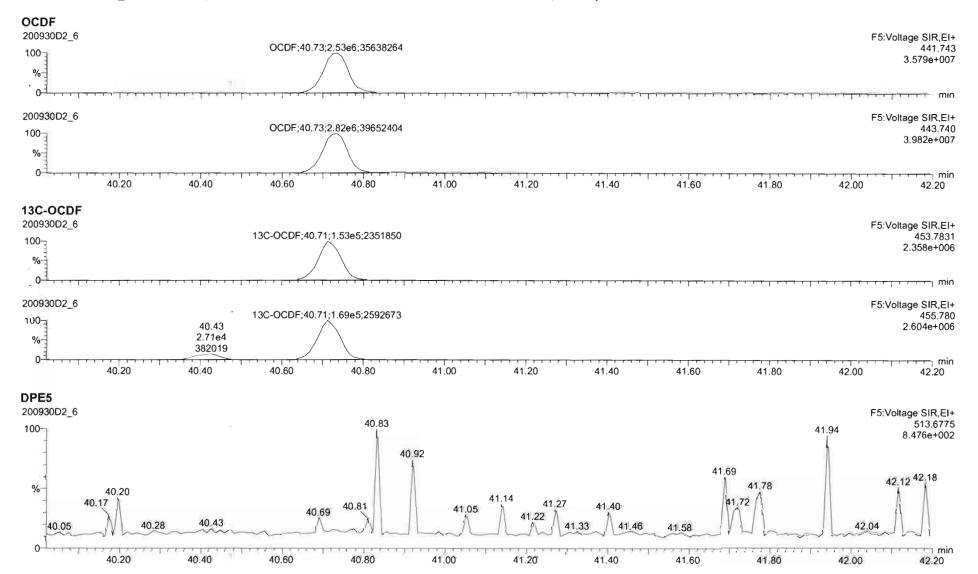
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U:\VG7.PRO\Results\200930D2\200930D2_CRV.qld

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Printed:

Thursday, October 01, 2020 09:56:59 Pacific Daylight Time Thursday, October 01, 2020 09:58:35 Pacific Daylight Time



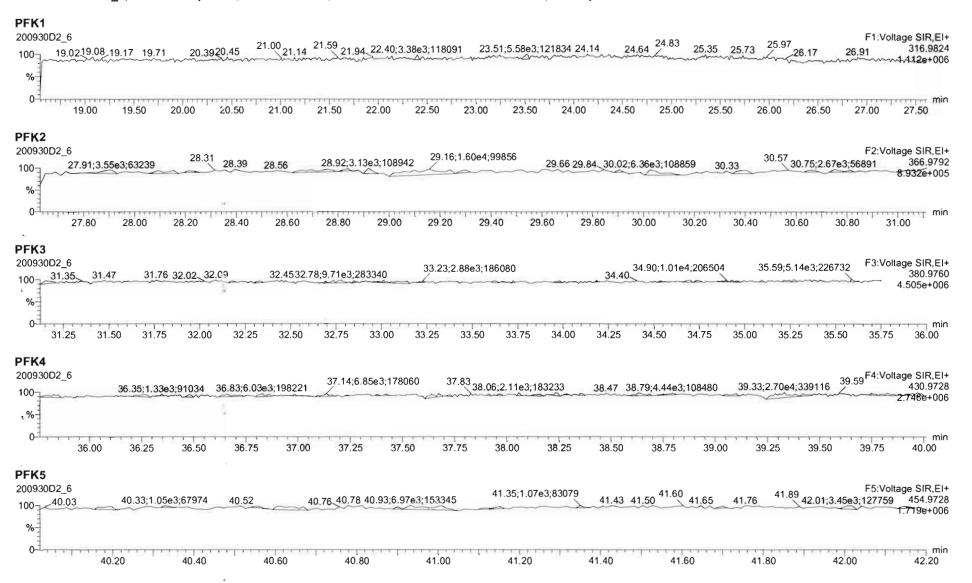
Quantify Sample Report Vista Analytical Laboratory

Dataset:

U:\VG7.PRO\Results\200930D2\200930D2_CRV.qld

Last Altered: Frinted: Thursday, October 01, 2020 09:56:59 Pacific Daylight Time Thursday, October 01, 2020 09:58:35 Pacific Daylight Time

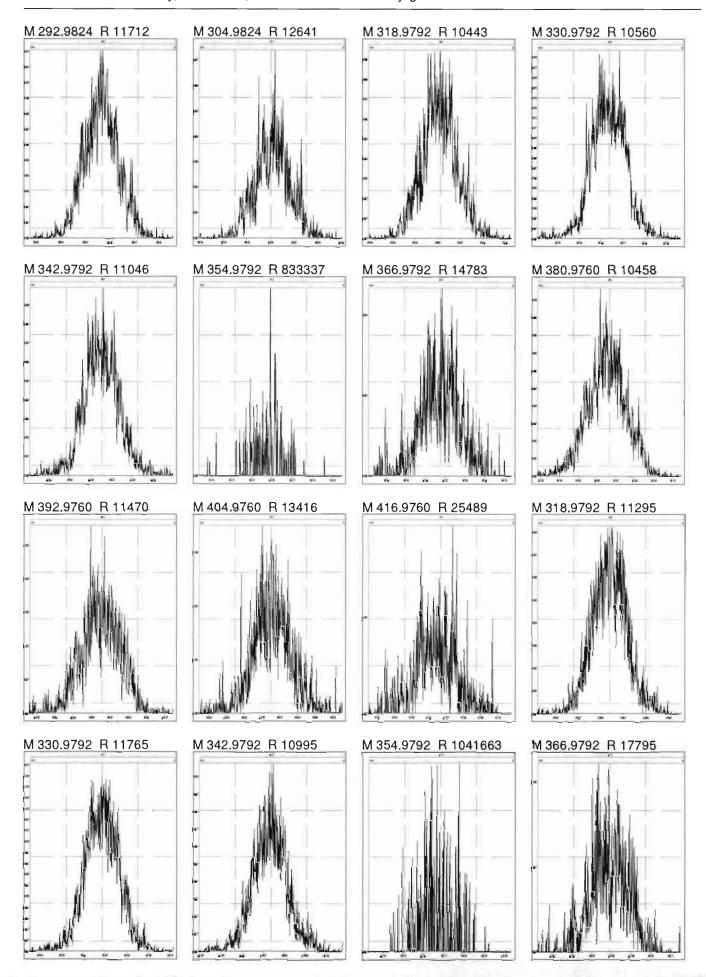
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Work Order 2002434

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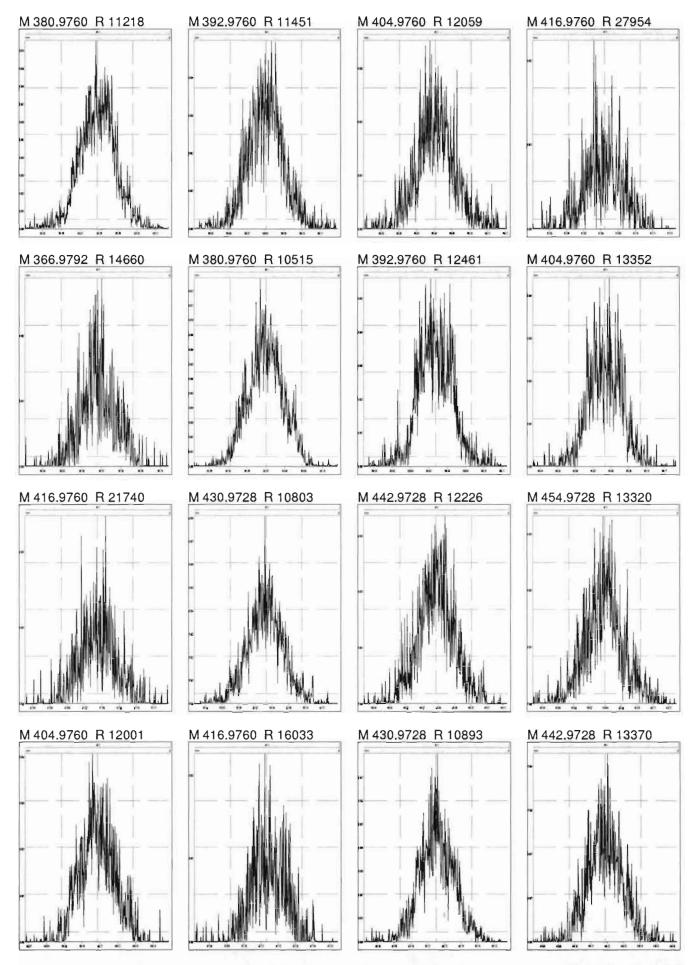
Thursday, October 01, 2020 02:40:50 Pacific Daylight Time



Work Order 2002434 Page 772 of 955

Printed:

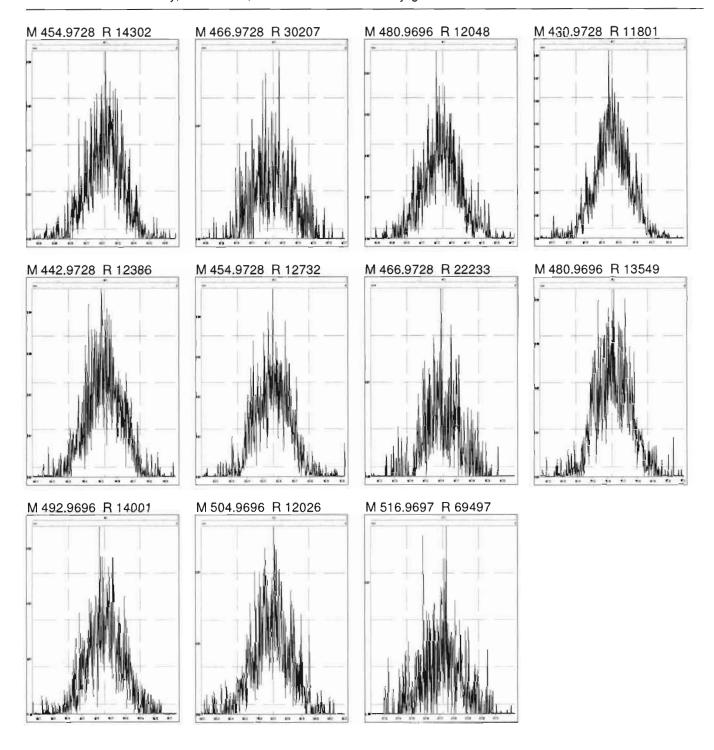
Thursday, October 01, 2020 02:40:50 Pacific Daylight Time



Work Order 2002434 Page 773 of 955

Printed:

Thursday, October 01, 2020 02:40:50 Pacific Daylight Time



Work Order 2002434 Page 774 of 955

Page 1 of 2

Dataset: U:\VG7.PRO\Results\200930D2\200930D2_8.qld

Last Altered: Thursday, October 01, 2020 10:40:53 Pacific Daylight Time Printed: Thursday, October 01, 2020 10:42:01 Pacific Daylight Time

DB 10/1/20 CT 10/01/2020

Method: C:\MassLynx\Default.PRO\MethDB\1613_rrt.mdb 11 Sep 2020 15:14:27 Calibration: U:\VG7.PRO\CurveDB\ZB_DIOXIN_1613vg7-9-30-20.cdb 01 Oct 2020 10:27:37

Name: 200930D2_8, Date: 30-Sep-2020, Time: 18:08:02, ID: SS200930D2-1 1613 SSS 20F1108, Description: 1613 SSS 20F1108

	# Name	Resp	RA	n/y	RRF	wt/vol	Pred.RT	RT	Pred.RRT	RRT	Conc.	%Rec	DL	EMPC
1	1 2,3,7,8-TCDD	2.31e4	0.74	NO	1.00	1.000	25.821	25.82	1.001	1.001	10.260	103	0.0632	10.3
2	2 1,2,3,7,8-PeCDD	8.31e4	0.61	NO	0.935	1.000	30.187	30.19	1.001	1.001	53.368	107	0.106	53.4
3	3 1,2,3,4,7,8-HxCDD	7.77e4	1.26	NO	1.15	1.000	33.415	33.42	1.000	1.000	45.778	91.6	0.150	45.8
4	4 1,2,3,6,7,8-HxCDD	8.20e4	1.25	NO	1.02	1.000	33.526	33.54	1.000	1.000	47.955	95.9	0.161	48.0
5	5 1,2,3,7,8,9-HxCDD	7.98e4	1.27	NO	1.06	1.000	33.845	33.82	1.001	1.000	45.851	91.7	0.156	45.9
6	6 1,2,3,4,6,7,8-HpCDD	7.23e4	1.07	NO	1.00	1.000	37.213	37.21	1.000	1.000	49.364	98.7	0.231	49.4
7	7 OCDD	1.24e5	0.89	NO	0.952	1.000	40.395	40.41	1.000	1.000	100.14	100	0.175	100
8	8 2,3,7,8-TCDF	3.03e4	0.76	NO	1.01	1.000	25.174	25.16	1.001	1.001	8.5800	85.8	0.0490	8.58
9	9 1,2,3,7,8-PeCDF	1.26e5	1.58	NO	0.998	1.000	29.019	29.02	1.001	1.001	47.977	96.0	0.102	48.0
10	10 2,3,4,7,8-PeCDF	1.46e5	1.58	NO	1.07	1.000	29.994	29.98	1.001	1.001	53.283	107	0.0861	53.3
11	11 1,2,3,4,7,8-HxCDF	1.29e5	1.25	NO	1.05	1.000	32.505	32.53	1.000	1.001	56.257	113	0.172	56.3
12	12 1,2,3,6,7,8-HxCDF	1.36e5	1.28	NO	1.10	1.000	32.658	32.66	1.000	1.000	56.801	114	0.172	56.8
13	13 2,3,4,6,7,8-HxCDF	1.28e5	1.27	NO	1.09	1.000	33.328	33.31	1.001	1.000	57.613	115	0.191	57.6
14	14 1,2,3,7,8,9-HxCDF	1.06e5	1.25	NO	1.08	1.000	34.294	34.32	1.000	1.001	53.240	106	0.252	53.2
15	15 1,2,3,4,6,7,8-HpCDF	1.20e5	1.03	NO	1.13	1.000	35.976	35.95	1.001	1.000	52.614	105	0.212	52.6
16	16 1,2,3,4,7,8,9-HpCDF	9.52e4	1.03	NO	1.29	1.000	37.849	37.86	1.000	1.000	51.703	103	0.224	51.7
17	17 OCDF	1.66e5	0.89	NO	0.953	1.000	40.702	40.72	1.000	1.001	114.48	114	0.229	114
18	18 13C-2,3,7,8-TCDD	2.25e5	0.80	NO	1.17	1.000	25.787	25.79	1.026	1.026	94.491	94.5	0.271	
19	19 13C-1,2,3,7,8-PeCDD	1.66e5	0.62	NO	0.914	1.000	29.974	30.17	1.193	1.200	89.682	89.7	0.183	1
20	20 13C-1,2,3,4,7,8-HxCDD	1.47e5	1.28	NO	0.634	1.000	33.405	33.40	1.014	1.014	105.24	105	0.428	
21	21 13C-1,2,3,6,7,8-HxCDD	1.67e5	1.27	NO	0.724	1.000	33.514	33.53	1.017	1.018	104.35	104	0.375	
22	22 13C-1,2,3,7,8,9-HxCDD	1.64e5	1.25	NO	0.716	1.000	33.781	33.81	1.025	1.026	103.67	104	0.379	
23	23 13C-1,2,3,4,6,7,8-HpCDD	1.46e5	1.05	NO	0.660	1.000	37.194	37.20	1.129	1.129	100.22	100	0.415	
24	24 13C-OCDD	2.61e5	0.89	NO	0.587	1.000	40.172	40.39	1.219	1.226	201.24	101	0.287	[
25	25 13C-2,3,7,8-TCDF	3.48e5	0.73	NO	1.02	1.000	24.882	25.15	0.990	1.001	99.486	99.5	0.276	
26	26 13C-1,2,3,7,8-PeCDF	2.62e5	1.59	NO	0.842	1.000	29.046	29.00	1.156	1.154	91.006	91.0	0.298	
27	27 13C-2,3,4,7,8-PeCDF	2.55e5	1.67	NO	0.802	1.000	29.934	29.96	1.191	1.192	92.871	92.9	0.313	
28	28 13C-1,2,3,4,7,8-HxCDF	2.17e5	0.51	NO	1.00	1.000	32.549	32.51	0.988	0.987	98.055	98.1	0.333	
29	29 13C-1,2,3,6,7,8-HxCDF	2.17e5	0.52	NO	1.02	1.000	32.680	32.65	0.992	0.991	96.461	96.5	0.328	
30	30 13C-2,3,4,6,7,8-HxCDF	2.05e5	0.52	NO	0.955	1.000	33.244	33.30	1.009	1.011	97.072	97.1	0.350	
31	31 13C-1,2,3,7,8,9-HxCDF	1.83e5	0.53	NO	0.851	1.000	34.308	34.29	1.041	1.041	97.441	97.4	0.392	

Work Order 2002434

Vista Analytical Laboratory

Dataset:

U:\VG7.PRO\Results\200930D2\200930D2_8.qld

Last Altered:

Thursday, October 01, 2020 10:40:53 Pacific Daylight Time

Printed:

Thursday, October 01, 2020 10:42:01 Pacific Daylight Time

	# Name	Resp	RA	n/y	RRF	wt/vol	Pred.RT	RT	Pred.RRT	RRT	Conc.	%Rec	DL	EMPC
32	32 13C-1,2,3,4,6,7,8-HpCDF	2.01e5	0.44	NO	0.848	1.000	35.810	35.94	1.087	1.091	107.16	107	0.390	
33	33 13C-1,2,3,4,7,8,9-HpCDF	1.43e5	0.45	NO	0.624	1.000	37.787	37.85	1.147	1.149	103.84	104	0.530	
34	34 13C-OCDF	3.04e5	0.90	NO	0.730	1.000	40.323	40.70	1.224	1.235	188.59	94.3	0.259	
35	35 37CI-2,3,7,8-TCDD	2.38e4			1.21	1.000	25.784	25.82	1.026	1.027	9.7250	97.3	0.0428	
36	36 13C-1,2,3,4-TCDD	2.03e5	0.78	NO	1.00	1.000	25.260	25.13	1.000	1.000	100.00	100	0.318	
37	37 13C-1,2,3,4-TCDF	3.43e5	0.75	NO	1.00	1.000	23.930	23.79	1.000	1.000	100.00	100	0.282	
38	38 13C-1,2,3,4,6,9-HxCDF	2.21e5	0.52	NO	1.00	1.000	32.990	32.94	1.000	1.000	100.00	100	0.334	

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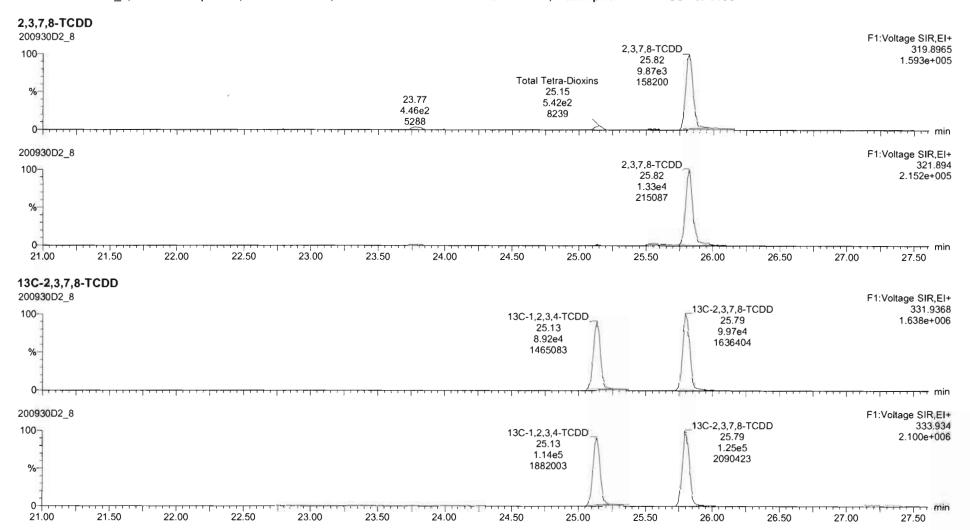
Dataset:

U:\VG7.PRO\Results\200930D2\200930D2_8.qld

Last Altered: Printed: Thursday, October 01, 2020 10:40:53 Pacific Daylight Time Thursday, October 01, 2020 10:42:17 Pacific Daylight Time

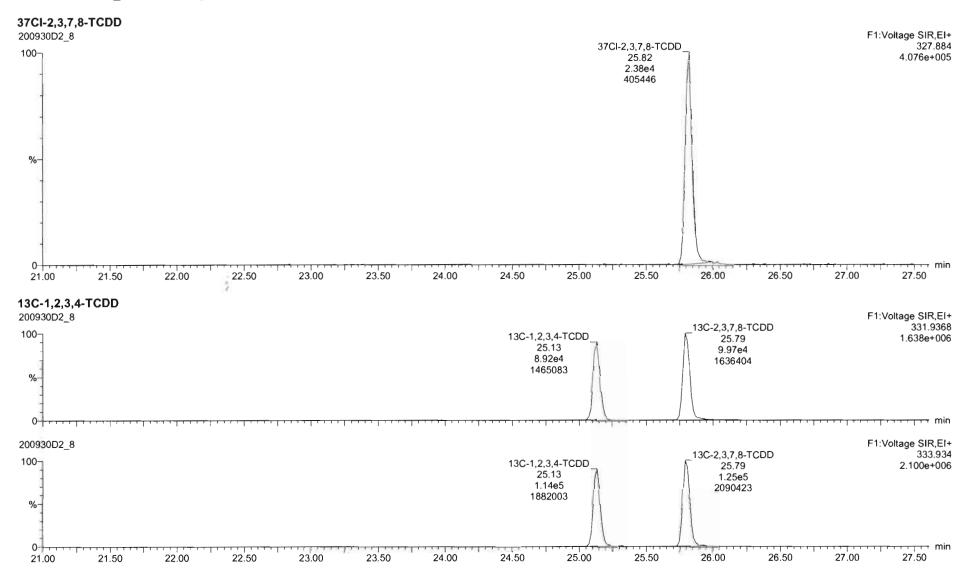
Method: C:\MassLynx\Default.PRO\MethDB\1613_rrt.mdb 11 Sep 2020 15:14:27

Calibration: U:\VG7.PRO\CurveDB\ZB_DIOXIN_1613vg7-9-30-20.cdb 01 Oct 2020 10:27:37



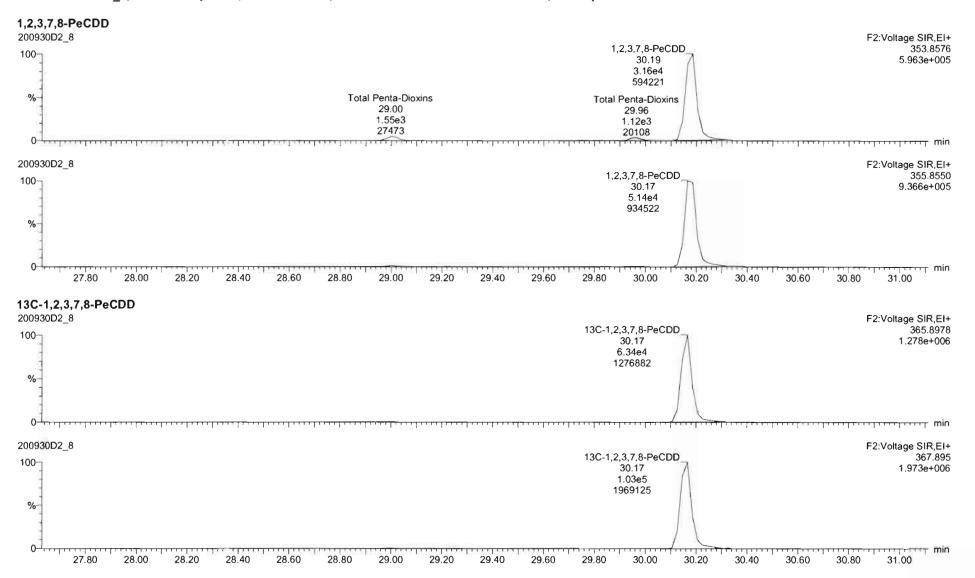
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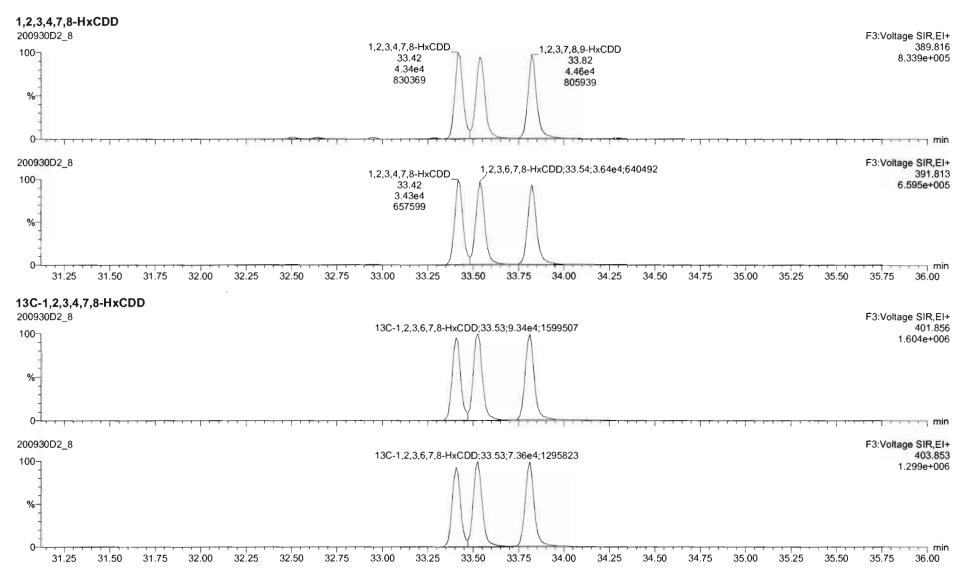
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Last Altered: Thursday, October 01, 2020 10:40:53 Pacific Daylight Time Printed: Thursday, October 01, 2020 10:42:17 Pacific Daylight Time



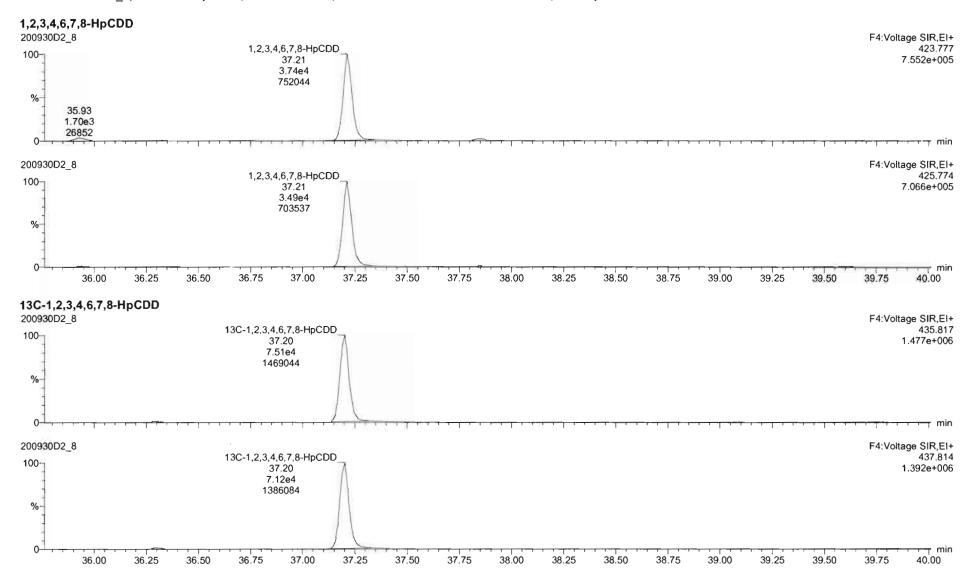
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Last Altered: Printed: Thursday, October 01, 2020 10:40:53 Pacific Daylight Time Thursday, October 01, 2020 10:42:17 Pacific Daylight Time



U:\VG7.PRO\Results\200930D2\200930D2_8.qld

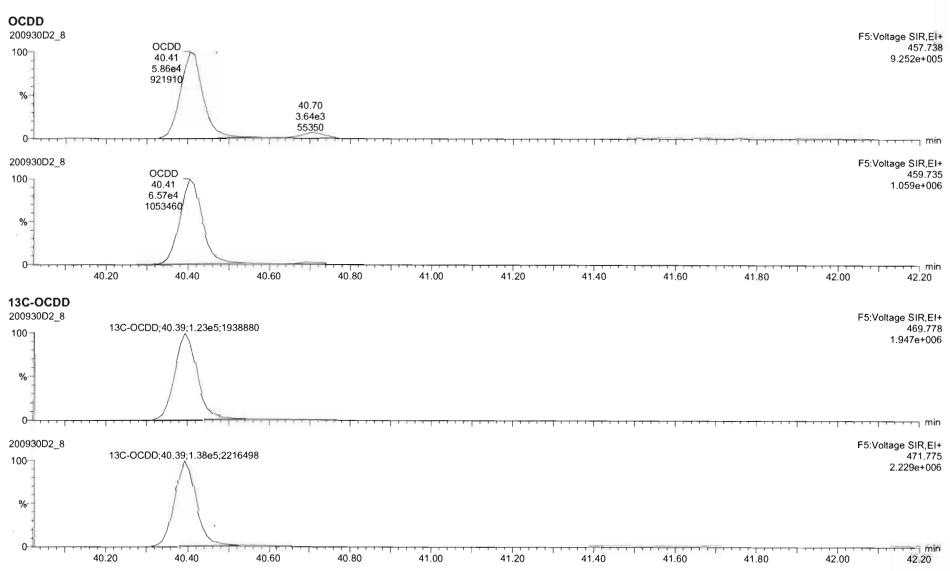
Last Altered: Printed: Thursday, October 01, 2020 10:40:53 Pacific Daylight Time Thursday, October 01, 2020 10:42:17 Pacific Daylight Time



U:\VG7.PRO\Results\200930D2\200930D2_8.qld

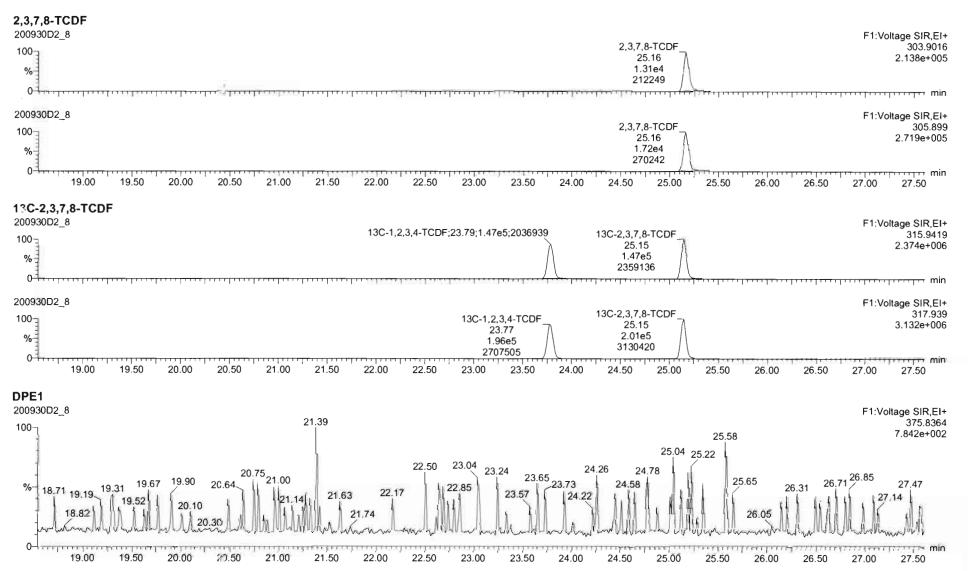
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Thursday, October 01, 2020 10:40:53 Pacific Daylight Time Thursday, October 01, 2020 10:42:17 Pacific Daylight Time



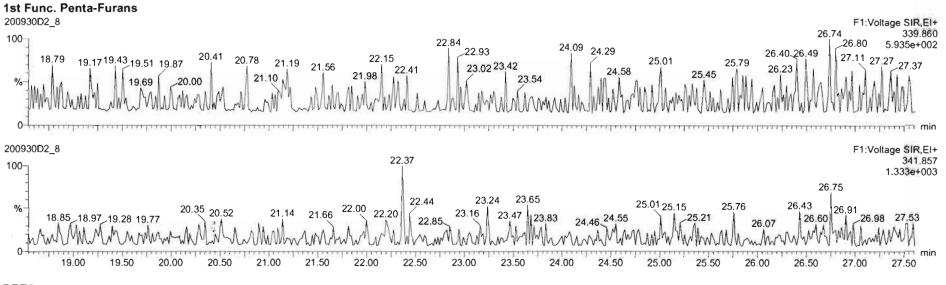
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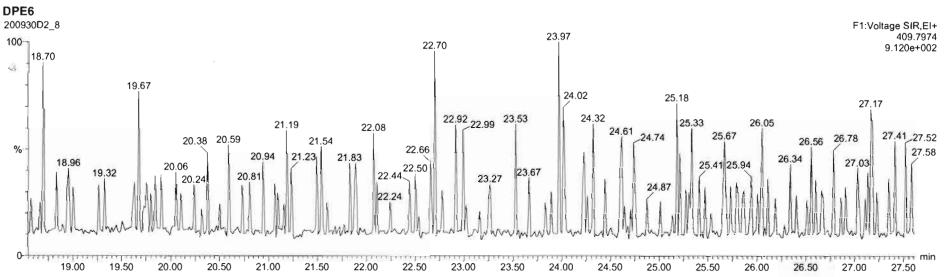
Last Altered: Thursday, October 01, 2020 10:40:53 Pacific Daylight Time Printed: Thursday, October 01, 2020 10:42:17 Pacific Daylight Time



U:\VG7.PRO\Results\200930D2\200930D2 8.qld

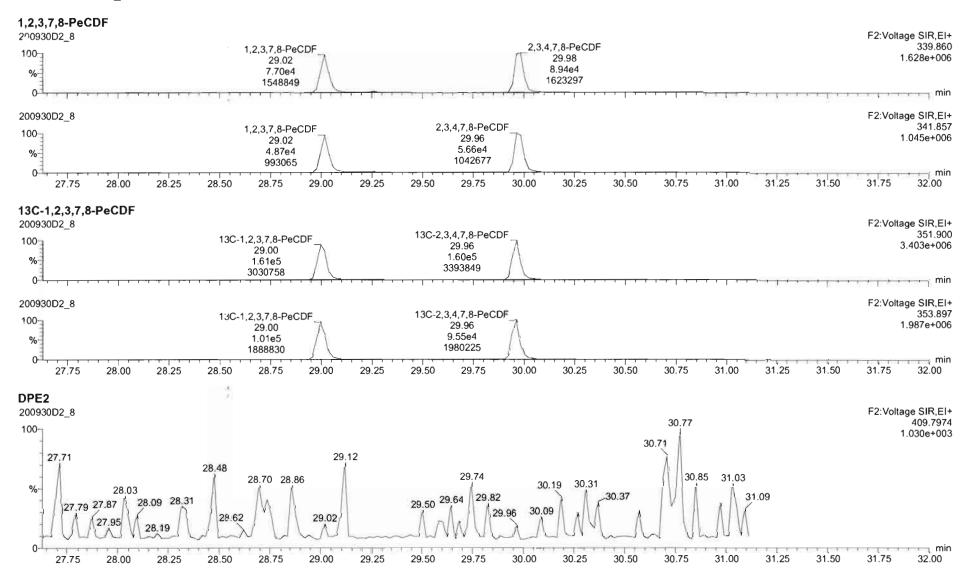
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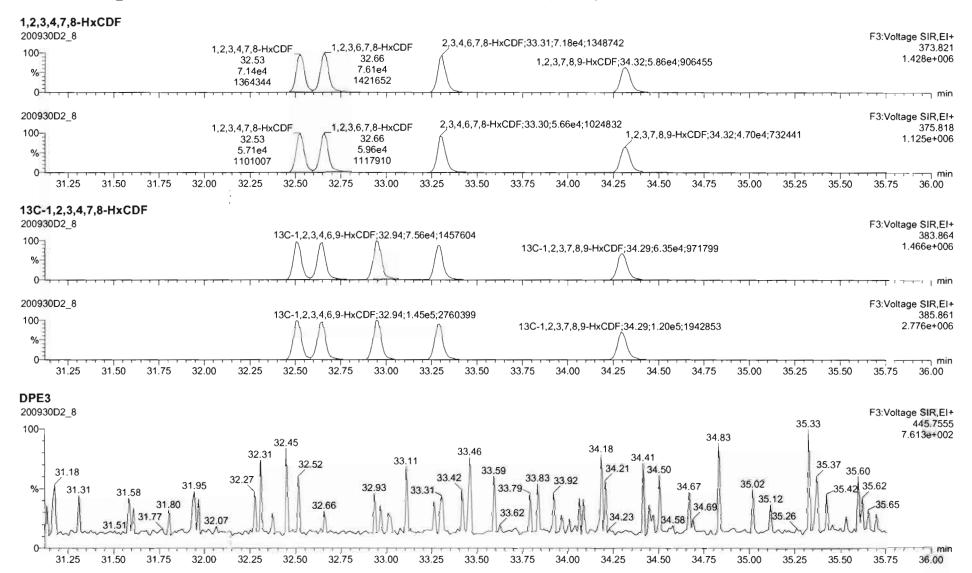
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Last Altered: Printed: Thursday, October 01, 2020 10:40:53 Pacific Daylight Time Thursday, October 01, 2020 10:42:17 Pacific Daylight Time



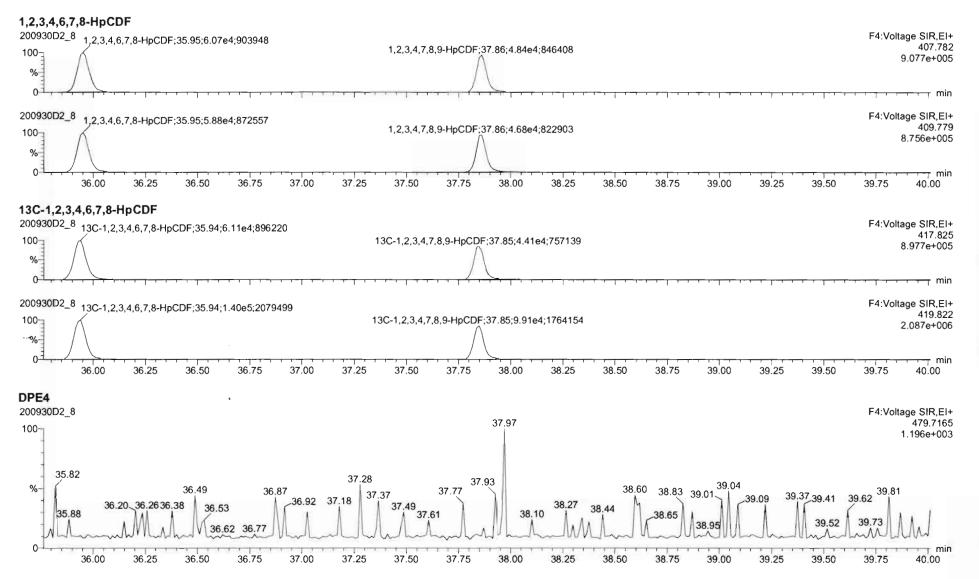
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Last Altered: Printed: Thursday, October 01, 2020 10:40:53 Pacific Daylight Time Thursday, October 01, 2020 10:42:17 Pacific Daylight Time



Dataset: U:\VG7.PRO\Results\200930D2\200930D2_8.qld

Last Altered: Thursday, October 01, 2020 10:40:53 Pacific Daylight Time Printed: Thursday, October 01, 2020 10:42:17 Pacific Daylight Time

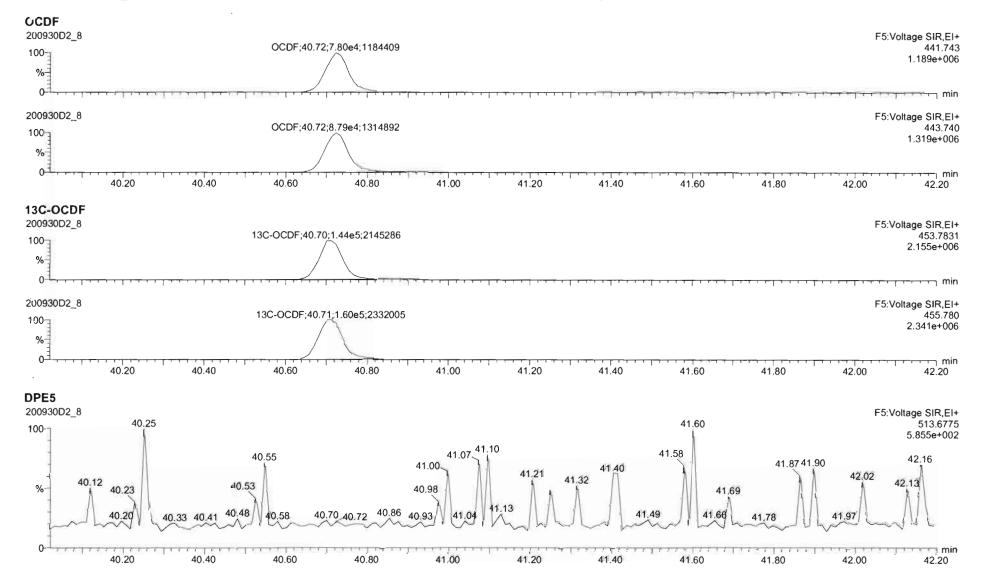


Printed:

U:\VG7.PRO\Results\2\J0930D2\200930D2_8.qld

Last Altered:

Thursday, October 01, 2020 10:40:53 Pacific Daylight Time Thursday, October 01, 2020 10:42:17 Pacific Daylight Time

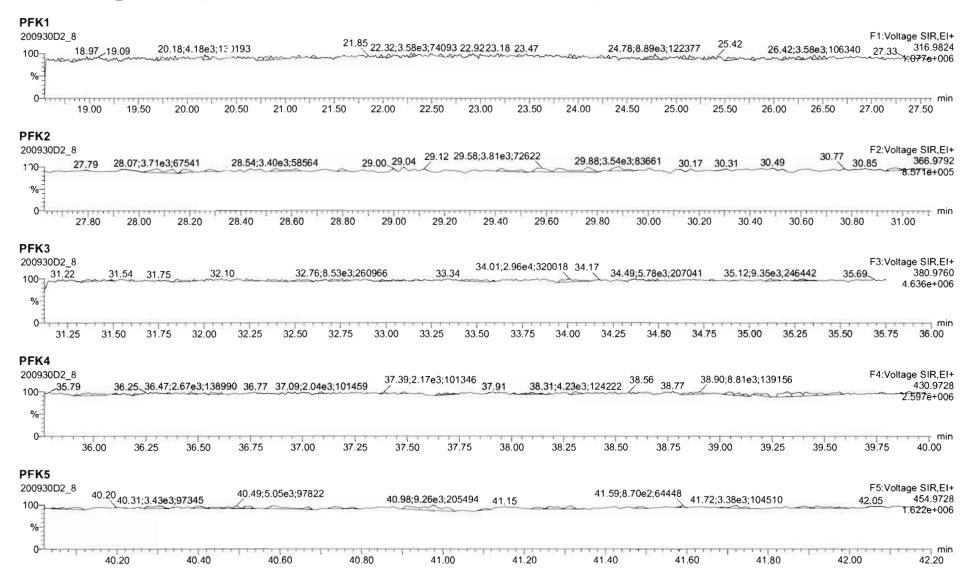


Quantify Sample Report Vista Analytical Laboratory

Dataset: U:\VG7.PRO\Results\200930D2\200930D2 8.gld

Last Altered: Thursday, October 01, 2020 10:40:53 Pacific Daylight Time Printed: Thursday, October 01, 2020 10:42:17 Pacific Daylight Time

Name: 200930D2 8, Date: 30-Sep-2020, Time: 18:08:02, ID: SS200930D2-1 1613 SSS 20F1108, Description: 1613 SSS 20F1108



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Quantify Compound Summary Report MassLynx 4.1 SCN815

Vista Analytical Laboratory

Dataset:

U:\VG12.PRO\Results\201203R2\201203R2_CRV.qld

Last Altered: Printed:

Friday, December 04, 2020 11:36:07 Pacific Standard Time Friday, December 04, 2020 11:37:44 Pacific Standard Time

J-IN 12/04/2020 GRB 12/08/2020

Method: U:\VG12.PRO\MethDB\1613rrt-11-11-20.mdb 12 Nov 2020 07:51:39

Calibration: U:\VG12.PRO\CurveDB\dbDIOXIN_1613vg12-12-03-20.cdb 04 Dec 2020 11:36:07

Compound name: 2,3,7,8-TCDD

Response Factor: 0.980478

RRF SD: 0.0566851, Relative SD: 5.78138

Response type: Internal Std (Ref 18), Area * (IS Conc. / IS Area)

Curve type: RF

11.5	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	201203R2_1	0.250	0.69	NO	25.98	1.000	1.86e3	7.27e5	0.261	4.5	1.02	MM
2	201203R2_2	0.500	0.81	NO	26.01	1.001	3.43e3	7.75e5	0.452	-9.6	0.886	MM
3	201203R2_3	2.00	0.78	NO	25.99	1.001	1.58e4	8.00e5	2.01	0.5	0.985	bb
4	201203R2_4	40.0	0.78	NO	25.99	1.001	3.98e5	9.54e5	42.5	6.4	1.04	bb
5	201203R2_5	300	0.78	NO	25.99	1.001	2.86e6	1.00e6	290	-3.3	0.948	bb
6	201203R2_6	10.0	0.77	NO	25.98	1.001	8.33e4	8.36e5	10.2	1.6	0.997	bb

Compound name: 1,2,3,7,8-PeCDD

Response Factor: 0.931961

RRF SD: 0.0759604, Relative SD: 8.1506

Response type: Internal Std (Ref 19), Area * (IS Conc. / IS Area)

Curve type: RF

TO STATE	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	201203R2_1	1.25	0.56	NO	30.74	1.000	6.50e3	5.16e5	1.35	8.2	1.01	MM
2	201203R2_2	2.50	0.57	NO	30.76	1.001	1.18e4	5.51e5	2.29	-8.3	0.854	MM
3	201203R2_3	10.0	0.62	NO	30.74	1.000	5.55 e 4	5.88e5	10.1	1.3	0.944	MM
4	201203R2_4	200	0.62	NO	30.74	1.000	1.39e6	7.22e5	207	3.6	0.965	bb
5	201203R2_5	1500	0.63	NO	30.74	1.000	1.02e7	8.24e5	1330	-11.6	0.824	bb
6	201203R2_6	50.0	0.61	NO	30.73	1.000	2.93e5	5.89e5	53.4	6.8	0.996	bb

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U:\VG12.PRO\Results\201203R2\201203R2_CRV.qld

Last Altered: Printed:

Friday, December 04, 2020 11:36:07 Pacific Standard Time Friday, December 04, 2020 11:37:44 Pacific Standard Time

Compound name: 1,2,3,4,7,8-HxCDD

Response Factor: 1.02027

RRF SD: 0.089298, Relative SD: 8.75242

Response type: Internal Std (Ref 20), Area * (IS Conc. / IS Area)

Curve type: RF

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	201203R2_1	1.25	1.21	NO	34.05	1.001	4.47e3	3.55e5	1.23	-1.2	1.01	MM
2	201203R2_2	2.50	1.23	NO	34.06	1.001	8.64e3	3.81e5	2.22	-11.0	0.908	bd
3	201203R2_3	10.0	1.22	NO	34.05	1.001	4.12e4	4.06e5	9.96	-0.4	1.02	bd
4	201203R2_4	200	1.26	NO	34.05	1.000	1.17e6	5.28e5	217	8.5	1.11	bd
5	201203R2_5	1500	1.25	NO	34.04	1.000	9.00e6	6.35e5	1390	-7.4	0.945	bd
6	201203R2_6	50.0	1.23	NO	34.04	1.000	2.42e5	4.26e5	55.8	11.6	1.14	bd

Compound name: 1,2,3,6,7,8-HxCDD

Response Factor: 0.902494

RRF SD: 0.0671114, Relative SD: 7.43621

Response type: Internal Std (Ref 21), Area * (IS Conc. / IS Area)

Curve type: RF

the state of	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	201203R2_1	1.25	1.19	NO	34.17	1.000	5.01e3	4.26e5	1.30	4.0	0.939	db
2	201203R2_2	2.50	1.17	NO	34.19	1.001	9.36e3	4.55e5	2.28	-8.8	0.823	MM
3	201203R2_3	10.0	1.32	NO	34.17	1.001	4.48e4	4.87e5	10.2	2.0	0.921	db
4	201203R2_4	200	1.26	NO	34.17	1.000	1.18e6	6.16e5	213	6.6	0.962	db
5	201203R2_5	1500	1.25	NO	34.17	1.001	8.88e6	7.28e5	1350	-9.9	0.813	db
6	201203R2_6	50.0	1.24	NO	34.16	1.000	2.46e5	5.13e5	53.0	6.1	0.957	db

Compound name: 1,2,3,7,8,9-HxCDD

Response Factor: 0.954157

RRF SD: 0.0657355, Relative SD: 6.88938

Response type: Internal Std (Ref 22), Area * (IS Conc. / IS Area)

Curve type: RF

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	201203R2_1	1.25	1.32	NO	34.44	1.001	5.15e3	4.19e5	1.29	3.0	0.983	bb
2	201203R2_2	2.50	1.24	NO	34.44	1.000	1.00e4	4.56e5	2.30	-8.0	0.878	bb

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Dataset:

U:\VG12.PRO\Results\201203R2\201203R2_CRV.qld

Last Altered: Printed:

Friday, December 04, 2020 11:36:07 Pacific Standard Time Friday, December 04, 2020 11:37:44 Pacific Standard Time

Compound name: 1,2,3,7,8,9-HxCDD

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
3	201203R2_3	10.0	1.23	NO	34.44	1.001	4.69e4	4.87e5	10.1	0.9	0.963	bb
4	201203R2_4	200	1.24	NO	34.44	1.000	1.20e6	5.99e5	210	4.8	1.00	bb
5	201203R2_5	1500	1.24	NO	34.43	1.000	9.22e6	7.06e5	1370	-8.7	0.871	bb
6	201203R2_6	50.0	1.26	NO	34.43	1.000	2.61e5	5.07e5	54.0	8.0	1.03	MM

Compound name: 1,2,3,4,6,7,8-HpCDD

Response Factor: 0.918023

Ri.F SD: 0.0609394, Relative SD: 6.63811

Response type: Internal Std (Ref 23), Area * (IS Conc. / IS Area)

Curve type: RF

4.4	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	201203R2_1	1.25	1.05	NO	37.91	1.000	3.95e3	3.21e5	1.34	7.2	0.984	MM
2	201203R2_2	2.50	1.06	NO	37.92	1.000	7.18e3	3.37e5	2.32	-7.2	0.852	MM
3	201203R2_3	10.0	1.06	NO	37.92	1.001	3.39e4	3.72e5	9.91	-0.9	0.910	MM
4	201203R2_4	200	1.03	NO	37.92	1.000	9.39e5	4.93e5	208	3.8	0.953	bb
5	201203R2_5	1500	1.04	NO	37.91	1.001	7.38e6	5.85e5	1370	-8.5	0.840	bb
6	201203R2_6	50.0	1.02	NO	37.91	1.001	1.90e5	3.92e5	52.8	5.5	0.969	bb

Compound name: OCDD Response Factor: 0.865808

RRF SD: 0.07035, Relative SD: 8.12536

Response type: Internal Std (Ref 24), Area * (IS Conc. / IS Area)

Curve type: RF

30.4	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	201203R2_1	2.50	0.83	NO	40.81	1.000	6.00e3	5.55e5	2.50	-0.1	0.865	bb
2	201203R2_2	5.00	0.89	NO	40.83	1.000	1.11e4	5.80e5	4.43	-11.4	0.767	MM
3	201203R2_3	20.0	0.84	NO	40.81	1.000	5.89e4	6.66e5	20.4	2.1	0.884	bb
4	201203R2_4	400	0.88	NO	40.81	1.000	1.59e6	8.50e5	432	7.9	0.935	bb
5	201203R2_5	3000	0.89	NO	40.81	1.000	1.27e7	1.06e6	2780	-7.4	0.802	bb
6	201203R2_6	100	0.88	NO	40.81	1.000	3.12e5	6.62e5	109	8.9	0.942	bb

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Quantify Compound Summary Report
Vista Analytical Laboratory

MassLynx 4.1 SCN815

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Dataset:

U:\VG12.PRO\Results\201203R2\201203R2_CRV.qld

Last Altered: Printed: Friday, December 04, 2020 11:36:07 Pacific Standard Time Friday, December 04, 2020 11:37:44 Pacific Standard Time

Compound name: 2,3,7,8-TCDF

Response Factor: 0.847967

RRF SD: 0.0725275, Relative SD: 8.5531

Response type: Internal Std (Ref 25), Area * (IS Conc. / IS Area)

Curve type: RF

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	201203R2_1	0.250	0.73	NO	25.31	1.001	2.48 e 3	1.07 e 6	0.272	8.9	0.923	MM
2	201203R2_2	0.500	0.83	NO	25.30	1.001	4.29e3	1.14e6	0.442	-11.5	0.750	MM
3	201203R2_3	2.00	0.75	NO	25.30	1.001	1.90e4	1.17 e 6	1.92	-4.0	0.814	bb
4	201203R2_4	40.0	0.76	NO	25.30	1.001	4.93e5	1.37e6	42.3	5.8	0.897	MM
5	201203R2_5	300	0.76	NO	25.30	1.001	3.37e6	1.42e6	279	-6.8	0.790	bb
6	201203R2_6	10.0	0.75	NO	25.30	1.001	1.10e5	1.21e6	10.8	7.7	0.913	db

Compound name: 1,2,3,7,8-PeCDF

Response Factor: 0.959665

RRF SD: 0.0738522, Relative SD: 7.69562

Response type: Internal Std (Ref 26), Area * (IS Conc. / IS Area)

Curve type: RF

STEELS.	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	201203R2_1	1.25	1.56	NO	29.48	1.000	9.71e3	7.88e5	1.28	2.7	0.986	MM
2	201203R2_2	2.50	1.59	NO	29.49	1.000	1.84 e 4	8.48e5	2.26	-9.7	0.867	MM
3	201203R2_3	10.0	1.63	NO	29.48	1.000	8.91e4	9.03e5	10.3	2.8	0.986	bb
4	201203R2_4	200	1.57	NO	29.48	1.000	2.24e6	1.11e6	211	5.4	1.01	bb
5	201203R2_5	1500	1.57	NO	29.48	1.000	1.56e7	1.19e6	1360	-9.5	0.869	bb
6	201203R2_6	50.0	1.61	NO	29.46	1.000	4.70e5	9.04e5	54.1	8.3	1.04	bb

Compound name: 2,3,4,7,8-PeCDF

Response Factor: 1.06715

RRF SD: 0.100434, Relative SD: 9.41144

Response type: Internal Std (Ref 27), Area * (IS Conc. / IS Area)

Curve type: RF

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	201203R2_1	1.25	1.52	NO	30.55	1.000	1.08e4	7.63e5	1.32	6.0	1.13	bb
2	201203R2_2	2.50	1.59	NO	30.55	1.000	1.87e4	8.14e5	2.16	-13.7	0.921	мм

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Dataset:

U:\VG12.PRO\Results\201203R2\201203R2_CRV.qld

Last Altered: Printed: Friday, December 04, 2620 11:36:07 Pacific Standard Time Friday, December 04, 2020 11:37:44 Pacific Standard Time

Compound name: 2,3,4,7,8-PeCDF

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
3	201203R2_3	10.0	1.63	NO	30.55	1.000	9.54e4	8.55e5	10.5	4.5	1.12	MM
4	201203R2_4	200	1.56	NO	30.55	1.000	2.37e6	1.06e6	208	4.2	1.11	bb
5	201203R2_5	1500	1.55	NO	30.55	1.000	1.67e7	1.16e6	1350	-10.0	0.961	bb
6	201203R2_6	50.0	1.56	NO	30.53	1.000	5.09e5	8.75e5	54.5	9.0	1.16	bb

Compound name: 1,2,3,4,7,8-HxCDF

Response Factor: 0.9859

RRF SD: 0.0865731, Relative SD: 8.78113

Response type: Internal Std (Ref 28), Area * (IS Conc. / IS Area)

Curve type: RF

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	201203R2_1	1.25	1.29	NO	33.15	1.001	6.18e3	5.15e5	1.22	-2.7	0.959	bď
2	201203R2_2	2.50	1.18	NO	33.16	1.001	1.20e4	5.49e5	2.21	-11.6	0.872	pq
3	201203R2_3	10.0	1.26	NO	33.15	1.000	6.08e4	5.80e5	10.6	6.4	1.05	pq
4	201203R2_4	200	1.23	NO	33.16	1.001	1.55e6	7.36e5	213	6.5	1.05	bd
5	201203R2_5	1500	1.23	NO	33.15	1.001	1.15e7	8.47e5	1380	-8.3	0.904	pq
6	201203R2_6	50.0	1.23	NO	33.15	1.001	3.29e5	6.08e5	54.8	9.6	1.08	b d

Compound name: 1,2,3,6,7,8-HxCDF

Response Factor: 1.03876

RRF SD: 0.0872692, Relative SD: 8.40126

Response type: Internal Std (Ref 29), Area * (IS Conc. / IS Area)

Curve type: RF

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	201203R2_1	1.25	1.27	NO	33.29	1.001	7.32e3	5.47e5	1.29	3.1	1.07	MM
2	201203R2_2	2.50	1.22	NO	33.29	1.000	1.37e4	5.90e5	2.23	-10.8	0.927	MM
3	201203R2_3	10.0	1.27	NO	33.29	1.001	6.64e4	6.28e5	10.2	1.9	1.06	db
4	201203R2_4	200	1.22	NO	33.29	1.000	1.74e6	7.93e5	211	5.7	1.10	db
5	201203R2_5	1500	1.24	NO	33.28	1.000	1.26e7	8.97e5	1350	-9.7	0.938	db
6	201203R2_6	50.0	1.24	NO	33.28	1.001	3.68e5	6.44e5	54.9	9.9	1.14	db

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Dataset:

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Last Altered: Printed:

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Compound name: 2,3,4,6,7,8-HxCDF

Response Factor: 1.02016

RRF SD: 0.0860672, Relative SD: 8.43661

Response type: Internal Std (Ref 30), Area * (IS Conc. / IS Area)

Curve type: RF

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	201203R2_1	1.25	1.25	NO	33.95	1.001	6.57e3	4.91e5	1.31	5.0	1.07	MM
2	201203R2_2	2.50	1.22	NO	33.96	1.001	1.17e4	5.25e5	2.19	-12.3	0.895	MM
3	201203R2_3	10.0	1.26	NO	33.95	1.001	5.87e4	5.65 e 5	10.2	1.8	1.04	bb
4	201203R2_4	200	1.23	NO	33.95	1.001	1.54e6	7.08e5	213	6.6	1.09	bb
5	201203R2_5	1500	1.22	NO	33.94	1.000	1.14e7	8.16e5	1370	-8.7	0.932	bb
6	201203R2_6	50.0	1.25	NO	33.94	1.001	3.27e5	5.97e5	53.8	7.6	1.10	bb

Compound name: 1,2,3,7,8,9-HxCDF

Response Factor: 0.99094

RRF SD: 0.0846908, Relative SD: 8.54651

Response type: Internal Std (Ref 31), Area * (IS Conc. / IS Area)

Curve type: RF

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	201203R2_1	1.25	1.26	NO	34.94	1.001	5.61e3	4.28e5	1.32	5.8	1.05	MM
2	201203R2_2	2.50	1.32	NO	34.94	1.000	1.03e4	4.73e5	2.19	-12.6	0.867	bb
3	201203R2_3	10.0	1.25	NO	34.94	1.001	5.03e4	5.05e5	10.1	0.6	0.997	MM
4	201203R2_4	200	1.25	NO	34.93	1.000	1.43e6	6.76e5	213	6.7	1.06	bb
5	201203R2_5	1500	1.23	NO	34.92	1.000	1.09e7	7.99e5	1380	-8.3	0.909	bb
6	201203R2_6	50.0	1.25	NO	34.92	1.000	2.95e5	5.53e5	53.9	7.7	1.07	MM

Compound name: 1,2,3,4,6,7,8-HpCDF

Response Factor: 1.04917

RRF SD: 0.0785065, Relative SD: 7.48269

Response type: Internal Std (Ref 32), Area * (IS Conc. / IS Area)

Curve type: RF

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	201203R2_1	1.25	1.07	NO	36.49	1.000	5.72e3	4.27e5	1.28	2.1	1.07	MM
2	201203R2_2	2.50	0.94	NO	36.50	1.000	1.06e4	4.51e5	2.24	-10.4	0.940	bb

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Compound name: 1,2,3,4,6,7,8-HpCDF

7 3 5 5	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
3	201203R2_3	10.0	0.98	NO	36.49	1.000	5.28e4	4.95e5	10.2	1.6	1.07	bb
4	201203R2_4	200	1.01	NO	36.50	1.000	1.36e6	6.02e5	215	7.7	1.13	bb
5	201203R2_5	1500	1.02	NO	36.49	1.001	1.02e7	7.02e5	1380	-7.8	0.967	bb
6	201203R2_6	50.0	1.02	NO	36.47	1.000	2.86e5	5.12e5	53.3	6.7	1.12	bb

Compound name: 1,2,3,4,7,8,9-HpCDF

Response Factor: 1.17589

RRF SD: 0.0886789, Relative SD: 7.54143

Response type: Internal Std (Ref 33), Area * (IS Conc. / IS Area)

Curve type: RF

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	201203R2_1	1.25	0.89	NO	38.55	1.000	4.14e3	2.76e5	1.28	2.3	1.20	MM
2	201203R2_2	2.50	1.00	NO	38.55	1.000	7.84e3	2.93e5	2.27	-9.1	1.07	MM
3	201203R2_3	10.0	0.99	NO	38.55	1.001	3.75e4	3.22e5	9.90	-1.0	1.16	bb
4	201203R2_4	200	1.02	NO	38.54	1.001	1.06e6	4.21e5	214	7.1	1.26	bb
5	201203R2_5	1500	1.02	NO	38.53	1.000	8.34e6	5.15e5	1380	-8.2	1.08	bb
6	201203R2_6	50.0	1.03	NO	38.54	1.000	2.15e5	3.36e5	54.4	8.8	1.28	bb

Compound name: OCDF

Response Factor: 0.895953

RRF SD: 0.0701579, Relative SD: 7.83054

Response type: Internal Std (Ref 34), Area * (IS Conc. / IS Area)

Crove type: RF

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	201203R2_1	2.50	0.93	NO	41.09	1.000	7.18e3	6.13e5	2.61	4.6	0.937	MM
2	201203R2_2	5.00	0.90	NO	41.11	1.000	1.32e4	6.61e5	4.46	-10.7	0.800	MM
3	201203R2_3	20.0	0.86	NO	41.10	1.000	6.64e4	7.40e5	20.0	0.2	0.898	bb
4	201203R2_4	400	0.89	NO	41.09	1.000	1.89e6	9.93e5	425	6.3	0.952	MM
5	201203R2_5	3000	0.89	NO	41.09	1.000	1.50e7	1.22e6	2750	-8.3	0.822	bb
6	201203R2_6	100	0.88	NO	41.09	1.000	3.70e5	7.64e5	108	7.9	0.967	bb

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Compound name: 13C-2,3,7,8-TCDD

Response Factor: 1.05554

RRF SD: 0.132152, Relative SD: 12.5199

Response type: Internal Std (Ref 36), Area * (IS Conc. / IS Area)

Curve type: RF

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	201203R2_1	100	0.77	NO	25.98	1.031	7.27e5	7.80e5	88.4	-11.6	0.933	bb
2	201203R2_2	100	0.76	NO	25.98	1.031	7.75e5	8.11e5	90.5	-9.5	0.955	bb
3	201203R2_3	100	0.77	NO	25.98	1.031	8.00e5	8.35e5	90.8	-9.2	0.958	bb
4	201203R2_4	100	0.79	NO	25.98	1.031	9.54 e 5	8.19e5	110	10.3	1.16	bb
5	201203R2_5	100	0.78	NO	25.98	1.031	1.00e6	7.99e5	119	19.2	1.26	bb
6	201203R2_6	100	0.78	NO	25.97	1.031	8.36e5	7.85e5	101	0.9	1.07	bb

Compound name: 13C-1,2,3,7,8-PeCDD

Response Factor: 0.784679

RRF SD: 0.1443, Relative SD: 18.3896

Response type: Internal Std (Ref 36), Area * (IS Conc. / IS Area)

Curve type: RF

1	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	201203R2_1	100	0.62	NO	30.73	1.219	5.16e5	7.80e5	84.3	-15.7	0.662	bb
2	201203R2_2	100	0.63	NO	30.73	1.219	5.51 e 5	8.11e5	86.6	-13.4	0.679	bb
3	201203R2_3	100	0.62	NO	30.73	1.219	5.88e5	8.35e5	89.8	-10.2	0.704	bb
4	201203R2_4	100	0.63	NO	30.73	1.219	7.22e5	8.19e5	112	12.4	0.882	bb
5	201203R2_5	100	0.63	NO	30.73	1.219	8.24e5	7.99e5	131	31.4	1.03	bb
6	201203R2_6	100	0.64	NO	30.71	1.219	5.89e5	7.85e5	95.6	-4.4	0.750	bb

Compound name: 13C-1,2,3,4,7,8-HxCDD

Response Factor: 0.620541

RRF SD: 0.0984404, Relative SD: 15.8637

Response type: Internal Std (Ref 38), Area * (IS Conc. / IS Area)

Curve type: RF

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	beaqquib = X
1	201203R2_1	100	1.26	NO	34.03	1.014	3.55e5	6.41 e 5	89.2	-10.8	0.553	bd
2	201203R2_2	100	1.27	NO	34.04	1.014	3.81e5	6.94 e 5	88.5	-11.5	0.549	bđ

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Dataset:

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Compound name: 13C-1,2,3,4,7,8-HxCDD

To a	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
3	201203R2_3	100	1.27	NO	34.03	1.014	4.06e5	7.47e5	87.6	-12.4	0.544	bd
4	201203R2_4	100	1.30	NO	34.04	1.014	5.28e5	7.82e5	109	8.9	0.676	bd
5	201203R2_5	100	1.28	NO	34.03	1.013	6.35e5	8.01e5	128	27.7	0.793	bd
6	201203R2_6	100	1.28	NO	34.03	1.014	4.26e5	6.99e5	98.1	-1.9	0.609	bd

Compound name: 13C-1,2,3,6,7,8-HxCDD

Response Factor: 0.734012

RRF SD: 0.101028, Relative SD: 13.7638

Response type: Internal Std (Ref 38), Area * (IS Conc. / IS Area)

Curve type: RF

The same	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	201203R2_1	100	1.29	NO	34.16	1.018	4.26e5	6.41e5	90.7	-9.3	0.665	db
21.	201203R2_2	100	1.28	NO	34.16	1.017	4.55e5	6.94e5	89.4	-10.6	0.656	db
3	201203R2_3	100	1.28	NO	34.15	1.017	4.87e5	7.47e5	88.8	-11.2	0.651	db
4	201203R2_4	100	1.27	NO	34.16	1.017	6.16e5	7.82e5	107	7.3	0.788	db
5	201203R2_5	100	1.27	NO	34.15	1.017	7.28e5	8.01e5	124	23.8	0.909	db
6	201203R2_6	100	1.26	NO	34.15	1.017	5.13e5	6.99e5	100	0.1	0.735	db

Compound name: 13C-1,2,3,7,8,9-HxCDD

Response Factor: 0.72265

RRF SD: 0.0908822, Relative SD: 12.5762

Response type: Internal Std (Ref 38), Area * (IS Conc. / IS Area)

Curve type: RF

100	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	201203R2_1	100	1.25	NO	34.42	1.025	4.19e5	6.41e5	90.4	-9.6	0.653	bd
2	201203R2_2	100	1.26	NO	34.43	1.025	4.56e5	6.94e5	91.0	-9.0	0.657	bb
3	201203R2_3	100	1.26	NO	34.42	1.025	4.87e5	7.47e5	90.2	-9.8	0.652	ММ
4	201203R2_4	100 ,	1.24	NO	34.43	1.025	5.99e5	7.82e5	106	6.1	0.766	bb
5	201203R2_5	100	1.26	NO	34.42	1.025	7.06 e 5	8.01e5	122	22.0	0.882	bb
6	201203R2_6	100 .	1.25	NO	34.42	1.025	5.07e5	6.99e5	100	0.3	0.725	bb

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Compound name: 13C-1,2,3,4,6,7,8-HpCDD

Response Factor: 0.567736

RRF SD: 0.0966968, Relative SD: 17.032

Response type: Internal Std (Ref 38), Area * (IS Conc. / IS Area)

Curve type: RF

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	201203R2_1	100	1.06	NO	37.90	1.129	3.21e5	6.41e5	88.2	-11.8	0.501	MM
2	201203R2_2	100	1.05	NO	37.91	1.129	3.37e5	6.94e5	85.5	-14.5	0.485	bb
3	201203R2_3	100	1.06	NO	37.90	1.129	3.72e5	7.47e5	87.8	-12.2	0.498	MM
4	201203R2_4	100	1.04	NO	37.91	1.129	4.93e5	7.82e5	111	11.0	0.630	bb
5	201203R2_5	100	1.05	NO	37.89	1.128	5.85e5	8.01e5	129	28.8	0.731	bb
6	201203R2_6	100	£ 1.06	NO	37.89	1.129	3.92e5	6.99e5	98.7	-1.3	0.561	bb

Compound name: 13C-OCDD

Response Factor: 0.49583

RRF SD: 0.0921522, Relative SD: 18.5854

Response type: Internal Std (Ref 38), Area * (IS Conc. / IS Area)

Curve type: RF

1	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	201203R2_1	200	0.89	NO	40.80	1.215	5.55 e 5	6.41e5	175	-12.7	0.433	MM
2	201203R2_2	200	0.88	NO	40.81	1.215	5.80e5	6.94e5	169	-15.7	0.418	MM
3	201203R2_3	200	0.91	NO	40.80	1.215	6.66e5	7.47e5	180	-10.0	0.446	bd
4	201203R2_4	200	0.89	NO	40.80	1.215	8.50e5	7.82e5	219	9.7	0.544	bb
15	201203R2_5	200	0.89	NO	40.80	1.215	1.06e6	8.01e5	267	33.3	0.661	bb
16	201203R2_6	200	0.89	NO	40.80	1.215	6.62e5	6.99e5	191	-4.5	0.474	bb

Compound name: 13C-2,3,7,8-TCDF

Response Factor: 0.919039

RkF SD: 0.110551, Relative SD: 12.029

Response type: Internal Std (Ref 37), Area * (IS Conc. / IS Area)

Curve type: RF

3	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	201203R2_1	100	0.78	NO	25.28	1.003	1.07e6	1.32 e 6	88.7	-11.3	0.815	bb
2	201203R2_2	100	0.79	NO	25.28	1.003	1.14e6	1.36e6	91.6	-8.4	0.842	bb

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Compound name: 13C-2,3,7,8-TCDF

3	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
3	201203R2_3	100	0.76	NO	25.28	1.003	1.17e6	1.40 e 6	90.7	-9.3	0.834	bb
4	201203R2_4	100	0.79	NO	25.28	1.003	1.37e6	1.36e6	110	9.9	1.01	bb
5	201203R2_5	100	0.77	NO	25.28	1.003	1.42e6	1.31e6	118	18.5	1.09	bb
6 .	201203R2_6	100	0.77	NO	25.27	1.003	1.21e6	1.30e6	101	0.7	0.925	bb

Compound name: 13C-1,2,3,7,8-PeCDF

Response Factor: 0.715118

RRF SD: 0.124185, Relative SD: 17.3657

Response type: Internal Std (Ref 37), Area * (IS Conc. / IS Area)

Curve type: RF

42	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	201203R2_1	100	1.62	NO	29.46	1.169	7.88e5	1.32e6	83.6	-16.4	0.598	MM
2	201203R2_2	100	1.60	NO	29.48	1.169	8.48e5	1.36e6	87.3	-12.7	0.624	bb
3	201203R2_3	100	1.61	NO	29.46	1.169	9.03e5	1.40e6	90.3	-9.7	0.646	bb
4	201203R2_4	100	1.57	NO	29.48	1.169	1.11e6	1.36e6	114	13.8	0.814	bb
5	201203R2_5	100	1.59	NO	29.46	1.169	1.19e6	1.31e6	128	28.0	0.915	рр
6	201203R2_6	100	1.63	NO	29.46	1.169	9.04e5	1.30e6	97.0	-3.0	0.694	bb

Compound name: 13C-2,3,4,7,8-PeCDF

Response Factor: 0.688531

RRF SD: 0.122291, Relative SD: 17.7611

Response type: Internal Std (Ref 37), Area * (IS Conc. / IS Area)

Curve type: RF

3.	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	201203R2_1	100	1.62	NO	30.53	1.211	7.63e5	1.32e6	84.1	-15.9	0.579	bb
2	201203R2_2	100	1.59	NO	30.53	1.211	8.14e5	1.36e6	87.1	-12.9	0.599	MM
3	201203R2_3	100	1.60	NO	30.53	1.212	8.55e5	1.40e6	88.8	-11.2	0.611	bb
4	201203R2_4	100	1.59	NO	30.53	1.211	1.06e6	1.36e6	114	13.6	0.782	bb
5	201203R2_5	100	1.59	NO	30.53	1.212	1.16e6	1.31e6	129	29.0	0.888	bb
6	201203R2_6	100	1.63	NO	30.52	1.211	8.75e5	1.30e6	97.5	-2.5	0.671	bb

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Dataset:

U:\VG12.PRO\Results\201203R2\201203R2_CRV.qld

Last Altered: Printed:

Friday, December 04, 2020 11:36:07 Pacific Standard Time Friday, December 04, 2020 11:37:44 Pacific Standard Time

Compound name: 13C-1,2,3,4,7,8-HxCDF

Response Factor: 0.873401

RRF SD: 0.109302, Relative SD: 12.5145

Response type: Internal Std (Ref 38), Area * (IS Conc. / IS Area)

Curve type: RF

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	201203R2_1	100	0.51	NO	33.13	0.987	5.15e5	6.41e5	92.0	-8.0	0.804	bd
2	201203R2_2	100	0.51	NO	33.14	0.987	5.49e5	6.94e5	90.7	-9.3	0.792	bd
3	201203R2_3	100	0.50	NO	33.14	0.987	5.80 e 5	7.47e5	88.8	-11.2	0.776	bd
4	201203R2_4	100	0.51	NO	33.14	0.987	7.36 e 5	7.82e5	108	7.8	0.941	bd
5	201203R2_5	100	0.51	NO	33.13	0.987	8.47e5	8.01e5	121	21.1	1.06	bd
6	201203R2_6	100	0.50	NO	33.13	0.987	6.08e5	6.99e5	99.6	-0.4	0.870	bd

Compound name: 13C-1,2,3,6,7,8-HxCDF

Rusponse Factor: 0.933484

RRF SD: 0.112711, Relative SD: 12.0743

Response type: Internal Std (Ref 38), Area * (IS Conc. / IS Area)

Curve type: RF

		٠,										
-	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	201203R2_1	100	0.50	NO	33.27	0.991	5.47e5	6.41e5	91.4	-8.6	0.854	db
2	201203R2_2	100	0.52	NO	33.28	0.991	5.90e5	6.94e5	91.0	-9.0	0.850	MM
3	201203R2_3	100	0.51	NO	33.27	0.991	6.28e5	7.47 e 5	90.0	-10.0	0.841	db
4	201203R2_4	100	0.50	NO	33.28	0.991	7.93 e 5	7.82e5	109	8.7	1.01	db
5	201203R2_5	100	0.51	NO	33.27	0.991	8.97e5	8.01e5	120	20.0	1.12	db
6	201203R2_6	100	0.50	NO	33.26	0.991	6.44e5	6.99e5	98.8	-1.2	0.922	db

Compound name: 13C-2,3,4,6,7,8-HxCDF

Response Factor: 0.843038

RRF SD: 0.105848, Relative SD: 12.5555

Response type: Internal Std (Ref 38), Area * (IS Conc. / IS Area)

Curve type: RF

14.74	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	201203R2_1	100 .	0.50	NO	33.93	1.011	4.91e5	6.41e5	90.9	-9.1	0.766	MM
2	201203R2_2	100	0.50	NO	33.94	1.011	5.25 e 5	6.94e5	89.8	-10.2	0.757	ММ

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Dataset:

U:\VG12.PRO\Results\2:)1203R2\201203R2_CRV.qld

Last Altered: Printed:

Friday, December 04, 2020 11:36:07 Pacific Standard Time Friday, December 04, 2020 11:37:44 Pacific Standard Time

Compound name: 13C-2,3,4,6,7,8-HxCDF

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
3	201203R2_3	100	0.51	NO	33.93	1.011	5.65e5	7.47e5	89.7	-10.3	0.756	bb
4	201203R2_4	100	0.51	NO	33.93	1.010	7.08e5	7.82e5	107	7.5	0.906	рр
5	201203R2_5	100	0.51	NO	33.93	1.010	8.16e5	8.01e5	121	20.9	1.02	bb
6	201203R2_6	100	0.51	NO	33.92	1.010	5.97e5	6.99e5	101	1.2	0.853	bb

Compound name: 13C-1,2,3,7,8,9-HxCDF

Response Factor: 0.7799

RRF SD: 0.132819, Relative SD: 17.0303

Response type: Internal Std (Ref 38), Area * (IS Conc. / IS Area)

Curve type: RF

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	201203R2_1	100	0.51	NO	34.92	1.040	4.28e5	6.41e5	85.6	-14.4	0.667	MM
2	201203R2_2	100	0.50	NO	34.93	1.040	4.73e5	6.94e5	87.5	-12.5	0.682	MM
3	201203R2_3	100	0.52	NO	34.92	1.040	5.05e5	7.47e5	86.6	-13.4	0.676	MM
4	201203R2_4	100	0.52	NO	34.92	1.040	6.76e5	7.82e5	111	10.9	0.865	MM
5	201203R2_5	100	0.51	NO	34.91	1.040	7.99e5	8.01e5	128	28.0	0.998	bb
6	201203R2_6	100	0.49	NO	34.91	1.040	5.53e5	6.99e5	101	1.4	0.791	bb

Compound name: 13C-1,2,3,4,6,7,8-HpCDF

Response Factor: 0.726456

R F SD: 0.0871718, Relative SD: 11.9.96

Response type: Internal Std (Ref 38), Frea * (IS Conc. / IS Area)

Curve type: RF

1000	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	201203R2_1	100	0.42	NO	36.48	1.087	4.27e5	6.41e5	91.8	-8.2	0.667	bb
2	201203R2_2	100	0.42	NO	36.49	1.087	4.51e5	6.94e5	89.6	-10.4	0.651	bb
3	201203R2_3	100	0.43	NO	36.47	1.087	4.95 e 5	7.47e5	91.2	-8.8	0.663	bb
4	201203R2_4	100	0.42	NO	36.49	1.087	6.02 e 5	7.82e5	106	6.0	0.770	bb
5	201203R2_5	100	0.43	NO	36.47	1.086	7.02e5	8.01e5	121	20.7	0.877	bb
6	201203R2_6	100	0.43	NO	36.47	1.086	5.12e5	6.99 e 5	101	0.7	0.732	bb

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U:\VG12.PRO\Results\201203R2\201203R2_CRV.qld

Lest Altered: Printed:

Dataset:

Friday, December 04, 2020 11:36:07 Pacific Standard Time Friday, December 04, 2020 11:37:44 Pacific Standard Time

Compound name: 13C-1,2,3,4,7,8,9-HpCDF

Response Factor: 0.49111

RRF SD: 0.0867845, Relative SD: 17.6711

Response type: Internal Std (Ref 38), Area * (IS Conc. / IS Area)

C rve type: RF

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	201203R2_1	100	0.42	NO	38.53	1.148	2.76e5	6.41e5	87.5	-12.5	0.430	MM
2	201203R2_2	100	0.42	NO	38.54	1.148	2.93e5	6.94e5	86.1	-13.9	0.423	bb
3	201203R2_3	100	0.40	NO	38.53	1.148	3.22e5	7.47e5	87.7	-12.3	0.431	bb
4	201203R2_4	100	0.42	NO	38.52	1.147	4.21 e 5	7.82e5	110	9.8	0.539	bb
5	201203R2_5	100	0.42	NO	38.52	1.147	5.15e5	8.01e5	131	31.0	0.643	bb
6	201203R2_6	100	0.42	NO	38.53	1.148	3.36e5	6.99e5	97.9	-2.1	0.481	bb

Compound name: 13C-OCDF Response Factor: 0.565418

RRF SD: 0.112698, Relative SD: 19.9318

Response type: Internal Std (Ref 38), Area * (IS Conc. / IS Area)

Curve type: RF

100	Name	Std. Conc	. RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	201203R2_1	200	0.87	NO	41.09	1.224	6.13e5	6.41e5	169	-15.4	0.478	MM
2	201203R2_2	200	0.89	NO	41.10	1.224	6.61 e 5	6.94e5	169	-15.7	0.477	MM
3	201203R2_3	200	0.89	NO	41.08	1.224	7.40e5	7.47e5	175	-12.4	0.495	bb
4 :	201203R2_4	200	0.89	NO	41.08	1.223	9.93e5	7.82e5	225	12.4	0.636	MM
5	201203R2_5	200	0.88	NO	41.07	1.223	1.22e6	8.01e5	269	34.4	0.760	bb
6	201203R2_6	200	0.87	NO	41.08	1.224	7.64 e 5	6.99e5	193	-3.3	0.547	bb



Compound name: 37CI-2,3,7,8-TCDD

Response Factor: 1.21674

RRF SD: 0.217315, Relative SD: 17.8605

Response type: Internal Std (Ref 36), Area * (IS Conc. / IS Area)

Curve type: RF

140	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
	201203R2_1	0.250			26.01	1.032	2.03e3	7.80e5	0.214	-14.5	1.04	bb
2	201203R2_2	0.500	b)		26.01	1.032	4.12e3	8.11e5	0.418	-16.4	1.02	bb

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Vista Analytical Laboratory

Dataset:

U:\VG12.PRO\Results\201203R2\201203R2_CRV.qld

Last Altered: Printed:

Friday, December 04, 2020 11:36:07 Pacific Standard Time Friday, December 04, 2020 11:37:44 Pacific Standard Time

Compound name: 37CI-2,3,7,8-TCDD

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
3	201203R2_3	2.00			25.99	1.032	1.69e4	8.35e5	1.66	-16.8	1.01	bb
4	201203R2_4	40.0			25.99	1.031	4.66 e 5	8.19e5	46.8	16.9	1.42	bb
5	201203R2_5	200			25.99	1.032	2.36 e 6	7.99e5	243	21.5	1.48	bb
6	201203R2_6	10.0			25.98	1.031	1.04 e 5	7.85e5	10.9	9.3	1.33	bb

Compound name: 13C-1,2,3,4-TCDD

Response Factor: 1

RRF SD: 0, Relative SD: 0

Response type: Internal Std (Ref 36), Area * (IS Conc. / IS Area)

Curve type: RF

F3		9	4									
1	Name	Std. Conc (RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	201203R2_1	100	0.79	NO	25.21	1.000	7.80e5	7.80 e 5	100	0.0	1.00	bb
2	201203R2_2	100	0.78	NO	25.21	1.000	8.11e5	8.11e5	100	0.0	1.00	bb
3	201203R2_3	100	0.78	NO	25.20	1.000	8.35e5	8.35e5	100	0.0	1.00	bb
4	201203R2_4	100	0.77	NO	25.21	1.000	8.19e5	8.19e5	100	0.0	1.00	bb
5	201203R2_5	100	0.77	NO	25.20	1.000	7.99e5	7.99e5	100	0.0	1.00	bb
6	201203R2_6	100	0.79	NO	25.20	1.000	7.85e5	7.85e5	100	0.0	1.00	bb

Compound name: 13C-1,2,3,4-TCDF

Response Factor: 1

RRF SD: 0, Relative SD: 0

Response type: Internal Std (Ref 37), Area * (IS Conc. / IS Area)

Curve type: RF

	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	201203R2_1	100	0.79	NO	23.69	1.000	1.32e6	1.32e6	100	0.0	1.00	bb
2	201203R2_2	100	0.78	NO	23.69	1.000	1.36e6	1.36e6	100	0.0	1.00	bb
3	201203R2_3	100	0.79	NO	23.67	1.000	1.40 e 6	1.40e6	100	0.0	1.00	bb
4	201203R2_4	100	0.78	NO	23.67	1.000	1.36e6	1.36e6	100	0.0	1.00	bb
5	201203R2_5	100	0.79	NO	23.69	1.000	1.31e6	1.31e6	100	0.0	1.00	bb
6	201203R2_6	100	0.79	NO	23.66	1.000	1.30e6	1.30e6	100	0.0	1.00	bb

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Quantify Compound Summary Report MassLynx 4.1 SCN815 Page 16 of 16

Vi∴ta Analytical Laboratory

Dataset: U:\VG12.PRO\Results\201203R2\201203R2_CRV.qld

Last Altered: Friday, December 04, 2020 11:36:07 Pacific Standard Time Printed: Friday, December 04, 2020 11:37:44 Pacific Standard Time

Compound name: 13C-1,2,3,4,6,9-HxCDF

Response Factor: 1

RRF SD: 0, Relative SD: 0

Response type: Internal Std (Ref 38), Area * (IS Conc. / IS Area)

Curve type: RF

1750	Name	Std. Conc	RA	n/y	RT	RRT	Resp	IS Resp	Conc.	%Dev	RRF	X = dropped
1	201203R2_1	100	0.50	NO	33.57	1.000	6.41e5	6.41e5	100	0.0	1.00	bb
2	201203R2_2	100	0.52	NO	33.58	1.000	6.94 e 5	6.94e5	100	0.0	1.00	bb
3	201203R2_3	100	0.51	NO	33.57	1.000	7.47e5	7.47e5	100	0.0	1.00	bb
4	201203R2_4	100	0.51	NO	33.58	1.000	7.82 e 5	7.82e5	100	0.0	1.00	bb
5	201203R2_5	100	0.51	NO	33.58	1.000	8.01e5	8.01e5	100	0.0	1.00	bb
6	201203R2_6	100	0.50	NO	33.57	1.000	6.99 e 5	6.99e5	100	0.0	1.00	bb

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Dataset:

Untitled

Last Altered: Printed: Friday, December 04, 2020 12:05:28 Pacific Standard Time Friday, December 04, 2020 12:05:43 Pacific Standard Time

Method: U:\VG12.PRO\MethDB\1613rrt-11-11-20.mdb 12 Nov 2020 07:51:39 Calibration: U:\VG12.PRO\CurveDB\dbDIOXIN_1613vg12-12-03-20.cdb 04 Dec 2020 11:36:07

Compound name: 2,3,7,8-TCDD

	Name	ID	Acq.Date	Acq.Time
1	201203R2_1	ST201203R2_1 1613 CS0 20K1901	03-Dec-20	10:36:45
2	201203R2_2	ST201203R2_2 1613 CS1 20K1902	03-Dec-20	11:28:04
3	201203R2_3	ST201203R2_3 1613 CS2 20K1903	03-Dec-20	12:14:40
4	201203R2_4	ST201203R2_4 1613 CS4 20L0302	03-Dec-20	13:00:37
5	201203R2_5	ST201203R2_5 1613 CS5 20L0303	03-Dec-20	13:47:04
6	201203R2_6	ST201203R2_6 1613 CS3 20L0301	03-Dec-20	14:35:05
7	201203R2_7	SOLVENT BLANK	03-Dec-20	15:21:59
8	201203R2_8	SS201203R2_1 1613 SSS 20K1907	03-Dec-20	16:09:07
9	201203R2_9	SOLVENT BLANK	03-Dec-20	17:02:58
10	201203R2_10	2002458-01 GW-1212 0.93004	03-Dec-20	17:47:52
11	201203R2_11	2002458-02 GW-1213 0.92278	03-Dec-20	18:32:46
12	201203R2_12	2002458-03 GW-1246 0.9578	03-Dec-20	19:17:40
13	201203R2_13	2002459-01 GW-1223 0.93891	03-Dec-20	20:02:33
14	201203R2_14	2002459-02 GW-1224 0.94848	03-Dec-20	20:47:27
15	201203R2_15	2002459-03 GW-1215 0.95546	03-Dec-20	21:32:21
16	201203R2_16	2002459-04 GW-1216 0.935	03-Dec-20	22:17:16
17	201203R2_17 (A)			
18	201203R2_18 T			
19	201203R2_19			
20	201203R2_20	SOLVENT BLANK	04-Dec-20	07:52:29
21	201203R2_21	ST201203R2_7 1613 CS3 20L0301	04-Dec-20	08:38:31

(A) Oven door open, run pawed LIN 12/04/2020

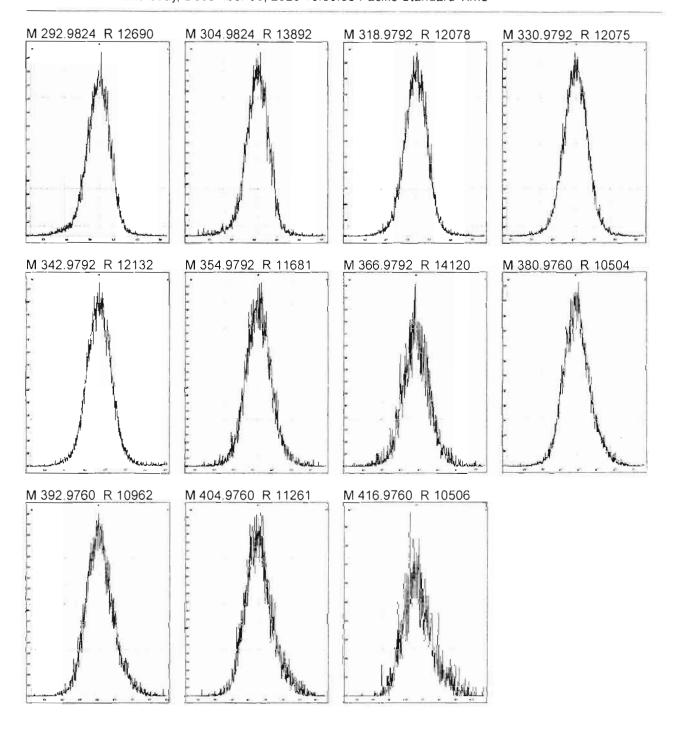
Work Order 2002434 Page 806 of 955

File:

Experiment: OCDD_DIOXIN.exp Reference: pfk.ref Function: 1 @ 200 (ppm)

Printed:

Thursday, December 03, 2020 10:30:53 Pacific Standard Time



Work Order 2002434 Page 807 of 955

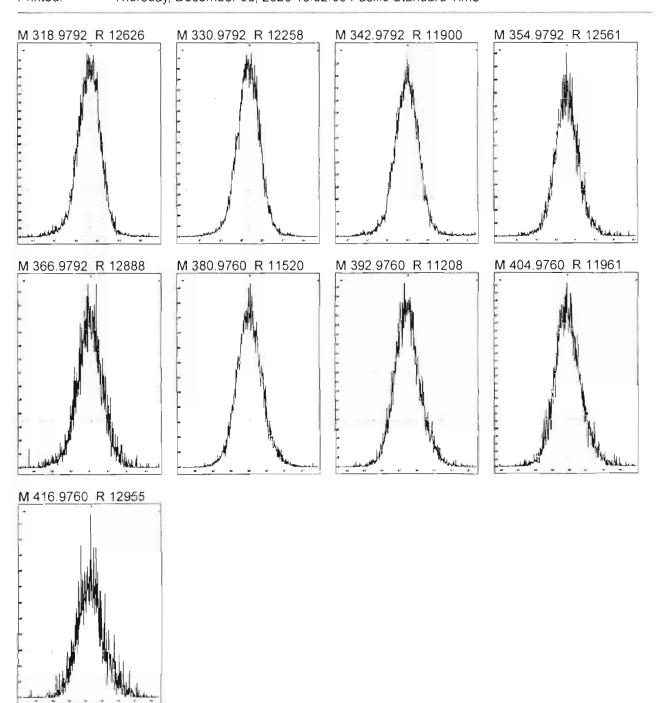
Page 1 of 1

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Printed:

Thursday, December 03, 2020 10:32:05 Pacific Standard Time



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MassLynx 4.1 SCN815

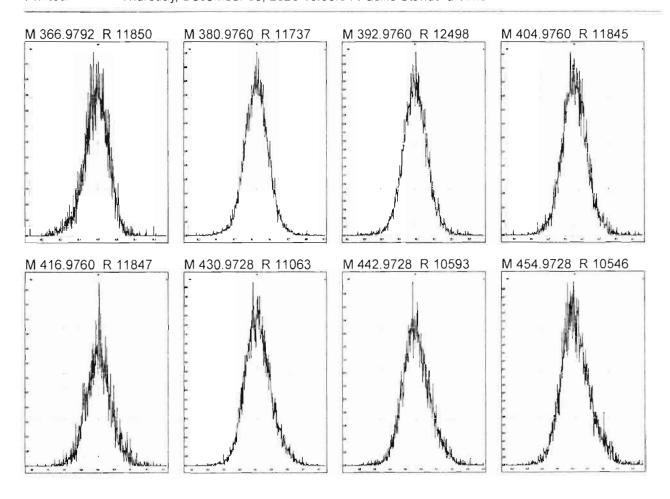
Page 1 of 1

File:

Experiment: OCDD_DIOXIN.exp Reference: pfk.ref Function: 3 @ 200 (ppm)

Printed:

Thursday, December 03, 2020 10:33:04 Pacific Standard Time



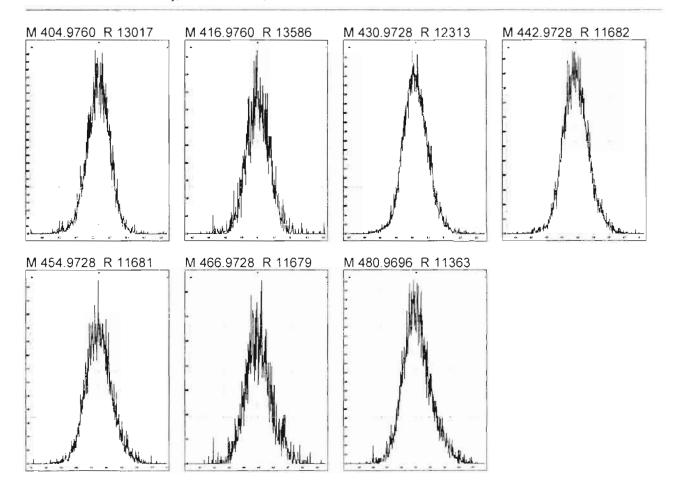
Work Order 2002434 Page 809 of 955

File:

Experiment: OCDD_DIOXIN.exp Reference: pfk.ref Function: 4 @ 200 (ppm)

Printed:

Thursday, December 03, 2020 10:33:57 Pacific Standard Time



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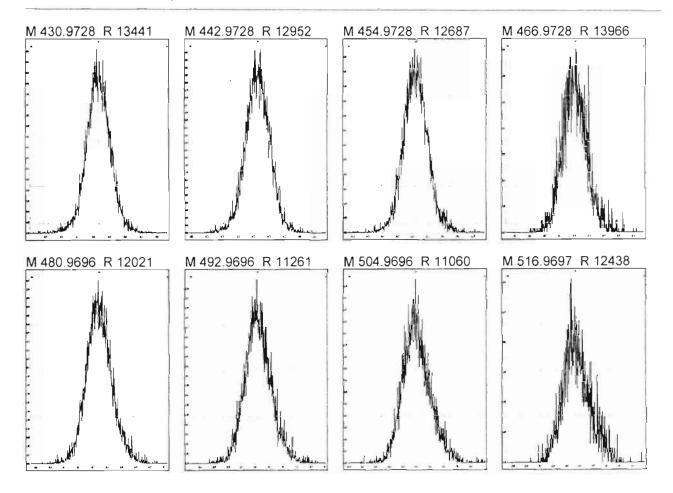
Page 1 of 1

File:

Experiment: OCDD_DIOXIN.exp Reference: pfk.ref Function: 5 @ 200 (ppm)

Printed:

Thursday, December 03, 2020 10:34:39 Pacific Standard Time



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Vista Analytical Laboratory VG-11

Dataset: U:\VG12.PRO\Results\201203R2\201203R2_CPSM.qld

Last Altered: Friday, December 04, 2020 12:03:49 Pacific Standard Time Friday, December 04, 2020 12:04:34 Pacific Standard Time

Method: Untitled 10 Nov 2020 10:04:22

Calibration: U:\VG12.PRO\CurveDB\dbDIOXIN_1613vg12-12-03-20.cdb 04 Dec 2020 11:36:07

Name: 201203R2_6, Date: 03-Dec-2020, Time: 14:35:05, ID: ST201203R2_6 1613 CS3 20L0301, Description: 1613 CS3 20L0301

1	# Name	RT
1	1 1,3,6,8-TCDD (First)	22.09
2	2 1,2,8,9-TCDD (Last)	26.90
3	3 1,2,4,7,9-PeCDD (First)	28.47
4	4 1,2,3,8,9-PeCDD (Last)	31.09
5	5 1,2,4,6,7,9-HxCDD (First)	32.42
6	6 1,2,3,7,8,9-HxCDD (Last)	34.43
7	7 1,2,3,4,6,7,9-HpCDD (First)	36.85
8	8 1,2,3,4,6,7,8-HpCDD (Last)	37.91
9	9 1,3,6,8-TCDF (First)	19.89
10	10 1,2,8,9-TCDF (Last)	27.21
11	11 1,3,4,6,8-PeCDF (First)	26.78
12	12 1,2,3,8,9-PeCDF (Last)	31.47
13	13 1,2,3,4,6,8-HxCDF (First)	31.90
14	14 1,2,3,7,8,9-HxCDF (Last)	34.92
15	15 1,2,3,4,6,7,8-HpCDF (First)	36.48
16	16 1,2,3,4,7,8,9-HpCDF (Last)	38.54

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Vista Analytical Laboratory VG-11

Dataset:

Untitled

Last Altered: Printed:

Friday, December 04, 2020 12:14:23 Pacific Standard Time

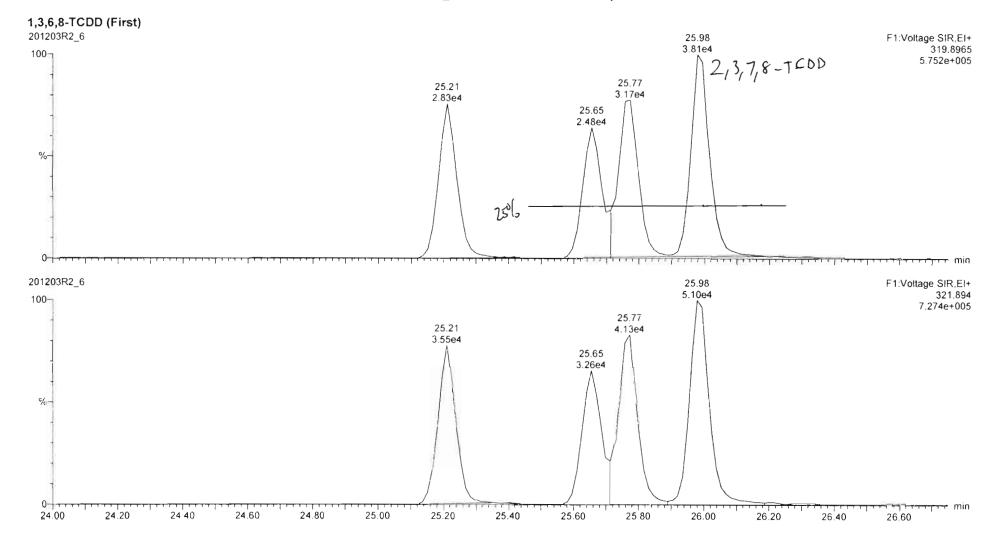
Friday, December 04, 2020 12:21:02 Pacific Standard Time

HN 12/04/2020

Method: U:\VG12.PRO\MethDB\CPSM.mdb 10 Nov 2020 10:04:22

Calibration: U:\VG12.PRO\CurveDB\dbDIOXIN_1613vg12-12-03-20.cdb 04 Dec 2020 11:36:07

Name: 201203R2_6, Date: 03-Dec-2020, Time: 14:35:05, ID: ST201203R2_6 1613 CS3 20L0301, Description: 1613 CS3 20L0301



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Vista Analytical Laboratory VG-11

Dataset:

Untitled

Last Altered:

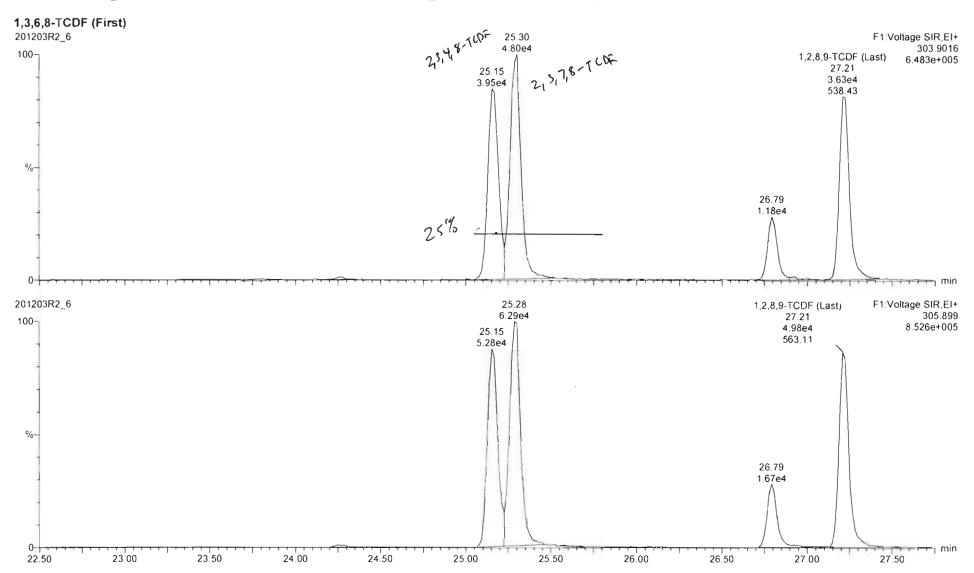
Friday, December 04, 2020 12:14:23 Pacific Standard Time

Printed:

Friday, December 04, 2020 12:21:02 Pacific Standard Time

HIN 12/04/2020

Name: 201203R2_6, Date: 03-Dec-2020, Time: 14:35:05, ID: ST201203R2_6 1613 CS3 20L0301, Description: 1613 CS3 20L0301



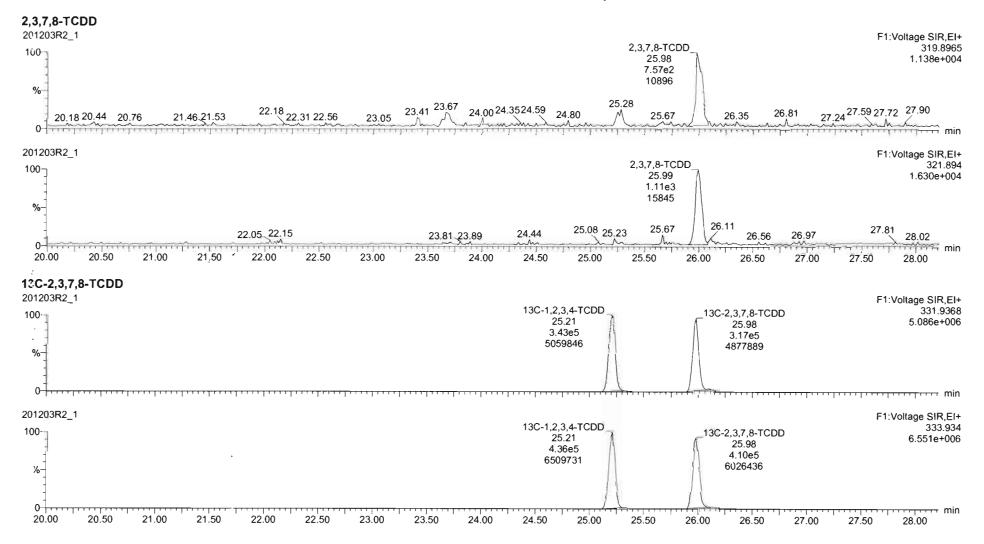
Quantify Sample Report Vista Analytical Laboratory

Dataset: U:\VG12.PRO\Results\201203R2\201203R2 CRV.qld

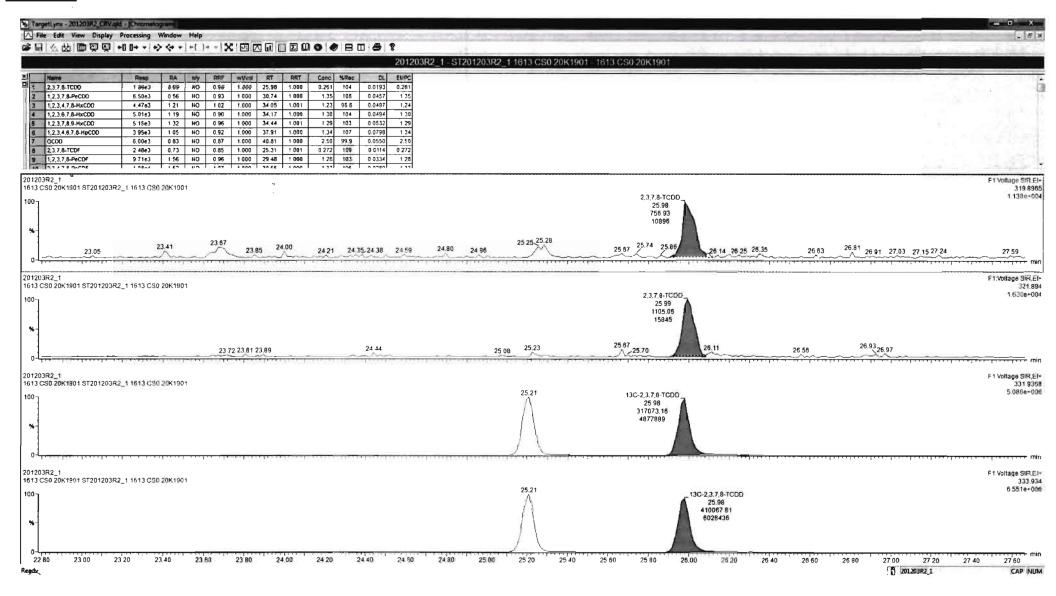
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Quantify Sample Report

MassLynx 4.1 SCN815

Vista Analytical Laboratory

Dataset:

U:\VG12.PRO\Results\201203R2\201203R2_CRV.qld

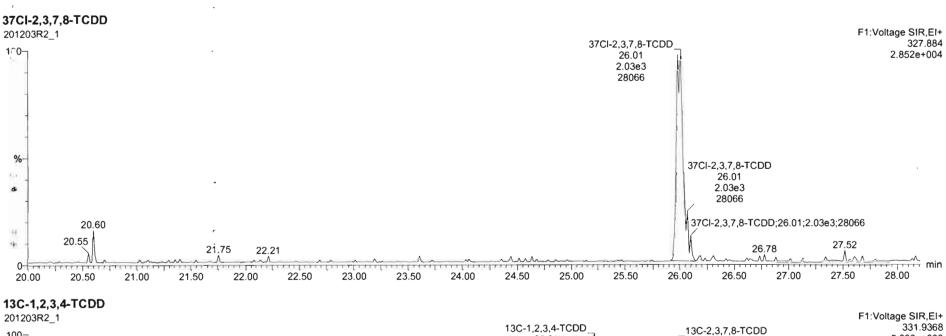
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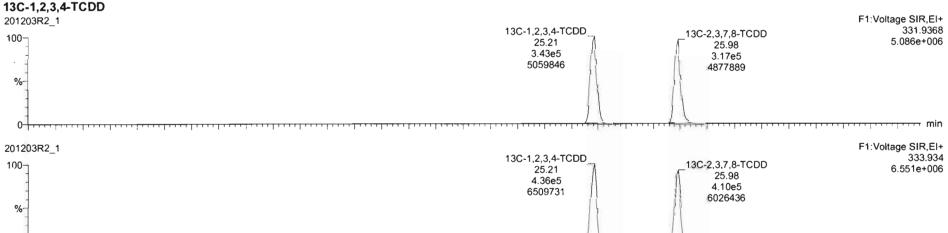
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Work Order 2002434

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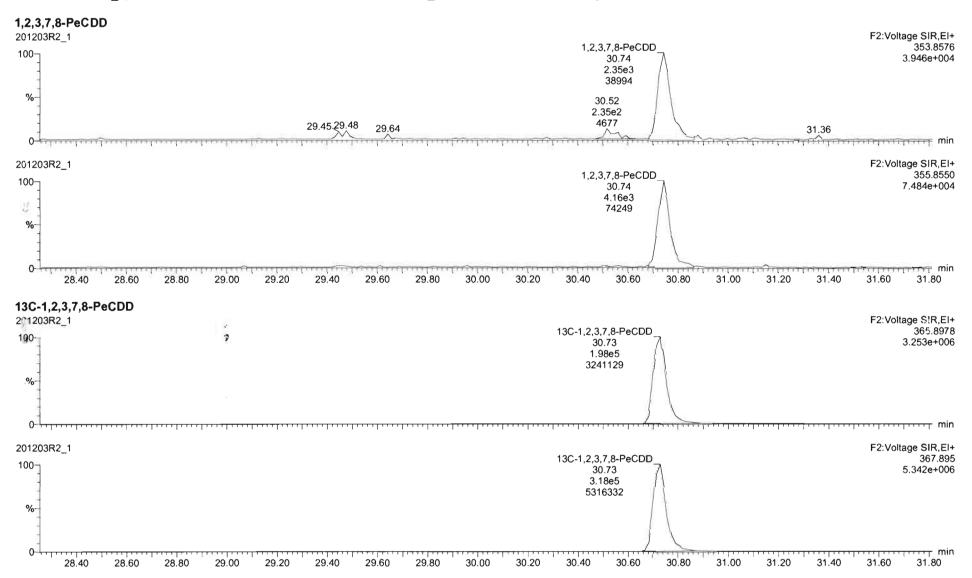
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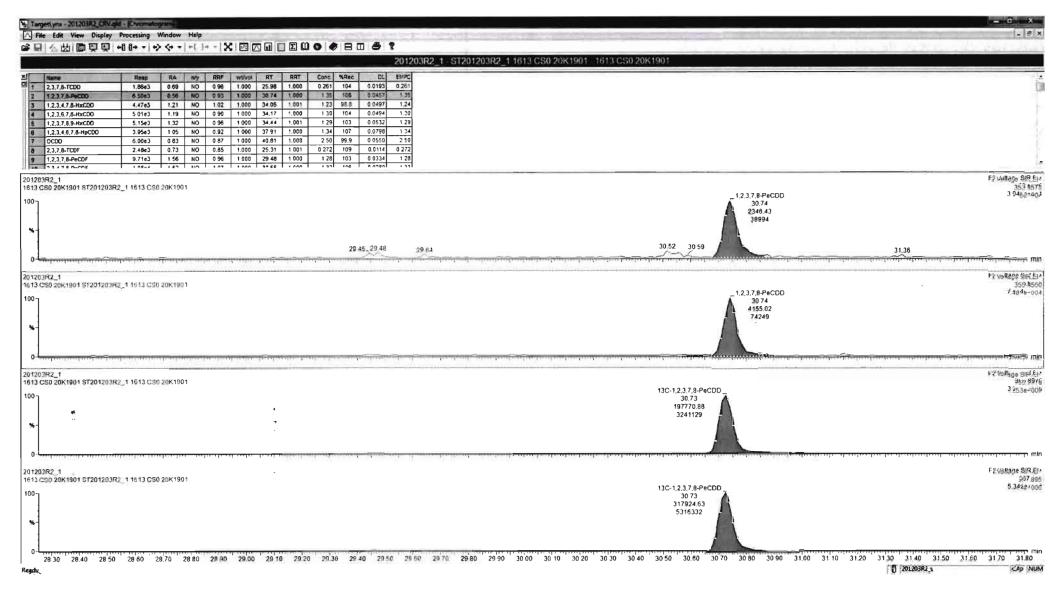
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U:\VG12.PRO\Results\201203R2\201203R2_CRV.qld

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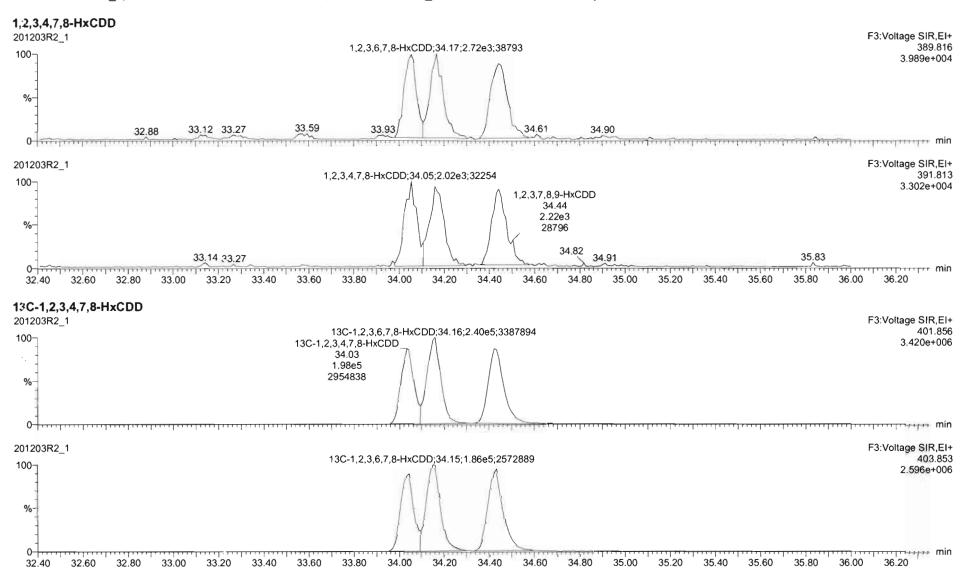
Quantify Sample Report MassLynx 4.1 SCN815

Vista Analytical Laboratory

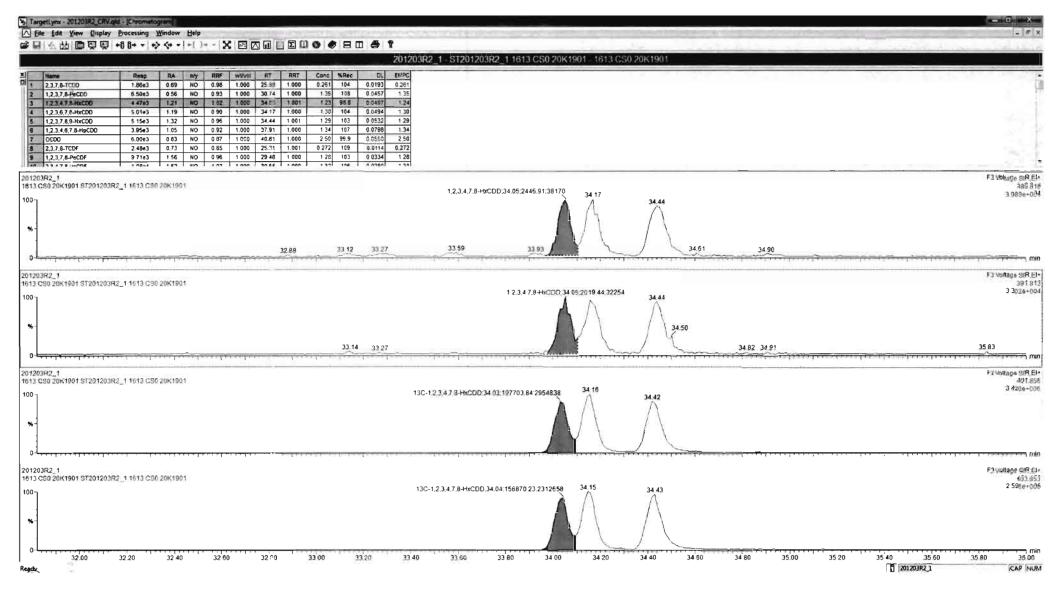
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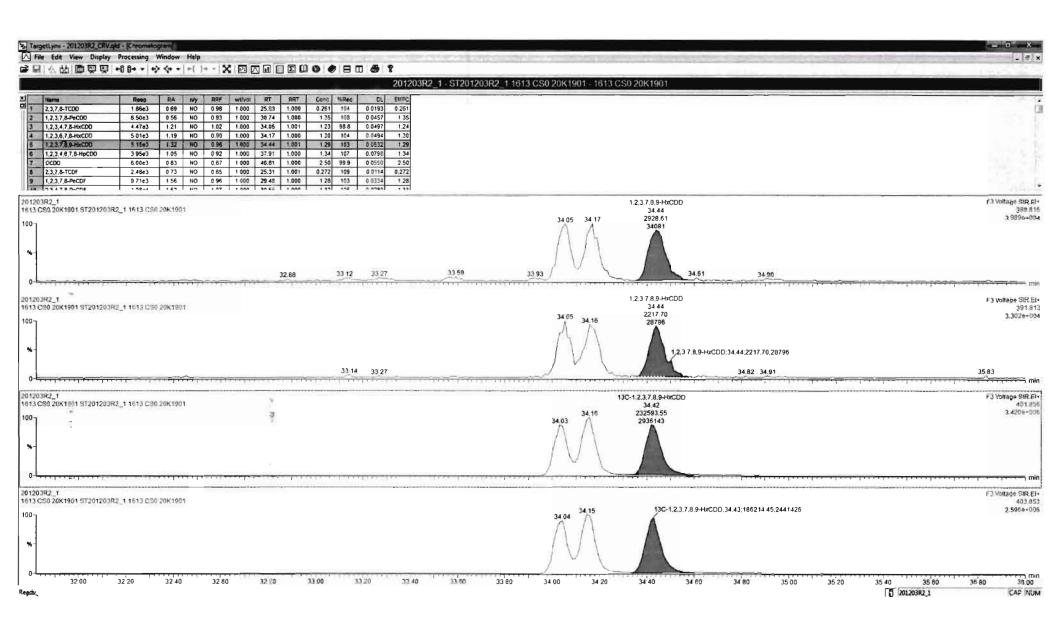
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Work Order 2002434



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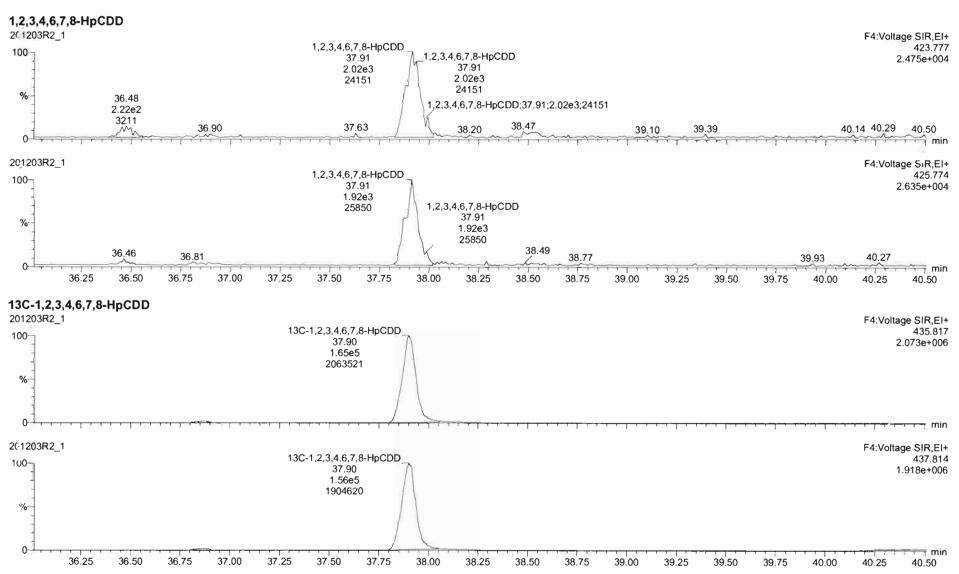
Work Order 2002434 Page 822 of 955

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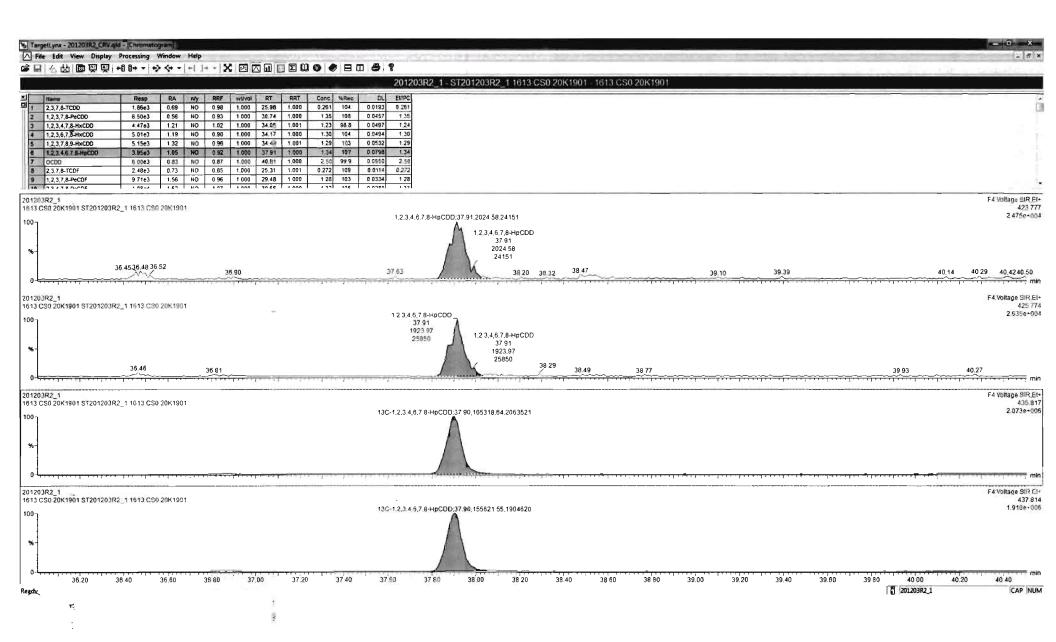
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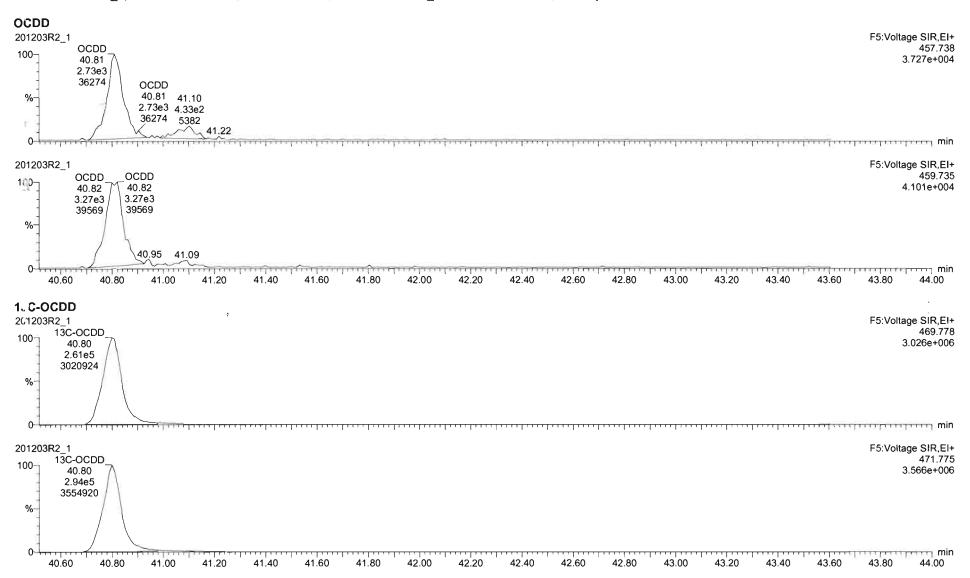
Work Order 2002434 Page 824 of 955

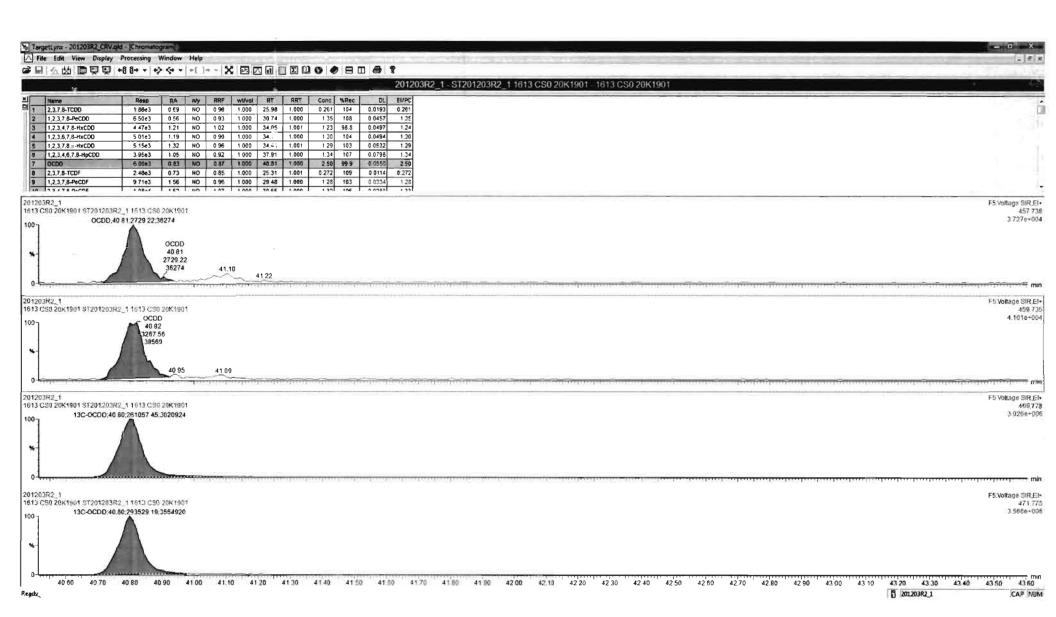
Vista Analytical Laboratory

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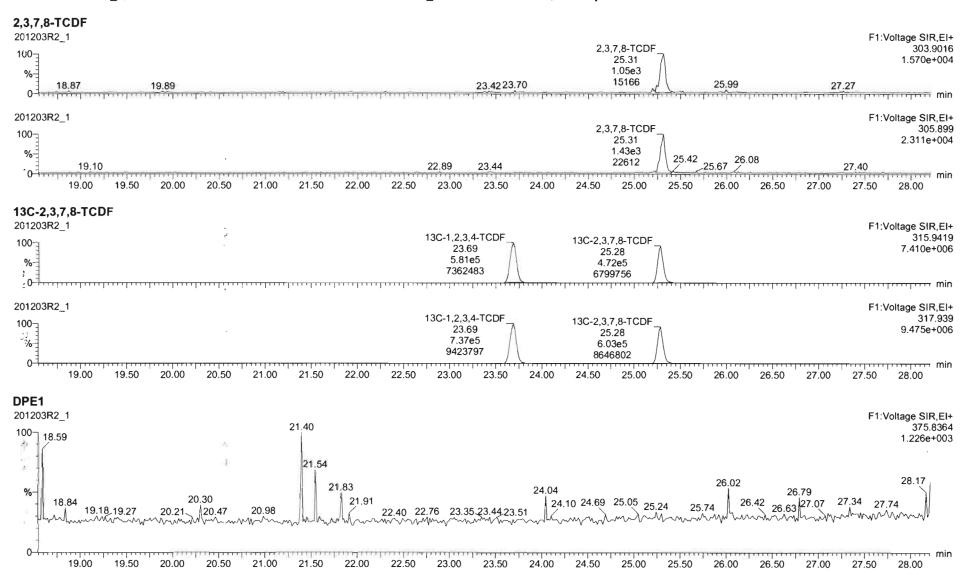
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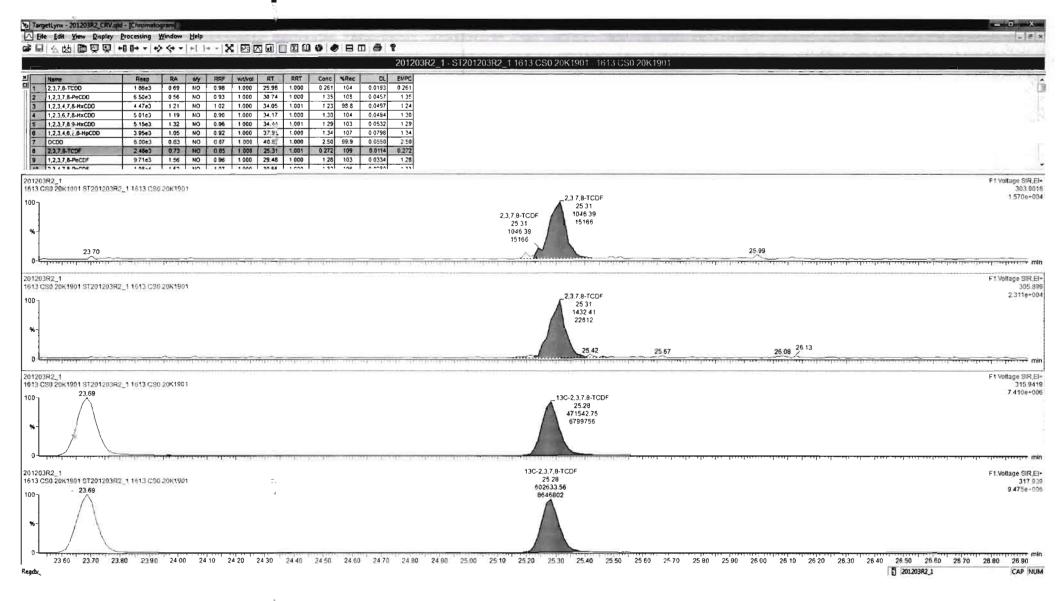
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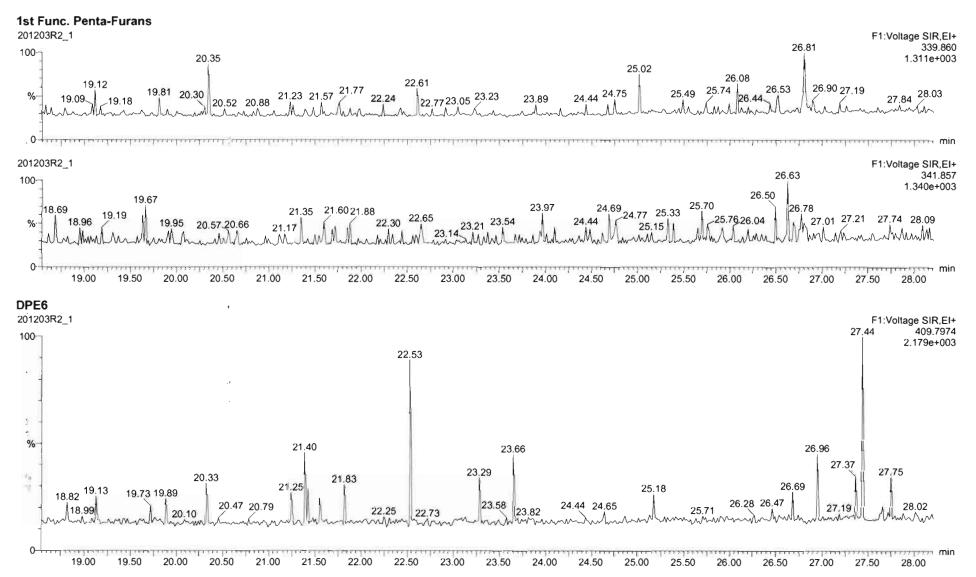
Work Order 2002434 Page 828 of 955

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Name: 201203R2_1, Date: 03-Dec-2020, Time: 10:36:45, ID: ST201203R2_1 1613 CS0 20K1901, Description: 1613 CS0 20K1901



Quantify Sample Report Vista Analytical Laboratory MassLynx 4.1 SCN815

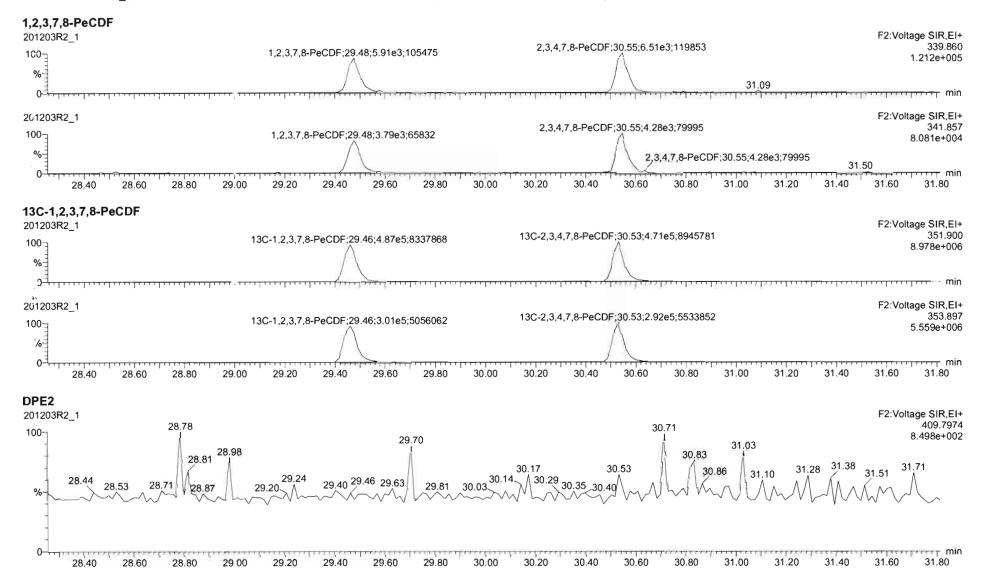
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Dataset:

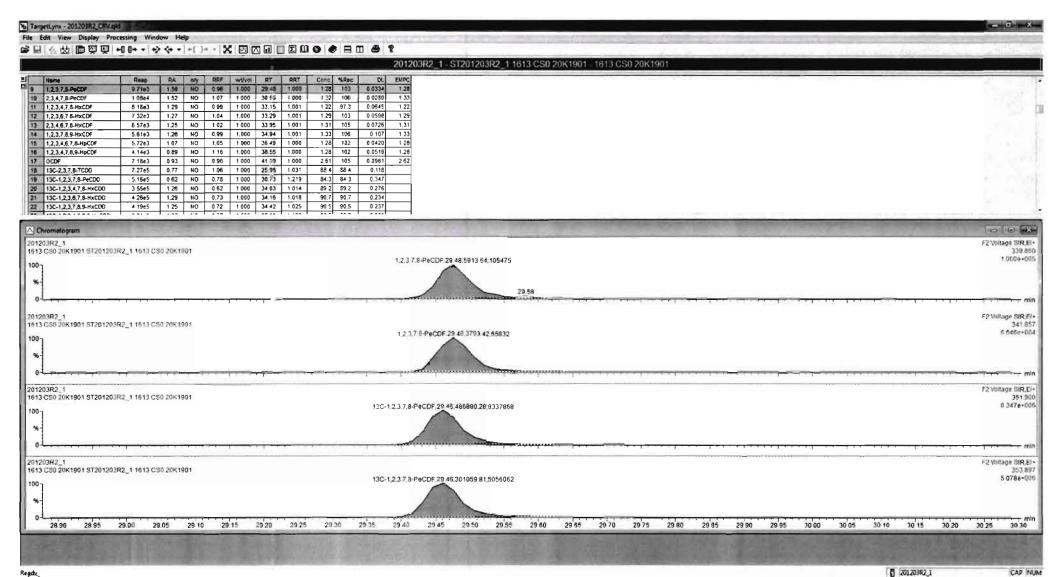
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Work Order 2002434



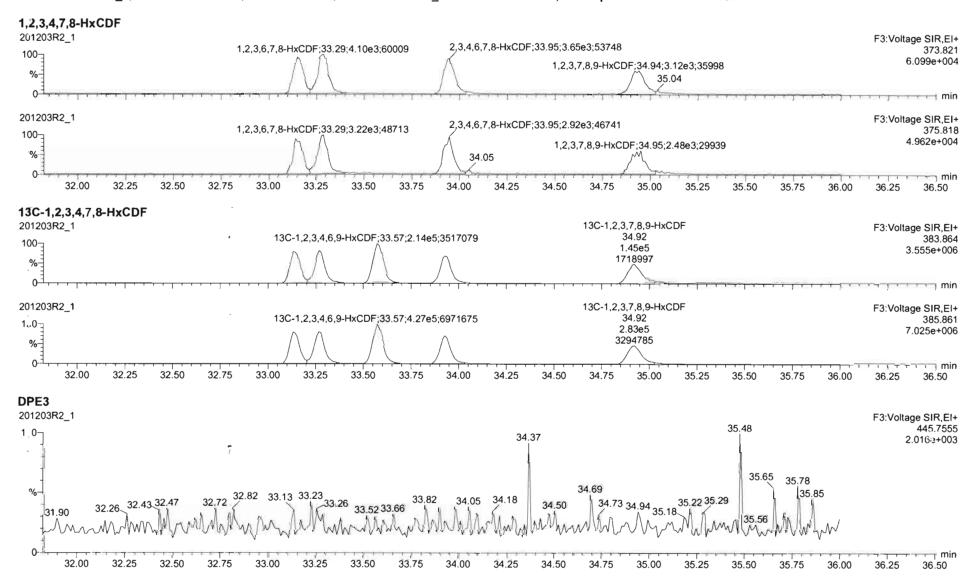
Work Order 2002434 Page 831 of 955

U:\VG12.PRO\Results\201203R2\201203R2_CRV.qld

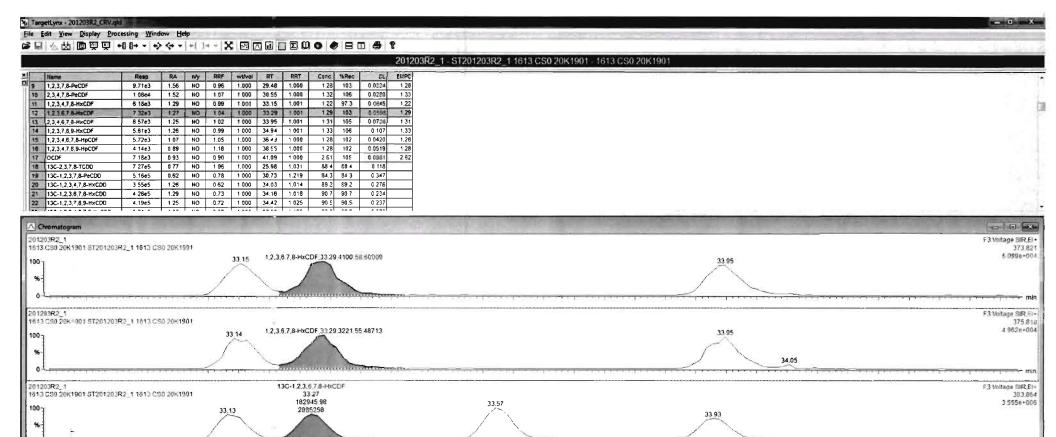
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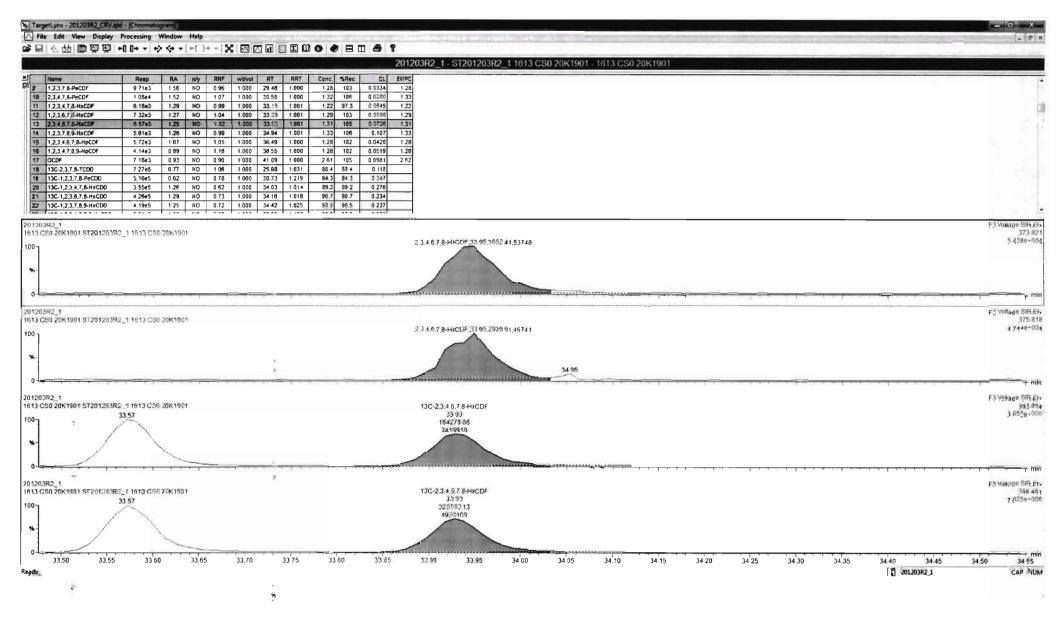
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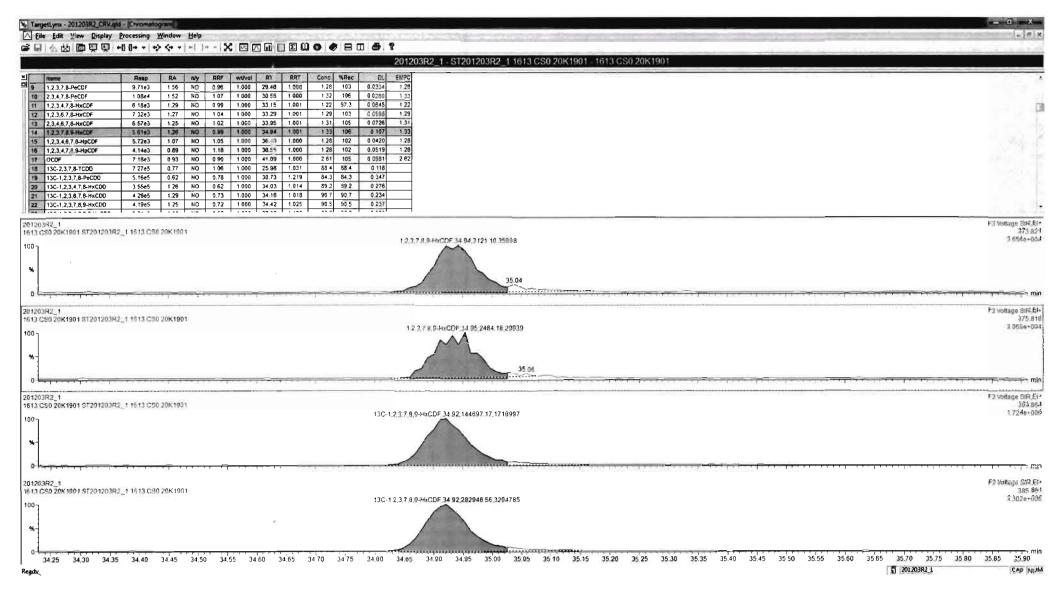
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1613 CS0 20K1901 ST201203R2_1 1613 CS0 20K1901

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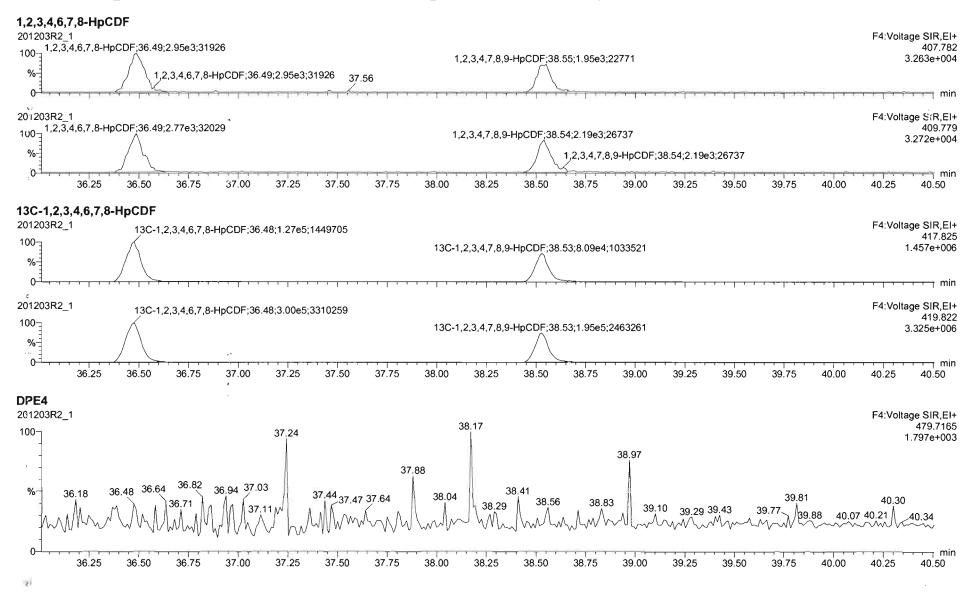
Work Order 2002434 Page 835 of 955

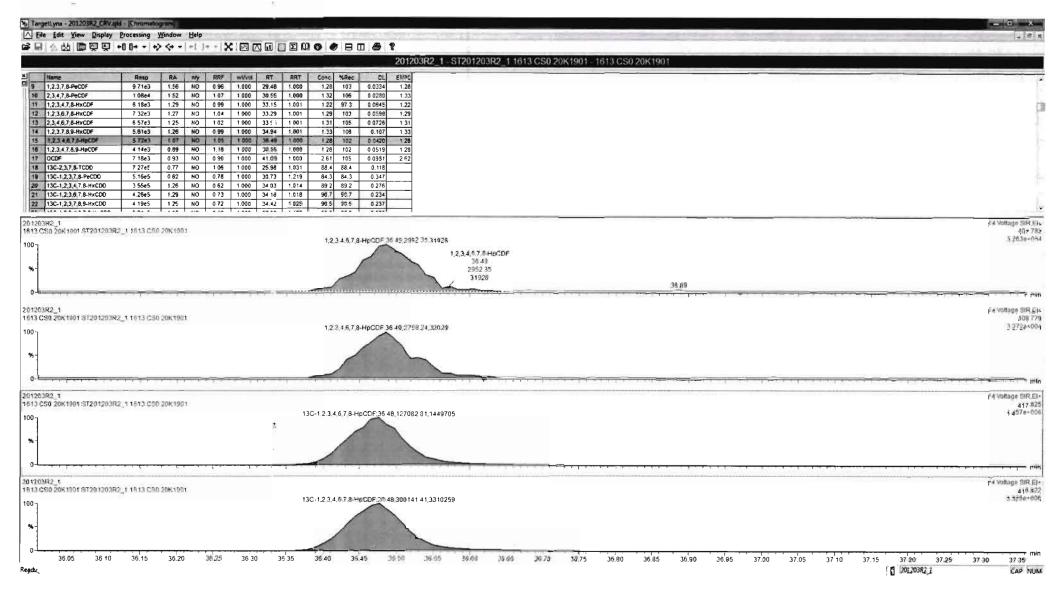
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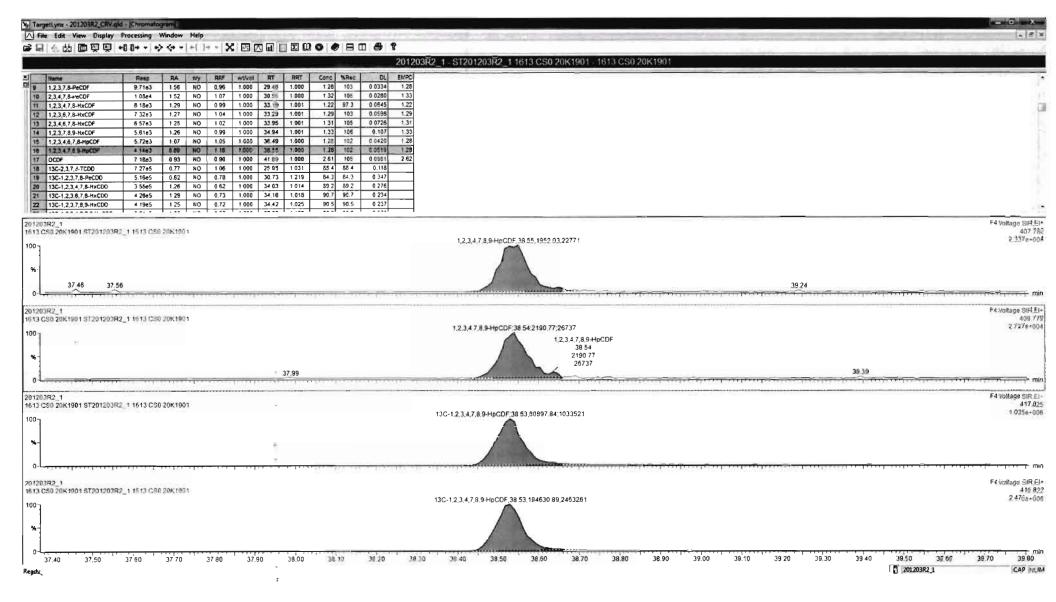
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Nome: 201203R2_1, Date: 03-Dec-2020, Time: 10:36:45, ID: ST201203R2_1 1613 CS0 20K1901, Description: 1613 CS0 20K1901





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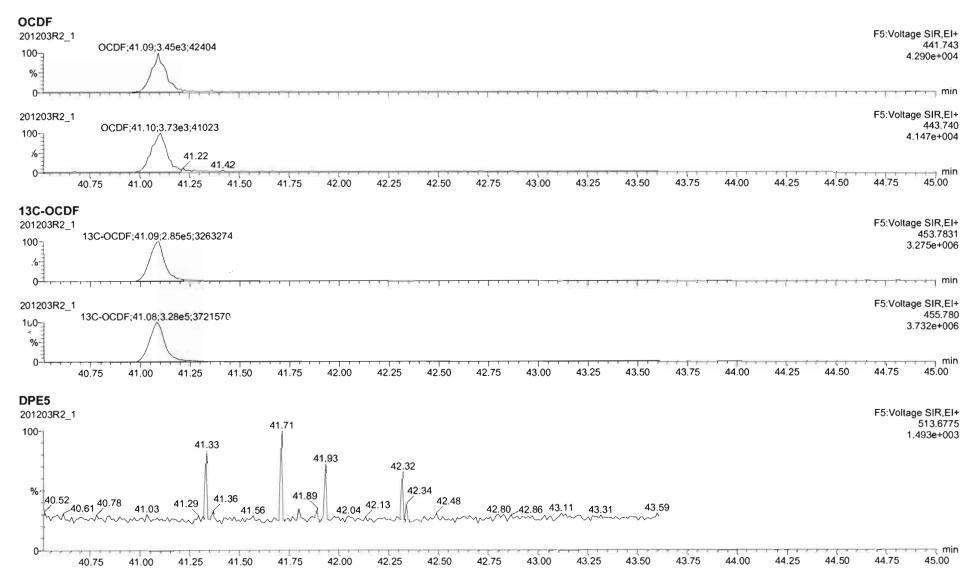
Quantify Sample Report Vista Analytical Laboratory MassLynx 4.1 SCN815

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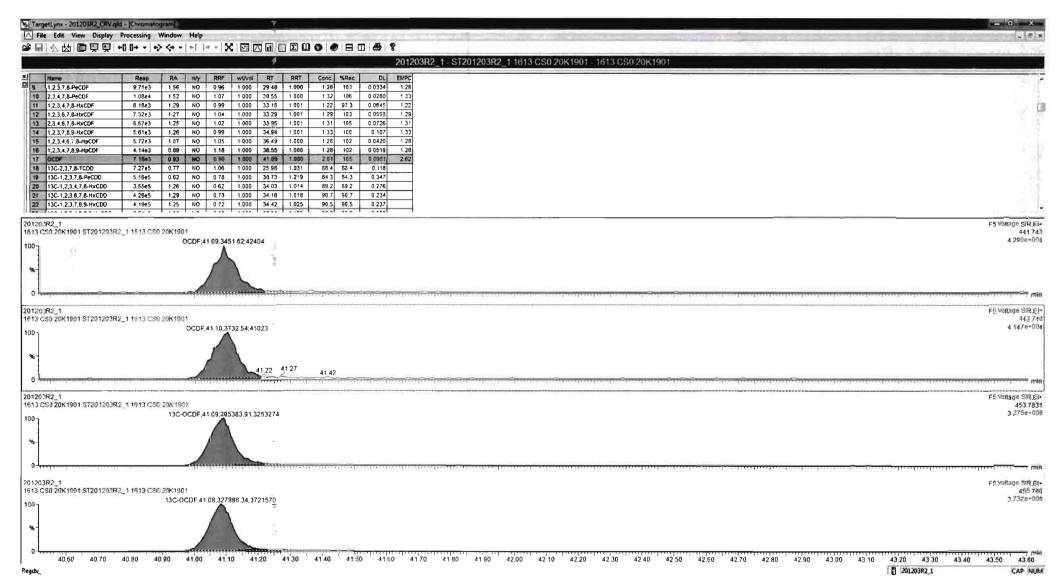
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Work Order 2002434



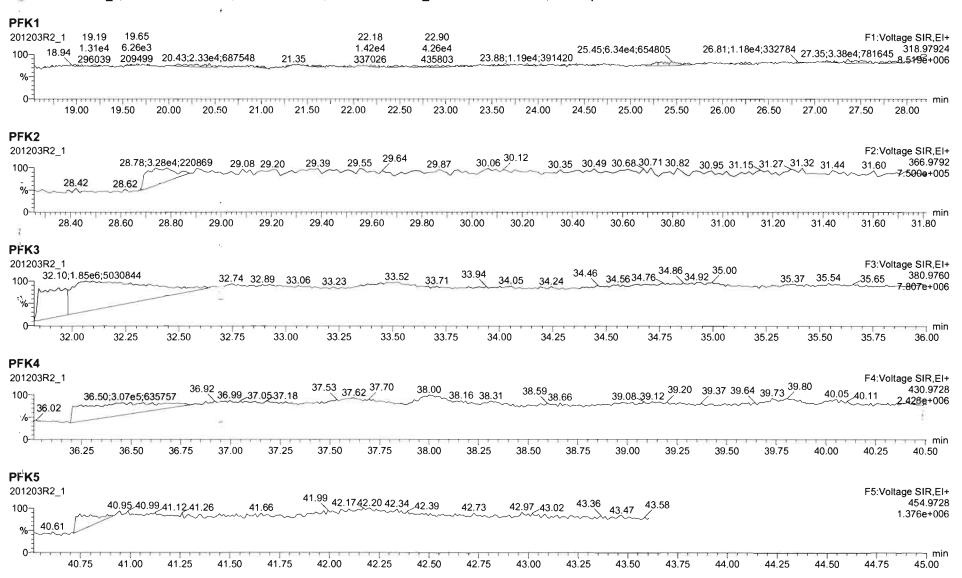
Work Order 2002434 Page 840 of 955

Quantify Sample Report Vista Analytical Laboratory

Dataset: U:\VG12.PRO\Results\201203R2\201203R2_CRV.qld

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Name: 201203R2 1, Date: 03-Dec-2020, Time: 10:36:45, ID: ST201203R2 1 1613 CS0 20K1901, Description: 1613 CS0 20K1901



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Vista Analytical Laboratory

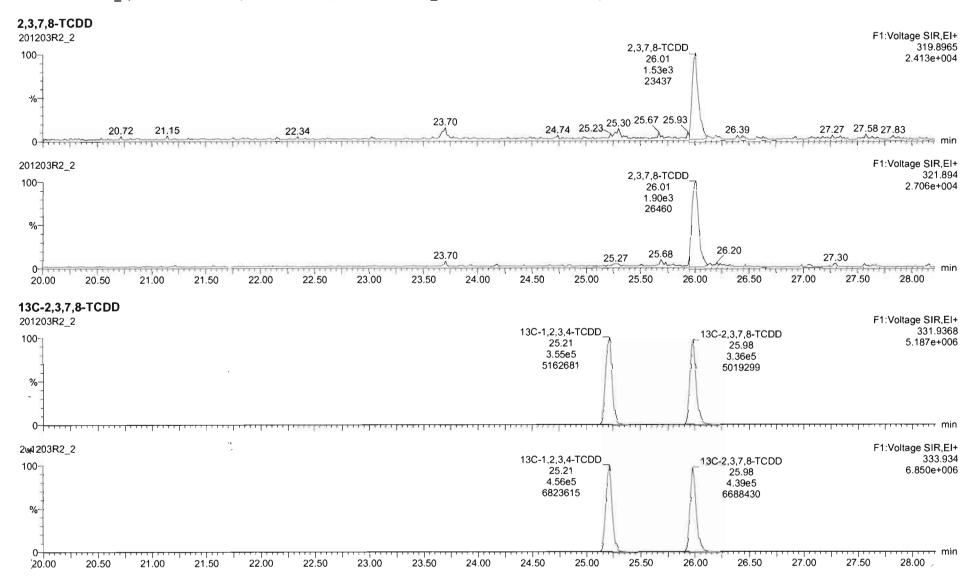
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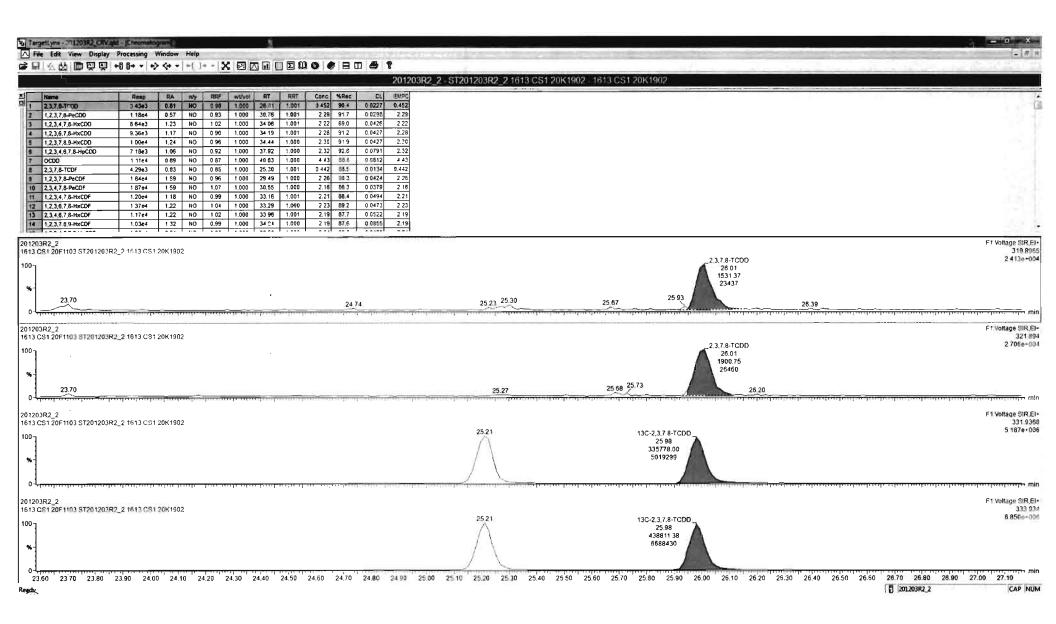
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Name: 201203R2_2, Date: 03-Dec-2020, Time: 11:28:04, ID: ST201203R2_2 1613 CS1 20K1902, Description: 1613 CS1 20F1103





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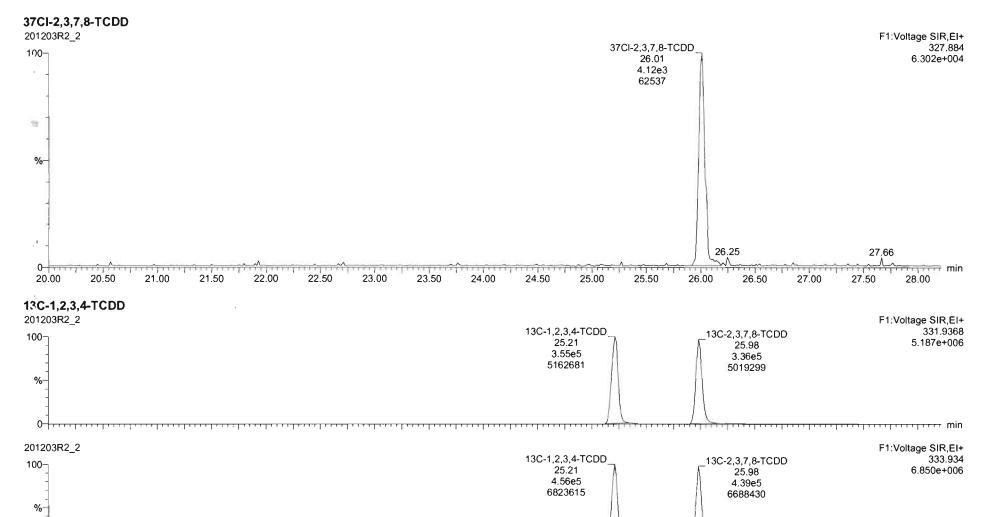
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Friday, December 04, 2020 08:58:11 Pacific Standard Time Friday, December 04, 2020 09:59:16 Pacific Standard Time

Name: 201203R2_2, Date: 03-Dec-2020, Time: 11:28:04, ID: ST201203R2_2 1613 CS1 20K1902, Description: 1613 CS1 20F1103



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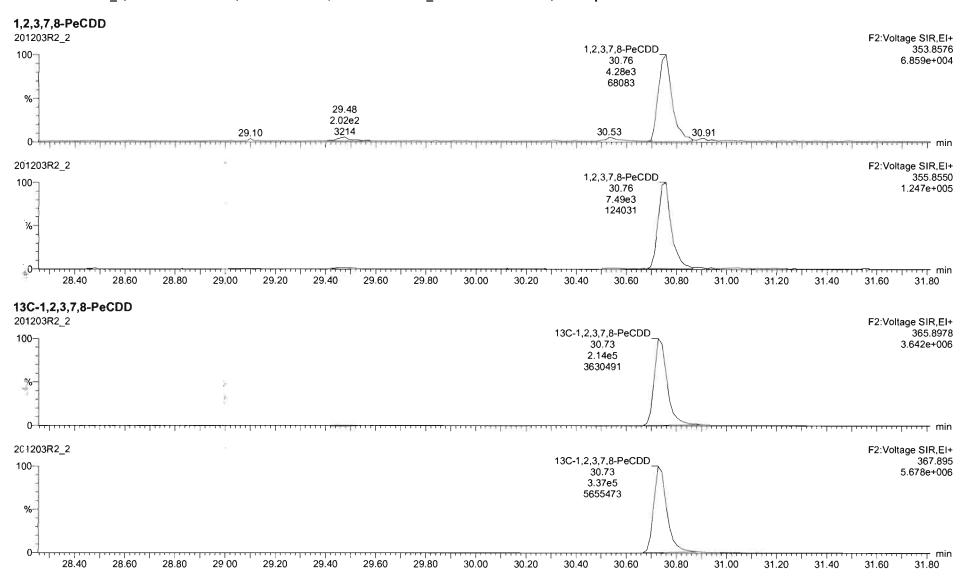
Quantify Sample Report Vista Analytical Laboratory

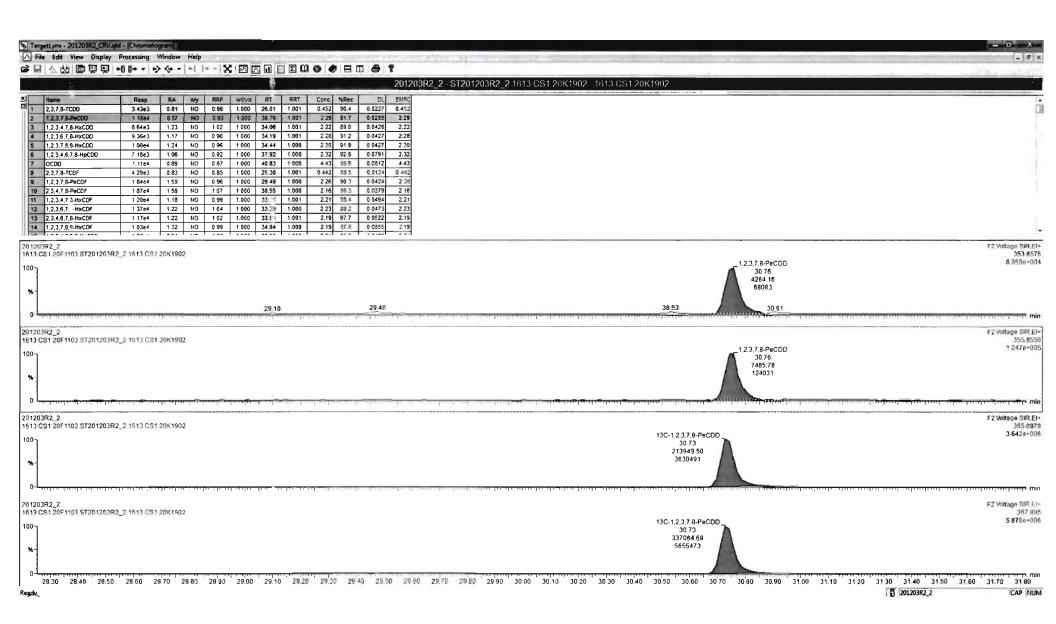
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U:\VG12.PRO\Results\201203R2\201203R2_CRV.qld

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Name: 201203R2_2, Date: 03-Dec-2020, Time: 11:28:04, ID: ST201203R2_2 1613 CS1 20K1902, Description: 1613 CS1 20F1103





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Quantify Sample Report

Massilynx 4.1 SCN815

Vista Analytical Laboratory

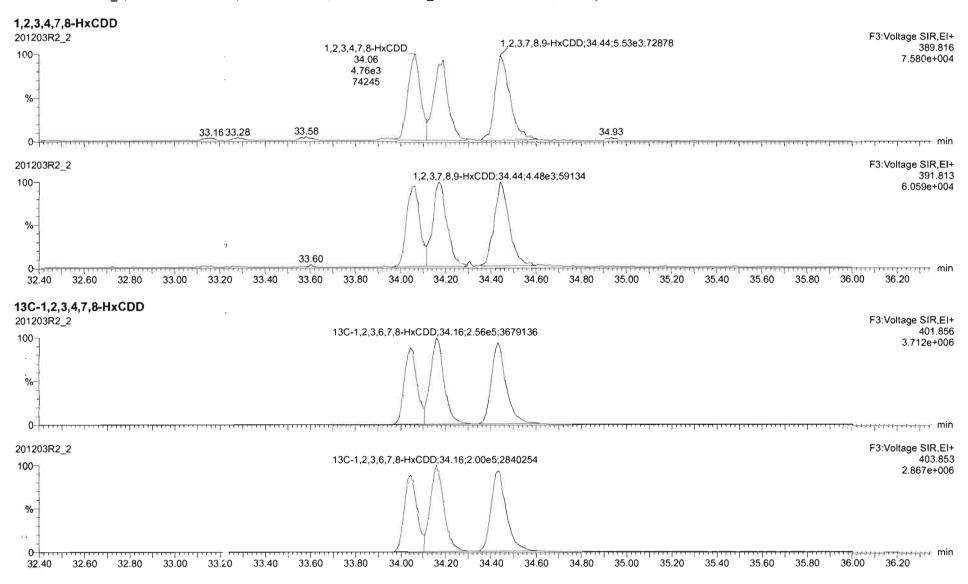
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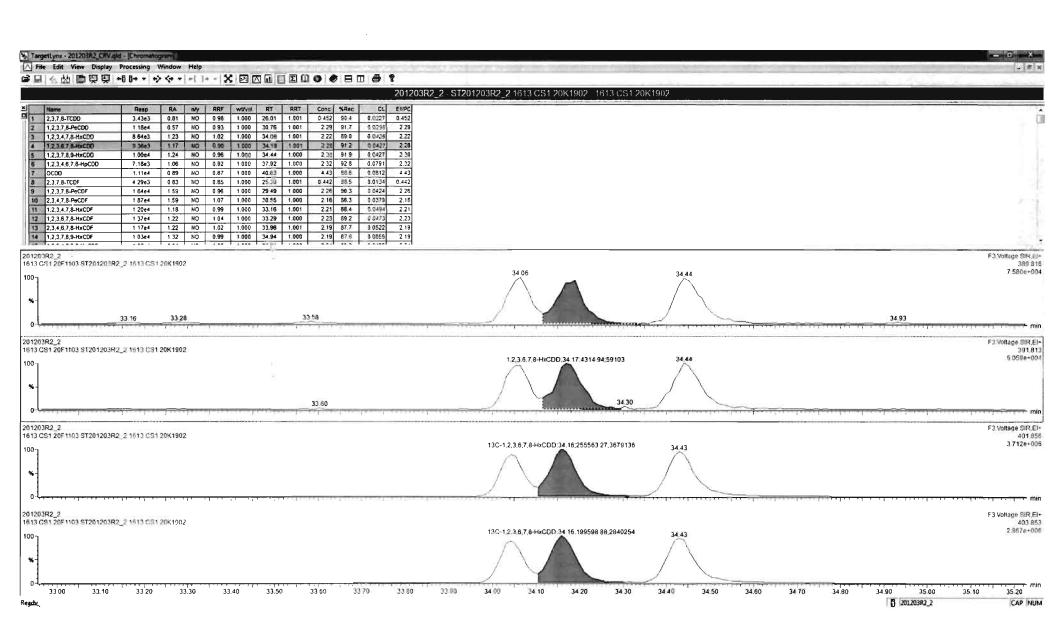
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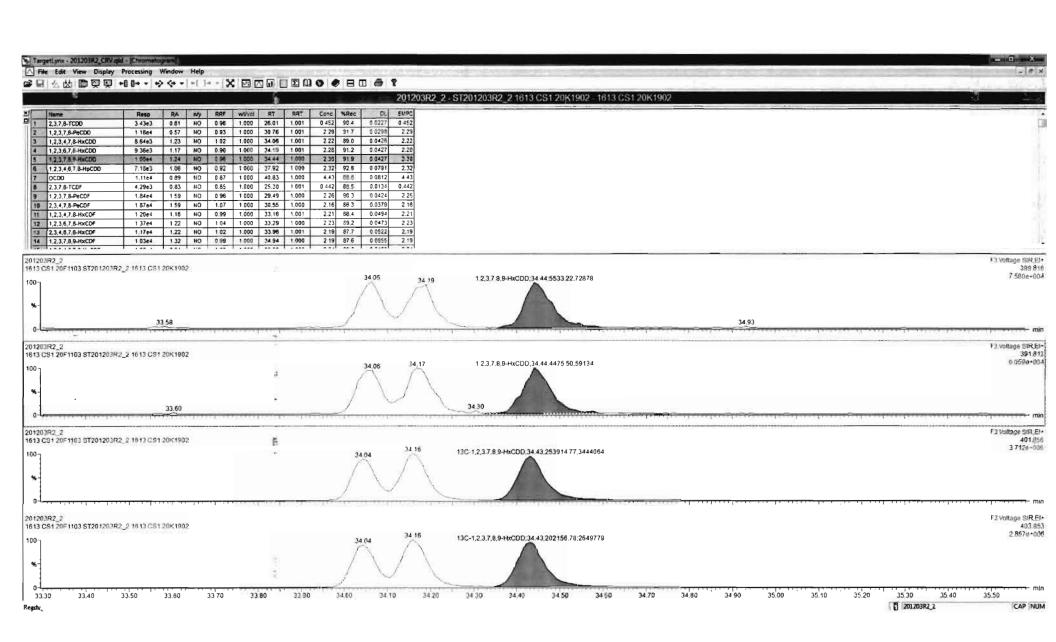
Friday, December 04, 2020 08:58:11 Pacific Standard Time Friday, December 04, 2020 09:59:16 Pacific Standard Time

Name: 201203R2_2, Date: 03-Dec-2020, Time: 11:28:04, ID: ST201203R2_2 1613 CS1 20K1902, Description: 1613 CS1 20F1103





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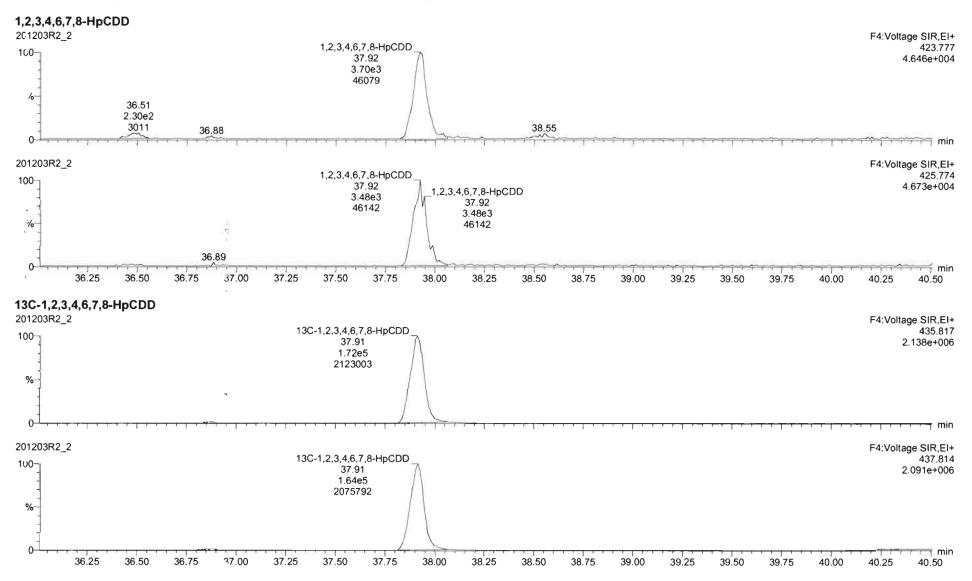
Work Order 2002434 Page 849 of 955

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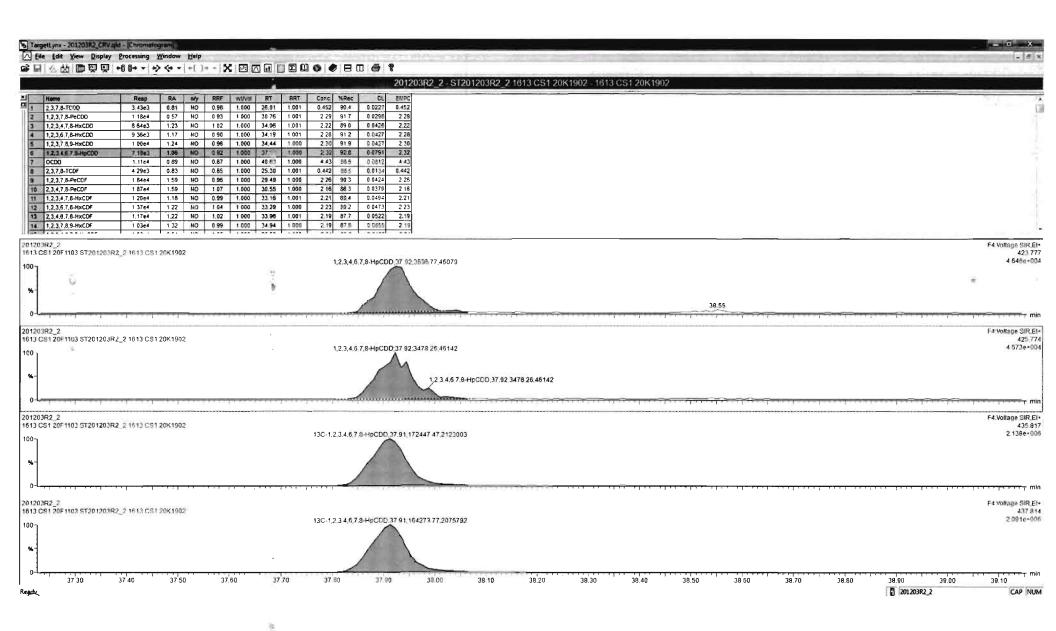
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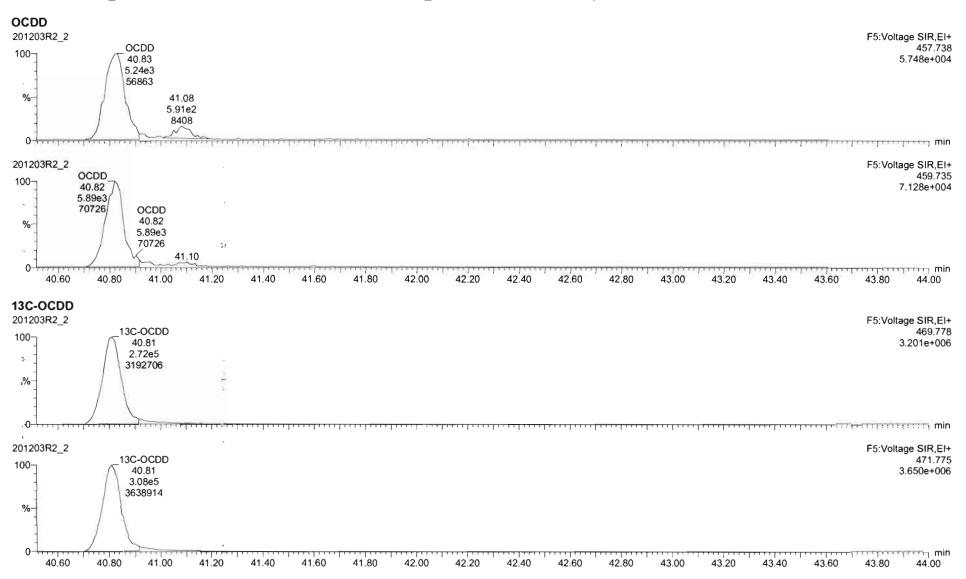


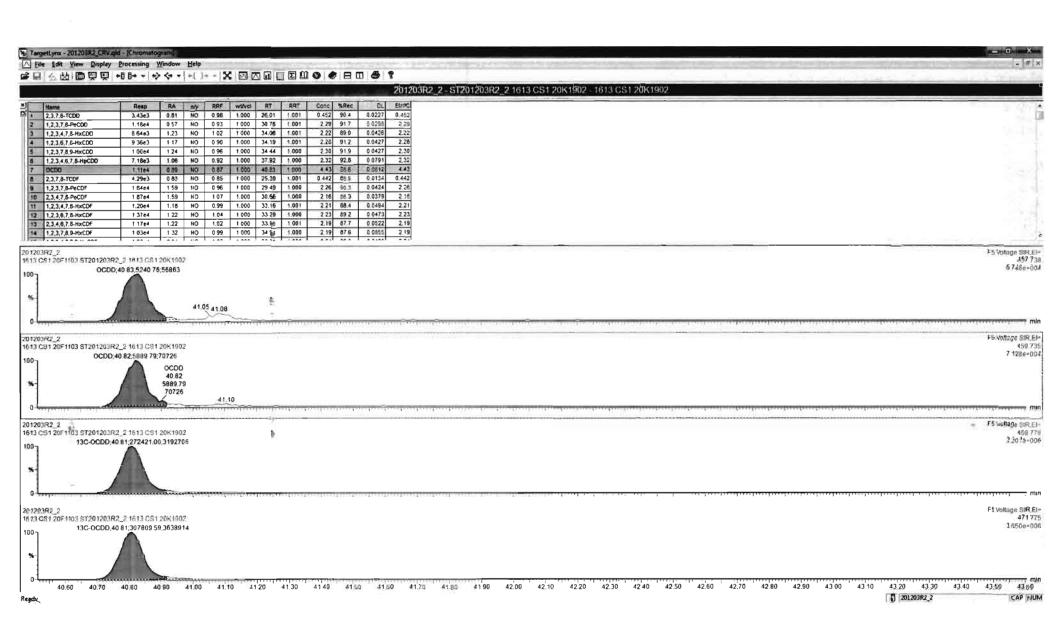
Work Order 2002434 Page 851 of 955

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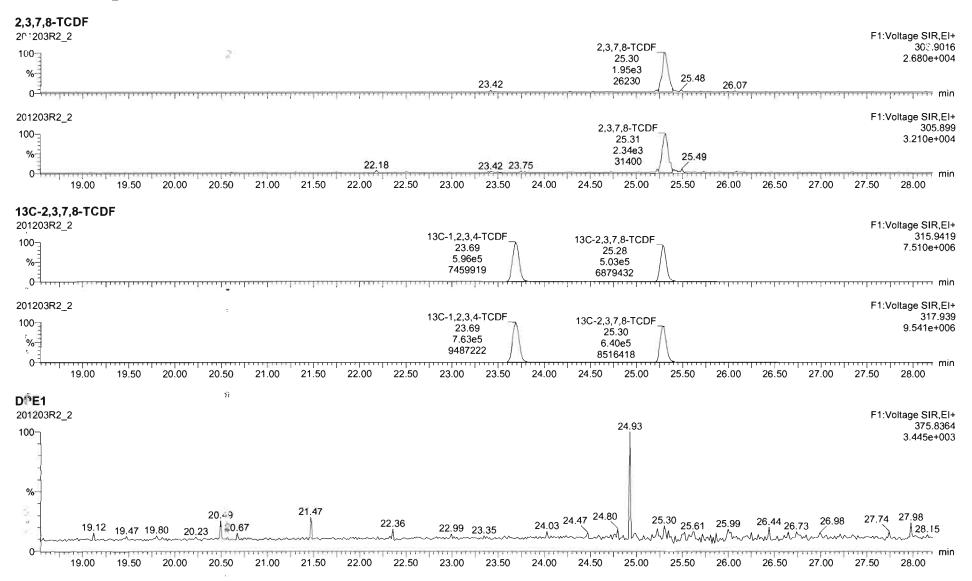
Work Order 2002434 Page 853 of 955

Quantify Sample Report Vista Analytical Laboratory

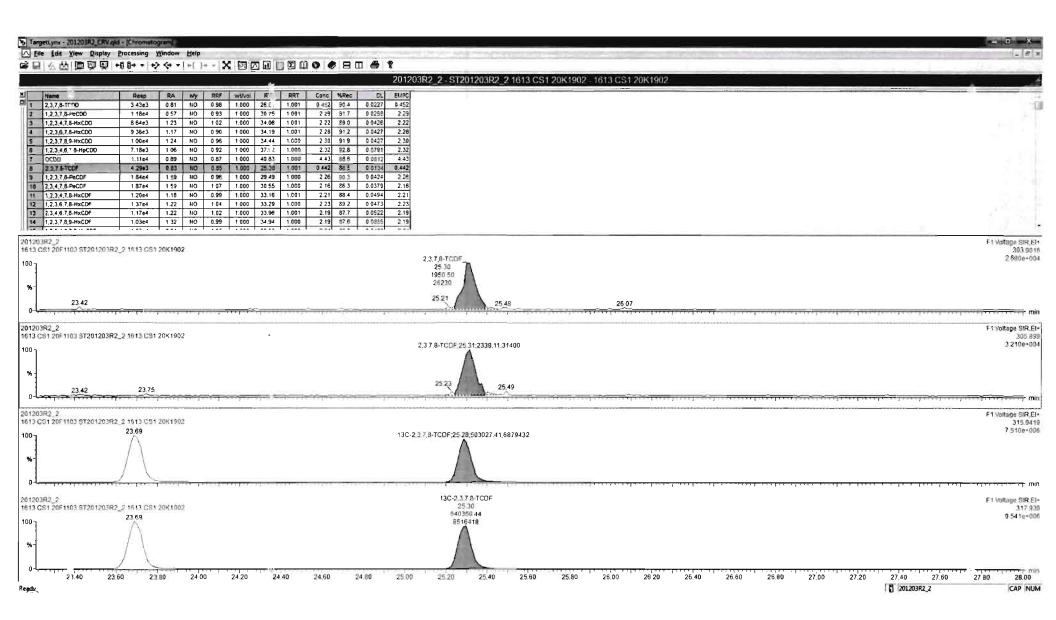
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Name: 201203R2_2, Date: 03-Dec-2020, Time: 11:28:04, ID: ST201203R2_2 1613 CS1 20K1902, Description: 1613 CS1 20F1103



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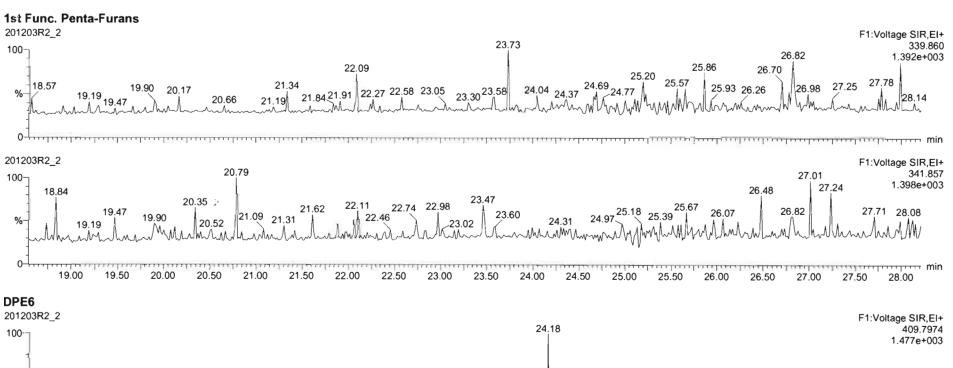
Work Order 2002434 Page 855 of 955

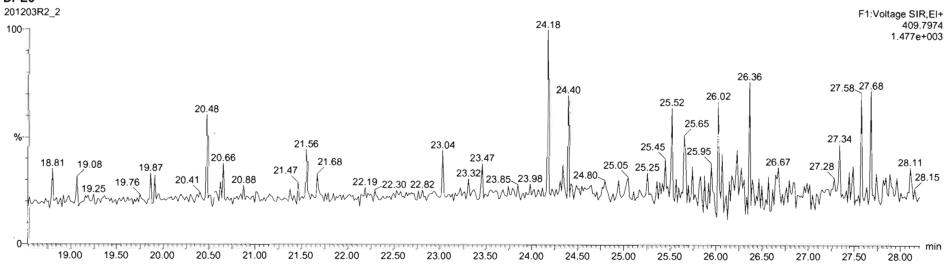
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Name: 201203R2_2, Date: 03-Dec-2020, Time: 11:28:04, ID: ST201203R2_2 1613 CS1 20K1902, Description: 1613 CS1 20F1103



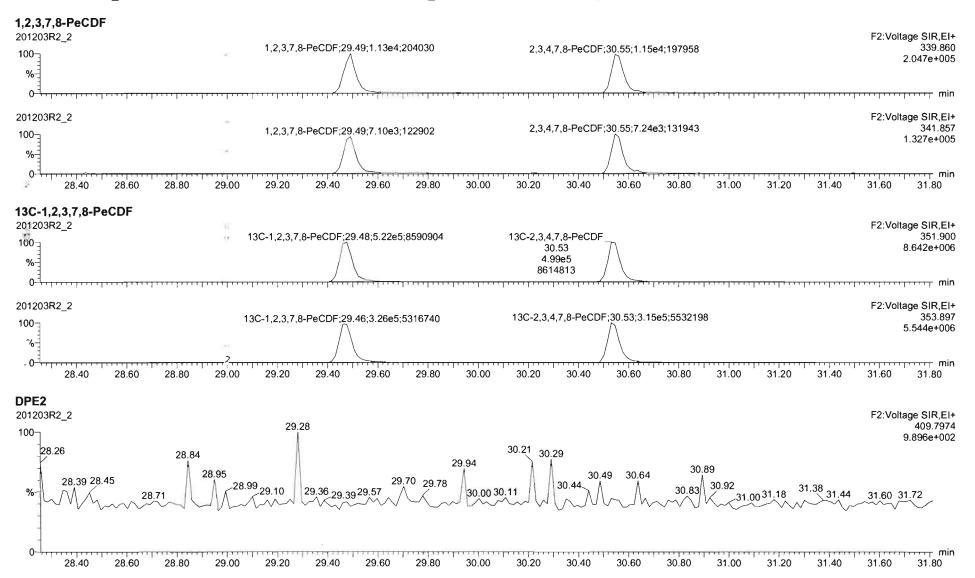


Work Order 2002434 Page 856 of 955

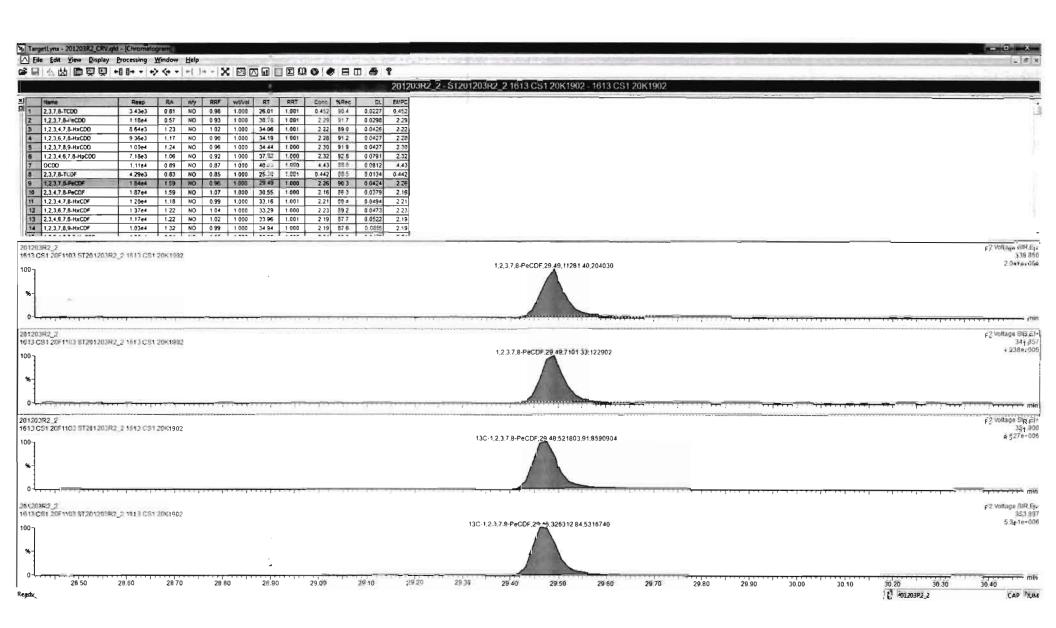
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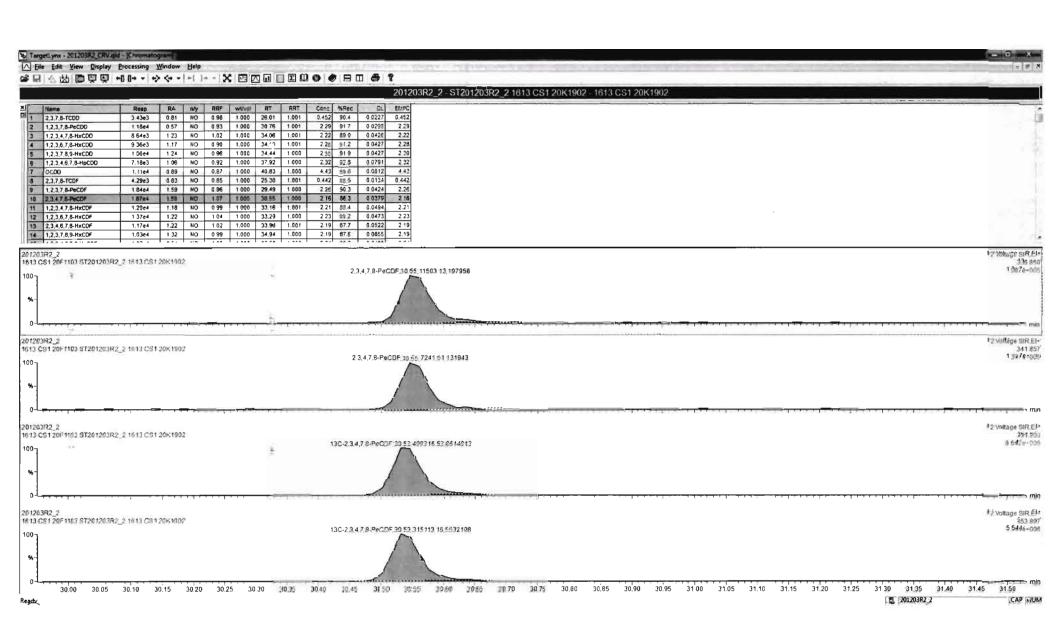
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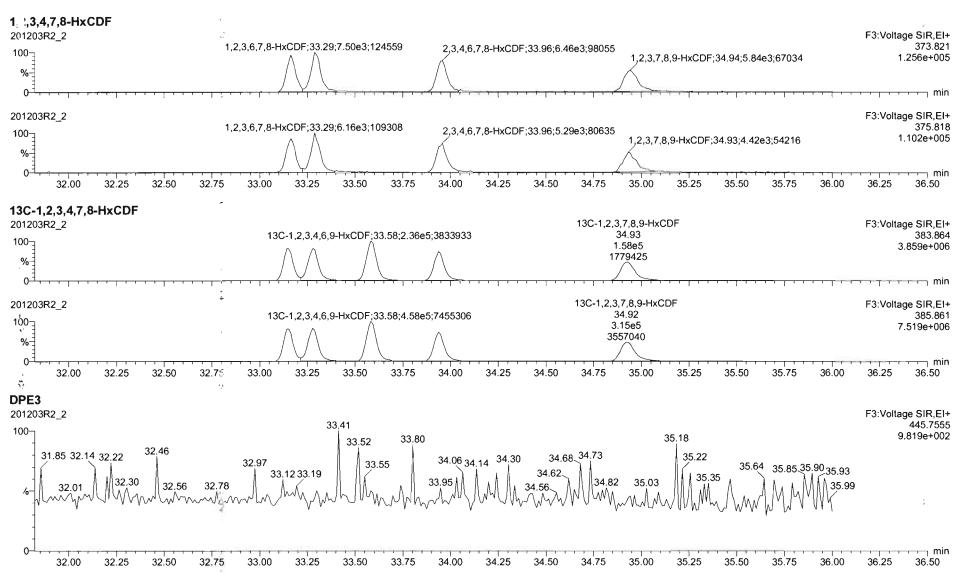


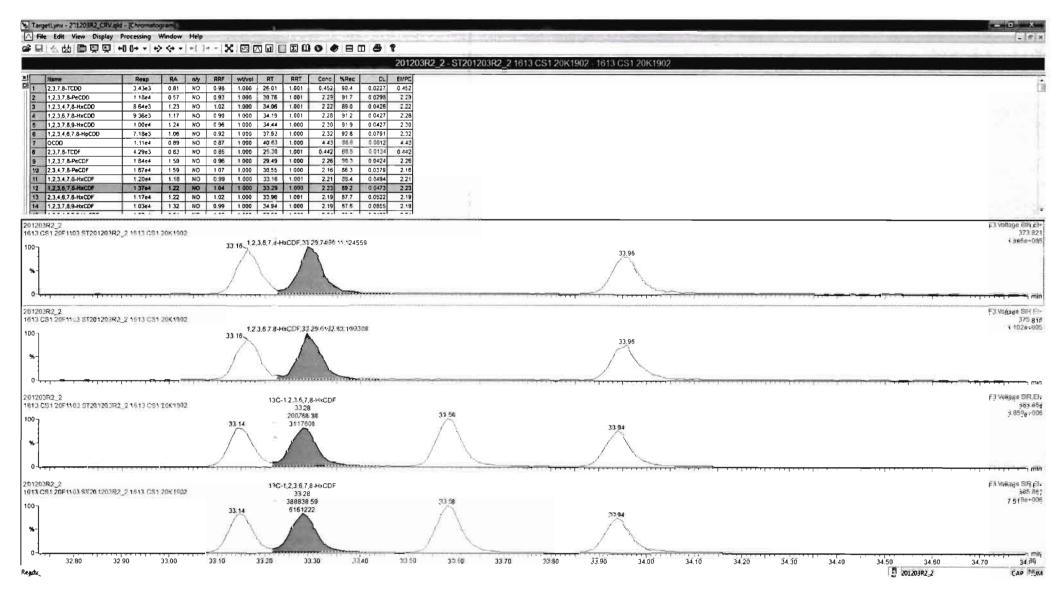
Work Order 2002434 Page 859 of 955

U:\VG12.PRO\Results\201203R2\201203R2_CRV.qld

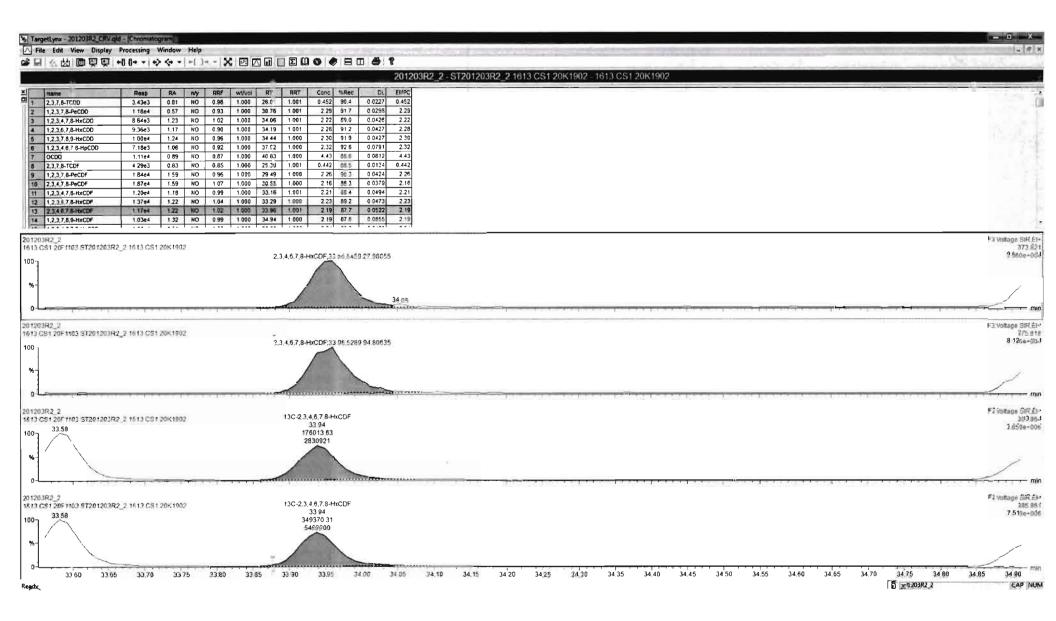
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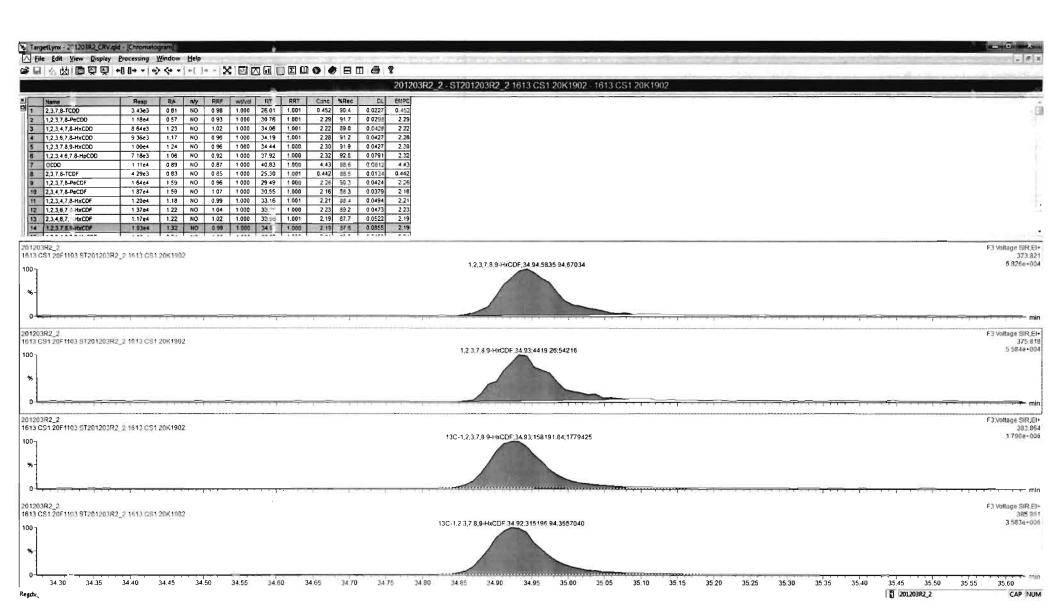




Work Order 2002434 Page 861 of 955



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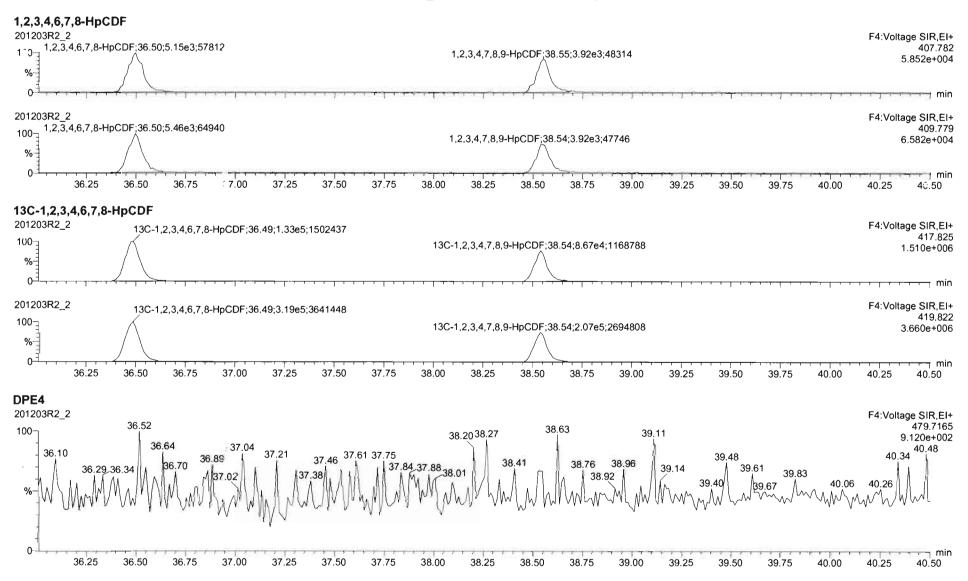
Work Order 2002434 Page 863 of 955

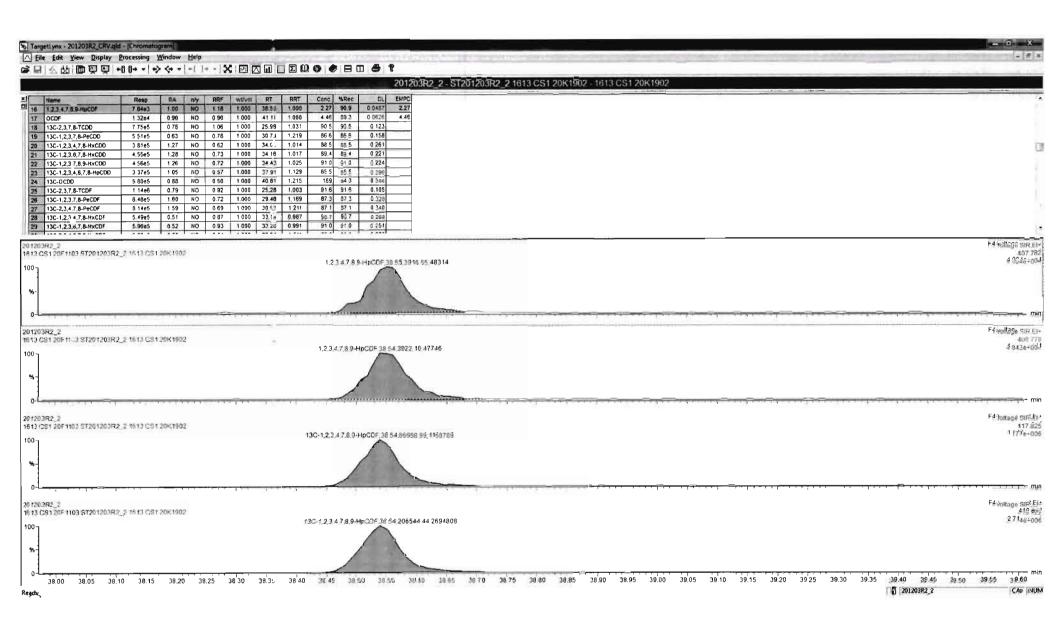
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Friday, December 04, 2020 08:58:11 Pacific Standard Time Friday, December 04, 2020 09:59:16 Pacific Standard Time

Name: 201203R2_2, Date: 03-Dec-2020, Time: 11:28:04, ID: ST201203R2_2 1613 CS1 20K1902, Description: 1613 CS1 20F1103





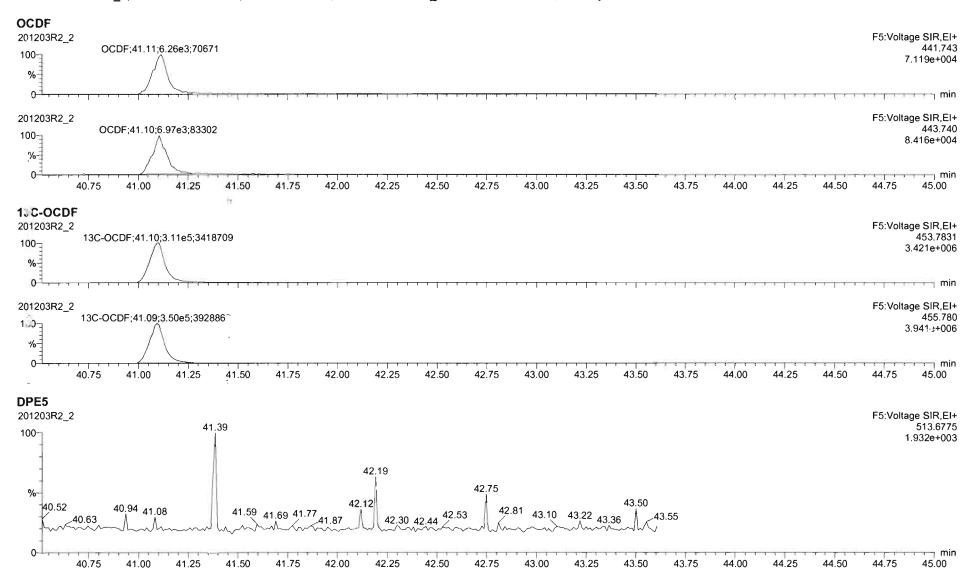
Work Order 2002434 Page 865 of 955

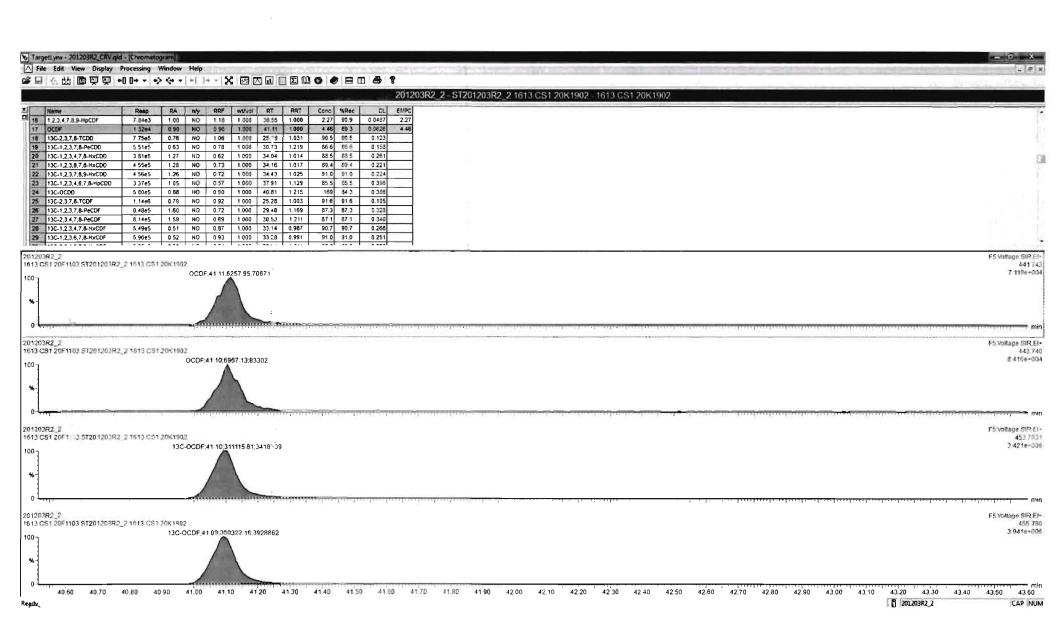
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Friday, December 04, 2020 08:58:11 Pacific Standard Time Friday, December 04, 2020 09:59:16 Pacific Standard Time

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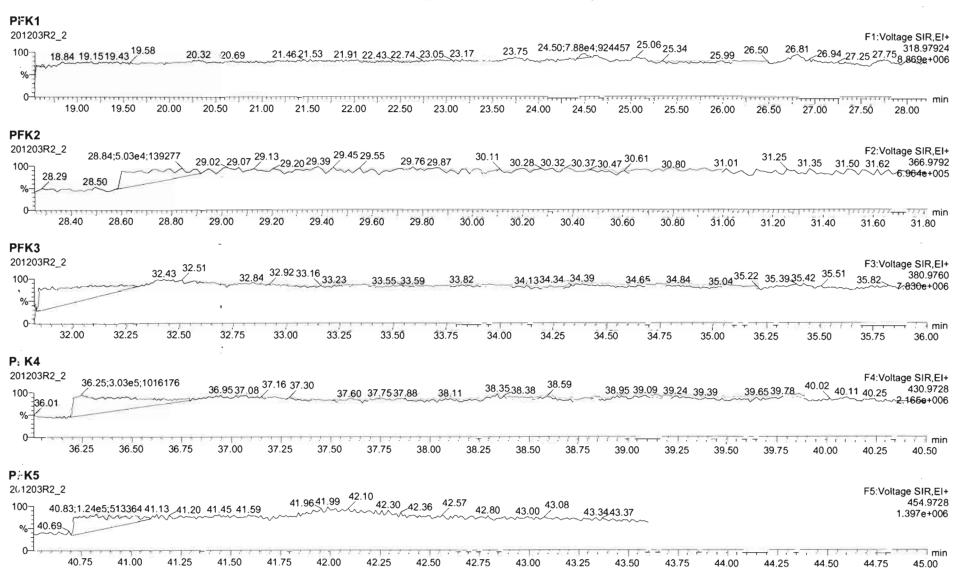


Work Order 2002434 Page 867 of 955

U:\VG12.PRO\Results\201203R2\201203R2_CRV.qld

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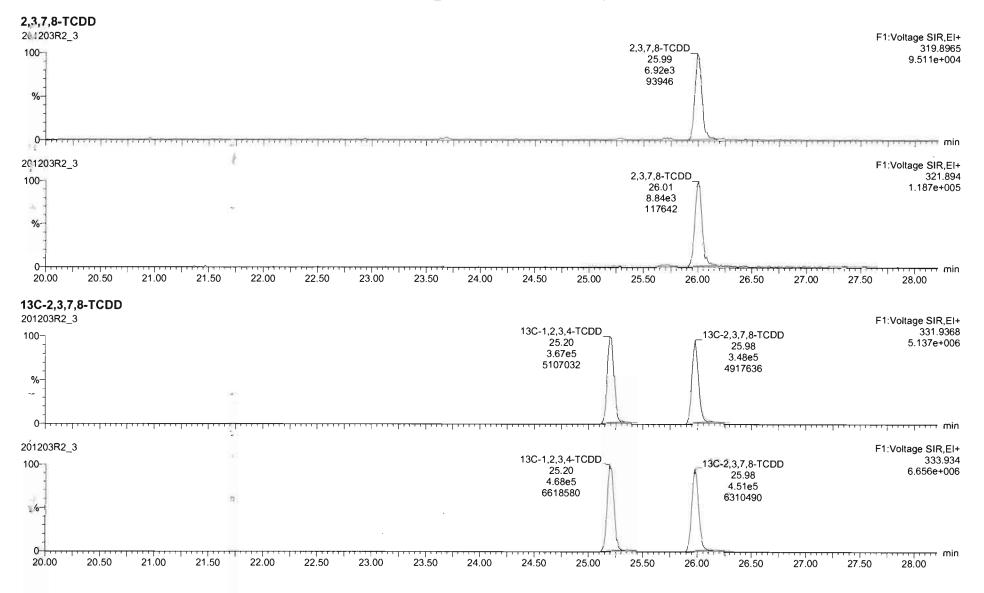
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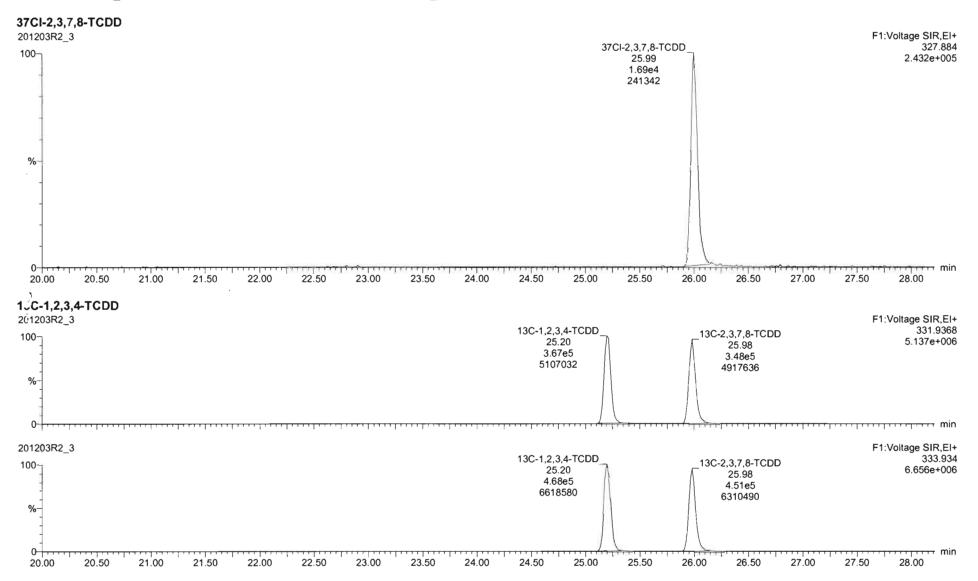
Quantify Sample Report Vista Analytical Laboratory

Dataset:

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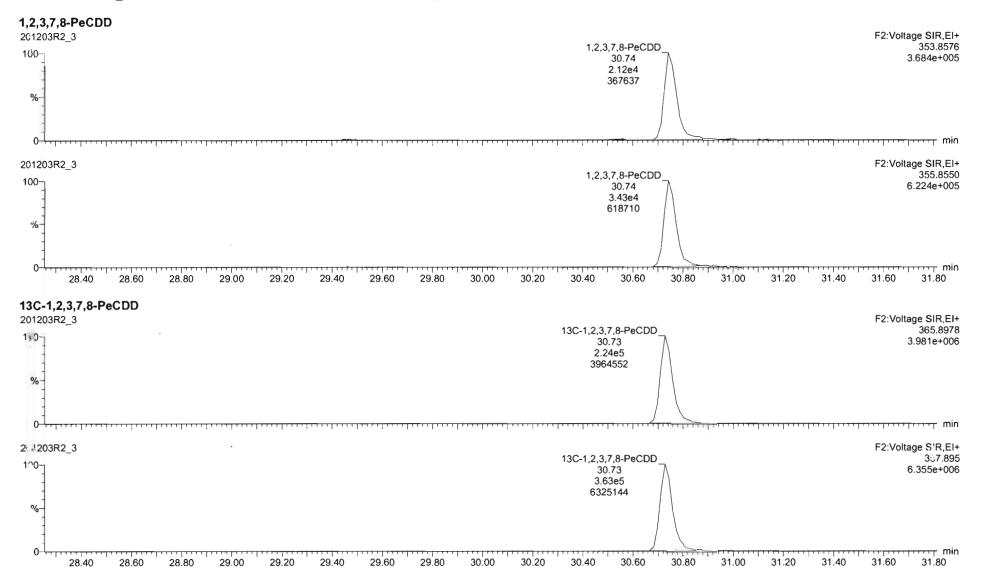


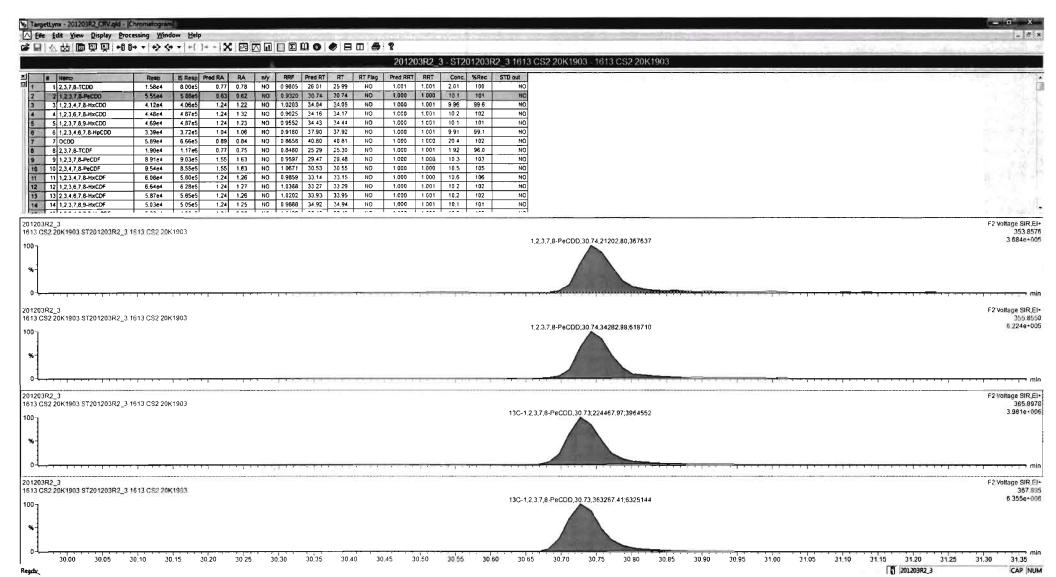
Q antify Sample Report Vista Analytical Laboratory MassLynx 4.1 SCN815

Dataset:

U:\VG12.PRO\Results\201203R2\201203R2_CRV.qld

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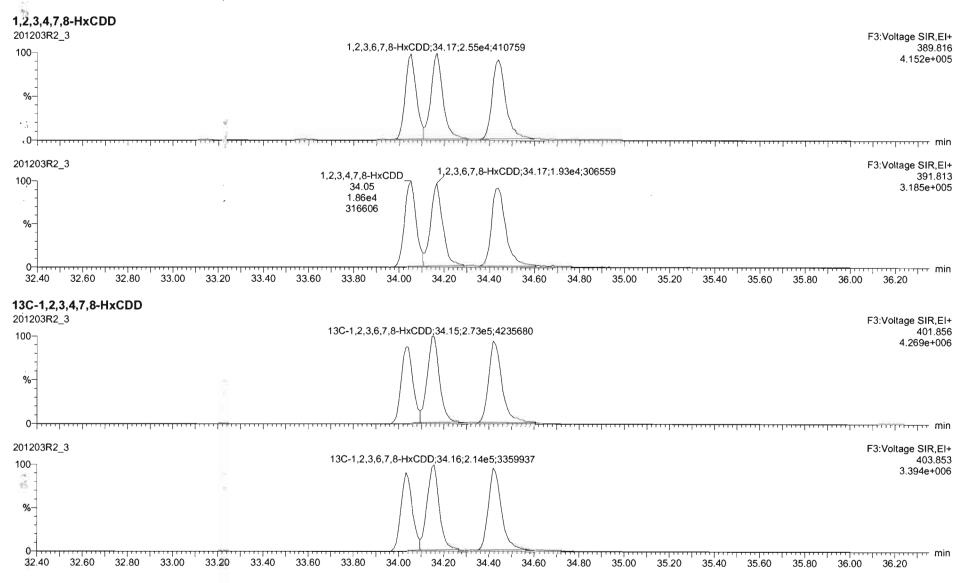


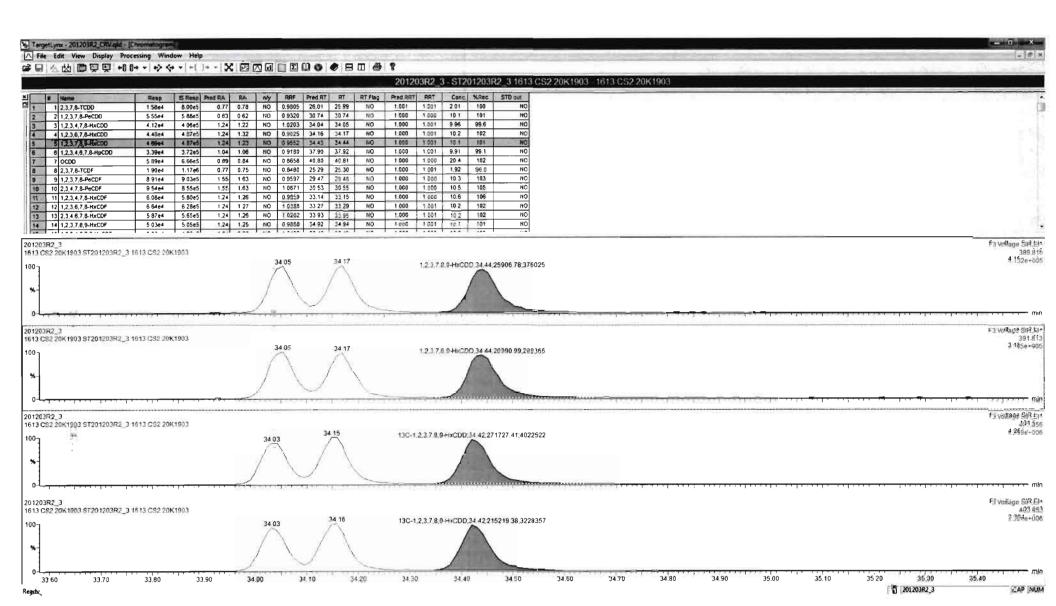
Work Order 2002434 Page 872 of 955

U:\VG12.PRO\Results\201203R2\201203R2_CRV.qld

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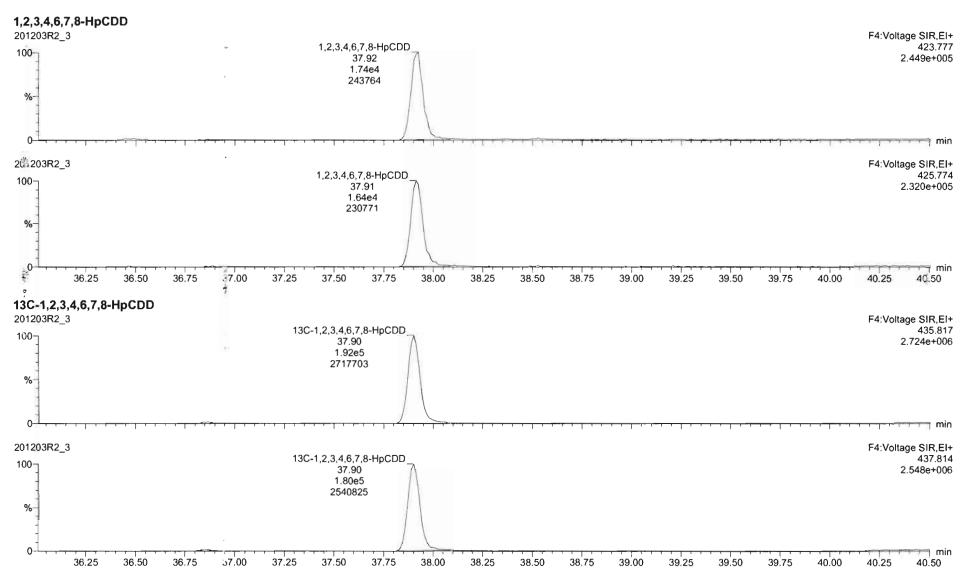


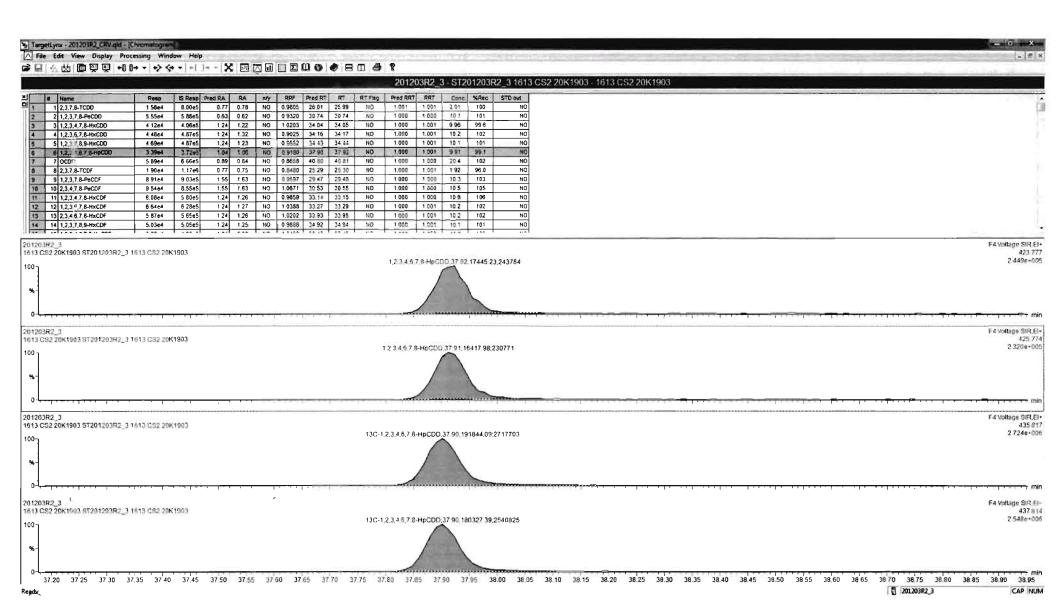


Work Order 2002434 Page 874 of 955

Dataset: U:\VG12.PRO\Results\201203R2\201203R2_CRV.qld

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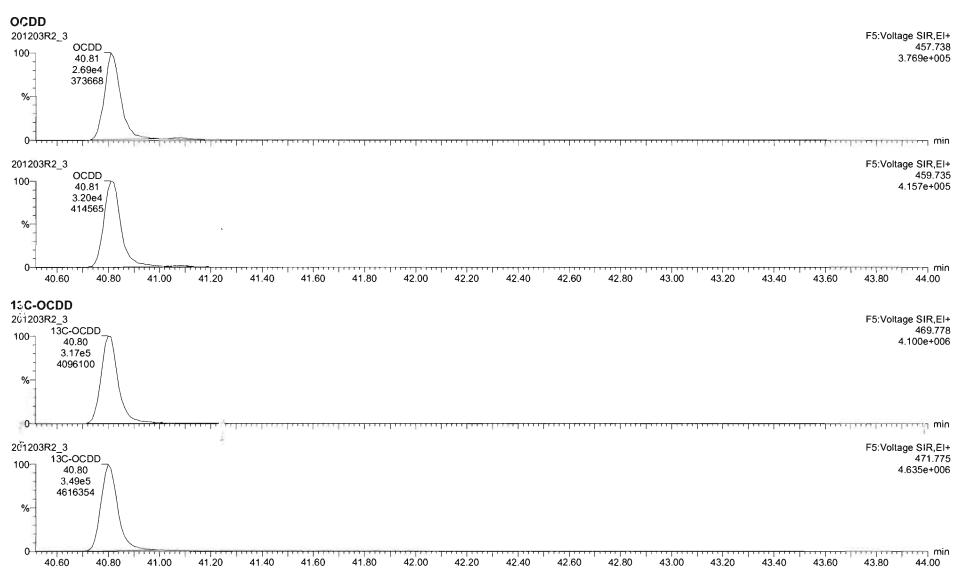
Work Order 2002434 Page 876 of 955

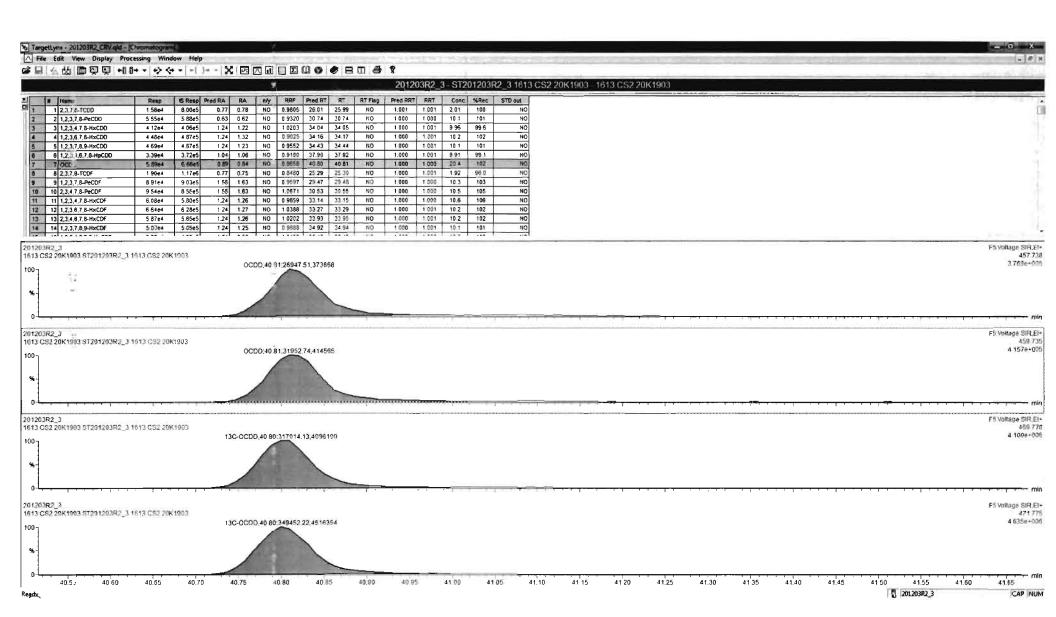
Vista Analytical Laboratory

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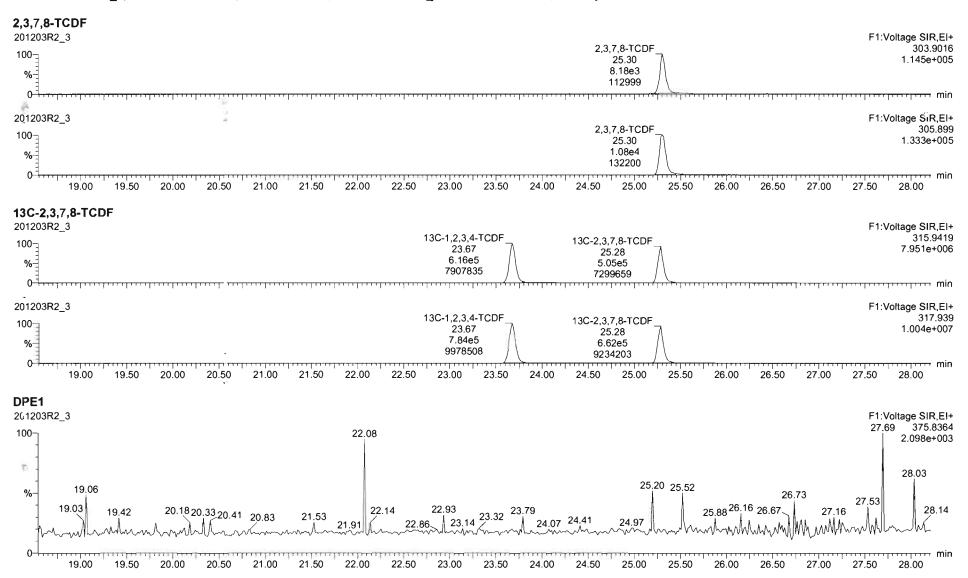
Quantify Sample Report Vista Analytical Laboratory

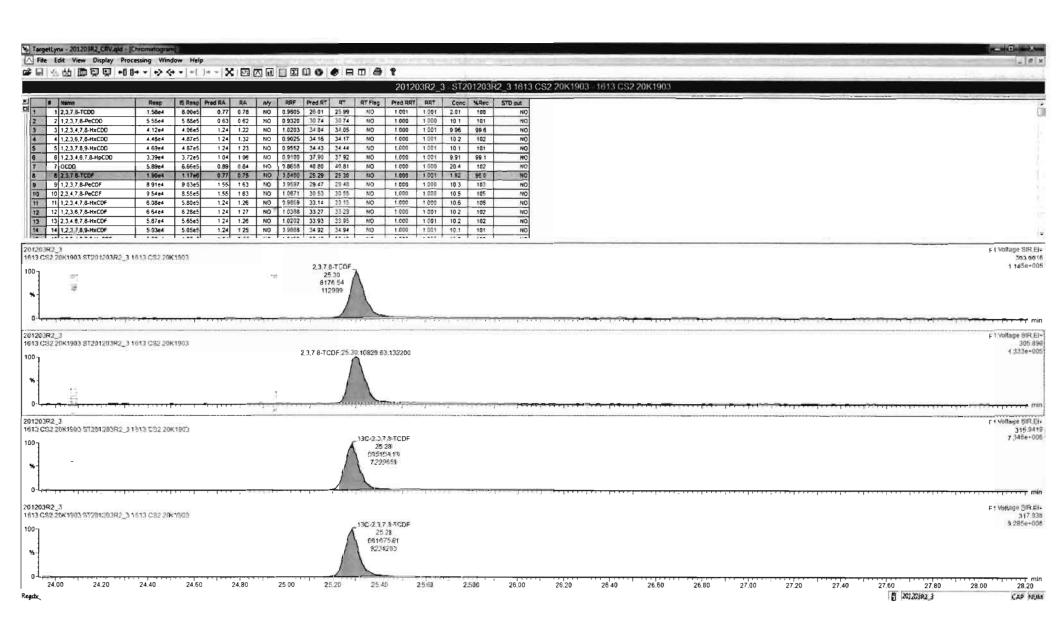
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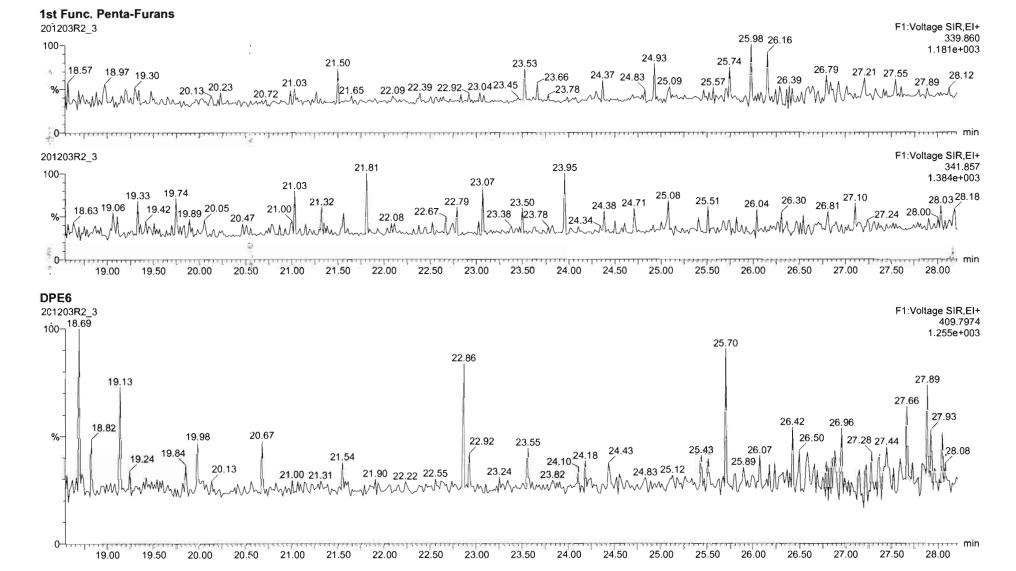
Work Order 2002434 Page 880 of 955

Vista Analytical Laboratory

Dataset:

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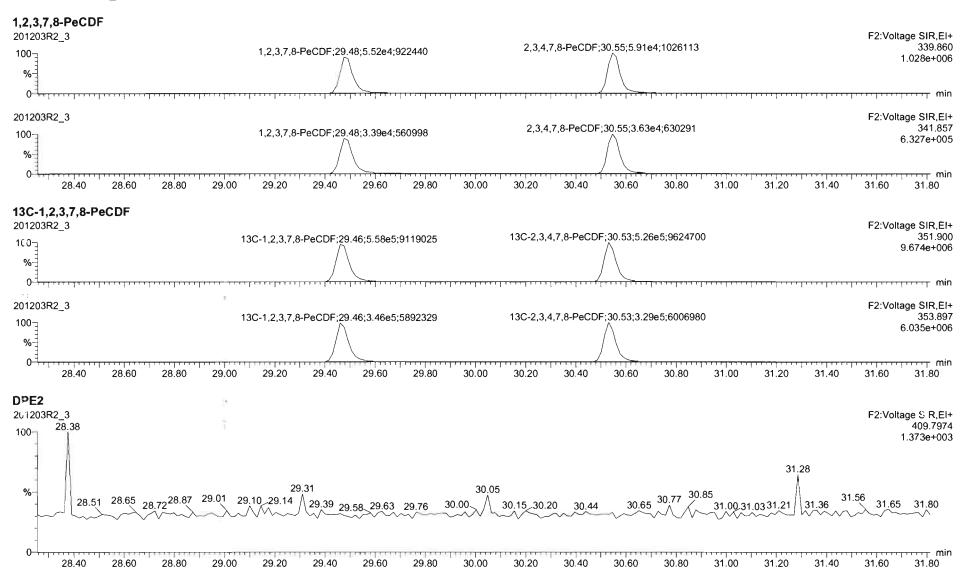


Vista Analytical Laboratory

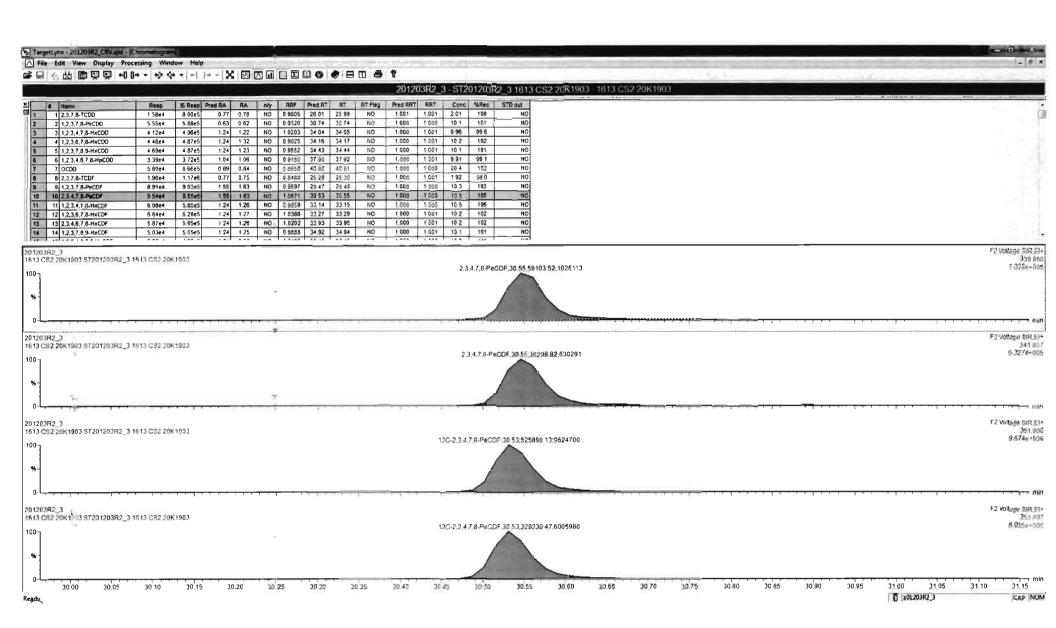
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Last Altered: Friday, December 04, 2)20 08:58:11 Pacific Standard Time Friday, December 04, 2)20 09:59:16 Pacific Standard Time

Name: 201203R2_3, Date: 03-Dec-2020, Time: 12:14:40, ID: ST201203R2_3 1613 CS2 20K1903, Description: 1613 CS2 20K1903



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Vista Analytical Laboratory

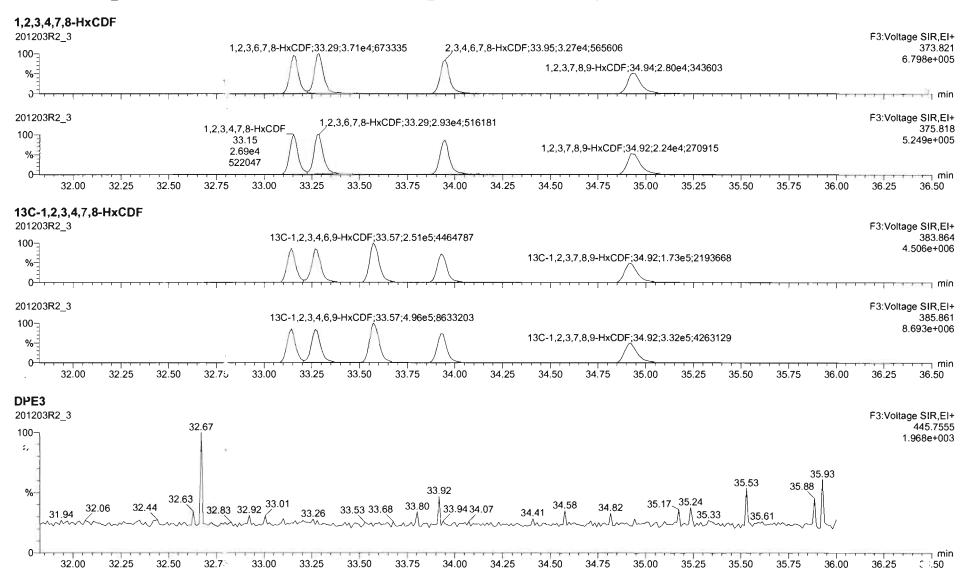
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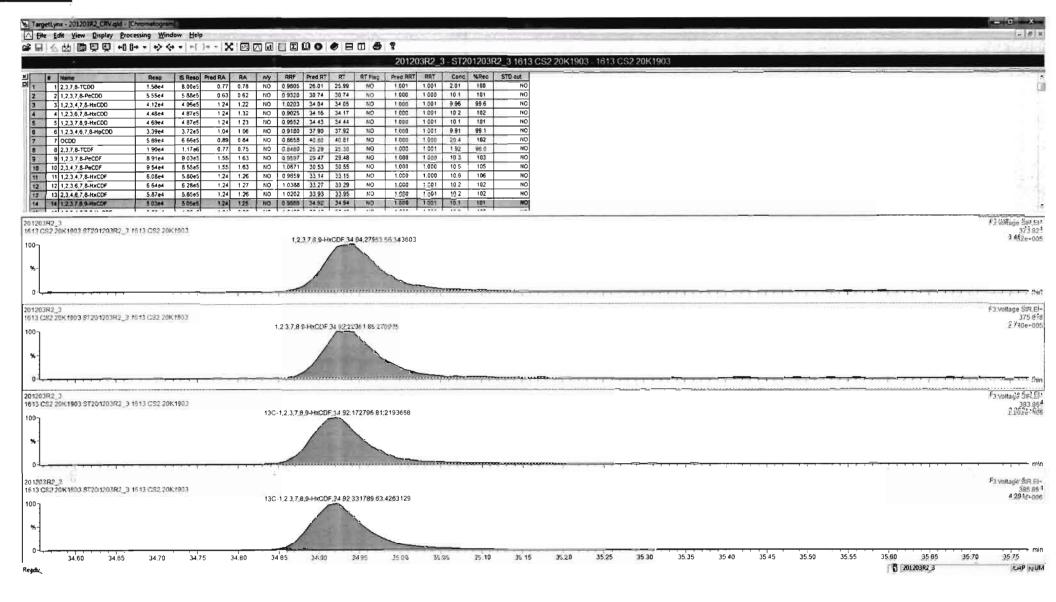
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Work Order 2002434



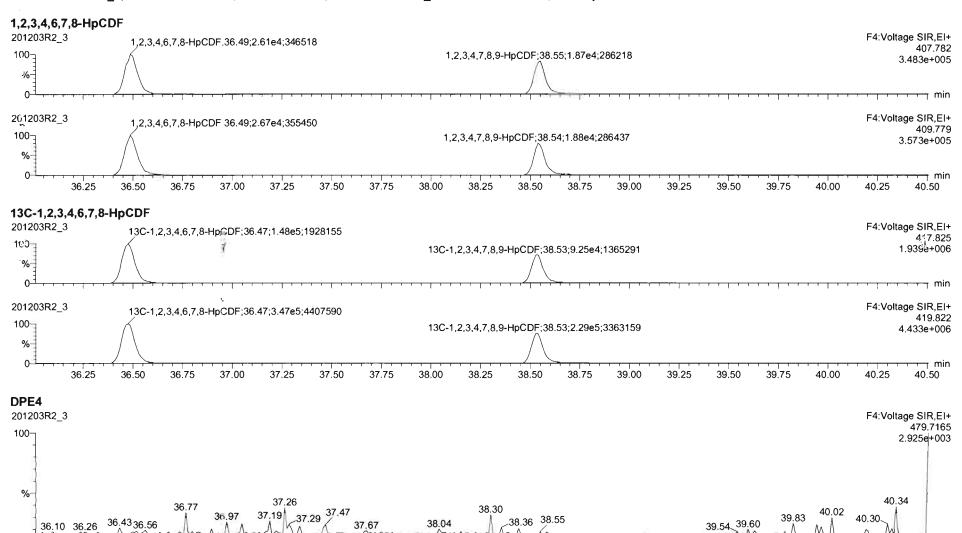
Work Order 2002434 Page 885 of 955

U:\VG12.PRO\Results\201203R2\201203R2_CRV.qld

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Friday, December 04, 2020 08:58:11 Pacific Standard Time Friday, December 04, 2020 09:59:16 Pacific Standard Time

Name: 201203R2 3, Date: 03-Dec-2020, Time: 12:14:40, ID: ST201203R2_3 1613 CS2 20K1903, Description: 1613 CS2 20K1903



36.25

36.50

36.75

37.00

37.25

37.50

37.75

38.00

38.25

38.50

38.75

39.00

39.25

39.50

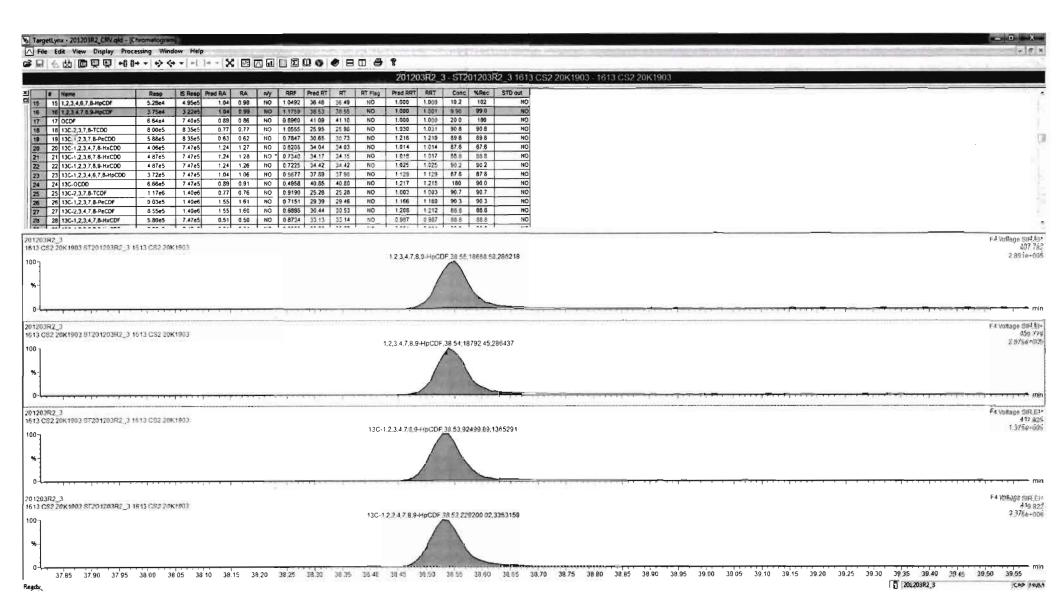
39.75

40.00

40.25

min min

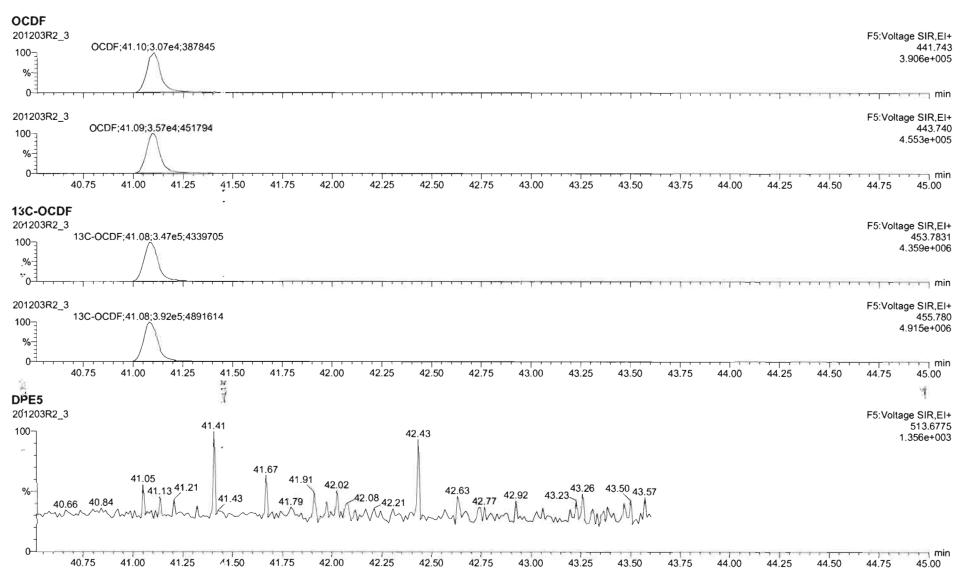
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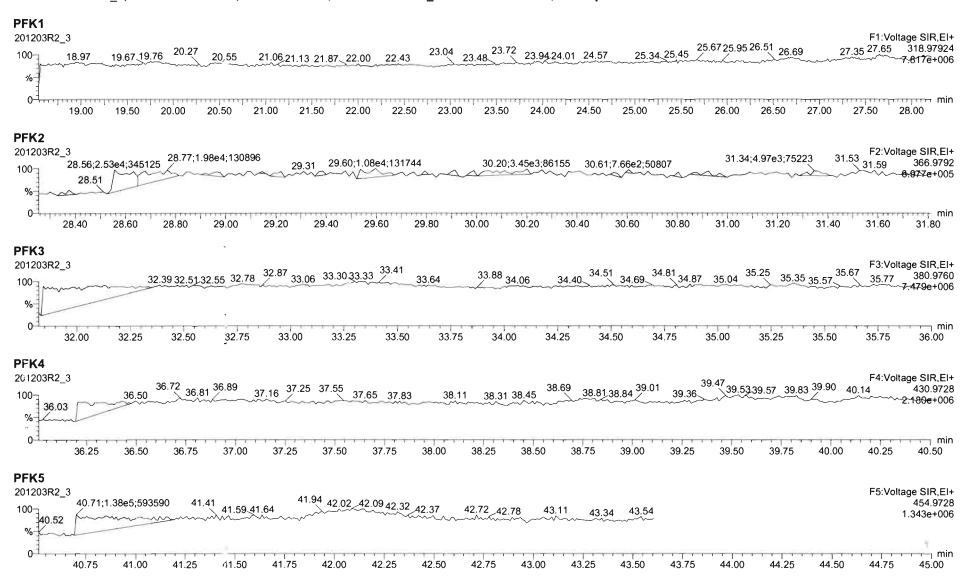
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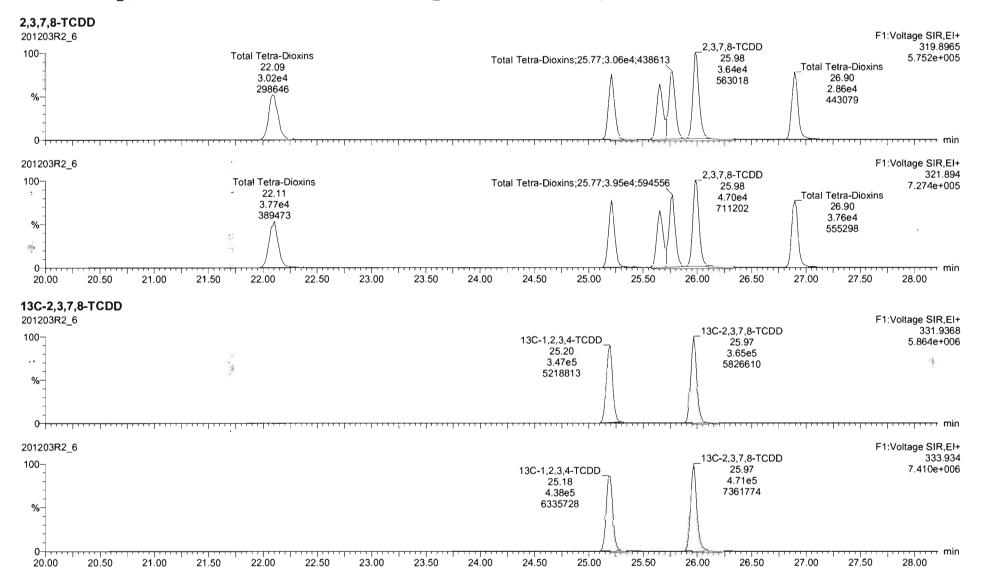
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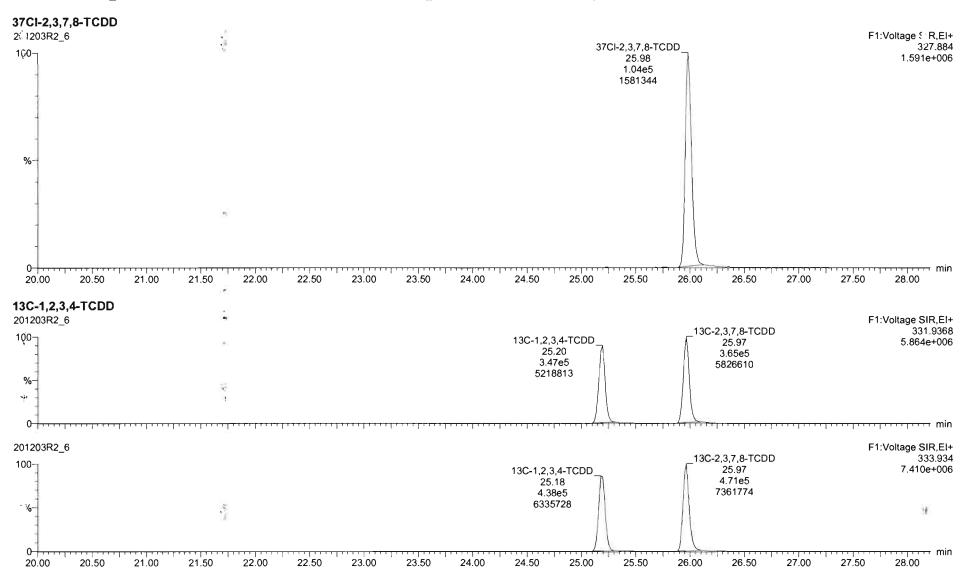
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Vista Analytical Laboratory

Dataset: U:\VG12.PRO\Results\201203R2\201203R2_CRV.qld

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Quantify Sample Report

MassLynx 4.1 SCN815

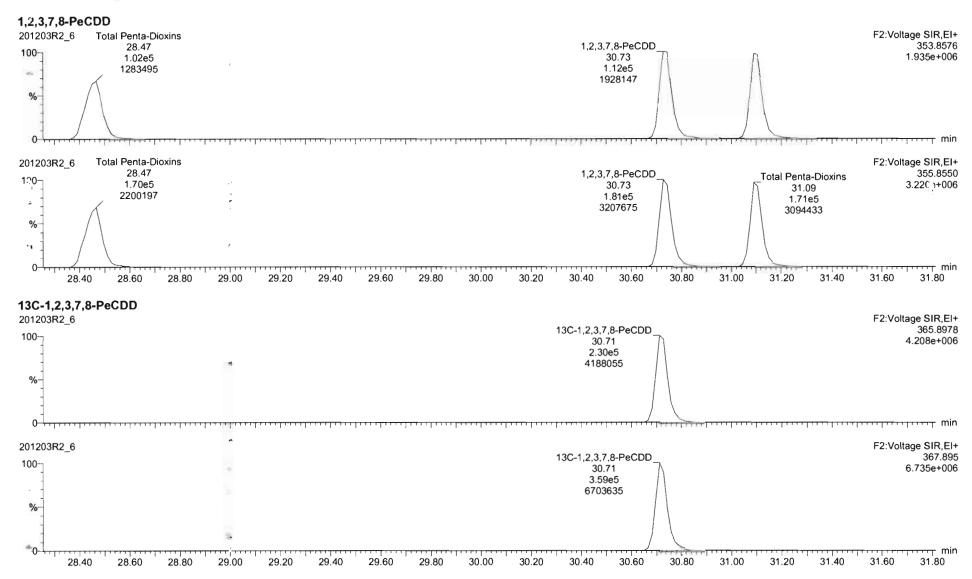
Vista Analytical Laboratory

Dataset:

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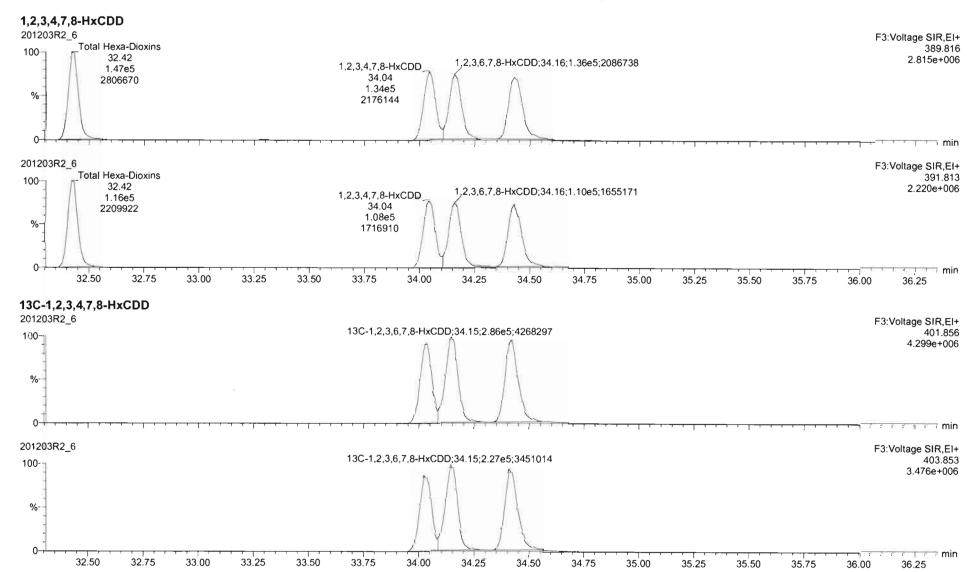
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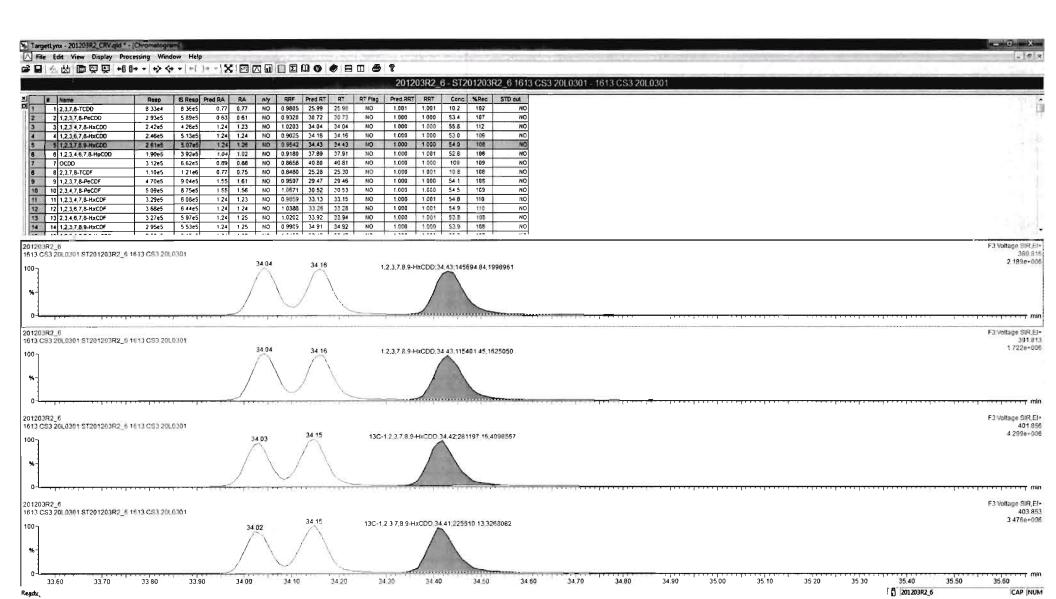


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Quantify Sample Report Vista Analytical Laboratory

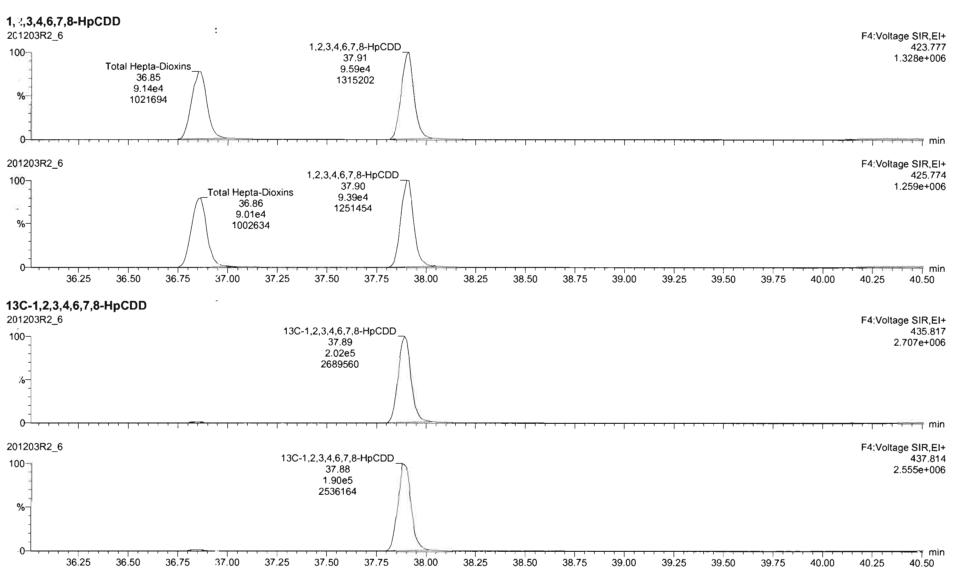
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Friday, December 04, 2020 08:58:11 Pacific Standard Time Friday, December 04, 2020 09:59:16 Pacific Standard Time

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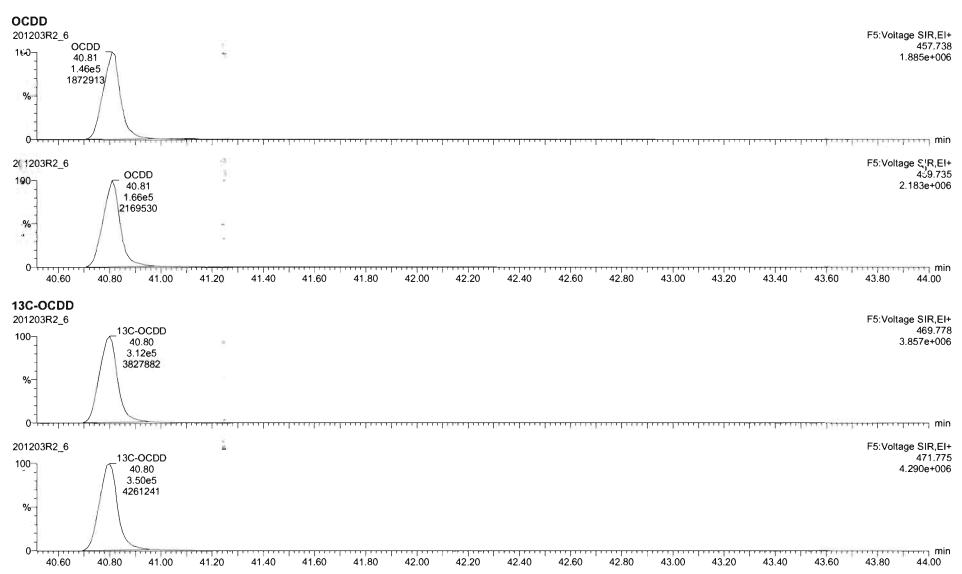


Work Order 2002434

Vista Analytical Laboratory

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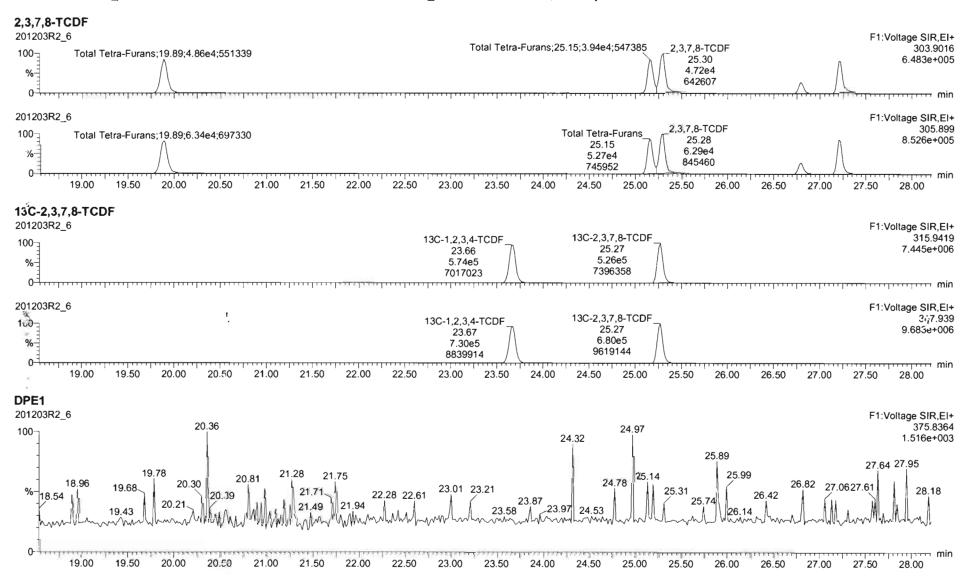
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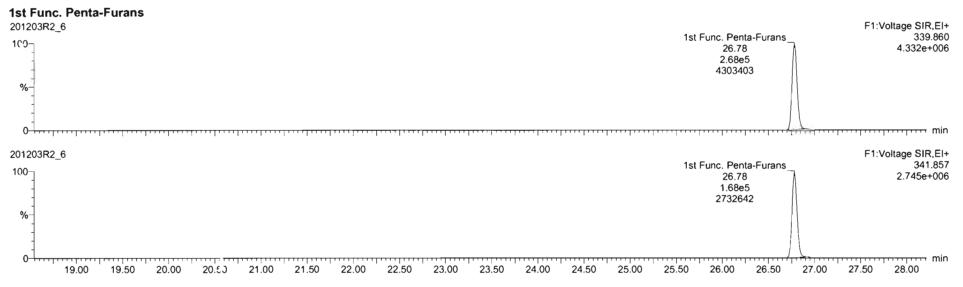
Page 898 of 955

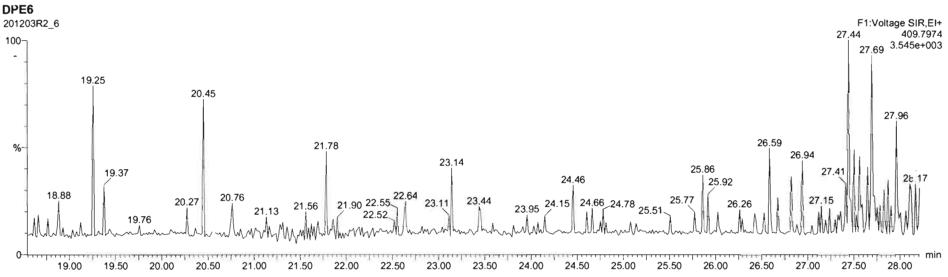
Vista Analytical Laboratory

Dataset:

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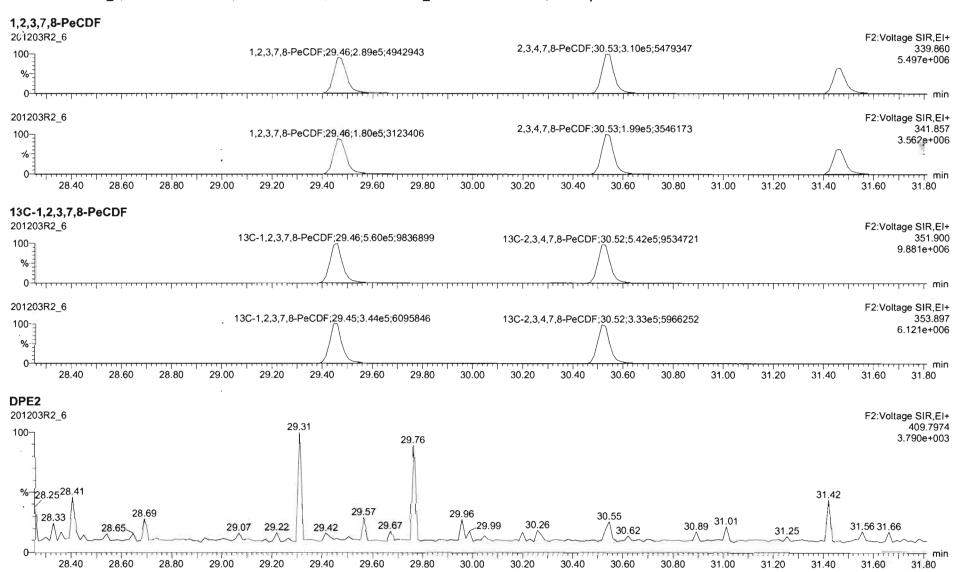
Quantify Sample Report Vista Analytical Laboratory

Dataset:

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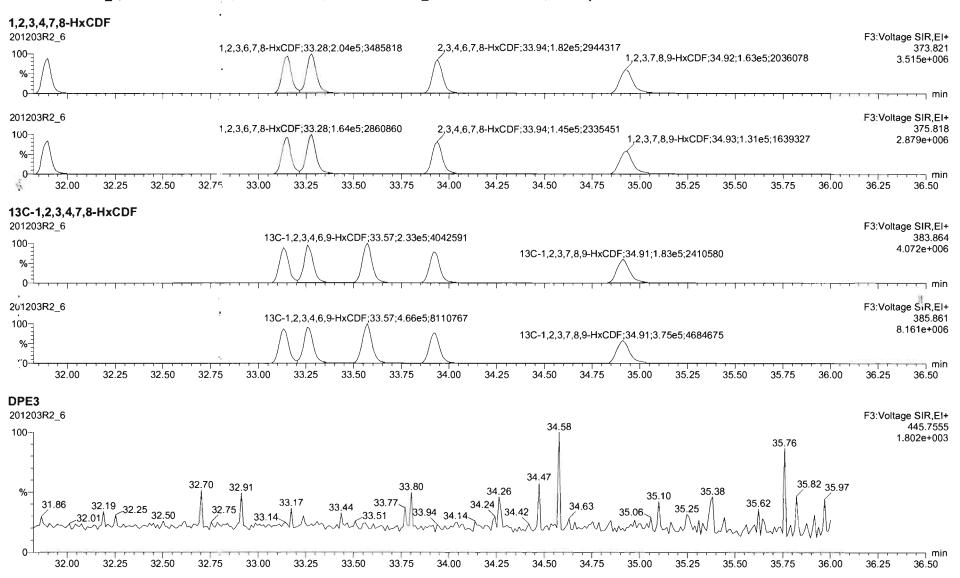
Quantify Sample Report Vista Analytical Laboratory

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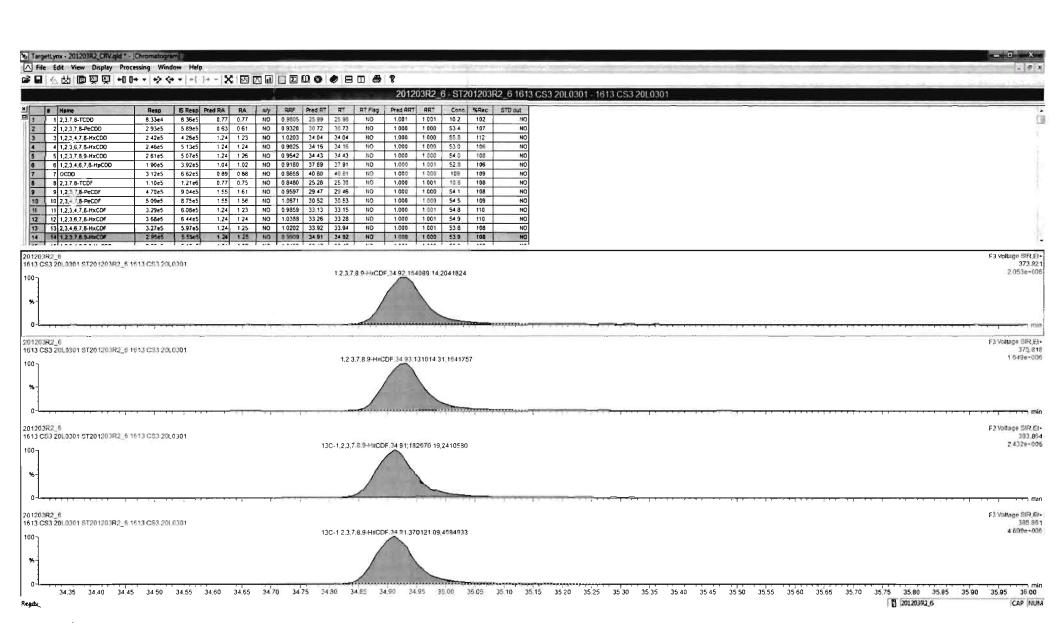
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Work Order 2002434



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Quantify Sample Report

Mass!_ynx 4.1 SCN815

Vista Analytical Laboratory

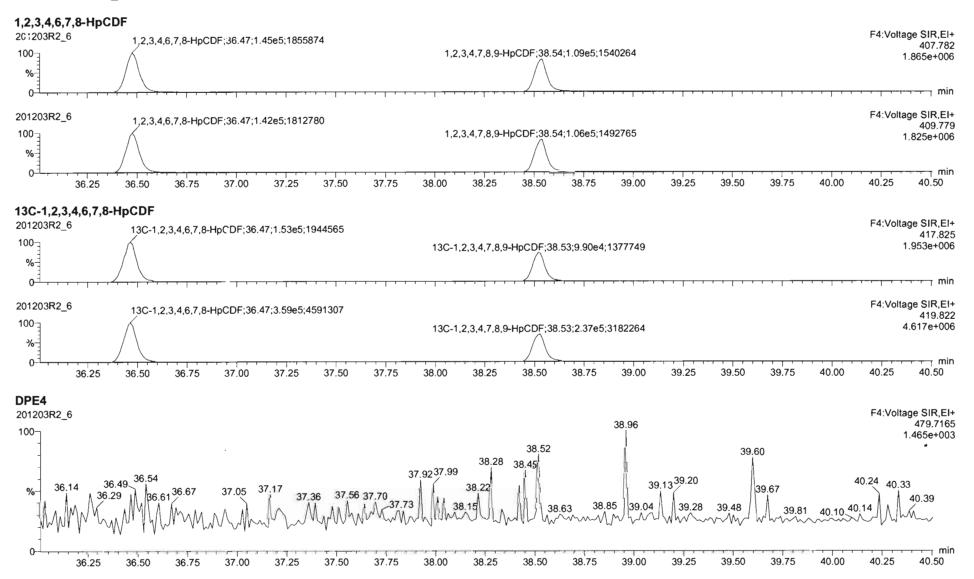
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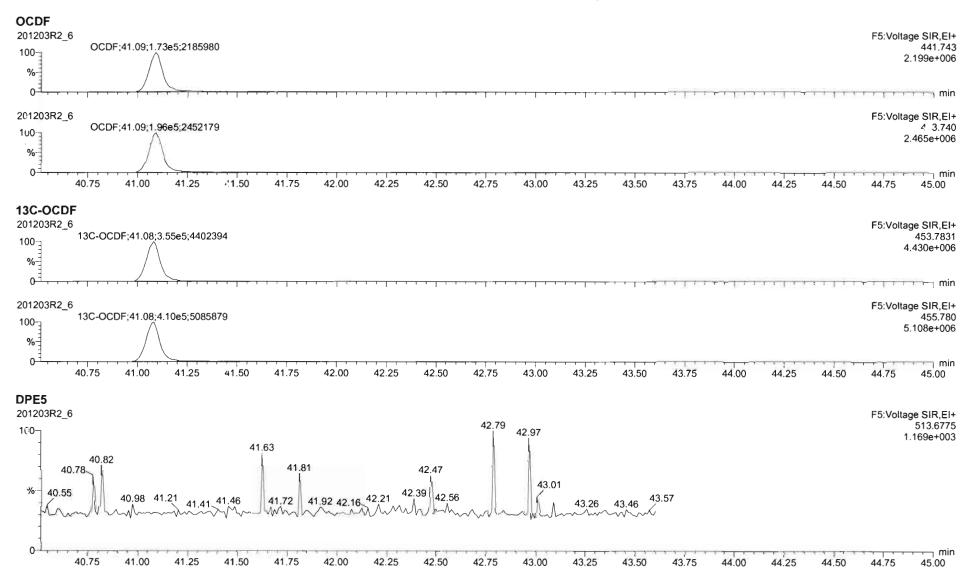
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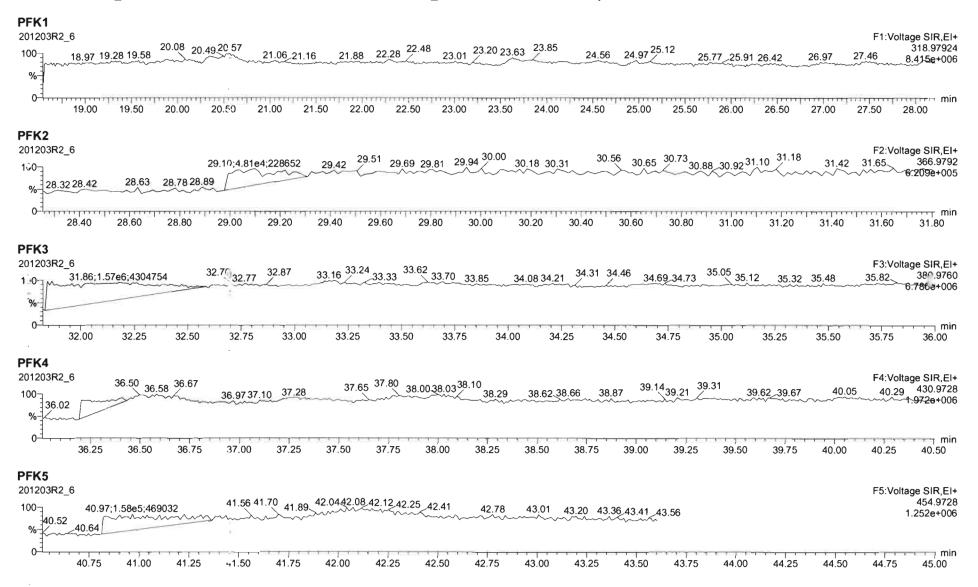


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Quantify Sample Report

MassLynx 4.1 SCN815

Vista Analytical Laboratory

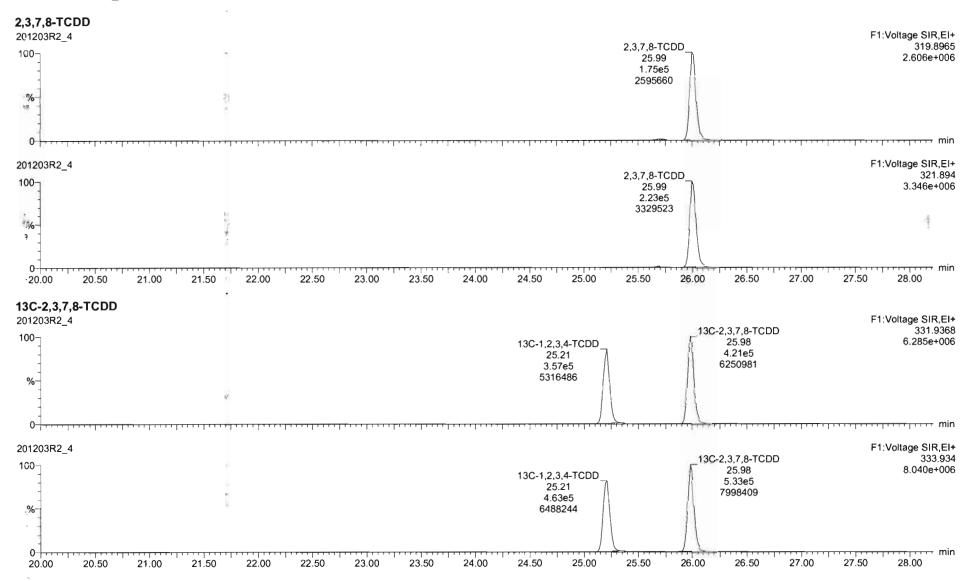
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Name: 201203R2_4, Date: 03-Dec-2020, Time: 13:00:37, ID: ST201203R2_4 1613 CS4 20L0302, Description: 1613 CS4 20L0302



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Quantify Sample Report Vista Analytical Laboratory

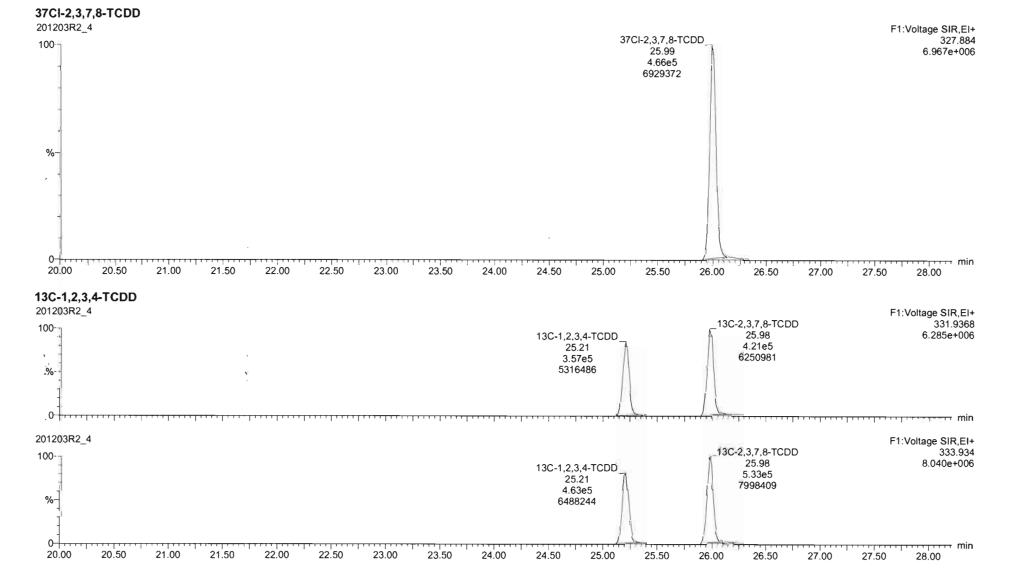
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Name: 201203R2_4, Date: 03-Dec-2020, Time: 13:00:37, ID: ST201203R2_4 1613 CS4 20L0302, Description: 1613 CS4 20L0302



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Quantify Sample Report MassLynx 4.1 SCN815

Vista Analytical Laboratory

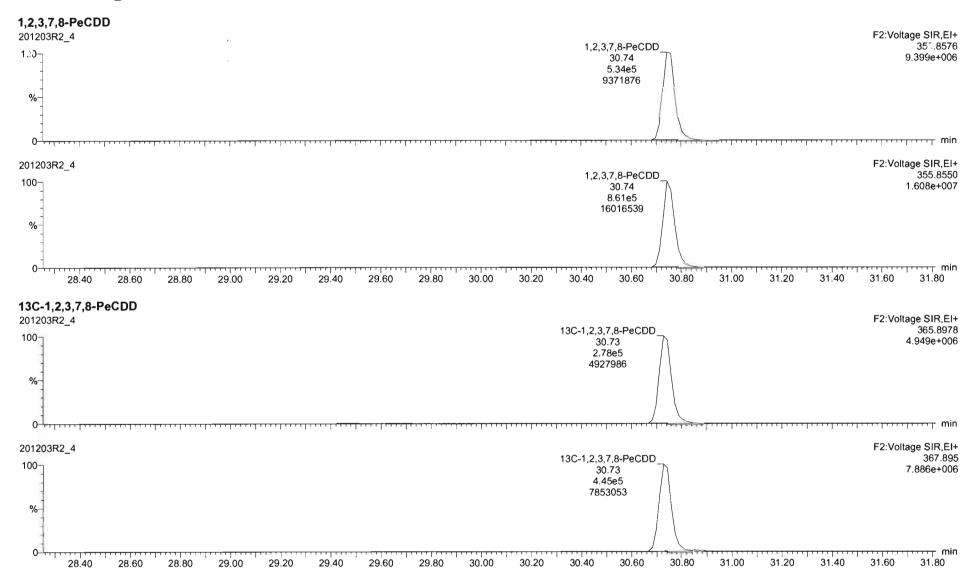
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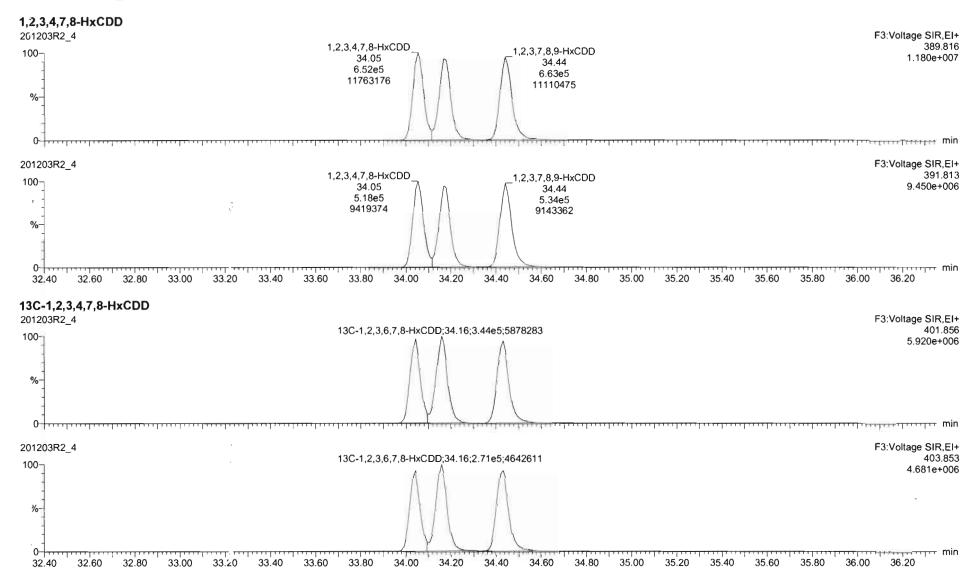
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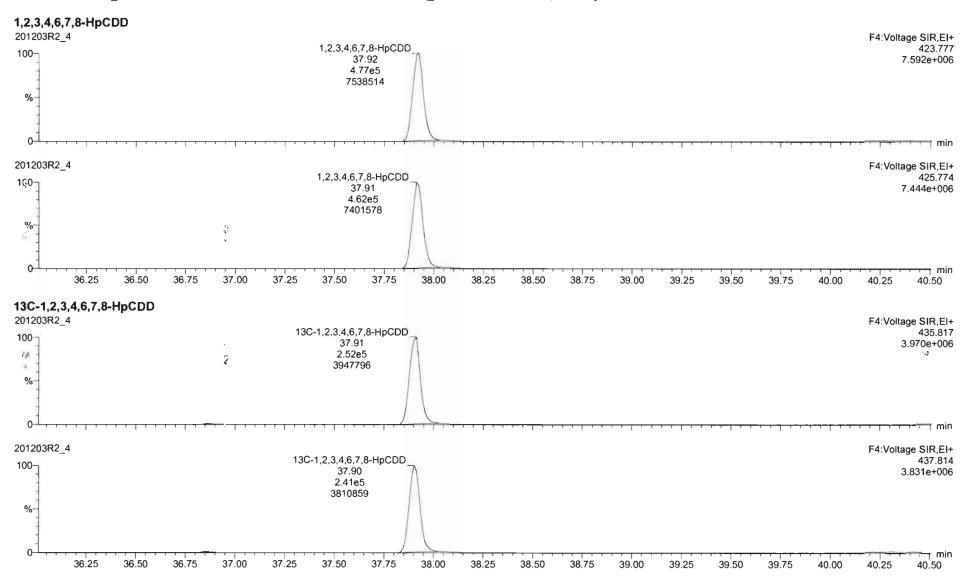
Work Order 2002434

Vista Analytical Laboratory

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Name: 201203R2_4, Date: 03-Dec-2020, Time: 13:00:37, ID: ST201203R2_4 1613 CS4 20L0302, Description: 1613 CS4 20L0302



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Quantify Sample Report Vista Analytical Laboratory

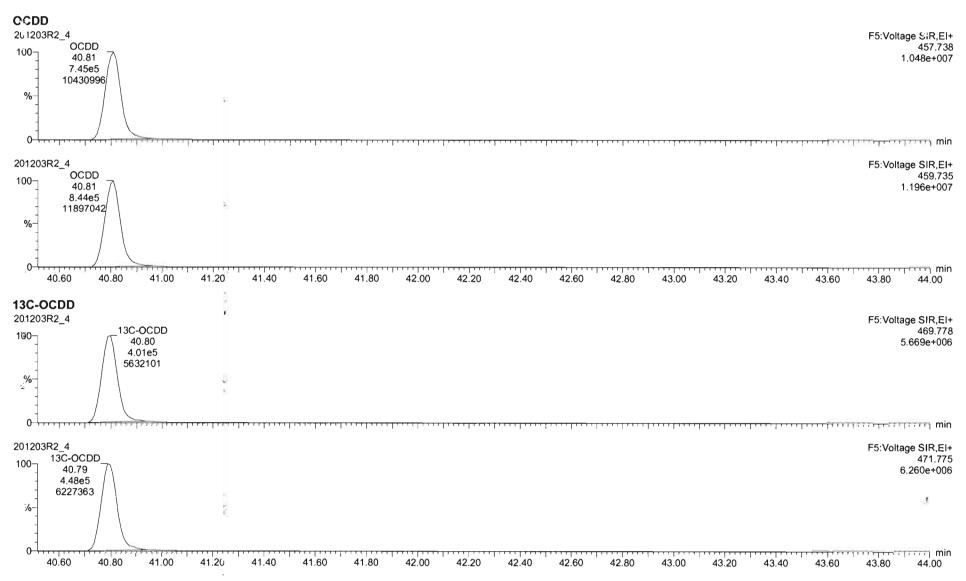
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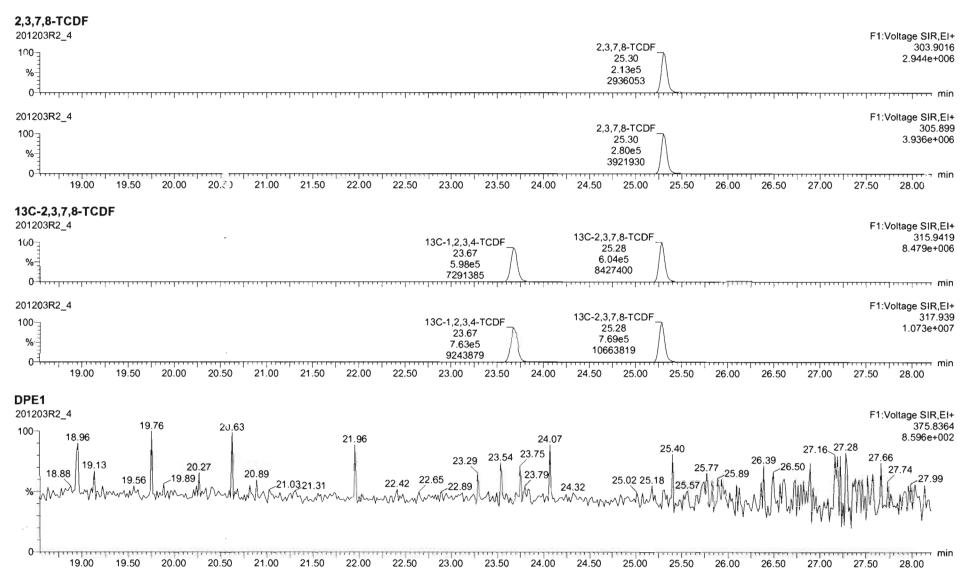
Work Order 2002434

Quantify Sample Report Vista Analytical Laboratory

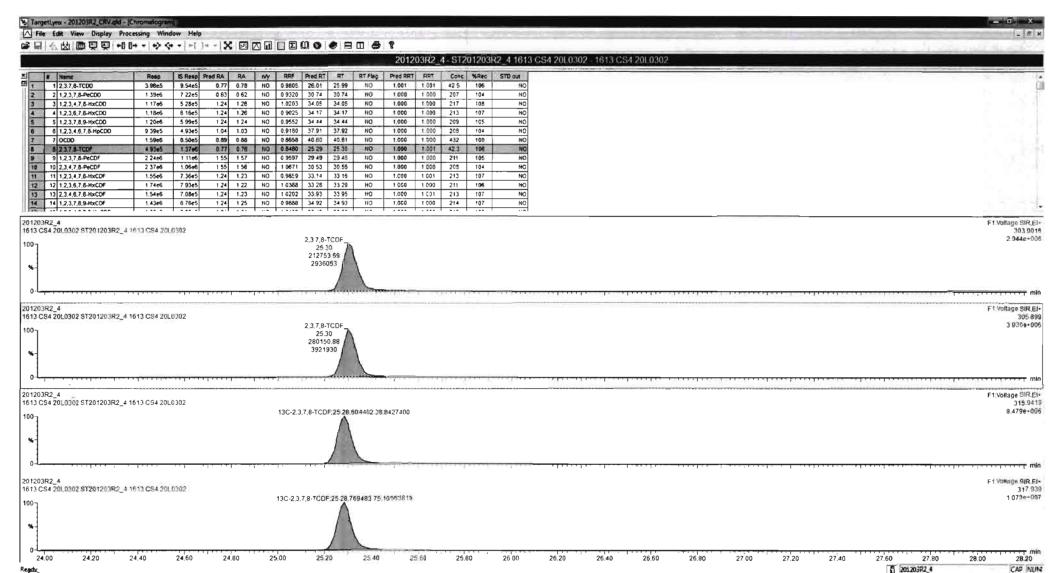
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Name: 201203R2_4, Date: 03-Dec-2020, Time: 13:00:37, ID: ST201203R2_4 1613 CS4 20L0302, Description: 1613 CS4 20L0302



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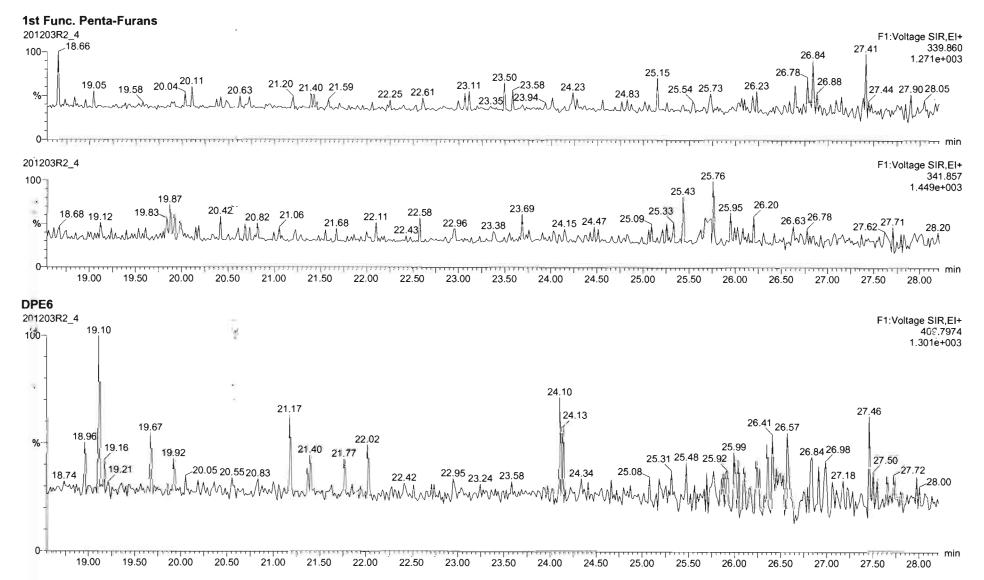


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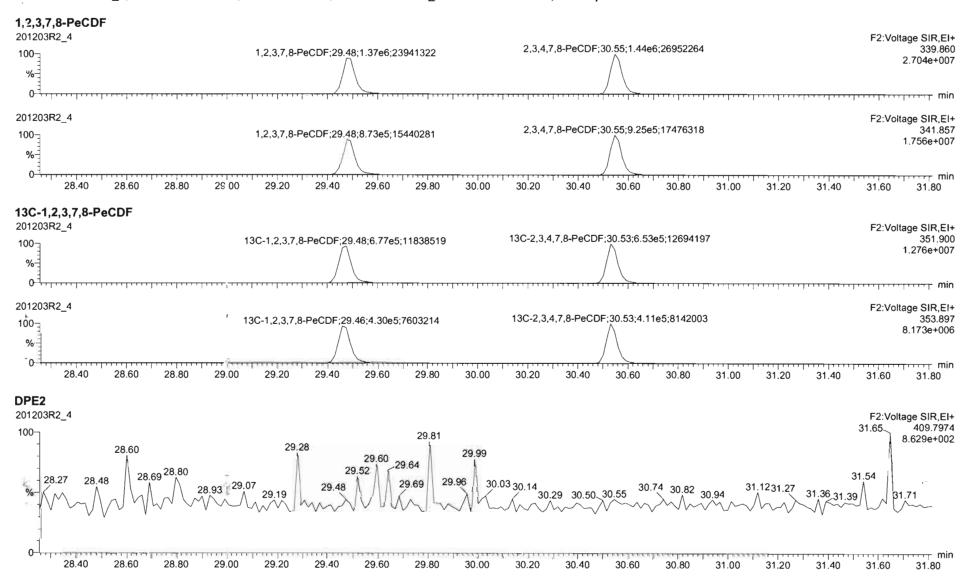


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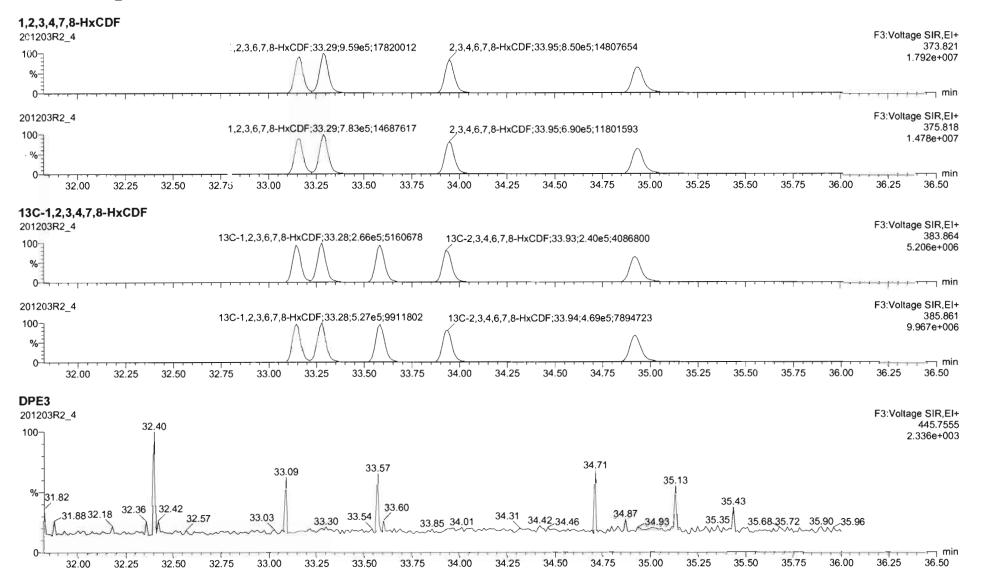
Work Order 2002434

Quantify Sample Report Vista Analytical Laboratory MassLynx 4.1 SCN815

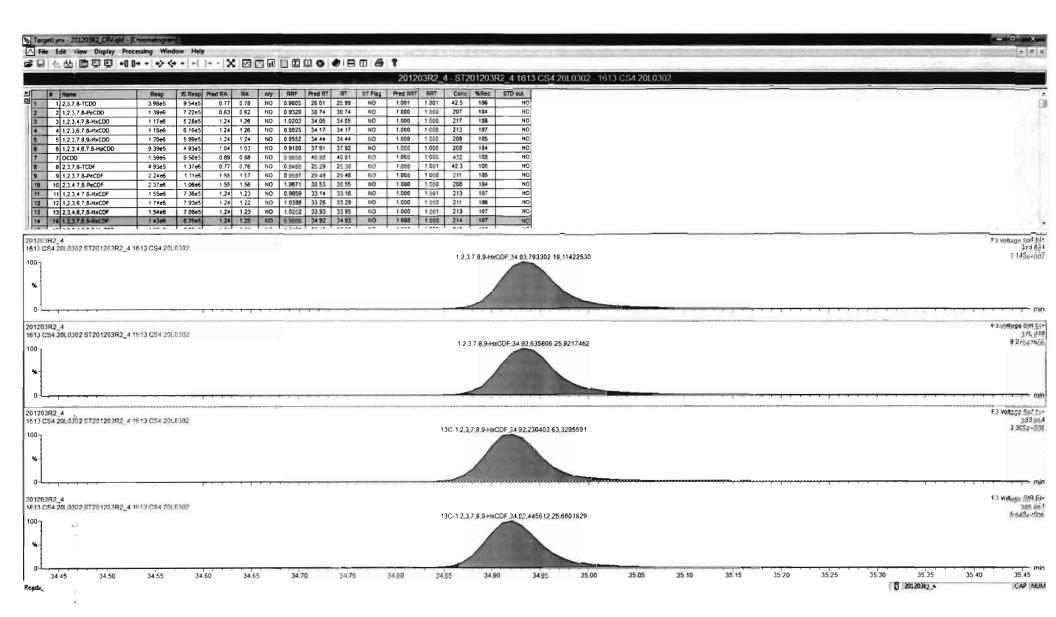
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Name: 201203R2_4, Date: 03-Dec-2020, Time: 13:00:37, ID: ST201203R2_4 1613 CS4 20L0302, Description: 1613 CS4 20L0302



Work Order 2002434

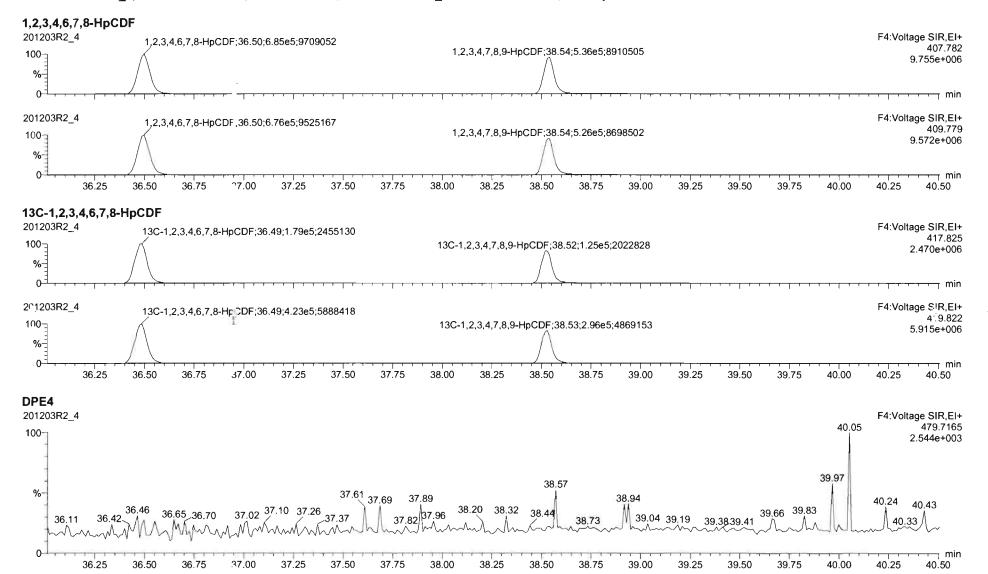


Work Order 2002434 Page 916 of 955

U:\VG12.PRO\Results\201203R2\201203R2 CRV.qld

Last Altered: Printed: Friday, December 04, 2020 08:58:11 Pacific Standard Time Friday, December 04, 2020 09:59:16 Pacific Standard Time

Name: 201203R2 4, Date: 03-Dec-2020, Time: 13:00:37, ID: ST201203R2 4 1613 CS4 20L0302, Description: 1613 CS4 20L0302

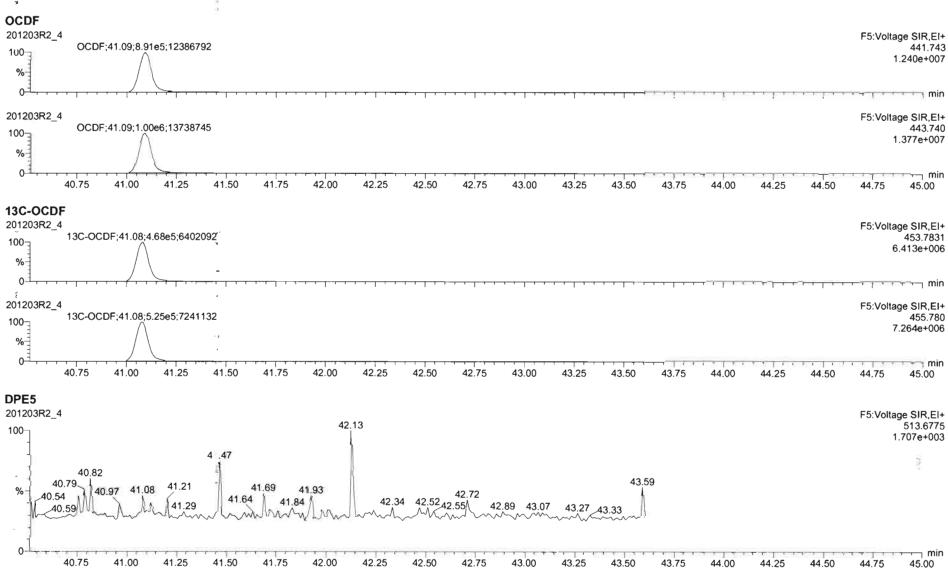


Vista Analytical Laboratory

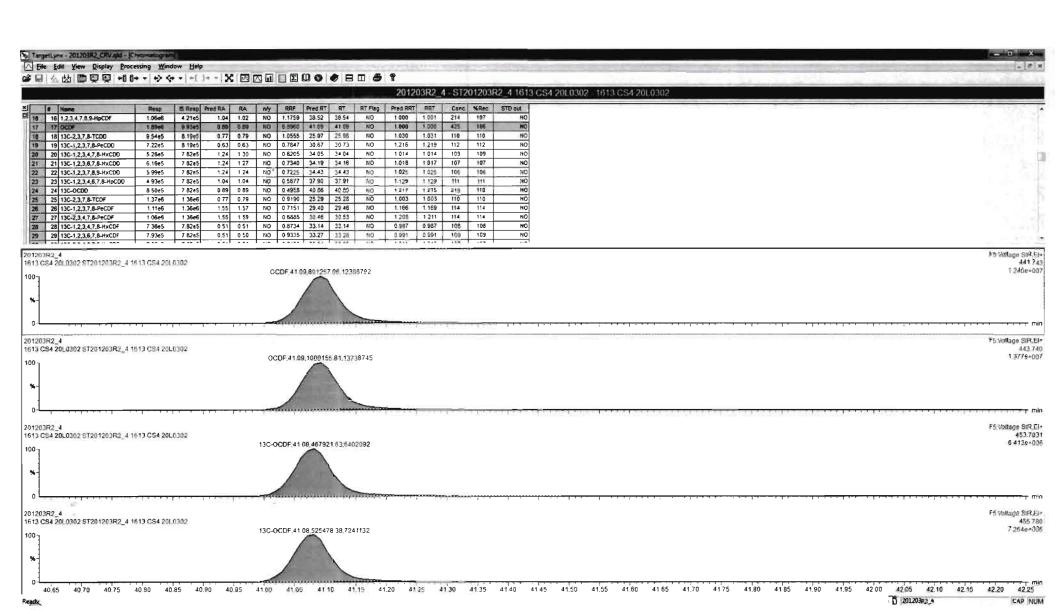
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Last Altered: Friday, December 04, 2020 08:58:11 Pacific Standard Time Printed: Friday, December 04, 2020 09:59:16 Pacific Standard Time

Name: 201203R2_4, Date: 03-Dec-2020, Time: 13:00:37, ID: ST201203R2_4 1613 CS4 20L0302, Description: 1613 CS4 20L0302



Work Order 2002434 Page 918 of 955



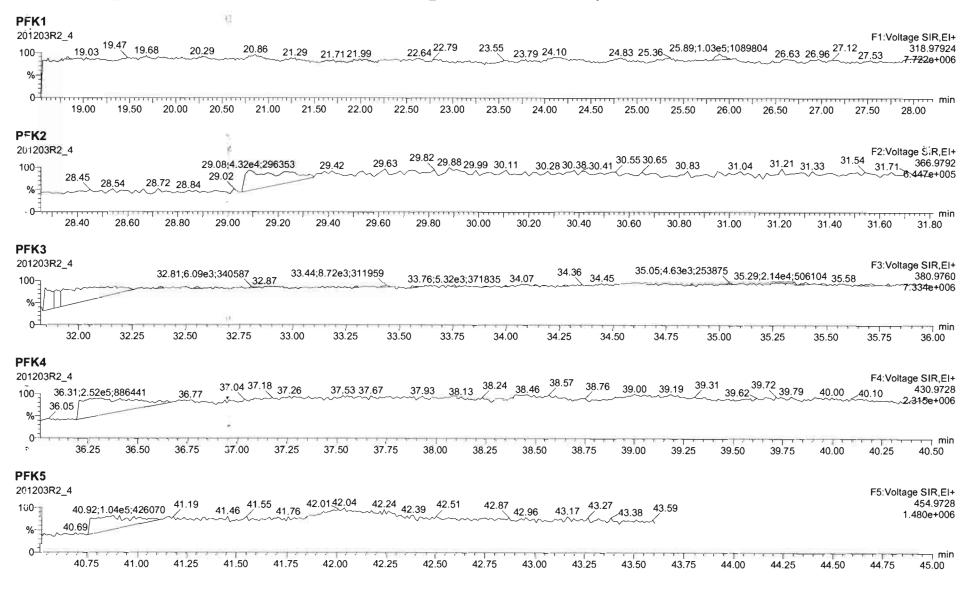
Work Order 2002434 Page 919 of 955

U:\VG12.PRO\Results\201203R2\201203R2 CRV.qld

Last Altered: Printed:

Friday, December 04, 2020 08:58:11 Pacific Standard Time Friday, December 04, 2020 09:59:16 Pacific Standard Time

Name: 201203R2_4, Date: 03-Dec-2020, Time: 13:00:37, ID: ST201203R2_4 1613 CS4 20L0302, Description: 1613 CS4 20L0302



Viota Analytical Laboratory

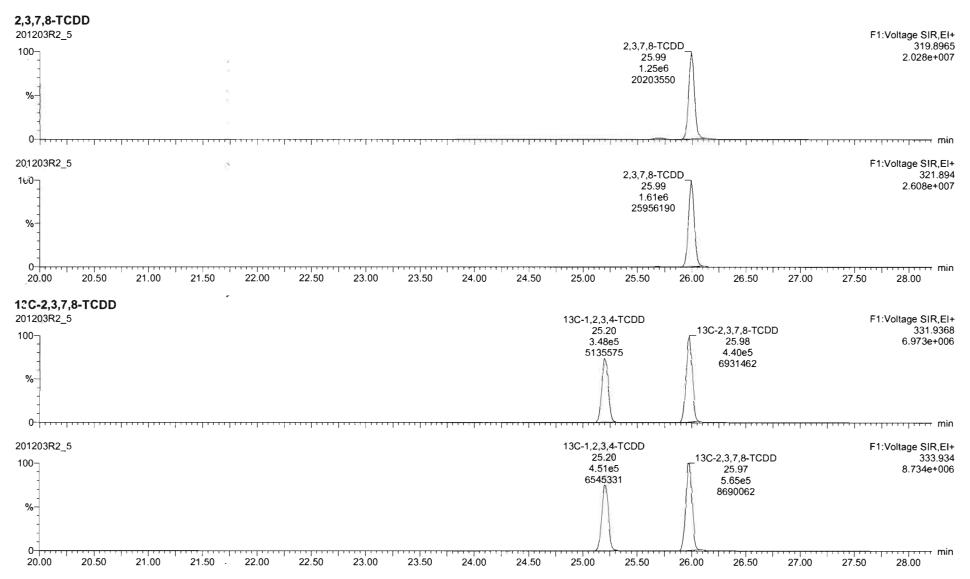
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U:\VG12.PRO\Results\201203R2\201203R2_CRV.qld

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Friday, December 04, 2020 08:58:11 Pacific Standard Time Friday, December 04, 2020 09:59:16 Pacific Standard Time

Name: 201203R2_5, Date: 03-Dec-20:0, Time: 13:47:04, ID: ST201203R2_5 1613 CS5 20L0303, Description: 1613 CS5 20L0303



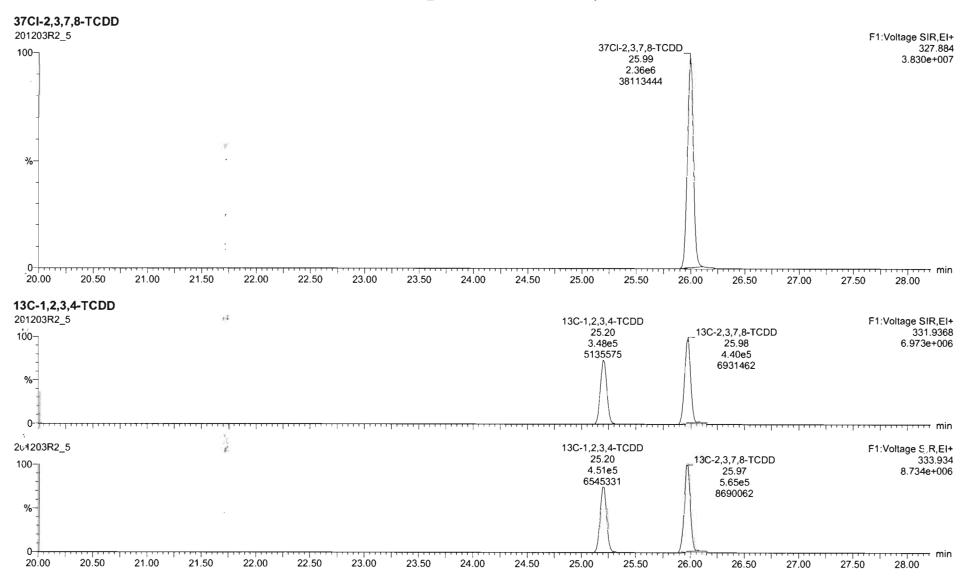
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12

Last Altered: Printed:

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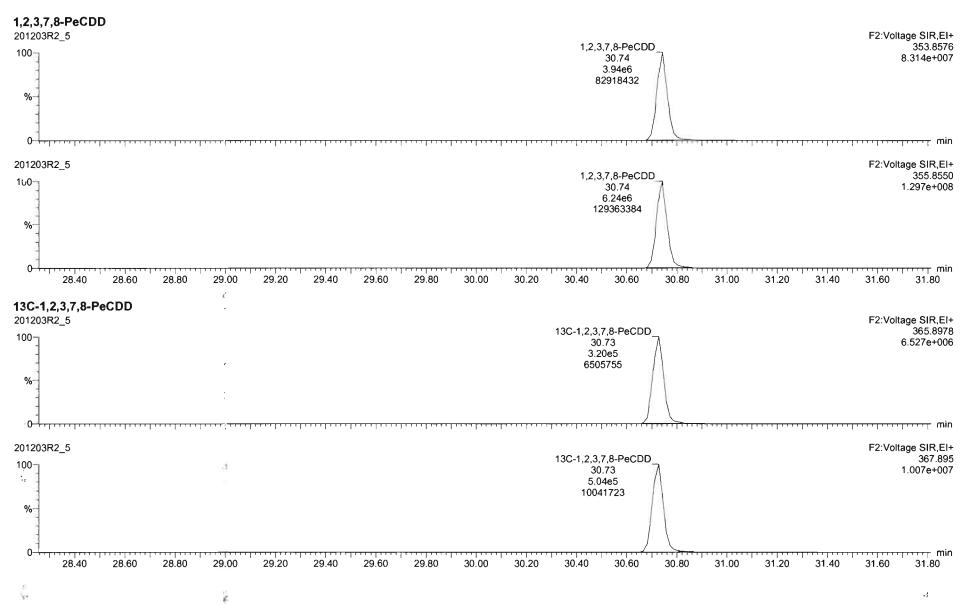
Work Order 2002434

Vista Analytical Laboratory

Dataset: U:\VG12.PRO\Results\201203R2\201203R2_CRV.qld

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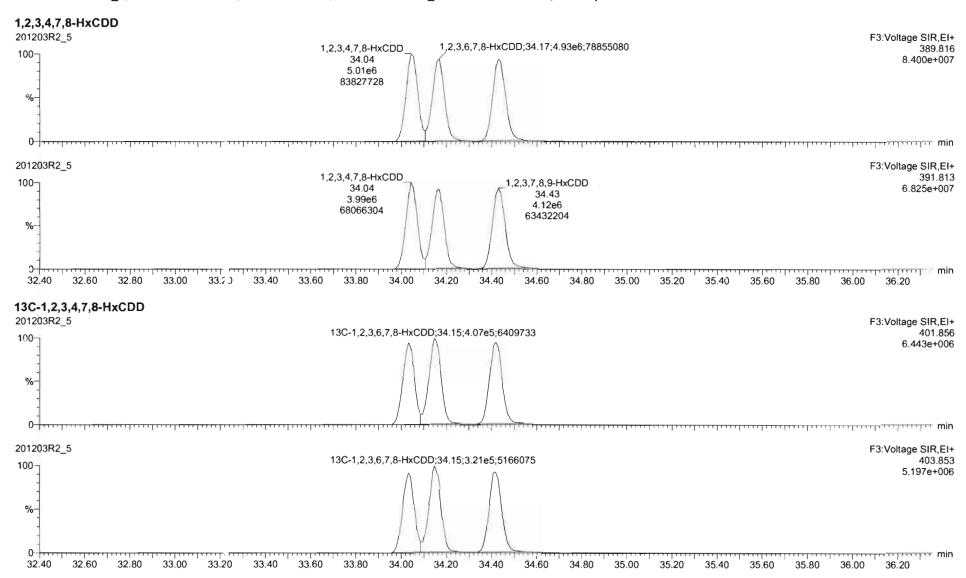


Vista Analytical Laboratory

Dataset: U:\VG12.PRO\Results\201203R2\201203R2_CRV.qld

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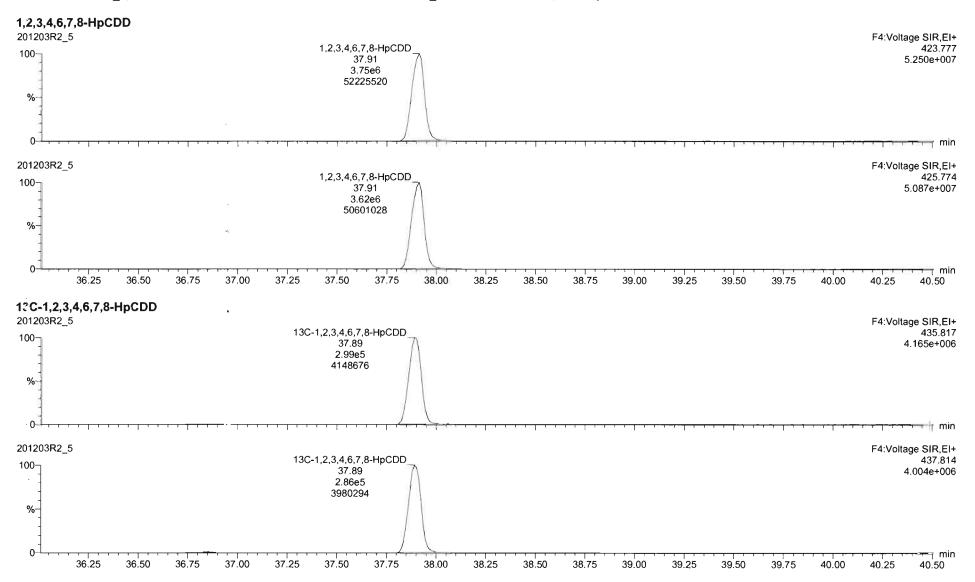
Work Order 2002434 Page 924 of 955

U:\VG12.PRO\Results\201203R2\201203R2_CRV.qld

Last Altered: P inted:

Friday, December 04, 2020 08:58:11 Pacific Standard Time Friday, December 04, 2020 09:59:16 Pacific Standard Time

Name: 201203R2_5, Date: 03-Dec-2020, Time: 13:47:04, ID: ST201203R2_5 1613 CS5 20L0303, Description: 1613 CS5 20L0303



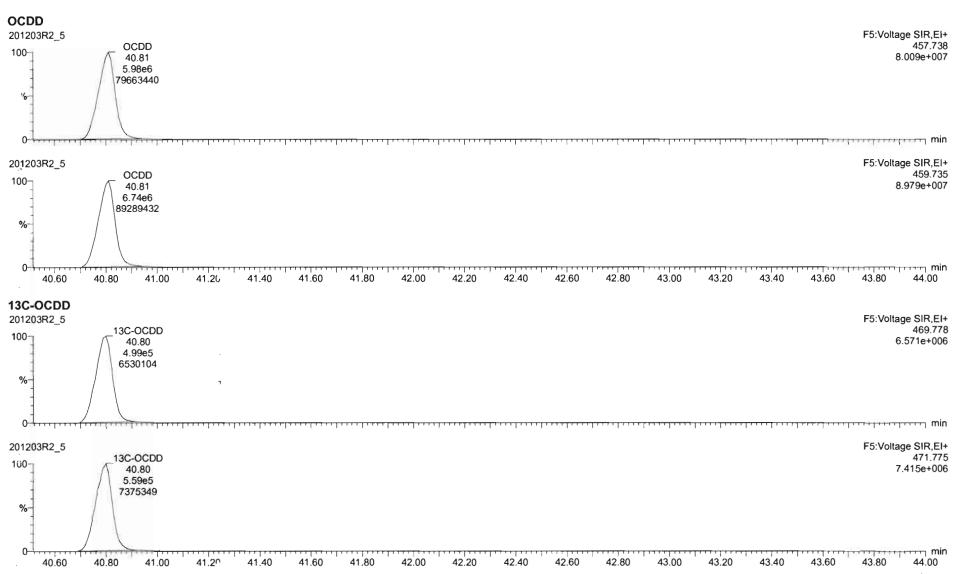
Work Order 2002434

Vista Analytical Laboratory

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Vista Analytical Laboratory

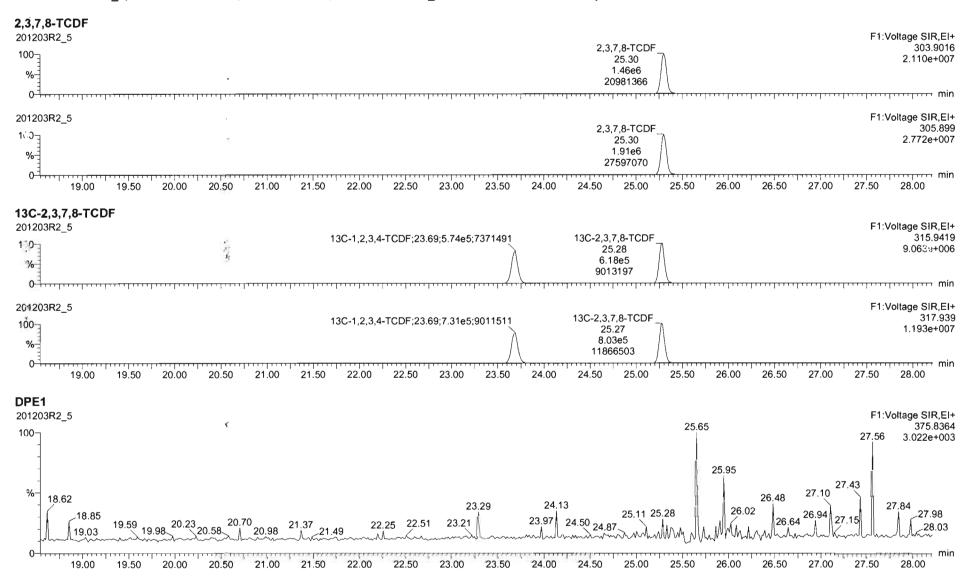
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U:\VG12.PRO\Results\201203R2\201203R2 CRV.qld

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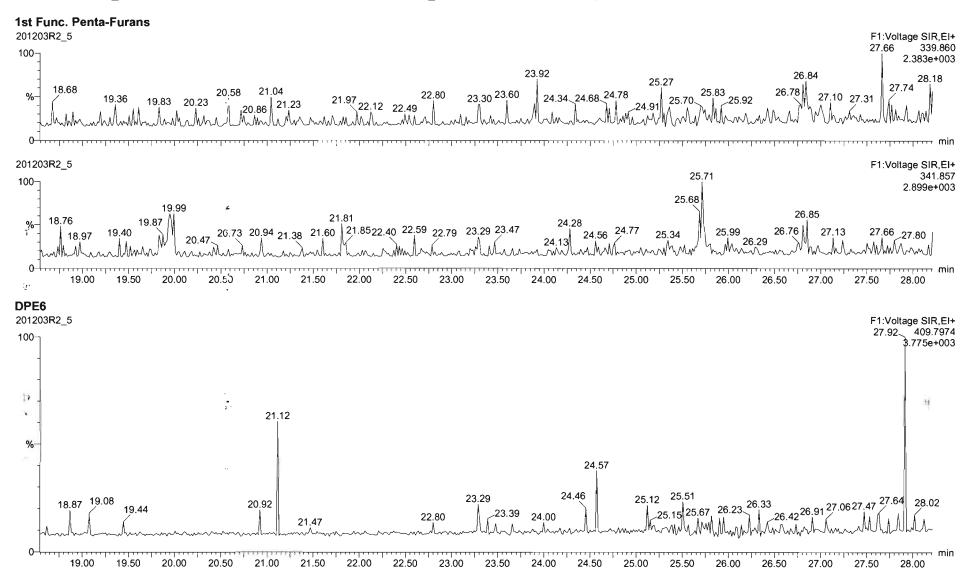


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Last Altered: Printed:

Friday, December 04, 2020 08:58:11 Pacific Standard Time Friday, December 04, 2020 09:59:16 Pacific Standard Time

Name: 201203R2_5, Date: 03-Dec-2020, Time: 13:47:04, ID: ST201203R2_5 1613 CS5 20L0303, Description: 1613 CS5 20L0303



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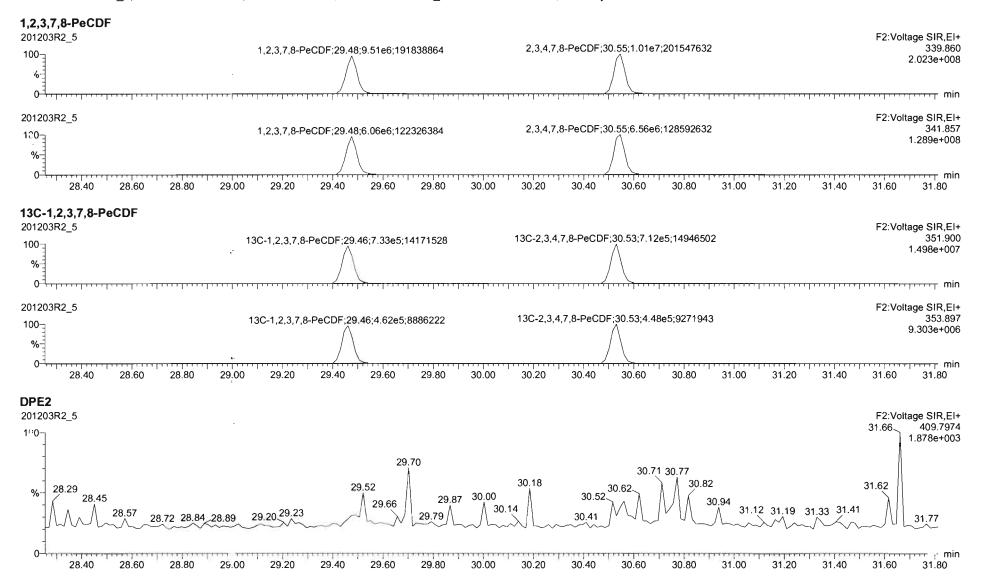
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Friday, December 04, 2020 08:58:11 Pacific Standard Time Friday, December 04, 2020 09:59:16 Pacific Standard Time

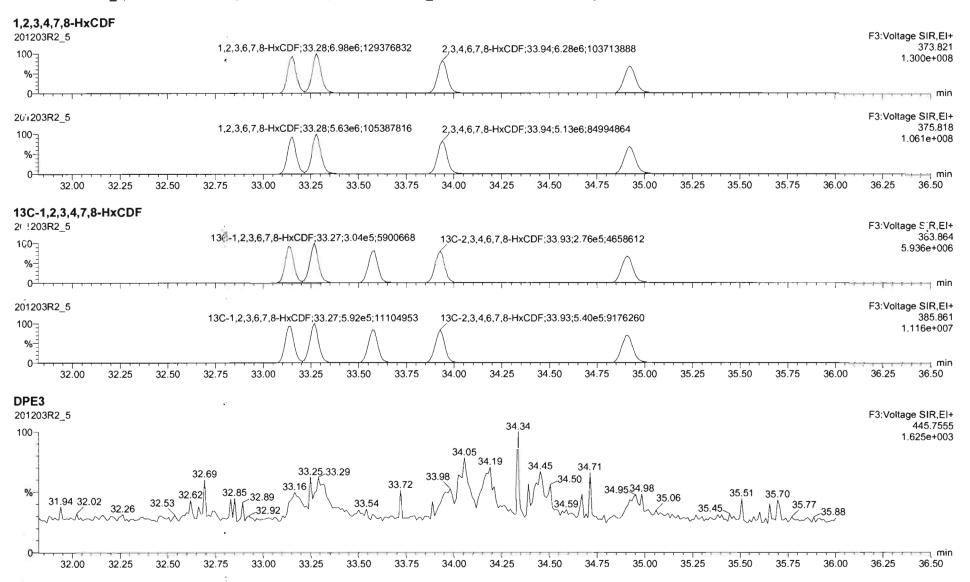
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U:\VG12.PRO\Results\201203R2\201203R2_CRV.qld Dataset:

Last Altered: Friday, December 04, 2020 08:58:11 Pacific Standard Time Friday, December 04, 2020 09:59:16 Pacific Standard Time Printed:

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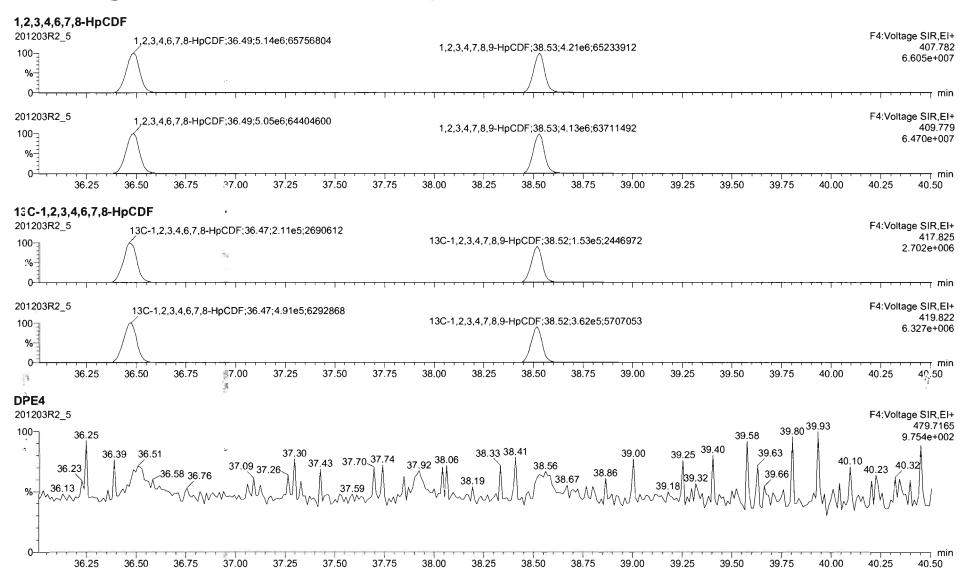
Page 63 of 78

D .taset:

U:\VG12.PRO\Results\201203R2\201203R2 CRV.qld

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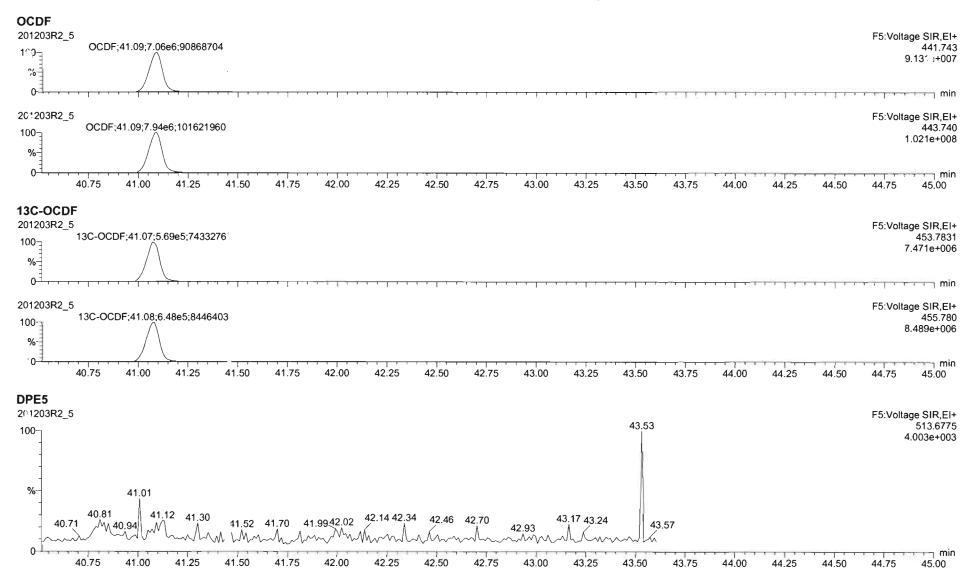
Work Order 2002434 Page 931 of 955

U:\VG12.PRO\Results\201203R2\201203R2_CRV.qld

Last Altered: Punted:

Friday, December 04, 2020 08:58:11 Pacific Standard Time Friday, December 04, 2020 09:59:16 Pacific Standard Time

Name: 201203R2_5, Date: 03-Dec-2020, Time: 13:47:04, ID: ST201203R2_5 1613 CS5 20L0303, Description: 1613 CS5 20L0303

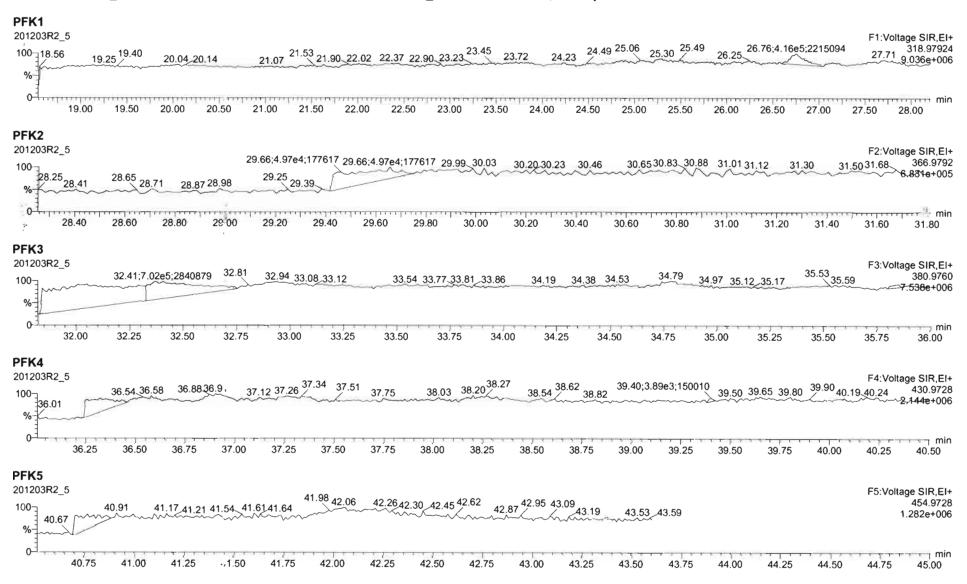


Quantify Sample Report Vista Analytical Laboratory

Dataset: U:\VG12.PRO\Results\201203R2\201203R2_CRV.qld

Last Altered: Friday, December 04, 2020 08:58:11 Pacific Standard Time Friday, December 04, 2020 09:59:16 Pacific Standard Time

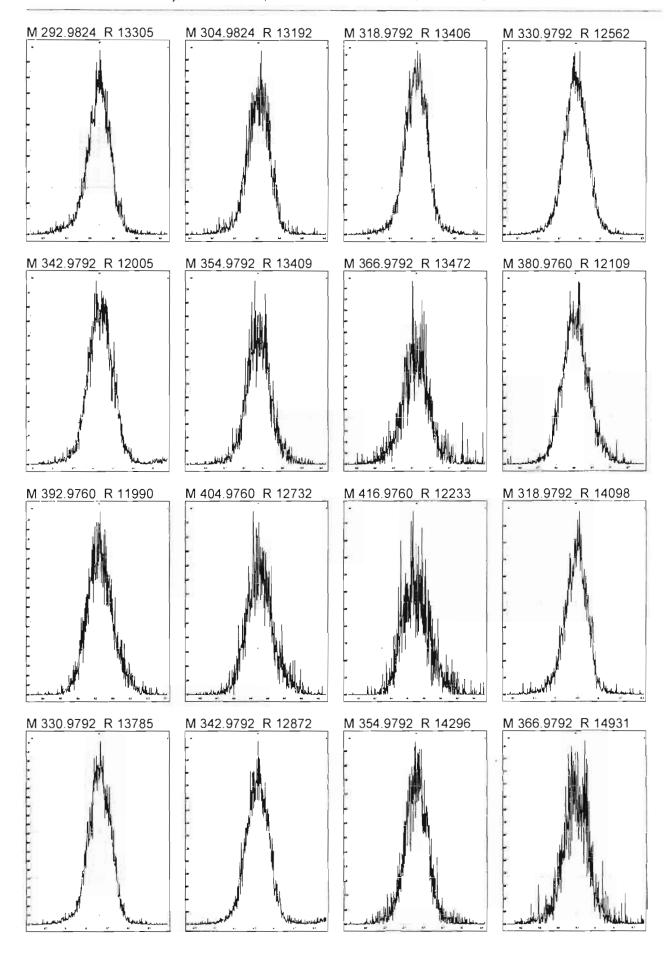
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Work Order 2002434

Printed:

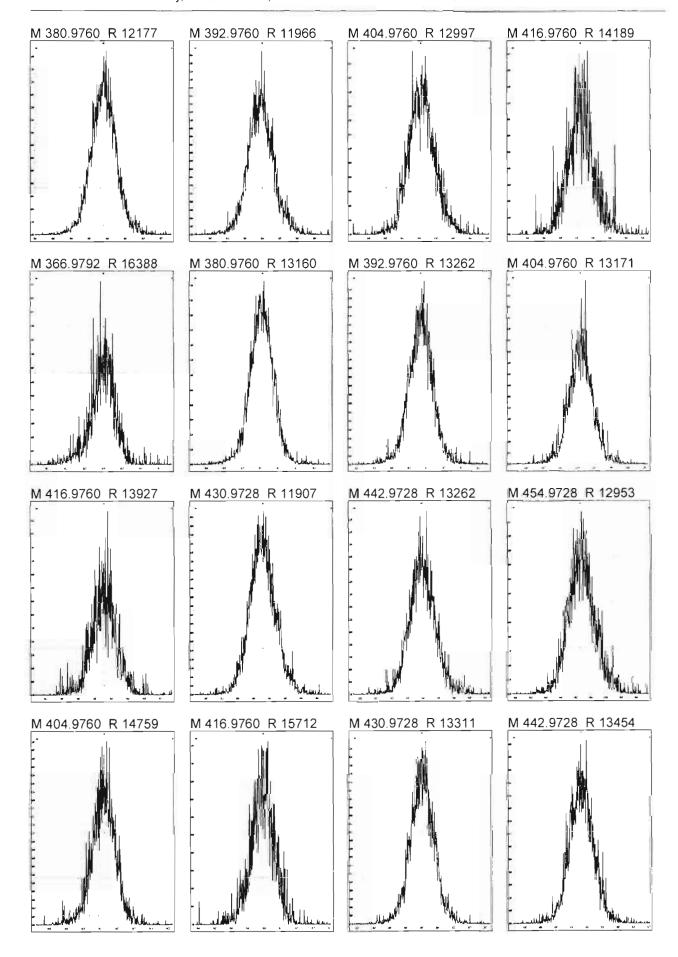
Thursday, December 03, 2020 17:02:52 Pacific Standard Time



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Printed:

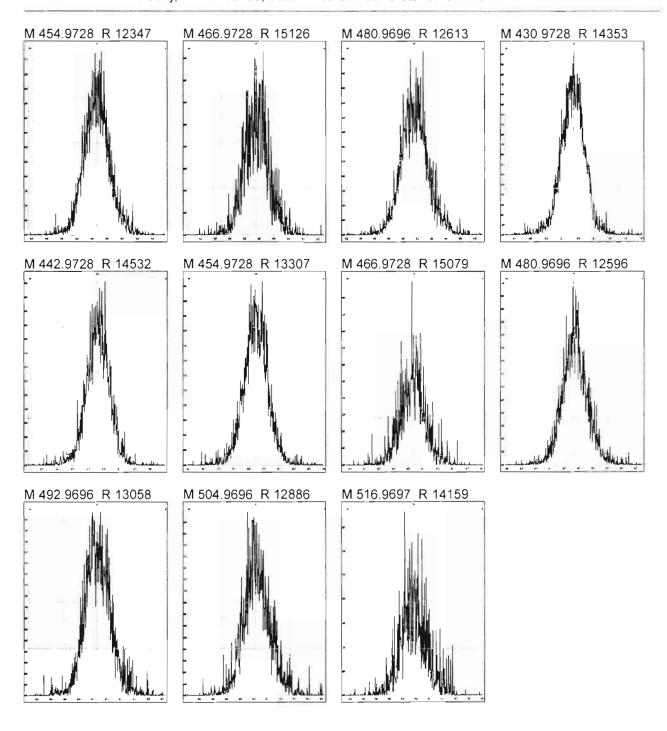
Thursday, December 03, 2020 17:02:52 Pacific Standard Time



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Printed:

Thursday, December 03, 2020 17:02:52 Pacific Standard Time



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MassLynx 4.1 SCN815

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Dataset:

U:\VG12.PRO\Results\201203R2\201203R2_8.qld

Last Altered:

Friday, December 04, 2020 11:51:09 Pacific Standard Time

Printed:

Friday, December 04, 2020 11:57:34 Pacific Standard Time

HN 12/04/2020 GRB 12/08/2020

Method: U:\VG12.PRO\MethDB\1613rrt-11-11-20.mdb 12 Nov 2020 07:51:39 Calibration: U:\VG12.PRO\CurveDB\dbDIOXIN_1613vg12-12-03-20.cdb 04 Dec 2020 11:36:07

Name: 201203R2_8, Date: 03-Dec-2020, Time: 16:09:07, ID: SS201203R2_1 1613 SSS 20K1907, Description: 1613 SSS 20K1907

	# Name	Resp	RA	n/y	RRF	wt/vol	Pred.RT	RT	Pred.RRT	RRT	Conc.	%Rec	DL	EMPC
1	1 2,3,7,8-TCDD	8.12e4	0.75	NO	0.980	1.000	26.008	26.01	1.001	1.001	11.221	112 50-	 50% 0.0338	11.2
2	2 1,2,3,7,8-PeCDD	2.78e5	0.63	NO	0.932	1.000	30.751	30.76	1.000	1.000	57.143	114	0.109	57.1
3	3 1,2,3,4,7,8-HxCDD	2.27e5	1.26	NO	1.02	1.000	34.053	34.05	1.000	1.000	57.544	115	0.126	57.5
4	4 1,2,3,6,7,8-HxCDD	2.58e5	1.25	NO	0.902	1.000	34.168	34.18	1.000	1.001	62.459	125	0.119	62.5
5	5 1,2,3,7,8,9-HxCDD	2.43e5	1.27	NO	0.954	1.000	34.440	34.45	1.000	1.001	58.002	116	0.129	58.0
6	6 1,2,3,4,6,7,8-HpCDD	1.75e5	1.04	NO	0.918	1.000	37.902	37.91	1.000	1.000	54.920	110	0.206	54.9
7	7 OCDD .	3.13e5	0.90	NO	0.866	1.000	40.810	40.81	1.000	1.000	123.69	124	0.226	124
8	8 2,3,7,8-TCDF	1.01e5	0.74	NO	0.848	1.000	25.292	25.30	1.000	1.001	10.949	109	0.0323	10.9
9	9 1,2,3,7,8-PeCDF	4.31e5	1.59	NO	0.960	1.000	29.485	29.49	1.000	1.001	55.891	112	0.145	55.9
10	10 2,3,4,7,8-PeCDF	5.03e5	1.62	NO	1.07	1.000	30.546	30.56	1.000	1.000	61.255	123	0.126	61.3
11	11 1,2,3,4,7,8-HxCDF	3.21e5	1.24	NO	0.986	1.000	33.153	33.16	1.000	1.000	61.557	123	0.127	61.6
12	12 1,2,3,6,7,8-HxCDF	3.50e5	1.24	NO	1.04	1.000	33.278	33.30	1.000	1.001	58.959	118	0.121	59.0
13	13 2,3,4,6,7,8-HxCDF	3.27e5	1.24	NO	1.02	1.000	33.941	33.95	1.000	1.000	61.252	123	0.143	61.3
14	14 1,2,3,7,8,9-HxCDF	2.66e5	1.23	NO	0.991	1.000	34.922	34.94	1.000	1.001	57.127	114	0.209	57.1
15	15 1,2,3,4,6,7,8-HpCDF	2.70e5	1.01	NO	1.05	1.000	36.490	36.50	1.000	1.00 0	60.349	121	0.233	60.3
16	16 1,2,3,4,7,8,9-HpCDF	1.98e5	1.01	NO	1.18	1.000	38.528	38.54	1.000	1.000	57.224	114	0.262	57.2
17	17 OCDF	3.54e5	0.90	NO	0.896	1.000	41.100	41.10	1.000	1.000	118.85	119	У 0.359	119
18	18 13C-2,3,7,8-TCDD	7.38e5	0.78	NO	1.06	1.000	25.952	25.98	1.030	1.031	101.50	102	0.148	
19	19 13C-1,2,3,7,8-PeCDD	5.22e5	0.62	NO	0.785	1.000	30.648	30.74	1.216	1.220	96.571	96.6	0.135	
20	20 13C-1,2,3,4,7,8-HxCDD	3.8 7 e5	1.28	NO	0.621	1.000	34.048	34.04	1.014	1.014	103.46	103	0.285	
21	21 13C-1,2,3,6,7,8-HxCDD	4.58e5	1.29	NO	0.734	1.000	34.186	34.16	1.018	1.017	103.62	104	0.241	
22	22 13C-1,2,3,7,8,9-HxCDD	4.38e5	1.28	NO	0.723	1.000	34.428	34.43	1.025	1.025	100.66	101	0.245	
23	23 13C-1,2,3,4,6,7,8-HpCDD	3.48e5	1.06	NO	0.568	1.000	37.904	37.90	1.129	1.129	101.76	102	0.392	
24	24 13C-OCDD	5.85e5	0.90	NO	0.496	1.000	40.862	40.81	1.217	1.215	195.89	97.9	0.404	
25	25 13C-2,3,7,8-TCDF	1.08e6	0.78	NO	0.919	1.000	25.276	25.28	1.003	1.004	103.53	104	0.146	
26	26 13C-1,2,3,7,8-PeCDF	8.04e5	1.61	NO	0.715	1.000	29.386	29.48	1.166	1.170	98.865	98.9	0.247	
27	27 13C-2,3,4,7,8-PeCDF	7.69e5	1.59	NO	0.689	1.000	30.439	30.55	1.208	1.212	98.136	98.1	0.256	
28	28 13C-1,2,3,4,7,8-HxCDF	5.30e5	0.51	NO	0.873	1.000	33.142	33.15	0.987	0.987	100.67	101	0.314	
29	29 13C-1,2,3,6,7,8-HxCDF	5.72e5	0.51	NO	0.933	1.000	33.273	3 3 .28	0.991	0.991	101.77	102	0.294	
30	30 13C-2,3,4,6,7,8-HxCDF	5.23e5	0.51	NO	0.843	1.000	33.941	33.94	1.011	1,011	102.97	103	0.326	
31	31_13C-1,2,3,7,8,9-HxCDF	4.69e5	0.51	NO	0.780	1.000	34.935	34.92	1.040	1:040	99.930	99.9	0.352	

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Vista Analytical Laboratory

Dataset: U:\VG12.PRO\Results\201203R2\201203R2_8.qld

Last Altered: Friday, December 04, 2020 11:51:09 Pacific Standard Time Friday, December 04, 2020 11:57:34 Pacific Standard Time

Name: 201203R2_8, Date: 03-Dec-2020, Time: 16:09:07, ID: SS201203R2_1 1613 SSS 20K1907, Description: 1613 SSS 20K1907

18 K.	# Name	Resp	RA	n/y	RRF	wt/vol	Pred.RT	RT	Pred.RRT	RRT	Conc.	%Rec	DL	EMPC
32	32 13C-1,2,3,4,6,7,8-HpCDF	4.26e5	0.42	NO	0.726	1.000	36.500	36.49	1.087	1.086	97.268	97.3	0.265	
5.; 34	33 13C-1,2,3,4,7,8,9-HpCDF	2.94e5	0.42	NO	0.491	1.000	38.532	38.53	1.147	1.147	99.221	99.2	0.391	
34	34 13C-OCDF	6.65e5	0.87	NO	0.565	1.000	41.144	41.09	1.225	1.224	195.35	97.7	0.348	
35	35 37CI-2,3,7,8-TCDD	9.13e4			1.22	1.000	25.952	25.99	1.030	1.032	10.891	109	0.0217	
36	36 13C-1,2,3,4-TCDD	6.89e5	0.77	NO	1.00	1.000	25.370	25.20	1.000	1.000	100.00	100	0.157	
37	37 13C-1,2,3,4-TCDF	1.14e6	0.78	NO	1.00	1.000	23.870	23.67	1.000	1.000	100.00	100	0.134	
38	38 13C-1,2,3,4,6,9-HxCDF	6.02e5	0.51	NO	1.00	1.000	33.710	33.58	1.000	1.000	100.00	100	0.274	

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Dataset:

U:\VG12.PRO\Results\201203R2\201203R2 8.gld

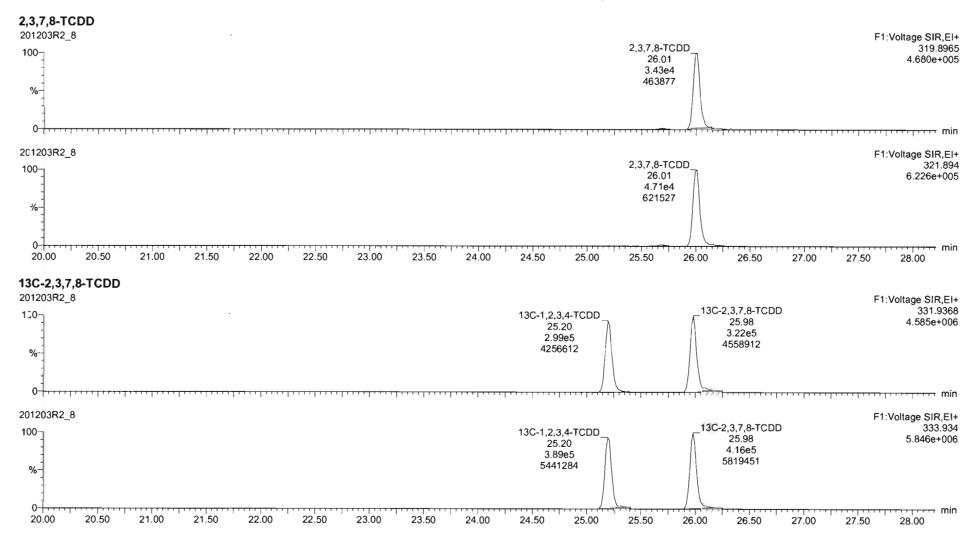
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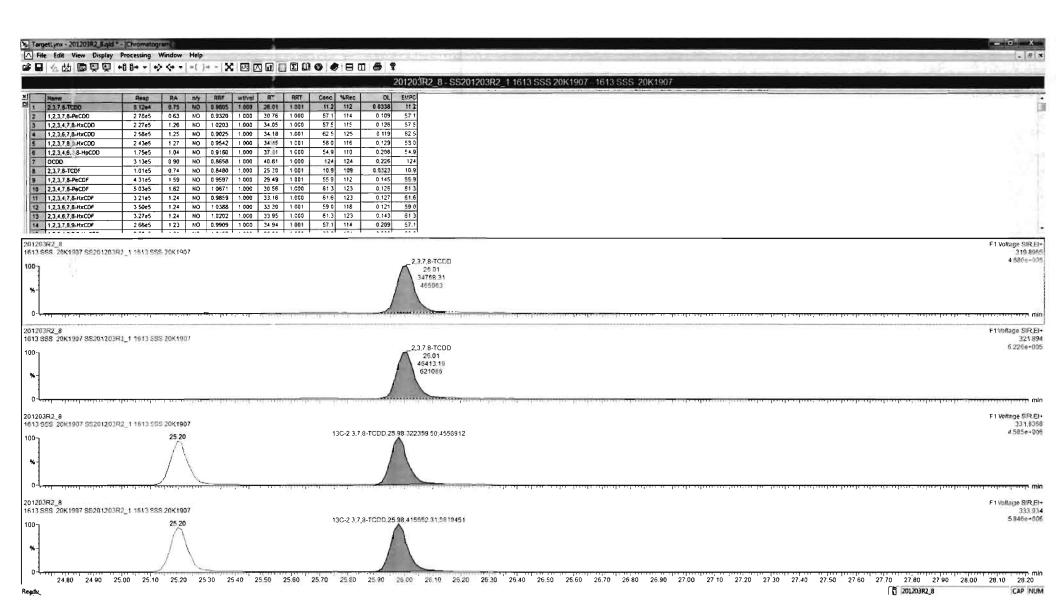
Friday, December 04, 2020 11:47:08 Pacific Standard Time Friday, December 04, 2020 11:48:25 Pacific Standard Time

Method: U:\VG12.PRO\MethDB\1613rrt-11-11-20.mdb 12 Nov 2020 07:51:39

Calibration: U:\VG12.PRO\CurveDB\dbDlOXIN_1613vg12-12-03-20.cdb 04 Dec 2020 11:36:07

Name: 201203R2_8, Date: 03-Dec-2020, Time: 16:09:07, ID: SS201203R2_1 1613 SSS 20K1907, Description: 1613 SSS 20K1907





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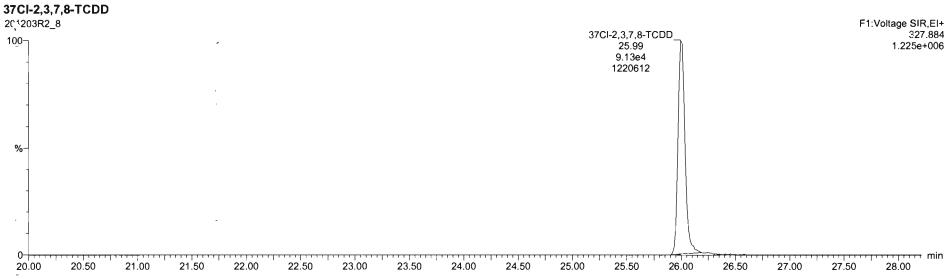
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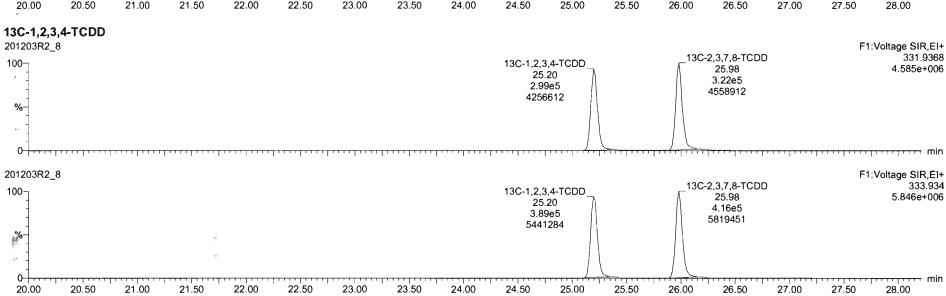
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Last Altered: Printed:

Friday, December 04, 2020 11:47:08 Pacific Standard Time Friday, December 04, 2020 11:48:25 Pacific Standard Time

Name: 201203R2_8, Date: 03-Dec-2020, Time: 16:09:07, ID: SS201203R2_1 1613 SSS 20K1907, Description: 1613 SSS 20K1907



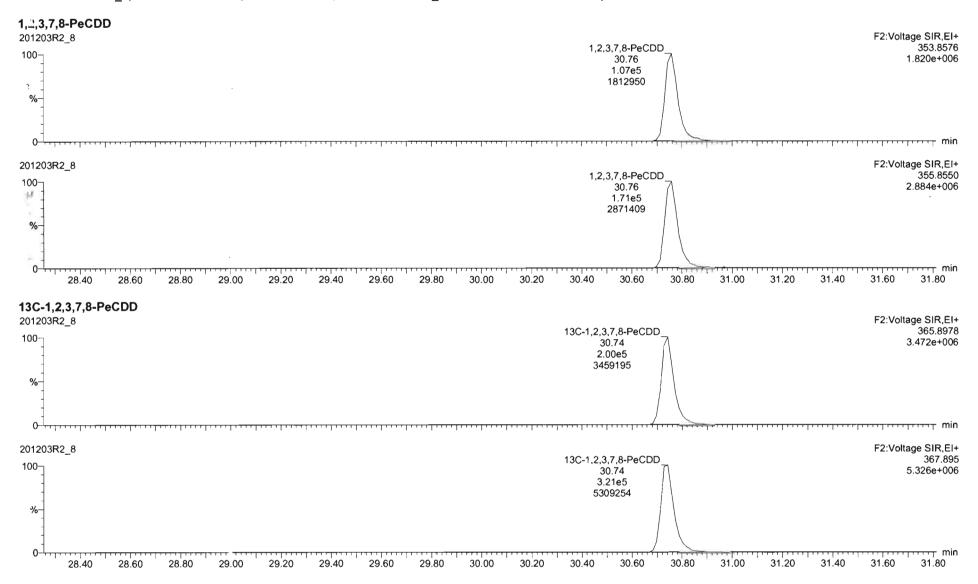


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Dataset:

U:\VG12.PRO\Results\201203R2\201203R2_8.qld

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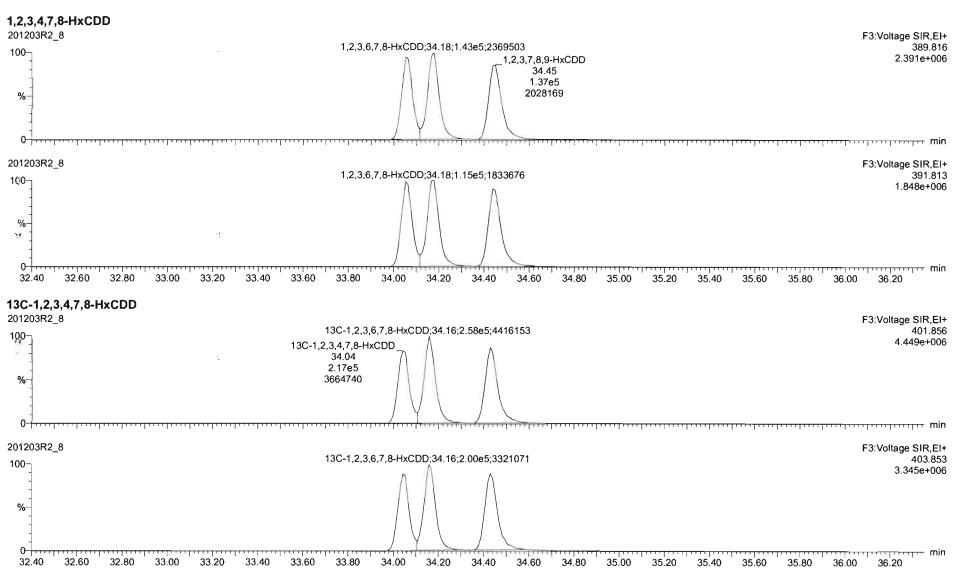


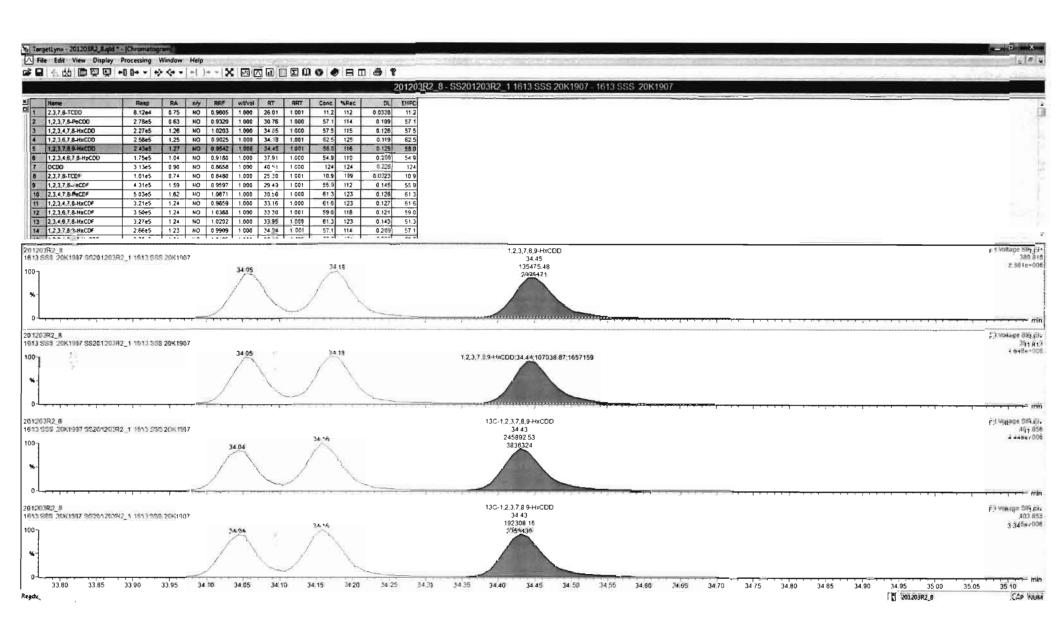
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Last Altered: Printed:

Friday, December 04, 2020 11:47:08 Pacific Standard Time Friday, December 04, 2020 11:48:25 Pacific Standard Time

Name: 201203R2_8, Date: 03-Dec-2020, Time: 16:09:07, ID: SS201203R2_1 1613 SSS 20K1907, Description: 1613 SSS 20K1907





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Vista Analytical Laboratory

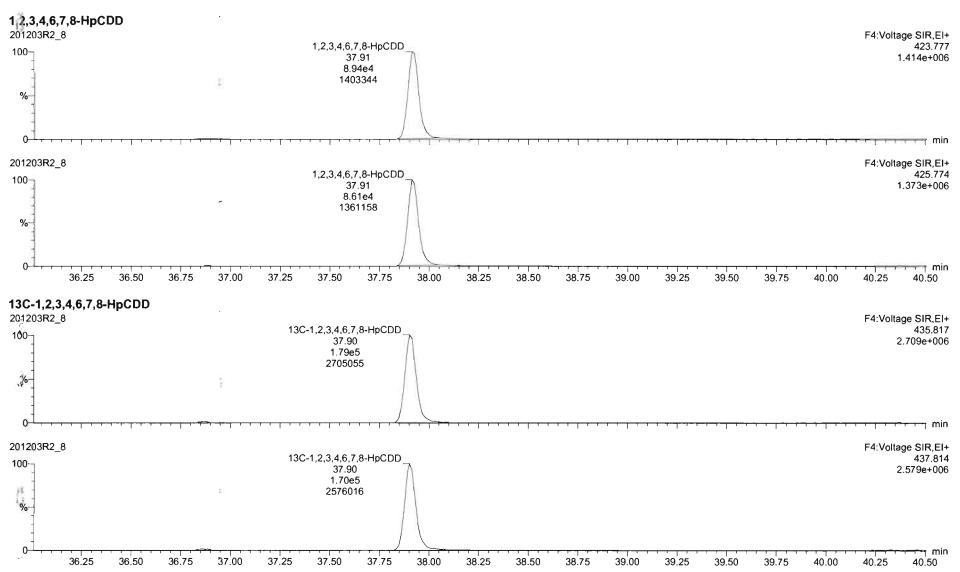
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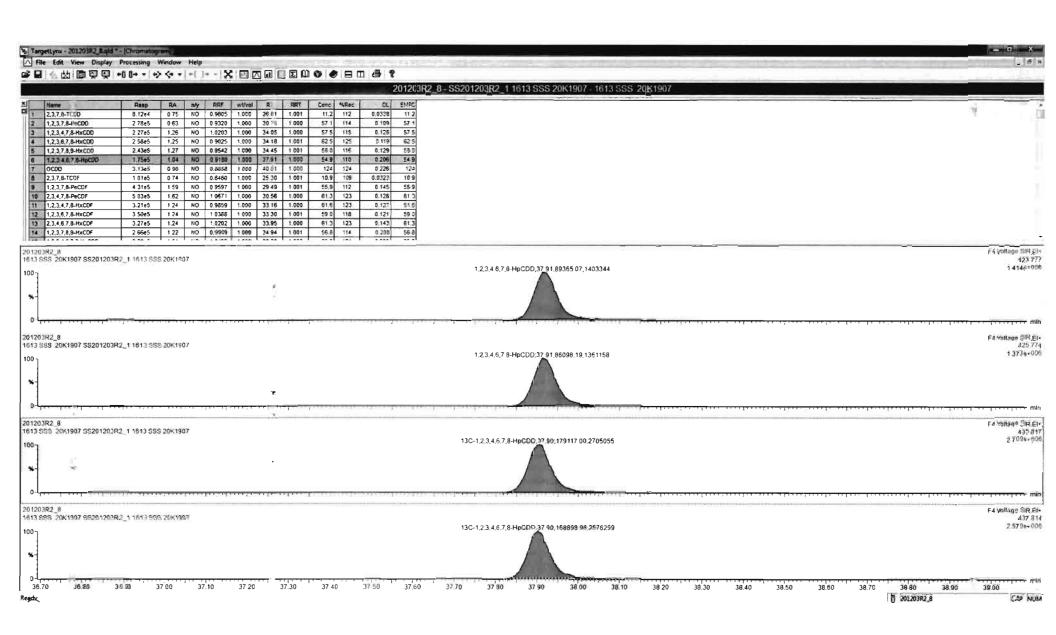
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Last Altered: Printed:

Friday, December 04, 2020 11:47:08 Pacific Standard Time Friday, December 04, 2020 11:48:25 Pacific Standard Time

Name: 201203R2_8, Date: 03-Dec-2020, Time: 16:09:07, ID: SS201203R2_1 1613 SSS 20K1907, Description: 1613 SSS 20K1907



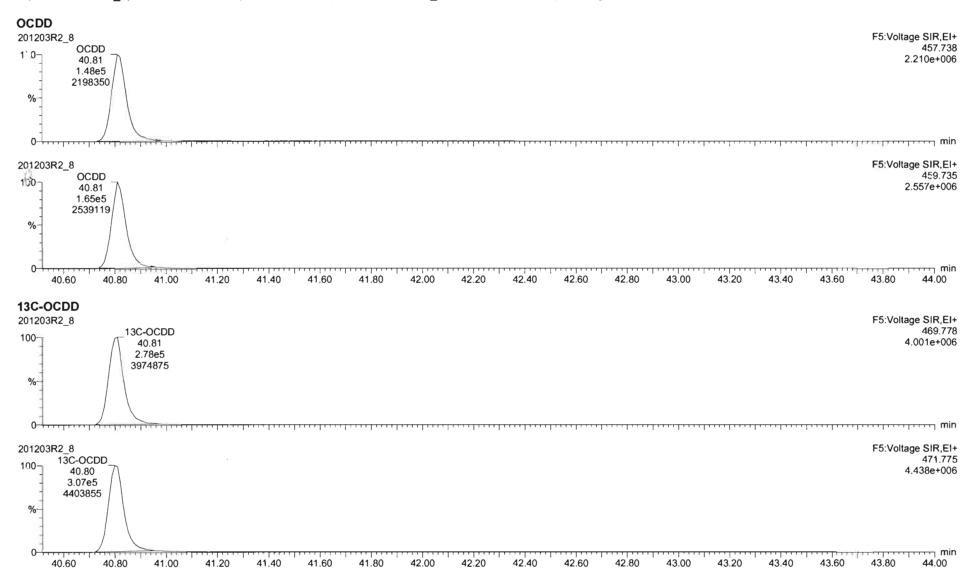


Work Order 2002434 Page 946 of 955

Dataset: U:\VG12.PRO\Results\201203R2\201203R2_8.qld

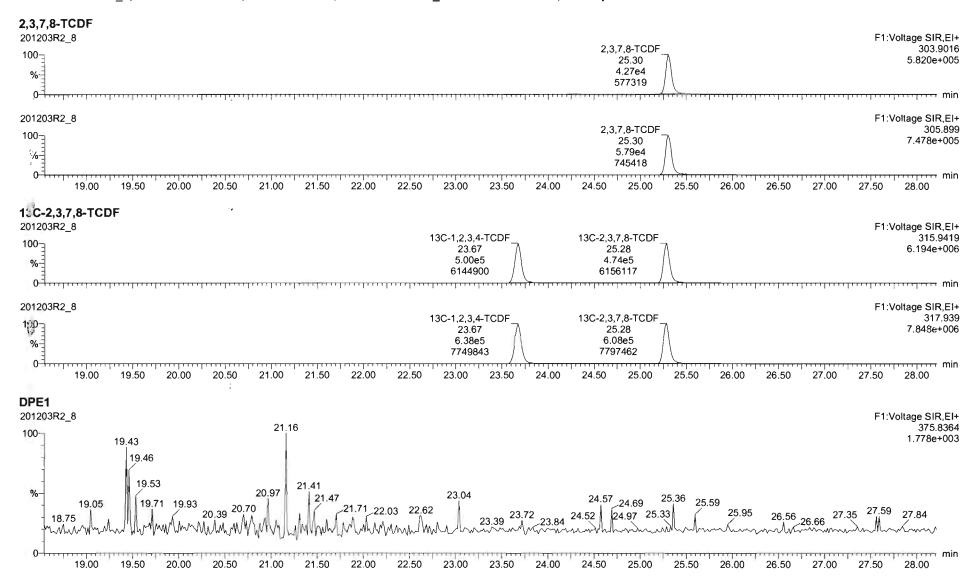
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Name: 201203R2_8, Date: 03-Dec-2020, Time: 16:09:07, ID: SS201203R2_1 1613 SSS 20K1907, Description: 1613 SSS 20K1907



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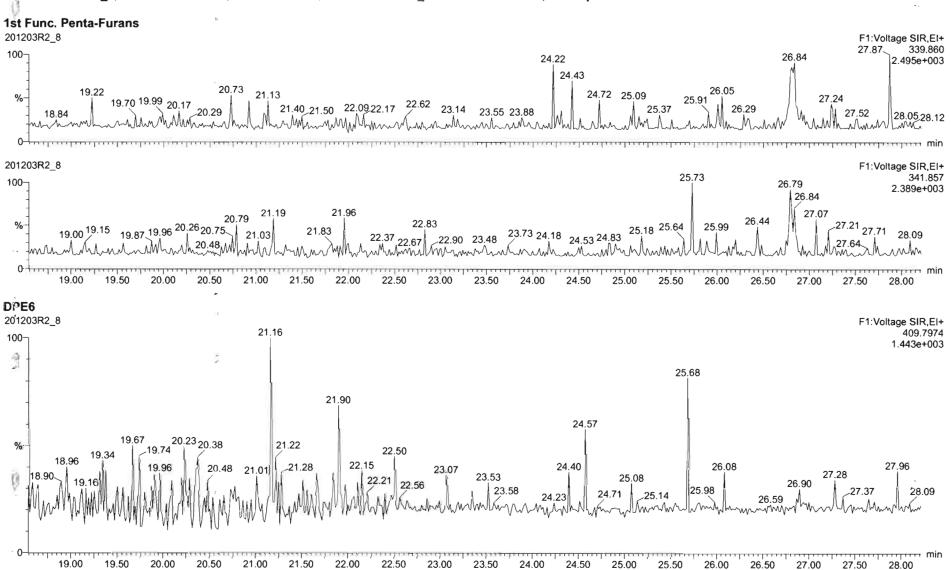


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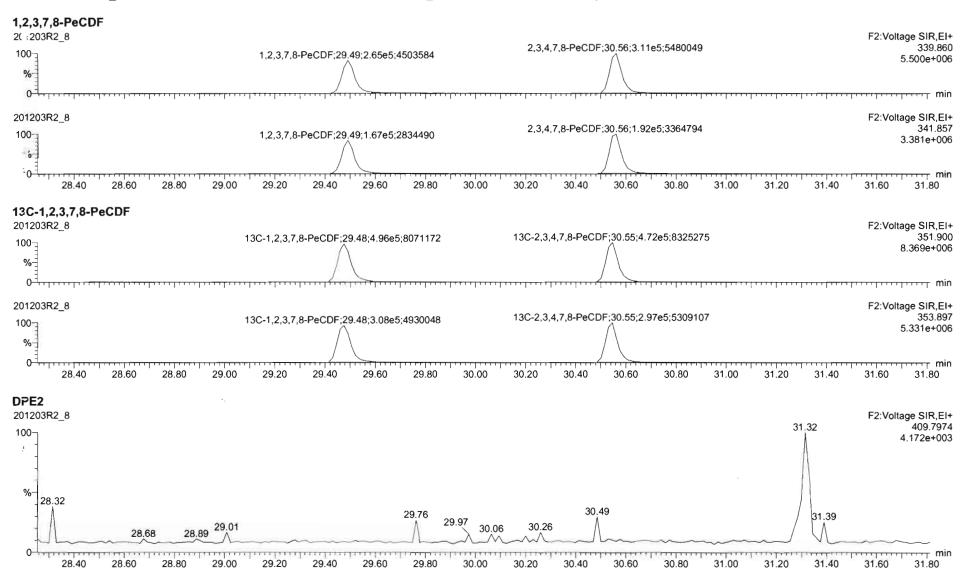


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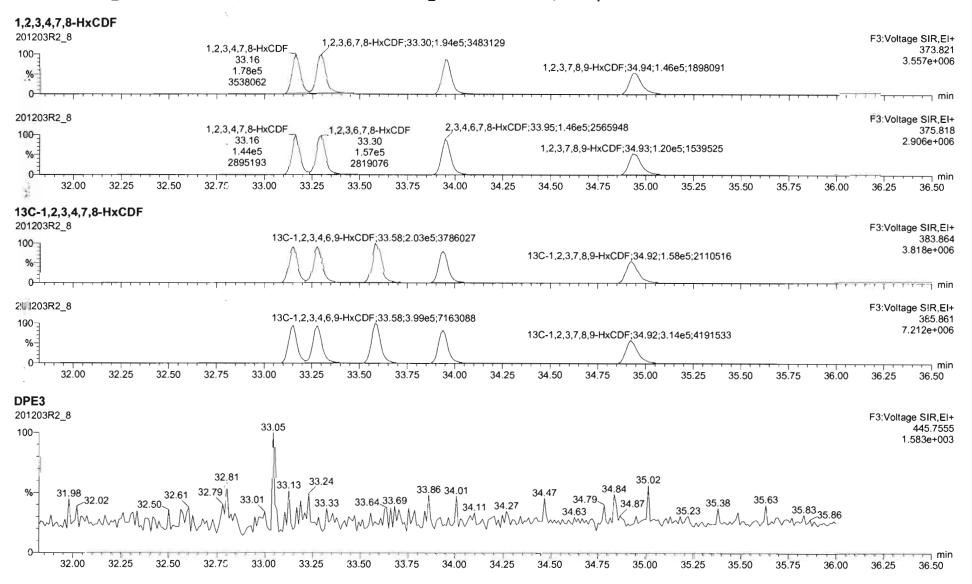
Friday, December 04, 2020 11:47:08 Pacific Standard Time Friday, December 04, 2020 11:48:25 Pacific Standard Time

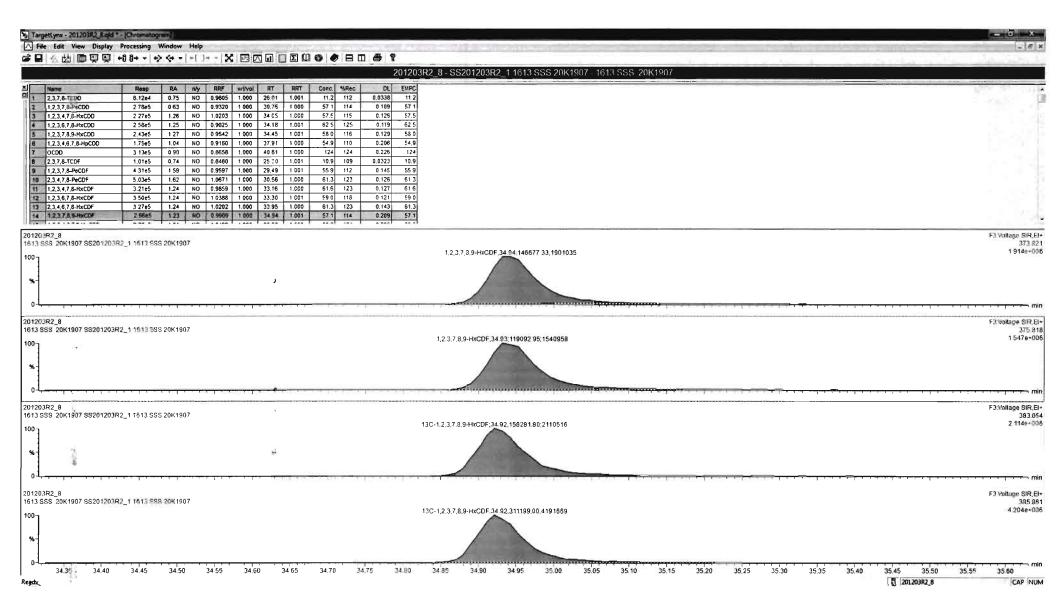


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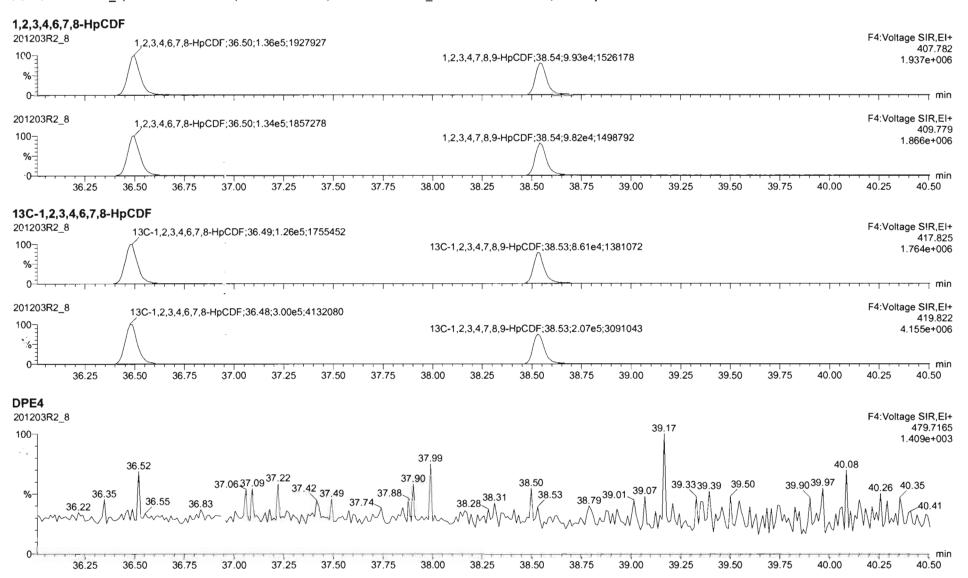




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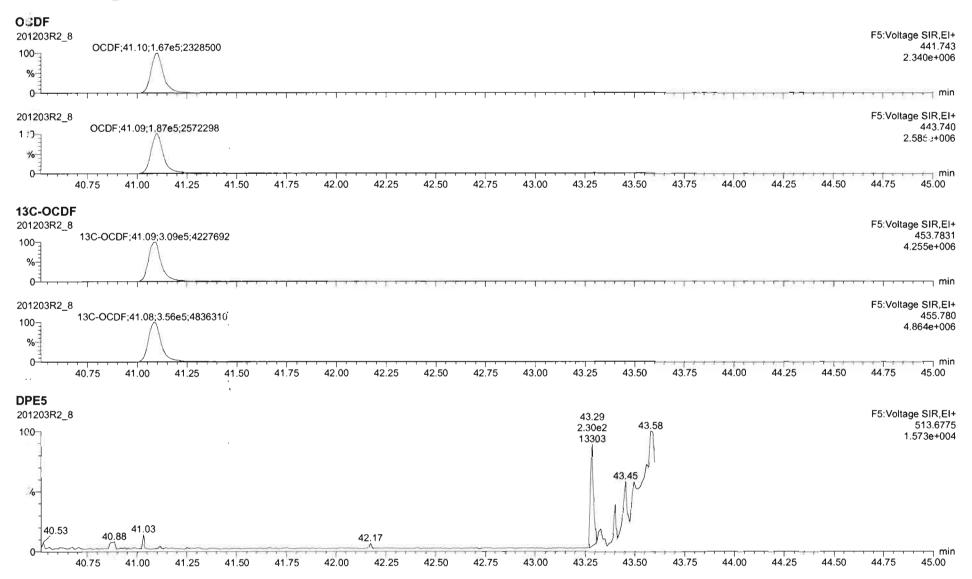


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Name: 201203R2_8, Date: 03-Dec-2020, Time: 16:09:07, ID: SS201203R2_1 1613 SSS 20K1907, Description: 1613 SSS 20K1907



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Dataset: U:\VG12.PRO\Results\201203R2\201203R2_8.qld

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