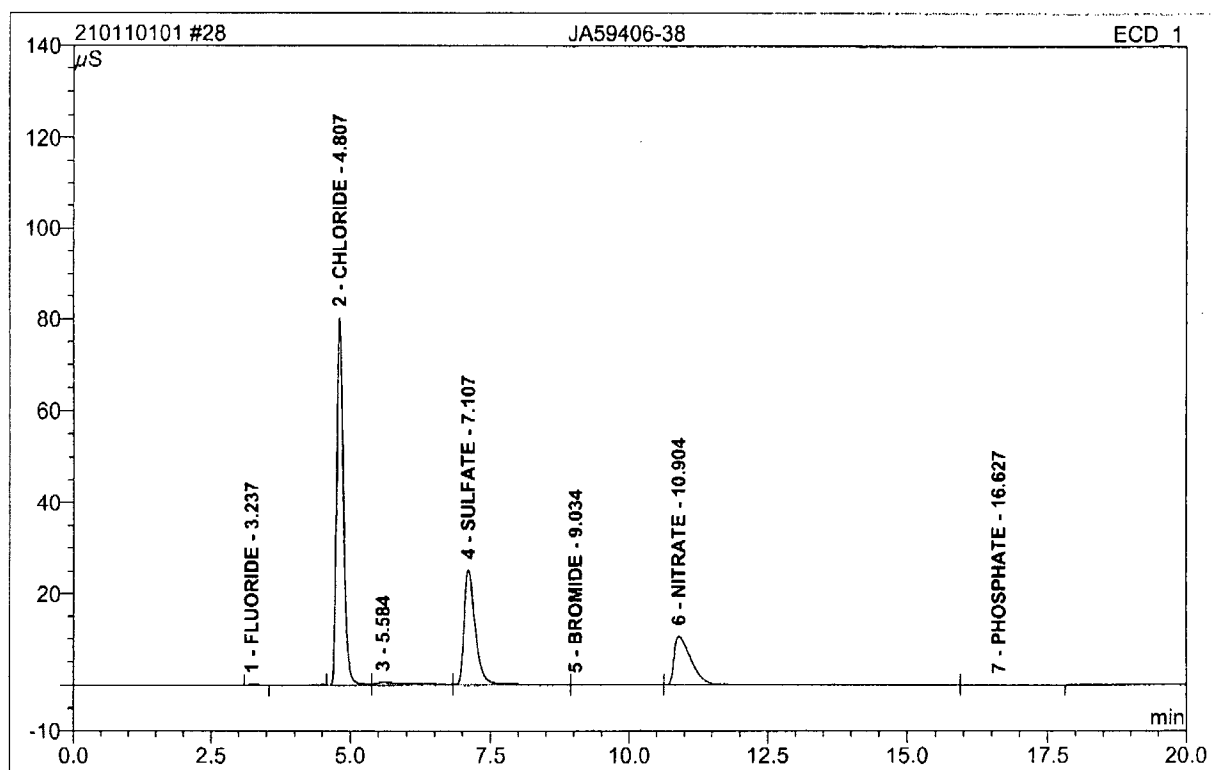


**28 JA59406-38**

Sample Name:	JA59406-38	Injection Volume:	20.0
Vial Number:	21	Channel:	ECD_1
Sample Type:	unknown	Wavelength:	n.a.
Control Program:	Anions2_ASDV	Bandwidth:	n.a.
Quantif. Method:	ANIONS2	Dilution Factor:	1.0000
Recording Time:	11/1/2010 17:41	Sample Weight:	1.0000
Run Time (min):	21.00	Sample Amount:	1.0000

14.7  
14

No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	3.24	FLUORIDE	0.134	0.017	0.08	0.041	BMB
2	4.81	CHLORIDE	80.182	11.015	51.68	46.375	BM
3	5.58	n.a.	0.567	0.419	1.97	n.a.	M
4	7.11	SULFATE	25.268	5.950	27.92	32.911	M
5	9.03	BROMIDE	0.079	0.086	0.40	0.730	M
6	10.90	NITRATE	10.564	3.820	17.93	6.770	Mb
7	16.63	PHOSPHATE	0.006	0.006	0.03	0.019	bMB
<b>Total:</b>			116.800	21.313	100.00	86.845	

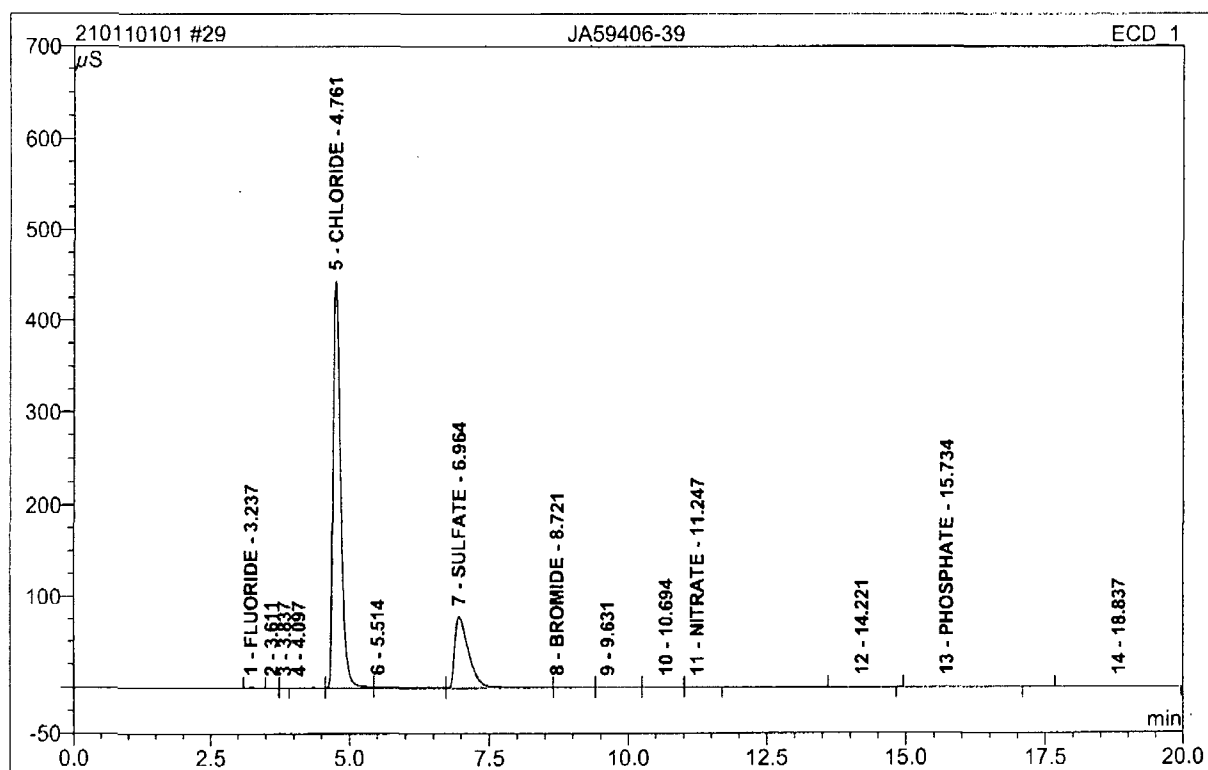
anions/Integration

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Version 6.80 SR9a Build 2680 (163077)

**29 JA59406-39**

Sample Name: **JA59406-39**  
 Vial Number: **22**  
 Sample Type: **unknown**  
 Control Program: **Anions2\_ASDV**  
 Quantif. Method: **ANIONS2**  
 Recording Time: **11/1/2010 18:05**  
 Run Time (min): **21.00**

Injection Volume: **20.0**  
 Channel: **ECD\_1**  
 Wavelength: **n.a.**  
 Bandwidth: **n.a.**  
 Dilution Factor: **1.0000**  
 Sample Weight: **1.0000**  
 Sample Amount: **1.0000**

14.7  
14

No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	3.24	FLUORIDE	0.651	0.137	0.15	0.341	BM
2	3.61	n.a.	0.026	0.003	0.00	n.a.	Rd
3	3.84	n.a.	0.012	0.001	0.00	n.a.	Ru
4	4.10	n.a.	0.136	0.087	0.09	n.a.	M
5	4.76	CHLORIDE	443.092	69.455	74.75	292.419	M
6	5.51	n.a.	1.067	0.815	0.88	n.a.	M
7	6.96	SULFATE	77.903	22.192	23.88	122.750	M
8	8.72	BROMIDE	0.190	0.104	0.11	0.880	M
9	9.63	n.a.	0.104	0.044	0.05	n.a.	Mb
10	10.69	n.a.	0.024	0.008	0.01	n.a.	bMb
11	11.25	NITRATE	0.044	0.012	0.01	0.020	bMB

anions/Integration

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12	14.22	n.a.	0.025	0.013	0.01	n.a.	BMB
13	15.73	PHOSPHATE	0.021	0.015	0.02	0.048	BMB
14	18.84	n.a.	0.039	0.028	0.03	n.a.	BMB
Total:			523.336	92.914	100.00	416.457	

14.7

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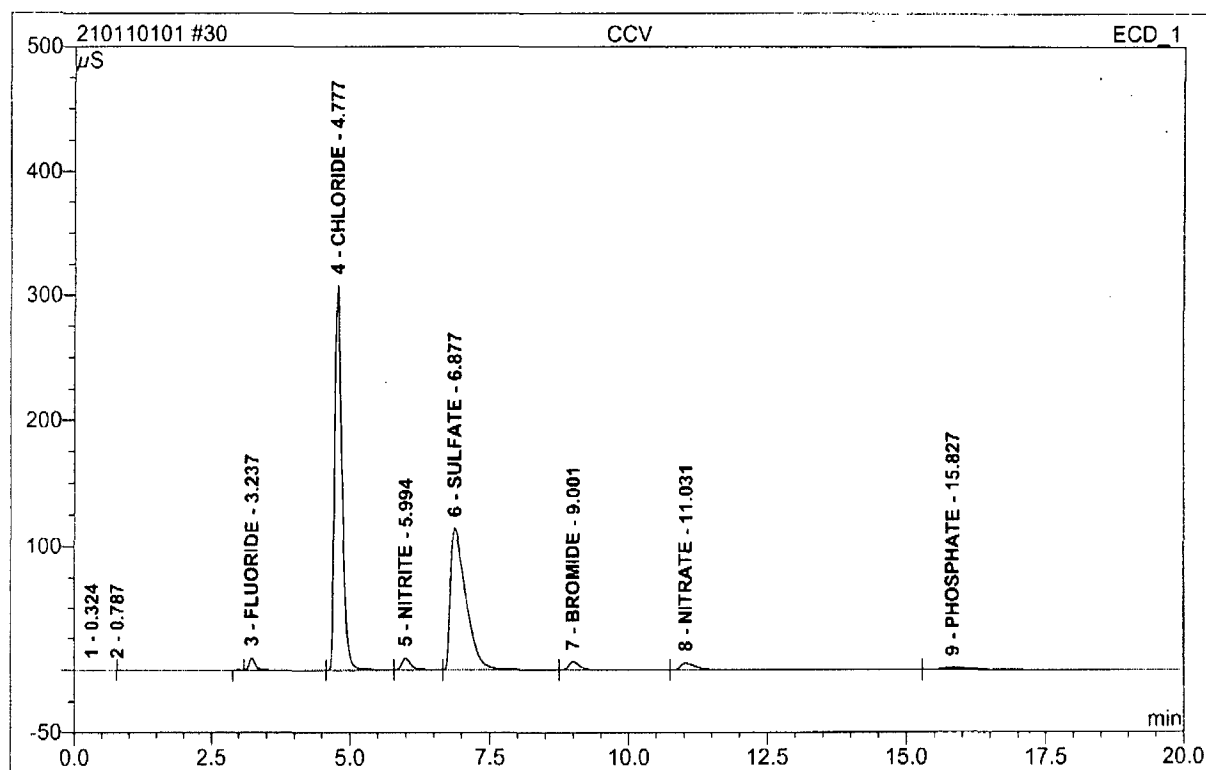
anions/Integration

Chromeleon (c) Dionex 1996-2001  
Version 6.80 SR9a Build 2680 (163077)

Operator:Chemistry Timebase:ACCUTEST\_SYS#2 Sequence:210110101

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11/2/2010 9:02 AM**30 CCV**

Sample Name:	CCV	Injection Volume:	20.0
Vial Number:	23	Channel:	ECD_1
Sample Type:	unknown	Wavelength:	n.a.
Control Program:	Anions2_ASDV	Bandwidth:	n.a.
Quantif. Method:	ANIONS2	Dilution Factor:	1.0000
Recording Time:	11/1/2010 18:29	Sample Weight:	1.0000
Run Time (min):	21.00	Sample Amount:	1.0000



No.	Ret.Time min	Peak Name	Height μS	Area μS*min	Rel.Area %	Amount	Type
1	0.32	n.a.	0.004	0.002	0.00	n.a.	BMB
2	0.79	n.a.	0.000	0.025	0.03	n.a.	BMB
3	3.24	FLUORIDE	9.732	1.234	1.33	3.077	BM
4	4.78	CHLORIDE	308.131	47.223	51.02	198.816	M
5	5.99	NITRITE	9.555	2.035	2.20	3.026	M
6	6.88	SULFATE	114.726	37.106	40.09	205.242	M
7	9.00	BROMIDE	6.944	1.931	2.09	16.366	M
8	11.03	NITRATE	5.512	1.958	2.12	3.469	M
9	15.83	PHOSPHATE	1.537	1.043	1.13	3.392	MB
<b>Total:</b>			456.142	92.557	100.00	433.389	

% Rec

99.5

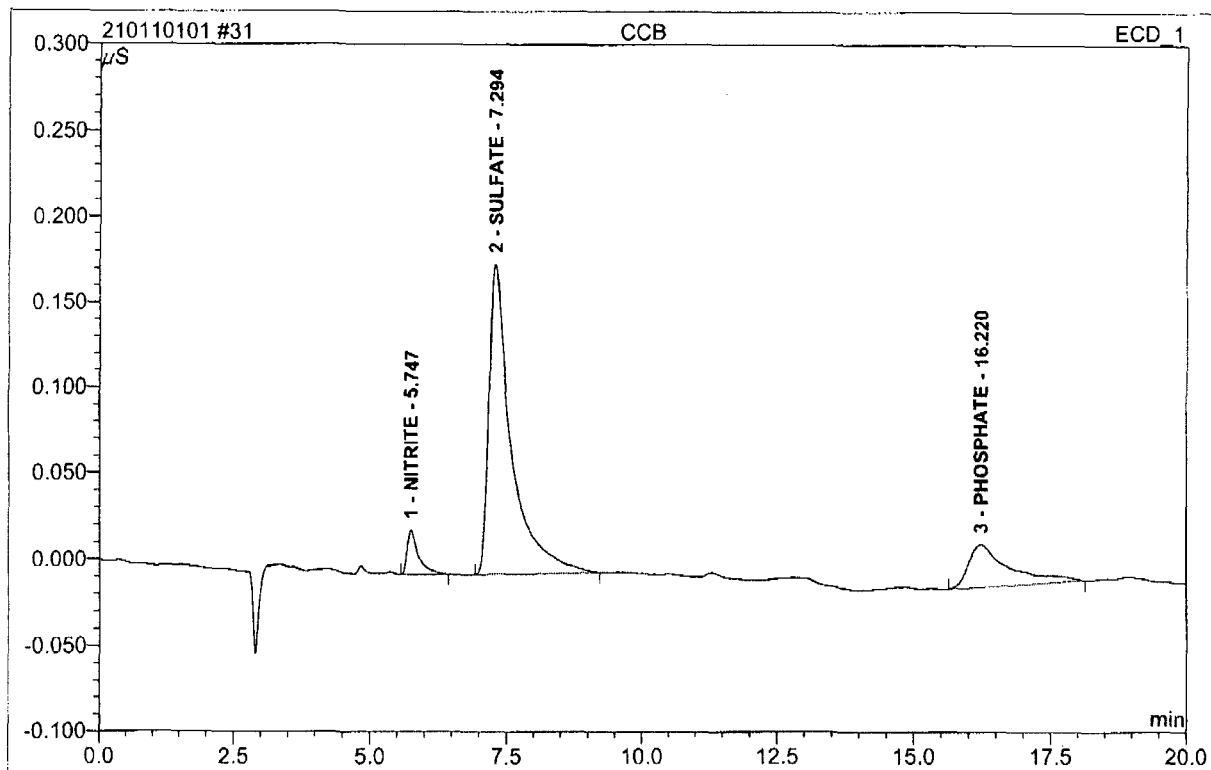
102.5

anions/Integration

Chromeleon (c) Dionex 1996-2001  
Version 6.80 SR9a Build 2680 (163077)

**31 CCB**

Sample Name:	CCB	Injection Volume:	20.0
Vial Number:	24	Channel:	ECD_1
Sample Type:	unknown	Wavelength:	n.a.
Control Program:	Anions2_ASDV	Bandwidth:	n.a.
Quantif. Method:	ANIONS2	Dilution Factor:	1.0000
Recording Time:	11/1/2010 18:53	Sample Weight:	1.0000
Run Time (min):	21.00	Sample Amount:	1.0000

14.7  
14

No.	Ret.Time min	Peak Name	Height μS	Area μS*min	Rel.Area %	Amount	Type
1	5.75	NITRITE	0.026	0.006	5.41	0.009	BMB
2	7.29	SULFATE	0.181	0.086	75.51	0.476	BMB
3	16.22	PHOSPHATE	0.025	0.022	19.09	0.071	BMB
<b>Total:</b>			0.231	0.114	100.00	0.556	

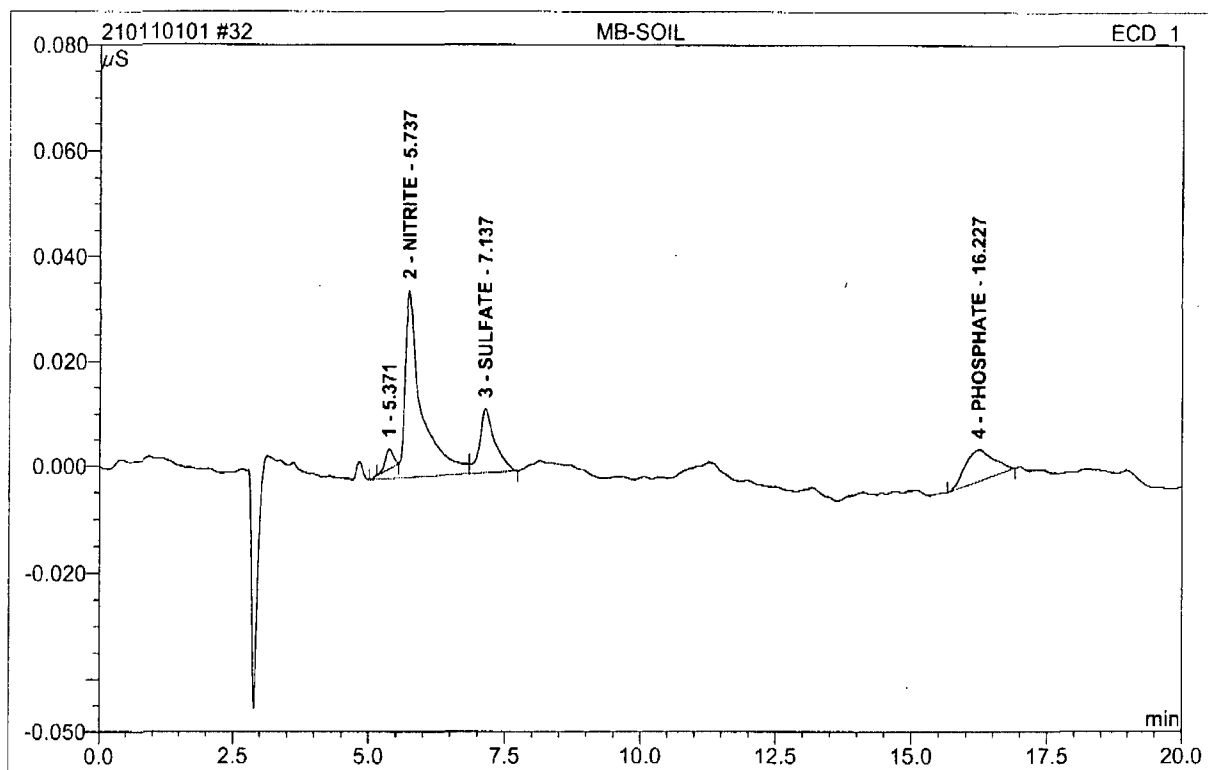
anions/Integration

Chromeleon (c) Dionex 1996-2001  
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11/2/2010 9:02 AM**32 MB-SOIL**

Sample Name:	MB-SOIL	Injection Volume:	20.0
Vial Number:	25	Channel:	ECD_1
Sample Type:	unknown	Wavelength:	n.a.
Control Program:	Anions2_ASDV	Bandwidth:	n.a.
Quantif. Method:	ANIONS2	Dilution Factor:	1.0000
Recording Time:	11/1/2010 19:17	Sample Weight:	1.0000
Run Time (min):	21.00	Sample Amount:	1.0000

14.7  
14

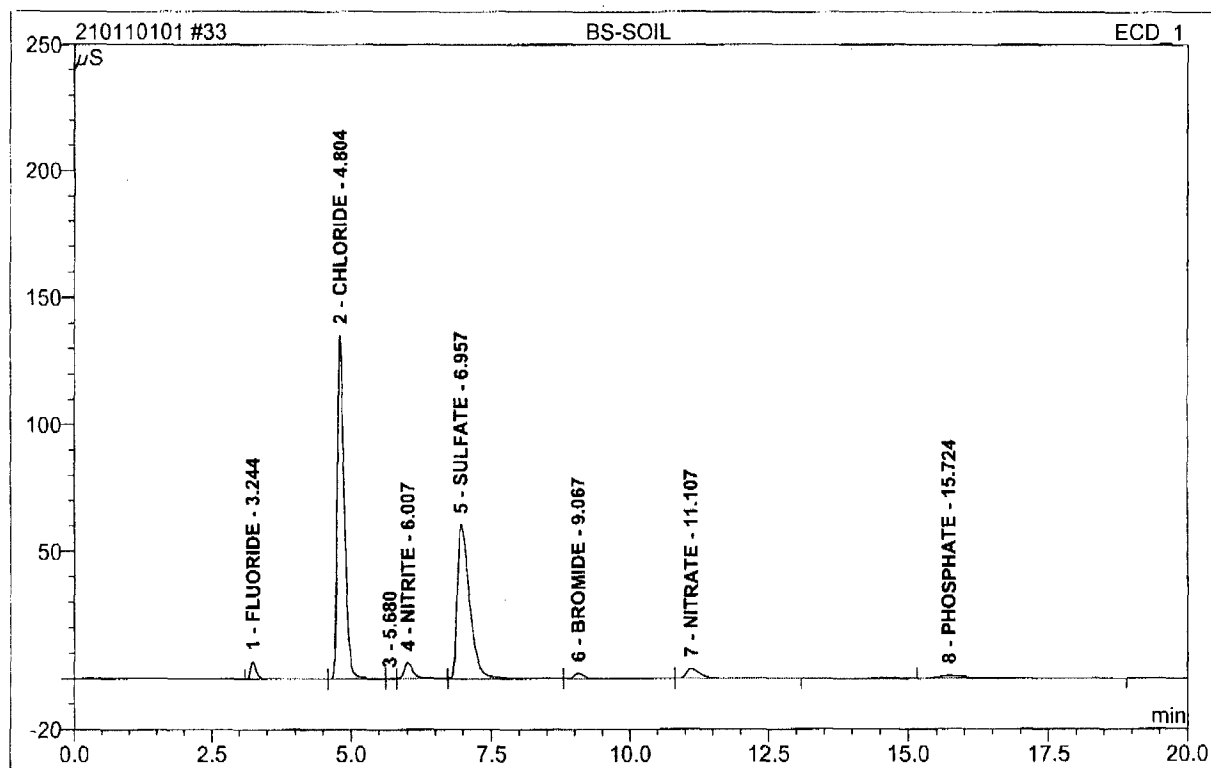
No.	Ret.Time min	Peak Name	Height μS	Area μS*min	Rel.Area %	Amount	Type
1	5.37	n.a.	0.004	0.001	2.93	n.a.	Ru
2	5.74	NITRITE	0.036	0.013	61.29	0.020	BM
3	7.14	SULFATE	0.012	0.004	18.61	0.022	MB
4	16.23	PHOSPHATE	0.006	0.004	17.16	0.012	BMB
Total:			0.058	0.021	100.00	0.054	

anions/Integration

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Version 6.80 SR9a Build 2680 (163077)

**33 BS-SOIL**

Sample Name:	BS-SOIL	Injection Volume:	20.0
Vial Number:	26	Channel:	ECD_1
Sample Type:	unknown	Wavelength:	n.a.
Control Program:	Anions2_ASDV	Bandwidth:	n.a.
Quantif. Method:	ANIONS2	Dilution Factor:	1.0000
Recording Time:	11/1/2010 19:41	Sample Weight:	1.0000
Run Time (min):	21.00	Sample Amount:	1.0000

14.7  
14

No.	Ret.Time min	Peak Name	Height μS	Area μS*min	Rel.Area %	Amount	Type
1	3.24	FLUORIDE	6.845	0.836	2.11	2.085	BM
2	4.80	CHLORIDE	135.254	19.448	49.11	81.879✓	M
3	5.68	n.a.	0.183	0.035	0.09	n.a.	M
4	6.01	NITRITE	6.486	1.271	3.21	1.890	M
5	6.96	SULFATE	60.581	15.562	39.30	86.074✓	M
6	9.07	BROMIDE	2.301	0.598	1.51	5.071	M
7	11.11	NITRATE	3.800	1.153	2.91	2.043	MB
8	15.72	PHOSPHATE	1.138	0.699	1.76	2.272	BMB
<b>Total:</b>			216.587	39.602	100.00	181.314	

70 Rec

102.4

107.6

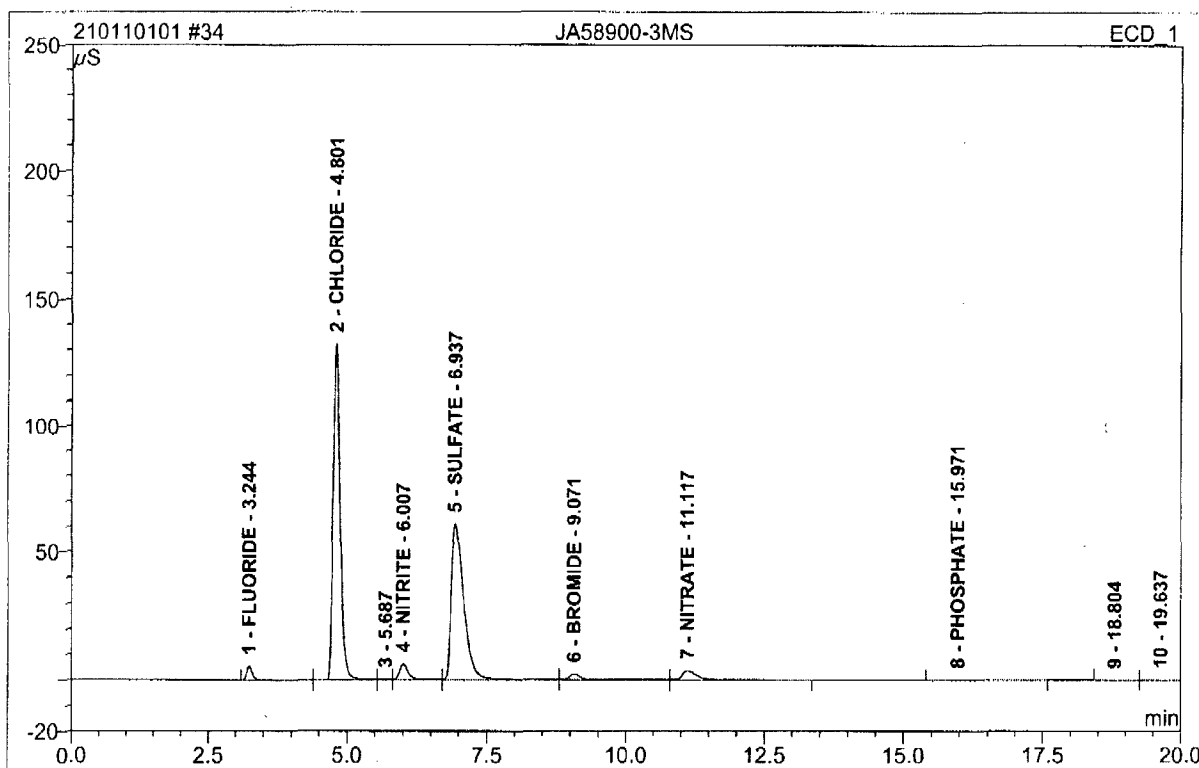
anions/Integration

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**34 JA58900-3MS**

Sample Name: JA58900-3MS  
 Vial Number: 27  
 Sample Type: unknown  
 Control Program: Anions2\_ASDV  
 Quantif. Method: ANIONS2  
 Recording Time: 11/1/2010 20:05  
 Run Time (min): 21.00

Injection Volume: 20.0  
 Channel: ECD\_1  
 Wavelength: n.a.  
 Bandwidth: n.a.  
 Dilution Factor: 1.0000  
 Sample Weight: 1.0000  
 Sample Amount: 1.0000



No.	Ret.Time min	Peak Name	Height μS	Area μS*min	Rel.Area %	Amount	Type
1	3.24	FLUORIDE	5.383	0.659	1.71	1.643	BM
2	4.80	CHLORIDE	132.443	19.043	49.36	80.175	M
3	5.69	n.a.	0.238	0.059	0.15	n.a.	M
4	6.01	NITRITE	6.259	1.228	3.18	1.826	M
5	6.94	SULFATE	61.049	15.825	41.02	87.534	M
6	9.07	BROMIDE	2.239	0.592	1.53	5.019	M
7	11.12	NITRATE	3.596	1.101	2.85	1.951	MB
8	15.97	PHOSPHATE	0.098	0.066	0.17	0.216	BMB
9	18.80	n.a.	0.007	0.003	0.01	n.a.	BM
10	19.64	n.a.	0.004	0.003	0.01	n.a.	MB
<b>Total:</b>			211.316	38.580	100.00	178.362	

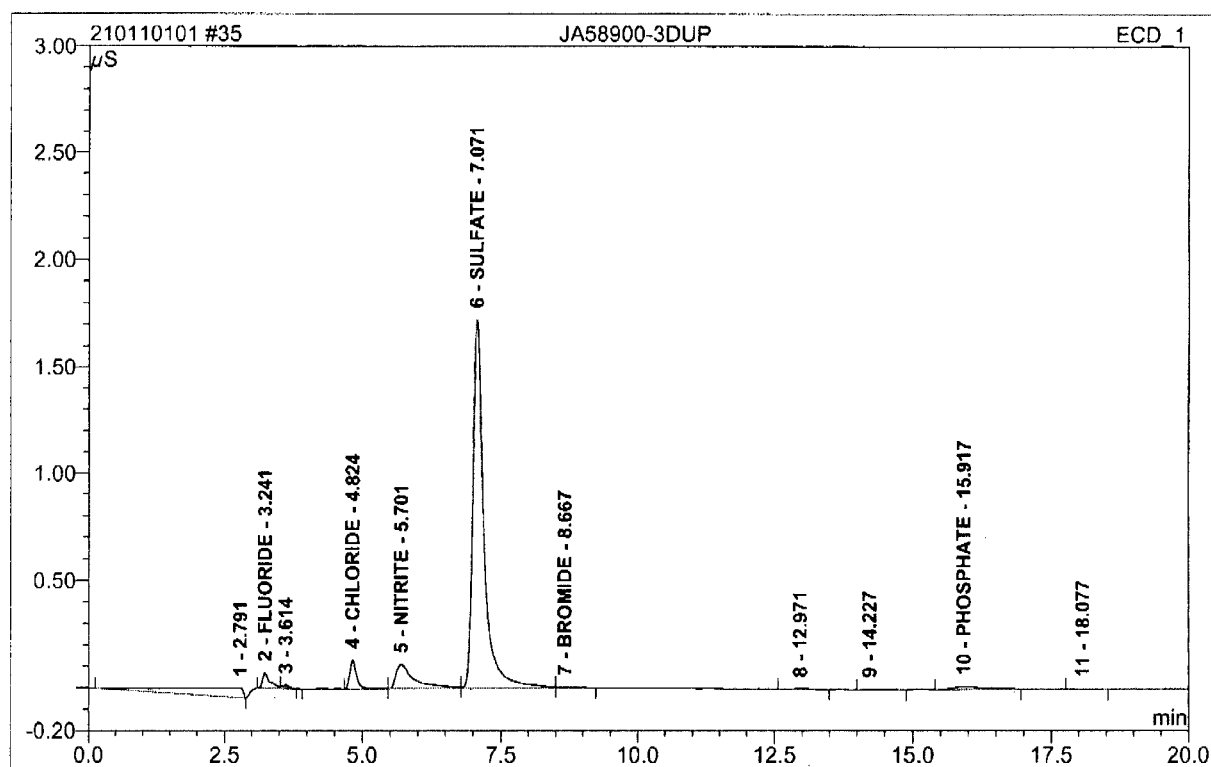
anions/Integration

Chromeleon (c) Dionex 1996-2001  
 Version 6.80 SR9a Build 2680 (163077)

**35 JA58900-3DUP**

Sample Name: **JA58900-3DUP**  
 Vial Number: **28**  
 Sample Type: **unknown**  
 Control Program: **Anions2\_ASDV**  
 Quantif. Method: **ANIONS2**  
 Recording Time: **11/1/2010 20:29**  
 Run Time (min): **21.00**

Injection Volume: **20.0**  
 Channel: **ECD\_1**  
 Wavelength: **n.a.**  
 Bandwidth: **n.a.**  
 Dilution Factor: **1.0000**  
 Sample Weight: **1.0000**  
 Sample Amount: **1.0000**

14.7  
14

No.	Ret.Time min	Peak Name	Height μS	Area μS*min	Rel.Area %	Amount	Type
1	2.79	n.a.	0.045	0.060	10.80	n.a.	BMB
2	3.24	FLUORIDE	0.071	0.013	2.29	0.032	BMB
3	3.61	n.a.	0.010	0.001	0.22	n.a.	Rd
4	4.82	CHLORIDE	0.135	0.019	3.49	0.082	BMB
5	5.70	NITRITE	0.112	0.043	7.74	0.064	BM
6	7.07	SULFATE	1.724	0.402	71.91	2.224	M
7	8.67	BROMIDE	0.006	0.002	0.42	0.020	MB
8	12.97	n.a.	0.003	0.001	0.26	n.a.	BMB
9	14.23	n.a.	0.005	0.002	0.37	n.a.	BMB
10	15.92	PHOSPHATE	0.015	0.010	1.86	0.034	BMB
11	18.08	n.a.	0.003	0.001	0.24	n.a.	BMB

anions/Integration

Chromeleon (c) Dionex 1996-2001  
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12	20.44	n.a.	0.004	0.002	0.42	n.a.	BMB
Total:			2.133	0.559	100.00	2.455	

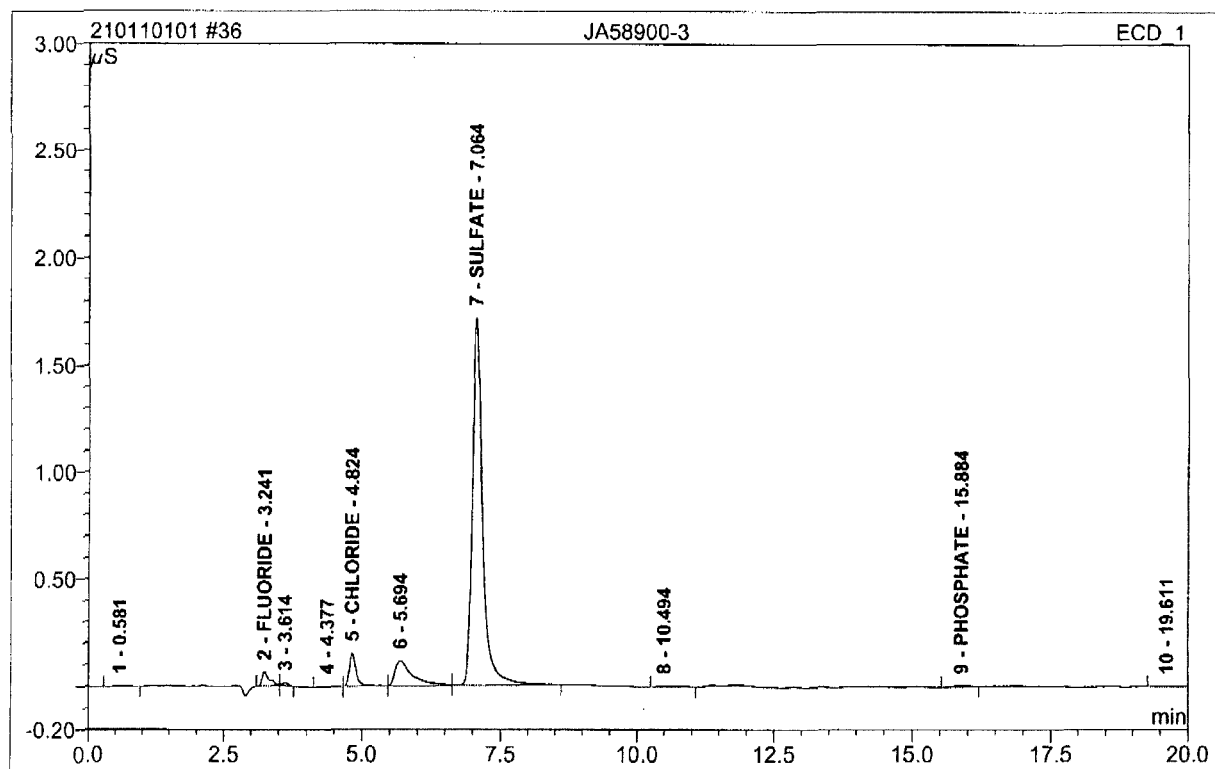
14.7  
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anions/Integration

Chromeleon (c) Dionex 1996-2001  
Version 6.80 SR9a Build 2680 (163077)

**36 JA58900-3**

Sample Name:	JA58900-3	Injection Volume:	20.0
Vial Number:	29	Channel:	ECD_1
Sample Type:	unknown	Wavelength:	n.a.
Control Program:	Anions2_ASDV	Bandwidth:	n.a.
Quantif. Method:	ANIONS2	Dilution Factor:	1.0000
Recording Time:	11/1/2010 20:53	Sample Weight:	1.0000
Run Time (min):	21.00	Sample Amount:	1.0000

14.7  
14

No.	Ret.Time min	Peak Name	Height μS	Area μS*min	Rel.Area %	Amount	Type
1	0.58	n.a.	0.004	0.001	0.32	n.a.	BMB
2	3.24	FLUORIDE	0.064	0.010	2.11	0.024	BMb
3	3.61	n.a.	0.014	0.002	0.34	n.a.	bMB
4	4.38	n.a.	0.005	0.002	0.35	n.a.	BMB
5	4.82	CHLORIDE	0.151	0.022	4.82	0.091	BMB
6	5.69	n.a.	0.114	0.041	9.06	n.a.	BM
7	7.06	SULFATE	1.716	0.367	81.64	2.032	MB
8	10.49	n.a.	0.006	0.003	0.62	n.a.	BMB
9	15.88	PHOSPHATE	0.006	0.002	0.45	0.007	BMB
10	19.61	n.a.	0.003	0.001	0.29	n.a.	BMB
<b>Total:</b>			2.083	0.450	100.00	2.153	

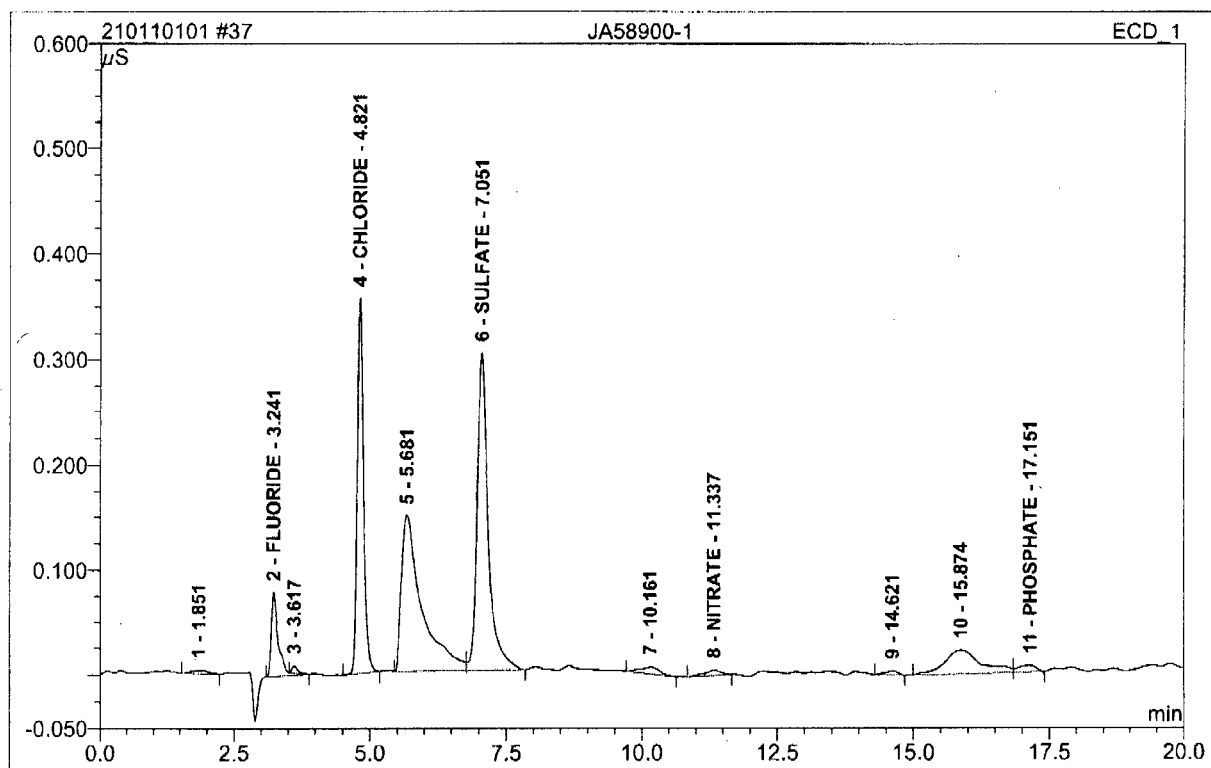
anions/Integration

Chromeleon (c) Dionex 1996-2001  
Version 6.80 SR9a Build 2680 (163077)

**37 JA58900-1**

Sample Name: JA58900-1  
 Vial Number: 30  
 Sample Type: unknown  
 Control Program: Anions2\_ASDV  
 Quantif. Method: ANIONS2  
 Recording Time: 11/1/2010 21:17  
 Run Time (min): 21.00

Injection Volume: 20.0  
 Channel: ECD\_1  
 Wavelength: n.a.  
 Bandwidth: n.a.  
 Dilution Factor: 1.0000  
 Sample Weight: 1.0000  
 Sample Amount: 1.0000

14.7  
14

No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.85	n.a.	0.003	0.001	0.52	n.a.	BMB
2	3.24	FLUORIDE	0.080	0.012	5.20	0.029	BMB
3	3.62	n.a.	0.007	0.001	0.37	n.a.	Rd
4	4.82	CHLORIDE	0.357	0.048	21.15	0.200	BMB
5	5.68	n.a.	0.149	0.064	28.47	n.a.	BM
6	7.05	SULFATE	0.302	0.071	31.64	0.393	MB
7	10.16	n.a.	0.006	0.003	1.16	n.a.	BMB
8	11.34	NITRATE	0.005	0.002	0.77	0.003	BMB
9	14.62	n.a.	0.004	0.001	0.47	n.a.	BMB
10	15.87	n.a.	0.022	0.017	7.58	n.a.	BM
11	17.15	PHOSPHATE	0.006	0.002	0.99	0.007	MB

anions/Integration

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12	20.56	n.a.	0.008	0.004	1.67	n.a.	BMB
Total:			0.949	0.225	100.00	0.633	

14.7

14

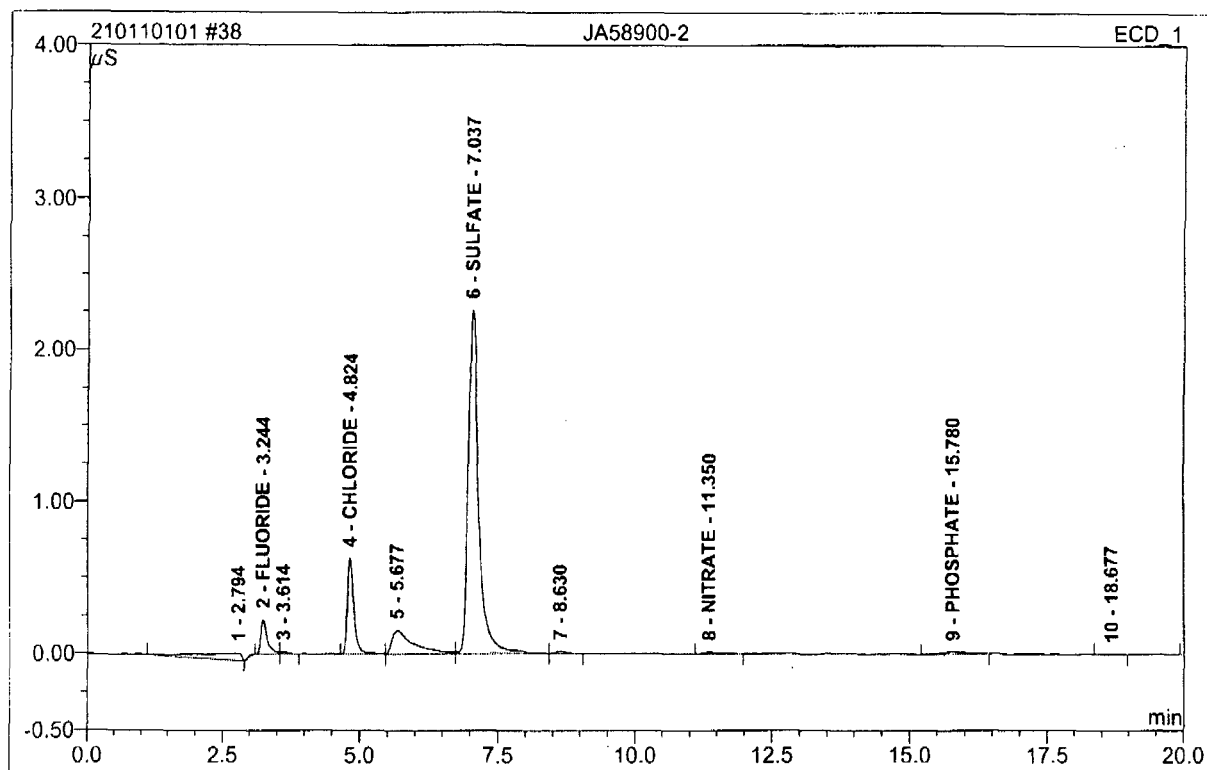
anions/Integration

Chromeleon (c) Dionex 1996-2001  
Version 6.80 SR9a Build 2680 (163077)

**38 JA58900-2**

Sample Name: **JA58900-2**  
 Vial Number: **31**  
 Sample Type: **unknown**  
 Control Program: **Anions2\_ASDV**  
 Quantif. Method: **ANIONS2**  
 Recording Time: **11/1/2010 21:41**  
 Run Time (min): **21.00**

Injection Volume: **20.0**  
 Channel: **ECD\_1**  
 Wavelength: **n.a.**  
 Bandwidth: **n.a.**  
 Dilution Factor: **1.0000**  
 Sample Weight: **1.0000**  
 Sample Amount: **1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.79	n.a.	0.044	0.037	4.98	n.a.	BMB
2	3.24	FLUORIDE	0.225	0.030	4.06	0.076	BM
3	3.61	n.a.	0.014	0.002	0.29	n.a.	MB
4	4.82	CHLORIDE	0.630	0.086	11.48	0.361	BM
5	5.68	n.a.	0.155	0.070	9.37	n.a.	M
6	7.04	SULFATE	2.260	0.494	66.07	2.732	M
7	8.63	n.a.	0.016	0.004	0.54	n.a.	MB
8	11.35	NITRATE	0.012	0.003	0.47	0.006	BMB
9	15.78	PHOSPHATE	0.015	0.008	1.07	0.026	BMB
10	18.68	n.a.	0.004	0.001	0.16	n.a.	BMB
11	20.51	n.a.	0.021	0.011	1.51	n.a.	BMB

anions/Integration

Chromeleon (c) Dionex 1996-2001  
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Total:	3.395	0.748	100.00	3.201
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14.7  
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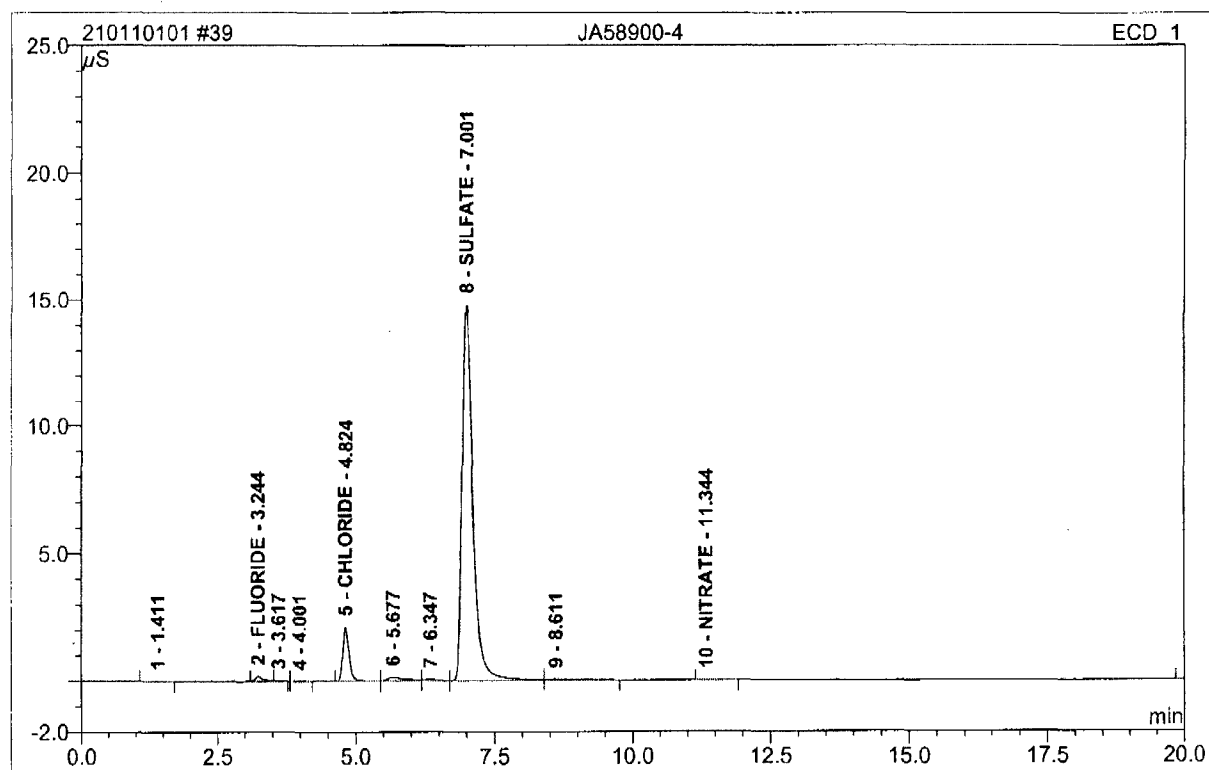
anions/Integration

Chromeleon (c) Dionex 1996-2001  
Version 6.80 SR9a Build 2680 (163077)

**39 JA58900-4**

Sample Name: JA58900-4  
 Vial Number: 32  
 Sample Type: unknown  
 Control Program: Anions2\_ASDV  
 Quantif. Method: ANIONS2  
 Recording Time: 11/1/2010 22:05  
 Run Time (min): 21.00

Injection Volume: 20.0  
 Channel: ECD\_1  
 Wavelength: n.a.  
 Bandwidth: n.a.  
 Dilution Factor: 1.0000  
 Sample Weight: 1.0000  
 Sample Amount: 1.0000

14.7  
14

No.	Ret.Time min	Peak Name	Height μS	Area μS*min	Rel.Area %	Amount	Type
1	1.41	n.a.	0.004	0.001	0.03	n.a.	BMB
2	3.24	FLUORIDE	0.190	0.028	0.74	0.069	BM
3	3.62	n.a.	0.020	0.002	0.06	n.a.	Rd
4	4.00	n.a.	0.008	0.001	0.04	n.a.	MB
5	4.82	CHLORIDE	2.129	0.277	7.42	1.168	BM
6	5.68	n.a.	0.137	0.049	1.31	n.a.	M
7	6.35	n.a.	0.049	0.014	0.36	n.a.	M
8	7.00	SULFATE	14.810	3.316	88.67	18.340	M
9	8.61	n.a.	0.054	0.025	0.67	n.a.	MB
10	11.34	NITRATE	0.008	0.002	0.06	0.004	BMB
11	20.51	n.a.	0.049	0.024	0.64	n.a.	BMB

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Total:	17.458	3.740	100.00	19.581
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14.7  
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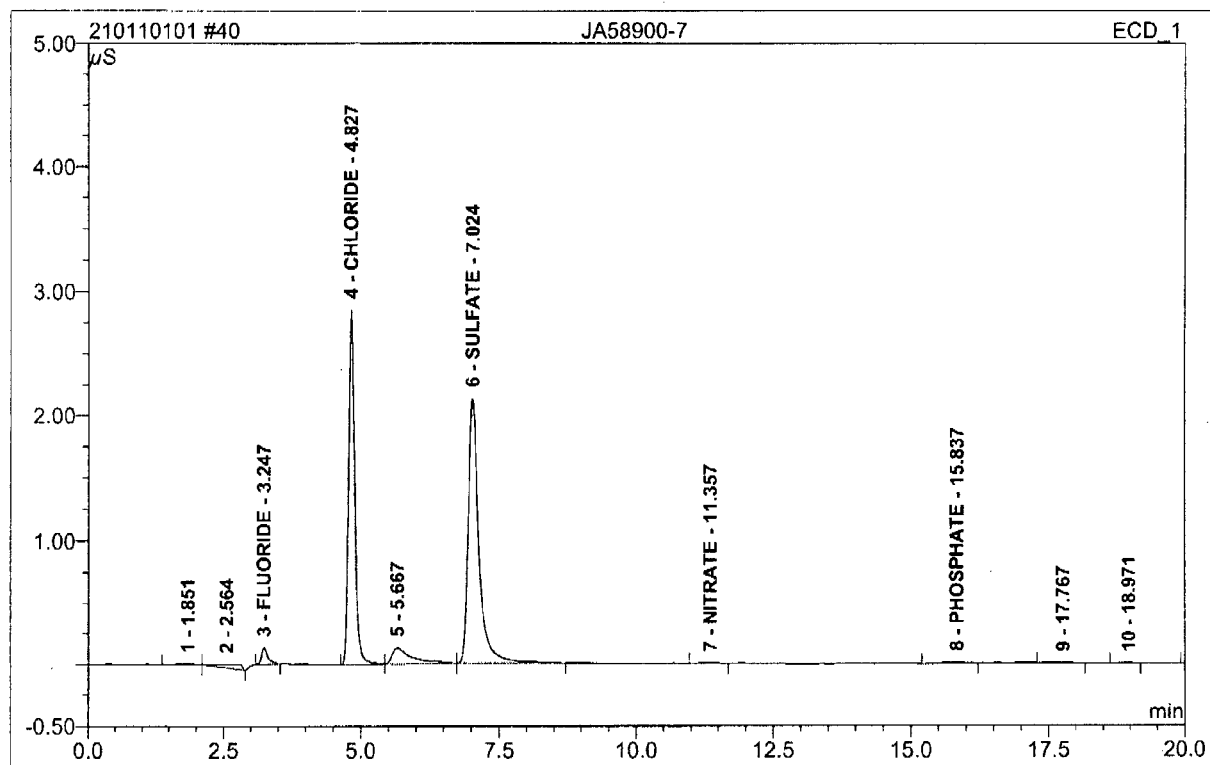
anions/Integration

Chromeleon (c) Dionex 1996-2001  
Version 6.80 SR9a Build 2680 (163077)

**40 JA58900-7**

Sample Name: JA58900-7  
 Vial Number: 33  
 Sample Type: unknown  
 Control Program: Anions2\_ASDV  
 Quantif. Method: ANIONS2  
 Recording Time: 11/1/2010 22:29  
 Run Time (min): 21.00

Injection Volume: 20.0  
 Channel: ECD\_1  
 Wavelength: n.a.  
 Bandwidth: n.a.  
 Dilution Factor: 1.0000  
 Sample Weight: 1.0000  
 Sample Amount: 1.0000

14.7  
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No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.85	n.a.	0.005	0.002	0.20	n.a.	BMb
2	2.56	n.a.	0.027	0.016	1.70	n.a.	bMB
3	3.25	FLUORIDE	0.135	0.018	1.87	0.045	BMB
4	4.83	CHLORIDE	2.853	0.376	39.09	1.582	BM
5	5.67	n.a.	0.131	0.053	5.53	n.a.	Mb
6	7.02	SULFATE	2.130	0.481	50.04	2.660	bMB
7	11.36	NITRATE	0.007	0.002	0.22	0.004	BMB
8	15.84	PHOSPHATE	0.009	0.004	0.45	0.014	BMB
9	17.77	n.a.	0.007	0.003	0.34	n.a.	BMB
10	18.97	n.a.	0.004	0.001	0.15	n.a.	BMB
11	20.47	n.a.	0.008	0.004	0.41	n.a.	BMB

anions/Integration

Chromeleon (c) Dionex 1996-2001  
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Total:	5.315	0.961	100.00	4.304
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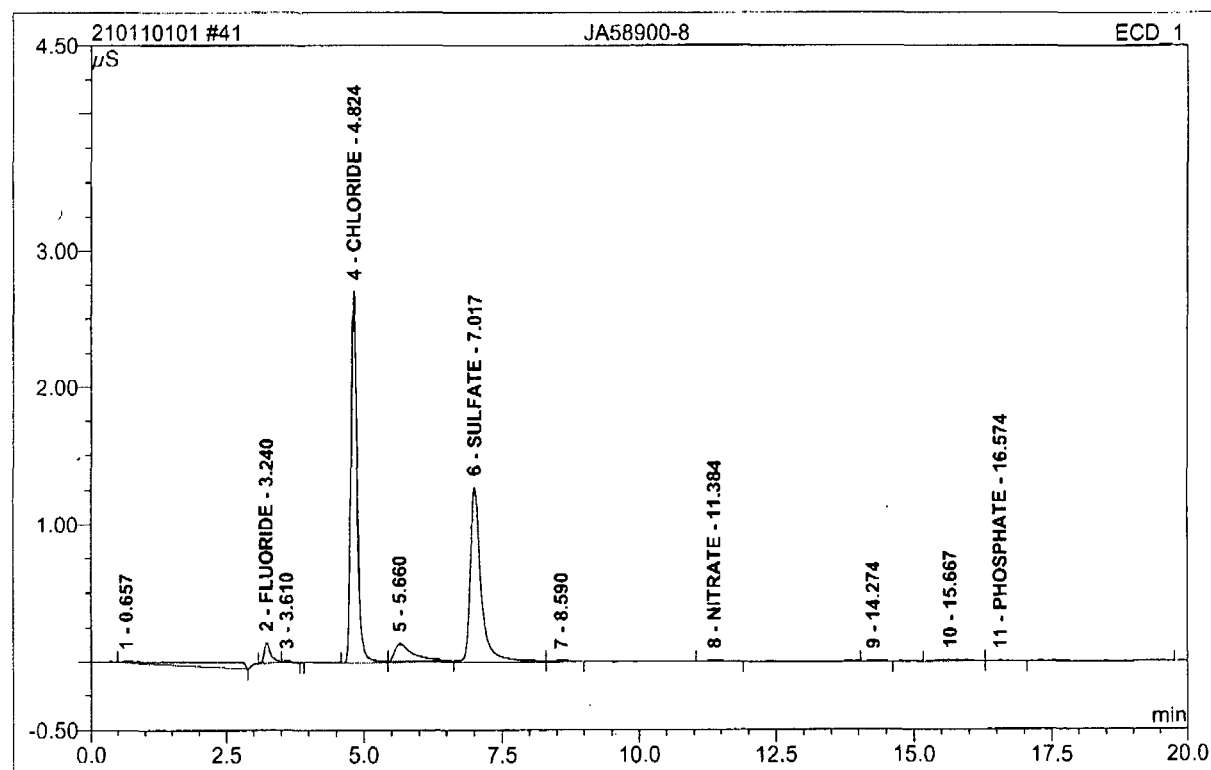
anions/Integration

Chromeleon (c) Dionex 1996-2001  
Version 6.80 SR9a Build 2680 (163077)

**41 JA58900-8**

Sample Name: **JA58900-8**  
 Vial Number: **34**  
 Sample Type: **unknown**  
 Control Program: **Anions2\_ASDV**  
 Quantif. Method: **ANIONS2**  
 Recording Time: **11/1/2010 22:53**  
 Run Time (min): **21.00**

Injection Volume: **20.0**  
 Channel: **ECD\_1**  
 Wavelength: **n.a.**  
 Bandwidth: **n.a.**  
 Dilution Factor: **1.0000**  
 Sample Weight: **1.0000**  
 Sample Amount: **1.0000**



No.	Ret.Time min	Peak Name	Height μS	Area μS*min	Rel.Area %	Amount	Type
1	0.66	n.a.	0.008	0.056	6.80	n.a.	BMB
2	3.24	FLUORIDE	0.147	0.022	2.67	0.055	BMB
3	3.61	n.a.	0.010	0.001	0.14	n.a.	Rd
4	4.82	CHLORIDE	2.715	0.359	43.56	1.513	BM
5	5.66	n.a.	0.128	0.048	5.79	n.a.	Ru
6	7.02	SULFATE	1.274	0.305	36.93	1.685	M
7	8.59	n.a.	0.010	0.004	0.46	n.a.	MB
8	11.38	NITRATE	0.011	0.004	0.44	0.006	BMB
9	14.27	n.a.	0.008	0.002	0.28	n.a.	BMB
10	15.67	n.a.	0.014	0.009	1.05	n.a.	BM
11	16.57	PHOSPHATE	0.004	0.002	0.24	0.006	MB

anions/Integration

Chromeleon (c) Dionex 1996-2001  
 Version 6.80 SR9a Build 2680 (163077)

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12	20.39	n.a.	0.024	0.014	1.64	n.a.	BMB
Total:			4.352	0.825	100.00	3.265	

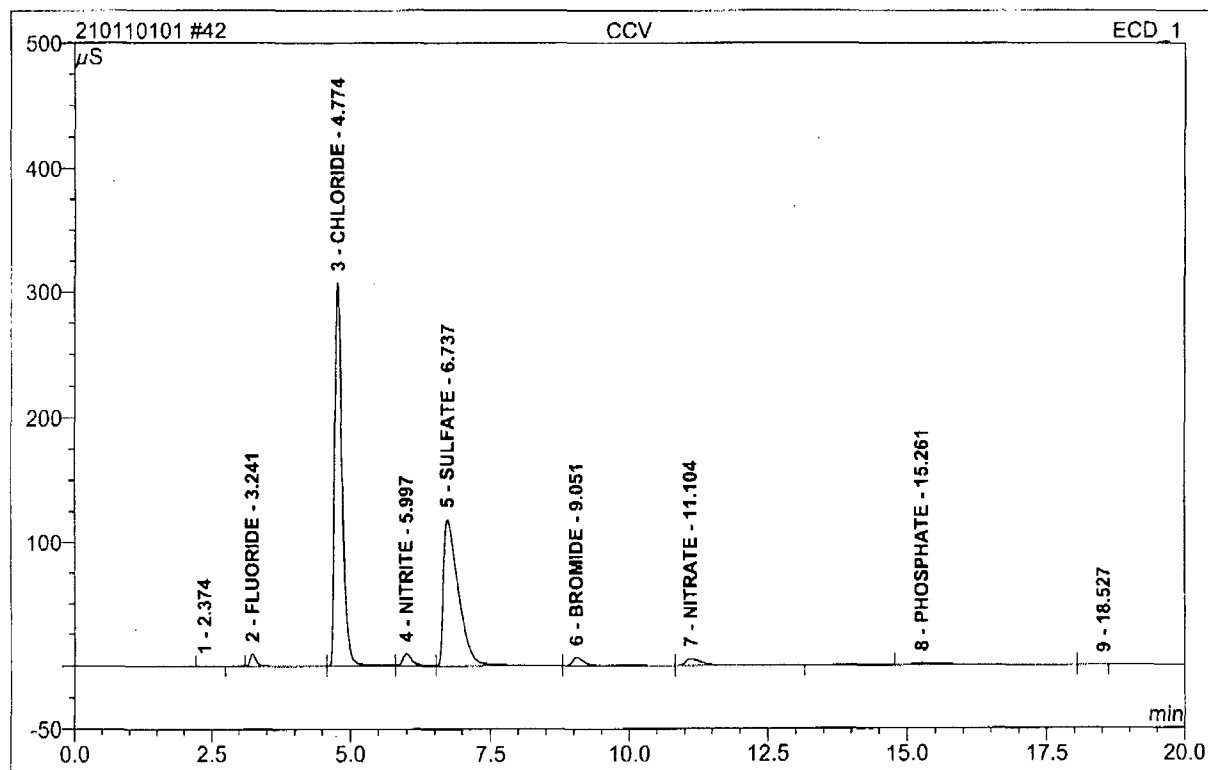
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anions/Integration

Chromeleon (c) Dionex 1996-2001  
Version 6.80 SR9a Build 2680 (163077)

**42 CCV**

Sample Name:	CCV	Injection Volume:	20.0
Vial Number:	35	Channel:	ECD_1
Sample Type:	unknown	Wavelength:	n.a.
Control Program:	Anions2_ASDV	Bandwidth:	n.a.
Quantif. Method:	ANIONS2	Dilution Factor:	1.0000
Recording Time:	11/1/2010 23:16	Sample Weight:	1.0000
Run Time (min):	21.00	Sample Amount:	1.0000



No.	Ret.Time min	Peak Name	Height μS	Area μS*min	Rel.Area %	Amount	Type
1	2.37	n.a.	0.008	0.002	0.00	n.a.	BM
2	3.24	FLUORIDE	9.678	1.228	1.34	3.060	BM
3	4.77	CHLORIDE	307.554	47.348	51.60	199.344	M
4	6.00	NITRITE	9.443	1.905	2.08	2.833	M
5	6.74	SULFATE	118.869	36.926	40.24	204.246	M
6	9.05	BROMIDE	6.750	1.736	1.89	14.712	M
7	11.10	NITRATE	5.327	1.718	1.87	3.045	MB
8	15.26	PHOSPHATE	1.514	0.894	0.97	2.907	BM
9	18.53	n.a.	0.000	0.002	0.00	n.a.	MB
<b>Total:</b>			459.143	91.759	100.00	430.147	

%Rec

99.5

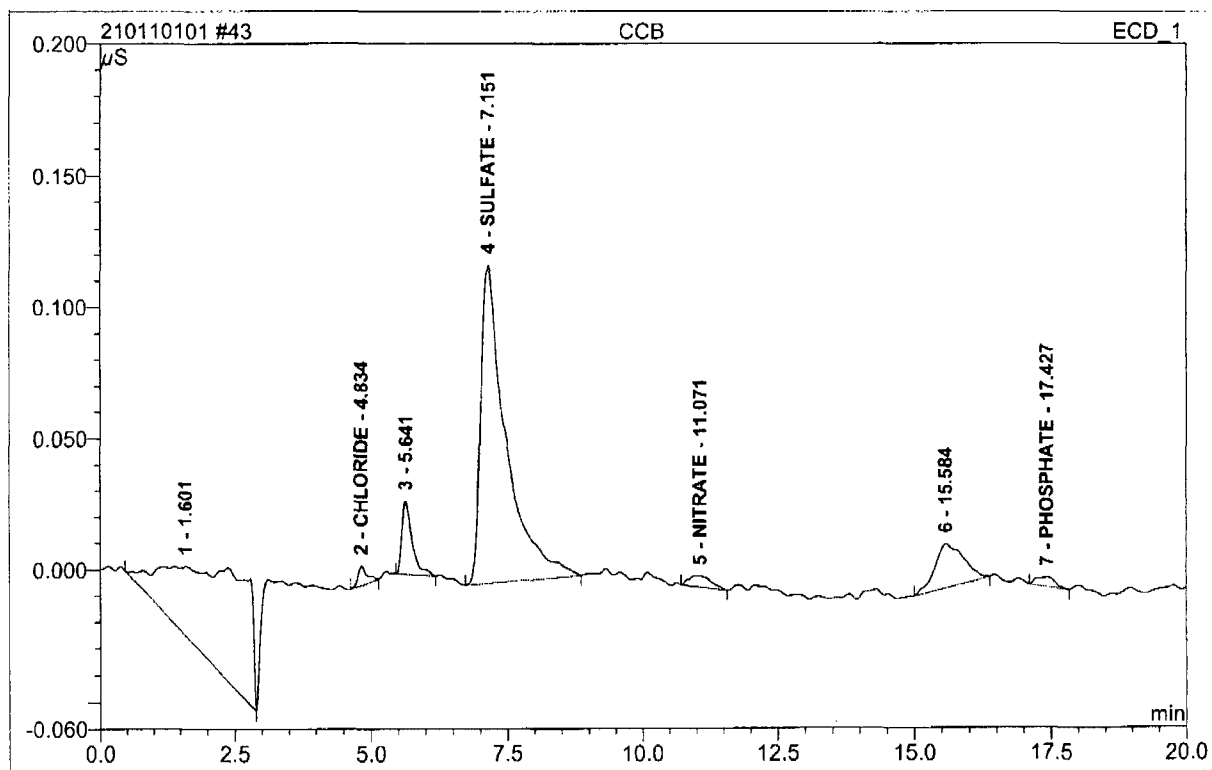
102.0

anions/Integration

Chromeleon (c) Dionex 1996-2001  
Version 6.80 SR9a Build 2680 (163077)

**43 CCB**

Sample Name:	CCB	Injection Volume:	20.0
Vial Number:	36	Channel:	ECD_1
Sample Type:	unknown	Wavelength:	n.a.
Control Program:	Anions2_ASDV	Bandwidth:	n.a.
Quantif. Method:	ANIONS2	Dilution Factor:	1.0000
Recording Time:	11/1/2010 23:40	Sample Weight:	1.0000
Run Time (min):	21.00	Sample Amount:	1.0000



No.	Ret.Time min	Peak Name	Height μS	Area μS*min	Rel.Area %	Amount	Type
1	1.60	n.a.	0.027	0.061	41.35	n.a.	BMB
2	4.83	CHLORIDE	0.008	0.001	0.96	0.006	BMB
3	5.64	n.a.	0.028	0.006	4.14	n.a.	BMB
4	7.15	SULFATE	0.121	0.065	44.29	0.362	BMB
5	11.07	NITRATE	0.004	0.002	1.40	0.004	BMB
6	15.58	n.a.	0.017	0.010	6.86	n.a.	BMB
7	17.43	PHOSPHATE	0.004	0.001	1.00	0.005	BMB
Total:			0.208	0.148	100.00	0.376	

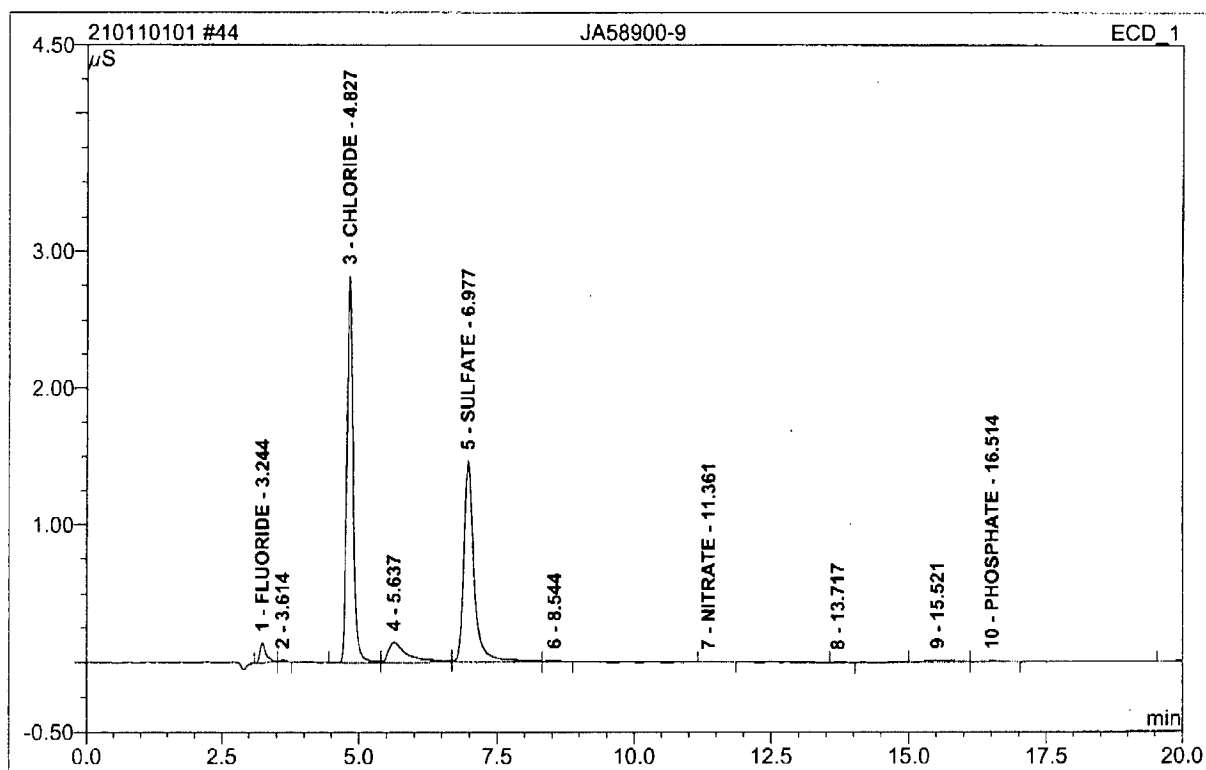
anions/Integration

 Chromeleon (c) Dionex 1996-2001  
 Version 6.80 SR9a Build 2680 (163077)

**44 JA58900-9**

Sample Name: **JA58900-9**  
 Vial Number: **37**  
 Sample Type: **unknown**  
 Control Program: **Anions2\_ASDV**  
 Quantif. Method: **ANIONS2**  
 Recording Time: **11/2/2010 0:04**  
 Run Time (min): **21.00**

Injection Volume: **20.0**  
 Channel: **ECD\_1**  
 Wavelength: **n.a.**  
 Bandwidth: **n.a.**  
 Dilution Factor: **1.0000**  
 Sample Weight: **1.0000**  
 Sample Amount: **1.0000**

14.7  
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No.	Ret.Time min	Peak Name	Height μS	Area μS*min	Rel.Area %	Amount	Type
1	3.24	FLUORIDE	0.142	0.019	2.32	0.046	BMb
2	3.61	n.a.	0.012	0.001	0.16	n.a.	bMB
3	4.83	CHLORIDE	2.819	0.372	46.56	1.565	BM
4	5.64	n.a.	0.145	0.058	7.24	n.a.	M
5	6.98	SULFATE	1.463	0.318	39.77	1.756	M
6	8.54	n.a.	0.010	0.003	0.33	n.a.	MB
7	11.36	NITRATE	0.004	0.001	0.17	0.002	BMB
8	13.72	n.a.	0.006	0.001	0.14	n.a.	BMB
9	15.52	n.a.	0.014	0.009	1.08	n.a.	BM
10	16.51	PHOSPHATE	0.008	0.004	0.50	0.013	MB
11	20.31	n.a.	0.024	0.014	1.74	n.a.	BMB

anions/Integration

Chromeleon (c) Dionex 1996-2001  
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Total:	4.647	0.798	100.00	3.383
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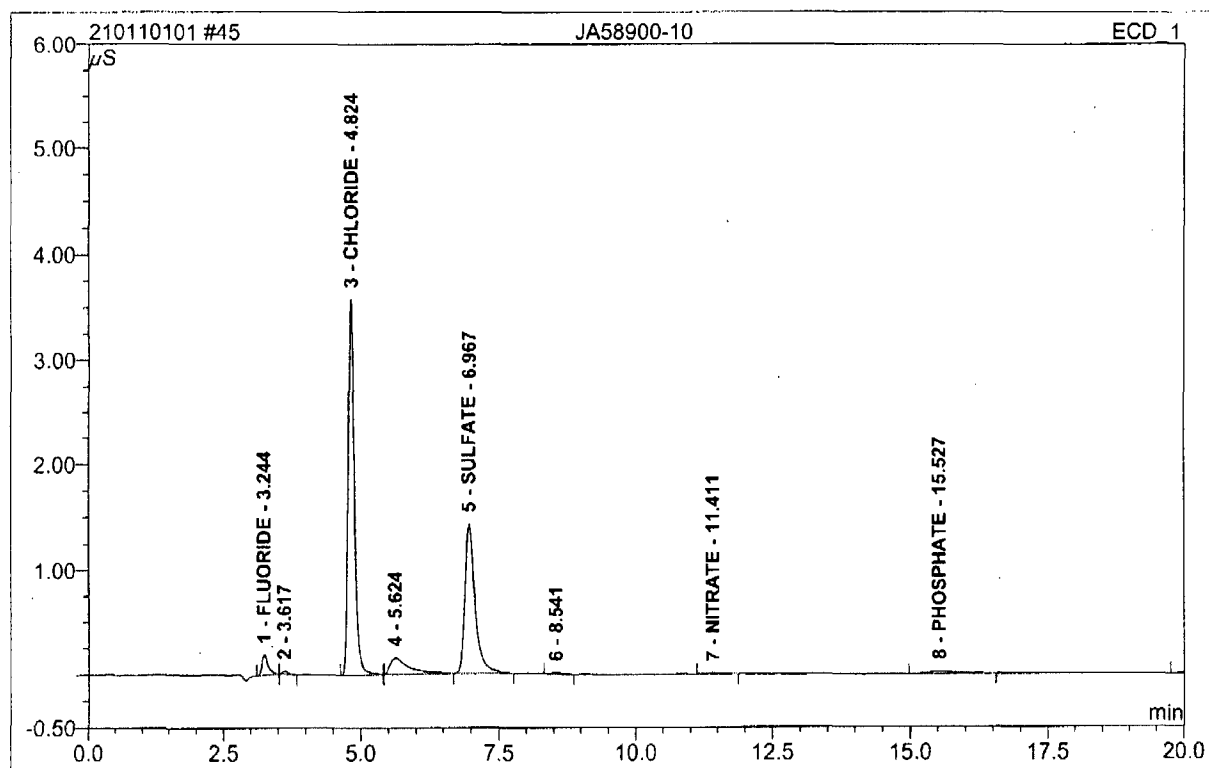
anions/Integration

Chromeleon (c) Dionex 1996-2001  
Version 6.80 SR9a Build 2680 (163077)

Operator:Chemistry Timebase:ACCUTEST\_SYS#2 Sequence:210110101

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11/2/2010 9:02 AM**45 JA58900-10**

Sample Name:	JA58900-10	Injection Volume:	20.0
Vial Number:	38	Channel:	ECD_1
Sample Type:	unknown	Wavelength:	n.a.
Control Program:	Anions2_ASDV	Bandwidth:	n.a.
Quantif. Method:	ANIONS2	Dilution Factor:	1.0000
Recording Time:	11/2/2010 0:28	Sample Weight:	1.0000
Run Time (min):	21.00	Sample Amount:	1.0000



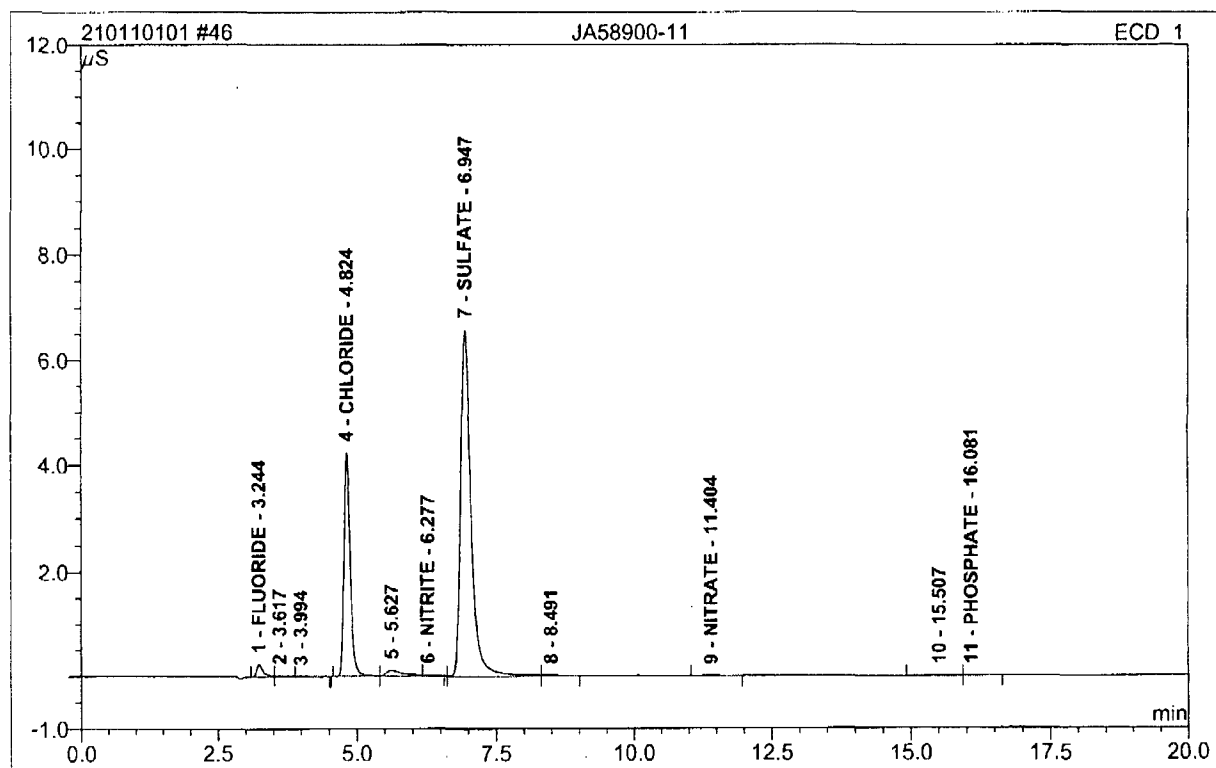
No.	Ret.Time min	Peak Name	Height $\mu$ S	Area $\mu$ S*min	Rel.Area %	Amount	Type
1	3.24	FLUORIDE	0.194	0.025	2.78	0.063	BMb
2	3.62	n.a.	0.030	0.004	0.39	n.a.	bMB
3	4.82	CHLORIDE	3.578	0.472	52.32	1.989	BM
4	5.62	n.a.	0.152	0.059	6.56	n.a.	Ru
5	6.97	SULFATE	1.428	0.306	33.94	1.694	MB
6	8.54	n.a.	0.015	0.003	0.37	n.a.	BMB
7	11.41	NITRATE	0.009	0.003	0.29	0.005	BMB
8	15.53	PHOSPHATE	0.023	0.014	1.54	0.045	BMB
9	20.27	n.a.	0.032	0.016	1.80	n.a.	BMB
<b>Total:</b>			5.460	0.903	100.00	3.795	

anions/Integration

Chromeleon (c) Dionex 1996-2001  
Version 6.80 SR9a Build 2680 (163077)

**46 JA58900-11**

Sample Name:	JA58900-11	Injection Volume:	20.0
Vial Number:	39	Channel:	ECD_1
Sample Type:	unknown	Wavelength:	n.a.
Control Program:	Anions2_ASDV	Bandwidth:	n.a.
Quantif. Method:	ANIONS2	Dilution Factor:	1.0000
Recording Time:	11/2/2010 0:52	Sample Weight:	1.0000
Run Time (min):	21.00	Sample Amount:	1.0000

14.7  
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No.	Ret.Time min	Peak Name	Height μS	Area μS*min	Rel.Area %	Amount	Type
1	3.24	FLUORIDE	0.239	0.033	1.56	0.081	BM
2	3.62	n.a.	0.024	0.005	0.26	n.a.	MB
3	3.99	n.a.	0.004	0.001	0.05	n.a.	Rd
4	4.82	CHLORIDE	4.222	0.559	26.74	2.353	BM
5	5.63	n.a.	0.117	0.048	2.28	n.a.	M
6	6.28	NITRITE	0.006	0.001	0.05	0.002	Rd
7	6.95	SULFATE	6.584	1.427	68.26	7.891	M
8	8.49	n.a.	0.014	0.005	0.23	n.a.	MB
9	11.40	NITRATE	0.007	0.003	0.14	0.005	BMB
10	15.51	n.a.	0.010	0.006	0.27	n.a.	BM
11	16.08	PHOSPHATE	0.010	0.004	0.17	0.011	MB

anions/Integration

Chromeleon (c) Dionex 1996-2001  
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Total:	11.237	2.090	100.00	10.343
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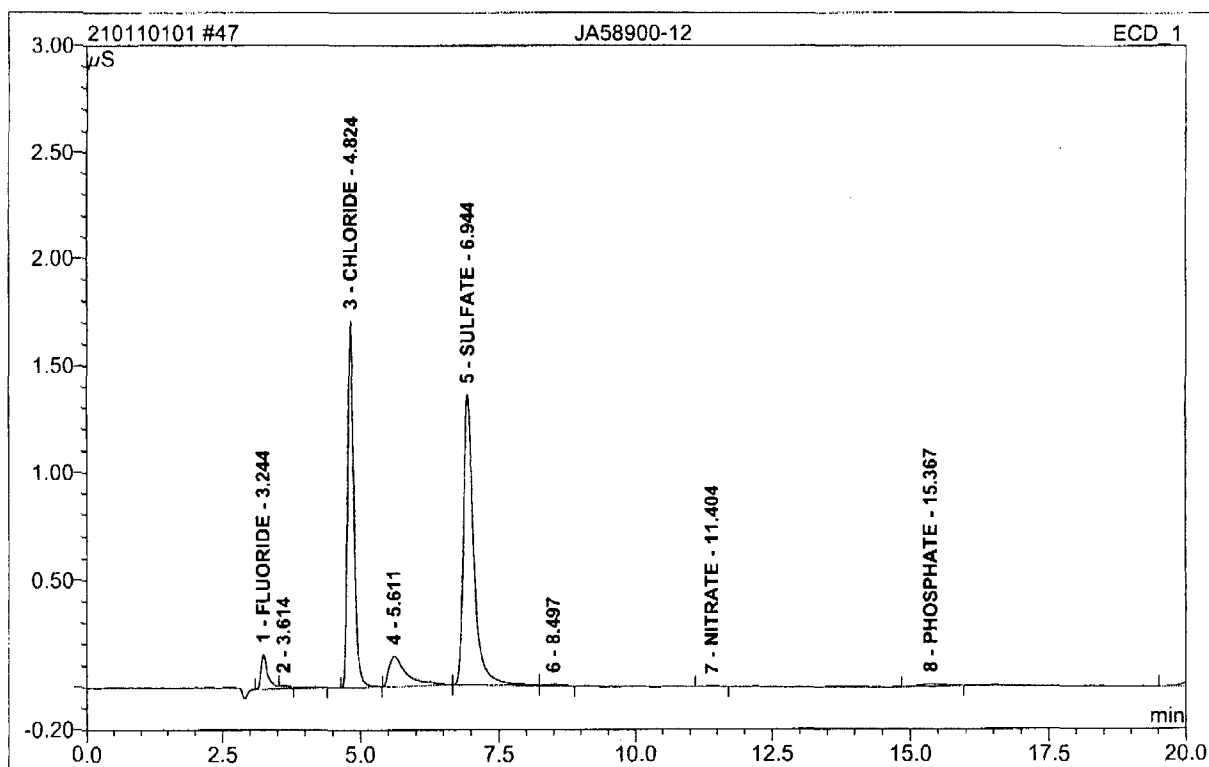
anions/Integration

Chromeleon (c) Dionex 1996-2001  
Version 6.80 SR9a Build 2680 (163077)

**47 JA58900-12**

Sample Name: **JA58900-12**  
 Vial Number: **40**  
 Sample Type: **unknown**  
 Control Program: **Anions2\_ASDV**  
 Quantif. Method: **ANIONS2**  
 Recording Time: **11/2/2010 1:16**  
 Run Time (min): **21.00**

Injection Volume: **20.0**  
 Channel: **ECD\_1**  
 Wavelength: **n.a.**  
 Bandwidth: **n.a.**  
 Dilution Factor: **1.0000**  
 Sample Weight: **1.0000**  
 Sample Amount: **1.0000**

14.7  
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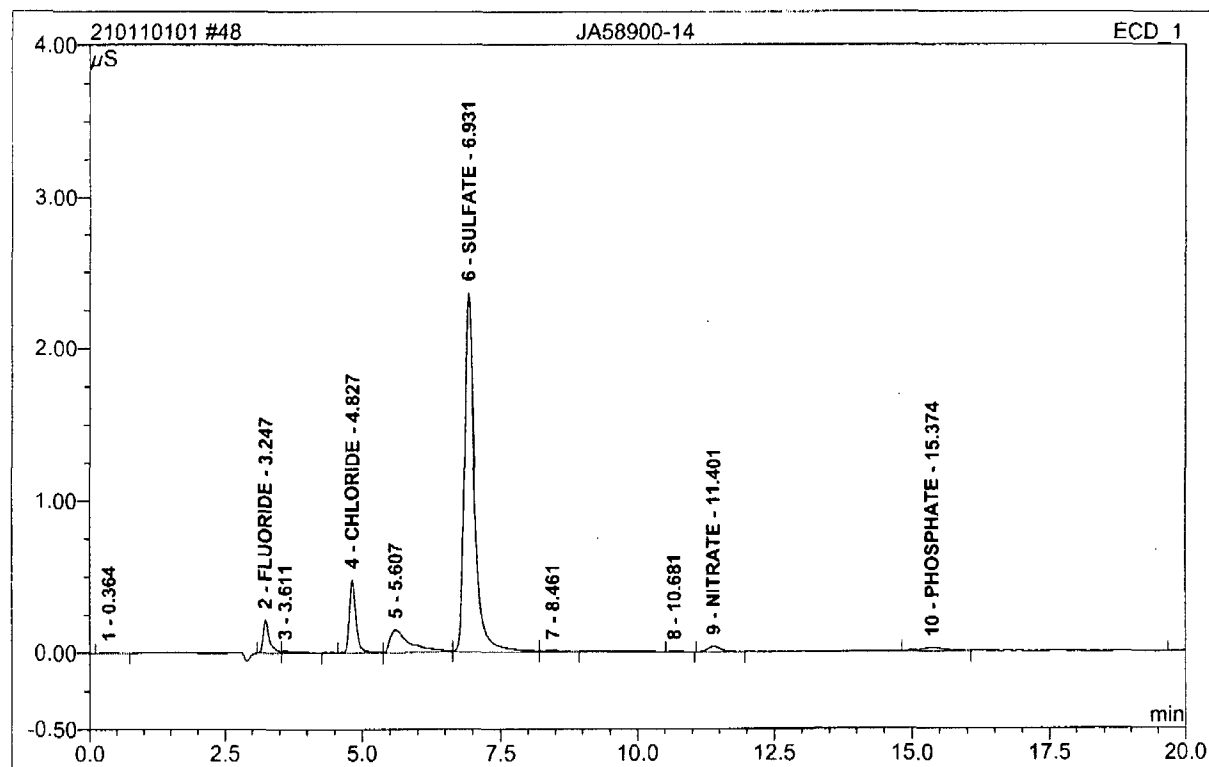
No.	Ret.Time min	Peak Name	Height μS	Area μS*min	Rel.Area %	Amount	Type
1	3.24	FLUORIDE	0.160	0.027	4.41	0.068	BMB
2	3.61	n.a.	0.008	0.001	0.15	n.a.	Rd
3	4.82	CHLORIDE	1.710	0.224	36.30	0.945	BMB
4	5.61	n.a.	0.139	0.052	8.48	n.a.	BMB
5	6.94	SULFATE	1.350	0.293	47.32	1.619	bMb
6	8.50	n.a.	0.006	0.002	0.25	n.a.	bMB
7	11.40	NITRATE	0.004	0.001	0.17	0.002	BMB
8	15.37	PHOSPHATE	0.011	0.005	0.89	0.018	BMB
9	20.21	n.a.	0.024	0.013	2.03	n.a.	BMB
<b>Total:</b>			3.412	0.618	100.00	2.651	

anions/Integration

Chromeleon (c) Dionex 1996-2001  
 Version 6.80 SR9a Build 2680 (163077)

**48 JA58900-14**

Sample Name:	JA58900-14	Injection Volume:	20.0
Vial Number:	41	Channel:	ECD_1
Sample Type:	unknown	Wavelength:	n.a.
Control Program:	Anions2_ASDV	Bandwidth:	n.a.
Quantif. Method:	ANIONS2	Dilution Factor:	1.0000
Recording Time:	11/2/2010 1:40	Sample Weight:	1.0000
Run Time (min):	21.00	Sample Amount:	1.0000

14.7  
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No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	0.36	n.a.	0.004	0.001	0.14	n.a.	BMB
2	3.25	FLUORIDE	0.217	0.030	4.21	0.074	BM
3	3.61	n.a.	0.014	0.003	0.48	n.a.	MB
4	4.83	CHLORIDE	0.482	0.066	9.35	0.278	BM
5	5.61	n.a.	0.150	0.064	9.10	n.a.	M
6	6.93	SULFATE	2.360	0.510	72.29	2.821	M
7	8.46	n.a.	0.011	0.004	0.58	n.a.	MB
8	10.68	n.a.	0.006	0.001	0.18	n.a.	BMB
9	11.40	NITRATE	0.036	0.010	1.42	0.018	BMB
10	15.37	PHOSPHATE	0.021	0.011	1.51	0.035	BMB
11	20.15	n.a.	0.012	0.005	0.75	n.a.	BMB

anions/Integration

Chromeleon (c) Dionex 1996-2001  
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Total:	3.313	0.705	100.00	3.225
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14.7

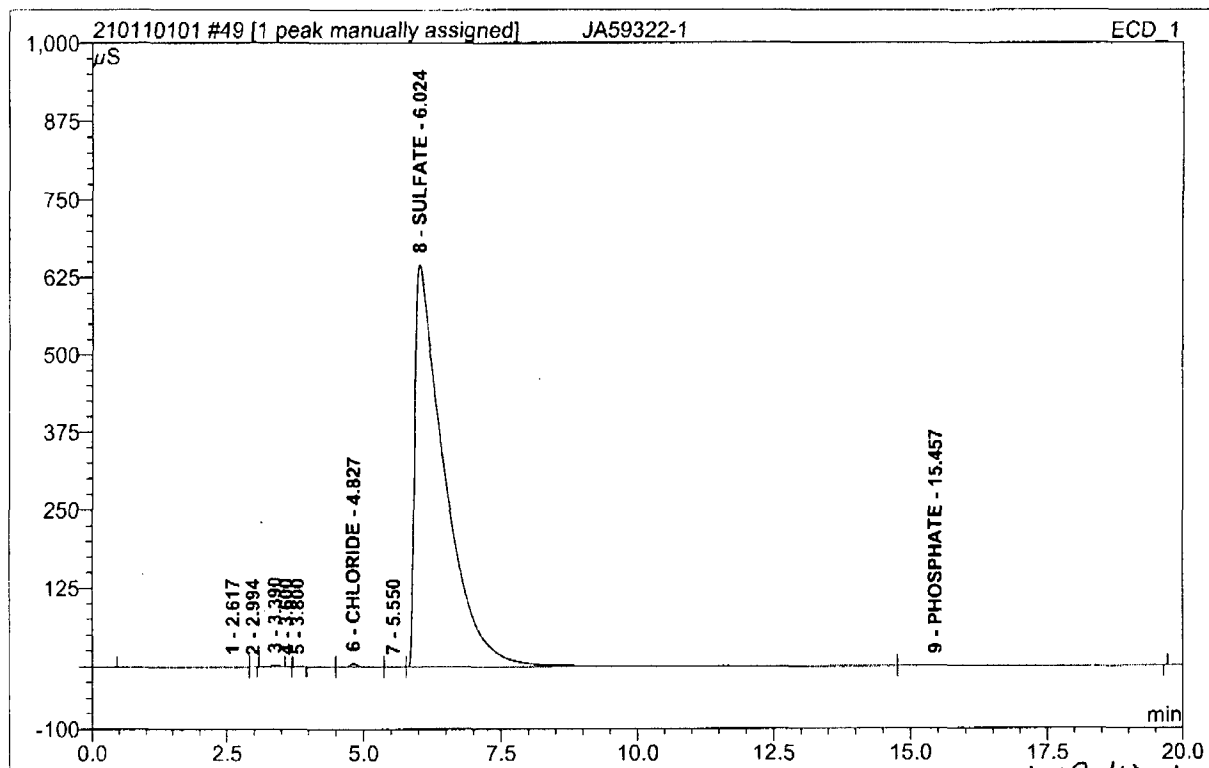
14

anions/Integration

Chromeleon (c) Dionex 1996-2001  
Version 6.80 SR9a Build 2680 (163077)

**49 JA59322-1**

Sample Name:	JA59322-1	Injection Volume:	20.0
Vial Number:	42	Channel:	ECD_1
Sample Type:	unknown	Wavelength:	n.a.
Control Program:	Anions2_ASDV	Bandwidth:	n.a.
Quantif. Method:	ANIONS2	Dilution Factor:	1.0000
Recording Time:	11/2/2010 2:04	Sample Weight:	1.0000
Run Time (min):	21.00	Sample Amount:	1.0000



No.	Ret.Time min	Peak Name	Height μS	Area μS*min	Rel.Area %	Amount	Type
1	2.62	n.a.	0.045	0.056	0.01	n.a.	BMB
2	2.99	n.a.	0.014	0.001	0.00	n.a.	BMB
3	3.39	n.a.	2.998	0.802	0.20	n.a.	BM
4	3.60	n.a.	0.118	0.011	0.00	n.a.	Rd
5	3.80	n.a.	0.318	0.036	0.01	n.a.	Rd
6	4.83	CHLORIDE	5.545	0.776	0.19	3.269	M
7	5.55	n.a.	0.153	0.044	0.01	n.a.	M
8	6.02	SULFATE	645.927	403.320	99.45	2230.843	M ^
9	15.46	PHOSPHATE	0.276	0.473	0.12	1.538	MB
10	20.32	n.a.	0.055	0.037	0.01	n.a.	BMB
<b>Total:</b>			655.448	405.557	100.00	2235.650	

anions/Integration

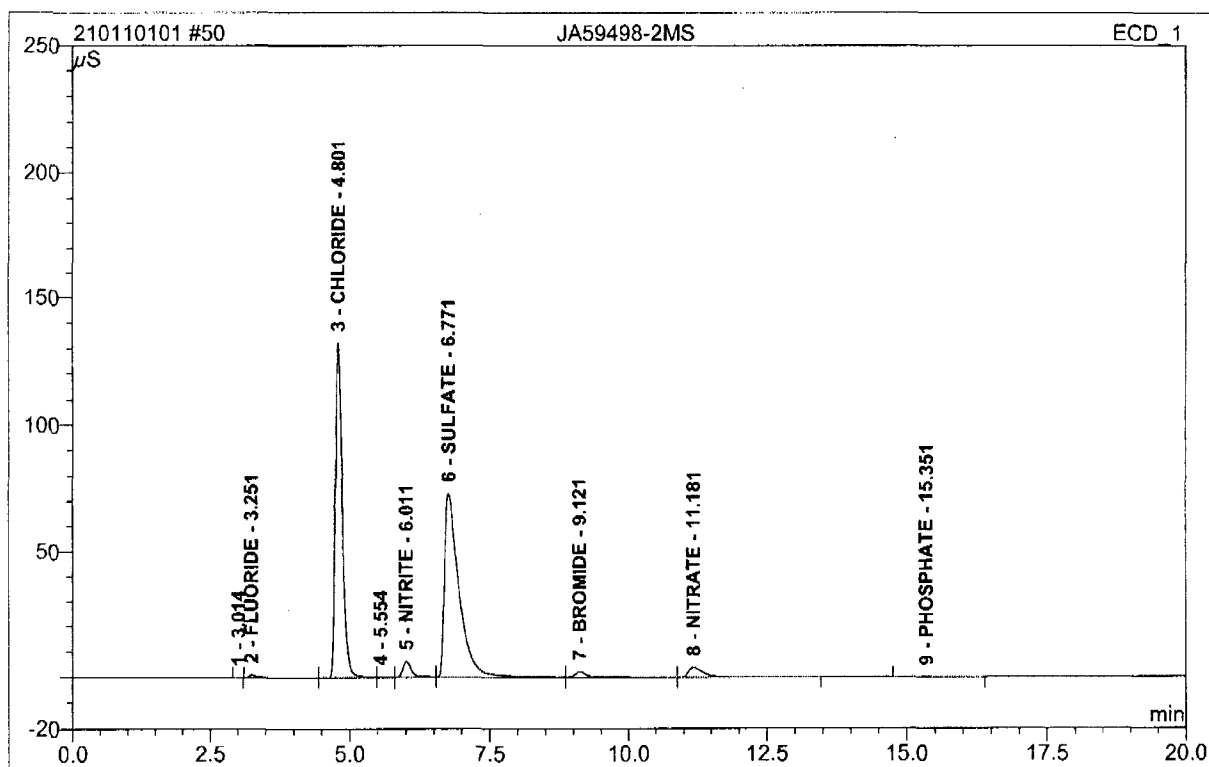
rem say @ 1.5

Chromeleon (c) Dionex 1996-2001  
Version 6.80 SR9a Build 2680 (163077)

**50 JA59498-2MS**

Sample Name: **JA59498-2MS**  
 Vial Number: **43**  
 Sample Type: **unknown**  
 Control Program: **Anions2\_ASDV**  
 Quantif. Method: **ANIONS2**  
 Recording Time: **11/2/2010 2:28**  
 Run Time (min): **21.00**

Injection Volume: **20.0**  
 Channel: **ECD\_1**  
 Wavelength: **n.a.**  
 Bandwidth: **n.a.**  
 Dilution Factor: **1.0000**  
 Sample Weight: **1.0000**  
 Sample Amount: **1.0000**

14.7  
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No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	3.01	n.a.	0.018	0.002	0.00	n.a.	BMB
2	3.25	FLUORIDE	1.069	0.187	0.42	0.465	BM
3	4.80	CHLORIDE	132.260	19.092	42.93	80.382	M
4	5.55	n.a.	0.182	0.049	0.11	n.a.	M
5	6.01	NITRITE	6.182	1.152	2.59	1.712	M
6	6.77	SULFATE	73.249	22.194	49.90	122.758	M
7	9.12	BROMIDE	2.253	0.610	1.37	5.173	M
8	11.18	NITRATE	3.726	1.156	2.60	2.048	MB
9	15.35	PHOSPHATE	0.054	0.035	0.08	0.113	BMB
<b>Total:</b>			218.993	44.476	100.00	212.652	

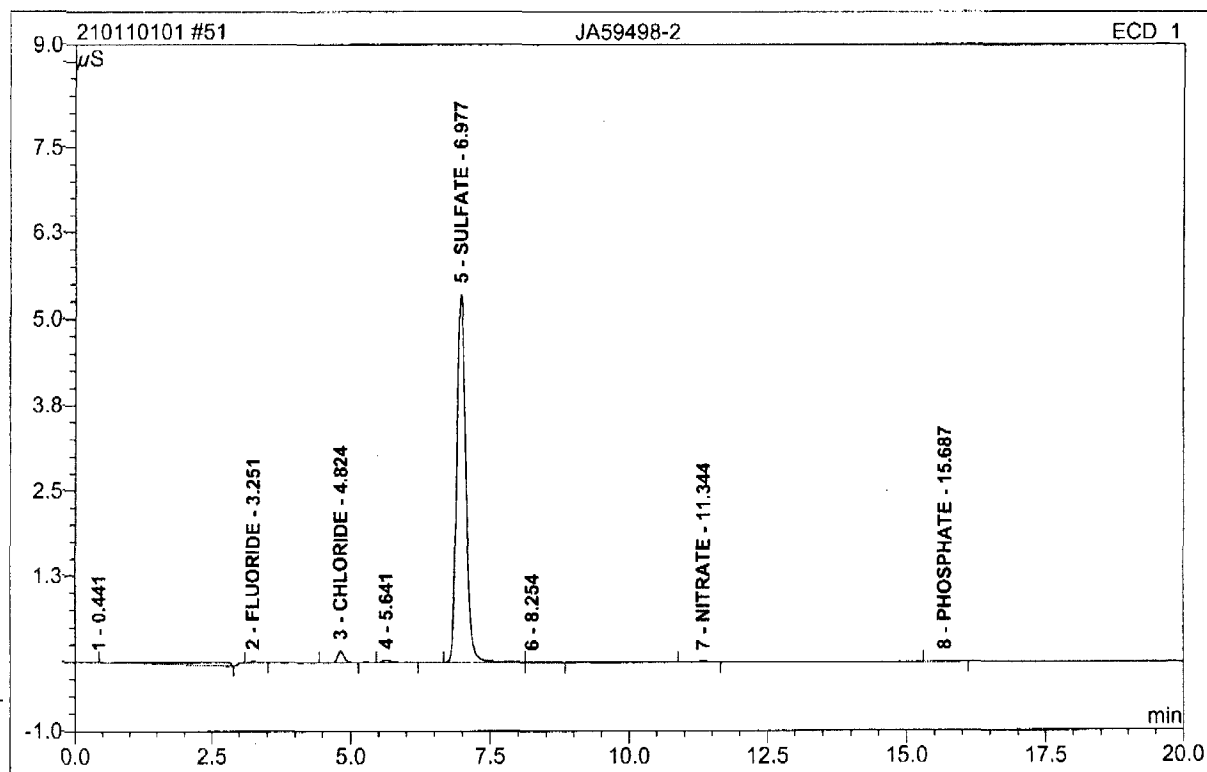
anions/Integration

possible SO<sub>4</sub> carryover  
rem SO<sub>4</sub>

Chromeleon (c) Dionex 1996-2001  
 Version 6.80 SR9a Build 2680 (163077)

**51 JA59498-2**

Sample Name:	JA59498-2	Injection Volume:	20.0
Vial Number:	44	Channel:	ECD_1
Sample Type:	unknown	Wavelength:	n.a.
Control Program:	Anions2_ASDV	Bandwidth:	n.a.
Quantif. Method:	ANIONS2	Dilution Factor:	1.0000
Recording Time:	11/2/2010 2:52	Sample Weight:	1.0000
Run Time (min):	21.00	Sample Amount:	1.0000

14.7  
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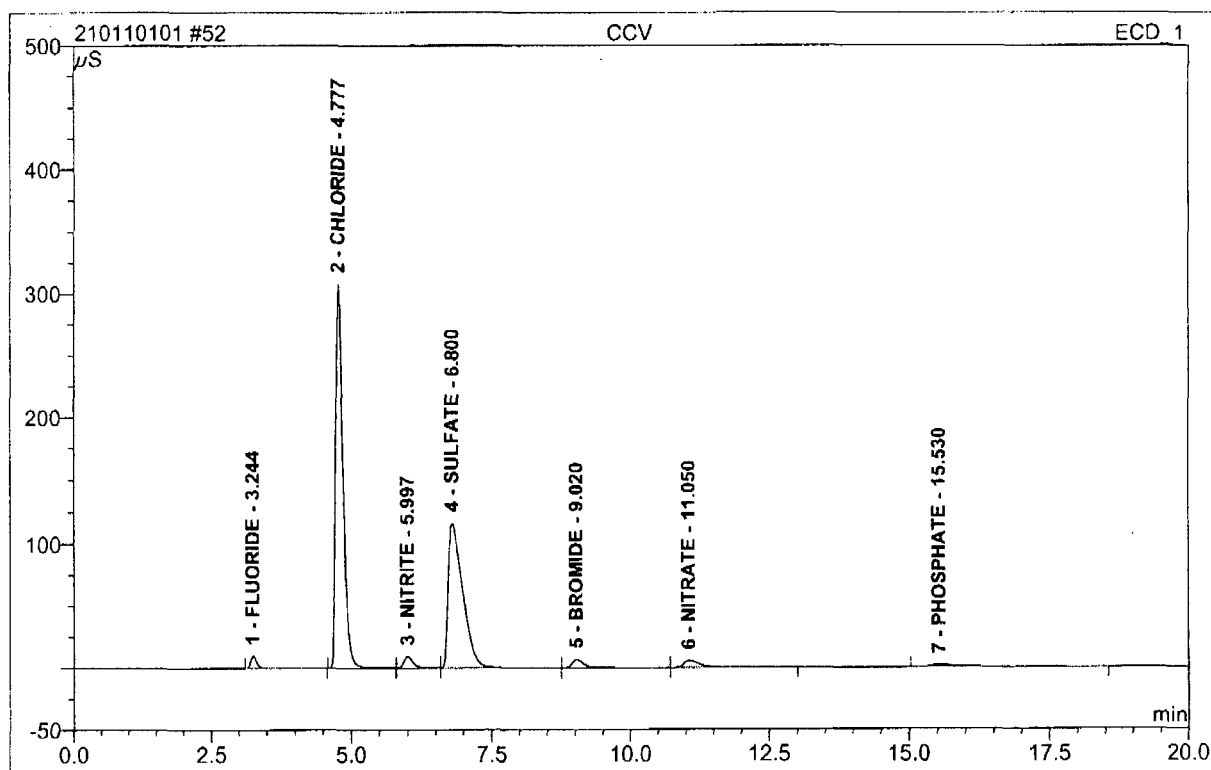
No.	Ret.Time min	Peak Name	Height μS	Area μS*min	Rel.Area %	Amount	Type
1	0.44	n.a.	0.000	0.059	5.32	n.a.	BMB
2	3.25	FLUORIDE	0.021	0.003	0.28	0.008	BMB
3	4.82	CHLORIDE	0.168	0.023	2.07	0.097✓	BMB
4	5.64	n.a.	0.035	0.007	0.65	n.a.	BMB
5	6.98	SULFATE	5.357	1.009	91.03	5.583✓	BM
6	8.25	n.a.	0.007	0.003	0.26	n.a.	MB
7	11.34	NITRATE	0.008	0.002	0.22	0.004	BMB
8	15.69	PHOSPHATE	0.004	0.002	0.16	0.006	BMB
Total:			5.601	1.109	100.00	5.697	

anions/Integration

Chromeleon (c) Dionex 1996-2001  
Version 6.80 SR9a Build 2680 (163077)

**52 CCV**

Sample Name:	CCV	Injection Volume:	20.0
Vial Number:	45	Channel:	ECD_1
Sample Type:	unknown	Wavelength:	n.a.
Control Program:	Anions2_ASDV	Bandwidth:	n.a.
Quantif. Method:	ANIONS2	Dilution Factor:	1.0000
Recording Time:	11/2/2010 3:16	Sample Weight:	1.0000
Run Time (min):	21.00	Sample Amount:	1.0000

14.7  
14

No.	Ret.Time min	Peak Name	Height μS	Area μS*min	Rel.Area %	Amount	Type
1	3.24	FLUORIDE	9.804	1.200	1.34	2.992	BMB
2	4.78	CHLORIDE	308.104	47.037	52.51	198.034	BM
3	6.00	NITRITE	9.357	1.823	2.04	2.711	M
4	6.80	SULFATE	116.129	35.089	39.17	194.083	M
5	9.02	BROMIDE	6.681	1.619	1.81	13.721	M
6	11.05	NITRATE	5.361	1.704	1.90	3.020	MB
7	15.53	PHOSPHATE	1.714	1.106	1.24	3.598	BMB
8	20.28	n.a.	0.004	0.001	0.00	n.a.	BMB
<b>Total:</b>			457.154	89.579	100.00	418.158	

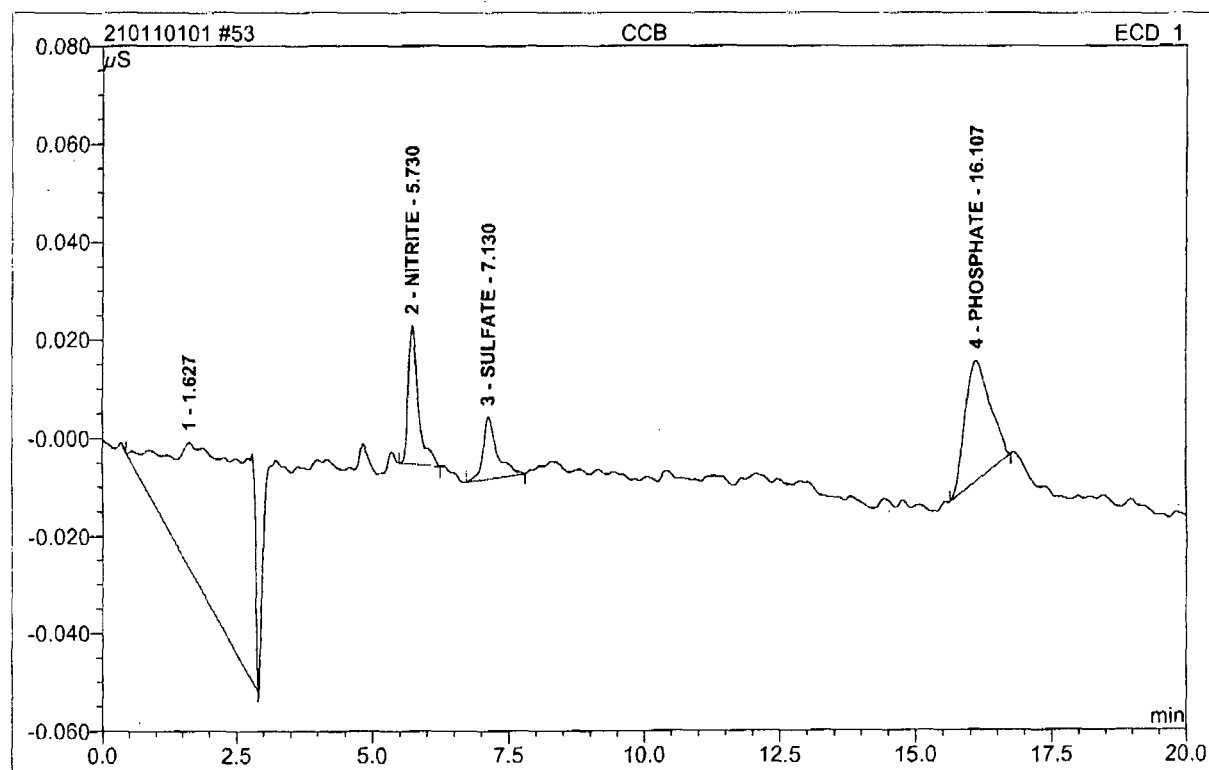
90 Rec  
99.0  
97.0

anions/Integration

Chromeleon (c) Dionex 1996-2001  
Version 6.80 SR9a Build 2680 (163077)

**53 CCB**

Sample Name:	CCB	Injection Volume:	20.0
Vial Number:	46	Channel:	ECD_1
Sample Type:	unknown	Wavelength:	n.a.
Control Program:	Anions2_ASDV	Bandwidth:	n.a.
Quantif. Method:	ANIONS2	Dilution Factor:	1.0000
Recording Time:	11/2/2010 3:40	Sample Weight:	1.0000
Run Time (min):	21.00	Sample Amount:	1.0000



No.	Ret.Time min	Peak Name	Height μS	Area μS*min	Rel.Area %	Amount	Type
1	1.63	n.a.	0.026	0.057	71.29	n.a.	BMB
2	5.73	NITRITE	0.028	0.006	7.55	0.009	BMB
3	7.13	SULFATE	0.013	0.004	4.74	0.021	BMB
4	16.11	PHOSPHATE	0.025	0.013	16.43	0.043	BMB
Total:			0.091	0.080	100.00	0.073	

anions/Integration

Chromeleon (c) Dionex 1996-2001  
Version 6.80 SR9a Build 2680 (163077)

	Sample Name	Sample ID	Method	Analysis	Dilution	Date / Time	Conc.	CV
1	CRI		tocscal4.met	SSM-TC	1.000	11/02/10 08:4	0.1239 %	0.136%
2	CRI		tocscal4.met	SSM-TC	1.000	11/02/10 08:4	0.1239 %	0.136%
3	HSTD		tocscal4.met	SSM-TC	1.000	11/02/10 08:5	5.357 %	1.39%
4	HSTD		tocscal4.met	SSM-TC	1.000	11/02/10 08:5	5.357 %	1.39%
5	ICV		tocscal4.met	SSM-TC	1.000	11/02/10 09:2	2.042 %	1.65%
6	ICV		tocscal4.met	SSM-TC	1.000	11/02/10 09:2	2.042 %	1.65%
7	CCV		tocscal4.met	SSM-TC	1.000	11/02/10 09:4	2.639 %	0.135%
8	CCV		tocscal4.met	SSM-TC	1.000	11/02/10 09:4	2.639 %	0.135%
9	GP56130-MB		tocss4.met	SSM-TC	1.000	11/02/10 10:0	0.03651 %	85.2%
10	GP56130-MB		tocss4.met	SSM-TC	1.000	11/02/10 10:0	0.03651 %	85.2%
11	GP56130-B1		tocss4.met	SSM-TC	1.000	11/02/10 10:1	2.107 %	2.86%
12	GP56130-B1		tocss4.met	SSM-TC	1.000	11/02/10 10:1	2.107 %	2.86%
13	JA58900-3	(A)	tocss4.met	SSM-TC	1.000	11/02/10 10:4	0.9420 %	10.6%
14	JA58900-3		tocss4.met	SSM-TC	1.000	11/02/10 10:4	0.9420 %	10.6%
15	JA59322-1	(2)	tocss4.met	SSM-TC	1.000	11/02/10 10:5	36.99 %	0.00%
16	JA58249-1A	(A)	tocss4.met	SSM-TC	1.000	11/02/10 11:0	7.032 %	0.00%
17	JA58900-1	(A)	tocss4.met	SSM-TC	1.000	11/02/10 11:1	2.424 %	14.5%
18	JA58900-1		tocss4.met	SSM-TC	1.000	11/02/10 11:1	2.424 %	14.5%
19	JA58900-2		tocss4.met	SSM-TC	1.000	11/02/10 11:2	0.5622 %	9.79%
20	JA58900-2		tocss4.met	SSM-TC	1.000	11/02/10 11:2	0.5622 %	9.79%
21	JA58900-4		tocss4.met	SSM-TC	1.000	11/02/10 12:0	1.543 %	7.84%
22	JA58900-4		tocss4.met	SSM-TC	1.000	11/02/10 12:0	1.543 %	7.84%
23	JA58900-7		tocss4.met	SSM-TC	1.000	11/02/10 12:1	1.150 %	5.25%
24	JA58900-7		tocss4.met	SSM-TC	1.000	11/02/10 12:1	1.150 %	5.25%
25	JA58900-8	(2)	tocss4.met	SSM-TC	1.000	11/02/10 12:4	1.437 %	28.8%
26	JA58900-8		tocss4.met	SSM-TC	1.000	11/02/10 12:4	1.437 %	28.8%
27	JA58900-8		tocss4.met	SSM-TC	1.000	11/02/10 12:4	1.437 %	28.8%
28	JA58900-8		tocss4.met	SSM-TC	1.000	11/02/10 12:4	1.437 %	28.8%
29	CCV		tocscal4.met	SSM-TC	1.000	11/02/10 12:5	2.659 %	1.16%
30	CCV		tocscal4.met	SSM-TC	1.000	11/02/10 12:5	2.659 %	1.16%
31	JA58900-9	(A)	tocss4.met	SSM-TC	1.000	11/02/10 13:1	1.460 %	16.0%
32	JA58900-9		tocss4.met	SSM-TC	1.000	11/02/10 13:1	1.460 %	16.0%
33	JA58900-9		tocss4.met	SSM-TC	1.000	11/02/10 13:1	1.460 %	16.0%
34	JA58900-9		tocss4.met	SSM-TC	1.000	11/02/10 13:1	1.460 %	16.0%
35	JA58900-10		tocss4.met	SSM-TC	1.000	11/02/10 13:4	1.826 %	17.4%
36	JA58900-10		tocss4.met	SSM-TC	1.000	11/02/10 13:4	1.826 %	17.4%
37	JA58900-10		tocss4.met	SSM-TC	1.000	11/02/10 13:4	1.826 %	17.4%
38	JA58900-10		tocss4.met	SSM-TC	1.000	11/02/10 13:4	1.826 %	17.4%
39	JA58900-11		tocss4.met	SSM-TC	1.000	11/02/10 13:5	1.440 %	3.54%
40	JA58900-11		tocss4.met	SSM-TC	1.000	11/02/10 13:5	1.440 %	3.54%
41	JA58900-12		tocss4.met	SSM-TC	1.000	11/02/10 14:2	0.8677 %	26.7%
42	JA58900-12		tocss4.met	SSM-TC	1.000	11/02/10 14:2	0.8677 %	26.7%
43	JA58900-12		tocss4.met	SSM-TC	1.000	11/02/10 14:2	0.8677 %	26.7%
44	JA58900-12		tocss4.met	SSM-TC	1.000	11/02/10 14:2	0.8677 %	26.7%
45	JA58900-14		tocss4.met	SSM-TC	1.000	11/02/10 14:4	0.5978 %	37.4%
46	JA58900-14		tocss4.met	SSM-TC	1.000	11/02/10 14:4	0.5978 %	37.4%
47	JA58900-14		tocss4.met	SSM-TC	1.000	11/02/10 14:4	0.5978 %	37.4%
48	JA58900-14		tocss4.met	SSM-TC	1.000	11/02/10 14:4	0.5978 %	37.4%
49	GP56130-D1	JA58900-3	tocss4.met	SSM-TC	1.000	11/02/10 15:0	0.8902 %	11.3%

overrange rerun  
0.005g  
overrange rerun  
0.05g

high CV &  
heterogeneous +  
rerun

14.8  
14

0.0110251.TOC

GN 44154

2, 11/3/10

	Sample Name	Sample ID	Method	Analysis	Dilution	Date / Time	Conc.	CV
50	GP56130-D1	JA58900-3	tocss4.met	SSM-TC	1.000	11/02/10 15:0	0.8902 %	11.3%
51	GP56130-D1	JA58900-3	tocss4.met	SSM-TC	1.000	11/02/10 15:0	0.8902 %	11.3%
52	GP56130-D1	JA58900-3	tocss4.met	SSM-TC	1.000	11/02/10 15:0	0.8902 %	11.3%
53	GP56130-S1	JA58900-3	tocss4.met	SSM-TC	1.000	11/02/10 15:1	2.586 %	0.789%
54	GP56130-S1	JA58900-3	tocss4.met	SSM-TC	1.000	11/02/10 15:1	2.586 %	0.789%
55	JA59322-1	(A)	tocss4.met	SSM-TC	1.000	11/02/10 15:3	47.05 %	6.64%
56	JA59322-1		tocss4.met	SSM-TC	1.000	11/02/10 15:3	47.05 %	6.64%
57	JA59322-1		tocss4.met	SSM-TC	1.000	11/02/10 15:3	47.05 %	6.64%
58	JA59322-1		tocss4.met	SSM-TC	1.000	11/02/10 15:3	47.05 %	6.64%
59	JA58249-1AR		tocss4.met	SSM-TC	1.000	11/02/10 16:0	7.301 %	18.7%
60	JA58249-1AR		tocss4.met	SSM-TC	1.000	11/02/10 16:0	7.301 %	18.7%
61	JA58249-1AR		tocss4.met	SSM-TC	1.000	11/02/10 16:0	7.301 %	18.7%
62	JA58249-1AR		tocss4.met	SSM-TC	1.000	11/02/10 16:0	7.301 %	18.7%
63	JA58900-8		tocss4.met	SSM-TC	1.000	11/02/10 16:2	0.9601 %	12.1%
64	JA58900-8		tocss4.met	SSM-TC	1.000	11/02/10 16:2	0.9601 %	12.1%
65	CCV		tocscal4.met	SSM-TC	1.000	11/02/10 16:3	2.612 %	1.83%
66	CCV		tocscal4.met	SSM-TC	1.000	11/02/10 16:3	2.612 %	1.83%

A0110351.TOC

GN 44154

8/11/3/10

A01102S1.TOC

Test: Total Organic Carbon

Units = mg/kg

GN Batch ID 44154


Product: TOC

Balance ID: B-39


Date 11/02/10

Method: Corp. Eng. 81 M/SW846.9060 M or EPA Region 2 Lloyd Kahn (circle one)

RDL = 1000 mg/kg or 100 mg/kg (circle one)

Analyst 

Sample ID	Sample Weight	Bottle #	Sample Description & comments
CRI			
HSTD			
ICV			
CCV			
GP56130-mB1	0.1000		
	0.1000		
GP56130-B1	0.1000		
	0.1000		
JAS8900-3	0.1053	1	
	0.1029		
	0.1005		
	0.1066		
JAS9322-1	0.0503	1	overrange rerun 0.005g
	0.0510		
	0.0504		
	0.0509		
JAS8249-1ARU	0.1061	1	overrange rerun 0.05g
	0.1056		
	0.1015		
	0.1061		
JAS8900-1	0.1061	2	
	0.1034		
	0.1085		
	0.1061		

Analyst:  Date: 11/2/10 QCReviewer: \_\_\_\_\_ Date: \_\_\_\_\_

Manager Review: \_\_\_\_\_ Date: \_\_\_\_\_

Comments:

BS - 100ml of 20000 mg C/L → 0.1 g Silica Sand TV = 20000 mg/kg

Form: GN-058a

Rev. Date: 11/11/08



(2)

Test: Total Organic Carbon

Units = mg/kg

GN Batch ID 44154Product: TOCBalance ID: 1339Date 11/2/10Method: Corp. Eng. 81 M/SW846 9060 M or EPA Region 2 Lloyd Kahn (circle one)

RDL = 1000 mg/kg or 100 mg/kg (circle one)

Analyst 87

Sample ID	Sample Weight	Bottle #	Sample Description & comments
JAS8900-2	0.1074	1	
	0.1050		
	0.1010		
	0.1055		
JAS8900-4	0.1099	2	
	0.1039		
	0.1078		
	0.1080		
JAS8900-7	0.1079	1	
	0.1014		
	0.1082		
	0.1068		
JAS8900-8	0.1073	2	
	0.1023		
	0.1016		
	0.1057		
CCV			
JAS8900-9	0.1069	1	
	0.1021		
	0.1004		
	0.1046		
JAS8900-10	0.1095	1	
	0.1025		
	0.1044		

Analyst: 87 Date: 11/2/10 QCReviewer: \_\_\_\_\_ Date: \_\_\_\_\_

Manager Review: \_\_\_\_\_ Date: \_\_\_\_\_

Comments: \_\_\_\_\_

Form: GN-058a

Rev. Date: 11/11/08



ACCUTEST.

3

Test: Total Organic Carbon

Units = mg/kg

GN Batch ID 44154

Product: TOC

Balance ID: B-39

Date 11/2/10

Method: Corp. Eng. 81 M/SW846 9060 M or EPA Region 2 Lloyd Kahn (circle one)

RDL = 1000 mg/kg or 100 mg/kg (circle one)

Analyst ES

Sample ID	Sample Weight	Bottle #	Sample Description & comments
	0.1071		
JA58900-11	0.1075	2	
	0.1012		
	0.1007		
	0.1028		
JA58900-12	0.1080	1	
	0.1024		
	0.1006		
	0.1067		
JA58900-14	0.1075	2	
	0.1059		
	0.1021		
	0.1018		
GP56130-D1	0.1070	1	JA58900-3
	0.1058		
	0.1031		
	0.1096		
GP56130-S1	0.1075	1	
	0.1008		TV= 19203
	0.1010		
	0.1056		
JA59322-1	0.0052	1	fine black powdery
	0.0048		
	0.0054		

Analyst: ES Date: 11/2/10 QCReviewer: \_\_\_\_\_ Date: \_\_\_\_\_

Manager Review: \_\_\_\_\_ Date: \_\_\_\_\_

Comments: \_\_\_\_\_

Form: GN-058a

Rev. Date: 11/11/08



④

GN Batch ID 44154

Date 11/2/10

Method: **Corp. Eng. 81 M/SW846 9060 M or EPA Region 2 Lloyd Kahn (circle one)**

RDL = 1000 mg/kg or 100 mg/kg (circle one)

Analyst                     

[illegible]

Analyst: 2 Date: 11/2/10 QCReviewer: \_\_\_\_\_ Date: \_\_\_\_\_

Manager Review: \_\_\_\_\_ Date: \_\_\_\_\_

Comments:

Form: GN-058a  
Rev. Date: 11/11/08


**ACCUTEST**

Bal B 39

Glass pipets - Class A

## GENERAL CHEMISTRY STANDARD PREPARATION LOG

Product: TOCGN or GP Number: GN44154

Intermediate Standard Description	Stock used to prepare standard	Stock concentration	Stock volume used in ml	Diluent	Final Volume	Final Conc. of Intermediate (mg/l)	Expiration Date	Analyst	Date
GNE10-26334-TOC	Fisher 092849	Sucrose	47.5g	DI H <sub>2</sub> O	100ml	200000	11/7/10	SS	11/2/10
GNE10-26335-TOC	Fisher 086673A	Glucose	12.5g	↓	↓	50000	↓	↓	↓
Standard Description	Intermediate or Stock used to prepare standard	Intermediate or Stock concentration	Intermediate or Stock volume used in ml	Diluent	Final Volume	Final Conc. of Standard (mg/l)	Expiration Date	Analyst	Date
Sucrose Stds									
GNE10-26336-TOC	GNE10-26334-TOC	200000	0.5	DI H <sub>2</sub> O	100ml	1000	11/7/10	SS	11/2/10
GNE10-26337-TOC	↓	↓	2.5	↓	↓	5000	↓	↓	↓
GNE10-26338-TOC	↓	↓	5.0	↓	↓	10000	↓	↓	↓
GNE10-26339-TOC	↓	↓	12.5	↓	↓	25000	↓	↓	↓
GNE10-26340-TOC	↓	↓	20.0	↓	↓	40000	↓	↓	↓
GNE10-26341-TOC	↓	↓	25.0	↓	↓	50000	↓	↓	↓
Glucose Stds.									
GNE10-26342-TOC	GNE10-26335-TOC	50000	40.0	DI H <sub>2</sub> O	100ml	20000	11/7/10	SS	↓
GNE10-26343-TOC	↓	↓	50.0	↓	↓	25000	↓	↓	↓

Form: GN121

Rev. Date: 2/26/03

QC Reports:



ACCUTEST.

GN44154

## Reagent Information Log - TOC - Soil

Reagent

Reagent # or Manufacturer/Lot

Sucrose Stock Solution, 200000 mg/L

GNE10-26334-TOC

XP  
11/7/10

Glucose Stock Solution, 50000 ug/L

GNE10-26335-TOC

11/7/10

Glucose Check Solution, 25000 ug/L

GNE10-26343-TOC

11/7/10

Nitric Acid, Reagent Grade

J19023 Baker

9/2/12

Glucose <sup>Check</sup> ~~Stock~~ Solution, 20000 ug/L

GNE10-26342-TOC

11/7/10

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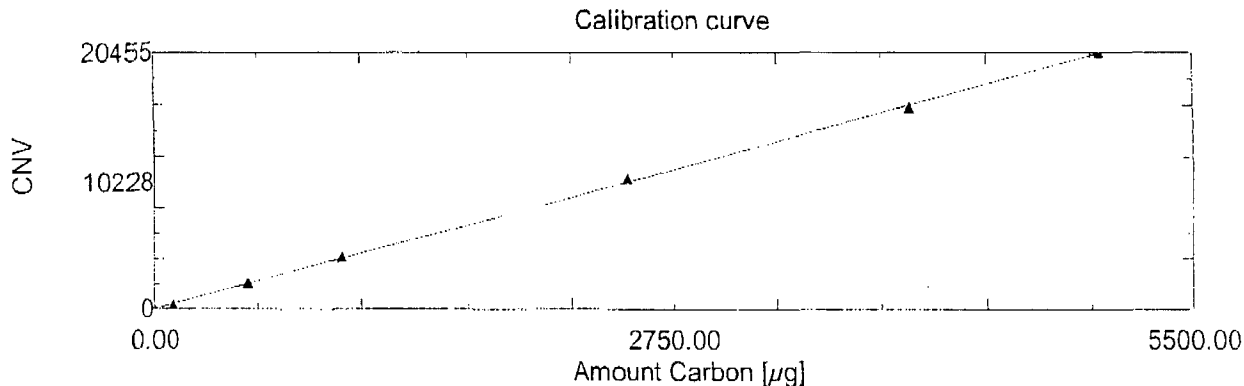
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All standards and stocks were made as described in the SOP for this method (circle one): Y or N  
If no (N), see attached page for standards prep.

Form: GN-087 1-66

Rev. Date: 4/26/01

# TOC-Control



## Calibration Curves

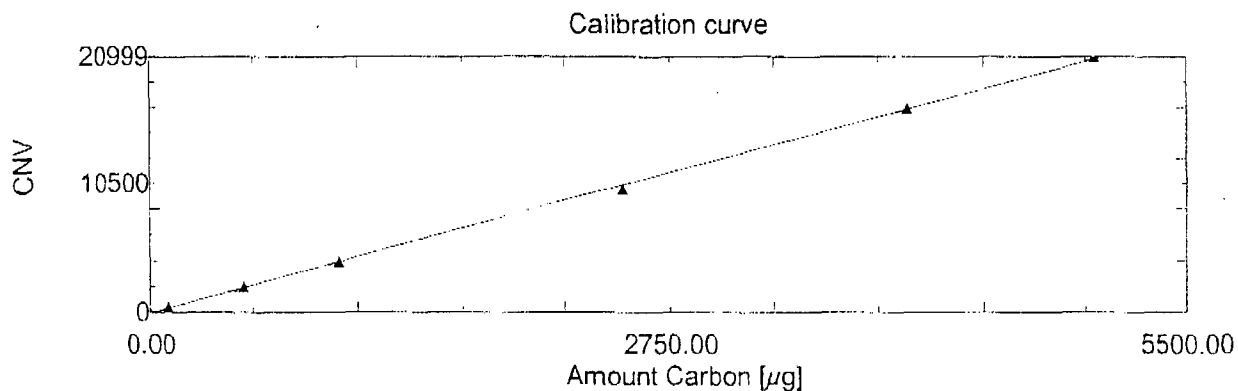
Filename: a01012s1.cal  
 Title: a01012s1.cal  
 Calculation method: Lin. regression without zero shift

Analysis	Unit	Range	Density
SSM-TC	%	5	1.000

Sample Name	Sample ID	Conc.	No. of Inj.	Mean Area	Volume	CNV	Abs C [µg]	SD	CV
STDA	0.0	0.000	2	0	0.00000	0	0.000	0	0.00%
STDB	0.1	0.1000	2	447	0.00000	446	100.0	24	5.54%
STDC	0.5	0.5000	2	2082	0.00000	2082	500.0	53	2.58%
STDD	1.0	1.000	2	4099	0.00000000	4098	1000	163	3.99%
STDE	2.5	2.500	2	10026	-0.00000	10025	2500	580	5.79%
STDF	4.0	4.000	2	16705	0.00000	16704	4000	0	0.0042%
STDG	5.0	5.000	2	20999	0.00000	20999	5000	66	0.317%

Slope: 4.1817  
 Intercept: -60.659  
 R<sup>2</sup>: 0.999584

# TOC-Control



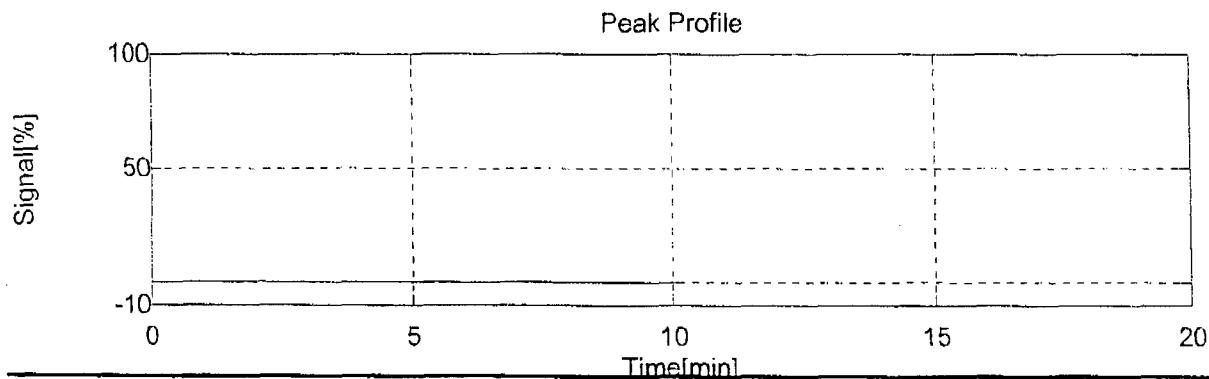
## Samples

Sample Name: STDA  
 Sample ID: 0.0  
 Comment:  
 Cal Curve: 1: a01012s1.cal

Type	Analysis	Dilution	Date/Time
Standard	SSM-TC	1.000	10/12/2010 09:21:44

Mean Area	Conc	Result	SD	CV	CNV	Modified
0	0.000%		0.000	0.00%	0	

No.	Range	Area	CNV	Conc	Excl.	Notes	Date/Time	Cal Curve
1	5	0	0	0.0000		*****	10/12/2010 09:14:47	a01012s1.cal
2	5	0	0	0.0000		*****	10/12/2010 09:21:44	a01012s1.cal



Accutest Laboratories,

10/12/2010 16:18:07

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# TOC-Control

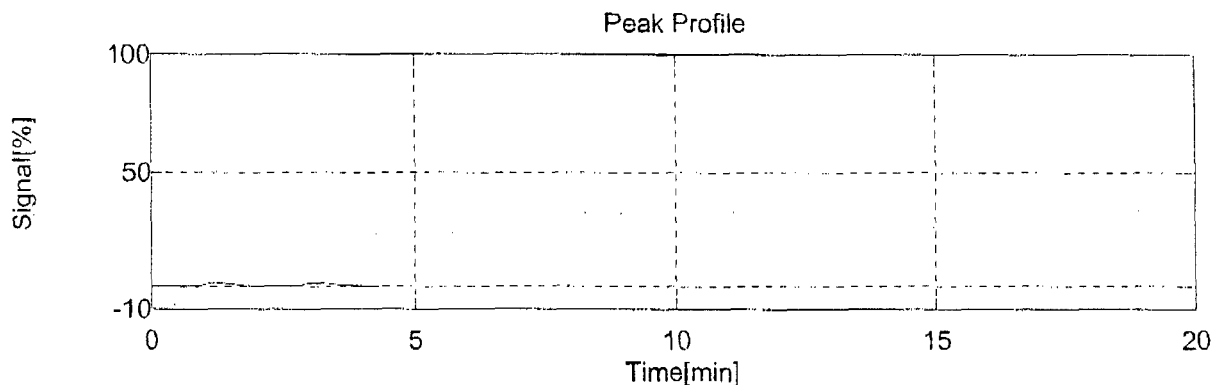
## Samples

Sample Name: STDB  
 Sample ID: 0.1  
 Comment:  
 Cal Curve: 1: a01012s1.cal

Type	Analysis	Dilution	Date/Time
Standard	SSM-TC	1.000	10/12/2010 09:42:51

Mean Area	Conc	Result	SD	CV	CNV	Modified
446	0.1000%		0.000	0.00%	446	

No.	Range	Area	CNV	Conc	Excl.	Notes	Date/Time	Cal Curve
1	5	464	464	0.10000		*****	10/12/2010 09:38:02	a01012s1.cal
2	5	429	429	0.10000		*****	10/12/2010 09:42:51	a01012s1.cal



## Samples

Sample Name: STDC  
 Sample ID: 0.5  
 Comment:

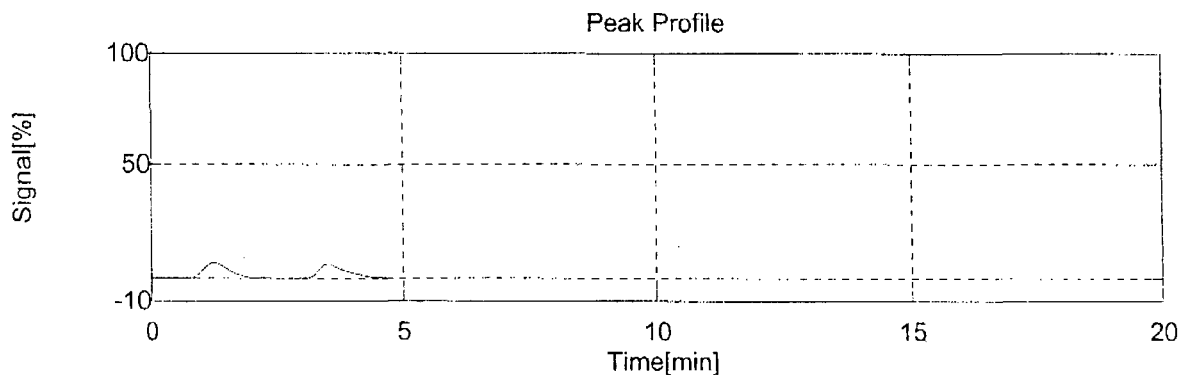
# TOC-Control

Cal Curve: 1: a01012s1.cal

Type	Analysis	Dilution	Date/Time
Standard	SSM-TC	1.000	10/12/2010 09:51:36

Mean Area	Conc	Result	SD	CV	CNV	Modified
2082	0.5000%		0.000	0.00%	2082	

No.	Range	Area	CNV	Conc	Excl.	Notes	Date/Time	Cal Curve
1	5	2044	2044	0.50000		*****	10/12/2010 09:47:07	a01012s1.cal
2	5	2120	2120	0.50000		*****	10/12/2010 09:51:36	a01012s1.cal



## Samples

Sample Name: STDD  
 Sample ID: 1.0  
 Comment:  
 Cal Curve: 1: a01012s1.cal

Type	Analysis	Dilution	Date/Time
Standard	SSM-TC	1.000	10/12/2010 10:10:39

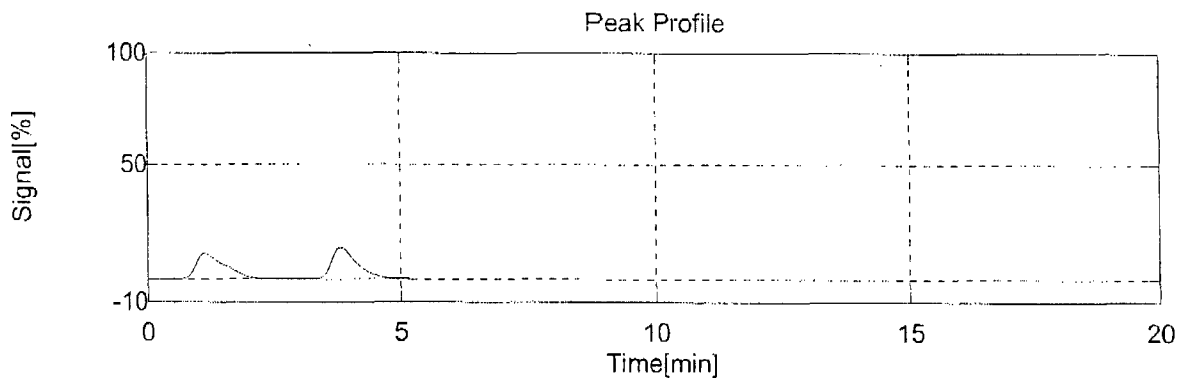
Mean Area	Conc	Result	SD	CV	CNV	Modified
4098	1.000%		0.000	0.00%	4098	

Accutest Laboratories,

10/12/2010 16:18:07

# TOC-Control

No.	Range	Area	CNV	Conc	Excl.	Notes	Date/Time	Cal Curve
1	5	3983	3983	1.0000		*****	10/12/2010 10:05:56	a01012s1.cal
2	5	4214	4214	1.0000		*****	10/12/2010 10:10:39	a01012s1.cal



## Samples

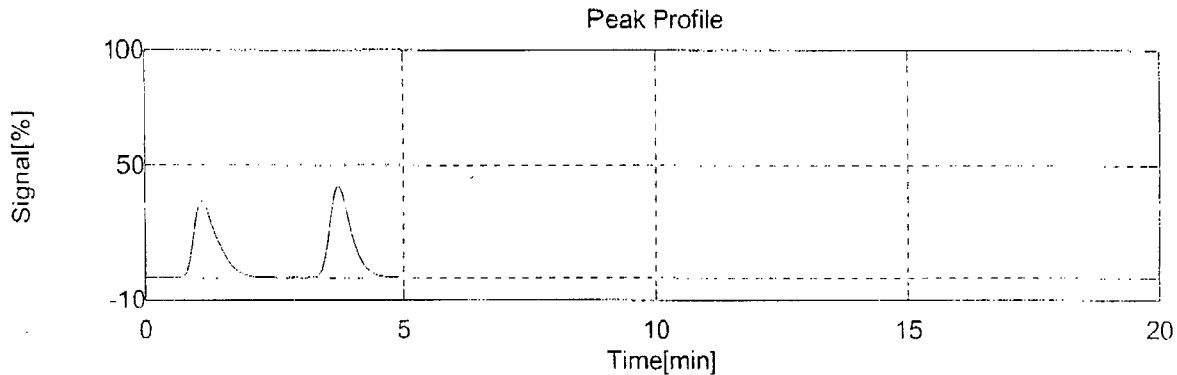
Sample Name: STDE  
 Sample ID: 2.5  
 Comment:  
 Cal Curve: 1: a01012s1.cal

Type	Analysis	Dilution	Date/Time
Standard	SSM-TC	1.000	10/12/2010 10:19:29

Mean Area	Conc	Result	SD	CV	CNV	Modified
10025	2.500%		0.000	0.00%	10025	

No.	Range	Area	CNV	Conc	Excl.	Notes	Date/Time	Cal Curve
1	5	9615	9615	2.5000		*****	10/12/2010 10:14:48	a01012s1.cal
2	5	10436	10436	2.5000		*****	10/12/2010 10:19:29	a01012s1.cal

# TOC-Control



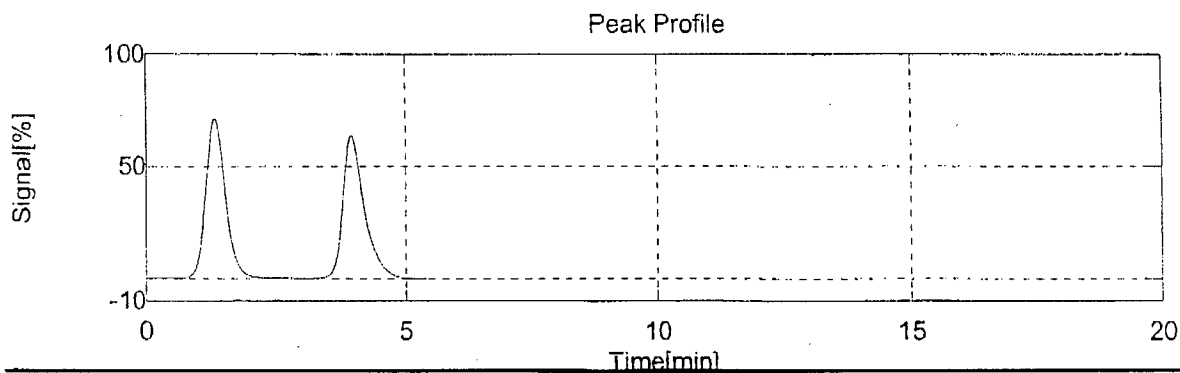
## Samples

Sample Name: STDF  
 Sample ID: 4.0  
 Comment:  
 Cal Curve: 1: a01012s1.cal

Type	Analysis	Dilution	Date/Time
Standard	SSM-TC	1.000	10/12/2010 10:30:06

Mean Area	Conc	Result	SD	CV	CNV	Modified
16704	4.000%		0.000	0.00%	16704	

No.	Range	Area	CNV	Conc	Excl.	Notes	Date/Time	Cal Curve
1	5	16705	16705	4.0000		*****	10/12/2010 10:25:12	a01012s1.cal
2	5	16704	16704	4.0000		*****	10/12/2010 10:30:06	a01012s1.cal



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10/12/2010 16:18:07

# TOC-Control

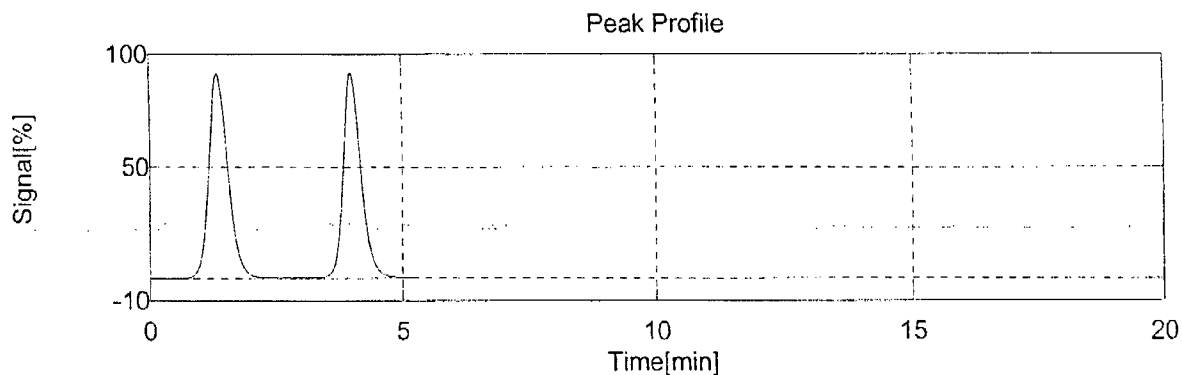
## Samples

Sample Name: STDG  
 Sample ID: 5.0  
 Comment:  
 Cal Curve: 1: a01012s1.cal

Type	Analysis	Dilution	Date/Time
Standard	SSM-TC	1.000	10/12/2010 10:40:05

Mean Area	Conc	Result	SD	CV	CNV	Modified
20999	5.000%		0.000	0.00%	20999	

No.	Range	Area	CNV	Conc	Excl.	Notes	Date/Time	Cal Curve
1	5	21046	21046	5.0000		*****	10/12/2010 10:35:01	a01012s1.cal
2	5	20952	20952	5.0000		*****	10/12/2010 10:40:05	a01012s1.cal



## Samples

Sample Name: ICV  
 Sample ID:  
 Comment:  
 Method: tocscal4.met

# TOC-Control

## General Information

Organization: Accutest Laboratories  
 User:  
 Title:  
 Instrument ID: TOC1  
 Filename: C:\TOCCNTR\DATA\A01102S1.TOC  
 Comment:

## Instrument Conditions

Instrument Attachments: TOC-5000 + SSM 5000

## Calibration Curves

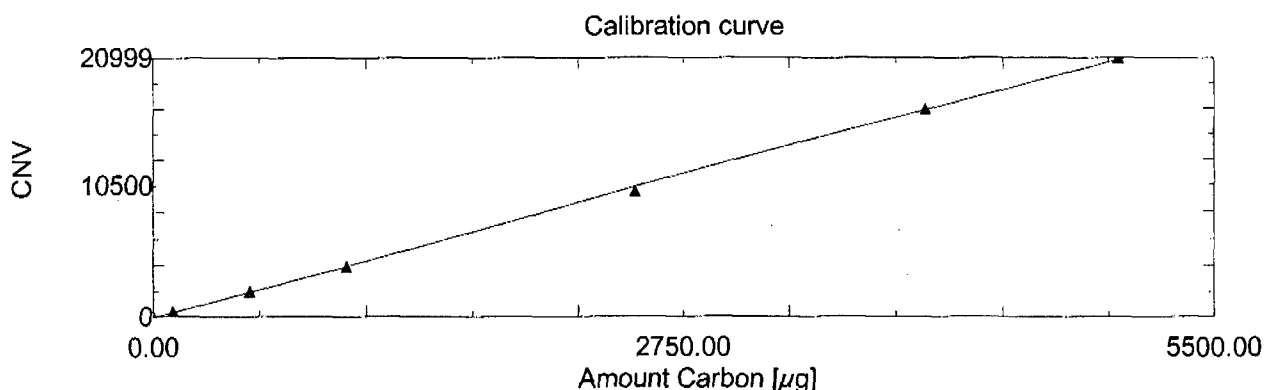
Filename: a01012s1.cal  
 Title: a01012s1.cal  
 Calculation method: Lin. regression without zero shift

Analysis	Unit	Range	Density
SSM-TC	%	5	1.000

Sample Name	Sample ID	Conc.	No. of Inj.	Mean Area	Volume	CNV	abs C (µg)	SD	CV
STDA	0.0	0.000	2	0	0.00000	0	0.000	0	0.00%
STDB	0.1	0.1000	2	447	0.00000	446	100.0	24	5.54%
STDC	0.5	0.5000	2	2082	0.00000	2082	500.0	53	2.58%
STDD	1.0	1.000	2	4099	0.00000000	4098	1000	163	3.99%
STDE	2.5	2.500	2	10026	-0.00000	10025	2500	580	5.79%
STDF	4.0	4.000	2	16705	0.00000	16704	4000	0	0.0042%
STDG	5.0	5.000	2	20999	0.00000	20999	5000	66	0.317%

Slope: 4.1817  
 Intercept: -60.659  
 R<sup>2</sup>: 0.999584

# TOC-Control



## Samples

Sample Name: CRI  
 Sample ID:  
 Comment:  
 Method: tocsca4.met  
 Cal Curve: 1: a01012s1.cal

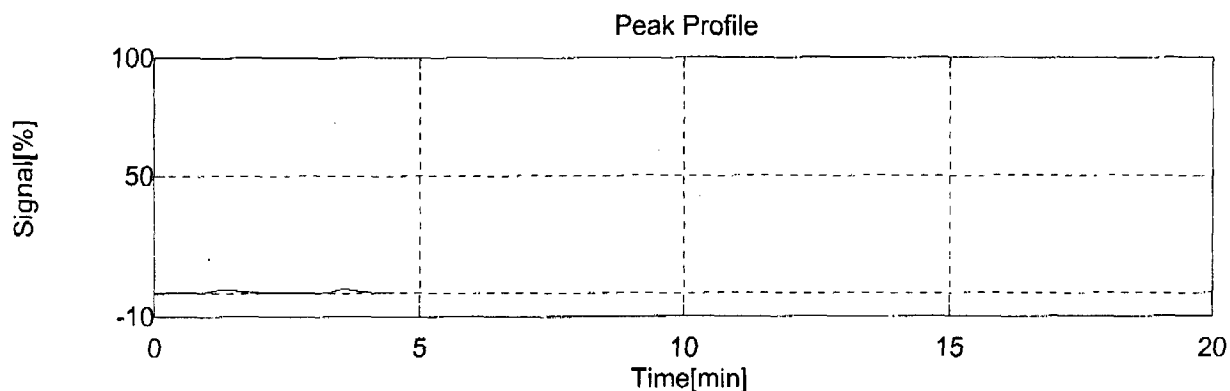
Type	Analysis	Dilution	Date/Time
Unknown	SSM-TC	1.000	11/02/2010 08:47:29

Mean Area	Conc	Result	SD	CV	Modified
457	0.1239%		0.00017	0.136%	

No.	Range	Area	Conc	Excl.	Notes	Date/Time	Cal Curve
1	5	458	0.12403		*****	11/02/2010 08:39:36	a01012s1.cal
2	5	457	0.12379		*****	11/02/2010 08:47:29	a01012s1.cal

14.8 14

# TOC-Control



## Samples

Sample Name: HSTD  
 Sample ID:  
 Comment:  
 Method: tocsca4.met  
 Cal Curve: 1: a01012s1.cal

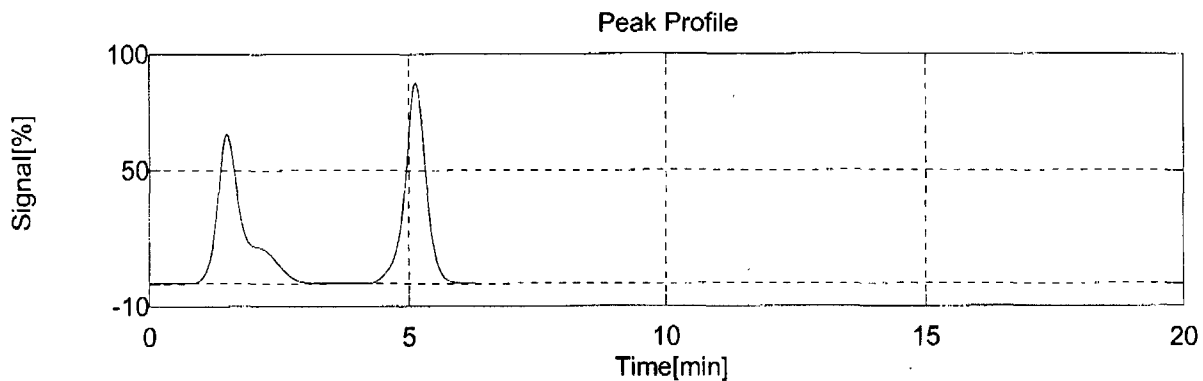
Type	Analysis	Dilution	Date/Time
Unknown	SSM-TC	1.000	11/02/2010 08:58:57

Mean Area	Conc	Result	SD	CV	Modified
22339	5.357%		0.07457	1.39%	

No.	Range	Area	Conc	Excl.	Notes	Date/Time	Cal Curve
1	5	22119	5.3039		*****	11/02/2010 08:54:31	a01012s1.cal
2	5	22560	5.4094		*****	11/02/2010 08:58:57	a01012s1.cal

14.8 14

# TOC-Control



## Samples

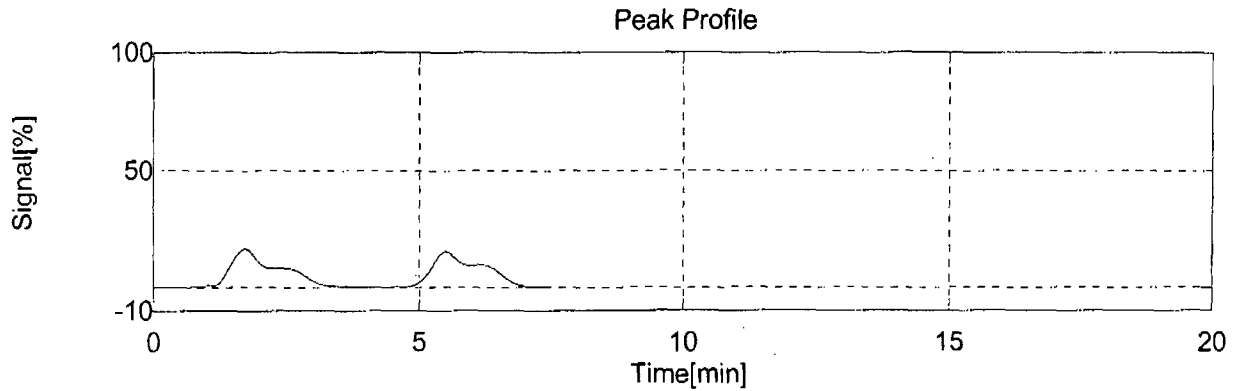
Sample Name: ICV  
 Sample ID:  
 Comment:  
 Method: tocsca4.met  
 Cal Curve: 1: a01012s1.cal

Type	Analysis	Dilution	Date/Time
Unknown	SSM-TC	1.000	11/02/2010 09:26:44

Mean Area	Conc	Result	SD	CV	Modified
8479	2.042%		0.03365	1.65%	

No.	Range	Area	Conc	Excl.	Notes	Date/Time	Cal Curve
1	5	8380	2.0185		*****	11/02/2010 09:10:58	a01012s1.cal
2	5	8579	2.0661		*****	11/02/2010 09:26:44	a01012s1.cal

# TOC-Control



## Samples

Sample Name: CCV  
 Sample ID:  
 Comment:  
 Method: tocscal4.met  
 Cal Curve: 1: a01012s1.cal

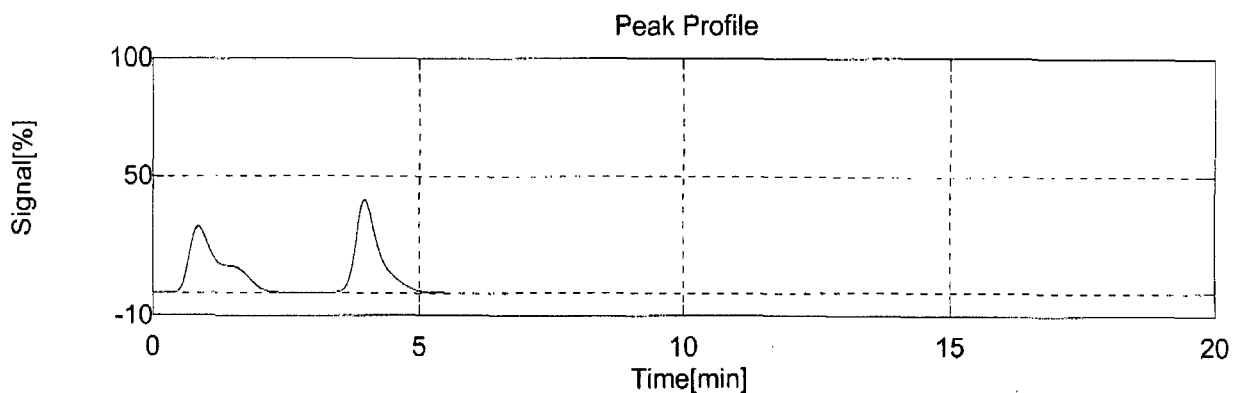
Type	Analysis	Dilution	Date/Time
Unknown	SSM-TC	1.000	11/02/2010 09:44:34

Mean Area	Conc	Result	SD	CV	Modified
10975	2.639%		0.00355	0.135%	

No.	Range	Area	Conc	Excl.	Notes	Date/Time	Cal Curve
1	5	10965	2.6366		*****	11/02/2010 09:34:42	a01012s1.cal
2	5	10986	2.6417		*****	11/02/2010 09:44:34	a01012s1.cal

14.8  
14

# TOC-Control



## Samples

Sample Name: GP56130-MB1  
 Sample ID:  
 Comment:  
 Method: tocss4.met  
 Cal Curve: 1: a01012s1.cal

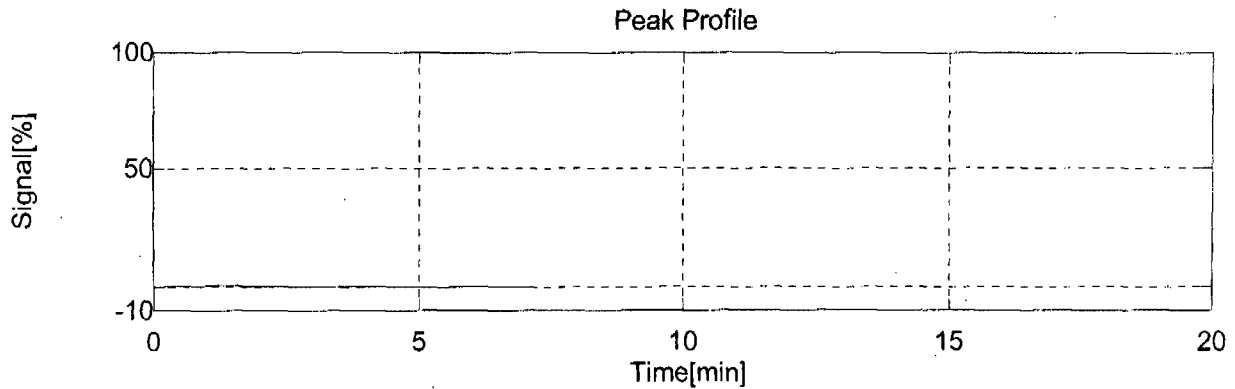
Type	Analysis	Dilution	Date/Time
Unknown	SSM-TC	1.000	11/02/2010 10:02:55

Mean Area	Conc	Result	SD	CV	Weight	Modified
92	0.03651%		0.03111	85.2%	100.0	

No.	Range	Area	Weight	Conc	Excl.	Notes	Date/Time	Cal Curve
1	5	184	100.0	0.058507		*****	11/02/2010 09:53:57	a01012s1.cal
2	5	0	100.0	0.014506		*****	11/02/2010 10:02:55	a01012s1.cal

14.8  
14

# TOC-Control



## Samples

Sample Name: GP56130-B1  
 Sample ID:  
 Comment:  
 Method: tocsc4.met  
 Cal Curve: 1: a01012s1.cal

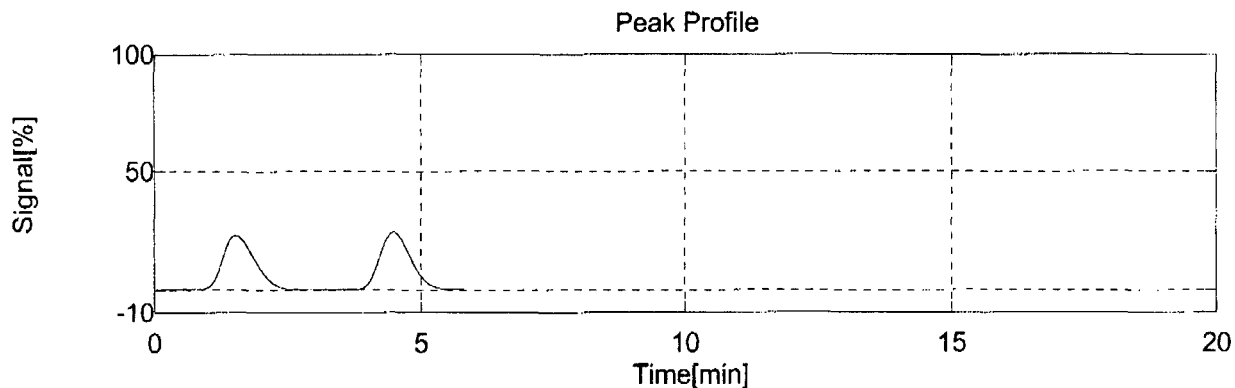
Type	Analysis	Dilution	Date/Time
Unknown	SSM-TC	1.000	11/02/2010 10:17:11

Mean Area	Conc	Result	SD	CV	Weight	Modified
8750	2.107%		0.06020	2.86%	100.0	

No.	Range	Area	Weight	Conc	Excl.	Notes	Date/Time	Cal Curve
1	5	8572	100.0	2.0644		*****	11/02/2010 10:07:37	a01012s1.cal
2	5	8928	100.0	2.1495		*****	11/02/2010 10:17:11	a01012s1.cal

14.8 14

# TOC-Control



## Samples

Sample Name: JA58900-3  
 Sample ID:  
 Comment:  
 Method: tocss4.met  
 Cal Curve: 1: a01012s1.cal

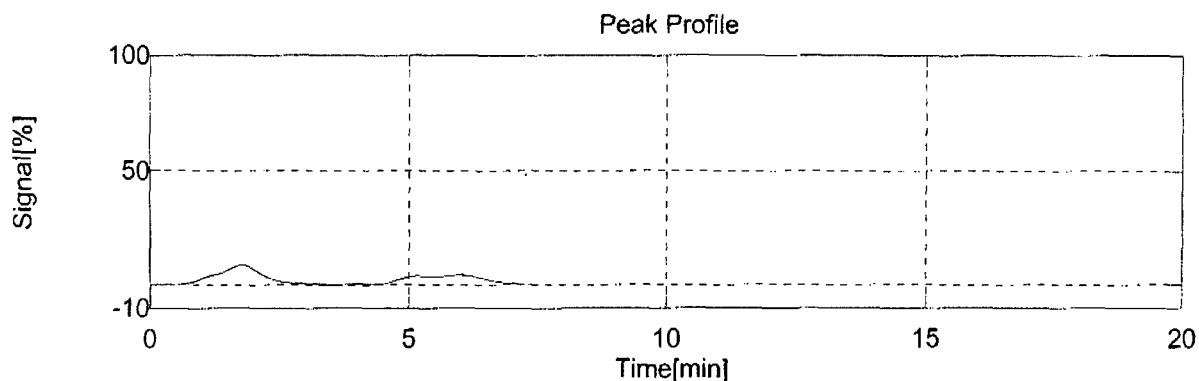
Type	Analysis	Dilution	Date/Time
Unknown	SSM-TC	1.000	11/02/2010 10:45:32

Mean Area	Conc	Result	SD	CV	Weight	Modified
4043	0.9420%		0.09948	10.6%	104.1	

No.	Range	Area	Weight	Conc	Excl.	Notes	Date/Time	Cal Curve
1	5	4397	105.3	1.0123		*****	11/02/2010 10:25:55	a01012s1.cal
2	5	3690	102.9	0.87164		*****	11/02/2010 10:45:32	a01012s1.cal

14.8  
14

# TOC-Control



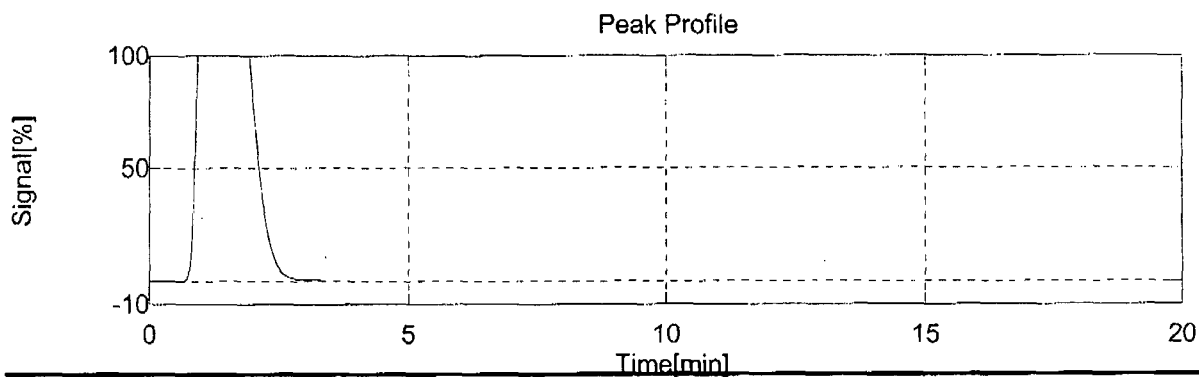
## Samples

Sample Name: JA59322-1  
 Sample ID:  
 Comment:  
 Method: tocss4.met  
 Cal Curve: 1: a01012s1.cal

Type	Analysis	Dilution	Date/Time
Unknown	SSM-TC	1.000	11/02/2010 10:53:26

Mean Area	Conc	Result	SD	CV	Weight	Modified
77735	36.99%		0.000	0.00%	50.30	

No.	Range	Area	Weight	Conc	Excl.	Notes	Date/Time	Cal Curve
1	5	77735	50.30	36.986		***H**	11/02/2010 10:53:26	a01012s1.cal



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11/03/2010 11:28:27

# TOC-Control

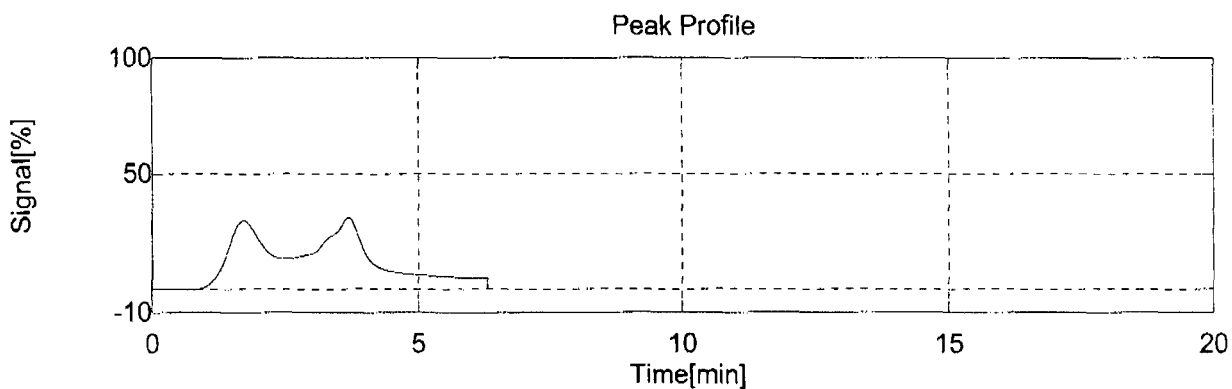
## Samples

Sample Name: JA58246-1ARU  
 Sample ID: ② 11/3/10  
 Comment:  
 Method: toc4s4.met  
 Cal Curve: 1: a01012s1.cal

Type	Analysis	Dilution	Date/Time
Unknown	SSM-TC	1.000	11/02/2010 11:03:45

Mean Area	Conc	Result	SD	CV	Weight	Modified
31138	7.032%		0.000	0.00%	106.1	

No.	Range	Area	Weight	Conc	Excl.	Notes	Date/Time	Cal Curve
1	5	31138	106.1	7.0318		*****	11/02/2010 11:03:45	a01012s1.cal



14.8 14

## Samples

Sample Name: JA58900-1  
 Sample ID:  
 Comment:  
 Method: toc4s4.met

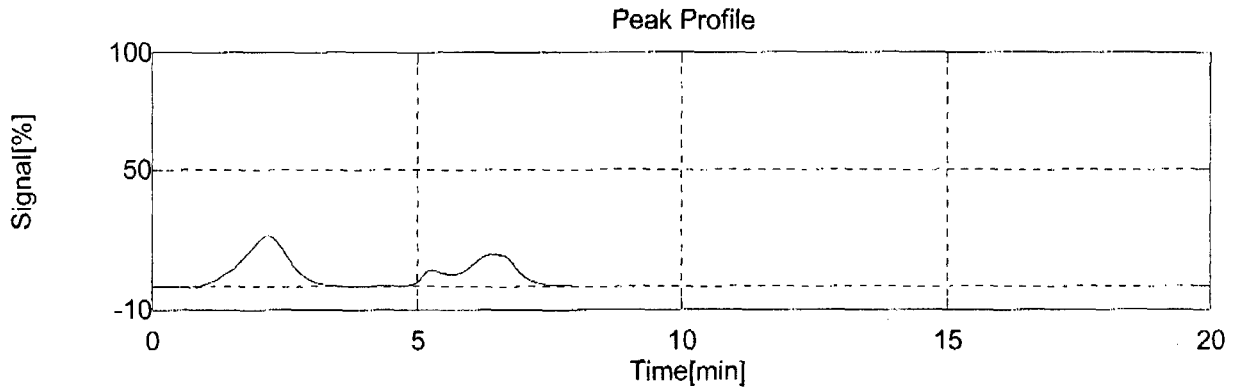
# TOC-Control

Cal Curve: 1: a01012s1.cal

Type	Analysis	Dilution	Date/Time
Unknown	SSM-TC	1.000	11/02/2010 11:16:54

Mean Area	Conc	Result	SD	CV	Weight	Modified
10572	2.424%		0.3520	14.5%	104.8	

No.	Range	Area	Weight	Conc	Excl.	Notes	Date/Time	Cal Curve
1	5	11799	106.1	2.6730		*****	11/02/2010 11:11:10	a01012s1.cal
2	5	9345	103.4	2.1753		*****	11/02/2010 11:16:54	a01012s1.cal



## Samples

Sample Name: JA58900-2  
 Sample ID:  
 Comment:  
 Method: tocss4.met  
 Cal Curve: 1: a01012s1.cal

Type	Analysis	Dilution	Date/Time
Unknown	SSM-TC	1.000	11/02/2010 11:28:19

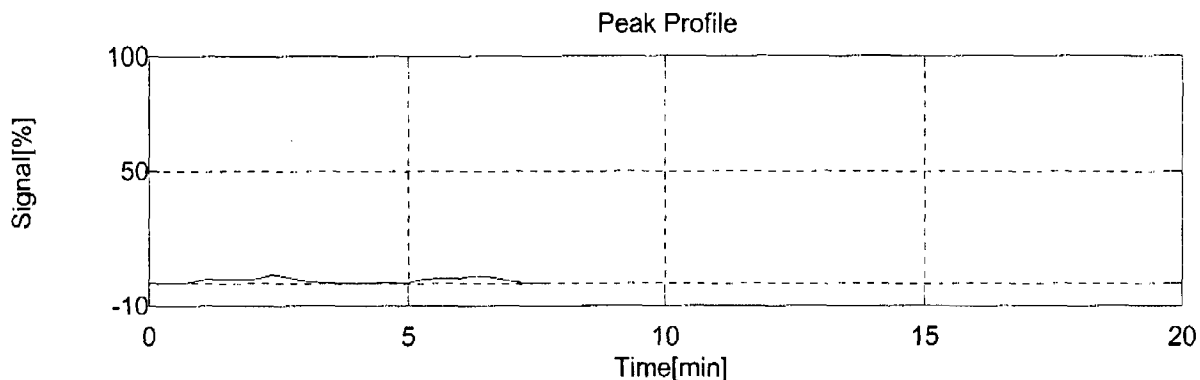
Mean Area	Conc	Result	SD	CV	Weight	Modified
2438	0.5622%		0.05502	9.79%	106.2	

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11/03/2010 11:28:27

# TOC-Control

No.	Range	Area	Weight	Conc	Excl.	Notes	Date/Time	Cal Curve
1	5	2639	107.4	0.60110		*****	11/02/2010 11:22:54	a01012s1.cal
2	5	2237	105.0	0.52329		*****	11/02/2010 11:28:19	a01012s1.cal



## Samples

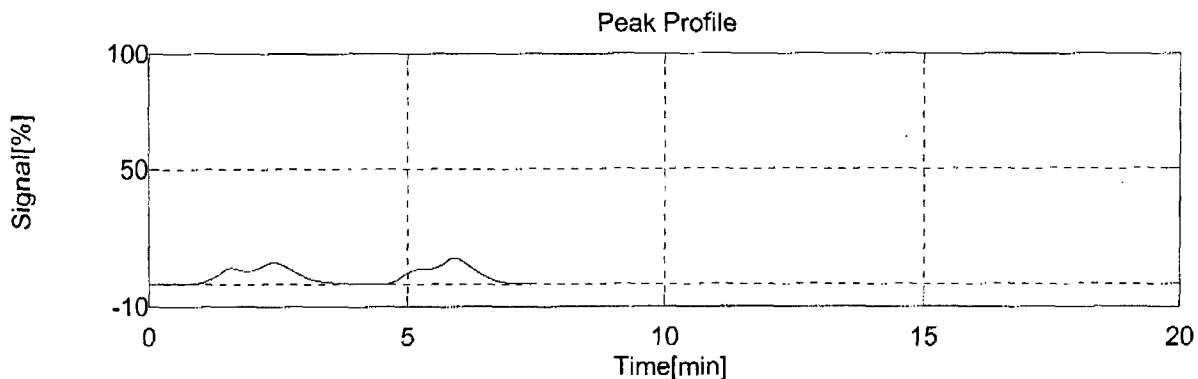
Sample Name: JA58900-4  
 Sample ID:  
 Comment:  
 Method: tocss4.met  
 Cal Curve: 1: a01012s1.cal

Type	Analysis	Dilution	Date/Time
Unknown	SSM-TC	1.000	11/02/2010 12:00:17

Mean Area	Conc	Result	SD	CV	Weight	Modified
6826	1.543%		0.1210	7.84%	106.9	

No.	Range	Area	Weight	Conc	Excl.	Notes	Date/Time	Cal Curve
1	5	6637	109.9	1.4574		*****	11/02/2010 11:34:07	a01012s1.cal
2	5	7015	103.9	1.6285		*****	11/02/2010 12:00:17	a01012s1.cal

# TOC-Control



## Samples

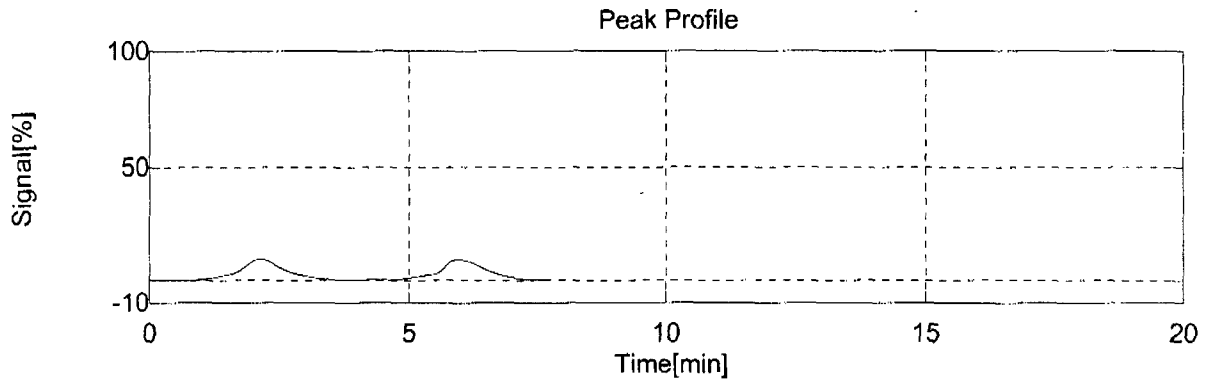
Sample Name: JA58900-7  
 Sample ID:  
 Comment:  
 Method: tocss4.met  
 Cal Curve: 1: a01012s1.cal

Type	Analysis	Dilution	Date/Time
Unknown	SSM-TC	1.000	11/02/2010 12:14:04

Mean Area	Conc	Result	SD	CV	Weight	Modified
4966	1.150%		0.06037	5.25%	104.7	

No.	Range	Area	Weight	Conc	Excl.	Notes	Date/Time	Cal Curve
1	5	4936	107.9	1.1074		*****	11/02/2010 12:08:15	a01012s1.cal
2	5	4997	101.4	1.1928		*****	11/02/2010 12:14:04	a01012s1.cal

# TOC-Control



## Samples

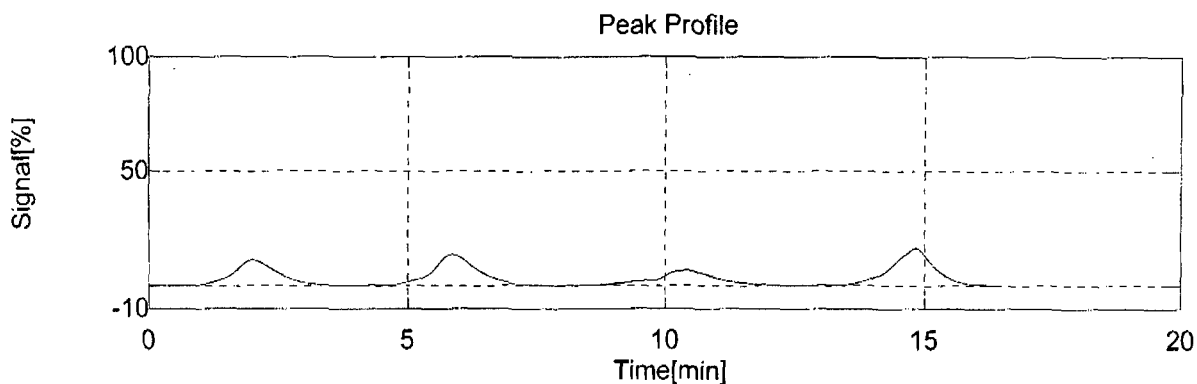
Sample Name: JA58900-8  
 Sample ID:  
 Comment:  
 Method: tocss4.met  
 Cal Curve: 1: a01012s1.cal

Type	Analysis	Dilution	Date/Time
Unknown	SSM-TC	1.000	11/02/2010 12:40:54

Mean Area	Conc	Result	SD	CV	Weight	Modified
6213	1.437%		0.4141	28.8%	104.2	

No.	Range	Area	Weight	Conc	Excl.	Notes	Date/Time	Cal Curve
1	5	5714	107.3	1.2870		*****	11/02/2010 12:20:09	a01012s1.cal
2	5	7017	102.3	1.6545		*****	11/02/2010 12:26:52	a01012s1.cal
3	5	3902	101.6	0.93269		*****	11/02/2010 12:35:03	a01012s1.cal
4	5	8219	105.7	1.8732		*****	11/02/2010 12:40:54	a01012s1.cal

# TOC-Control



## Samples

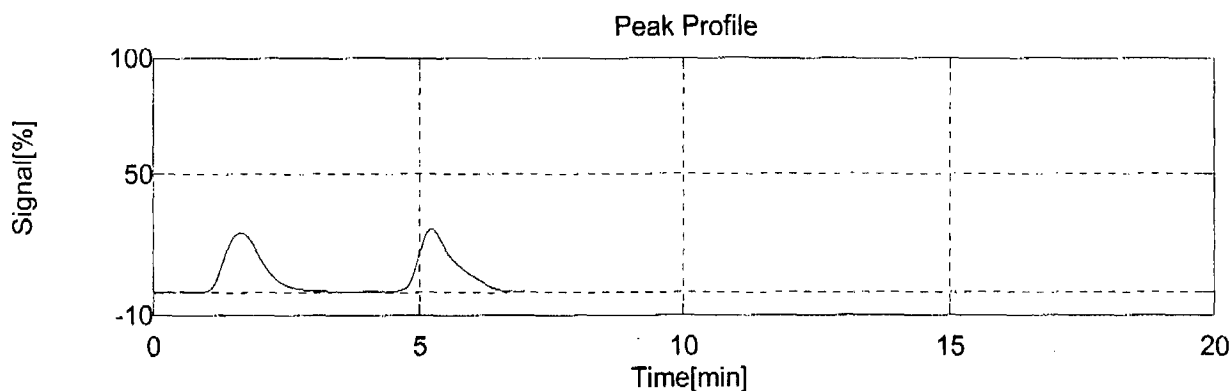
Sample Name: CCV  
 Sample ID:  
 Comment:  
 Method: tocscale4.met  
 Cal Curve: 1: a01012s1.cal

Type	Analysis	Dilution	Date/Time
Unknown	SSM-TC	1.000	11/02/2010 12:52:38

Mean Area	Conc	Result	SD	CV	Modified
11059	2.659%		0.03078	1.16%	

No.	Range	Area	Conc	Excl.	Notes	Date/Time	Cal Curve
1	5	10968	2.6373		*****	11/02/2010 12:46:47	a01012s1.cal
2	5	11150	2.6809		*****	11/02/2010 12:52:38	a01012s1.cal

# TOC-Control



## Samples

Sample Name: JA58900-9  
 Sample ID:  
 Comment:  
 Method: tocss4.met  
 Cal Curve: 1: a01012s1.cal

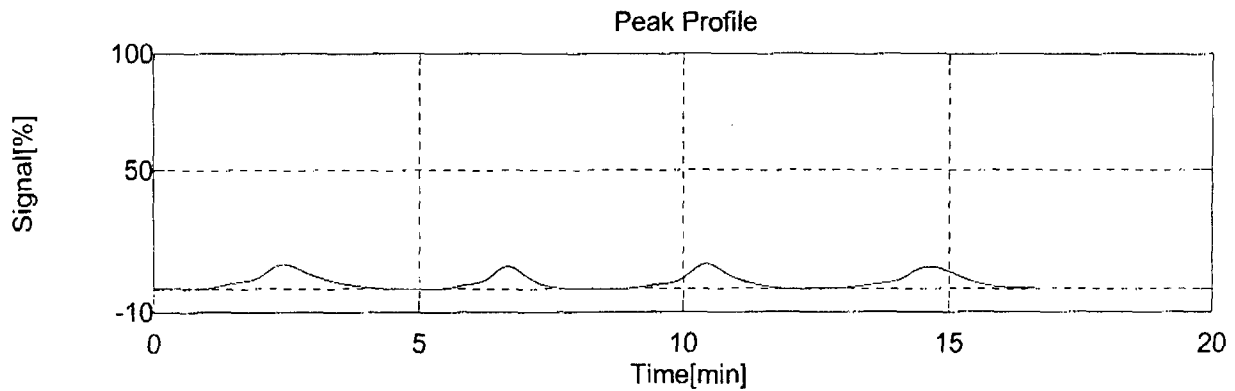
Type	Analysis	Dilution	Date/Time
Unknown	SSM-TC	1.000	11/02/2010 13:18:09

Mean Area	Conc	Result	SD	CV	Weight	Modified
6272	1.460%		0.2340	16.0%	103.5	

No.	Range	Area	Weight	Conc	Excl.	Notes	Date/Time	Cal Curve
1	5	7362	106.9	1.6605		*****	11/02/2010 12:59:50	a01012s1.cal
2	5	4737	102.1	1.1237		*****	11/02/2010 13:05:45	a01012s1.cal
3	5	6245	100.4	1.5019		*****	11/02/2010 13:11:58	a01012s1.cal
4	5	6745	104.6	1.5559		*****	11/02/2010 13:18:09	a01012s1.cal

14.8 14

# TOC-Control



## Samples

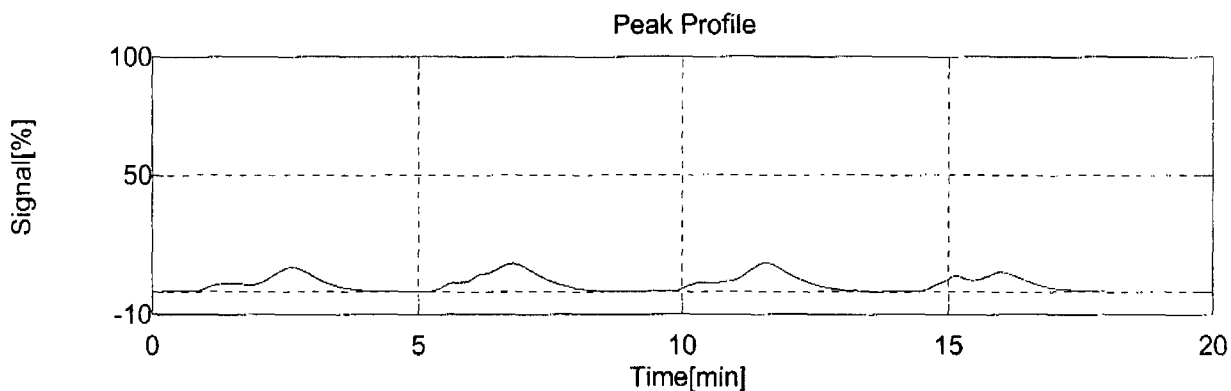
Sample Name: JA58900-10  
 Sample ID:  
 Comment:  
 Method: tocss4.met  
 Cal Curve: 1: a01012s1.cal

Type	Analysis	Dilution	Date/Time
Unknown	SSM-TC	1.000	11/02/2010 13:44:32

Mean Area	Conc	Result	SD	CV	Weight	Modified
7998	1.826%		0.3169	17.4%	105.9	

No.	Range	Area	Weight	Conc	Excl.	Notes	Date/Time	Cal Curve
1	5	7298	109.5	1.6070		*****	11/02/2010 13:26:10	a01012s1.cal
2	5	9159	102.5	2.1510		*****	11/02/2010 13:32:42	a01012s1.cal
3	5	8848	104.4	2.0406		*****	11/02/2010 13:38:47	a01012s1.cal
4	5	6689	107.1	1.5071		*****	11/02/2010 13:44:32	a01012s1.cal

# TOC-Control



## Samples

Sample Name: JA58900-11  
 Sample ID:  
 Comment:  
 Method: tocsc4.met  
 Cal Curve: 1: a01012s1.cal

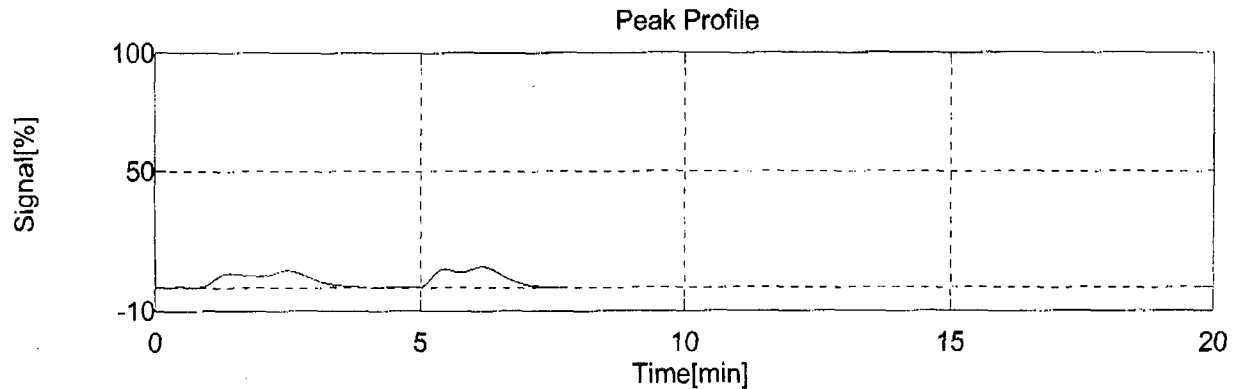
Type	Analysis	Dilution	Date/Time
Unknown	SSM-TC	1.000	11/02/2010 13:56:37

Mean Area	Conc	Result	SD	CV	Weight	Modified
6218	1.440%		0.05094	3.54%	104.4	

No.	Range	Area	Weight	Conc	Excl.	Notes	Date/Time	Cal Curve
1	5	6251	107.5	1.4040		*****	11/02/2010 13:51:40	a01012s1.cal
2	5	6186	101.2	1.4761		*****	11/02/2010 13:56:37	a01012s1.cal

14.8 14

# TOC-Control



## Samples

Sample Name: JA58900-12  
 Sample ID:  
 Comment:  
 Method: tocss4.met  
 Cal Curve: 1: a01012s1.cal

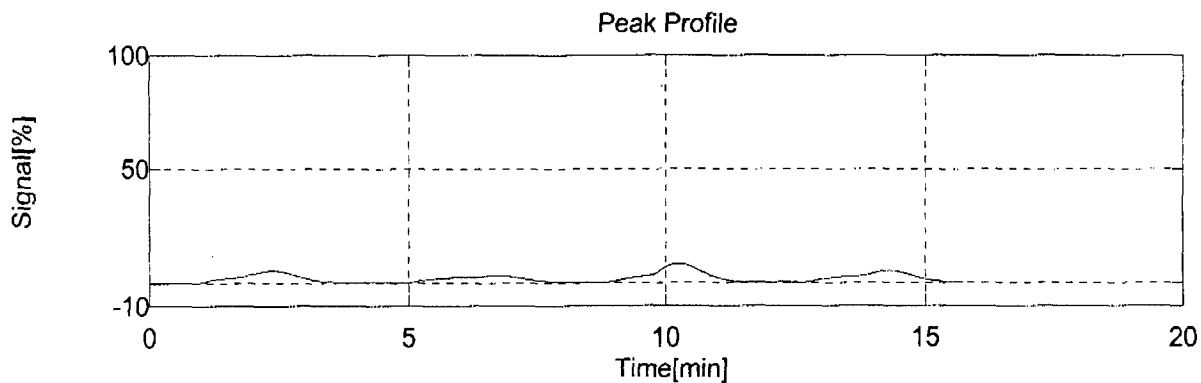
Type	Analysis	Dilution	Date/Time
Unknown	SSM-TC	1.000	11/02/2010 14:21:39

Mean Area	Conc	Result	SD	CV	Weight	Modified
3717	0.8677%		0.2315	26.7%	104.4	

No.	Range	Area	Weight	Conc	Excl.	Notes	Date/Time	Cal Curve
1	5	3671	108.0	0.82627		*****	11/02/2010 14:02:14	a01012s1.cal
2	5	2656	102.4	0.63442		*****	11/02/2010 14:10:20	a01012s1.cal
3	5	4937	100.6	1.1880		*****	11/02/2010 14:15:52	a01012s1.cal
4	5	3607	106.7	0.82199		*****	11/02/2010 14:21:39	a01012s1.cal

14.8 14

# TOC-Control



## Samples

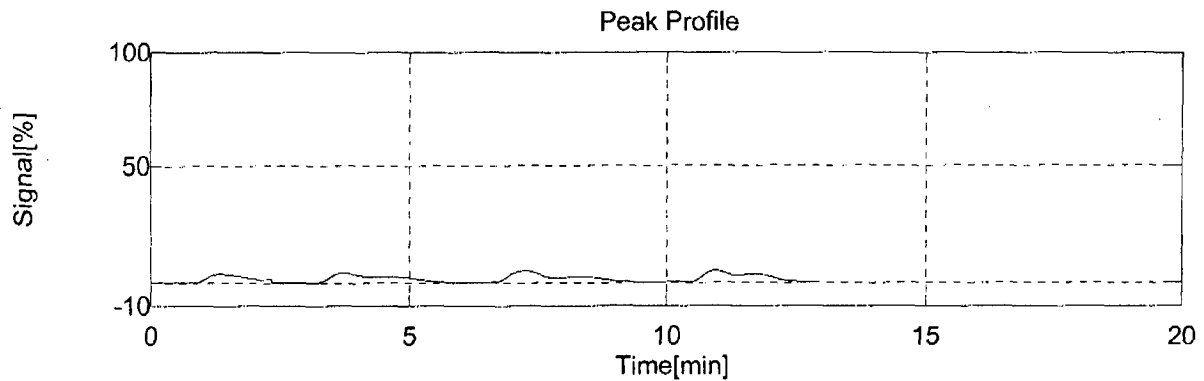
Sample Name: JA58900-14  
 Sample ID:  
 Comment:  
 Method: tocss4.met  
 Cal Curve: 1: a01012s1.cal

Type	Analysis	Dilution	Date/Time
Unknown	SSM-TC	1.000	11/02/2010 14:44:26

Mean Area	Conc	Result	SD	CV	Weight	Modified
2531	0.5978%		0.2236	37.4%	104.3	

No.	Range	Area	Weight	Conc	Excl.	Notes	Date/Time	Cal Curve
1	5	1165	107.5	0.27265		*****	11/02/2010 14:26:46	a01012s1.cal
2	5	2849	105.9	0.65704		*****	11/02/2010 14:32:35	a01012s1.cal
3	5	3282	102.1	0.78291		*****	11/02/2010 14:38:57	a01012s1.cal
4	5	2829	101.8	0.67880		*****	11/02/2010 14:44:26	a01012s1.cal

# TOC-Control



## Samples

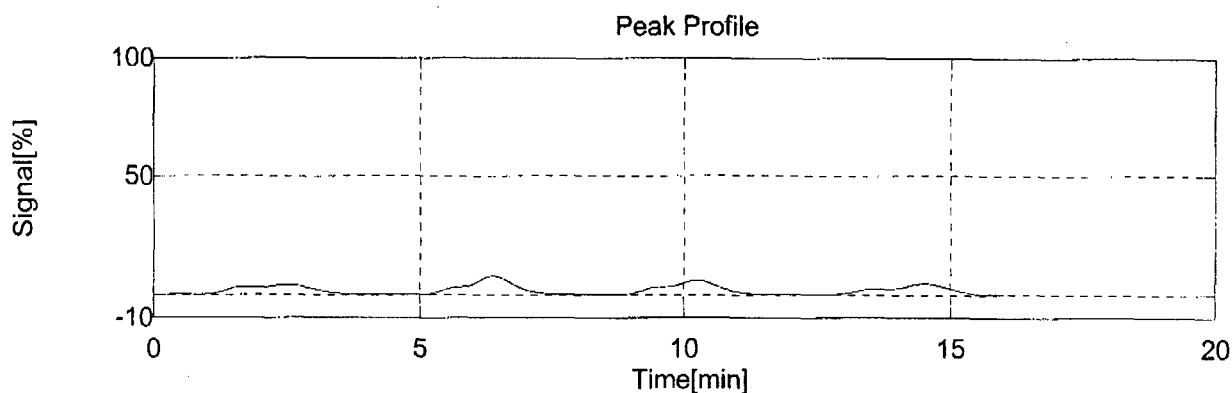
Sample Name: GP56130-D1  
 Sample ID: JA58900-3  
 Comment:  
 Method: tocss4.met  
 Cal Curve: 1: a01012s1.cal

Type	Analysis	Dilution	Date/Time
Unknown	SSM-TC	1.000	11/02/2010 15:06:37

Mean Area	Conc	Result	SD	CV	Weight	Modified
3894	0.8902%		0.1002	11.3%	106.4	

No.	Range	Area	Weight	Conc	Excl.	Notes	Date/Time	Cal Curve
1	5	3536	107.0	0.80382		*****	11/02/2010 14:50:27	a01012s1.cal
2	5	4441	105.8	1.0175		*****	11/02/2010 14:55:45	a01012s1.cal
3	5	3918	103.1	0.92283		*****	11/02/2010 15:01:04	a01012s1.cal
4	5	3683	109.6	0.81683		*****	11/02/2010 15:06:37	a01012s1.cal

# TOC-Control



## Samples

Sample Name: GP56130-S1  
 Sample ID: JA58900-3  
 Comment:  
 Method: toc4s4.met  
 Cal Curve: 1: a01012s1.cal

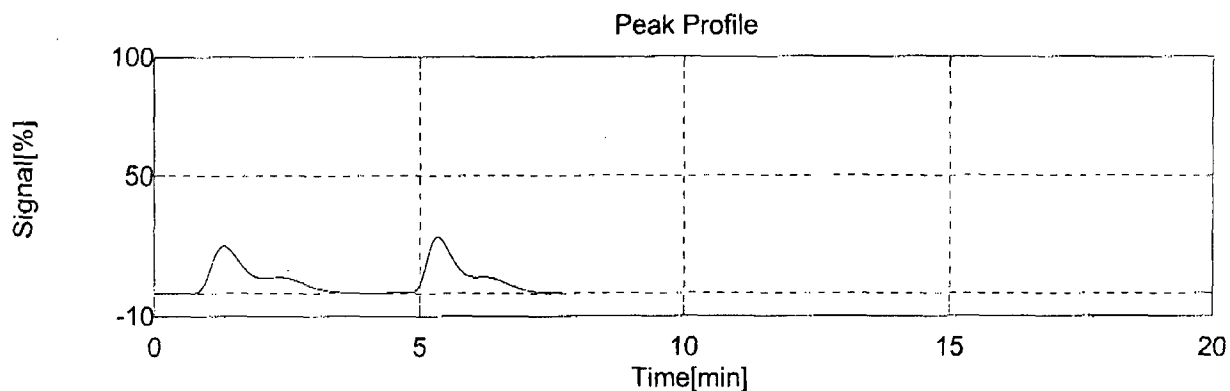
Type	Analysis	Dilution	Date/Time
Unknown	SSM-TC	1.000	11/02/2010 15:17:38

Mean Area	Conc	Result	SD	CV	Weight	Modified
11201	2.586%		0.02040	0.789%	104.2	

No.	Range	Area	Weight	Conc	Excl.	Notes	Date/Time	Cal Curve
1	5	11501	107.5	2.5719		*****	11/02/2010 15:12:42	a01012s1.cal
2	5	10902	100.8	2.6008		*****	11/02/2010 15:17:38	a01012s1.cal

14.8 14

# TOC-Control



## Samples

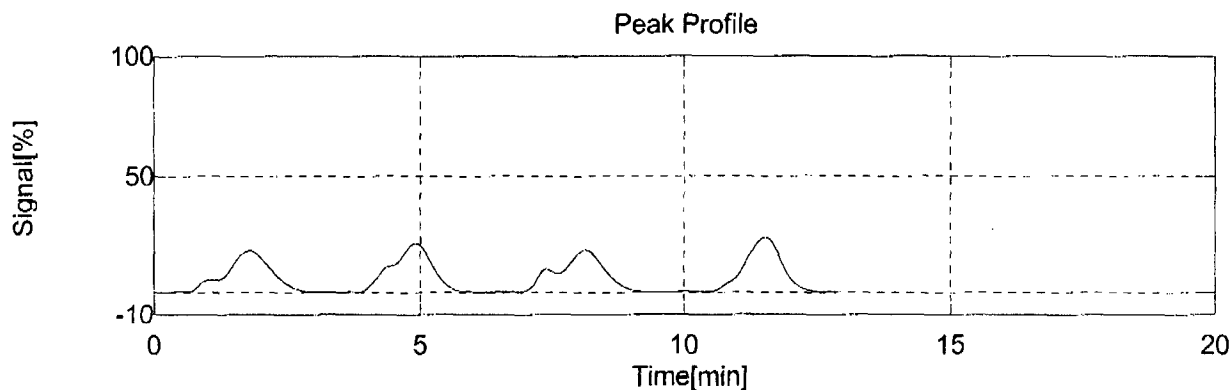
Sample Name: JA59322-1  
Sample ID:  
Comment:  
Method: tocsc4.met  
Cal Curve: 1: a01012s1.cal

Type	Analysis	Dilution	Date/Time
Unknown	SSM-TC	1.000	11/02/2010 15:38:20

Mean Area	Conc	Result	SD	CV	Weight	Modified
9953	47.05%		3.123	6.64%	5.100	

No.	Range	Area	Weight	Conc	Excl.	Notes	Date/Time	Cal Curve
1	5	9393	5.200	43.475		*****	11/02/2010 15:22:24	a01012s1.cal
2	5	10031	4.800	50.277		*****	11/02/2010 15:28:53	a01012s1.cal
3	5	10214	5.400	45.501		*****	11/02/2010 15:33:43	a01012s1.cal
4	5	10177	5.000	48.964		*****	11/02/2010 15:38:20	a01012s1.cal

# TOC-Control



## Samples

Sample Name: JA58249-1ARU  
 Sample ID:  
 Comment:  
 Method: tocsc4.met  
 Cal Curve: 1: a01012s1.cal

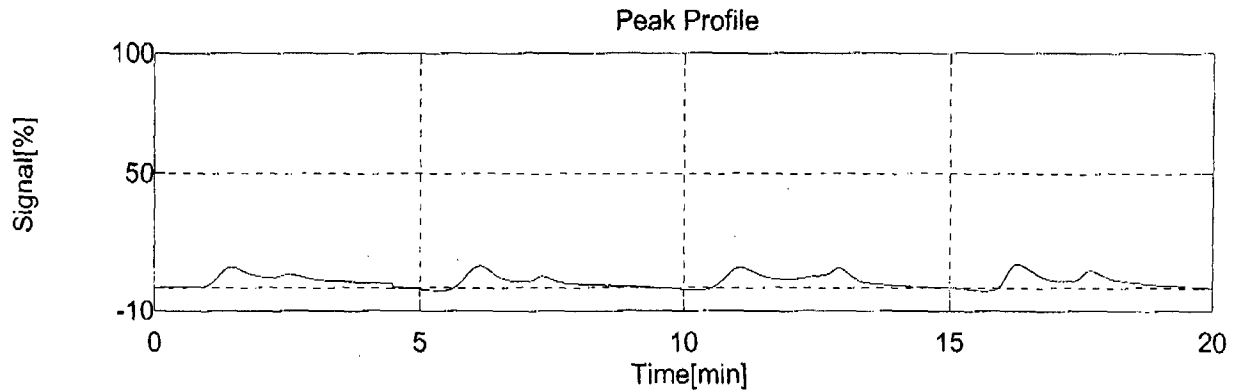
Type	Analysis	Dilution	Date/Time
Unknown	SSM-TC	1.000	11/02/2010 16:05:10

Mean Area	Conc	Result	SD	CV	Weight	Modified
7851	7.301%		1.369	18.7%	25.83	

No.	Range	Area	Weight	Conc	Excl.	Notes	Date/Time	Cal Curve
1	5	5972	25.20	5.7247		*****	11/02/2010 15:44:31	a01012s1.cal
2	5	6991	25.30	6.6652		*****	11/02/2010 15:50:44	a01012s1.cal
3	5	9675	26.50	8.7854		*****	11/02/2010 15:57:30	a01012s1.cal
4	5	8769	26.30	8.0285		*****	11/02/2010 16:05:10	a01012s1.cal

14.8 14

# TOC-Control



## Samples

Sample Name: JA58900-8  
 Sample ID:  
 Comment:  
 Method: tocss4.met  
 Cal Curve: 1: a01012s1.cal

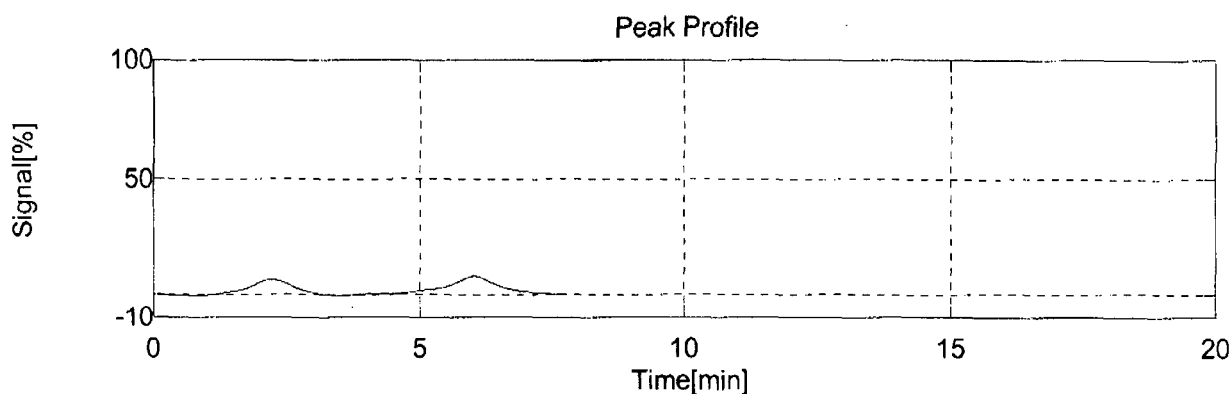
Type	Analysis	Dilution	Date/Time
Unknown	SSM-TC	1.000	11/02/2010 16:20:42

Mean Area	Conc	Result	SD	CV	Weight	Modified
4237	0.9601%		0.1163	12.1%	107.2	

No.	Range	Area	Weight	Conc	Excl.	Notes	Date/Time	Cal Curve
1	5	3937	108.9	0.87785		*****	11/02/2010 16:10:47	a01012s1.cal
2	5	4538	105.5	1.0424		*****	11/02/2010 16:20:42	a01012s1.cal

14.8 14

# TOC-Control



## Samples

Sample Name: CCV  
 Sample ID:  
 Comment:  
 Method: tocsca4.met  
 Cal Curve: 1: a01012s1.cal

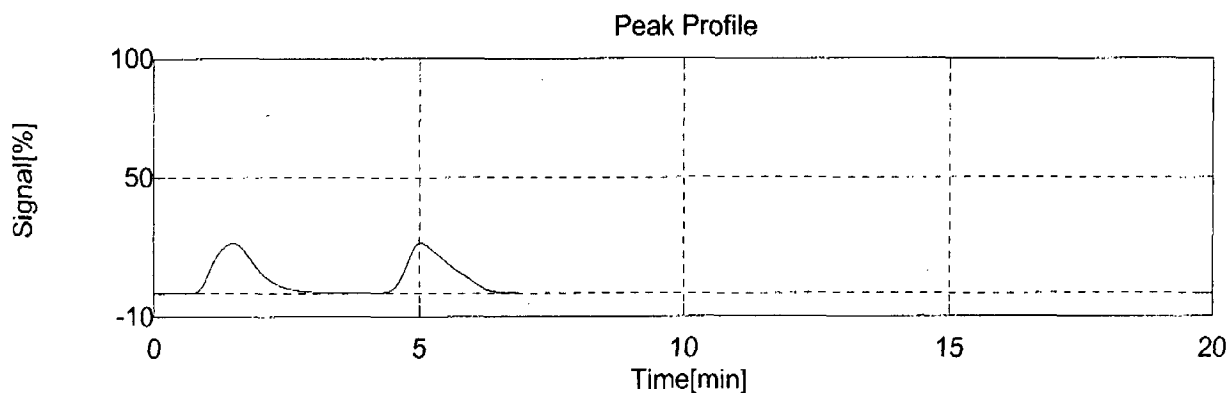
Type	Analysis	Dilution	Date/Time
Unknown	SSM-TC	1.000	11/02/2010 16:37:18

Mean Area	Conc	Result	SD	CV	Modified
10860	2.612%		0.04768	1.83%	

No.	Range	Area	Conc	Excl.	Notes	Date/Time	Cal Curve
1	5	10719	2.5778		*****	11/02/2010 16:28:46	a01012s1.cal
2	5	11001	2.6452		*****	11/02/2010 16:37:18	a01012s1.cal

14.8  
14

# TOC-Control



## Statistics / Summary

Sample Name	Analysis	Conc.
CRI	SSM-TC	0.1239 %
HSTD	SSM-TC	5.357 %
ICV	SSM-TC	2.042 %
CCV	SSM-TC	2.637 %
GP56130-MB1	SSM-TC	0.03651 %
GP56130-B1	SSM-TC	2.107 %
JA58900-3	SSM-TC	0.9420 %
JA59322-1	SSM-TC	42.02 %
JA58246-1ARU	SSM-TC	7.032 %
JA58900-1	SSM-TC	2.424 %
JA58900-2	SSM-TC	0.5622 %
JA58900-4	SSM-TC	1.543 %
JA58900-7	SSM-TC	1.150 %
JA58900-8	SSM-TC	1.198 %
JA58900-9	SSM-TC	1.460 %
JA58900-10	SSM-TC	1.826 %
JA58900-11	SSM-TC	1.440 %
JA58900-12	SSM-TC	0.8677 %
JA58900-14	SSM-TC	0.5978 %
GP56130-D1	SSM-TC	0.8902 %
GP56130-S1	SSM-TC	2.586 %
JA58249-1ARU	SSM-TC	7.301 %

14.8 14

**Note: All results below shown on a wet weight basis.**

Y intercept: -0.0007

14.9 14

ACCUTEST LABS  
DAYTON, NJ

### 3060A/7196A POST-DIGEST SPIKE LEVEL CALCULATION SPREADSHEET

NOTE: Always dilute post-spike first, then take a 45 ml aliquot of the diluted post-spike and add the spike amount.

Sample ID	PS Aliquot Weight in g Digested in 100 ml	Weight in 45 ml	Results in mg/kg.	Amount in ml to add of 100 ppm solution	Dilution needed	Suggested Dilution to use	Actual Dilution to be used	Suggested ml of 100 ppm to spike on dilution of sample.	Actual ml of 100 ppm to spike on dilution of sample.	Est. Read- back on curve in mg/l	Calculated Spike Amount in mg/kg	Use calculated or default spike?
JA58900-3	2.55	1.1475	0.032	0.459	yes	1	2	0.23	0.23	0.512	40.087	default (40 mg/kg) spike
		0		0.000	no	0		#DIV/0!		#DIV/0!	#DIV/0!	default (40 mg/kg) spike
		#VALUE!		#VALUE!	#VALUE!	#VALUE!		#VALUE!		#VALUE!	#VALUE!	calculated spike
		#VALUE!		#VALUE!	#VALUE!	#VALUE!		#VALUE!		#VALUE!	#VALUE!	calculated spike
		#VALUE!		#VALUE!	#VALUE!	#VALUE!		#VALUE!		#VALUE!	#VALUE!	calculated spike
		#VALUE!		#VALUE!	#VALUE!	#VALUE!		#VALUE!		#VALUE!	#VALUE!	calculated spike
		#VALUE!		#VALUE!	#VALUE!	#VALUE!		#VALUE!		#VALUE!	#VALUE!	calculated spike
		#VALUE!		#VALUE!	#VALUE!	#VALUE!		#VALUE!		#VALUE!	#VALUE!	calculated spike
		#VALUE!		#VALUE!	#VALUE!	#VALUE!		#VALUE!		#VALUE!	#VALUE!	calculated spike
		#VALUE!		#VALUE!	#VALUE!	#VALUE!		#VALUE!		#VALUE!	#VALUE!	calculated spike
		#VALUE!		#VALUE!	#VALUE!	#VALUE!		#VALUE!		#VALUE!	#VALUE!	calculated spike

### 3060A/7196A INSOLUBLE SPIKE CALCULATION

Weight of PbCrO4	Weight of Sample	Amount Spiked
0.0144	2.5	926.733
0.0118	2.52	753.379
		#VALUE!
		#VALUE!
		#VALUE!
		#VALUE!
		#VALUE!
		#VALUE!
		#VALUE!

**ACCUTEST.**

Test: **Hexavalent Chromium**  
 Product: **XCr**  
 Method: **SW846 3060A/7196A**

MDL = 0.22 mg/kg  
 RDL = 0.40 mg/kg

GNBatch ID: GN44187  
 Date: 11-3-2010

**Digestion Batch QC Summary**

Units = mg/kg

Method Blank ID: GP56076+B1 Date: 11-3-10 Result: <RDL RDL: 0.40 <RDL: Yes  
 Sol. Spike Blank ID: B1 Date: ↓ Result: 36.49 Spike: 40 %Rec.: 91.9A  
 Insol. Spike Blank ID: B2 Date: ↓ Result: 977.9 Spike: 926.7 %Rec.: 105.5  
 Duplicate ID: D1 Samp. Result: 0.032 Dup. Result: 0.032 %RPD: 0  
 Sol. MS ID: S1 Samp. Result: ↓ MS Result: 1.229 Spike: 39.68 %Rec.: 3.0  
 Insol. MS ID: S2 Samp. Result: ↓ MS Result: 482.5 Spike: 753.4 %Rec.: 64.0  
 Post Spike ID: JA56076-3 Samp. Result: ↓ PS Result: 38.876 Spike: 40.01 %Rec.: 96.9  
 Diluted Sample ID: \_\_\_\_\_ Samp. Result: \_\_\_\_\_ Dil. Result: \_\_\_\_\_ %RPD: \_\_\_\_\_  
 pH adj. PS ID: \_\_\_\_\_ Samp. Result: \_\_\_\_\_ MS Result: \_\_\_\_\_ Spike: \_\_\_\_\_ %Rec.: \_\_\_\_\_

**Analysis Batch QC Summary**

Units = mg/l

CCV: 11-3-10 Result: 0.4633 TV: 0.500 %Rec.: 92.7  
 CCV: ↓ Result: 0.4644 TV: 0.500 %Rec.: 92.9  
 CCV: ↓ Result: 0.4733 TV: 0.500 %Rec.: 94.7  
 CCV: ↓ Result: 0.4733 TV: 0.500 %Rec.: ↓  
 CCV: \_\_\_\_\_ Result: \_\_\_\_\_ TV: 0.500 %Rec.: \_\_\_\_\_  
 CCV: \_\_\_\_\_ Result: \_\_\_\_\_ TV: 0.500 %Rec.: \_\_\_\_\_  
 CCV: \_\_\_\_\_ Result: \_\_\_\_\_ TV: 0.500 %Rec.: \_\_\_\_\_  
 CCV: \_\_\_\_\_ Result: \_\_\_\_\_ TV: 0.500 %Rec.: \_\_\_\_\_  
 CCV: \_\_\_\_\_ Result: \_\_\_\_\_ TV: 0.500 %Rec.: \_\_\_\_\_  
 CCB: 11-3-10 Result: <RDL RDL: 0.010 <RDL: Yes  
 CCB: ↓ Result: ↓ RDL: 0.010 <RDL: ↓  
 CCB: ↓ Result: ↓ RDL: 0.010 <RDL: ↓  
 CCB: ↓ Result: ↓ RDL: 0.010 <RDL: ↓  
 CCB: \_\_\_\_\_ Result: \_\_\_\_\_ RDL: 0.010 <RDL: \_\_\_\_\_  
 CCB: \_\_\_\_\_ Result: \_\_\_\_\_ RDL: 0.010 <RDL: \_\_\_\_\_  
 CCB: \_\_\_\_\_ Result: \_\_\_\_\_ RDL: 0.010 <RDL: \_\_\_\_\_  
 CCB: \_\_\_\_\_ Result: \_\_\_\_\_ RDL: 0.010 <RDL: \_\_\_\_\_  
 CCB: \_\_\_\_\_ Result: \_\_\_\_\_ RDL: 0.010 <RDL: \_\_\_\_\_

**Reagent Reference Information - refer to attached reagent reference information page(s).**Insoluble spike = PbCrO<sub>4</sub> Molecular weight = 323.2 g/mol Cr = 52.0 g/mol

{1000000 ug/g x Insoluble spike wt(g) x 52/323.2}/ms sample wt(g) = Insoluble spike amount

Analyst: R2 Date: 11-3-2010

Comments: \_\_\_\_\_

Form: GN066-01

Rev. Date: 2/18/10

# Hexavalent Chromium pH Adjustment Log

Method: SW846 3060A/7196A

pH adj. start time:

10:07 11:36

10:27

12:00

Digestion Date:

10-28-10

pH adj. end time:

10:15 11:48

10:35

12:12

pH adj. Date:

GN Batch ID:

GN44187

Sample ID	Sample Weight in g	pH after HNO3	Final Volume (ml)	pH after H2SO4	bkg pH after H2SO4	Spike Amounts	Comments
CCV		7.99	100	1.94	—	5ml	10 ppb Ultra
CCV		7.09	↓	1.73	—	↓	
CCV							
CCV							
CCB		7.87	100	1.93	—		
CCB		7.10	↓	1.88	—		
CCB							
CCB							
MS (Sol) JA58900-3	2.52	7.24	100	1.85	1.90	1ml	100ppm Absolute
MS (Insol.)	2.52	7.92		2.02	0.0112	0.0112	PbCrO4
DUP ↓	2.52	7.14		1.86	1.93		
SB (Sol)		7.72		1.93	1.89	1ml	100ppm Absolute
SB (Insol)		7.21		1.95	0.0144	0.0144	PbCrO4
MB							
1 JA58900-3	2.55	7.04		1.78	1.89		
2	1	2.47		1.66	1.74		
3	2	2.55		2.08	1.89		
4	4	2.48		1.85	2.04		
5	7	2.50		1.72	1.99		
6	8	2.55		1.58	1.87		
7	9	2.49		2.00	1.79		
8	10	2.58		1.73	2.12		
9	11	2.45		2.01	1.81		
10	12	2.52		2.10	2.01		
11	14	2.53	↓	1.85	2.13		
12							
13							
14							
15							
16							
17							
18							
19							
20							
SB (Insol)		7.21	100	1.75	1.79		dilution = 50
MS (Insol.)		7.92		1.82	1.87		dilution = 50
PS				1.70		0.23ml	
pH adjusted PS							
1:5 dil.							
(14) JA58900-3	2.46						

Reagent Reference Information - refer to attached reagent reference information page(s).

{1000000 ug/g x Insoluble spike wt(g) x 52/323.2}/ms sample wt(g) = Insoluble spike amount of PbCrO4

Form: GN-067

Rev. Date: 10/13/05

Anayst:

Date:

**ACCUTEST**

GP/GN Batch ID:

GP 56076 / GN 44187

**Reagent Information Log - XCR (soil 3060A)**

<u>Reagent</u>	<u>Exp. Date</u>	<u>Reagent # or Manufacturer/Lot</u>
Calibration Source: Hexavalent Chromium, 1000 mg/L Stock	4/26/2013	Absolute Grade Lot # 042610
Calibration Checks: Hexavalent Chromium, 1000 mg/L Stock	7/31/2015	Ultra Lot # J00509
Spiking Solution Source	4/26/2013	Absolute Grade Lot # 042610
Lead Chromate (Insoluble Hexavalent Chromium Spike)	10/29/2014	Sigma Aldrich Lot # 0001355440
Magnesium Chloride, Anhydrous	6/29/2015	Alfa Aesar Lot # I02T070
1N NaOH		
Digestion Solution	11-26-10	GNE 10-2647 XCR
Phosphate Buffer Solution	4-7-11	GNE 10-26310 XCR
5.0 M Nitric Acid	4-7-11	GNE 10-26314 XCR
Diphenylcarbazide Solution	12-1-10	GNE 11-26550 XCR
Sulfuric Acid 10%	4-22-11	GNE 10-26450 XCR
Filter		FOEA065 P3
Teflon Chips	NA	919120

14.9  
14

Form: GN-087 1-21

Rev. Date: 5/5/06



## Hexavalent Chromium Digestion Temperature Log

Method: SW846 3060A

Record the temperature at the beginning, during, and at the end of each digestion.

Digestion Batch ID	Description	Time	Temp. in deg. C Hot Plate # 1	Temp. in deg. C Hot Plate # 1	Temp. in deg. C Hot Plate # 1	Temp. in deg. C Hot Plate # 1
GP56-76	Starting Time	10:40	91	92		
	Time 1	11:10	95	95		
	Ending Time	11:40	95	95		
	Starting Time	11:40	95	95		
	Time 1	12:10	95	95		
	Ending Time	12:40	95	95		
	Starting Time					
	Time 1					
	Ending Time					

Form: GN-074  
Rev. Date: 5/8/06Analyst: 72Date: 10-28-10


**ACCUTEST.**

**Method: SW846 3060A/7196A**

9-20

Q-38

pH adjustment Date:

11-3-2010

9.31

~~9-41~~

GN Batch ID:

GW 44187

14.9 14
$$\{1000000 \text{ ug/g} \times \text{Insoluble spike wt(g)} \times 52/323.2\} / \text{ms sample wt(g)} = \text{Insoluble spike amount of PbCrO}_4$$

Anayst:

22

Date:

11-3-15

**Rev. Date:5/22/06**

**ACCUTEST****HEXAVALENT CHROMIUM STANDARD PREPARATION LOG**Product: XCRGN or GP Number: QW 44 (A7)

Intermediate Standard Description	Stock used to prepare standard	Stock concentration	Stock volume used in ml	Diluent	Final Volume	Final Conc. of Intermediate (mg/l)	Expiration Date	Analyst
10 ppm	Absolute Grade Lot # 012010	1000 ppm	1.0 ml	DI	100 mls	10 mg/l	1/1/2013	R2
100 ppm		1000 ppm	10 ml	DI	100 mls	100 mg/l	4-26-13	
5 ppm		1000 ppm	1.0 ml	DI	200 mg/l	5 mg/l		
7.5 ppm		1000 ppm	1.5 ml	DI	200 mg/l	7.5 mg/l		
10 ppm	Ultra lot J00509	1000 ppm	1.0 ml	DI	100 mg/l	10 mg/l	7/31/2015	
Standard Description	Intermediate or Stock used to prepare standard	Intermediate or Stock concentration	Intermediate or Stock volume used in ml	Diluent	Final Volume	Final Conc. Of Standard (mg/l)	Expiration Date	Analyst
.010 ppm	10.0 ppm abs	10.0 ppm	0.1 ppm	DI	100 mls	0.01 mg/l	11-3-10	R2
.050 ppm			0.5 ppm	DI		0.05 mg/l		
.10 ppm			1.0 ppm	DI		0.10 mg/l		
.30 ppm			3.0 ppm	DI		0.30 mg/l		
.50 ppm			5.0 ppm	DI		0.50 mg/l		
.80 ppm			8.0 ppm	DI		0.80 mg/l		
1.00 ppm			10.0 ppm	DI		1.0 mg/l		

Form: GN205-02  
Rev. Date: 10/16/09

**ACCUTEST.**

Test: Redox Potential

Matrix: Aqueous ☐Matrix: Solid ☒

Test Code: REDOX

Method: ASTM D1498-76

Method: ASTM D1498-76 Mod.

Analyst: SHAWN

Date: 11/03/10

GN Batch ID: GN44201

Temp (Deg C): 25

**Quality Control Summary**

Sample ID: GN44201-D1	Results: 457.5	Dup: 523.1	% RPD: 13.38%
Ferrous-Ferric True: 675	Found 616.3	% Rec 91.30%	
pH 4 Quinhydrone True: 462	Found 463.5	% Rec 100.32%	
pH 4 Quinhydrone True: 462	Found 471.2	% Rec 101.99%	
pH 4 Quinhydrone True: 462	Found 459.5	% Rec 99.46%	
pH 7 Quinhydrone True: 285	Found 295.8	% Rec 103.79%	
pH 7 Quinhydrone True: 285	Found 295	% Rec 103.51%	
pH 7 Quinhydrone True: 285	Found 288.3	% Rec 101.16%	

Sample #:	mv vs. Ag/AgCl Electrode	Corrected results (mv vs. Hydrogen electrode) ***
Ferrous-Ferric Solution	414.3	616.3
pH 4 Quinhydrone	261.5	463.5
pH 7 Quinhydrone	93.9	295.8
Dup GN44201-D1	320.9	523.1
1. JA58900-1	226	428.1
2. JA58900-10	227.1	429.1
3. JA58900-11	216.4	418.4
4. JA58900-12	216.4	418.4
5. JA58900-14	209.8	411.8
6. JA58900-2	211.8	413.9
7. JA58900-3	216.7	418.5
8. JA58900-4	225.5	427.5
9. JA58900-7	216.1	418.1
pH 4 Quinhydrone	269.3	471.2
pH 7 Quinhydrone	92.9	295
10. JA58900-8	202.2	404.1
11. JA58900-9	224.3	426.2
12. JA59571-1A	232.5	434.4
13. JA59571-3A	225.7	457.5
14.		
15.		
16.		
17.		
18.		
19.		
pH 4 Quinhydrone	257.6	459.5
pH 7 Quinhydrone	86.4	288.3

\*\*\* Note: Results vs Ag/AgCl electrode are converted to corrected results automatically at the instrument by changing to the relative mv scale. This conversion is done by adding about 200 mV to the Ag/AgCl reading.

Reagent Numbers: pH 4 Fisher 103024 exp 05/2012, pH 7 Fisher 100990 exp 02/2012 pH10 102758 ex04/2012  
Redox standard gne10-26312-orp EXP 4/7/11 Quinhydrone ACROS A0282816

Comments:

Analyst:

Date:

QC Reviewer:

Date:

F/N GN141.DOC

Rev. Date: 3/27/2007



ACCUTEST

EH  
GN 414201PH  
GN 414202Analyst Sharon SMethod EH/PHPrep Date 11/3/10

GP # \_\_\_\_\_

Balance # 14

## Sample Prep Log

Sample ID	Sample Size	Final Volume
JA58900 - 1	50.48	50ml DI H <sub>2</sub> O
- 2	50.37	
- 3	50.30	
- 4	50.72	
- 7	50.41	
- 8	50.07	
- 9	50.66	
- 10	50.09	
- 11	50.55	
- 12	50.22	
V - 14	50.33	
JA59571 - 1	50.54	
- 3	50.11	
V - 3 Dup	50.47	
JA59935 - 6	50.04	

14.10 14



Test: pH, Corrosivity  
Method: SW846 9040B or SW846 9045C

Product: PH, CORR  
Analyst: SHAWN  
GN Batch ID: GN44202  
Analysis Date: 11/3/2010  
pH Meter ID: 49

Thermometer ID: 95  
Correction Factor: -1

## QC Summary

Duplicate ID: GN44202-D1 Sample ID: JA59571-3A  
Dup Result: 8.81 % RPD: 2.22%

Sample ID	Wt./Vol. used for solids	Uncorrected/ Corrected Temp in Deg C.	Result	Corrosivity	Read time
Buffer Check: 4		25	3.97		
Buffer Check: 7		25	7		
GN44202-D1		25	8.81		
JA58900-1		25	7.91		
JA58900-10		25	6.77		
JA58900-11		25	6.59		
JA58900-12		25	7.80		
JA58900-14		25	7.65		
JA58900-2		25	7.47		
JA58900-3		25	6.80		
JA58900-4		25	6.58		
JA58900-7		25	8.01		
JA58900-8		25	7.93		
Buffer Check:4		25	4.01		
Buffer Check:10		25	10.03		
JA58900-9		25	7.79		
JA59571-1A		25	10.03		
JA59571-3A		25	9.09		
JA59735-6R		25	7.09		
Buffer Check:		25	4.02		
Buffer Check:13		25	13.02		
Buffer Check:					
Buffer Check:					

QC Reviewer: \_\_\_\_\_

Date: \_\_\_\_\_

Comments: \_\_\_\_\_



# ACCUTEST.

EW  
GN 414201

PH  
GW 441202

Analyst Shawn S

Method ELISA

Prep Date 11/3/10

GP # \_\_\_\_\_

Balance # 141

## Sample Prep Log

[illegible]

14.11 14



**Reagent Information Log**  
**Test Name: \_\_\_\_\_ pH \_\_\_\_\_**

**Reagent****Reagent # or Manufacturer/Lot**pH 2 Buffer SolutionFISCHER LOT#090982 EXP 3/2011pH 4 Buffer SolutionFISCHER LOT#103204 EXP 5/2012pH 7 Buffer SolutionFISCHER LOT#104506 EXP 6/2012pH 10 Buffer SolutionFISCHER LOT#093565 EXP 7/2011pH 13 Buffer SolutionAQUA LOT#0030296 EXP 3/2011

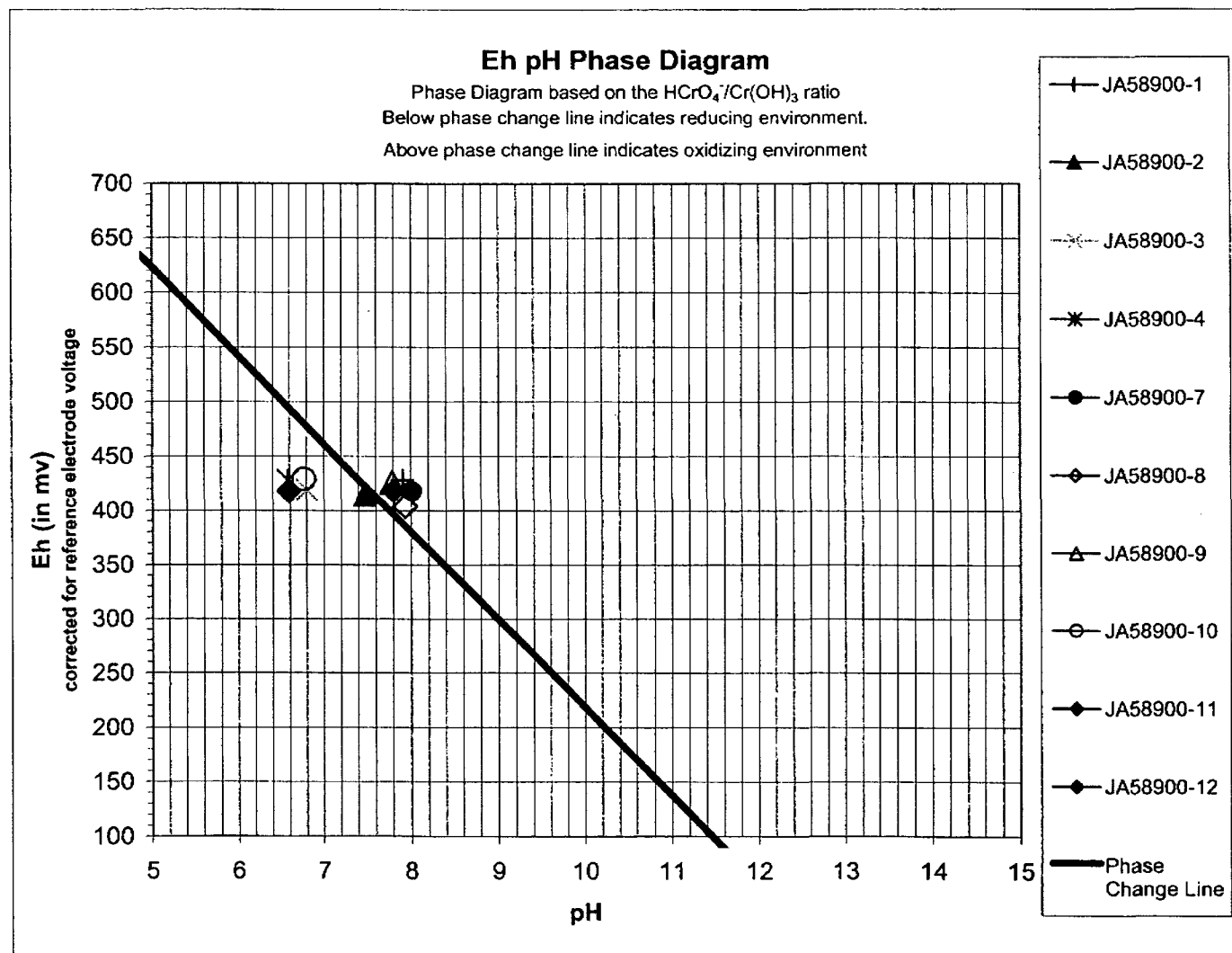
All standards and stocks were made as described in the SOP for this method (circle one): Y or N  
If no (N), see attached page for standards prep.

Form: GN087-01  
Rev. Date: 11/3/2010


**ACCUTEST.**

	pH	eH (MV)
Phase Change Line	0	1027.7
	14	-105.6

Sample Number	pH	eH (mv)
JA58900-1	7.91	428
JA58900-2	7.47	414
JA58900-3	6.8	419
JA58900-4	6.58	428
JA58900-7	8.01	418
JA58900-8	7.93	404
JA58900-9	7.79	426
JA58900-10	6.77	429
JA58900-11	6.59	418
JA58900-12	7.8	418



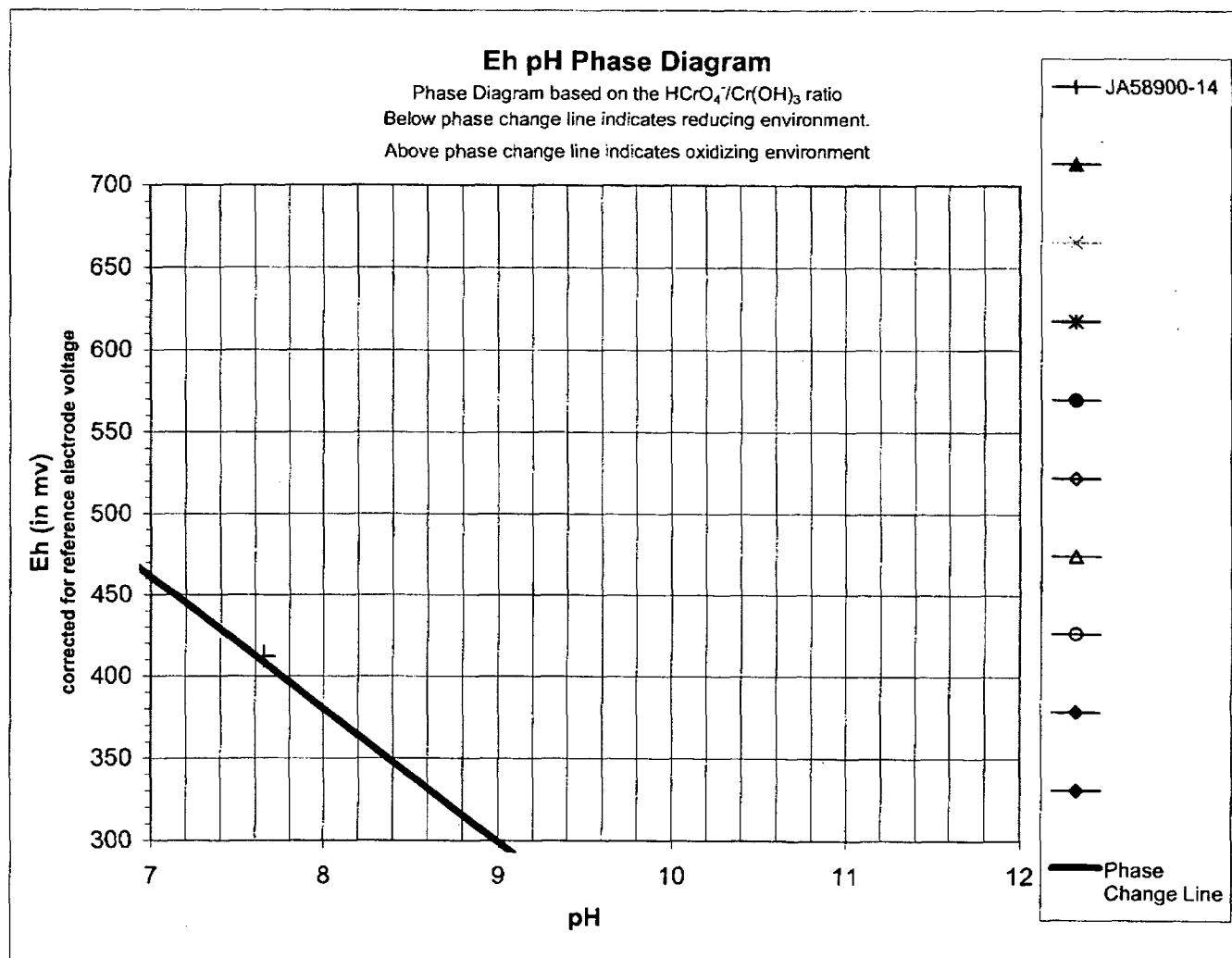
Note that the Eh values plotted on this diagram are corrected for the reference electrode voltage and the values shown are versus the standard hydrogen electrode

Reference for graph: SW846 method 3060A



	pH	eH (MV)
Phase Change Line	0	1027.7
	14	-105.6

Sample Number	pH	eH (mv)
JA58900-14	7.65	412



Note that the Eh values plotted on this diagram are corrected for the reference electrode voltage and the values shown are versus the standard hydrogen electrode

Reference for graph: SW846 method 3060A



## Misc. Forms

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## Custody Documents and Other Forms

(Accutest Labs of New England, Inc.)

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Includes the following where applicable:

- Chain of Custody
- Sample Tracking Chronicle
- Internal Chain of Custody



## CHAIN OF CUSTODY

Fresh Ponds Corporate Village, Building B  
2235 Route 130, Dayton, NJ 08810  
908-329-0200 FAX: 908-329-3499/3480

Accutest Job #: JA58900  
Accutest Quote #:

Client Information			Facility Information			Analytical Information		
Accutest			Project Name			LC8315FORM		
Name 2235 Route 130			Bell Bend Power Plant, PA					
Address Dayton NJ 08810			Location					
City State Zip Dayton NJ 08810			Project No. JA58900					
Send Report to: Phone #: (732) 329-0200 x364			FAX #: (732) 329-3499					
Collection			Preservation					
Field ID / Point of Collection	Date	Time	Sampled By	Matrix	# of bottles	101	103	104
-1	10/14/10		MH	Soil				
2	10/14/10		MH	Soil				
3, 3D, 3S	10/14/10		MH	Soil				
4	10/14/10		MH	Soil				
5	10/14/10		MH	FB				
6	10/14/10		MH	FB				
7	10/13/10		MH	Soil				
8	10/13/10		MH	Soil				
9	10/13/10		MH	Soil				
10	10/13/10		MH	Soil				
Turnaround Information			Data Deliverable Information			Comments / Remarks		
<input type="checkbox"/> 21 Day Standard <input type="checkbox"/> 14 Day <input type="checkbox"/> 7 Days EMERGENCY <input checked="" type="checkbox"/> Other 21 (Days) 21 Day Turnaround Hardcopy, Emergency or RUSH is FAX Data unless previously approved.			Approved By: _____ <input type="checkbox"/> NJ Reduced <input checked="" type="checkbox"/> NJ Full <input type="checkbox"/> FULL CLP <input type="checkbox"/> Disk Deliverable <input type="checkbox"/> Other (Specify) _____			<input type="checkbox"/> Commercial "A" <input type="checkbox"/> Commercial "B" <input type="checkbox"/> State Forms Loo. 15A, 16C		
Sample Custody must be documented below each time samples change possession, including courier delivery.								
Relinquished by Sampler: 1	Date Time: 10-15-10 1700	Received By: 1	Relinquished By: 2	Date Time: 6-16-10 1044	Received By: 2			
Relinquished by Sampler: 3	Date Time:	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4			
Relinquished by Sampler: 5	Date Time:	Received By: 5	Relinquished By: 5	Date Time:	Received By: 5			
Preserved where applicable <input type="checkbox"/>						On Ice <input checked="" type="checkbox"/> 1.9°C		

JA58900: Chain of Custody

Page 1 of 3

Accutest Labs of New England, Inc.



Fresh Ponds Corporate Village, Building B  
2235 Route 130, Dayton, NJ 08810  
908-329-0200 FAX: 908-329-3499/3480

Page 2 of 2

Accutest Job #:

JA58900

Accutest Quote #:

[illegible]

**JA58900: Chain of Custody**  
**Page 2 of 3**

## 15.1

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## Accutest Laboratories Sample Receipt Summary

Accutest Job Number: JA58900 Client: \_\_\_\_\_ Immediate Client Services Action Required: No  
Date / Time Received: 10/16/2010 No. Coolers: \_\_\_\_\_ Client Service Action Required at Login: No  
Project: \_\_\_\_\_ Airbill #'s: \_\_\_\_\_

**Cooler Security**      Y or N      Y or N  
1. Custody Seals Present: ☒ ☐      3. COC Present: ☒ ☐  
2. Custody Seals Intact: ☒ ☐      4. SmpI Dates/Time OK ☒ ☐

**Cooler Temperature**      Y or N  
1. Temp criteria achieved: ☒ ☐  
2. Cooler temp verification: Infrared gun  
3. Cooler media: Ice (bag)

**Quality Control Preservation**      Y or N      N/A  
1. Trip Blank present / cooler: ☐ ☐  
2. Trip Blank listed on COC: ☐ ☐  
3. Samples preserved properly: ☒ ☐  
4. VOCs headspace free: ☐ ☐ ☒

**Sample Integrity - Documentation**      Y or N  
1. Sample labels present on bottles: ☒ ☐  
2. Container labeling complete: ☒ ☐  
3. Sample container label / COC agree: ☒ ☐

**Sample Integrity - Condition**      Y or N  
1. Sample recvd within HT: ☒ ☐  
2. All containers accounted for: ☒ ☐  
3. Condition of sample: Intact

**Sample Integrity - Instructions**      Y or N      N/A  
1. Analysis requested is clear: ☒ ☐  
2. Bottles received for unspecified tests: ☐ ☒  
3. Sufficient volume rec'd for analysis: ☒ ☐  
4. Compositing instructions clear: ☐ ☐ ☒  
5. Filtering instructions clear: ☐ ☐ ☒

Comments

Accutest Laboratories  
V:508.481.6200

495 Technology Center West, Bldg One  
F: 508.481.7753

Marlborough, MA  
www.accutest.com

JA58900: Chain of Custody  
Page 3 of 3

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## Internal Sample Tracking Chronicle

Accutest New Jersey

Job No: JA58900

ENSRMAA: Bell Bend Nuclear Power Plant, Salem Townwhip, PA  
 Project No: 60160208

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JA58900-1 Collected: 14-OCT-10 12:30 By: MH Received: 14-OCT-10 By: BC BBNPP-D2						
JA58900-1	SW846 8315	22-OCT-10 03:17	CZ	19-OCT-10 FC		LC+ ACHD
JA58900-1	SW846 8315	22-OCT-10 18:30	CZ	19-OCT-10 FC		LC8315FORM
JA58900-2 Collected: 14-OCT-10 12:45 By: MH Received: 14-OCT-10 By: BC BBNPP-D1-C						
JA58900-2	SW846 8315	22-OCT-10 03:38	CZ	19-OCT-10 FC		LC+ ACHD
JA58900-2	SW846 8315	22-OCT-10 18:51	CZ	19-OCT-10 FC		LC8315FORM
JA58900-3 Collected: 14-OCT-10 12:20 By: MH Received: 14-OCT-10 By: BC BBNPP-R-C						
JA58900-3	SW846 8315	22-OCT-10 03:59	CZ	19-OCT-10 FC		LC+ ACHD
JA58900-3	SW846 8315	22-OCT-10 19:12	CZ	19-OCT-10 FC		LC8315FORM
JA58900-4 Collected: 14-OCT-10 12:45 By: MH Received: 14-OCT-10 By: BC BBNPP-CW22-C						
JA58900-4	SW846 8315	22-OCT-10 04:20	CZ	19-OCT-10 FC		LC+ ACHD
JA58900-4	SW846 8315	22-OCT-10 19:33	CZ	19-OCT-10 FC		LC8315FORM
JA58900-5 Collected: 14-OCT-10 15:01 By: MH Received: 14-OCT-10 By: BC BBNPP-C-EB						
JA58900-5	SW846 8315	19-OCT-10 18:05	CZ	16-OCT-10 FC		LC8315FORM
JA58900-6 Collected: 14-OCT-10 15:35 By: MH Received: 14-OCT-10 By: BC BBNPP-PB						
JA58900-6	SW846 8315	19-OCT-10 18:26	CZ	16-OCT-10 FC		LC8315FORM
JA58900-7 Collected: 13-OCT-10 14:17 By: MH Received: 14-OCT-10 By: BC BBNPP-CW4-C						
JA58900-7	SW846 8315	22-OCT-10 04:41	CZ	19-OCT-10 FC		LC+ ACHD
JA58900-7	SW846 8315	22-OCT-10 19:54	CZ	19-OCT-10 FC		LC8315FORM

15.2 15

## Internal Sample Tracking Chronicle

Accutest New Jersey

Job No: JA58900

ENSRMAA: Bell Bend Nuclear Power Plant, Salem Townwhip, PA  
 Project No: 60160208

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JA58900-8 Collected: 13-OCT-10 15:10 By: MH Received: 14-OCT-10 By: BC BBNPP-CW7-C						
JA58900-8	SW846 8315	22-OCT-10 05:02	CZ	19-OCT-10 FC		LC+ ACHD
JA58900-8	SW846 8315	22-OCT-10 20:15	CZ	19-OCT-10 FC		LC8315FORM
JA58900-9 Collected: 13-OCT-10 15:30 By: MH Received: 14-OCT-10 By: BC BBNPP-CW10-C						
JA58900-9	SW846 8315	22-OCT-10 05:44	CZ	19-OCT-10 FC		LC+ ACHD
JA58900-9	SW846 8315	22-OCT-10 20:57	CZ	19-OCT-10 FC		LC8315FORM
JA58900-10 Collected: 13-OCT-10 15:49 By: MH Received: 14-OCT-10 By: BC BBNPP-CW13-C						
JA58900-10	SW846 8315	22-OCT-10 06:05	CZ	19-OCT-10 FC		LC+ ACHD
JA58900-10	SW846 8315	22-OCT-10 21:17	CZ	19-OCT-10 FC		LC8315FORM
JA58900-11 Collected: 13-OCT-10 16:10 By: MH Received: 14-OCT-10 By: BC BBNPP-CW16-C						
JA58900-11	SW846 8315	22-OCT-10 06:26	CZ	19-OCT-10 FC		LC+ ACHD
JA58900-11	SW846 8315	22-OCT-10 21:38	CZ	19-OCT-10 FC		LC8315FORM
JA58900-12 Collected: 13-OCT-10 16:32 By: MH Received: 14-OCT-10 By: BC BBNPP-CW19-C						
JA58900-12	SW846 8315	22-OCT-10 06:47	CZ	19-OCT-10 FC		LC+ ACHD
JA58900-12	SW846 8315	22-OCT-10 21:59	CZ	19-OCT-10 FC		LC8315FORM
JA58900-14 Collected: 14-OCT-10 12:45 By: MH Received: 14-OCT-10 By: BC BBNPP-D1-CFD						
JA58900-14	SW846 8315	22-OCT-10 07:07	CZ	19-OCT-10 FC		LC+ ACHD
JA58900-14	SW846 8315	22-OCT-10 22:20	CZ	19-OCT-10 FC		LC8315FORM

15.2 15



## GC Semi-volatiles

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## QC Data Summaries

(Accutest Labs of New England, Inc.)

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Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries
- GC Surrogate Retention Time Summaries
- Initial and Continuing Calibration Summaries

**Method Blank Summary**

Page 1 of 1

**Job Number:** JA58900**Account:** ALNJ Accutest New Jersey**Project:** ENSRMAA: Bell Bend Nuclear Power Plant, Salem Township, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP22971-MB	VU28432.D	1	10/19/10	CZ	10/16/10	OP22971	GVU1286

**The QC reported here applies to the following samples:****Method:** SW846 8315

JA58900-5, JA58900-6

CAS No.	Compound	Result	RL	MDL	Units	Q
50-00-0	Formaldehyde	ND	20	6.3	ug/l	
75-07-0	Acetaldehyde	ND	20	4.8	ug/l	

CAS No.	Surrogate Recoveries	Limits
123-72-8	Butyraldehyde	166%* a 10-150%
123-72-8	Butyraldehyde	166%* a 10-150%

(a) Confirmed by reanalysis.

16.1.1

16

**Method Blank Summary**

Page 1 of 1

**Job Number:** JA58900**Account:** ALNJ Accutest New Jersey**Project:** ENSRMAA: Bell Bend Nuclear Power Plant, Salem Township, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP22999-MB	VU28476.D	1	10/22/10	CZ	10/19/10	OP22999	GVU1288

The QC reported here applies to the following samples:

Method: SW846 8315

JA58900-1, JA58900-2, JA58900-3, JA58900-4, JA58900-7, JA58900-8, JA58900-9, JA58900-10, JA58900-11, JA58900-12, JA58900-14

CAS No.	Compound	Result	RL	MDL	Units	Q
50-00-0	Formaldehyde	112	800	110	ug/kg	J
75-07-0	Acetaldehyde	ND	800	47	ug/kg	

CAS No.	Surrogate Recoveries		Limits
123-72-8	Butyraldehyde	126%	18-186%
123-72-8	Butyraldehyde	127%	18-186%

16.1.2 16

**Leachate Blank Summary**

Page 1 of 1

**Job Number:** JA58900**Account:** ALNJ Accutest New Jersey**Project:** ENSRMAA: Bell Bend Nuclear Power Plant, Salem Township, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP22999-LB	VU28492.D	1	10/22/10	CZ	10/19/10	OP22999	GVU1288

**The QC reported here applies to the following samples:****Method:** SW846 8315

JA58900-1, JA58900-2, JA58900-3, JA58900-4, JA58900-7, JA58900-8, JA58900-9, JA58900-10, JA58900-11, JA58900-12, JA58900-14

CAS No.	Compound	Result	RL	MDL	Units	Q
50-00-0	Formaldehyde	ND	800	110	ug/kg	
75-07-0	Acetaldehyde	63.4	800	47	ug/kg	J

CAS No.	Surrogate Recoveries		Limits
123-72-8	Butyraldehyde	143%	18-186%
123-72-8	Butyraldehyde	143%	18-186%

16.2.1

16

**Blank Spike Summary**

Page 1 of 1

**Job Number:** JA58900**Account:** ALNJ Accutest New Jersey**Project:** ENSRMAA: Bell Bend Nuclear Power Plant, Salem Township, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP22971-BS	VU28433.D	1	10/19/10	CZ	10/16/10	OP22971	GVU1286

The QC reported here applies to the following samples:

Method: SW846 8315

JA58900-5, JA58900-6

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
50-00-0	Formaldehyde	80	84.3	105	35-150
75-07-0	Acetaldehyde	80	22.0	28	10-150

CAS No.	Surrogate Recoveries	BSP	Limits
123-72-8	Butyraldehyde	137%	10-150%
123-72-8	Butyraldehyde	137%	10-150%

16.3.1  
16

**Blank Spike Summary**

Page 1 of 1

**Job Number:** JA58900**Account:** ALNJ Accutest New Jersey**Project:** ENSRMAA: Bell Bend Nuclear Power Plant, Salem Township, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP22999-BS	VU28477.D	1	10/22/10	CZ	10/19/10	OP22999	GVU1288

**The QC reported here applies to the following samples:****Method:** SW846 8315

JA58900-1, JA58900-2, JA58900-3, JA58900-4, JA58900-7, JA58900-8, JA58900-9, JA58900-10, JA58900-11, JA58900-12, JA58900-14

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
50-00-0	Formaldehyde	1600	1530	96	27-150
75-07-0	Acetaldehyde	1600	1180	74	32-143

CAS No.	Surrogate Recoveries	BSP	Limits
123-72-8	Butyraldehyde	115%	18-186%
123-72-8	Butyraldehyde	116%	18-186%

16.3.2  
16

**Matrix Spike/Matrix Spike Duplicate Summary**

Page 1 of 1

**Job Number:** JA58900**Account:** ALNJ Accutest New Jersey**Project:** ENSRMAA: Bell Bend Nuclear Power Plant, Salem Township, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP22971-MS	VU28434.D	1	10/19/10	CZ	10/16/10	OP22971	GVU1286
OP22971-MSD	VU28435.D	1	10/19/10	CZ	10/16/10	OP22971	GVU1286
M94706-25	VU28436.D	1	10/19/10	CZ	10/16/10	OP22971	GVU1286

The QC reported here applies to the following samples:

Method: SW846 8315

JA58900-5, JA58900-6

CAS No.	Compound	M94706-25 ug/l	Spike Q	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
50-00-0	Formaldehyde	ND	80	103	129	90.5	113	13	11-150/35
75-07-0	Acetaldehyde	ND	80	25.2	32	22.7	28	10	10-150/35

CAS No.	Surrogate Recoveries	MS	MSD	M94706-25	Limits
123-72-8	Butyraldehyde	158%* <sup>a</sup>	143%	133%	10-150%
123-72-8	Butyraldehyde	158%* <sup>a</sup>	143%	133%	10-150%

(a) Outside control limits due to possible matrix interference.

16.4.1

16

**Matrix Spike/Matrix Spike Duplicate Summary**

Page 1 of 1

**Job Number:** JA58900**Account:** ALNJ Accutest New Jersey**Project:** ENSRMAA: Bell Bend Nuclear Power Plant, Salem Township, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP22999-MS	VU28518.D	5	10/22/10	CZ	10/19/10	OP22999	GVU1289
OP22999-MSD	VU28519.D	5	10/22/10	CZ	10/19/10	OP22999	GVU1289
JA58900-3	VU28482.D	1	10/22/10	CZ	10/19/10	OP22999	GVU1288
JA58900-3	VU28522.D	5	10/22/10	CZ	10/19/10	OP22999	GVU1289

**The QC reported here applies to the following samples:****Method:** SW846 8315

JA58900-1, JA58900-2, JA58900-3, JA58900-4, JA58900-7, JA58900-8, JA58900-9, JA58900-10, JA58900-11, JA58900-12, JA58900-14

CAS No.	Compound	JA58900-3 ug/kg	Spike Q	ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
50-00-0	Formaldehyde	19800 <sup>a</sup>		2140	21300	70	22300	117	5	10-150/35
75-07-0	Acetaldehyde	95.3	J	2140	1600	75	1800	84	12	10-150/35

CAS No.	Surrogate Recoveries	MS	MSD	JA58900-3	JA58900-3	Limits
123-72-8	Butyraldehyde	163%	156%	180%	152%	18-186%
123-72-8	Butyraldehyde	162%	167%	150%	152%	18-186%

(a) Result is from Run #2.

## Semivolatile Surrogate Recovery Summary

Page 1 of 1

Job Number: JA58900

Account: ALNJ Accutest New Jersey

Project: ENSRMAA: Bell Bend Nuclear Power Plant, Salem Township, PA

Method: SW846 8315

Matrix: AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 <sup>a</sup>	S1 <sup>b</sup>
JA58900-5	VU28438.D	155.0* <sup>c</sup>	155.0* <sup>c</sup>
JA58900-6	VU28439.D	123.0	123.0
OP22971-BS	VU28433.D	137.0	137.0
OP22971-MB	VU28432.D	166.0* <sup>d</sup>	166.0* <sup>d</sup>
OP22971-MS	VU28434.D	158.0* <sup>c</sup>	158.0* <sup>c</sup>
OP22971-MSD	VU28435.D	143.0	143.0

Surrogate Compounds	Recovery Limits
------------------------	--------------------

S1 = Butyraldehyde	10-150%
--------------------	---------

(a) Recovery from GC signal #1

(b) Recovery from GC signal #2

(c) Outside control limits due to possible matrix interference.

(d) Confirmed by reanalysis.

16.5.1  
16

# Semivolatile Surrogate Recovery Summary

Page 1 of 1

Job Number: JA58900

Account: ALNJ Accutest New Jersey

Project: ENSRMAA: Bell Bend Nuclear Power Plant, Salem Township, PA

Method: SW846 8315

Matrix: SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 <sup>a</sup>	S1 <sup>b</sup>
JA58900-1	VU28520.D	142.0	146.0
JA58900-1	VU28480.D	161.0	163.0
JA58900-2	VU28521.D	160.0	164.0
JA58900-2	VU28481.D	179.0	177.0
JA58900-3	VU28522.D	152.0	152.0
JA58900-3	VU28482.D	180.0	150.0
JA58900-4	VU28523.D	153.0	167.0
JA58900-4	VU28483.D	212.0* <sup>c</sup>	214.0* <sup>c</sup>
JA58900-7	VU28524.D	152.0	156.0
JA58900-7	VU28484.D	171.0	165.0
JA58900-8	VU28525.D	154.0	156.0
JA58900-8	VU28485.D	181.0	208.0* <sup>c</sup>
JA58900-9	VU28527.D	167.0	174.0
JA58900-9	VU28487.D	199.0* <sup>c</sup>	202.0* <sup>c</sup>
JA58900-10	VU28528.D	168.0	169.0
JA58900-10	VU28488.D	185.0	185.0
JA58900-11	VU28529.D	155.0	154.0
JA58900-11	VU28489.D	165.0	164.0
JA58900-12	VU28530.D	149.0	152.0
JA58900-12	VU28490.D	169.0	167.0
JA58900-14	VU28531.D	153.0	153.0
JA58900-14	VU28491.D	157.0	159.0
OP22999-BS	VU28477.D	115.0	116.0
OP22999-LB	VU28492.D	143.0	143.0
OP22999-MB	VU28476.D	126.0	127.0
OP22999-MS	VU28518.D	163.0	162.0
OP22999-MSD	VU28519.D	156.0	167.0

**Surrogate  
Compounds**

**Recovery  
Limits**

S1 = Butyraldehyde

18-186%

(a) Recovery from GC signal #1

(b) Recovery from GC signal #2

(c) Outside control limits due to possible matrix interference.

16.5.2  
16

## GC Surrogate Retention Time Summary

Page 1 of 1

**Job Number:** JA58900

**Account:** ALNJ Accutest New Jersey

**Project:** ENSRMAA: Bell Bend Nuclear Power Plant, Salem Township, PA

**Check Std:** GVU1286-CC1253

**Injection Date:** 10/19/10

**Lab File ID:** VU28431.D

**Injection Time:** 15:28

**Instrument ID:** GCVU

**Method:** SW846 8315

**S1<sup>a</sup> S1<sup>b</sup>**  
**RT RT**

Check Std	13.32	13.31
-----------	-------	-------

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 <sup>a</sup> RT	S1 <sup>b</sup> RT
OP22971-MB	VU28432.D	10/19/10	15:59	13.33	13.34
OP22971-BS	VU28433.D	10/19/10	16:20	13.36	13.36
OP22971-MS	VU28434.D	10/19/10	16:41	13.34	13.34
OP22971-MSD	VU28435.D	10/19/10	17:02	13.36	13.35
M94706-25	VU28436.D	10/19/10	17:23	13.36	13.35
ZZZZZZ	VU28437.D	10/19/10	17:44	13.41	13.40
JA58900-5	VU28438.D	10/19/10	18:05	13.36	13.36
JA58900-6	VU28439.D	10/19/10	18:26	13.36	13.36
GVU1286-ECC1253	VU28440.D	10/19/10	18:47	13.38	13.38

### Surrogate Compounds

**S1** = Butyraldehyde

(a) Retention time from GC signal #1

(b) Retention time from GC signal #2

16.6.1  
16

## GC Surrogate Retention Time Summary

Page 1 of 1

Job Number: JA58900

Account: ALNJ Accutest New Jersey

Project: ENSRMAA: Bell Bend Nuclear Power Plant, Salem Township, PA

Check Std:	GVU1288-CC1253	Injection Date:	10/22/10
Lab File ID:	VU28475.D	Injection Time:	01:33
Instrument ID:	GCVU	Method:	SW846 8315

S1 <sup>a</sup>	S1 <sup>b</sup>
RT	RT

Check Std	13.36	13.35
-----------	-------	-------

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 <sup>a</sup> RT	S1 <sup>b</sup> RT
OP22999-MB	VU28476.D	10/22/10	01:54	13.35	13.35
OP22999-BS	VU28477.D	10/22/10	02:15	13.36	13.36
JA58900-1	VU28480.D	10/22/10	03:17	13.36	13.36
JA58900-2	VU28481.D	10/22/10	03:38	13.36	13.36
JA58900-3	VU28482.D	10/22/10	03:59	13.34	13.34
JA58900-4	VU28483.D	10/22/10	04:20	13.37	13.37
JA58900-7	VU28484.D	10/22/10	04:41	13.37	13.37
JA58900-8	VU28485.D	10/22/10	05:02	13.37	13.36

### Surrogate Compounds

S1 = Butyraldehyde

(a) Retention time from GC signal #1

(b) Retention time from GC signal #2

16.6.2

16

## GC Surrogate Retention Time Summary

Page 1 of 1

**Job Number:** JA58900

**Account:** ALNJ Accutest New Jersey

**Project:** ENSRMAA: Bell Bend Nuclear Power Plant, Salem Township, PA

**Check Std:** GVU1288-CC1253

**Injection Date:** 10/22/10

**Lab File ID:** VU28486.D

**Injection Time:** 05:23

**Instrument ID:** GCVU

**Method:** SW846 8315

**S1<sup>a</sup>**   **S1<sup>b</sup>**  
**RT**   **RT**

Check Std	13.35	13.35
-----------	-------	-------

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 <sup>a</sup> RT	S1 <sup>b</sup> RT
JA58900-9	VU28487.D	10/22/10	05:44	13.33	13.33
JA58900-10	VU28488.D	10/22/10	06:05	13.48	13.48
JA58900-11	VU28489.D	10/22/10	06:26	13.51	13.51
JA58900-12	VU28490.D	10/22/10	06:47	13.52	13.52
JA58900-14	VU28491.D	10/22/10	07:07	13.52	13.52
OP22999-LB	VU28492.D	10/22/10	07:28	13.52	13.52
GVU1288-ECC1253	VU28493.D	10/22/10	07:49	13.51	13.52

### Surrogate Compounds

S1 = Butyraldehyde

(a) Retention time from GC signal #1

(b) Retention time from GC signal #2

16.6.3  
16

## GC Surrogate Retention Time Summary

Page 1 of 1

**Job Number:** JA58900

**Account:** ALNJ Accutest New Jersey

**Project:** ENSRMAA: Bell Bend Nuclear Power Plant, Salem Township, PA

<b>Check Std:</b>	GVU1289-CC1253	<b>Injection Date:</b>	10/22/10
<b>Lab File ID:</b>	VU28526.D	<b>Injection Time:</b>	20:36
<b>Instrument ID:</b>	GCVU	<b>Method:</b>	SW846 8315

<b>S1<sup>a</sup></b>	<b>S1<sup>b</sup></b>
<b>RT</b>	<b>RT</b>

Check Std	13.14	13.14
-----------	-------	-------

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 <sup>a</sup> RT	S1 <sup>b</sup> RT
JA58900-9	VU28527.D	10/22/10	20:57	13.10	13.10
JA58900-10	VU28528.D	10/22/10	21:17	13.05	13.04
JA58900-11	VU28529.D	10/22/10	21:38	13.04	13.04
JA58900-12	VU28530.D	10/22/10	21:59	13.05	13.05
JA58900-14	VU28531.D	10/22/10	22:20	13.08	13.08
GVU1289-ECC1253	VU28532.D	10/22/10	22:41	13.05	13.05

### Surrogate Compounds

S1 = Butyraldehyde

(a) Retention time from GC signal #1

(b) Retention time from GC signal #2

16.6.4

16

## Initial Calibration Summary

Page 1 of 1

Job Number: JA58900

Sample: GVU1253-ICC1253

Account: ALNJ Accutest New Jersey

Lab FileID: VU27924.D

Project: ENSRMAA: Bell Bend Nuclear Power Plant, Salem Township, PA

## Response Factor Report G1315A

Method : K:\HPLC2\METHODS\FM070610.M (RTE Integrator)  
Title : LC8315FORM/032310/ic1209/op20876  
Last Update : Wed Jul 07 09:33:41 2010  
Response via : Initial Calibration

## Calibration Files

1 =VU27923.D 2 =VU27924.D 3 =VU27925.D 4 =VU27926.D  
5 =VU27927.D 6 =VU27928.D

Compound	1	2	3	4	5	6	Avg	%RSD
1) Formaldehyde	0.236	0.293	0.291	0.352	0.462	1.033	0.445 E5	67.10
----- Quadratic regression ----- Coefficient = 0.9981								
Response Ratio = 51516.94310 + 31750.28549 *A + -85.97234 *A^2								
2) Acetaldehyde	0.373	0.482	0.419	0.563	0.716	1.507	0.677 E5	62.71
----- Quadratic regression ----- Coefficient = 0.9941								
Response Ratio = 46838.46160 + 52778.35038 *A + -157.35314 *A^2								
3) s Butyraldehyde	1.879	2.264	1.685	1.867	2.045	3.994	2.289 E4	37.47
----- Quadratic regression ----- Coefficient = 0.9934								
Response Ratio = -35678.24236 + 24769.28645 *A + -54.97964 *A^2								

## Signal #2

1) Formaldehyde	0.640	0.804	0.795	0.974	1.282	3.115	1.268 E5	73.39
----- Quadratic regression ----- Coefficient = 0.9976								
Response Ratio = 154796.34944 + 86883.32869 *A + -242.46209 *A^2								
2) Acetaldehyde	0.727	0.916	0.844	1.200	1.713	4.232	1.605 E5	83.12
----- Quadratic regression ----- Coefficient = 0.9946								
Response Ratio = 268283.95198 + 94044.36771 *A + -236.82367 *A^2								
3) s Butyraldehyde	3.420	4.082	3.022	3.160	3.437	5.777	3.816 E4	26.92
----- Quadratic regression ----- Coefficient = 0.9938								
Response Ratio = -79635.93019 + 44871.05988 *A + -96.50411 *A^2								

-----  
(#) = Out of Range

FM070610.M

Wed Jul 07 09:39:21 2010

RPT1

16.7.1  
16

**Initial Calibration Verification****Job Number:** JA58900**Sample:**

GVU1253-ICV1253

**Account:** ALNJ Accutest New Jersey**Lab FileID:**

VU27929.D

**Project:** ENSRMAA: Bell Bend Nuclear Power Plant, Salem Township, PA

## Evaluate Continuing Calibration Report

Data File : K:\HPLC2\DATA\070610\VU27929.D\dad1b.ch Vial: 7  
Acq On : 06-Jul-2010, 17:06:55 Operator: caobinz  
Sample : icv1253-50,form 50,icv Inst : G1315A  
Misc : op21785,gvu1253,25,,,1,,soil Multiplr: 1.00  
IntFile : rteint.p

Data File : K:\HPLC2\DATA\070610\VU27929.D\dad1a.ch Vial: 7  
Acq On : 06-Jul-2010, 17:06:55 Operator: sonal  
Sample : form 50,icv Inst : G1315A  
Misc : Multiplr: 1.00  
IntFile : rteint2.p

Method : K:\HPLC2\METHODS\FM070610.M (RTE Integrator)  
Title : LC8315FORM/032310/ic1209/op20876  
Last Update : Wed Jul 07 09:33:41 2010  
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 35% Max. R.T. Dev 0.50min  
Max. RRF Dev : 65% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev (Min)
1	Formaldehyde	44.466	28.800 E3	35.2	98	0.00
2	Acetaldehyde	67.665	40.359 E3	40.4	84	0.00
3 s	Butyraldehyde	22.890	22.098 E3	3.5	98	0.00

## Signal #2

1	Formaldehyde	126.806	78.052 E3	38.4	97	0.00
2	Acetaldehyde	160.538	74.700 E3	53.5	82	0.00
3 s	Butyraldehyde	38.164	40.346 E3	-5.7	99	0.01

## Evaluate Continuing Calibration Report - Not Finds

Data File : K:\HPLC2\DATA\070610\VU27929.D\dad1b.ch Vial: 7  
Acq On : 06-Jul-2010, 17:06:55 Operator: caobinz  
Sample : icv1253-50,form 50,icv Inst : G1315A  
Misc : op21785,gvu1253,25,,,1,,soil Multiplr: 1.00  
IntFile : rteint.p

Data File : K:\HPLC2\DATA\070610\VU27929.D\dad1a.ch Vial: 7  
Acq On : 06-Jul-2010, 17:06:55 Operator: sonal  
Sample : form 50,icv Inst : G1315A  
Misc : Multiplr: 1.00  
IntFile : rteint2.p

Method : K:\HPLC2\METHODS\FM070610.M (RTE Integrator)  
Title : LC8315FORM/032310/ic1209/op20876  
Last Update : Wed Jul 07 09:33:41 2010  
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 35% Max. R.T. Dev 0.50min  
Max. RRF Dev : 65% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev (Min)
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16.7.2 16

## Initial Calibration Verification

Job Number: JA58900

Account: ALNJ Accutest New Jersey

Project: ENSRMAA: Bell Bend Nuclear Power Plant, Salem Township, PA

Sample:

GVU1253-ICV1253

Lab FileID:

VU27929.D

Page 2 of 2

Signal #2

---

(#) = Out of Range

SPCC's out = 0 CCC's out = 0

VU27924.D FM070610.M

Wed Jul 07 09:36:32 2010 RPT1

16.7.2  
16

## Continuing Calibration Summary

Job Number: JA58900

Account: ALNJ Accutest New Jersey

Project: ENSRMAA: Bell Bend Nuclear Power Plant, Salem Township, PA

Sample:

GVU1286-CC1253

Lab FileID:

VU28431.D

Page 1 of 2

## Evaluate Continuing Calibration Report

Data File : D:\HPLC2\DATA\101910\VU28431.D\dad1b.ch Vial: 51  
Acq On : 19-Oct-2010, 15:28:18 Operator: caobinz  
Sample : cc1253-20, form 20 Inst : G1315A  
Misc : op22971,gvul286,500,,,1 Multiplr: 1.00  
IntFile : rteint.p

Data File : D:\HPLC2\DATA\101910\VU28431.D\dad1a.ch Vial: 51  
Acq On : 19-Oct-2010, 15:28:18 Operator: caobinz  
Sample : form 20 Inst : G1315A  
Misc : Multiplr: 1.00  
IntFile : rteint2.p

Method : D:\HPLC2\METHODS\FM101910.M (RTE Integrator)  
Title : LC8315FORM/070610/ic1253/op21796  
Last Update : Tue Oct 19 16:05:29 2010  
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 85% Max. R.T. Dev 0.50min  
Max. RRF Dev : 15% Max. Rel. Area : 115%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
1	Formaldehyde	44.466	29.915 E3	32.7#	103	0.00
2	Acetaldehyde	67.665	42.592 E3	37.1#	102	0.00
3 s	Butyraldehyde	22.890	18.354 E3	19.8#	109	0.00

## Signal #2

1	Formaldehyde	126.806	80.460 E3	36.5#	101	0.00
2	Acetaldehyde	160.538	89.762 E3	44.1#	106	0.00
3 s	Butyraldehyde	38.164	32.646 E3	14.5	108	0.00

## Evaluate Continuing Calibration Report - Not Found

Data File : D:\HPLC2\DATA\101910\VU28431.D\dad1b.ch Vial: 51  
Acq On : 19-Oct-2010, 15:28:18 Operator: caobinz  
Sample : cc1253-20, form 20 Inst : G1315A  
Misc : op22971,gvul286,500,,,1 Multiplr: 1.00  
IntFile : rteint.p

Data File : D:\HPLC2\DATA\101910\VU28431.D\dad1a.ch Vial: 51  
Acq On : 19-Oct-2010, 15:28:18 Operator: caobinz  
Sample : form 20 Inst : G1315A  
Misc : Multiplr: 1.00  
IntFile : rteint2.p

Method : D:\HPLC2\METHODS\FM101910.M (RTE Integrator)  
Title : LC8315FORM/070610/ic1253/op21796  
Last Update : Tue Oct 19 16:05:29 2010  
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 85% Max. R.T. Dev 0.50min  
Max. RRF Dev : 15% Max. Rel. Area : 115%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
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16.7.3 16

## Continuing Calibration Summary

**Job Number:** JA58900

**Account:** ALNJ Accutest New Jersey

**Project:** ENSRMAA: Bell Bend Nuclear Power Plant, Salem Township, PA

**Sample:**

GVU1286-CC1253

**Lab FileID:**

VU28431.D

Page 2 of 2

Signal #2

---

(#) = Out of Range

SPCC's out = 0 CCC's out = 0

VU28431.D FM101910.M

Wed Oct 20 16:11:20 2010 RPT1

16.7.3  
16

## Continuing Calibration Summary

Job Number: JA58900

Sample:

GVU1286-ECC1253

Account: ALNJ Accutest New Jersey

Lab FileID:

VU28440.D

Project: ENSRMAA: Bell Bend Nuclear Power Plant, Salem Township, PA

## Evaluate Continuing Calibration Report

Data File : D:\HPLC2\DATA\101910\VU28440.D\dad1b.ch Vial: 51  
Acq On : 19-Oct-2010, 18:47:14 Operator: caobinz  
Sample : ecc1253-20,form 20 Inst : G1315A  
Misc : op22971,gvul286,500,,,1 Multiplr: 1.00  
IntFile : rteint.p

Data File : D:\HPLC2\DATA\101910\VU28440.D\dad1a.ch Vial: 51  
Acq On : 19-Oct-2010, 18:47:14 Operator: caobinz  
Sample : form 20 Inst : G1315A  
Misc : Multiplr: 1.00  
IntFile : rteint2.p

Method : D:\HPLC2\METHODS\FM101910.M (RTE Integrator)  
Title : LC8315FORM/070610/ic1253/op21796  
Last Update : Tue Oct 19 16:05:29 2010  
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 85% Max. R.T. Dev 0.50min  
Max. RRF Dev : 15% Max. Rel. Area : 115%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
1	Formaldehyde	44.466	28.939 E3	34.9#	99	0.03
2	Acetaldehyde	67.665	42.393 E3	37.3#	101	0.04
3 s	Butyraldehyde	22.890	18.658 E3	18.5#	111	0.06

Signal #2

1	Formaldehyde	126.806	80.816 E3	36.3#	102	0.03
2	Acetaldehyde	160.538	89.224 E3	44.4#	106	0.03
3 s	Butyraldehyde	38.164	33.120 E3	13.2	110	0.07

## Evaluate Continuing Calibration Report - Not Found

Data File : D:\HPLC2\DATA\101910\VU28440.D\dad1b.ch Vial: 51  
Acq On : 19-Oct-2010, 18:47:14 Operator: caobinz  
Sample : ecc1253-20,form 20 Inst : G1315A  
Misc : op22971,gvul286,500,,,1 Multiplr: 1.00  
IntFile : rteint.p

Data File : D:\HPLC2\DATA\101910\VU28440.D\dad1a.ch Vial: 51  
Acq On : 19-Oct-2010, 18:47:14 Operator: caobinz  
Sample : form 20 Inst : G1315A  
Misc : Multiplr: 1.00  
IntFile : rteint2.p

Method : D:\HPLC2\METHODS\FM101910.M (RTE Integrator)  
Title : LC8315FORM/070610/ic1253/op21796  
Last Update : Tue Oct 19 16:05:29 2010  
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 85% Max. R.T. Dev 0.50min  
Max. RRF Dev : 15% Max. Rel. Area : 115%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
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16.7.4 16

## Continuing Calibration Summary

Job Number: JA58900

Account: ALNJ Accutest New Jersey

Project: ENSRMAA: Bell Bend Nuclear Power Plant, Salem Township, PA

Sample:

Lab FileID:

GVU1286-ECC1253

VU28440.D

Page 2 of 2

Signal #2

(#) = Out of Range

SPCC's out = 0 CCC's out = 0

VU28431.D FM101910.M

Wed Oct 20 16:19:29 2010 RPT1

16.7.4

16

## Continuing Calibration Summary

Page 1 of 2

Job Number: JA58900

Sample:

GVU1288-CC1253

Account: ALNJ Accutest New Jersey

Lab FileID:

VU28475.D

Project: ENSRMAA: Bell Bend Nuclear Power Plant, Salem Township, PA

## Evaluate Continuing Calibration Report

Data File : D:\HPLC2\DATA\102110\VU28475.D\dad1b.ch Vial: 91  
Acq On : 22-Oct-2010, 01:33:17 Operator: caobinz  
Sample : cc1253-20, form 20 Inst : G1315A  
Misc : op22983,gvul288,25,,,1 Multiplr: 1.00  
IntFile : rteint.p

Data File : D:\HPLC2\DATA\102110\VU28475.D\dad1a.ch Vial: 91  
Acq On : 22-Oct-2010, 01:33:17 Operator: caobinz  
Sample : form 20 Inst : G1315A  
Misc : Multiplr: 1.00  
IntFile : rteint2.p

Method : D:\HPLC2\METHODS\FM102110.M (RTE Integrator)  
Title : LC8315FORM/070610/ic1253/op21796  
Last Update : Fri Oct 22 08:44:26 2010  
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 85% Max. R.T. Dev 0.50min  
Max. RRF Dev : 15% Max. Rel. Area : 115%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev (Min)
1	Formaldehyde	44.466	29.889 E3	32.8#	103	0.00
2	Acetaldehyde	67.665	41.296 E3	39.0#	99	0.00
3 s	Butyraldehyde	22.890	18.911 E3	17.4#	112	0.04

Signal #2

1	Formaldehyde	126.806	81.241 E3	35.9#	102	0.00
2	Acetaldehyde	160.538	90.092 E3	43.9#	107	0.00
3 s	Butyraldehyde	38.164	33.534 E3	12.1	111	0.03

## Evaluate Continuing Calibration Report - Not Found

Data File : D:\HPLC2\DATA\102110\VU28475.D\dad1b.ch Vial: 91  
Acq On : 22-Oct-2010, 01:33:17 Operator: caobinz  
Sample : cc1253-20, form 20 Inst : G1315A  
Misc : op22983,gvul288,25,,,1 Multiplr: 1.00  
IntFile : rteint.p

Data File : D:\HPLC2\DATA\102110\VU28475.D\dad1a.ch Vial: 91  
Acq On : 22-Oct-2010, 01:33:17 Operator: caobinz  
Sample : form 20 Inst : G1315A  
Misc : Multiplr: 1.00  
IntFile : rteint2.p

Method : D:\HPLC2\METHODS\FM102110.M (RTE Integrator)  
Title : LC8315FORM/070610/ic1253/op21796  
Last Update : Fri Oct 22 08:44:26 2010  
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 85% Max. R.T. Dev 0.50min  
Max. RRF Dev : 15% Max. Rel. Area : 115%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev (Min)
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16.7.5  
16

## Continuing Calibration Summary

Page 2 of 2

**Job Number:** JA58900

**Sample:** GVU1288-CC1253

**Account:** ALNJ Accutest New Jersey

**Lab FileID:** VU28475.D

**Project:** ENSRMAA: Bell Bend Nuclear Power Plant, Salem Township, PA

---

Signal #2

---

(#) = Out of Range

SPCC's out = 0 CCC's out = 0

VU28449.D FM102110.M

Fri Oct 22 09:36:18 2010 RPT1

16.7.5

16

## Continuing Calibration Summary

Page 1 of 2

Job Number: JA58900

Sample:

GVU1288-CC1253

Account: ALNJ Accutest New Jersey

Lab FileID:

VU28486.D

Project: ENSRMAA: Bell Bend Nuclear Power Plant, Salem Township, PA

## Evaluate Continuing Calibration Report

Data File : D:\HPLC2\DATA\102110\VU28486.D\dad1b.ch Vial: 91  
Acq On : 22-Oct-2010, 05:23:25 Operator: caobinz  
Sample : cc1253-20, form 20 Inst : G1315A  
Misc : op22999,gvu1288,25,,,1 Multiplr: 1.00  
IntFile : rteint.p

Data File : D:\HPLC2\DATA\102110\VU28486.D\dad1a.ch Vial: 91  
Acq On : 22-Oct-2010, 05:23:25 Operator: caobinz  
Sample : form 20 Inst : G1315A  
Misc : Multiplr: 1.00  
IntFile : rteint2.p

Method : D:\HPLC2\METHODS\FM102110.M (RTE Integrator)  
Title : LC8315FORM/070610/ic1253/op21796  
Last Update : Fri Oct 22 08:44:26 2010  
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 85% Max. R.T. Dev 0.50min  
Max. RRF Dev : 15% Max. Rel. Area : 115%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev (Min)
1	Formaldehyde	44.466	27.589 E3	38.0#	95	0.00
2	Acetaldehyde	67.665	41.095 E3	39.3#	98	0.00
3 s	Butyraldehyde	22.890	19.005 E3	17.0#	113	0.04

Signal #2

1	Formaldehyde	126.806	78.876 E3	37.8#	99	0.00
2	Acetaldehyde	160.538	90.786 E3	43.4#	108	0.00
3 s	Butyraldehyde	38.164	33.335 E3	12.7	110	0.02

## Evaluate Continuing Calibration Report - Not Found

Data File : D:\HPLC2\DATA\102110\VU28486.D\dad1b.ch Vial: 91  
Acq On : 22-Oct-2010, 05:23:25 Operator: caobinz  
Sample : cc1253-20, form 20 Inst : G1315A  
Misc : op22999,gvu1288,25,,,1 Multiplr: 1.00  
IntFile : rteint.p

Data File : D:\HPLC2\DATA\102110\VU28486.D\dad1a.ch Vial: 91  
Acq On : 22-Oct-2010, 05:23:25 Operator: caobinz  
Sample : form 20 Inst : G1315A  
Misc : Multiplr: 1.00  
IntFile : rteint2.p

Method : D:\HPLC2\METHODS\FM102110.M (RTE Integrator)  
Title : LC8315FORM/070610/ic1253/op21796  
Last Update : Fri Oct 22 08:44:26 2010  
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 85% Max. R.T. Dev 0.50min  
Max. RRF Dev : 15% Max. Rel. Area : 115%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev (Min)
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16.7.6

16

## Continuing Calibration Summary

**Job Number:** JA58900

**Account:** ALNJ Accutest New Jersey

**Project:** ENSRMAA: Bell Bend Nuclear Power Plant, Salem Township, PA

**Sample:**

GVU1288-CC1253

**Lab FileID:**

VU28486.D

Page 2 of 2

Signal #2

---

(#) = Out of Range

SPCC's out = 0 CCC's out = 0

VU28449.D FM102110.M

Fri Oct 22 09:45:22 2010 RPT1

16.7.6

16

**Continuing Calibration Summary****Job Number:** JA58900**Sample:**

GVU1288-ECC1253

**Account:** ALNJ Accutest New Jersey**Lab FileID:**

VU28493.D

**Project:** ENSRMAA: Bell Bend Nuclear Power Plant, Salem Township, PA

## Evaluate Continuing Calibration Report

Data File : D:\HPLC2\DATA\102110\VU28493.D\dad1b.ch Vial: 91  
Acq On : 22-Oct-2010, 07:49:46 Operator: caobinz  
Sample : ecc1253-20,form 20 Inst : G1315A  
Misc : op22999,gvul288,25,,,1 Multiplr: 1.00  
IntFile : rteint.p

Data File : D:\HPLC2\DATA\102110\VU28493.D\dad1a.ch Vial: 91  
Acq On : 22-Oct-2010, 07:49:46 Operator: caobinz  
Sample : form 20 Inst : G1315A  
Misc : Multiplr: 1.00  
IntFile : rteint2.p

Method : D:\HPLC2\METHODS\FM102110.M (RTE Integrator)  
Title : LC8315FORM/070610/ic1253/op21796  
Last Update : Fri Oct 22 08:44:26 2010  
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 85% Max. R.T. Dev 0.50min  
Max. RRF Dev : 15% Max. Rel. Area : 115%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev (Min)
1	Formaldehyde	44.466	28.845 E3	35.1#	99	0.06
2	Acetaldehyde	67.665	42.064 E3	37.8#	100	0.08
3 s	Butyraldehyde	22.890	18.882 E3	17.5#	112	0.19

## Signal #2

1	Formaldehyde	126.806	80.349 E3	36.6#	101	0.06
2	Acetaldehyde	160.538	89.826 E3	44.0#	106	0.08
3 s	Butyraldehyde	38.164	32.993 E3	13.5	109	0.20

## Evaluate Continuing Calibration Report - Not Found

Data File : D:\HPLC2\DATA\102110\VU28493.D\dad1b.ch Vial: 91  
Acq On : 22-Oct-2010, 07:49:46 Operator: caobinz  
Sample : ecc1253-20,form 20 Inst : G1315A  
Misc : op22999,gvul288,25,,,1 Multiplr: 1.00  
IntFile : rteint.p

Data File : D:\HPLC2\DATA\102110\VU28493.D\dad1a.ch Vial: 91  
Acq On : 22-Oct-2010, 07:49:46 Operator: caobinz  
Sample : form 20 Inst : G1315A  
Misc : Multiplr: 1.00  
IntFile : rteint2.p

Method : D:\HPLC2\METHODS\FM102110.M (RTE Integrator)  
Title : LC8315FORM/070610/ic1253/op21796  
Last Update : Fri Oct 22 08:44:26 2010  
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 85% Max. R.T. Dev 0.50min  
Max. RRF Dev : 15% Max. Rel. Area : 115%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev (Min)
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16.7.7  
16

## Continuing Calibration Summary

**Job Number:** JA58900

**Account:** ALNJ Accutest New Jersey

**Project:** ENSRMAA: Bell Bend Nuclear Power Plant, Salem Township, PA

**Sample:**

**Lab FileID:**

GVU1288-ECC1253

VU28493.D

Page 2 of 2

Signal #2

(#) = Out of Range

SPCC's out = 0 CCC's out = 0

VU28449.D FM102110.M

Fri Oct 22 09:50:45 2010 RPT1

16.7.7

16

## Continuing Calibration Summary

Page 1 of 2

Job Number: JA58900

Sample: GVU1289-CC1253

Account: ALNJ Accutest New Jersey

Lab FileID: VU28526.D

Project: ENSRMAA: Bell Bend Nuclear Power Plant, Salem Township, PA

## Evaluate Continuing Calibration Report

Data File : D:\HPLC2\DATA\102210\VU28526.D\dad1b.ch Vial: 91  
Acq On : 22-Oct-2010, 20:36:06 Operator: caobinz  
Sample : cc1253-20,form 20 Inst : G1315A  
Misc : op22999,gvu1289,25,,,1,5 Multiplr: 1.00  
IntFile : rteint.p

Data File : D:\HPLC2\DATA\102210\VU28526.D\dad1a.ch Vial: 91  
Acq On : 22-Oct-2010, 20:36:06 Operator: caobinz  
Sample : form 20 Inst : G1315A  
Misc : Multiplr: 1.00  
IntFile : rteint2.p

Method : D:\HPLC2\METHODS\FM102210.M (RTE Integrator)  
Title : LC8315FORM/070610/ic1253/op21796  
Last Update : Fri Oct 22 12:05:41 2010  
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 85% Max. R.T. Dev 0.50min  
Max. RRF Dev : 15% Max. Rel. Area : 115%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev (Min)
1	Formaldehyde	44.466	29.995 E3	32.5#	103	-0.10
2	Acetaldehyde	67.665	43.188 E3	36.2#	103	-0.15
3 s	Butyraldehyde	22.890	18.964 E3	17.2#	113	-0.37

## Signal #2

1	Formaldehyde	126.806	81.579 E3	35.7#	103	-0.10
2	Acetaldehyde	160.538	91.201 E3	43.2#	108	-0.14
3 s	Butyraldehyde	38.164	33.569 E3	12.0	111	-0.37

## Evaluate Continuing Calibration Report - Not Found

Data File : D:\HPLC2\DATA\102210\VU28526.D\dad1b.ch Vial: 91  
Acq On : 22-Oct-2010, 20:36:06 Operator: caobinz  
Sample : cc1253-20,form 20 Inst : G1315A  
Misc : op22999,gvu1289,25,,,1,5 Multiplr: 1.00  
IntFile : rteint.p

Data File : D:\HPLC2\DATA\102210\VU28526.D\dad1a.ch Vial: 91  
Acq On : 22-Oct-2010, 20:36:06 Operator: caobinz  
Sample : form 20 Inst : G1315A  
Misc : Multiplr: 1.00  
IntFile : rteint2.p

Method : D:\HPLC2\METHODS\FM102210.M (RTE Integrator)  
Title : LC8315FORM/070610/ic1253/op21796  
Last Update : Fri Oct 22 12:05:41 2010  
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 85% Max. R.T. Dev 0.50min  
Max. RRF Dev : 15% Max. Rel. Area : 115%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev (Min)
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16.7.8 16

## Continuing Calibration Summary

**Job Number:** JA58900

**Account:** ALNJ Accutest New Jersey

**Project:** ENSRMAA: Bell Bend Nuclear Power Plant, Salem Township, PA

**Sample:**

GVU1289-CC1253

**Lab FileID:**

VU28526.D

Page 2 of 2

Signal #2

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(#) = Out of Range

SPCC's out = 0 CCC's out = 0

VU28494.D FM102210.M

Sat Oct 23 09:35:03 2010 RPT1

16.7.8

16

## Continuing Calibration Summary

Job Number: JA58900

Account: ALNJ Accutest New Jersey

Project: ENSRMAA: Bell Bend Nuclear Power Plant, Salem Township, PA

Sample:

GVU1289-ECC1253

Lab FileID:

VU28532.D

## Evaluate Continuing Calibration Report

Data File : D:\HPLC2\DATA\102210\VU28532.D\dad1b.ch Vial: 91  
Acq On : 22-Oct-2010, 22:41:24 Operator: caobinz  
Sample : ecc1253-20,form 20 Inst : G1315A  
Misc : op22999,gvul289,25,,,1,5 Multiplr: 1.00  
IntFile : rteint.p

Data File : D:\HPLC2\DATA\102210\VU28532.D\dad1a.ch Vial: 91  
Acq On : 22-Oct-2010, 22:41:24 Operator: caobinz  
Sample : form 20 Inst : G1315A  
Misc : Multiplr: 1.00  
IntFile : rteint2.p

Method : D:\HPLC2\METHODS\FM102210.M (RTE Integrator)  
Title : LC8315FORM/070610/ic1253/op21796  
Last Update : Fri Oct 22 12:05:41 2010  
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 85% Max. R.T. Dev 0.50min  
Max. RRF Dev : 15% Max. Rel. Area : 115%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
1	Formaldehyde	44.466	30.002 E3	32.5#	103	-0.13
2	Acetaldehyde	67.665	43.555 E3	35.6#	104	-0.19
3 s	Butyraldehyde	22.890	18.905 E3	17.4#	112	-0.46

## Signal #2

1	Formaldehyde	126.806	81.980 E3	35.4#	103	-0.13
2	Acetaldehyde	160.538	91.074 E3	43.3#	108	-0.18
3 s	Butyraldehyde	38.164	33.527 E3	12.2	111	-0.47

## Evaluate Continuing Calibration Report - Not Found

Data File : D:\HPLC2\DATA\102210\VU28532.D\dad1b.ch Vial: 91  
Acq On : 22-Oct-2010, 22:41:24 Operator: caobinz  
Sample : ecc1253-20,form 20 Inst : G1315A  
Misc : op22999,gvul289,25,,,1,5 Multiplr: 1.00  
IntFile : rteint.p

Data File : D:\HPLC2\DATA\102210\VU28532.D\dad1a.ch Vial: 91  
Acq On : 22-Oct-2010, 22:41:24 Operator: caobinz  
Sample : form 20 Inst : G1315A  
Misc : Multiplr: 1.00  
IntFile : rteint2.p

Method : D:\HPLC2\METHODS\FM102210.M (RTE Integrator)  
Title : LC8315FORM/070610/ic1253/op21796  
Last Update : Fri Oct 22 12:05:41 2010  
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 85% Max. R.T. Dev 0.50min  
Max. RRF Dev : 15% Max. Rel. Area : 115%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
--	----------	-------	------	------	-------	----------

16.7.9 16

## Continuing Calibration Summary

Job Number: JA58900

Account: ALNJ Accutest New Jersey

Project: ENSRMAA: Bell Bend Nuclear Power Plant, Salem Township, PA

Sample:

GVU1289-ECC1253

Lab FileID:

VU28532.D

Page 2 of 2

Signal #2

---

(#) = Out of Range

SPCC's out = 0 CCC's out = 0

VU28494.D FM102210.M

Sat Oct 23 09:45:40 2010 RPT1

16.7.9  
16



GC Semi-volatiles

---

Raw Data

(Accutest Labs of New England, Inc.)

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**John Hamilton**  
**11/08/10 15:12**

## Quantitation Report (QT Reviewed)

Data File : D:\HPLC2\DATA\102110\VU28480.D\dad1b.ch Vial: 35  
Acq On : 22-Oct-2010, 03:17:53 Operator: caobinz  
Sample : ja58900-1 Inst : G1315A  
Misc : op22999,gvul288,25,,,1 Multiplr: 1.00  
IntFile : rteint.p

Data File : D:\HPLC2\DATA\102110\VU28480.D\dad1a.ch Vial: 35  
Acq On : 22-Oct-2010, 03:17:53 Operator: caobinz  
Sample : ja58900-1 Inst : G1315A  
Misc : Multiplr: 1.00  
IntFile : rteint2.p

Quant Time: Oct 22 9:40 2010 Quant Results File: FM102110.RES

Quant Method : D:\HPLC2\METHODS\FM102110.M (RTE Integrator)  
Title : LC8315FORM/070610/ic1253/op21796  
Last Update : Fri Oct 22 08:44:26 2010  
Response via : Initial Calibration  
DataAcq Meth : F6040D.M

Volume Inj. :  
Signal #1 Phase : Signal #2 Phase:  
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ppm	ppm
-----						
System Monitoring Compounds						
3) s Butyraldehyde	13.36	13.36	1599179	2931489	80.325m	81.333m
Spiked Amount	50.000	Range	10 - 115	Recovery	= 160.65%#	162.67%#

Target Compounds						
2) Acetaldehyde	9.08	9.07	145380	158244	1.878m	398.274m#

-----  
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.  
VU28480.D FM102110.M Fri Oct 22 10:53:35 2010 RPT1

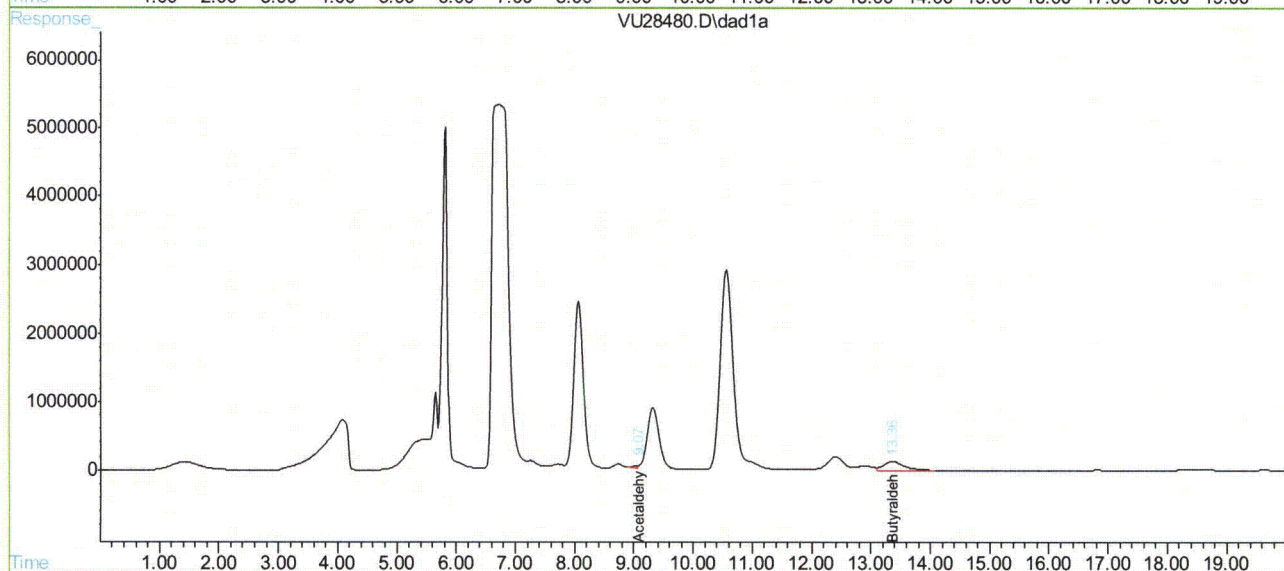
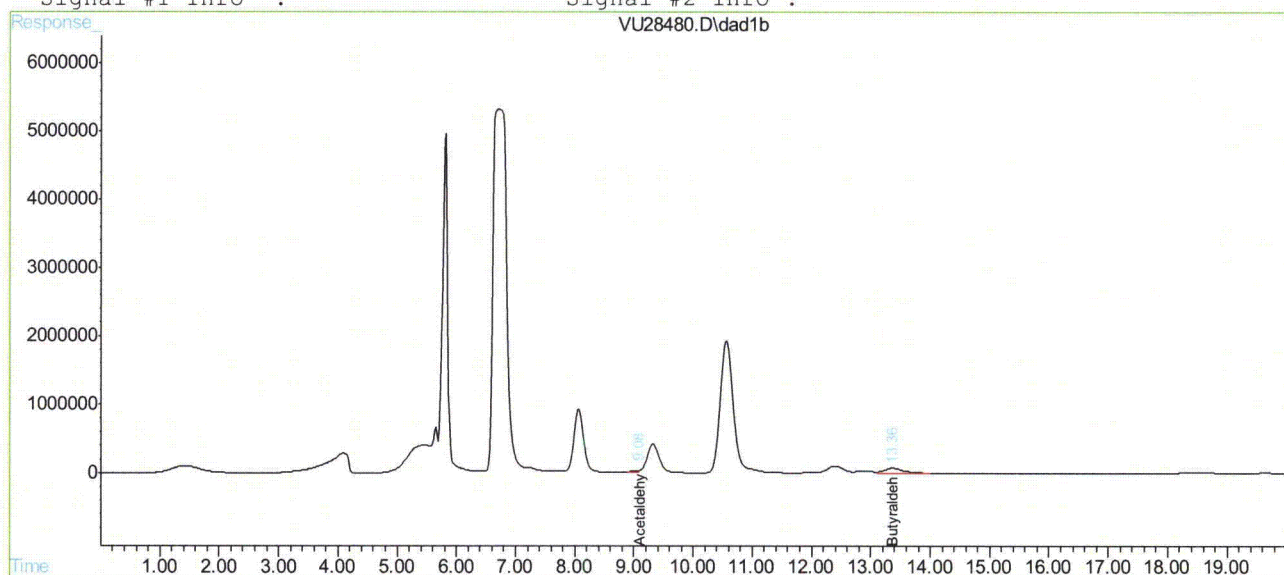
## Quantitation Report

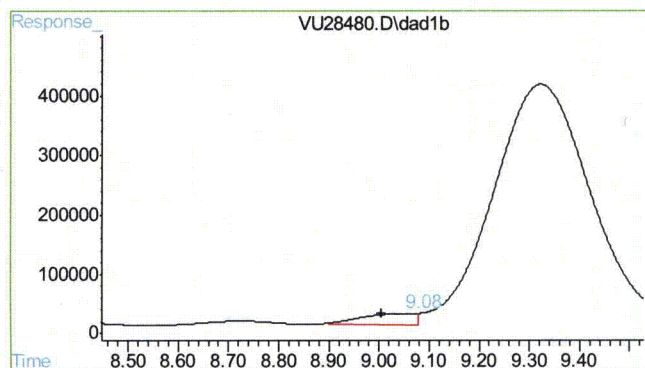
Data File : D:\HPLC2\DATA\102110\VU28480.D\dad1b.ch Vial: 35  
Acq On : 22-Oct-2010, 03:17:53 Operator: caobinz  
Sample : ja58900-1 Inst : G1315A  
Misc : op22999,gvu1288,25,,,1 Multiplr: 1.00  
IntFile : rteint.p

Data File : D:\HPLC2\DATA\102110\VU28480.D\dad1a.ch Vial: 35  
Acq On : 22-Oct-2010, 03:17:53 Operator: caobinz  
Sample : ja58900-1 Inst : G1315A  
Misc : Multiplr: 1.00  
IntFile : rteint2.p  
Quant Time: Oct 22 9:40 2010 Quant Results File: FM102110.RES

Quant Method : D:\HPLC2\METHODS\FM102110.M (RTE Integrator)  
Title : LC8315FORM/070610/ic1253/op21796  
Last Update : Fri Oct 22 08:44:26 2010  
Response via : Multiple Level Calibration  
DataAcq Meth : F6040D.M

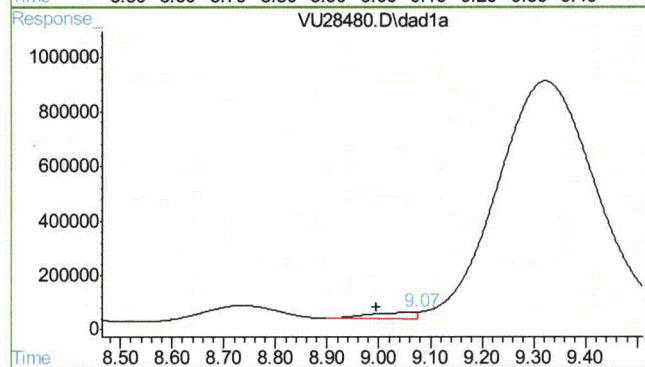
Volume Inj. :  
Signal #1 Phase : Signal #2 Phase:  
Signal #1 Info : Signal #2 Info :





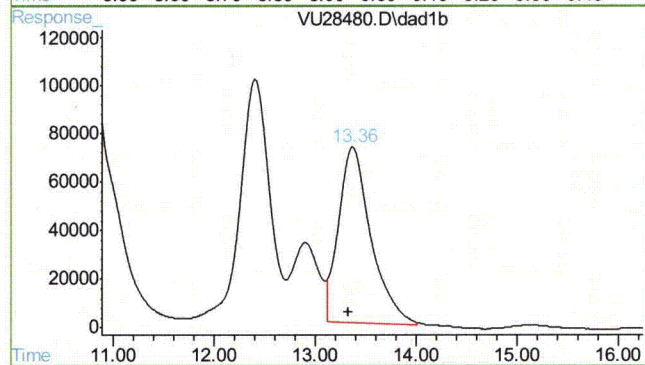
## #2 Acetaldehyde

R.T.: 9.078 min  
Delta R.T.: 0.074 min  
Response: 145380  
Conc: 1.88 ppm m



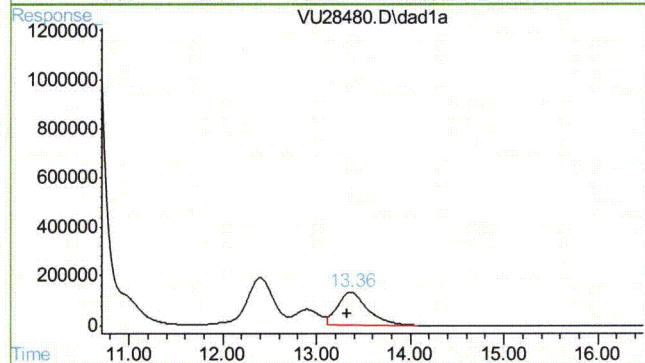
## #2 Acetaldehyde

R.T.: 9.075 min  
Delta R.T.: 0.079 min  
Response: 158244  
Conc: 398.27 ppm m



## #3 Butyraldehyde

R.T.: 13.365 min  
Delta R.T.: 0.046 min  
Response: 1599179  
Conc: 80.32 ug/ml m



## #3 Butyraldehyde

R.T.: 13.363 min  
Delta R.T.: 0.039 min  
Response: 2931489  
Conc: 81.33 ug/ml m

## Quantitation Report (QT Reviewed)

Data File : D:\HPLC2\DATA\102210\VU28520.D\dad1b.ch Vial: 35  
 Acq On : 22-Oct-2010, 18:30:41 Operator: caobinz  
 Sample : ja58900-1,1ul Inst : G1315A  
 Misc : op22999,gvul289,25,,,1,5 Multiplr: 1.00  
 IntFile : rteint.p

Data File : D:\HPLC2\DATA\102210\VU28520.D\dad1a.ch Vial: 35  
 Acq On : 22-Oct-2010, 18:30:41 Operator: caobinz  
 Sample : ja58900-1,1ul Inst : G1315A  
 Misc : Multiplr: 1.00  
 IntFile : rteint2.p

Quant Time: Oct 23 9:31 2010 Quant Results File: FM102210.RES

Quant Method : D:\HPLC2\METHODS\FM102210.M (RTE Integrator)  
 Title : LC8315FORM/070610/ic1253/op21796  
 Last Update : Fri Oct 22 12:05:41 2010  
 Response via : Initial Calibration  
 DataAcq Meth : F6040D.M

Volume Inj. :  
 Signal #1 Phase : Signal #2 Phase:  
 Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ppm	ppm
-----						
System Monitoring Compounds						
3) s Butyraldehyde	13.16f	13.17f	305145	552842	14.208m	14.551m
Spiked Amount	50.000	Range	10 - 115	Recovery =	28.42%	29.10%
Target Compounds						
1) Formaldehyde	8.01f	8.01f	2215432	5974319	90.170	89.171

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.  
 VU28520.D FM102210.M Sat Oct 23 10:56:34 2010 RPT1

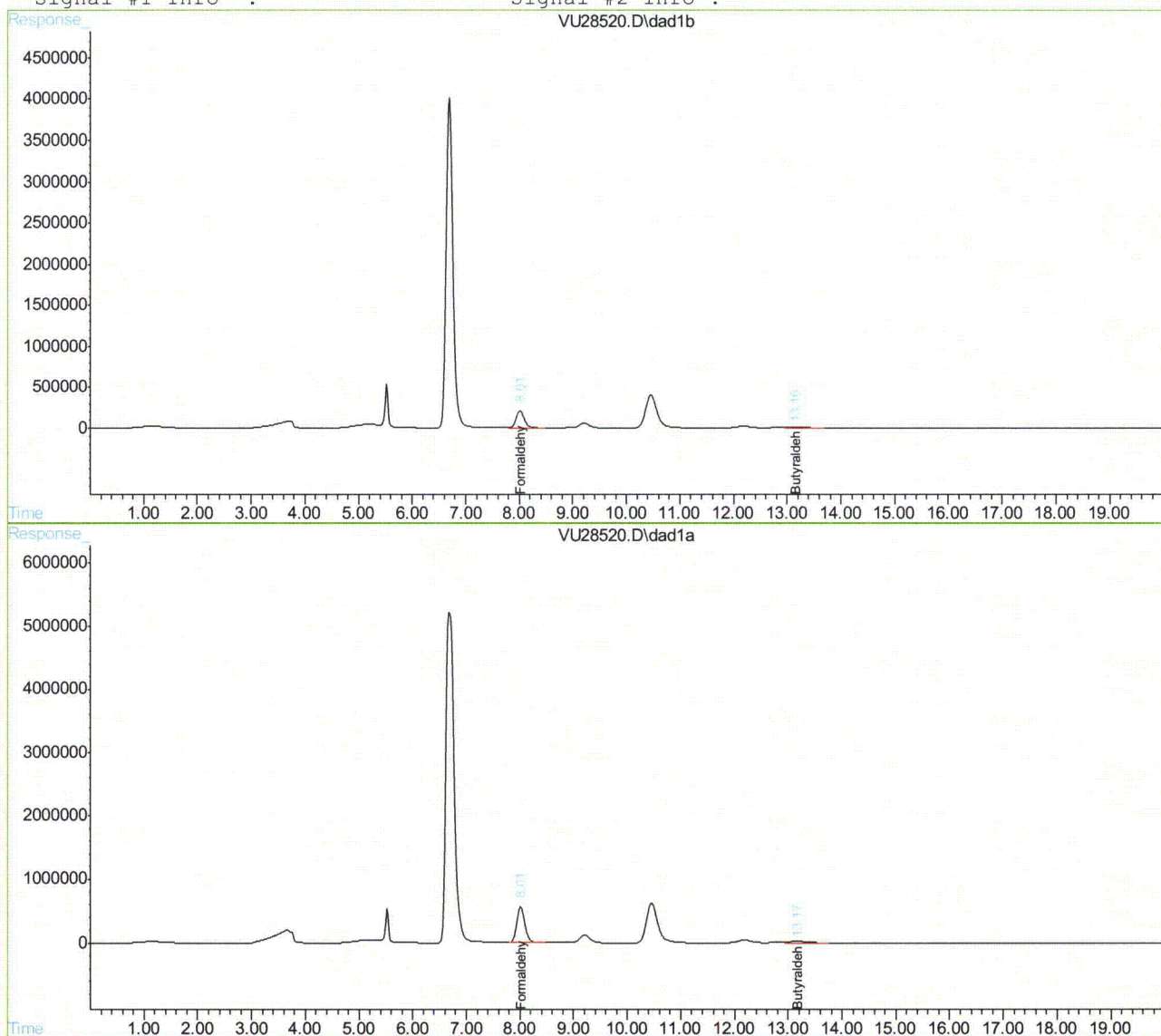
## Quantitation Report

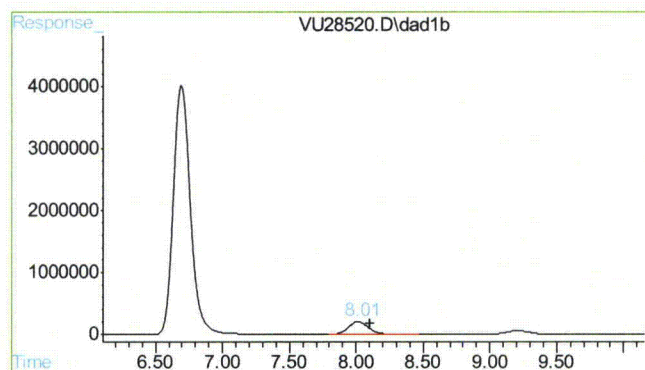
Data File : D:\HPLC2\DATA\102210\VU28520.D\dad1b.ch Vial: 35  
Acq On : 22-Oct-2010, 18:30:41 Operator: caobinz  
Sample : ja58900-1,1ul Inst : G1315A  
Misc : op22999,gvul289,25,,,1,5 Multiplr: 1.00  
IntFile : rteint.p

Data File : D:\HPLC2\DATA\102210\VU28520.D\dad1a.ch Vial: 35  
Acq On : 22-Oct-2010, 18:30:41 Operator: caobinz  
Sample : ja58900-1,1ul Inst : G1315A  
Misc : Multiplr: 1.00  
IntFile : rteint2.p  
Quant Time: Oct 23 9:31 2010 Quant Results File: FM102210.RES

Quant Method : D:\HPLC2\METHODS\FM102210.M (RTE Integrator)  
Title : LC8315FORM/070610/ic1253/op21796  
Last Update : Fri Oct 22 12:05:41 2010  
Response via : Multiple Level Calibration  
DataAcq Meth : F6040D.M

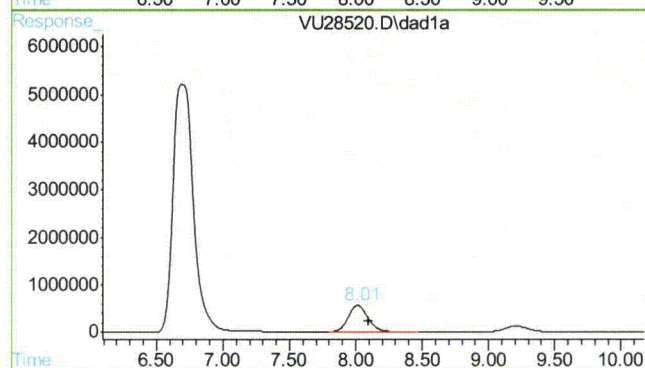
Volume Inj. :  
Signal #1 Phase : Signal #2 Phase:  
Signal #1 Info : Signal #2 Info :





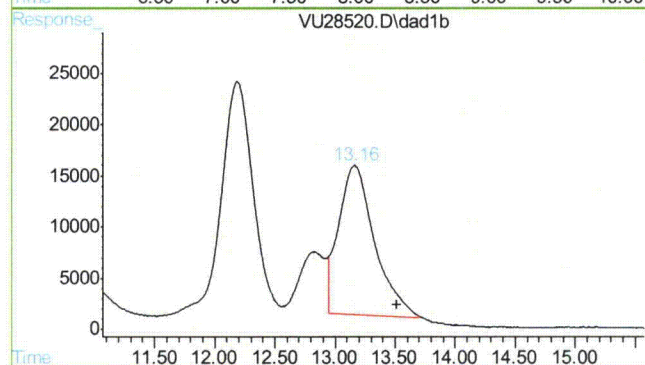
## #1 Formaldehyde

R.T.: 8.014 min  
Delta R.T.: -0.088 min  
Response: 2215432  
Conc: 90.17 ppm



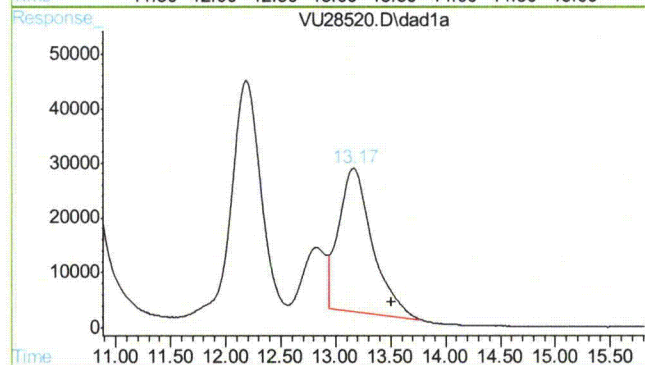
## #1 Formaldehyde

R.T.: 8.014 min  
Delta R.T.: -0.088 min  
Response: 5974319  
Conc: 89.17 ppm



## #3 Butyraldehyde

R.T.: 13.160 min  
Delta R.T.: -0.351 min  
Response: 305145  
Conc: 14.21 ug/ml m



## #3 Butyraldehyde

R.T.: 13.165 min  
Delta R.T.: -0.346 min  
Response: 552842  
Conc: 14.55 ug/ml m

## Quantitation Report (QT Reviewed)

Data File : D:\HPLC2\DATA\102110\VU28481.D\dad1b.ch Vial: 36  
Acq On : 22-Oct-2010, 03:38:48 Operator: caobinz  
Sample : ja58900-2 Inst : G1315A  
Misc : op22999,gvu1288,25,,,1 Multiplr: 1.00  
IntFile : rteint.p

Data File : D:\HPLC2\DATA\102110\VU28481.D\dad1a.ch Vial: 36  
Acq On : 22-Oct-2010, 03:38:48 Operator: caobinz  
Sample : ja58900-2 Inst : G1315A  
Misc : Multiplr: 1.00  
IntFile : rteint2.p  
Quant Time: Oct 22 9:41 2010 Quant Results File: FM102110.RES

Quant Method : D:\HPLC2\METHODS\FM102110.M (RTE Integrator)  
Title : LC8315FORM/070610/ic1253/op21796  
Last Update : Fri Oct 22 08:44:26 2010  
Response via : Initial Calibration  
DataAcq Meth : F6040D.M

Volume Inj. :  
Signal #1 Phase : Signal #2 Phase:  
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ppm	ppm
-----						
System Monitoring Compounds						
3) s Butyraldehyde	13.36	13.36	1742488	3129759	89.615m	88.290m
Spiked Amount	50.000	Range	10 - 115	Recovery	= 179.23%#	176.58%#

Target Compounds						
2) Acetaldehyde	9.03	9.04	155362	243237	2.069	397.373 #

-----  
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.  
VU28481.D FM102110.M Fri Oct 22 10:53:40 2010 RPT1

## Quantitation Report

Data File : D:\HPLC2\DATA\102110\VU28481.D\dad1b.ch  
Acq On : 22-Oct-2010, 03:38:48  
Sample : ja58900-2  
Misc : op22999,gvu1288,25,,,1  
IntFile : rteint.p

Vial: 36  
Operator: caobinz  
Inst : G1315A  
Multiplr: 1.00

Data File : D:\HPLC2\DATA\102110\VU28481.D\dad1a.ch  
Acq On : 22-Oct-2010, 03:38:48  
Sample : ja58900-2  
Misc :  
IntFile : rteint2.p

Vial: 36  
Operator: caobinz  
Inst : G1315A  
Multiplr: 1.00

Quant Time: Oct 22 9:41 2010 Quant Results File: FM102110.RES

Quant Method : D:\HPLC2\METHODS\FM102110.M (RTE Integrator)  
Title : LC8315FORM/070610/ic1253/op21796  
Last Update : Fri Oct 22 08:44:26 2010  
Response via : Multiple Level Calibration  
DataAcq Meth : F6040D.M

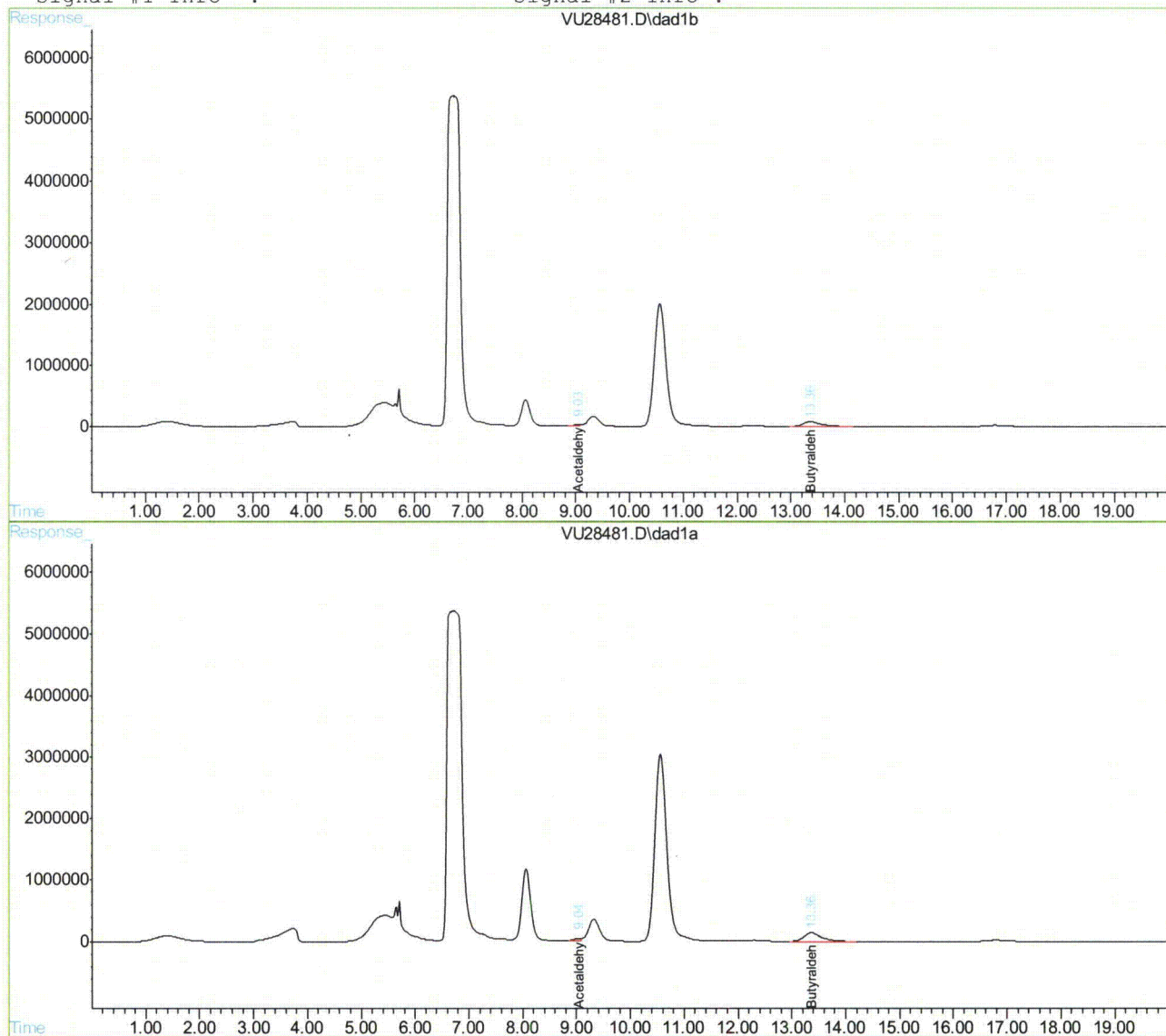
Volume Inj. :

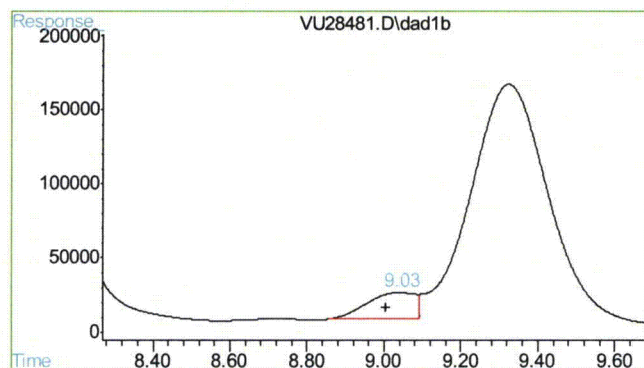
Signal #1 Phase :

Signal #1 Info :

Signal #2 Phase:

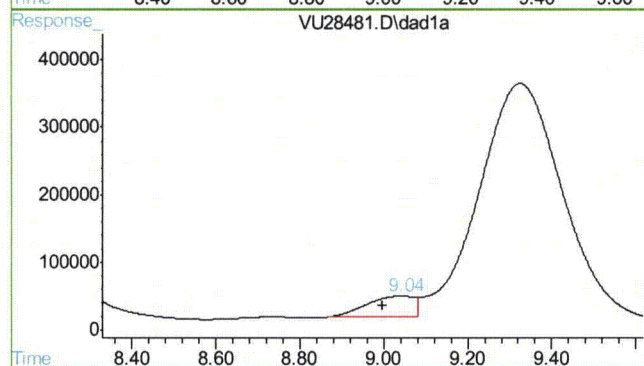
Signal #2 Info :





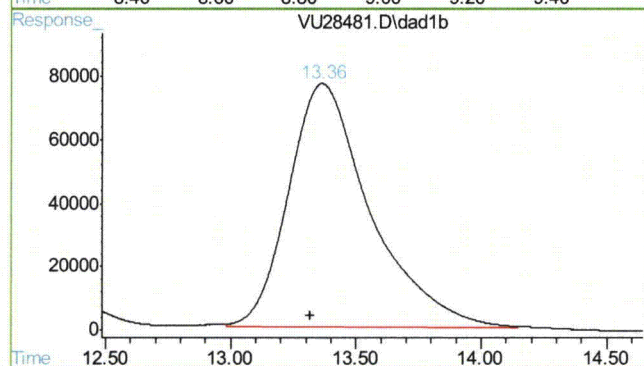
## #2 Acetaldehyde

R.T.: 9.035 min  
Delta R.T.: 0.031 min  
Response: 155362  
Conc: 2.07 ppm



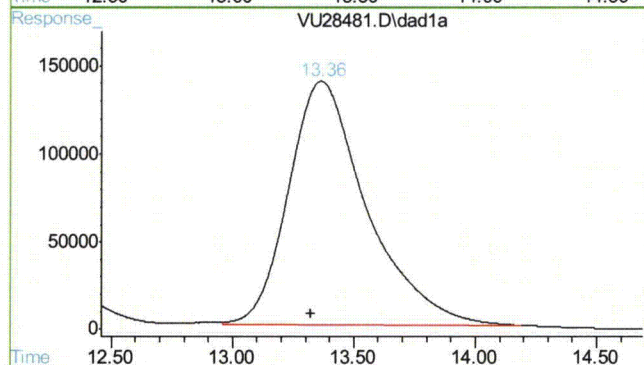
## #2 Acetaldehyde

R.T.: 9.041 min  
Delta R.T.: 0.046 min  
Response: 243237  
Conc: 397.37 ppm



## #3 Butyraldehyde

R.T.: 13.363 min  
Delta R.T.: 0.044 min  
Response: 1742488  
Conc: 89.61 ug/ml m



## #3 Butyraldehyde

R.T.: 13.363 min  
Delta R.T.: 0.039 min  
Response: 3129759  
Conc: 88.29 ug/ml m

## Quantitation Report (QT Reviewed)

Data File : D:\HPLC2\DATA\102210\VU28521.D\dad1b.ch Vial: 36  
 Acq On : 22-Oct-2010, 18:51:34 Operator: caobinz  
 Sample : ja58900-2,1ul Inst : G1315A  
 Misc : op22999,gvul289,25,,,1,5 Multiplr: 1.00  
 IntFile : rteint.p

Data File : D:\HPLC2\DATA\102210\VU28521.D\dad1a.ch Vial: 36  
 Acq On : 22-Oct-2010, 18:51:34 Operator: caobinz  
 Sample : ja58900-2,1ul Inst : G1315A  
 Misc : Multiplr: 1.00  
 IntFile : rteint2.p

Quant Time: Oct 23 9:31 2010 Quant Results File: FM102210.RES

Quant Method : D:\HPLC2\METHODS\FM102210.M (RTE Integrator)  
 Title : LC8315FORM/070610/ic1253/op21796  
 Last Update : Fri Oct 22 12:05:41 2010  
 Response via : Initial Calibration  
 DataAcq Meth : F6040D.M

Volume Inj. :  
 Signal #1 Phase : Signal #2 Phase:  
 Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ppm	ppm
-----						
System Monitoring Compounds						
3) s Butyraldehyde	13.15f	13.15f	346290	632123	15.988m	16.444m
Spiked Amount	50.000	Range	10 - 115	Recovery =	31.98%	32.89%
Target Compounds						
1) Formaldehyde	8.01f	8.01f	971556	2623568	31.698m	31.117m

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.  
 VU28521.D FM102210.M Sat Oct 23 10:56:41 2010 RPT1

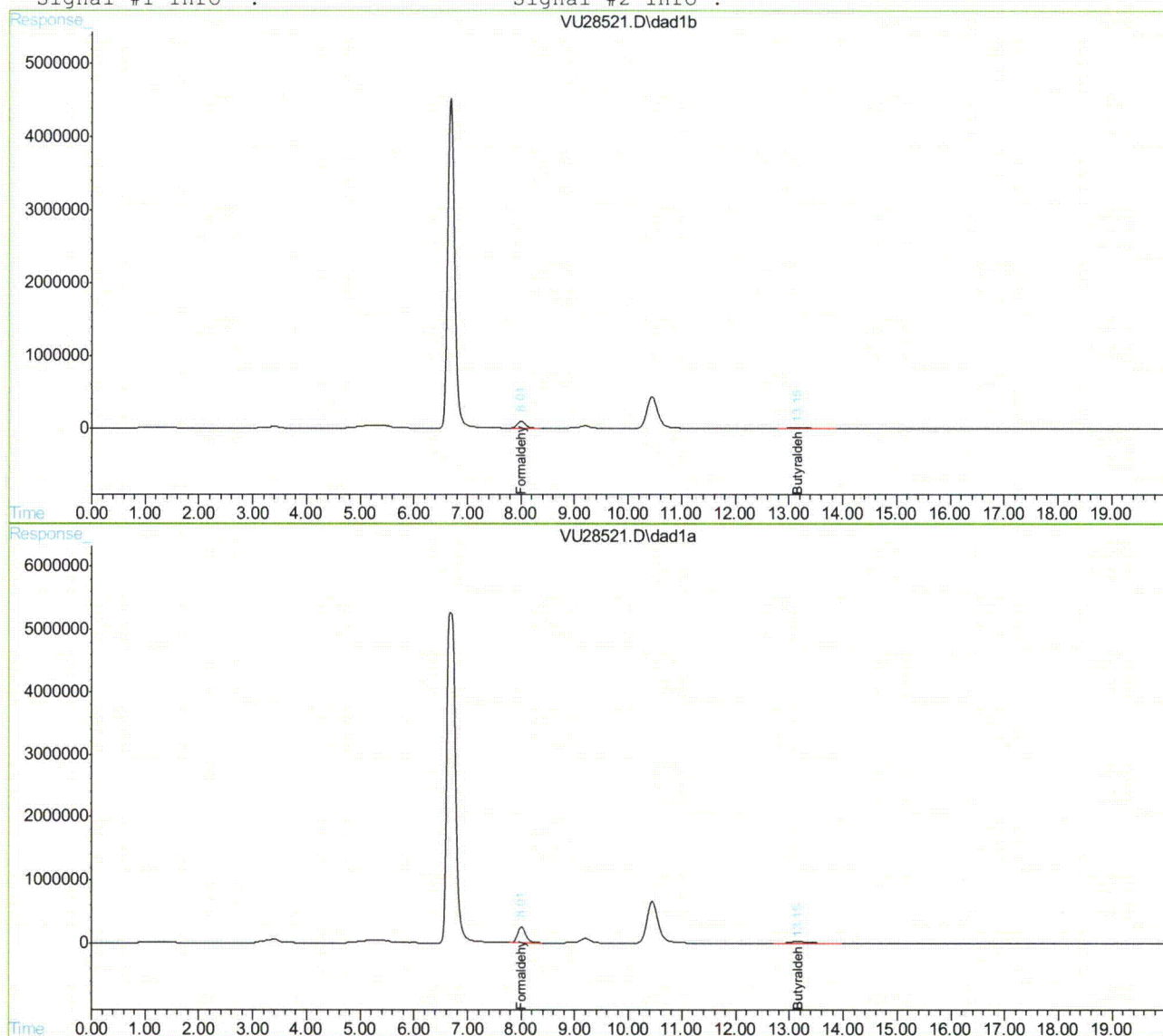
## Quantitation Report

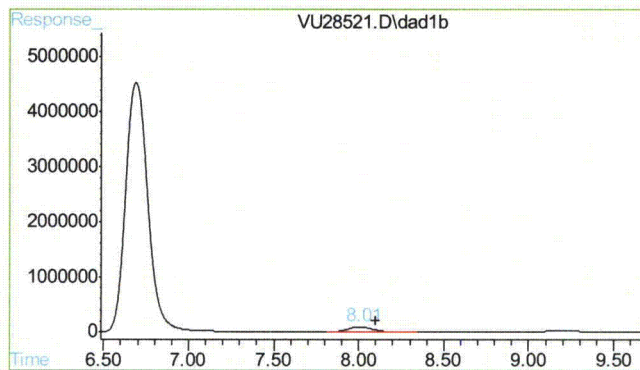
Data File : D:\HPLC2\DATA\102210\VU28521.D\dad1b.ch Vial: 36  
Acq On : 22-Oct-2010, 18:51:34 Operator: caobinz  
Sample : ja58900-2,1ul Inst : G1315A  
Misc : op22999,gvul289,25,,,1,5 Multiplr: 1.00  
IntFile : rteint.p

Data File : D:\HPLC2\DATA\102210\VU28521.D\dad1a.ch Vial: 36  
Acq On : 22-Oct-2010, 18:51:34 Operator: caobinz  
Sample : ja58900-2,1ul Inst : G1315A  
Misc : Multiplr: 1.00  
IntFile : rteint2.p  
Quant Time: Oct 23 9:31 2010 Quant Results File: FM102210.RES

Quant Method : D:\HPLC2\METHODS\FM102210.M (RTE Integrator)  
Title : LC8315FORM/070610/ic1253/op21796  
Last Update : Fri Oct 22 12:05:41 2010  
Response via : Multiple Level Calibration  
DataAcq Meth : F6040D.M

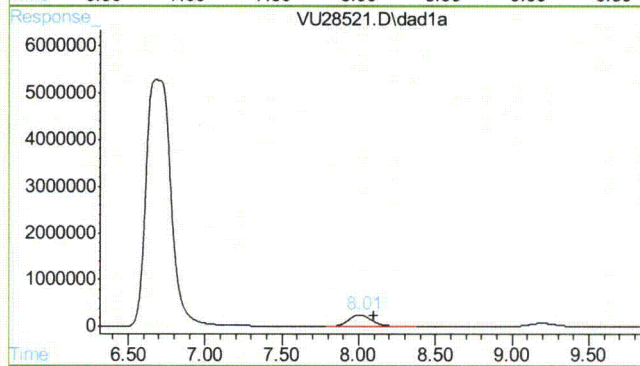
Volume Inj. :  
Signal #1 Phase : Signal #2 Phase:  
Signal #1 Info : Signal #2 Info :





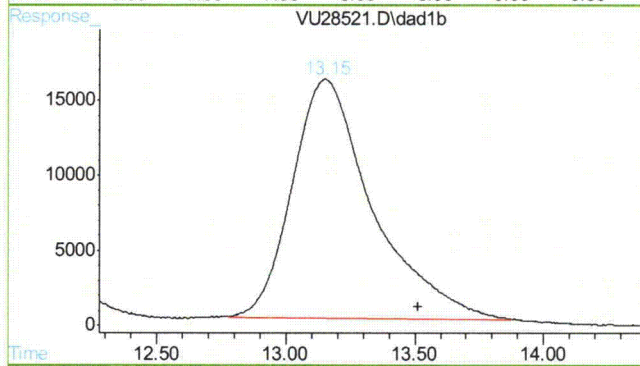
## #1 Formaldehyde

R.T.: 8.005 min  
Delta R.T.: -0.096 min  
Response: 971556  
Conc: 31.70 ppm m



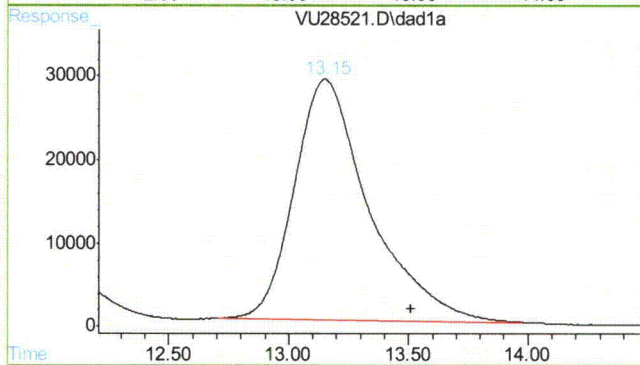
## #1 Formaldehyde

R.T.: 8.005 min  
Delta R.T.: -0.096 min  
Response: 2623568  
Conc: 31.12 ppm m



## #3 Butyraldehyde

R.T.: 13.152 min  
Delta R.T.: -0.360 min  
Response: 346290  
Conc: 15.99 ug/ml m



## #3 Butyraldehyde

R.T.: 13.152 min  
Delta R.T.: -0.360 min  
Response: 632123  
Conc: 16.44 ug/ml m

**John Hamilton**  
**11/08/10 15:12**

## Quantitation Report (QT Reviewed)

Data File : D:\HPLC2\DATA\102110\VU28482.D\dad1b.ch Vial: 37  
Acq On : 22-Oct-2010, 03:59:42 Operator: caobinz  
Sample : ja58900-3 Inst : G1315A  
Misc : op22999,gvul288,25,,,1 Multiplr: 1.00  
IntFile : rteint.p

Data File : D:\HPLC2\DATA\102110\VU28482.D\dad1a.ch Vial: 37  
Acq On : 22-Oct-2010, 03:59:42 Operator: caobinz  
Sample : ja58900-3 Inst : G1315A  
Misc : Multiplr: 1.00  
IntFile : rteint2.p

Quant Time: Oct 22 9:41 2010 Quant Results File: FM102110.RES

Quant Method : D:\HPLC2\METHODS\FM102110.M (RTE Integrator)  
Title : LC8315FORM/070610/ic1253/op21796  
Last Update : Fri Oct 22 08:44:26 2010  
Response via : Initial Calibration  
DataAcq Meth : F6040D.M

Volume Inj. :  
Signal #1 Phase : Signal #2 Phase:  
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ppm	ppm
-----						
System Monitoring Compounds						
3) s Butyraldehyde	13.34	13.34	1746126	2740339	89.859	74.917m
Spiked Amount	50.000	Range	10 - 115	Recovery	= 179.72%#	149.83%#

Target Compounds						
2) Acetaldehyde	9.05	9.05	140368	169939	1.782m	398.150m#

-----  
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.  
VU28482.D FM102110.M Fri Oct 22 10:53:46 2010 RPT1

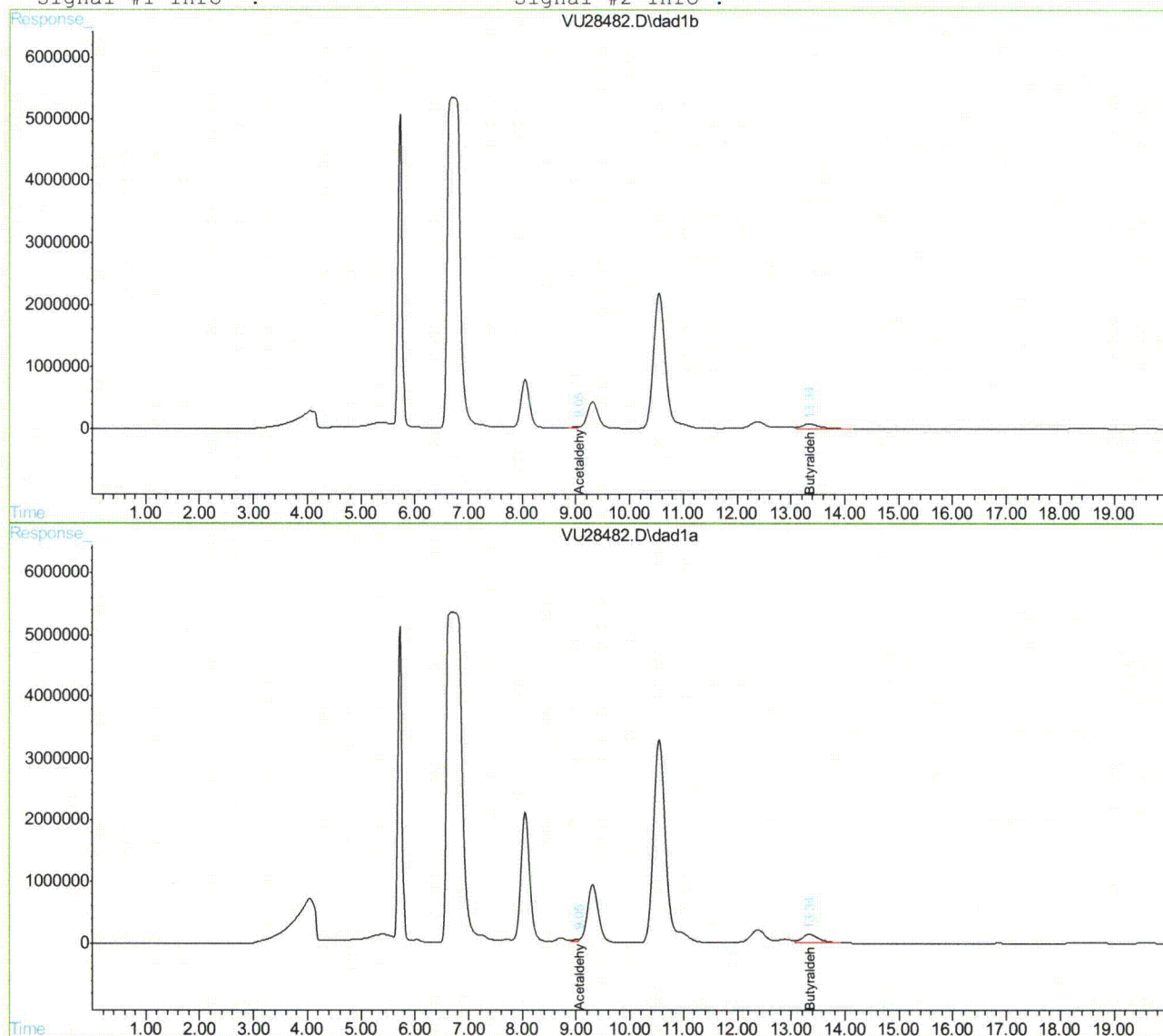
## Quantitation Report

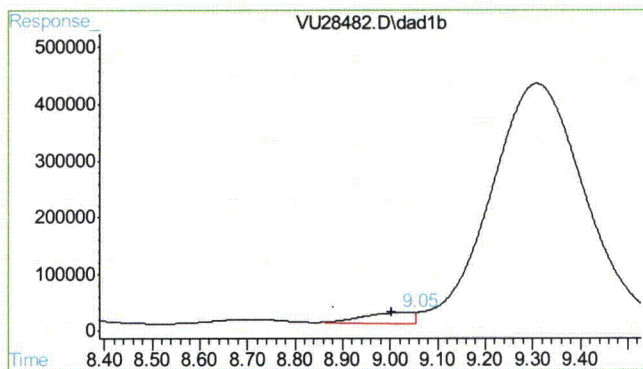
Data File : D:\HPLC2\DATA\102110\VU28482.D\dad1b.ch Vial: 37  
Acq On : 22-Oct-2010, 03:59:42 Operator: caobinz  
Sample : ja58900-3 Inst : G1315A  
Misc : op22999,gvul288,25,,,1 Multiplr: 1.00  
IntFile : rteint.p

Data File : D:\HPLC2\DATA\102110\VU28482.D\dad1a.ch Vial: 37  
Acq On : 22-Oct-2010, 03:59:42 Operator: caobinz  
Sample : ja58900-3 Inst : G1315A  
Misc : Multiplr: 1.00  
IntFile : rteint2.p  
Quant Time: Oct 22 9:41 2010 Quant Results File: FM102110.RES

Quant Method : D:\HPLC2\METHODS\FM102110.M (RTE Integrator)  
Title : LC8315FORM/070610/ic1253/op21796  
Last Update : Fri Oct 22 08:44:26 2010  
Response via : Multiple Level Calibration  
DataAcq Meth : F6040D.M

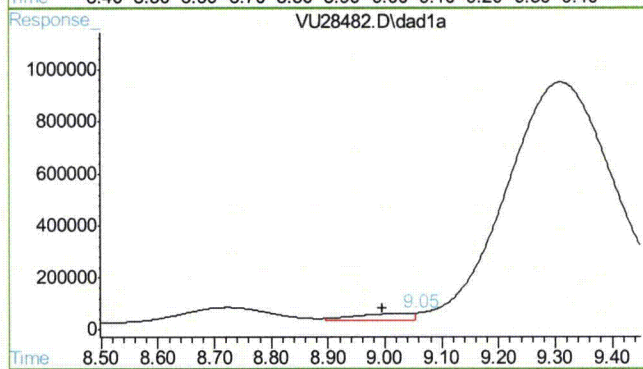
Volume Inj. :  
Signal #1 Phase : Signal #2 Phase:  
Signal #1 Info : Signal #2 Info :





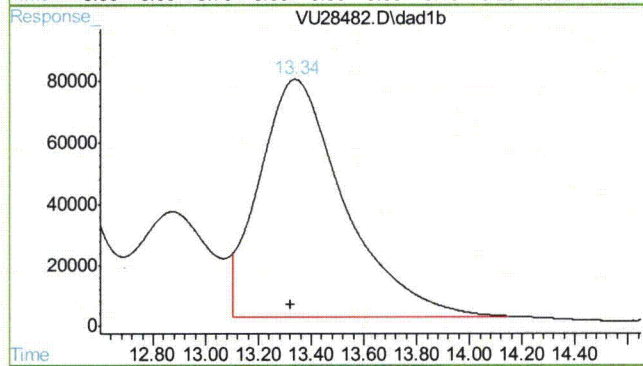
#2 Acetaldehyde

R.T.: 9.053 min  
Delta R.T.: 0.049 min  
Response: 140368  
Conc: 1.78 ppm m



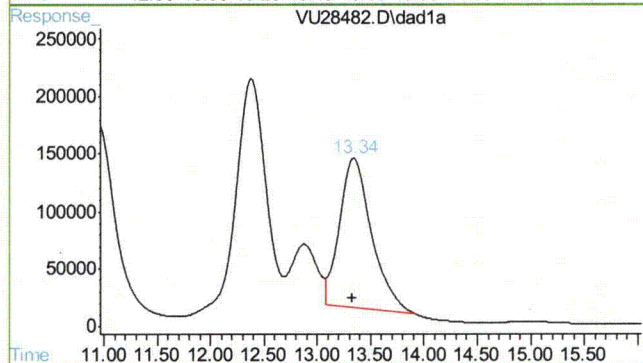
#2 Acetaldehyde

R.T.: 9.053 min  
Delta R.T.: 0.058 min  
Response: 169939  
Conc: 398.15 ppm m



#3 Butyraldehyde

R.T.: 13.337 min  
Delta R.T.: 0.018 min  
Response: 1746126  
Conc: 89.86 ug/ml



#3 Butyraldehyde

R.T.: 13.339 min  
Delta R.T.: 0.014 min  
Response: 2740339  
Conc: 74.92 ug/ml m

17.1.5 17

## Quantitation Report (QT Reviewed)

Data File : D:\HPLC2\DATA\102210\VU28522.D\dad1b.ch Vial: 37  
 Acq On : 22-Oct-2010, 19:12:24 Operator: caobinz  
 Sample : ja58900-3,1ul Inst : G1315A  
 Misc : op22999,gvul289,25,,,1,5 Multiplr: 1.00  
 IntFile : rteint.p

Data File : D:\HPLC2\DATA\102210\VU28522.D\dad1a.ch Vial: 37  
 Acq On : 22-Oct-2010, 19:12:24 Operator: caobinz  
 Sample : ja58900-3,1ul Inst : G1315A  
 Misc : Multiplr: 1.00  
 IntFile : rteint2.p

Quant Time: Oct 23 9:32 2010 Quant Results File: FM102210.RES

Quant Method : D:\HPLC2\METHODS\FM102210.M (RTE Integrator)  
 Title : LC8315FORM/070610/ic1253/op21796  
 Last Update : Fri Oct 22 12:05:41 2010  
 Response via : Initial Calibration  
 DataAcq Meth : F6040D.M

Volume Inj. :  
 Signal #1 Phase : Signal #2 Phase:  
 Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ppm	ppm
-----						
System Monitoring Compounds						
3) s Butyraldehyde	13.14f	13.13f	328631	581288	15.222m	15.228m
Spiked Amount	50.000	Range	10 - 115	Recovery	=	30.44% 30.46%
Target Compounds						
1) Formaldehyde	8.00f	8.00f	1930701	5206135	74.024	73.018

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.  
 VU28522.D FM102210.M Sat Oct 23 10:56:47 2010 RPT1

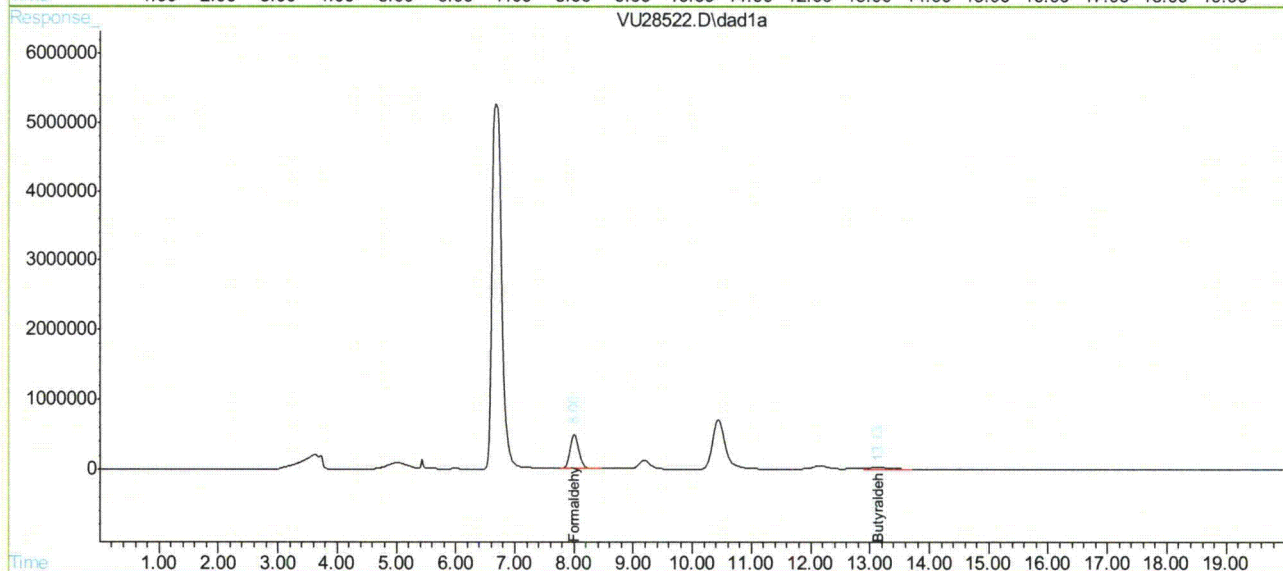
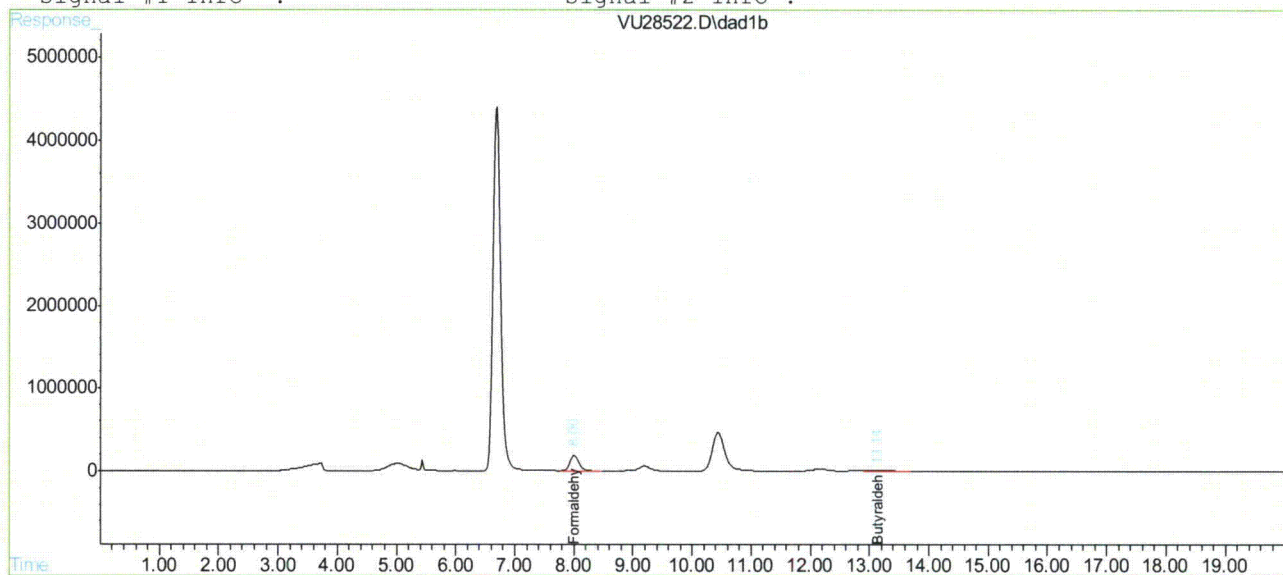
## Quantitation Report

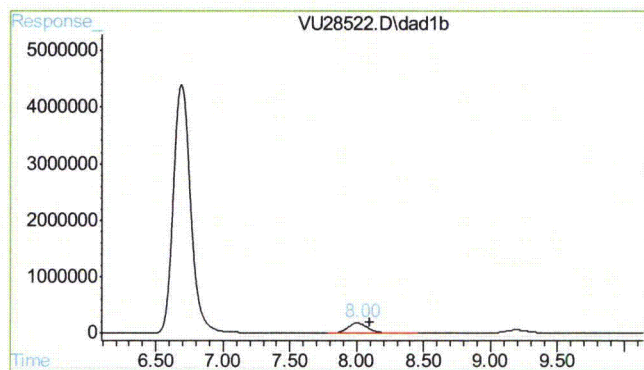
Data File : D:\HPLC2\DATA\102210\VU28522.D\dad1b.ch Vial: 37  
Acq On : 22-Oct-2010, 19:12:24 Operator: caobinz  
Sample : ja58900-3,1ul Inst : G1315A  
Misc : op22999,gvul289,25,,,1,5 Multiplr: 1.00  
IntFile : rteint.p

Data File : D:\HPLC2\DATA\102210\VU28522.D\dad1a.ch Vial: 37  
Acq On : 22-Oct-2010, 19:12:24 Operator: caobinz  
Sample : ja58900-3,1ul Inst : G1315A  
Misc : Multiplr: 1.00  
IntFile : rteint2.p  
Quant Time: Oct 23 9:32 2010 Quant Results File: FM102210.RES

Quant Method : D:\HPLC2\METHODS\FM102210.M (RTE Integrator)  
Title : LC8315FORM/070610/ic1253/op21796  
Last Update : Fri Oct 22 12:05:41 2010  
Response via : Multiple Level Calibration  
DataAcq Meth : F6040D.M

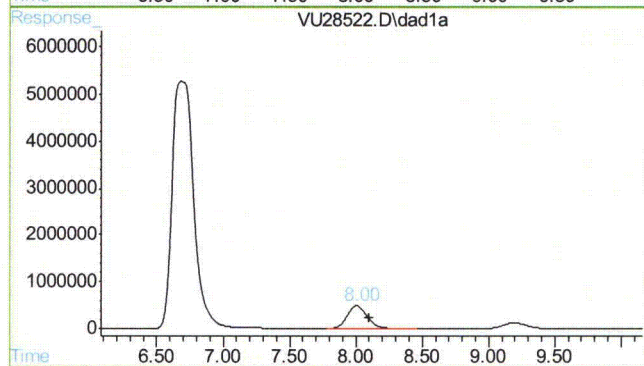
Volume Inj. :  
Signal #1 Phase : Signal #2 Phase:  
Signal #1 Info : Signal #2 Info :





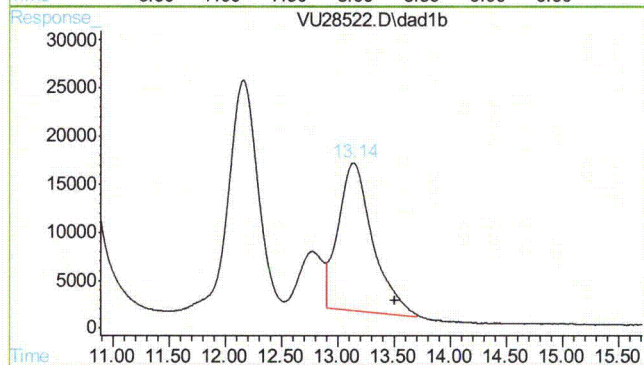
#1 Formaldehyde

R.T.: 8.003 min  
Delta R.T.: -0.098 min  
Response: 1930701  
Conc: 74.02 ppm



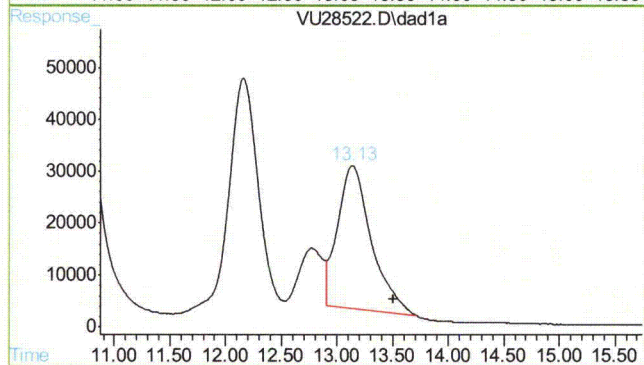
#1 Formaldehyde

R.T.: 8.003 min  
Delta R.T.: -0.098 min  
Response: 5206135  
Conc: 73.02 ppm



#3 Butyraldehyde

R.T.: 13.142 min  
Delta R.T.: -0.370 min  
Response: 328631  
Conc: 15.22 ug/ml m



#3 Butyraldehyde

R.T.: 13.133 min  
Delta R.T.: -0.378 min  
Response: 581288  
Conc: 15.23 ug/ml m

## Quantitation Report (QT Reviewed)

Data File : D:\HPLC2\DATA\102110\VU28483.D\dad1b.ch Vial: 38  
Acq On : 22-Oct-2010, 04:20:37 Operator: caobinz  
Sample : ja58900-4 Inst : G1315A  
Misc : op22999,gvul288,25,,,1 Multiplr: 1.00  
IntFile : rteint.p

Data File : D:\HPLC2\DATA\102110\VU28483.D\dad1a.ch Vial: 38  
Acq On : 22-Oct-2010, 04:20:37 Operator: caobinz  
Sample : ja58900-4 Inst : G1315A  
Misc : Multiplr: 1.00  
IntFile : rteint2.p

Quant Time: Oct 22 9:42 2010 Quant Results File: FM102110.RES

Quant Method : D:\HPLC2\METHODS\FM102110.M (RTE Integrator)  
Title : LC8315FORM/070610/ic1253/op21796  
Last Update : Fri Oct 22 08:44:26 2010  
Response via : Initial Calibration  
DataAcq Meth : F6040D.M

Volume Inj. :  
Signal #1 Phase : Signal #2 Phase:  
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ppm	ppm
----------	------	------	--------	--------	-----	-----

## System Monitoring Compounds

3) s Butyraldehyde	13.37	13.37	1970834	3621876	105.902m	107.214m
Spiked Amount	50.000	Range	10 - 115	Recovery	= 211.80%#	214.43%#

## Target Compounds

2) Acetaldehyde	9.04	9.04	305449	490322	4.974m	2.375m#
-----------------	------	------	--------	--------	--------	---------

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.  
VU28483.D FM102110.M Fri Oct 22 10:53:51 2010 RPT1

## Quantitation Report

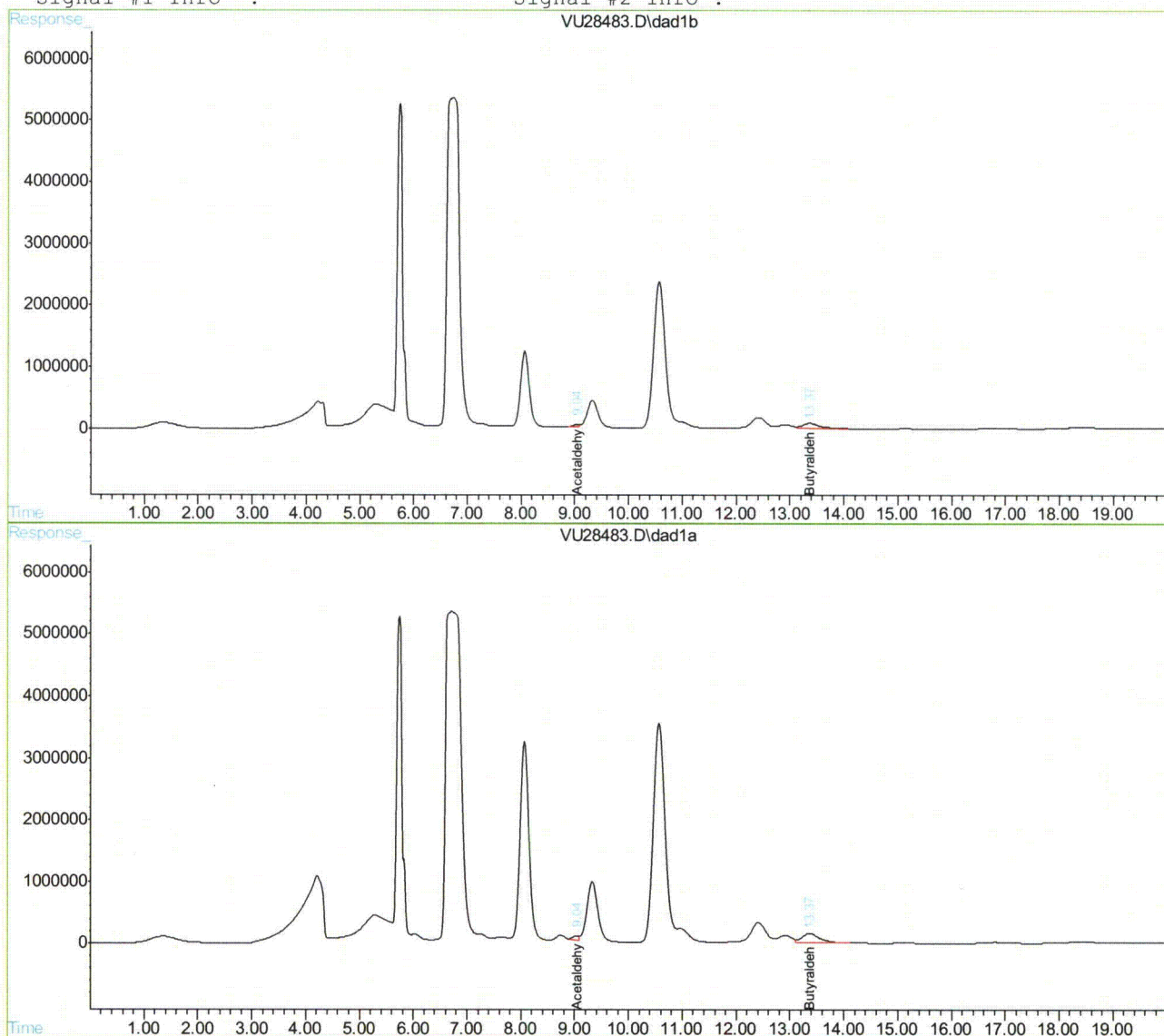
Data File : D:\HPLC2\DATA\102110\VU28483.D\dad1b.ch Vial: 38  
Acq On : 22-Oct-2010, 04:20:37 Operator: caobinz  
Sample : ja58900-4 Inst : G1315A  
Misc : op22999,gvu1288,25,,,1 Multiplr: 1.00  
IntFile : rteint.p

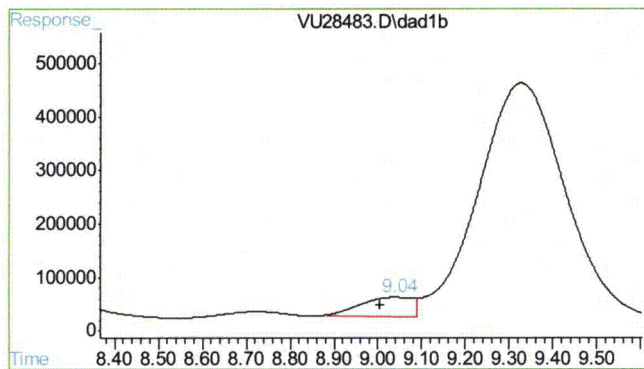
Data File : D:\HPLC2\DATA\102110\VU28483.D\dad1a.ch Vial: 38  
Acq On : 22-Oct-2010, 04:20:37 Operator: caobinz  
Sample : ja58900-4 Inst : G1315A  
Misc : Multiplr: 1.00  
IntFile : rteint2.p

Quant Time: Oct 22 9:42 2010 Quant Results File: FM102110.RES

Quant Method : D:\HPLC2\METHODS\FM102110.M (RTE Integrator)  
Title : LC8315FORM/070610/ic1253/op21796  
Last Update : Fri Oct 22 08:44:26 2010  
Response via : Multiple Level Calibration  
DataAcq Meth : F6040D.M

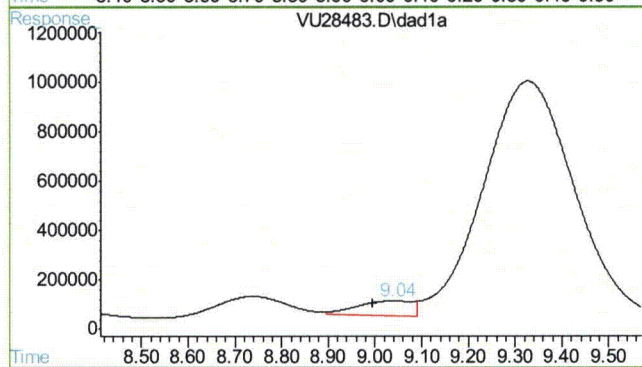
Volume Inj. :  
Signal #1 Phase : Signal #2 Phase:  
Signal #1 Info : Signal #2 Info :





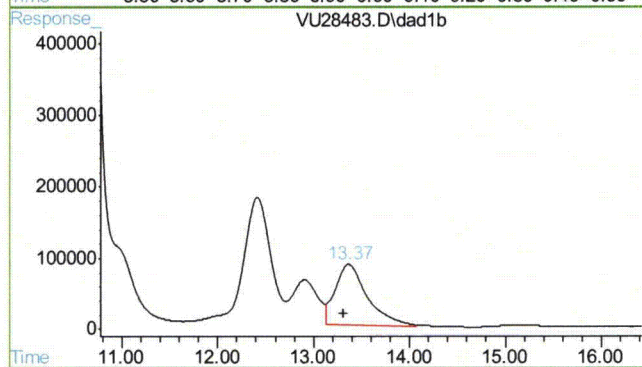
## #2 Acetaldehyde

R.T.: 9.038 min  
Delta R.T.: 0.034 min  
Response: 305449  
Conc: 4.97 ppm m



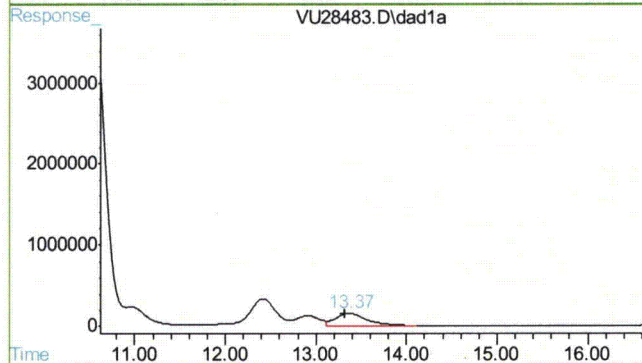
## #2 Acetaldehyde

R.T.: 9.038 min  
Delta R.T.: 0.042 min  
Response: 490322  
Conc: 2.38 ppm m



## #3 Butyraldehyde

R.T.: 13.366 min  
Delta R.T.: 0.047 min  
Response: 1970834  
Conc: 105.90 ug/ml m



## #3 Butyraldehyde

R.T.: 13.366 min  
Delta R.T.: 0.042 min  
Response: 3621876  
Conc: 107.21 ug/ml m

## Quantitation Report (QT Reviewed)

Data File : D:\HPLC2\DATA\102210\VU28523.D\dad1b.ch Vial: 38  
 Acq On : 22-Oct-2010, 19:33:20 Operator: caobinz  
 Sample : ja58900-4,1:10 Inst : G1315A  
 Misc : op22999,gvul289,25,,,1,10 Multiplr: 1.00  
 IntFile : rteint.p

Data File : D:\HPLC2\DATA\102210\VU28523.D\dad1a.ch Vial: 38  
 Acq On : 22-Oct-2010, 19:33:20 Operator: caobinz  
 Sample : ja58900-4,1:10 Inst : G1315A  
 Misc : Multiplr: 1.00  
 IntFile : rteint2.p

Quant Time: Oct 23 9:32 2010 Quant Results File: FM102210.RES

Quant Method : D:\HPLC2\METHODS\FM102210.M (RTE Integrator)  
 Title : LC8315FORM/070610/ic1253/op21796  
 Last Update : Fri Oct 22 12:05:41 2010  
 Response via : Initial Calibration  
 DataAcq Meth : F6040D.M

Volume Inj. :  
 Signal #1 Phase : Signal #2 Phase:  
 Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ppm	ppm
-----						
System Monitoring Compounds						
3) s Butyraldehyde	13.13f	13.14f	150409	287774	7.642m	8.338m
Spiked Amount	50.000	Range	10 - 115	Recovery	= 15.28%	16.68%
Target Compounds						
1) Formaldehyde	8.01f	8.01f	1323171	3565326	45.709	44.873

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.  
 VU28523.D FM102210.M Sat Oct 23 10:56:52 2010 RPT1

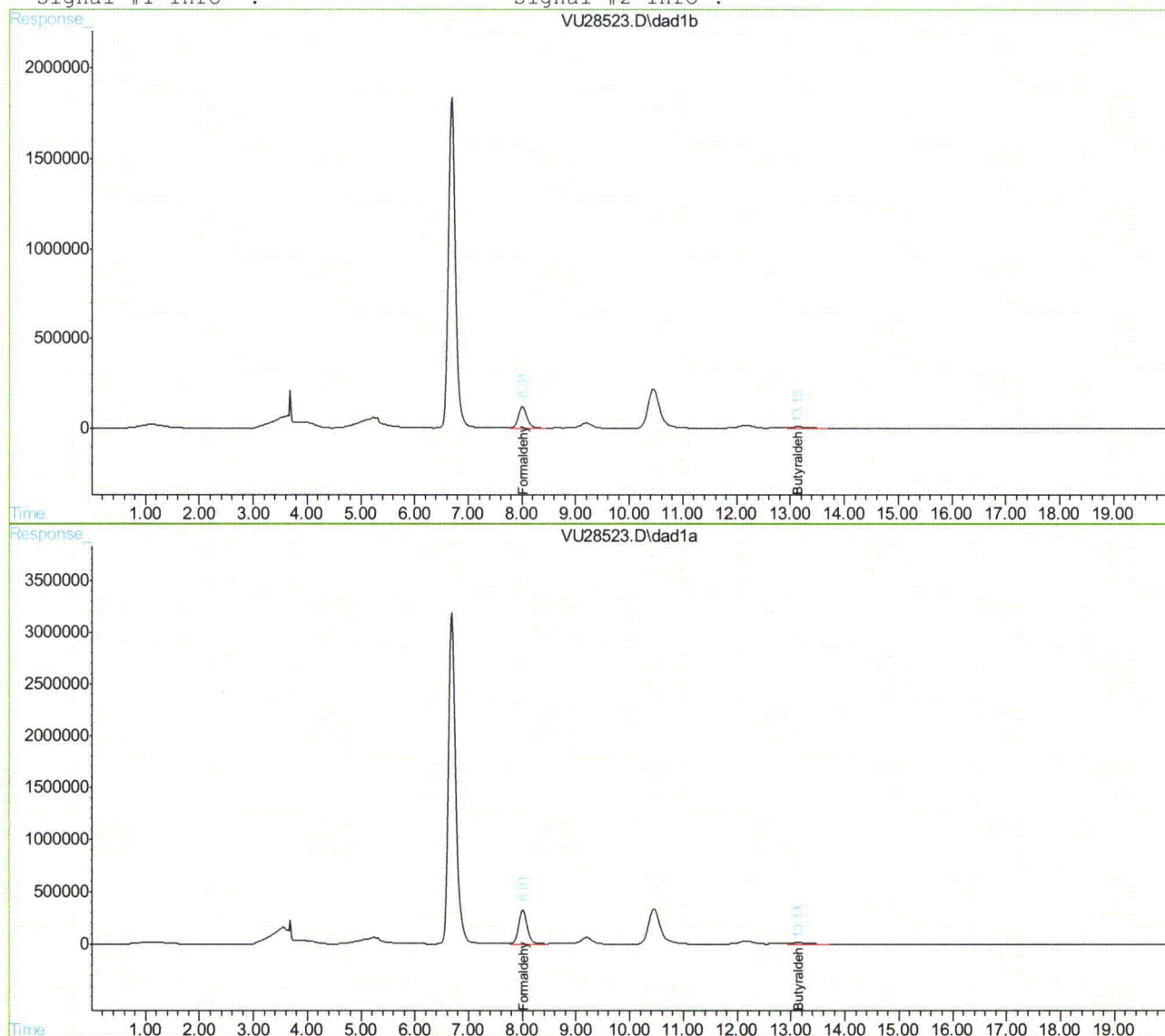
## Quantitation Report

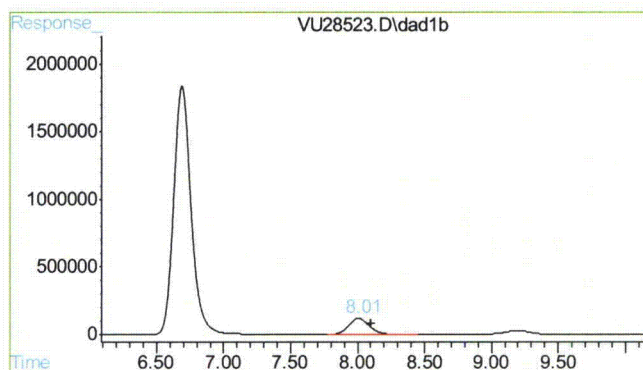
Data File : D:\HPLC2\DATA\102210\VU28523.D\dad1b.ch Vial: 38  
Acq On : 22-Oct-2010, 19:33:20 Operator: caobinz  
Sample : ja58900-4,1:10 Inst : G1315A  
Misc : op22999,gvu1289,25,,,1,10 Multiplr: 1.00  
IntFile : rteint.p

Data File : D:\HPLC2\DATA\102210\VU28523.D\dad1a.ch Vial: 38  
Acq On : 22-Oct-2010, 19:33:20 Operator: caobinz  
Sample : ja58900-4,1:10 Inst : G1315A  
Misc : Multiplr: 1.00  
IntFile : rteint2.p  
Quant Time: Oct 23 9:32 2010 Quant Results File: FM102210.RES

Quant Method : D:\HPLC2\METHODS\FM102210.M (RTE Integrator)  
Title : LC8315FORM/070610/ic1253/op21796  
Last Update : Fri Oct 22 12:05:41 2010  
Response via : Multiple Level Calibration  
DataAcq Meth : F6040D.M

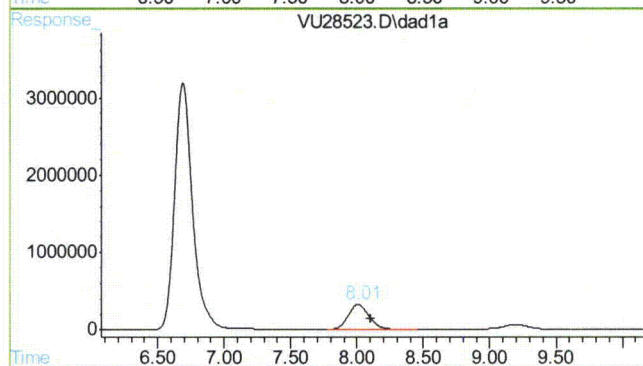
Volume Inj. :  
Signal #1 Phase : Signal #2 Phase:  
Signal #1 Info : Signal #2 Info :





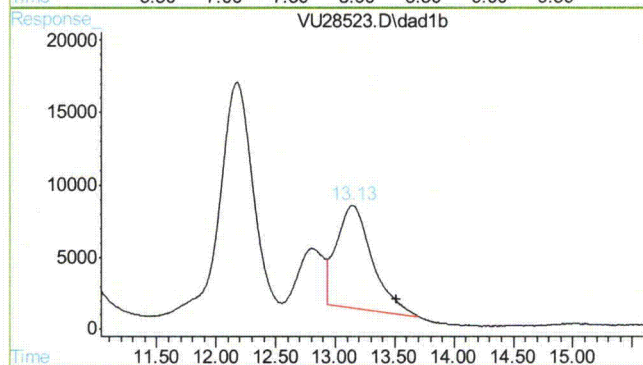
## #1 Formaldehyde

R.T.: 8.008 min  
Delta R.T.: -0.094 min  
Response: 1323171  
Conc: 45.71 ppm



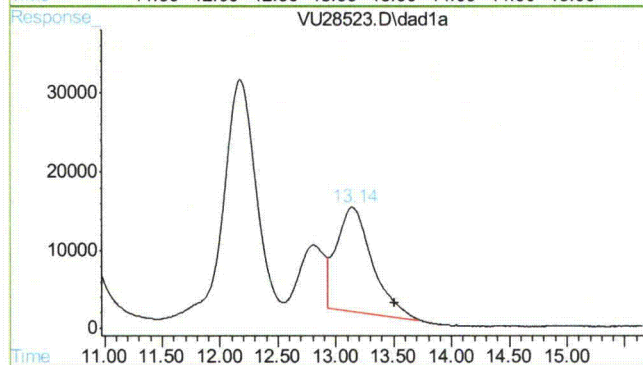
## #1 Formaldehyde

R.T.: 8.008 min  
Delta R.T.: -0.094 min  
Response: 3565326  
Conc: 44.87 ppm



## #3 Butyraldehyde

R.T.: 13.134 min  
Delta R.T.: -0.377 min  
Response: 150409  
Conc: 7.64 ug/ml m



## #3 Butyraldehyde

R.T.: 13.144 min  
Delta R.T.: -0.367 min  
Response: 287774  
Conc: 8.34 ug/ml m

17.1.8 17

**Nancy Ma**  
**10/22/10 15:31**

## Quantitation Report (QT Reviewed)

Data File : D:\HPLC2\DATA\101910\VU28438.D\dad1b.ch Vial: 7  
Acq On : 19-Oct-2010, 18:05:23 Operator: caobinz  
Sample : ja58900-5 Inst : G1315A  
Misc : op22971,gvul286,500,,,1 Multiplr: 1.00  
IntFile : rteint.p

Data File : D:\HPLC2\DATA\101910\VU28438.D\dad1a.ch Vial: 7  
Acq On : 19-Oct-2010, 18:05:23 Operator: caobinz  
Sample : ja58900-5 Inst : G1315A  
Misc : Multiplr: 1.00  
IntFile : rteint2.p

Quant Time: Oct 20 16:17 2010 Quant Results File: FM101910.RES

Quant Method : D:\HPLC2\METHODS\FM101910.M (RTE Integrator)  
Title : LC8315FORM/070610/ic1253/op21796  
Last Update : Tue Oct 19 16:05:29 2010  
Response via : Initial Calibration  
DataAcq Meth : F6040D.M

Volume Inj. :  
Signal #1 Phase : Signal #2 Phase:  
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ppm	ppm
-----						
System Monitoring Compounds						
3) s Butyraldehyde	13.36	13.36	1557193	2820498	77.714	77.575
Spiked Amount	50.000	Range	10 - 115	Recovery	= 155.43%#	155.15%#

Target Compounds						
1) Formaldehyde	8.05	8.05	89893	265394	1.213m	1.277m

-----  
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.  
VU28438.D FM101910.M Wed Oct 20 16:21:30 2010 RPT1

## Quantitation Report

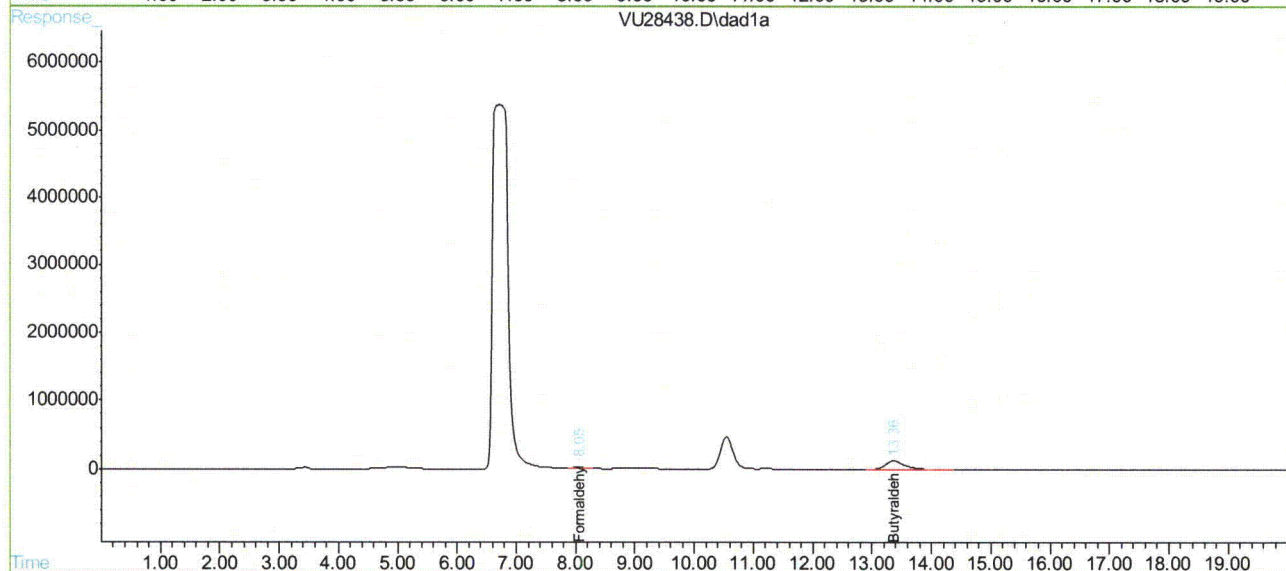
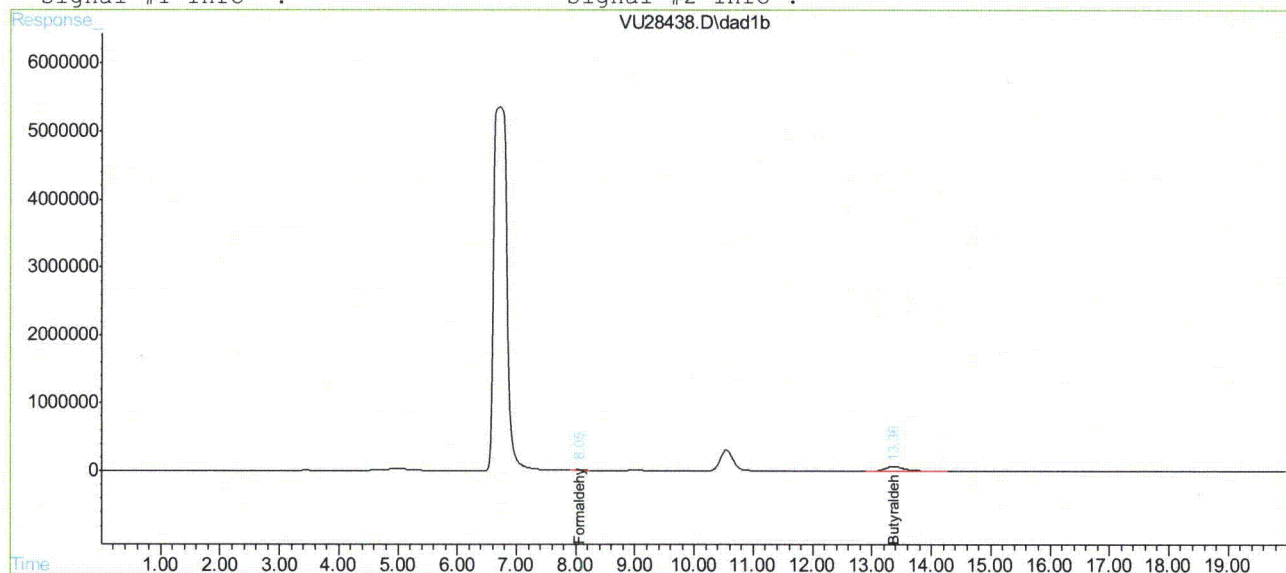
Data File : D:\HPLC2\DATA\101910\VU28438.D\dad1b.ch Vial: 7  
Acq On : 19-Oct-2010, 18:05:23 Operator: caobinz  
Sample : ja58900-5 Inst : G1315A  
Misc : op22971,gvu1286,500,,,1 Multiplr: 1.00  
IntFile : rteint.p

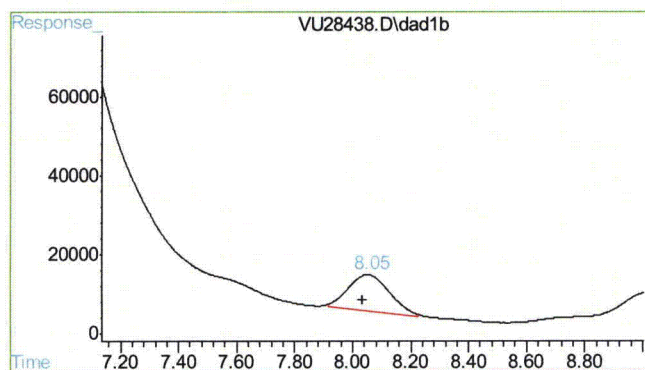
Data File : D:\HPLC2\DATA\101910\VU28438.D\dad1a.ch Vial: 7  
Acq On : 19-Oct-2010, 18:05:23 Operator: caobinz  
Sample : ja58900-5 Inst : G1315A  
Misc : Multiplr: 1.00  
IntFile : rteint2.p

Quant Time: Oct 20 16:17 2010 Quant Results File: FM101910.RES

Quant Method : D:\HPLC2\METHODS\FM101910.M (RTE Integrator)  
Title : LC8315FORM/070610/ic1253/op21796  
Last Update : Tue Oct 19 16:05:29 2010  
Response via : Multiple Level Calibration  
DataAcq Meth : F6040D.M

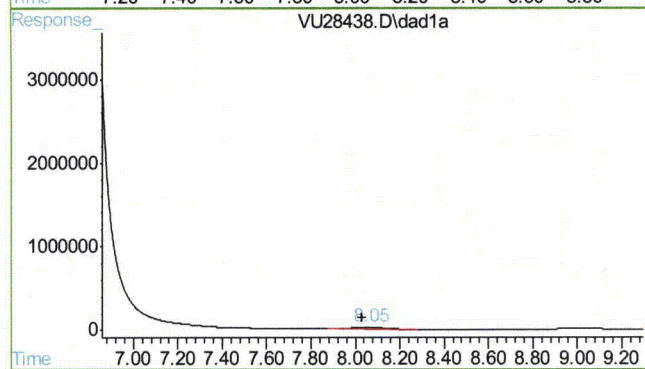
Volume Inj. :  
Signal #1 Phase : Signal #2 Phase:  
Signal #1 Info : Signal #2 Info :





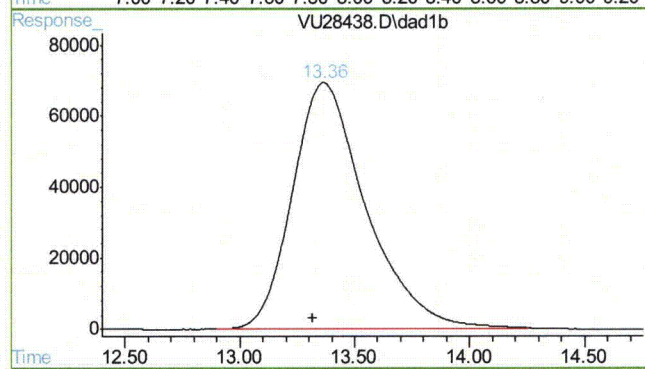
#1 Formaldehyde

R.T.: 8.047 min  
Delta R.T.: 0.015 min  
Response: 89893  
Conc: 1.21 ppm m



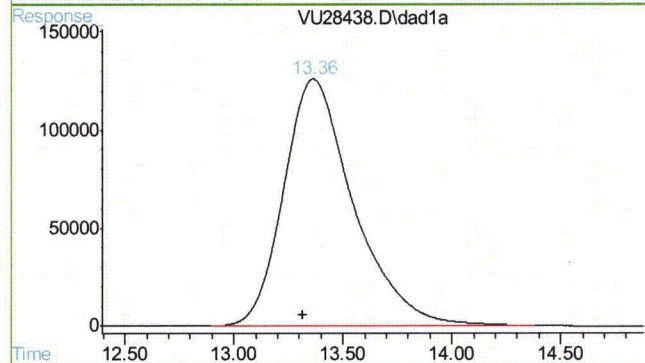
#1 Formaldehyde

R.T.: 8.053 min  
Delta R.T.: 0.020 min  
Response: 265394  
Conc: 1.28 ppm m



#3 Butyraldehyde

R.T.: 13.363 min  
Delta R.T.: 0.045 min  
Response: 1557193  
Conc: 77.71 ug/ml



#3 Butyraldehyde

R.T.: 13.363 min  
Delta R.T.: 0.048 min  
Response: 2820498  
Conc: 77.58 ug/ml

## Quantitation Report (QT Reviewed)

Data File : D:\HPLC2\DATA\101910\VU28439.D\dad1b.ch Vial: 8  
Acq On : 19-Oct-2010, 18:26:19 Operator: caobinz  
Sample : ja58900-6 Inst : G1315A  
Misc : op22971,gvul286,500,,,1 Multiplr: 1.00  
IntFile : rteint.p

Data File : D:\HPLC2\DATA\101910\VU28439.D\dad1a.ch Vial: 8  
Acq On : 19-Oct-2010, 18:26:19 Operator: caobinz  
Sample : ja58900-6 Inst : G1315A  
Misc : Multiplr: 1.00  
IntFile : rteint2.p

Quant Time: Oct 20 16:18 2010 Quant Results File: FM101910.RES

Quant Method : D:\HPLC2\METHODS\FM101910.M (RTE Integrator)  
Title : LC8315FORM/070610/ic1253/op21796  
Last Update : Tue Oct 19 16:05:29 2010  
Response via : Initial Calibration  
DataAcq Meth : F6040D.M

Volume Inj. :  
Signal #1 Phase : Signal #2 Phase:  
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ppm	ppm
----------	------	------	--------	--------	-----	-----

## System Monitoring Compounds

3) s Butyraldehyde	13.36	13.36	1279513	2321496	61.490	61.699
Spiked Amount	50.000	Range	10 - 115	Recovery	= 122.98%#	123.40%#

## Target Compounds

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.  
VU28439.D FM101910.M Wed Oct 20 16:21:37 2010 RPT1

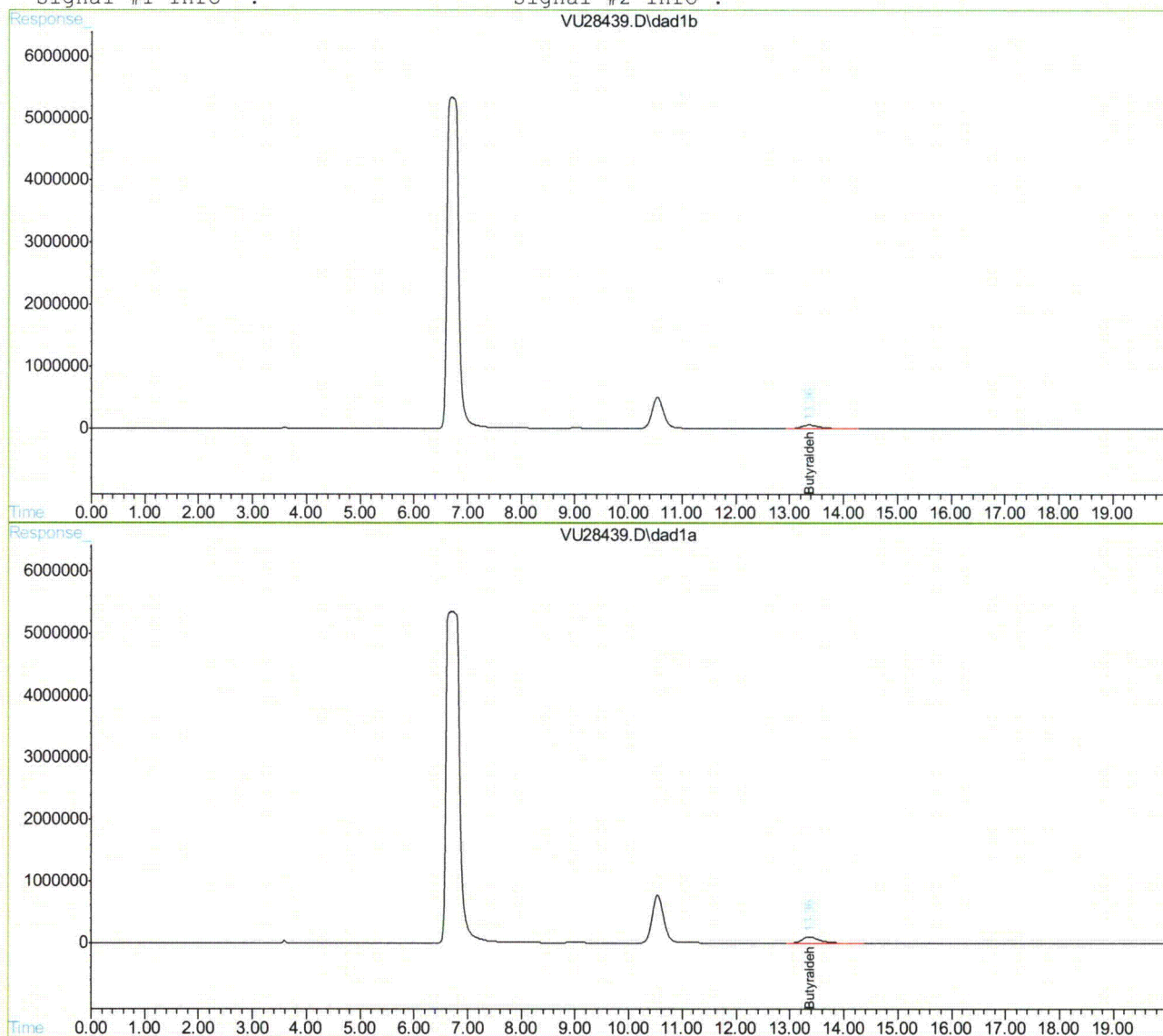
## Quantitation Report

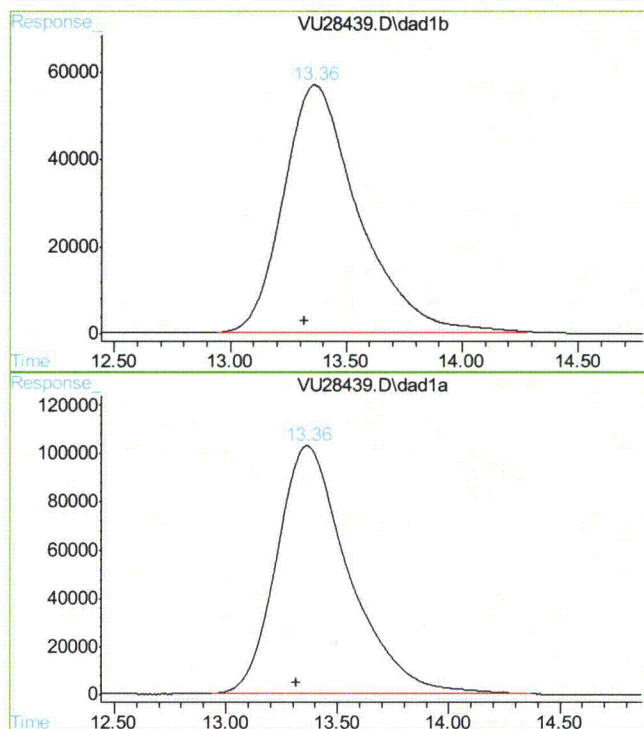
Data File : D:\HPLC2\DATA\101910\VU28439.D\dad1b.ch Vial: 8  
Acq On : 19-Oct-2010, 18:26:19 Operator: caobinz  
Sample : ja58900-6 Inst : G1315A  
Misc : op22971,gvu1286,500,,,1 Multiplr: 1.00  
IntFile : rteint.p

Data File : D:\HPLC2\DATA\101910\VU28439.D\dad1a.ch Vial: 8  
Acq On : 19-Oct-2010, 18:26:19 Operator: caobinz  
Sample : ja58900-6 Inst : G1315A  
Misc : Multiplr: 1.00  
IntFile : rteint2.p  
Quant Time: Oct 20 16:18 2010 Quant Results File: FM101910.RES

Quant Method : D:\HPLC2\METHODS\FM101910.M (RTE Integrator)  
Title : LC8315FORM/070610/ic1253/op21796  
Last Update : Tue Oct 19 16:05:29 2010  
Response via : Multiple Level Calibration  
DataAcq Meth : F6040D.M

Volume Inj. :  
Signal #1 Phase : Signal #2 Phase:  
Signal #1 Info : Signal #2 Info :





#3 Butyraldehyde

R.T.: 13.360 min  
Delta R.T.: 0.042 min  
Response: 1279513  
Conc: 61.49 ug/ml

#3 Butyraldehyde

R.T.: 13.362 min  
Delta R.T.: 0.047 min  
Response: 2321496  
Conc: 61.70 ug/ml

17.1.10 17

John Hamilton  
11/08/10 15:12

## Quantitation Report (QT Reviewed)

Data File : D:\HPLC2\DATA\102110\VU28484.D\dad1b.ch Vial: 39  
Acq On : 22-Oct-2010, 04:41:32 Operator: caobinz  
Sample : ja58900-7 Inst : G1315A  
Misc : op22999,gvu1288,25,,,1 Multiplr: 1.00  
IntFile : rteint.p

Data File : D:\HPLC2\DATA\102110\VU28484.D\dad1a.ch Vial: 39  
Acq On : 22-Oct-2010, 04:41:32 Operator: caobinz  
Sample : ja58900-7 Inst : G1315A  
Misc : Multiplr: 1.00  
IntFile : rteint2.p  
Quant Time: Oct 22 9:43 2010 Quant Results File: FM102110.RES

Quant Method : D:\HPLC2\METHODS\FM102110.M (RTE Integrator)  
Title : LC8315FORM/070610/ic1253/op21796  
Last Update : Fri Oct 22 08:44:26 2010  
Response via : Initial Calibration  
DataAcq Meth : F6040D.M

Volume Inj. :  
Signal #1 Phase : Signal #2 Phase:  
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ppm	ppm
-----						
System Monitoring Compounds						
3) s Butyraldehyde	13.37	13.37	1681707	2971393	85.599m	82.707m
Spiked Amount	50.000	Range	10 - 115	Recovery	= 171.20%#	165.41%#

Target Compounds						
2) Acetaldehyde	9.03	9.03	114304	167774	1.283	398.173m#

-----  
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.  
VU28484.D FM102110.M Fri Oct 22 10:53:56 2010 RPT1

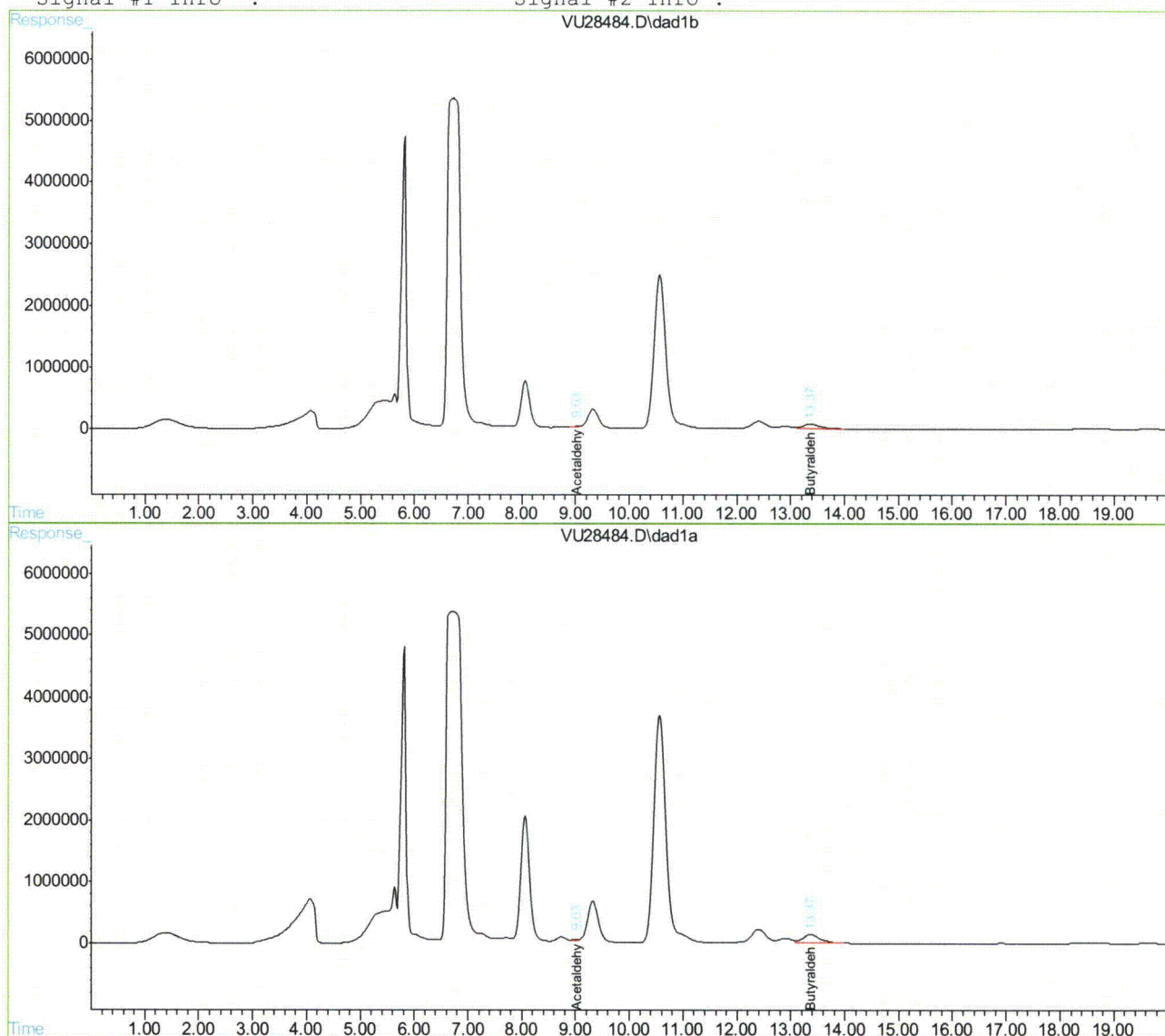
## Quantitation Report

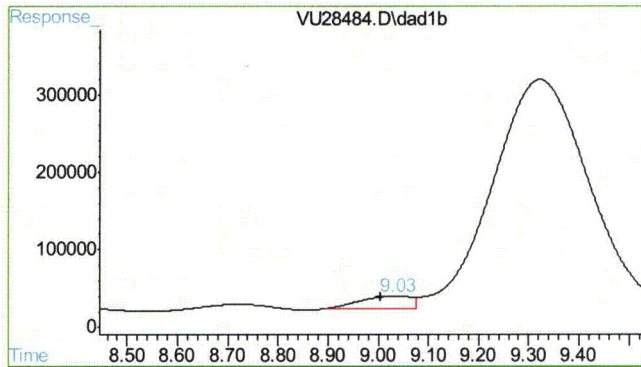
Data File : D:\HPLC2\DATA\102110\VU28484.D\dad1b.ch Vial: 39  
Acq On : 22-Oct-2010, 04:41:32 Operator: caobinz  
Sample : ja58900-7 Inst : G1315A  
Misc : op22999,gvu1288,25,,,1 Multiplr: 1.00  
IntFile : rteint.p

Data File : D:\HPLC2\DATA\102110\VU28484.D\dad1a.ch Vial: 39  
Acq On : 22-Oct-2010, 04:41:32 Operator: caobinz  
Sample : ja58900-7 Inst : G1315A  
Misc : Multiplr: 1.00  
IntFile : rteint2.p  
Quant Time: Oct 22 9:43 2010 Quant Results File: FM102110.RES

Quant Method : D:\HPLC2\METHODS\FM102110.M (RTE Integrator)  
Title : LC8315FORM/070610/ic1253/op21796  
Last Update : Fri Oct 22 08:44:26 2010  
Response via : Multiple Level Calibration  
DataAcq Meth : F6040D.M

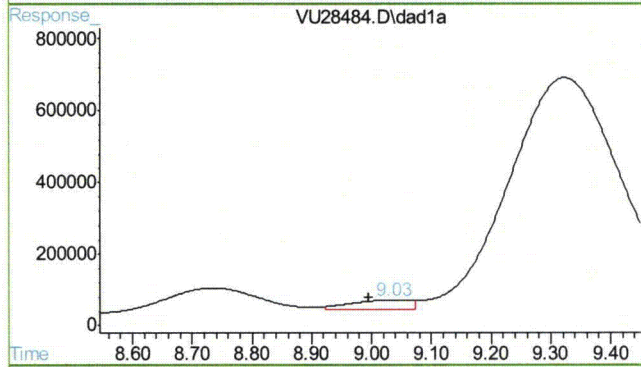
Volume Inj. :  
Signal #1 Phase : Signal #2 Phase:  
Signal #1 Info : Signal #2 Info :





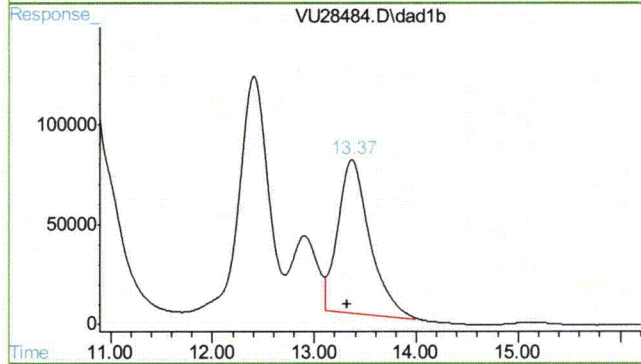
#2 Acetaldehyde

R.T.: 9.029 min  
Delta R.T.: 0.025 min  
Response: 114304  
Conc: 1.28 ppm



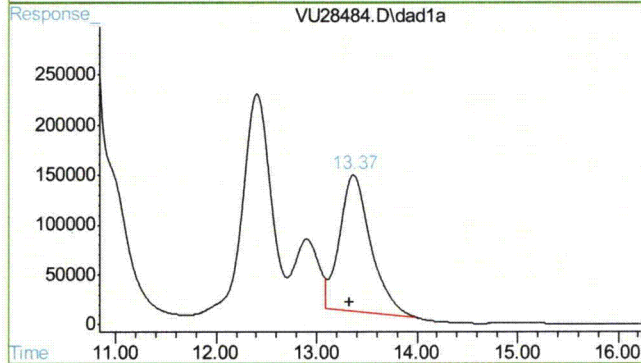
#2 Acetaldehyde

R.T.: 9.029 min  
Delta R.T.: 0.033 min  
Response: 167774  
Conc: 398.17 ppm



#3 Butyraldehyde

R.T.: 13.367 min  
Delta R.T.: 0.048 min  
Response: 1681707  
Conc: 85.60 ug/ml



#3 Butyraldehyde

R.T.: 13.366 min  
Delta R.T.: 0.041 min  
Response: 2971393  
Conc: 82.71 ug/ml

17.1.11 17

## Quantitation Report (QT Reviewed)

Data File : D:\HPLC2\DATA\102210\VU28524.D\dad1b.ch Vial: 39  
 Acq On : 22-Oct-2010, 19:54:15 Operator: caobinz  
 Sample : ja58900-7,1ul Inst : G1315A  
 Misc : op22999,gvul289,25,,,1,5 Multiplr: 1.00  
 IntFile : rteint.p

Data File : D:\HPLC2\DATA\102210\VU28524.D\dad1a.ch Vial: 39  
 Acq On : 22-Oct-2010, 19:54:15 Operator: caobinz  
 Sample : ja58900-7,1ul Inst : G1315A  
 Misc : Multiplr: 1.00  
 IntFile : rteint2.p

Quant Time: Oct 23 9:33 2010 Quant Results File: FM102210.RES

Quant Method : D:\HPLC2\METHODS\FM102210.M (RTE Integrator)  
 Title : LC8315FORM/070610/ic1253/op21796  
 Last Update : Fri Oct 22 12:05:41 2010  
 Response via : Initial Calibration  
 DataAcq Meth : F6040D.M

Volume Inj. :  
 Signal #1 Phase : Signal #2 Phase:  
 Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ppm	ppm
-----						
System Monitoring Compounds						
3) s Butyraldehyde	13.14f	13.14f	327478	596772	15.173m	15.598m
Spiked Amount	50.000	Range	10 - 115	Recovery =	30.35%	31.20%
Target Compounds						
1) Formaldehyde	8.00f	8.00f	1782146	4702821	66.472	63.653m

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.  
 VU28524.D FM102210.M Sat Oct 23 10:56:57 2010 RPT1

## Quantitation Report

Data File : D:\HPLC2\DATA\102210\VU28524.D\dad1b.ch  
Acq On : 22-Oct-2010, 19:54:15  
Sample : ja58900-7,1ul  
Misc : op22999,gvul289,25,,,1,5  
IntFile : rteint.p

Vial: 39  
Operator: caobinz  
Inst : G1315A  
Multiplr: 1.00

Data File : D:\HPLC2\DATA\102210\VU28524.D\dad1a.ch  
Acq On : 22-Oct-2010, 19:54:15  
Sample : ja58900-7,1ul  
Misc :  
IntFile : rteint2.p

Vial: 39  
Operator: caobinz  
Inst : G1315A  
Multiplr: 1.00

Quant Time: Oct 23 9:33 2010 Quant Results File: FM102210.RES

Quant Method : D:\HPLC2\METHODS\FM102210.M (RTE Integrator)  
Title : LC8315FORM/070610/ic1253/op21796  
Last Update : Fri Oct 22 12:05:41 2010  
Response via : Multiple Level Calibration  
DataAcq Meth : F6040D.M

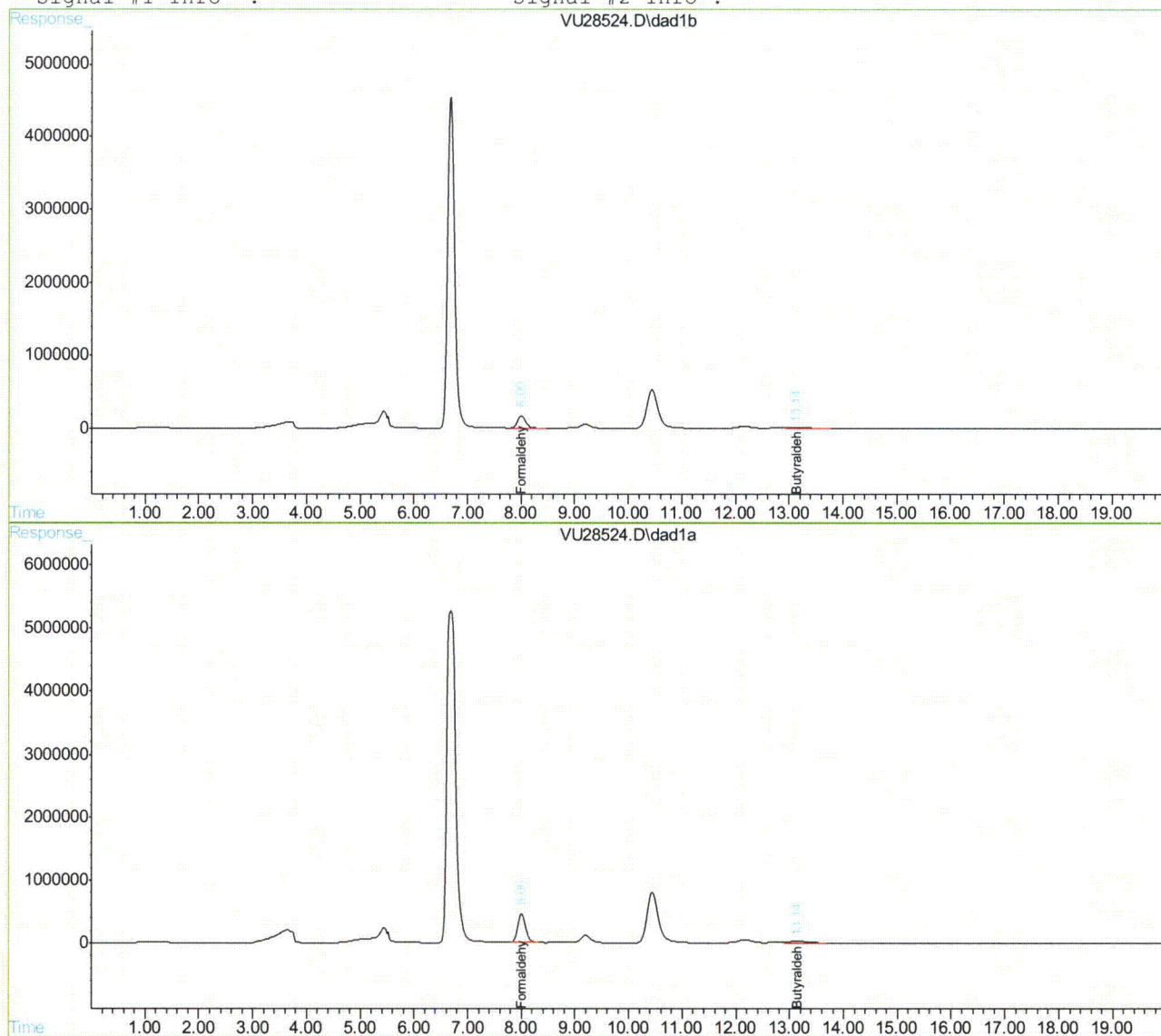
Volume Inj. :

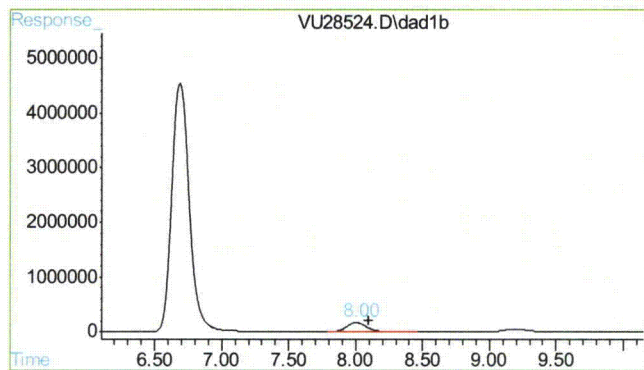
Signal #1 Phase :

Signal #1 Info :

Signal #2 Phase:

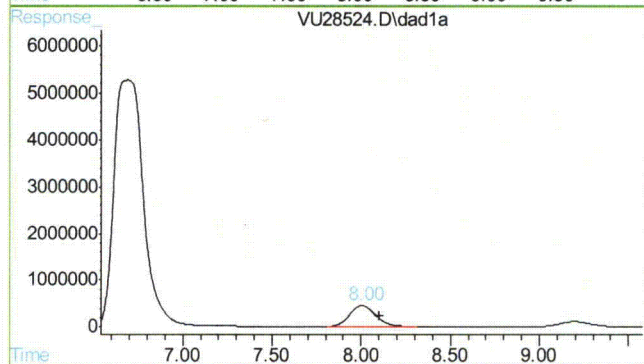
Signal #2 Info :





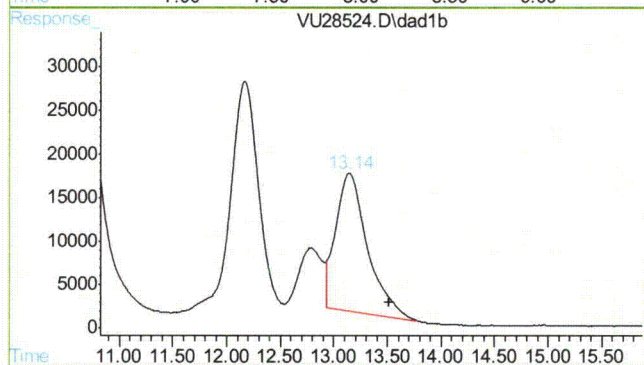
## #1 Formaldehyde

R.T.: 8.004 min  
Delta R.T.: -0.098 min  
Response: 1782146  
Conc: 66.47 ppm



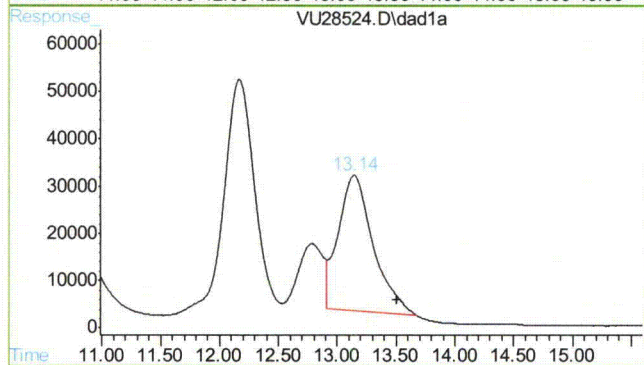
## #1 Formaldehyde

R.T.: 8.004 min  
Delta R.T.: -0.098 min  
Response: 4702821  
Conc: 63.65 ppm m



## #3 Butyraldehyde

R.T.: 13.137 min  
Delta R.T.: -0.374 min  
Response: 327478  
Conc: 15.17 ug/ml m



## #3 Butyraldehyde

R.T.: 13.139 min  
Delta R.T.: -0.373 min  
Response: 596772  
Conc: 15.60 ug/ml m

## Quantitation Report (QT Reviewed)

Data File : D:\HPLC2\DATA\102110\VU28485.D\dad1b.ch Vial: 40  
Acq On : 22-Oct-2010, 05:02:27 Operator: caobinz  
Sample : ja58900-8 Inst : G1315A  
Misc : op22999,gvul288,25,,,1 Multiplr: 1.00  
IntFile : rteint.p

Data File : D:\HPLC2\DATA\102110\VU28485.D\dad1a.ch Vial: 40  
Acq On : 22-Oct-2010, 05:02:27 Operator: caobinz  
Sample : ja58900-8 Inst : G1315A  
Misc : Multiplr: 1.00  
IntFile : rteint2.p  
Quant Time: Oct 22 9:44 2010 Quant Results File: FM102110.RES

Quant Method : D:\HPLC2\METHODS\FM102110.M (RTE Integrator)  
Title : LC8315FORM/070610/ic1253/op21796  
Last Update : Fri Oct 22 08:44:26 2010  
Response via : Initial Calibration  
DataAcq Meth : F6040D.M

Volume Inj. :  
Signal #1 Phase : Signal #2 Phase:  
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ppm	ppm
-----						
System Monitoring Compounds						
3) s Butyraldehyde	13.37	13.36	1756868	3548620	90.583m	104.220
Spiked Amount	50.000	Range	10 - 115	Recovery	= 181.17%#	208.44%#

Target Compounds						
2) Acetaldehyde	9.03	9.08	133098	186892	1.642m	397.971m#

-----  
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.  
VU28485.D FM102110.M Fri Oct 22 10:54:01 2010 RPT1

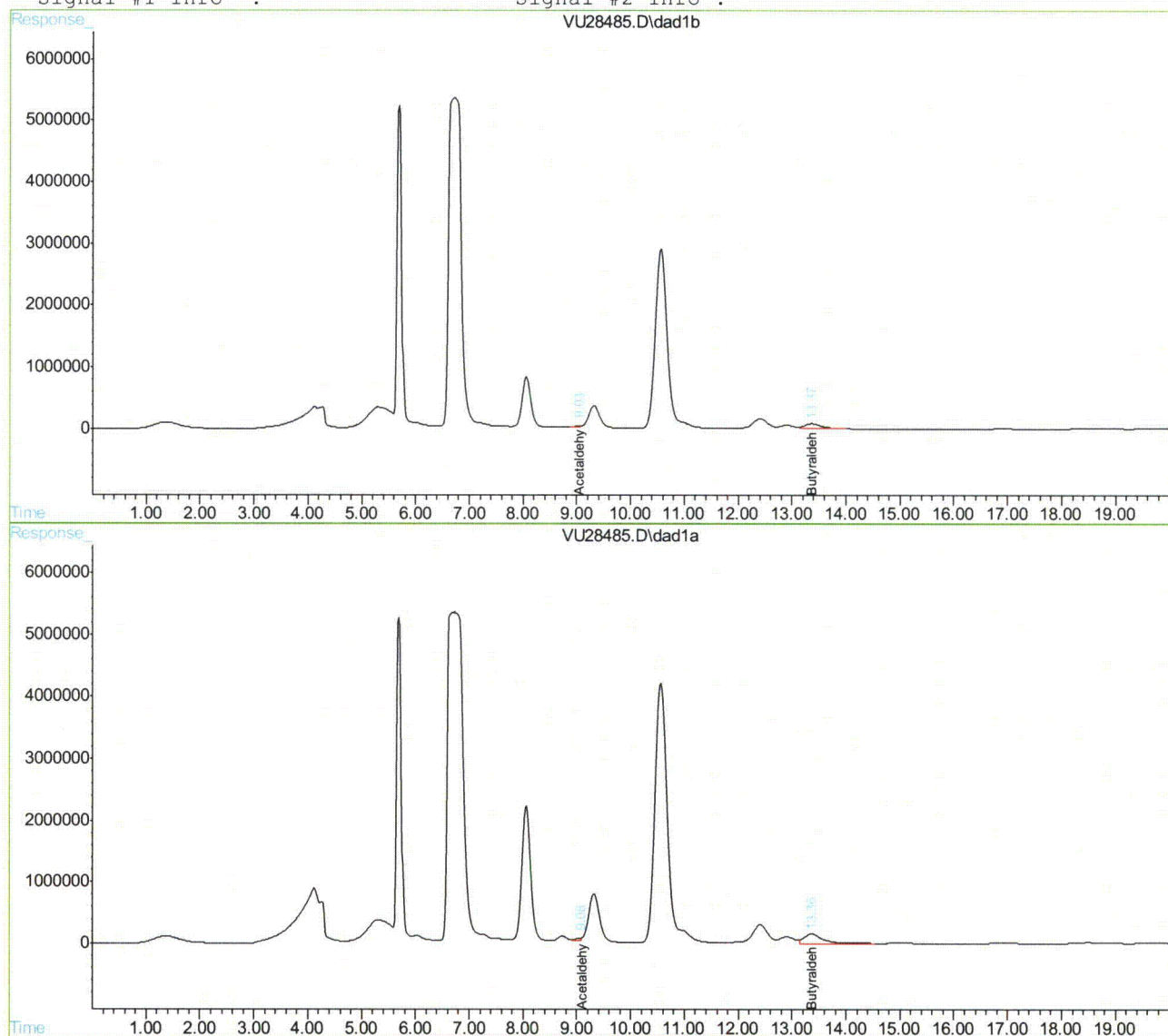
## Quantitation Report

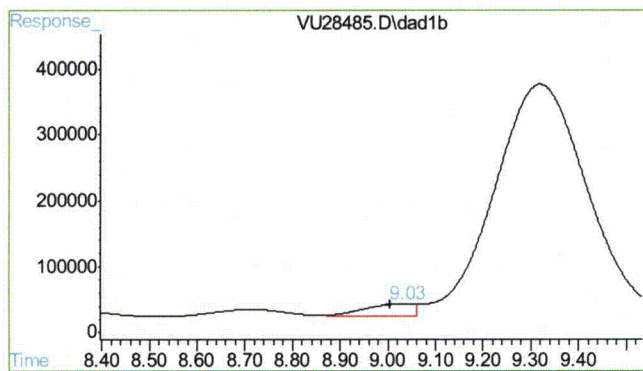
Data File : D:\HPLC2\DATA\102110\VU28485.D\dad1b.ch Vial: 40  
Acq On : 22-Oct-2010, 05:02:27 Operator: caobinz  
Sample : ja58900-8 Inst : G1315A  
Misc : op22999,gvu1288,25,,,1 Multiplr: 1.00  
IntFile : rteint.p

Data File : D:\HPLC2\DATA\102110\VU28485.D\dad1a.ch Vial: 40  
Acq On : 22-Oct-2010, 05:02:27 Operator: caobinz  
Sample : ja58900-8 Inst : G1315A  
Misc : Multiplr: 1.00  
IntFile : rteint2.p  
Quant Time: Oct 22 9:44 2010 Quant Results File: FM102110.RES

Quant Method : D:\HPLC2\METHODS\FM102110.M (RTE Integrator)  
Title : LC8315FORM/070610/ic1253/op21796  
Last Update : Fri Oct 22 08:44:26 2010  
Response via : Multiple Level Calibration  
DataAcq Meth : F6040D.M

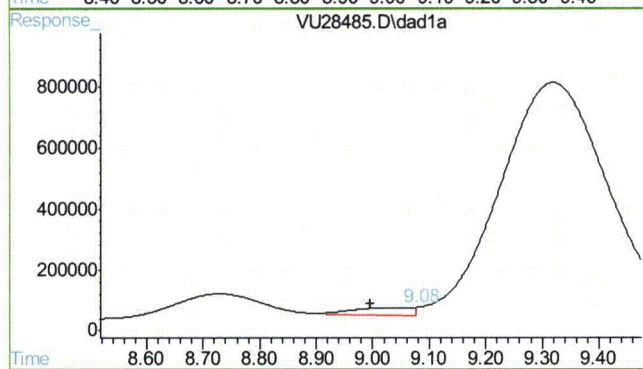
Volume Inj. :  
Signal #1 Phase : Signal #2 Phase:  
Signal #1 Info : Signal #2 Info :





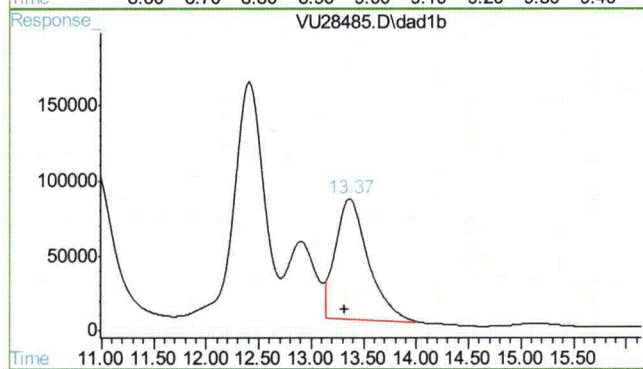
## #2 Acetaldehyde

R.T.: 9.031 min  
Delta R.T.: 0.026 min  
Response: 133098  
Conc: 1.64 ppm m



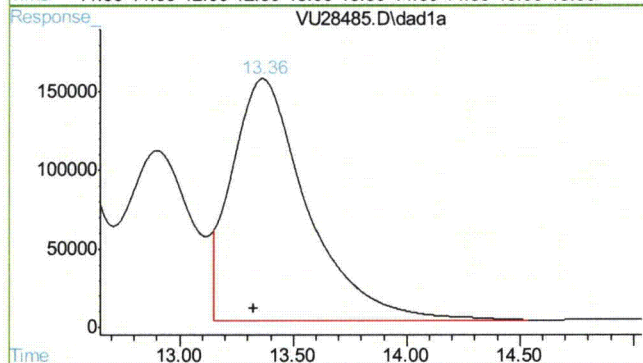
## #2 Acetaldehyde

R.T.: 9.077 min  
Delta R.T.: 0.081 min  
Response: 186892  
Conc: 397.97 ppm m



## #3 Butyraldehyde

R.T.: 13.366 min  
Delta R.T.: 0.046 min  
Response: 1756868  
Conc: 90.58 ug/ml m



## #3 Butyraldehyde

R.T.: 13.364 min  
Delta R.T.: 0.040 min  
Response: 3548620  
Conc: 104.22 ug/ml

## Quantitation Report (QT Reviewed)

Data File : D:\HPLC2\DATA\102210\VU28525.D\dad1b.ch Vial: 40  
 Acq On : 22-Oct-2010, 20:15:11 Operator: caobinz  
 Sample : ja58900-8,1ul Inst : G1315A  
 Misc : op22999,gvul289,25,,,1,5 Multiplr: 1.00  
 IntFile : rteint.p

Data File : D:\HPLC2\DATA\102210\VU28525.D\dad1a.ch Vial: 40  
 Acq On : 22-Oct-2010, 20:15:11 Operator: caobinz  
 Sample : ja58900-8,1ul Inst : G1315A  
 Misc : Multiplr: 1.00  
 IntFile : rteint2.p

Quant Time: Oct 23 9:33 2010 Quant Results File: FM102210.RES

Quant Method : D:\HPLC2\METHODS\FM102210.M (RTE Integrator)  
 Title : LC8315FORM/070610/ic1253/op21796  
 Last Update : Fri Oct 22 12:05:41 2010  
 Response via : Initial Calibration  
 DataAcq Meth : F6040D.M

Volume Inj. :  
 Signal #1 Phase : Signal #2 Phase:  
 Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ppm	ppm
-----						
System Monitoring Compounds						
3) s Butyraldehyde	13.14f	13.14f	332996	597954	15.412m	15.626m
Spiked Amount	50.000	Range	10 - 115	Recovery	= 30.82%	31.25%
Target Compounds						
1) Formaldehyde	8.00f	8.00f	1982686	5343514	76.791	75.721

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.  
 VU28525.D FM102210.M Sat Oct 23 10:57:02 2010 RPT1

## Quantitation Report

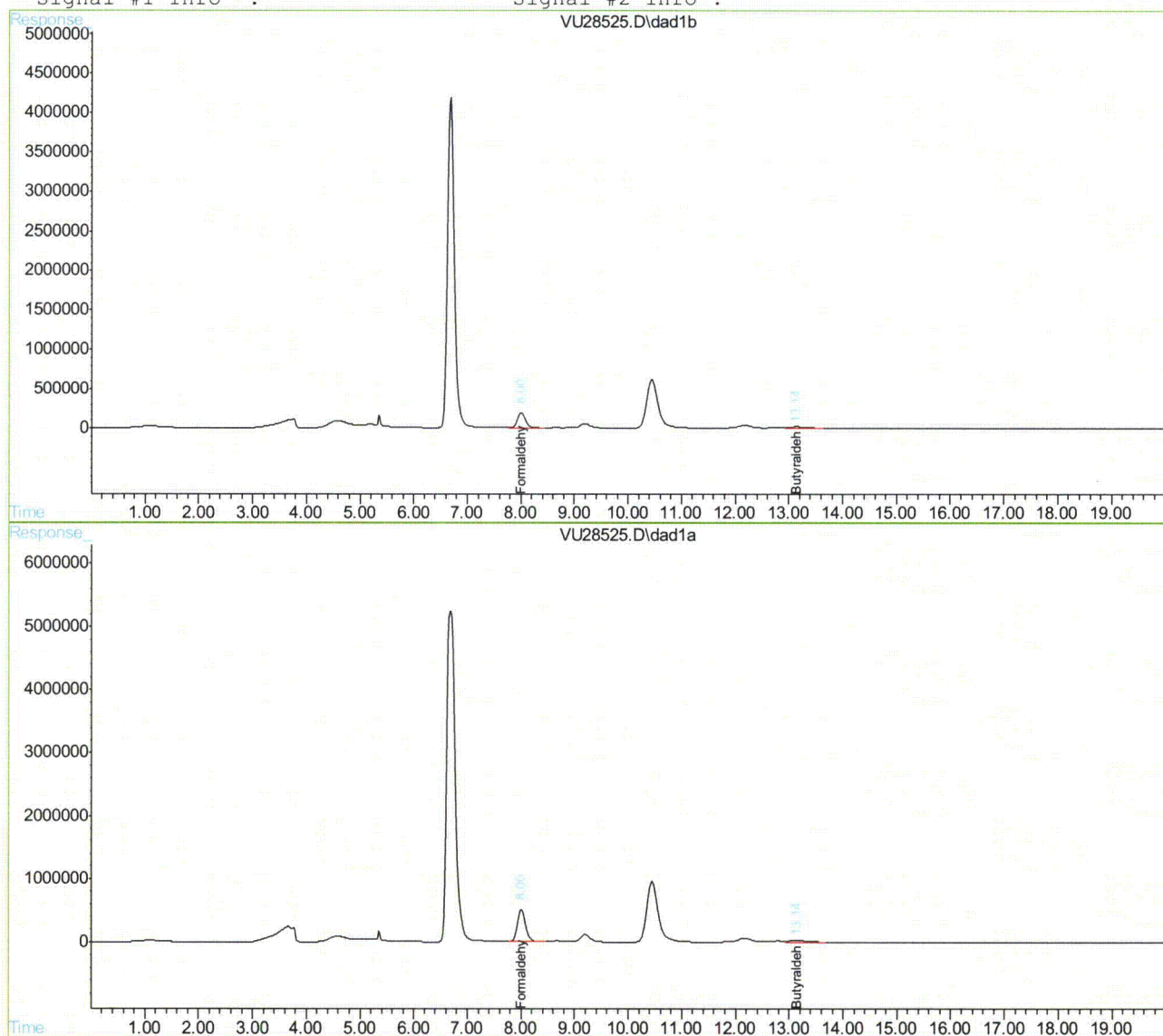
Data File : D:\HPLC2\DATA\102210\VU28525.D\dad1b.ch Vial: 40  
Acq On : 22-Oct-2010, 20:15:11 Operator: caobinz  
Sample : ja58900-8,1ul Inst : G1315A  
Misc : op22999,gvu1289,25,,,1,5 Multiplr: 1.00  
IntFile : rteint.p

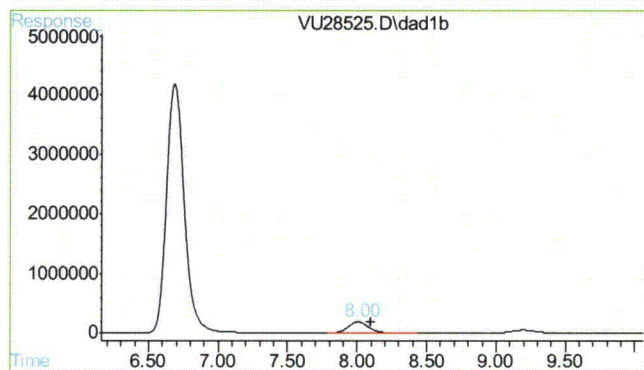
Data File : D:\HPLC2\DATA\102210\VU28525.D\dad1a.ch Vial: 40  
Acq On : 22-Oct-2010, 20:15:11 Operator: caobinz  
Sample : ja58900-8,1ul Inst : G1315A  
Misc : Multiplr: 1.00  
IntFile : rteint2.p

Quant Time: Oct 23 9:33 2010 Quant Results File: FM102210.RES

Quant Method : D:\HPLC2\METHODS\FM102210.M (RTE Integrator)  
Title : LC8315FORM/070610/ic1253/op21796  
Last Update : Fri Oct 22 12:05:41 2010  
Response via : Multiple Level Calibration  
DataAcq Meth : F6040D.M

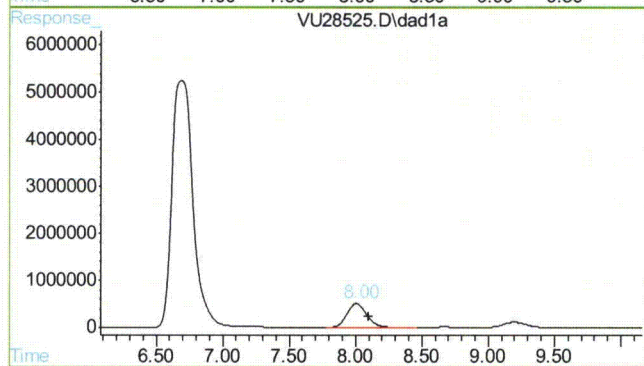
Volume Inj. :  
Signal #1 Phase : Signal #2 Phase:  
Signal #1 Info : Signal #2 Info :





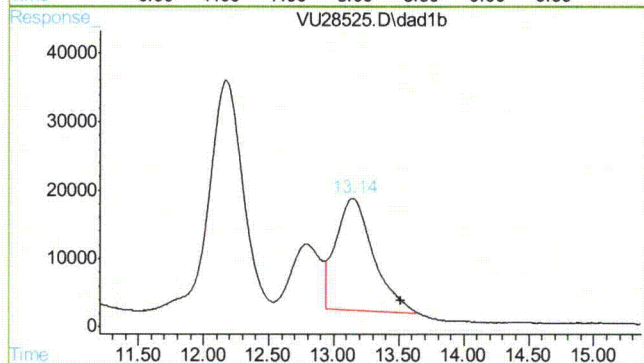
#1 Formaldehyde

R.T.: 8.005 min  
Delta R.T.: -0.097 min  
Response: 1982686  
Conc: 76.79 ppm



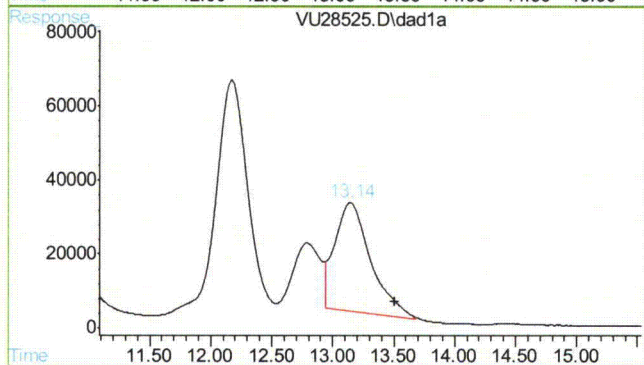
#1 Formaldehyde

R.T.: 8.005 min  
Delta R.T.: -0.097 min  
Response: 5343514  
Conc: 75.72 ppm



#3 Butyraldehyde

R.T.: 13.145 min  
Delta R.T.: -0.367 min  
Response: 332996  
Conc: 15.41 ug/ml m



#3 Butyraldehyde

R.T.: 13.143 min  
Delta R.T.: -0.369 min  
Response: 597954  
Conc: 15.63 ug/ml m

John Hamilton  
11/08/10 15:12

## Quantitation Report (QT Reviewed)

Data File : D:\HPLC2\DATA\102110\VU28487.D\dad1b.ch Vial: 41  
Acq On : 22-Oct-2010, 05:44:21 Operator: caobinz  
Sample : ja58900-9 Inst : G1315A  
Misc : op22999,gvul288,25,,,1 Multiplr: 1.00  
IntFile : rteint.p

Data File : D:\HPLC2\DATA\102110\VU28487.D\dad1a.ch Vial: 41  
Acq On : 22-Oct-2010, 05:44:21 Operator: caobinz  
Sample : ja58900-9 Inst : G1315A  
Misc : Multiplr: 1.00  
IntFile : rteint2.p  
Quant Time: Oct 22 9:46 2010 Quant Results File: FM102110.RES

Quant Method : D:\HPLC2\METHODS\FM102110.M (RTE Integrator)  
Title : LC8315FORM/070610/ic1253/op21796  
Last Update : Fri Oct 22 08:44:26 2010  
Response via : Initial Calibration  
DataAcq Meth : F6040D.M

Volume Inj. :  
Signal #1 Phase : Signal #2 Phase:  
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ppm	ppm
-----						
System Monitoring Compounds						
3) s Butyraldehyde	13.33	13.33	1882989	3466634	99.387m	100.950m
Spiked Amount	50.000	Range	10 - 115	Recovery	= 198.77%#	201.90%#

Target Compounds						
2) Acetaldehyde	9.04	9.06	161066	379139	2.178m	1.182m#

-----  
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.  
VU28487.D FM102110.M Fri Oct 22 10:54:11 2010 RPT1

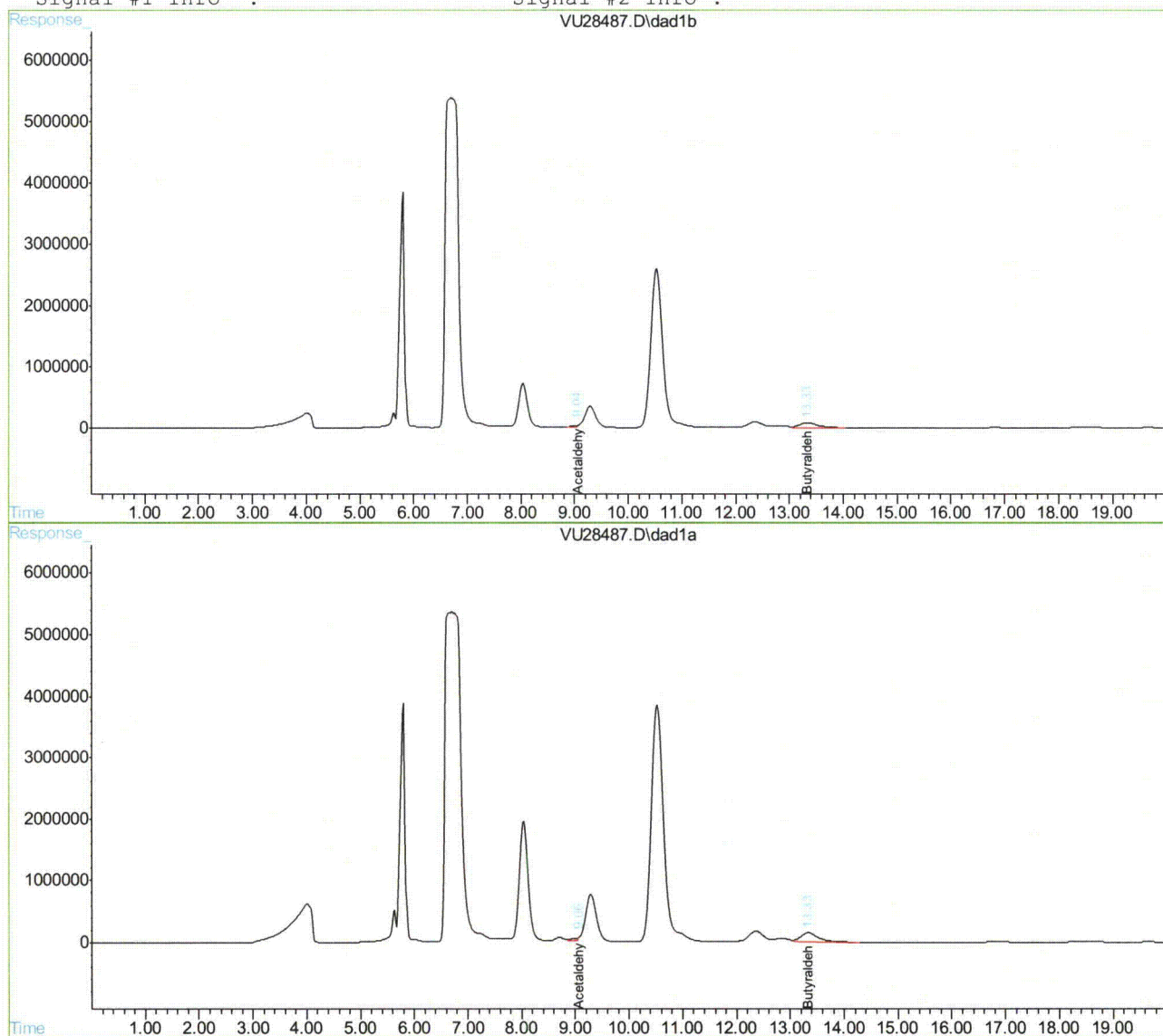
## Quantitation Report

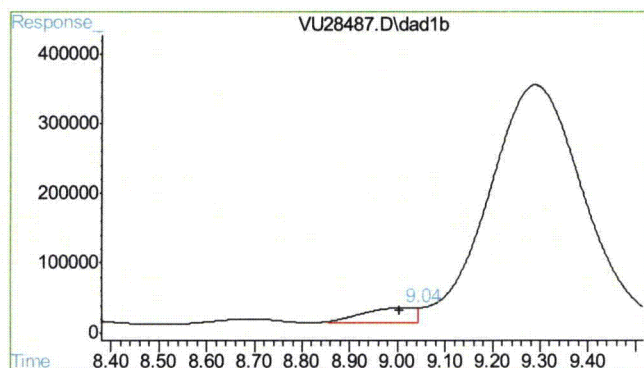
Data File : D:\HPLC2\DATA\102110\VU28487.D\dad1b.ch Vial: 41  
Acq On : 22-Oct-2010, 05:44:21 Operator: caobinz  
Sample : ja58900-9 Inst : G1315A  
Misc : op22999,gvu1288,25,,1 Multiplr: 1.00  
IntFile : rteint.p

Data File : D:\HPLC2\DATA\102110\VU28487.D\dad1a.ch Vial: 41  
Acq On : 22-Oct-2010, 05:44:21 Operator: caobinz  
Sample : ja58900-9 Inst : G1315A  
Misc : Multiplr: 1.00  
IntFile : rteint2.p  
Quant Time: Oct 22 9:46 2010 Quant Results File: FM102110.RES

Quant Method : D:\HPLC2\METHODS\FM102110.M (RTE Integrator)  
Title : LC8315FORM/070610/ic1253/op21796  
Last Update : Fri Oct 22 08:44:26 2010  
Response via : Multiple Level Calibration  
DataAcq Meth : F6040D.M

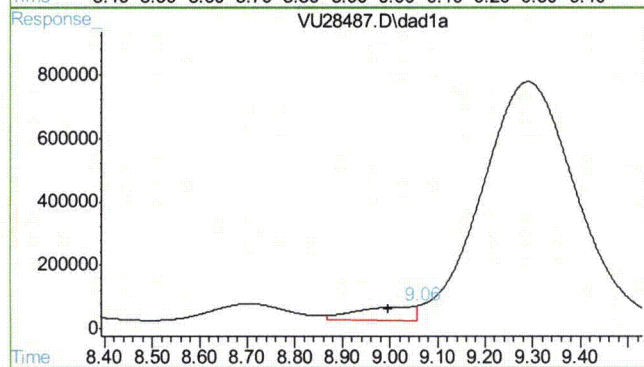
Volume Inj. :  
Signal #1 Phase : Signal #2 Phase:  
Signal #1 Info : Signal #2 Info :





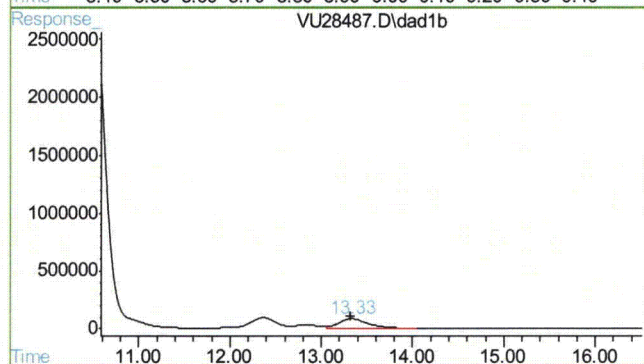
#2 Acetaldehyde

R.T.: 9.044 min  
Delta R.T.: 0.040 min  
Response: 161066  
Conc: 2.18 ppm m



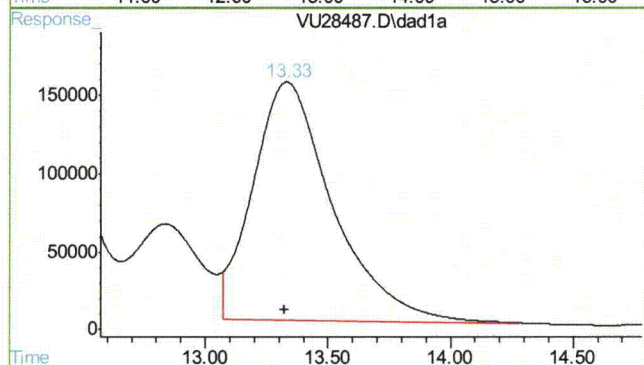
#2 Acetaldehyde

R.T.: 9.057 min  
Delta R.T.: 0.061 min  
Response: 379139  
Conc: 1.18 ppm m



#3 Butyraldehyde

R.T.: 13.329 min  
Delta R.T.: 0.010 min  
Response: 1882989  
Conc: 99.39 ug/ml m



#3 Butyraldehyde

R.T.: 13.330 min  
Delta R.T.: 0.006 min  
Response: 3466634  
Conc: 100.95 ug/ml m

## Quantitation Report (QT Reviewed)

Data File : D:\HPLC2\DATA\102210\VU28527.D\dad1b.ch Vial: 41  
 Acq On : 22-Oct-2010, 20:57:04 Operator: caobinz  
 Sample : ja58900-9,1ul Inst : G1315A  
 Misc : op22999,gvul289,25,,,1,5 Multiplr: 1.00  
 IntFile : rteint.p

Data File : D:\HPLC2\DATA\102210\VU28527.D\dad1a.ch Vial: 41  
 Acq On : 22-Oct-2010, 20:57:04 Operator: caobinz  
 Sample : ja58900-9,1ul Inst : G1315A  
 Misc : op22999,gvul289,25,,,1,5 Multiplr: 1.00  
 IntFile : rteint2.p  
 Quant Time: Oct 23 9:42 2010 Quant Results File: FM102210.RES

Quant Method : D:\HPLC2\METHODS\FM102210.M (RTE Integrator)  
 Title : LC8315FORM/070610/ic1253/op21796  
 Last Update : Fri Oct 22 12:05:41 2010  
 Response via : Initial Calibration  
 DataAcq Meth : F6040D.M

Volume Inj. :  
 Signal #1 Phase : Signal #2 Phase:  
 Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ppm	ppm
-----						
System Monitoring Compounds						
3) s Butyraldehyde	13.10f	13.10f	363480	670982	16.737m	17.378m
Spiked Amount	50.000	Range	10 - 115	Recovery =	33.47%	34.76%
Target Compounds						
1) Formaldehyde	7.99f	7.99f	1745013	4621876	64.658	62.217m

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.  
 VU28527.D FM102210.M Sat Oct 23 10:57:14 2010 RPT1

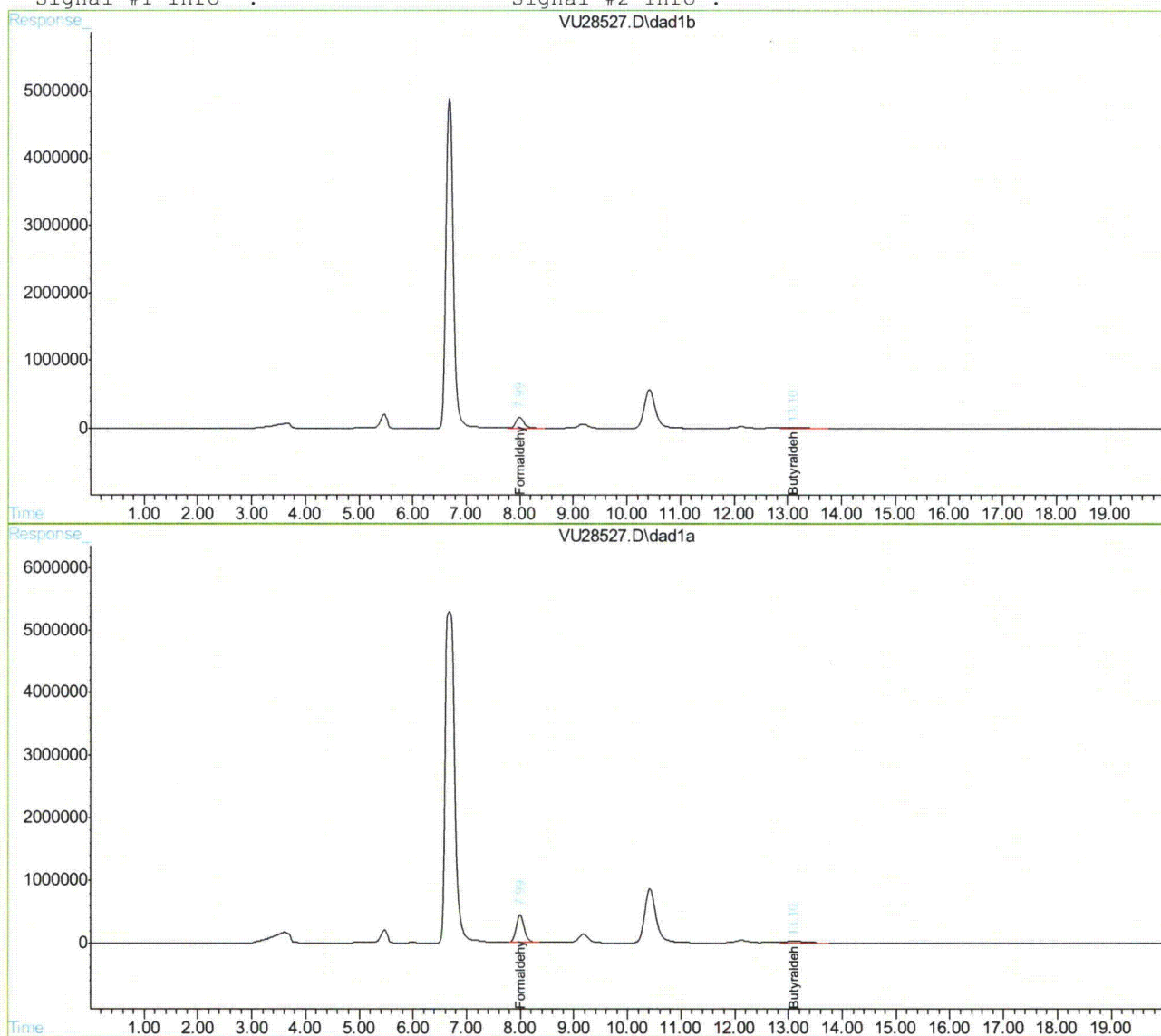
## Quantitation Report

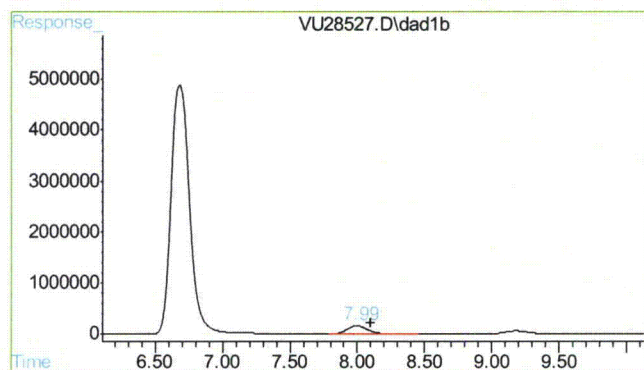
Data File : D:\HPLC2\DATA\102210\VU28527.D\dad1b.ch Vial: 41  
Acq On : 22-Oct-2010, 20:57:04 Operator: caobinz  
Sample : ja58900-9,1ul Inst : G1315A  
Misc : op22999,gvul289,25,,,1,5 Multiplr: 1.00  
IntFile : rteint.p

Data File : D:\HPLC2\DATA\102210\VU28527.D\dad1a.ch Vial: 41  
Acq On : 22-Oct-2010, 20:57:04 Operator: caobinz  
Sample : ja58900-9,1ul Inst : G1315A  
Misc : op22999,gvul289,25,,,1,5 Multiplr: 1.00  
IntFile : rteint2.p  
Quant Time: Oct 23 9:42 2010 Quant Results File: FM102210.RES

Quant Method : D:\HPLC2\METHODS\FM102210.M (RTE Integrator)  
Title : LC8315FORM/070610/ic1253/op21796  
Last Update : Fri Oct 22 12:05:41 2010  
Response via : Multiple Level Calibration  
DataAcq Meth : F6040D.M

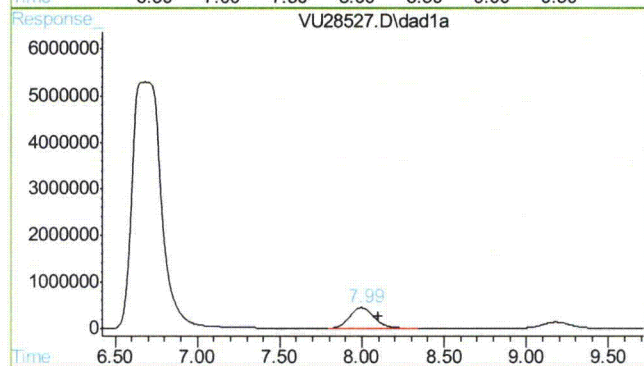
Volume Inj. :  
Signal #1 Phase : Signal #2 Phase:  
Signal #1 Info : Signal #2 Info :





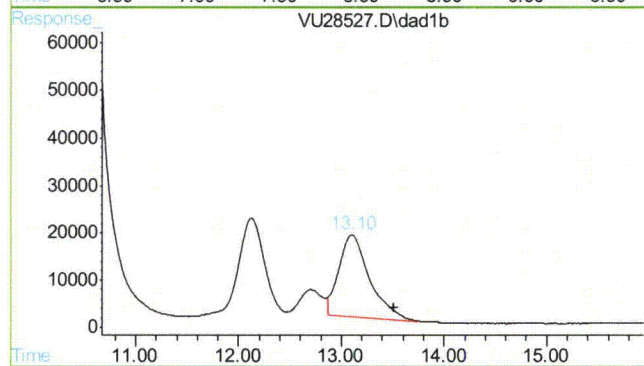
#1 Formaldehyde

R.T.: 7.995 min  
Delta R.T.: -0.107 min  
Response: 1745013  
Conc: 64.66 ppm



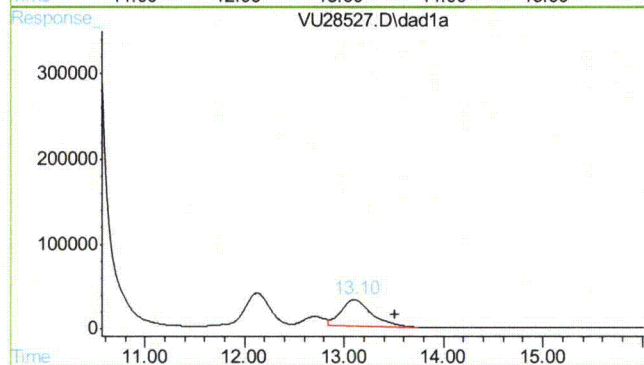
#1 Formaldehyde

R.T.: 7.995 min  
Delta R.T.: -0.107 min  
Response: 4621876  
Conc: 62.22 ppm m



#3 Butyraldehyde

R.T.: 13.098 min  
Delta R.T.: -0.413 min  
Response: 363480  
Conc: 16.74 ug/ml m



#3 Butyraldehyde

R.T.: 13.101 min  
Delta R.T.: -0.410 min  
Response: 670982  
Conc: 17.38 ug/ml m

## Quantitation Report (QT Reviewed)

Data File : D:\HPLC2\DATA\102110\VU28488.D\dad1b.ch Vial: 42  
Acq On : 22-Oct-2010, 06:05:15 Operator: caobinz  
Sample : ja58900-10 Inst : G1315A  
Misc : op22999,gvul288,25,,,1 Multiplr: 1.00  
IntFile : rteint.p

Data File : D:\HPLC2\DATA\102110\VU28488.D\dad1a.ch Vial: 42  
Acq On : 22-Oct-2010, 06:05:15 Operator: caobinz  
Sample : ja58900-10 Inst : G1315A  
Misc : Multiplr: 1.00  
IntFile : rteint2.p  
Quant Time: Oct 22 9:47 2010 Quant Results File: FM102110.RES

Quant Method : D:\HPLC2\METHODS\FM102110.M (RTE Integrator)  
Title : LC8315FORM/070610/ic1253/op21796  
Last Update : Fri Oct 22 08:44:26 2010  
Response via : Initial Calibration  
DataAcq Meth : F6040D.M

Volume Inj. :  
Signal #1 Phase : Signal #2 Phase:  
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ppm	ppm
-----						
System Monitoring Compounds						
3) s Butyraldehyde	13.48	13.48	1787239	3245320	92.649m	92.504m
Spiked Amount	50.000	Range	10 - 115	Recovery	= 185.30%#	185.01%#

Target Compounds						
2) Acetaldehyde	9.07	9.07	193740	312932	2.807	0.475 #

-----  
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.  
VU28488.D FM102110.M Fri Oct 22 10:54:18 2010 RPT1

## Quantitation Report

Data File : D:\HPLC2\DATA\102110\VU28488.D\dad1b.ch  
Acq On : 22-Oct-2010, 06:05:15  
Sample : ja58900-10  
Misc : op22999,gvu1288,25,,,1  
IntFile : rteint.p

Vial: 42  
Operator: caobinz  
Inst : G1315A  
Multiplr: 1.00

Data File : D:\HPLC2\DATA\102110\VU28488.D\dad1a.ch  
Acq On : 22-Oct-2010, 06:05:15  
Sample : ja58900-10  
Misc :  
IntFile : rteint2.p

Vial: 42  
Operator: caobinz  
Inst : G1315A  
Multiplr: 1.00

Quant Time: Oct 22 9:47 2010 Quant Results File: FM102110.RES

Quant Method : D:\HPLC2\METHODS\FM102110.M (RTE Integrator)  
Title : LC8315FORM/070610/ic1253/op21796  
Last Update : Fri Oct 22 08:44:26 2010  
Response via : Multiple Level Calibration  
DataAcq Meth : F6040D.M

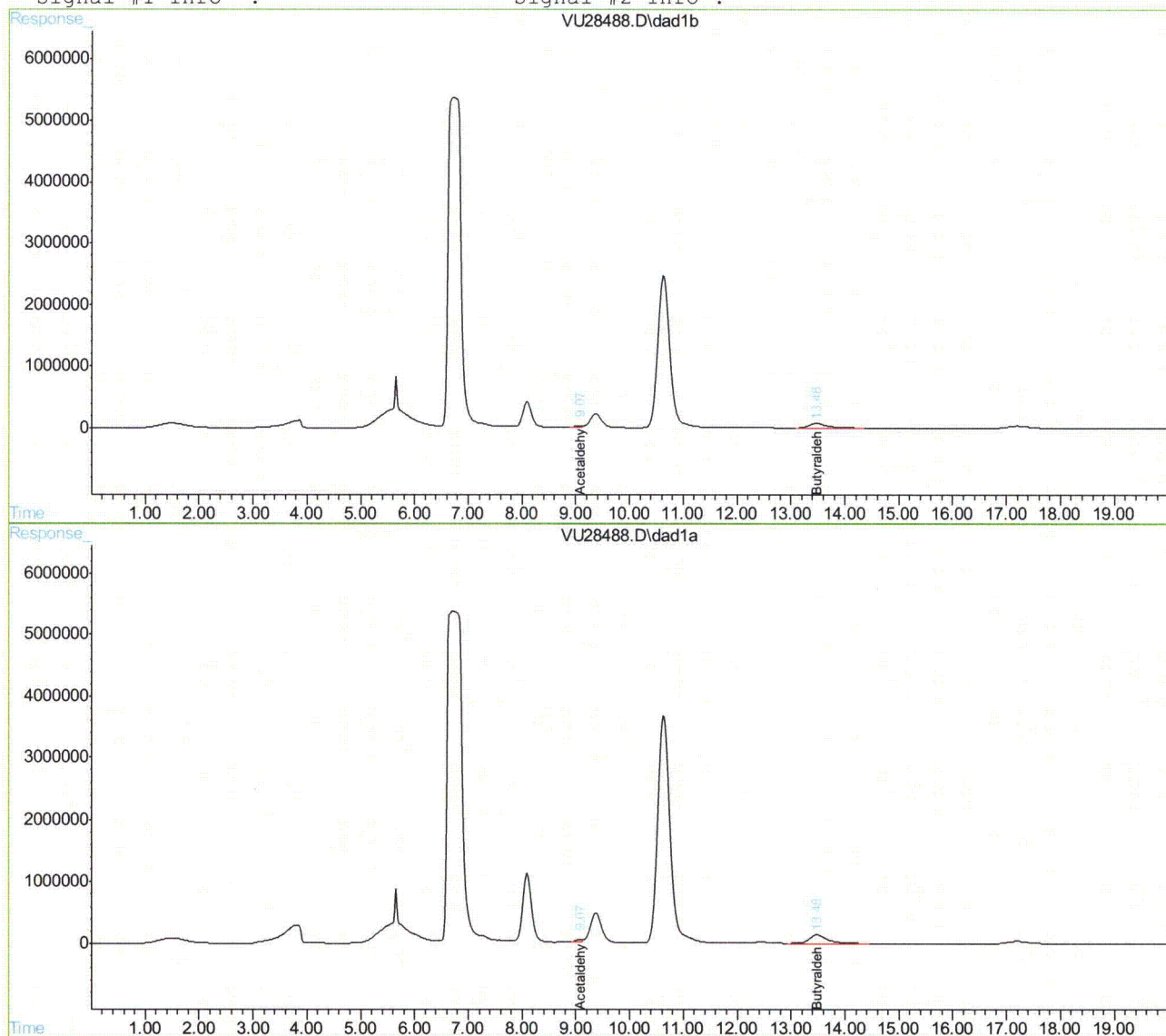
Volume Inj. :

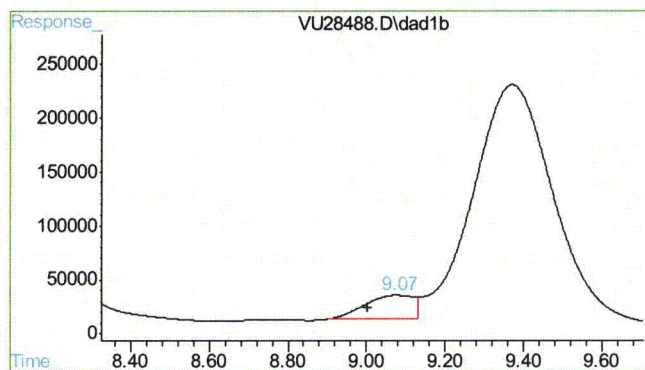
Signal #1 Phase :

Signal #1 Info :

Signal #2 Phase:

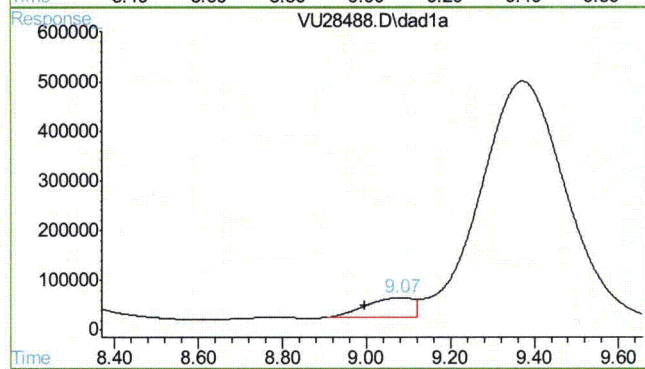
Signal #2 Info :





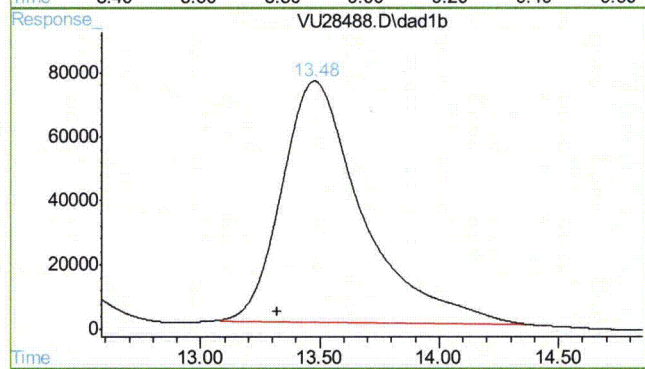
## #2 Acetaldehyde

R.T.: 9.073 min  
Delta R.T.: 0.069 min  
Response: 193740  
Conc: 2.81 ppm



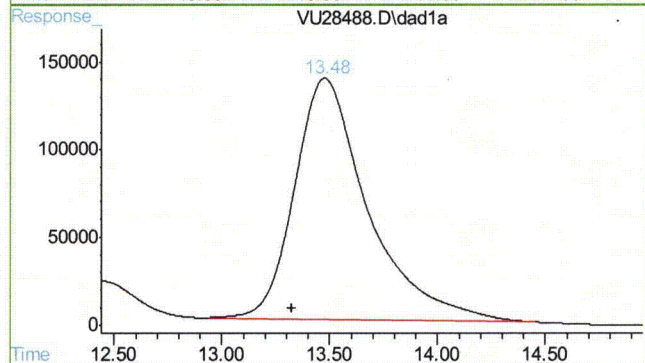
## #2 Acetaldehyde

R.T.: 9.073 min  
Delta R.T.: 0.077 min  
Response: 312932  
Conc: 0.48 ppm



## #3 Butyraldehyde

R.T.: 13.478 min  
Delta R.T.: 0.159 min  
Response: 1787239  
Conc: 92.65 ug/ml m



## #3 Butyraldehyde

R.T.: 13.478 min  
Delta R.T.: 0.154 min  
Response: 3245320  
Conc: 92.50 ug/ml m

## Quantitation Report (QT Reviewed)

Data File : D:\HPLC2\DATA\102210\VU28528.D\dad1b.ch Vial: 42  
 Acq On : 22-Oct-2010, 21:17:54 Operator: caobinz  
 Sample : ja58900-10,1ul Inst : G1315A  
 Misc : op22999,gvu1289,25,,,1,5 Multiplr: 1.00  
 IntFile : rteint.p

Data File : D:\HPLC2\DATA\102210\VU28528.D\dad1a.ch Vial: 42  
 Acq On : 22-Oct-2010, 21:17:54 Operator: caobinz  
 Sample : ja58900-10,1ul Inst : G1315A  
 Misc : Multiplr: 1.00  
 IntFile : rteint2.p

Quant Time: Oct 23 9:43 2010 Quant Results File: FM102210.RES

Quant Method : D:\HPLC2\METHODS\FM102210.M (RTE Integrator)  
 Title : LC8315FORM/070610/ic1253/op21796  
 Last Update : Fri Oct 22 12:05:41 2010  
 Response via : Initial Calibration  
 DataAcq Meth : F6040D.M

Volume Inj. :  
 Signal #1 Phase : Signal #2 Phase:  
 Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ppm	ppm
-----						
System Monitoring Compounds						
3) s Butyraldehyde	13.05f	13.04f	364458	650245	16.779m	16.879m
Spiked Amount	50.000	Range	10 - 115	Recovery =	33.56%	33.76%
Target Compounds						
1) Formaldehyde	7.97f	7.97f	998334	2680859	32.720	31.917

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.  
 VU28528.D FM102210.M Sat Oct 23 10:57:20 2010 RPT1

## Quantitation Report

Data File : D:\HPLC2\DATA\102210\VU28528.D\dad1b.ch  
Acq On : 22-Oct-2010, 21:17:54  
Sample : ja58900-10,1ul  
Misc : op22999,gvu1289,25,,,1,5  
IntFile : rteint.p

Vial: 42  
Operator: caobinz  
Inst : G1315A  
Multiplr: 1.00

Data File : D:\HPLC2\DATA\102210\VU28528.D\dad1a.ch  
Acq On : 22-Oct-2010, 21:17:54  
Sample : ja58900-10,1ul  
Misc :  
IntFile : rteint2.p

Vial: 42  
Operator: caobinz  
Inst : G1315A  
Multiplr: 1.00

Quant Time: Oct 23 9:43 2010 Quant Results File: FM102210.RES

Quant Method : D:\HPLC2\METHODS\FM102210.M (RTE Integrator)  
Title : LC8315FORM/070610/ic1253/op21796  
Last Update : Fri Oct 22 12:05:41 2010  
Response via : Multiple Level Calibration  
DataAcq Meth : F6040D.M

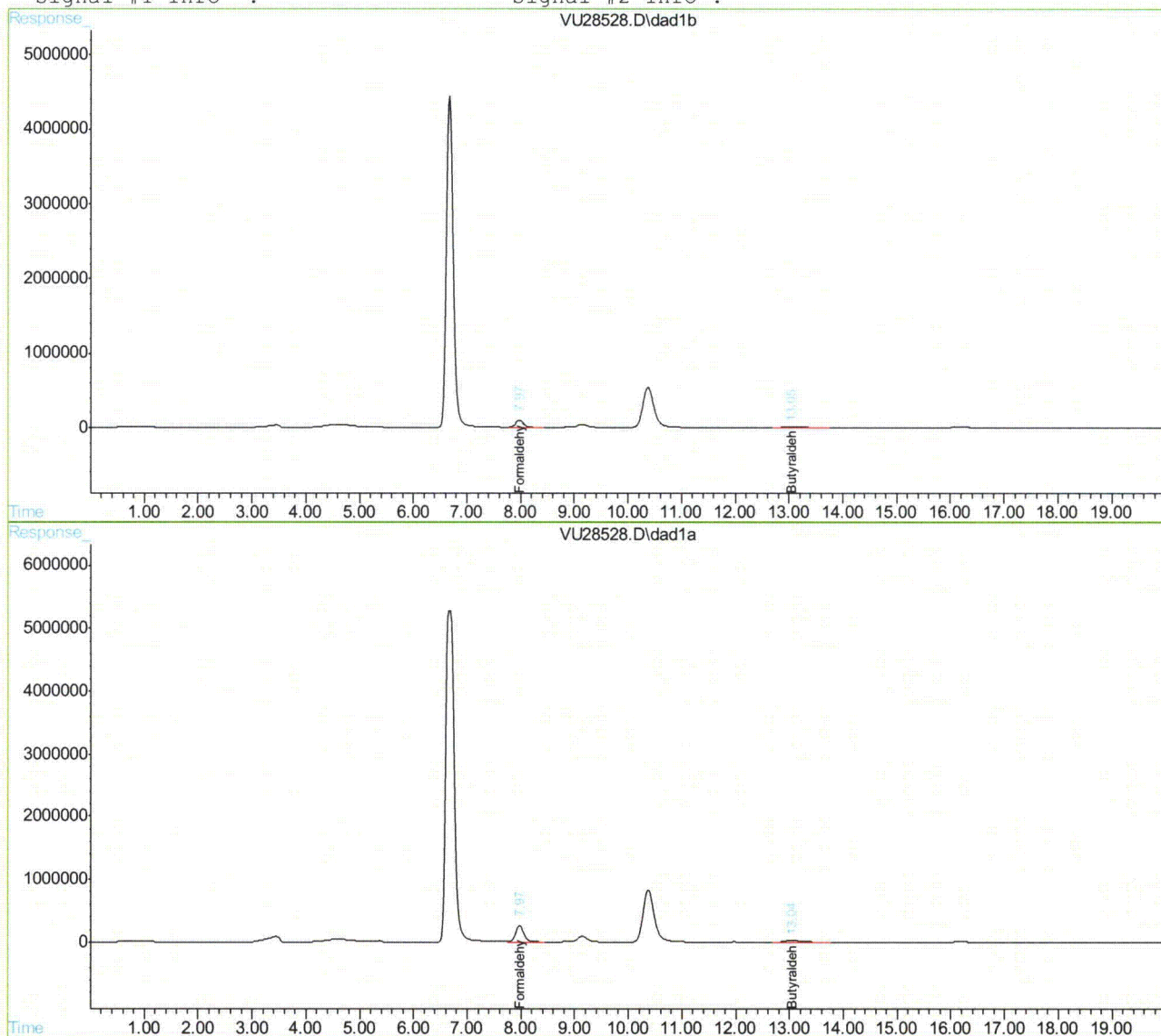
Volume Inj. :

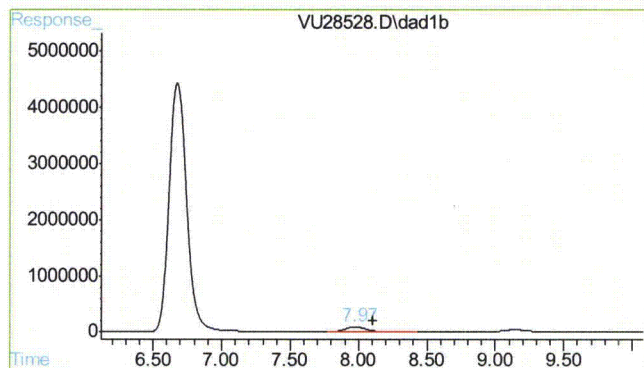
Signal #1 Phase :

Signal #1 Info :

Signal #2 Phase:

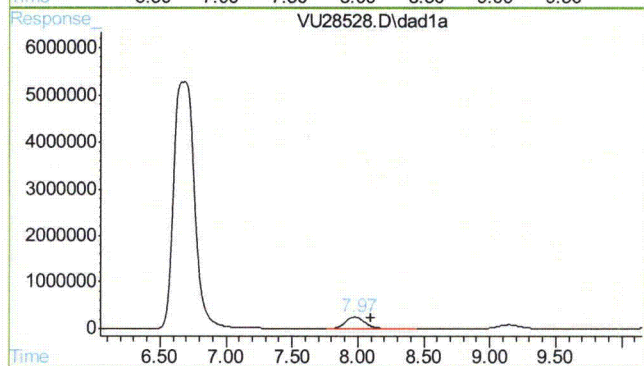
Signal #2 Info :





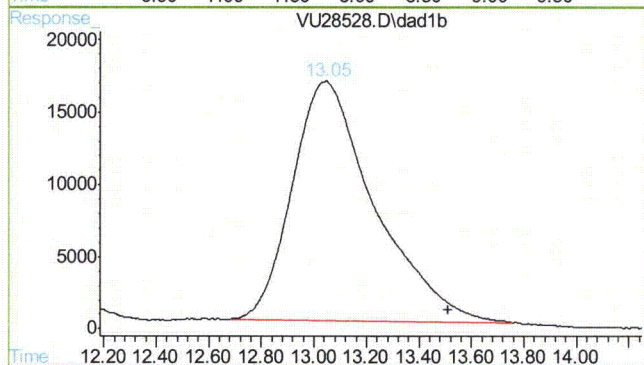
#1 Formaldehyde

R.T.: 7.974 min  
Delta R.T.: -0.127 min  
Response: 998334  
Conc: 32.72 ppm



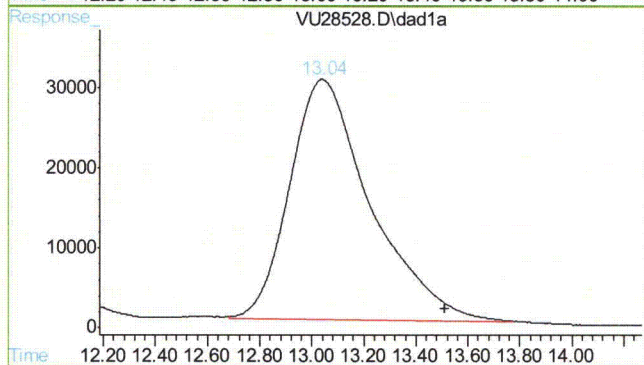
#1 Formaldehyde

R.T.: 7.974 min  
Delta R.T.: -0.127 min  
Response: 2680859  
Conc: 31.92 ppm



#3 Butyraldehyde

R.T.: 13.046 min  
Delta R.T.: -0.465 min  
Response: 364458  
Conc: 16.78 ug/ml m



#3 Butyraldehyde

R.T.: 13.038 min  
Delta R.T.: -0.474 min  
Response: 650245  
Conc: 16.88 ug/ml m

## Quantitation Report (QT Reviewed)

Data File : D:\HPLC2\DATA\102110\VU28489.D\dad1b.ch Vial: 43  
Acq On : 22-Oct-2010, 06:26:11 Operator: caobinz  
Sample : ja58900-11 Inst : G1315A  
Misc : op22999,gvul288,25,,,1 Multiplr: 1.00  
IntFile : rteint.p

Data File : D:\HPLC2\DATA\102110\VU28489.D\dad1a.ch Vial: 43  
Acq On : 22-Oct-2010, 06:26:11 Operator: caobinz  
Sample : ja58900-11 Inst : G1315A  
Misc : Multiplr: 1.00  
IntFile : rteint2.p

Quant Time: Oct 22 9:47 2010 Quant Results File: FM102110.RES

Quant Method : D:\HPLC2\METHODS\FM102110.M (RTE Integrator)  
Title : LC8315FORM/070610/ic1253/op21796  
Last Update : Fri Oct 22 08:44:26 2010  
Response via : Initial Calibration  
DataAcq Meth : F6040D.M

Volume Inj. :  
Signal #1 Phase : Signal #2 Phase:  
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ppm	ppm
-----						
System Monitoring Compounds						
3) s Butyraldehyde	13.51	13.51	1636469	2946053	82.684m	81.833m
Spiked Amount	50.000	Range	10 - 115	Recovery	= 165.37%#	163.67%#

Target Compounds						
2) Acetaldehyde	9.09	9.09	227408	381845	3.457	1.211 #

-----  
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.  
VU28489.D FM102110.M Fri Oct 22 10:54:23 2010 RPT1

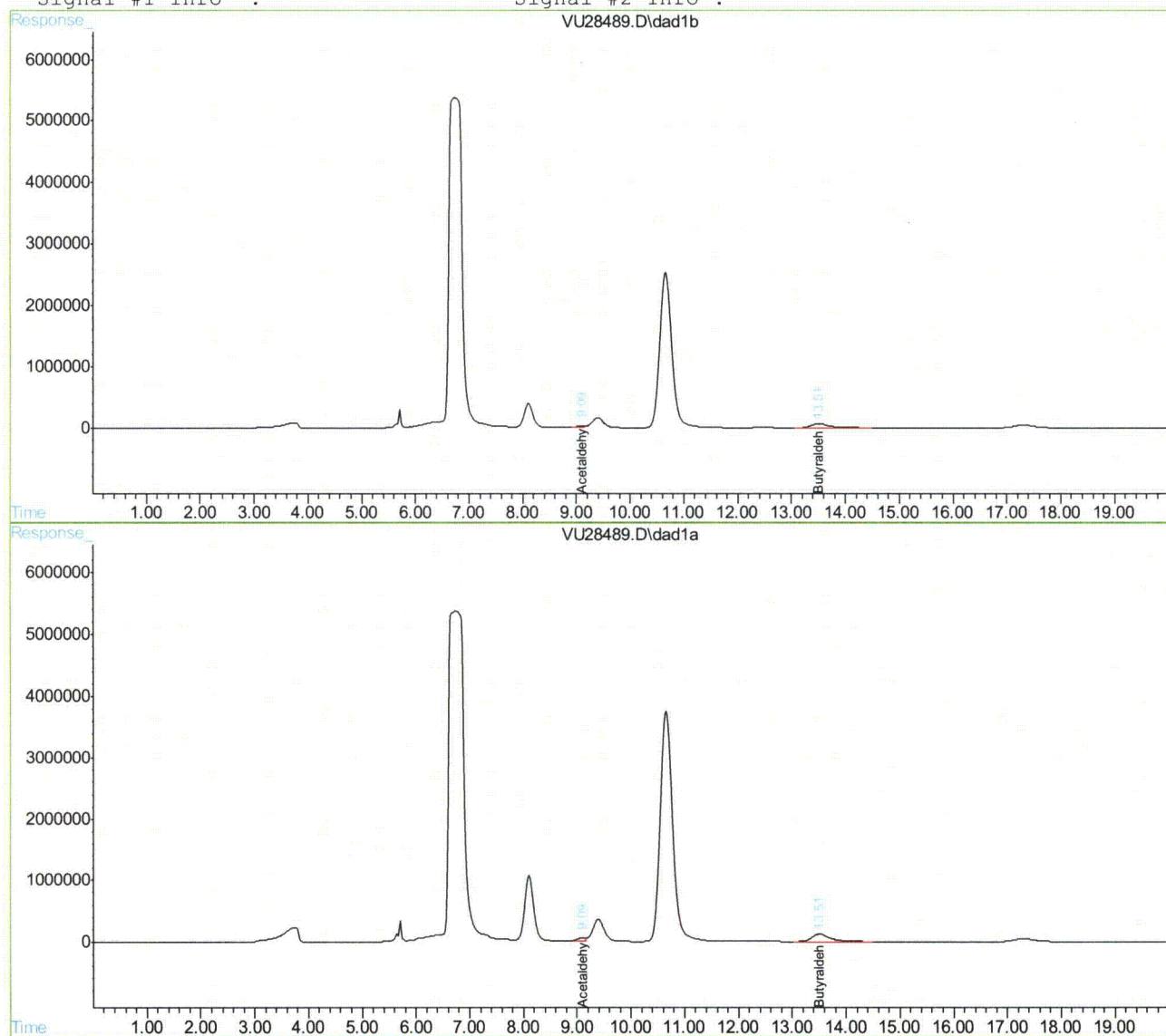
## Quantitation Report

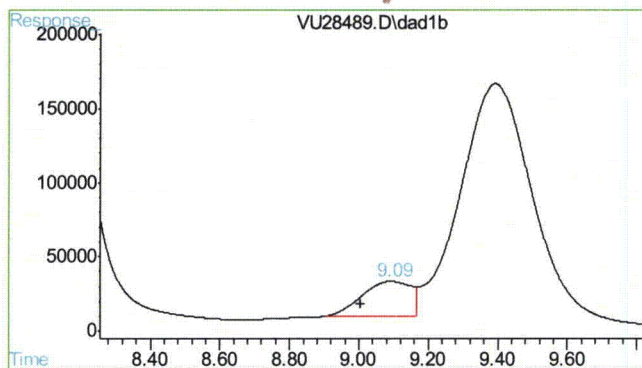
Data File : D:\HPLC2\DATA\102110\VU28489.D\dad1b.ch Vial: 43  
Acq On : 22-Oct-2010, 06:26:11 Operator: caobinz  
Sample : ja58900-11 Inst : G1315A  
Misc : op22999,gvu1288,25,,,1 Multiplr: 1.00  
IntFile : rteint.p

Data File : D:\HPLC2\DATA\102110\VU28489.D\dad1a.ch Vial: 43  
Acq On : 22-Oct-2010, 06:26:11 Operator: caobinz  
Sample : ja58900-11 Inst : G1315A  
Misc : Multiplr: 1.00  
IntFile : rteint2.p  
Quant Time: Oct 22 9:47 2010 Quant Results File: FM102110.RES

Quant Method : D:\HPLC2\METHODS\FM102110.M (RTE Integrator)  
Title : LC8315FORM/070610/ic1253/op21796  
Last Update : Fri Oct 22 08:44:26 2010  
Response via : Multiple Level Calibration  
DataAcq Meth : F6040D.M

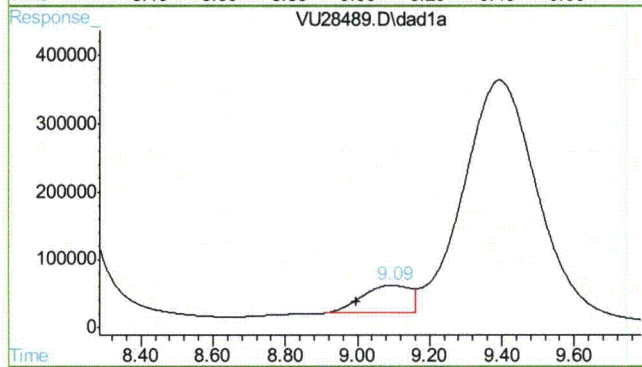
Volume Inj. :  
Signal #1 Phase : Signal #2 Phase:  
Signal #1 Info : Signal #2 Info :





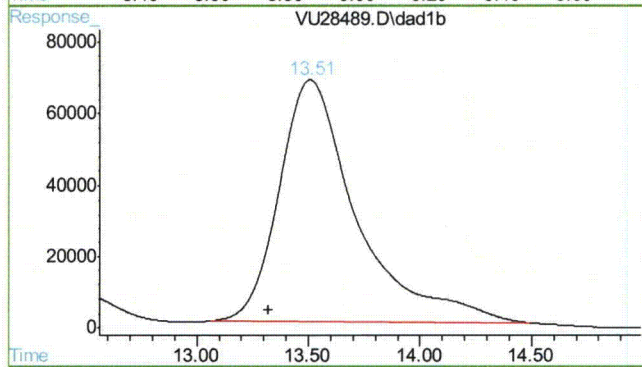
#2 Acetaldehyde

R.T.: 9.091 min  
Delta R.T.: 0.087 min  
Response: 227408  
Conc: 3.46 ppm



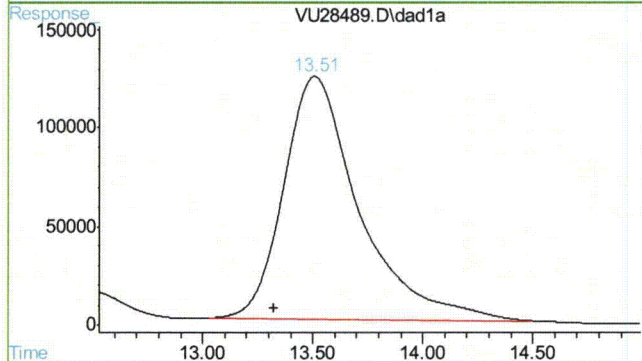
#2 Acetaldehyde

R.T.: 9.091 min  
Delta R.T.: 0.095 min  
Response: 381845  
Conc: 1.21 ppm



#3 Butyraldehyde

R.T.: 13.506 min  
Delta R.T.: 0.187 min  
Response: 1636469  
Conc: 82.68 ug/ml m



#3 Butyraldehyde

R.T.: 13.506 min  
Delta R.T.: 0.182 min  
Response: 2946053  
Conc: 81.83 ug/ml m

## Quantitation Report (QT Reviewed)

Data File : D:\HPLC2\DATA\102210\VU28529.D\dad1b.ch Vial: 43  
 Acq On : 22-Oct-2010, 21:38:47 Operator: caobinz  
 Sample : ja58900-11,1ul Inst : G1315A  
 Misc : op22999,gvul289,25,,,1,5 Multiplr: 1.00  
 IntFile : rteint.p

Data File : D:\HPLC2\DATA\102210\VU28529.D\dad1a.ch Vial: 43  
 Acq On : 22-Oct-2010, 21:38:47 Operator: caobinz  
 Sample : ja58900-11,1ul Inst : G1315A  
 Misc : Multiplr: 1.00  
 IntFile : rteint2.p

Quant Time: Oct 23 9:44 2010 Quant Results File: FM102210.RES

Quant Method : D:\HPLC2\METHODS\FM102210.M (RTE Integrator)  
 Title : LC8315FORM/070610/ic1253/op21796  
 Last Update : Fri Oct 22 12:05:41 2010  
 Response via : Initial Calibration  
 DataAcq Meth : F6040D.M

Volume Inj. :  
 Signal #1 Phase : Signal #2 Phase:  
 Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ppm	ppm
-----						
System Monitoring Compounds						
3) s Butyraldehyde	13.04f	13.04f	334061	588914	15.458m	15.410m
Spiked Amount	50.000	Range	10 - 115	Recovery =	30.92%	30.82%
Target Compounds						
1) Formaldehyde	7.97f	7.97f	939865	2507649	30.498	29.511

-----  
 (f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.  
 VU28529.D FM102210.M Sat Oct 23 10:57:25 2010 RPT1

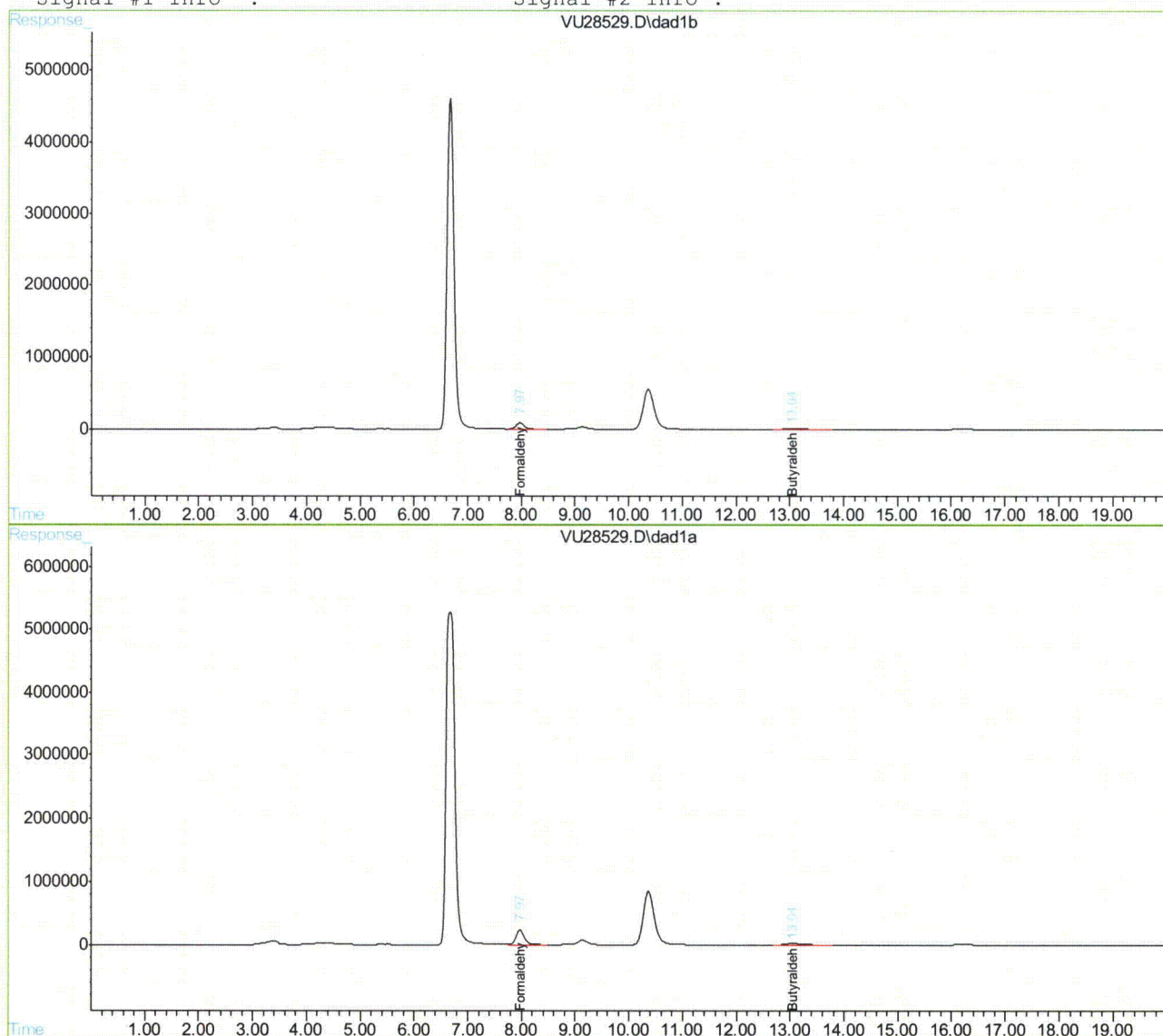
## Quantitation Report

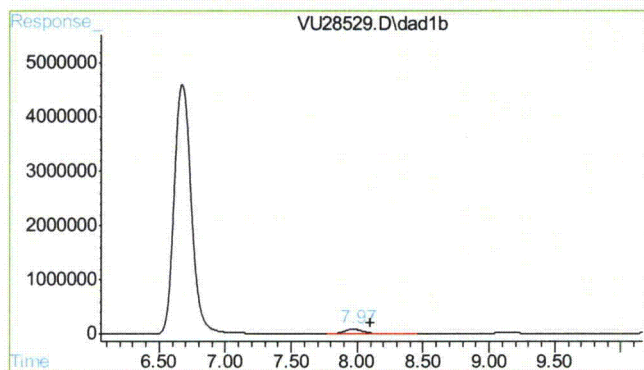
Data File : D:\HPLC2\DATA\102210\VU28529.D\dad1b.ch Vial: 43  
Acq On : 22-Oct-2010, 21:38:47 Operator: caobinz  
Sample : ja58900-11,1ul Inst : G1315A  
Misc : op22999,gvu1289,25,,,1,5 Multiplr: 1.00  
IntFile : rteint.p

Data File : D:\HPLC2\DATA\102210\VU28529.D\dad1a.ch Vial: 43  
Acq On : 22-Oct-2010, 21:38:47 Operator: caobinz  
Sample : ja58900-11,1ul Inst : G1315A  
Misc : Multiplr: 1.00  
IntFile : rteint2.p  
Quant Time: Oct 23 9:44 2010 Quant Results File: FM102210.RES

Quant Method : D:\HPLC2\METHODS\FM102210.M (RTE Integrator)  
Title : LC8315FORM/070610/ic1253/op21796  
Last Update : Fri Oct 22 12:05:41 2010  
Response via : Multiple Level Calibration  
DataAcq Meth : F6040D.M

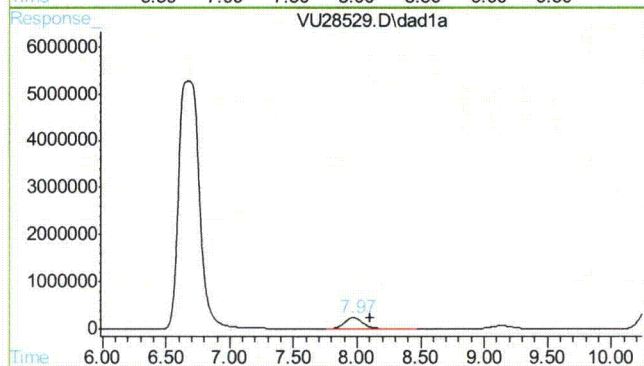
Volume Inj. :  
Signal #1 Phase : Signal #2 Phase:  
Signal #1 Info : Signal #2 Info :





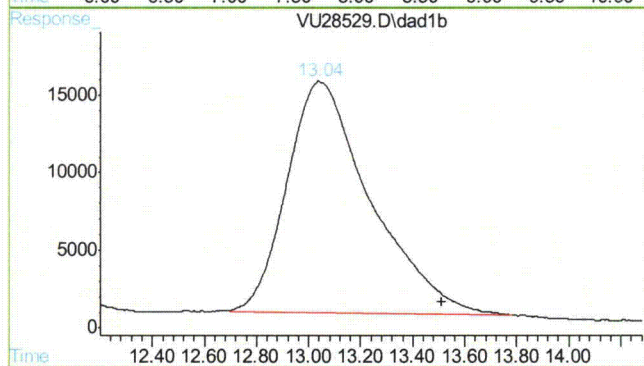
## #1 Formaldehyde

R.T.: 7.970 min  
Delta R.T.: -0.131 min  
Response: 939865  
Conc: 30.50 ppm



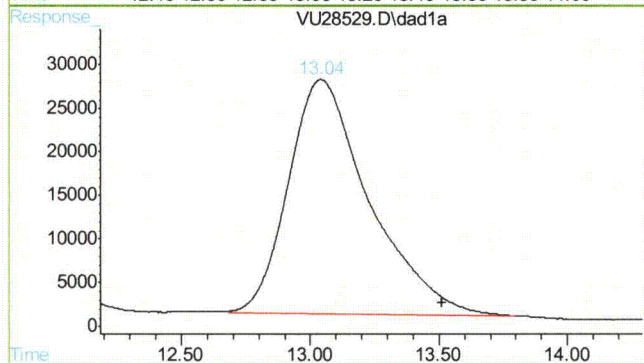
## #1 Formaldehyde

R.T.: 7.970 min  
Delta R.T.: -0.131 min  
Response: 2507649  
Conc: 29.51 ppm



## #3 Butyraldehyde

R.T.: 13.037 min  
Delta R.T.: -0.474 min  
Response: 334061  
Conc: 15.46 ug/ml m



## #3 Butyraldehyde

R.T.: 13.037 min  
Delta R.T.: -0.474 min  
Response: 588914  
Conc: 15.41 ug/ml m

## Quantitation Report (QT Reviewed)

Data File : D:\HPLC2\DATA\102110\VU28490.D\dad1b.ch Vial: 44  
Acq On : 22-Oct-2010, 06:47:02 Operator: caobinz  
Sample : ja58900-12 Inst : G1315A  
Misc : op22999,gvul288,25,,,1 Multiplr: 1.00  
IntFile : rteint.p

Data File : D:\HPLC2\DATA\102110\VU28490.D\dad1a.ch Vial: 44  
Acq On : 22-Oct-2010, 06:47:02 Operator: caobinz  
Sample : ja58900-12 Inst : G1315A  
Misc : Multiplr: 1.00  
IntFile : rteint2.p

Quant Time: Oct 22 9:48 2010 Quant Results File: FM102110.RES

Quant Method : D:\HPLC2\METHODS\FM102110.M (RTE Integrator)  
Title : LC8315FORM/070610/ic1253/op21796  
Last Update : Fri Oct 22 08:44:26 2010  
Response via : Initial Calibration  
DataAcq Meth : F6040D.M

Volume Inj. :  
Signal #1 Phase : Signal #2 Phase:  
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ppm	ppm
-----						
System Monitoring Compounds						
3) s Butyraldehyde	13.52	13.52	1667530	2992511	84.679	83.440m
Spiked Amount	50.000	Range	10 - 115	Recovery	= 169.36%#	166.88%#

Target Compounds						
2) Acetaldehyde	9.10	9.10	207879	320999	3.080	0.561 #

-----  
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.  
VU28490.D FM102110.M Fri Oct 22 10:54:29 2010 RPT1

## Quantitation Report

Data File : D:\HPLC2\DATA\102110\VU28490.D\dad1b.ch  
Acq On : 22-Oct-2010, 06:47:02  
Sample : ja58900-12  
Misc : op22999,gvu1288,25,,,1  
IntFile : rteint.p

Vial: 44  
Operator: caobinz  
Inst : G1315A  
Multiplr: 1.00

Data File : D:\HPLC2\DATA\102110\VU28490.D\dad1a.ch  
Acq On : 22-Oct-2010, 06:47:02  
Sample : ja58900-12  
Misc :  
IntFile : rteint2.p

Vial: 44  
Operator: caobinz  
Inst : G1315A  
Multiplr: 1.00

Quant Time: Oct 22 9:48 2010 Quant Results File: FM102110.RES

Quant Method : D:\HPLC2\METHODS\FM102110.M (RTE Integrator)  
Title : LC8315FORM/070610/ic1253/op21796  
Last Update : Fri Oct 22 08:44:26 2010  
Response via : Multiple Level Calibration  
DataAcq Meth : F6040D.M

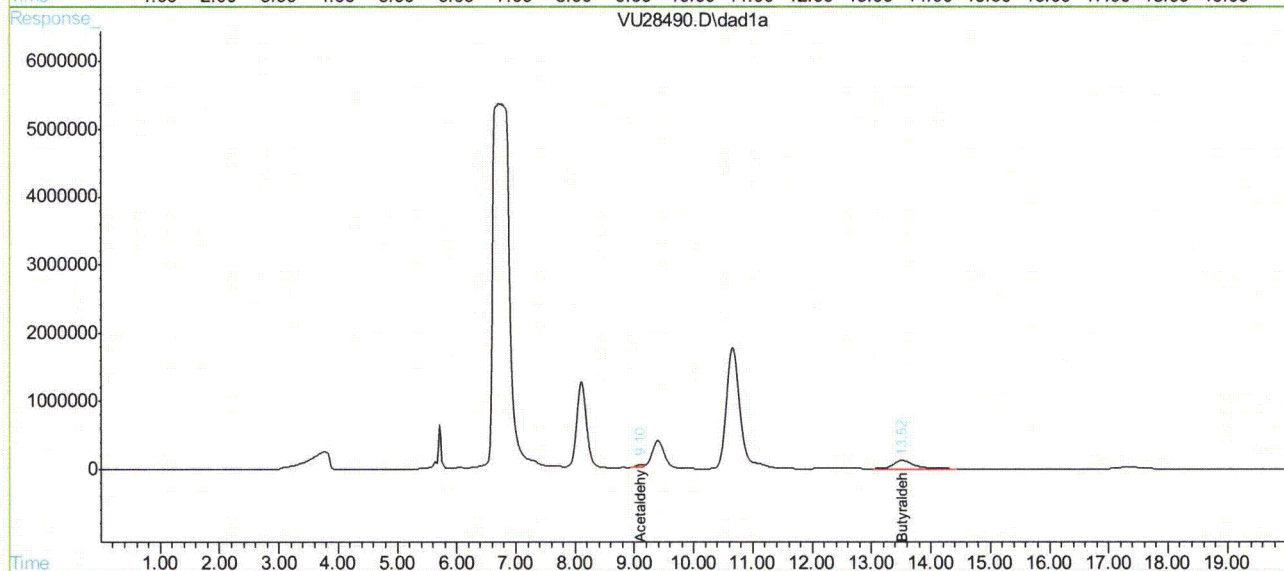
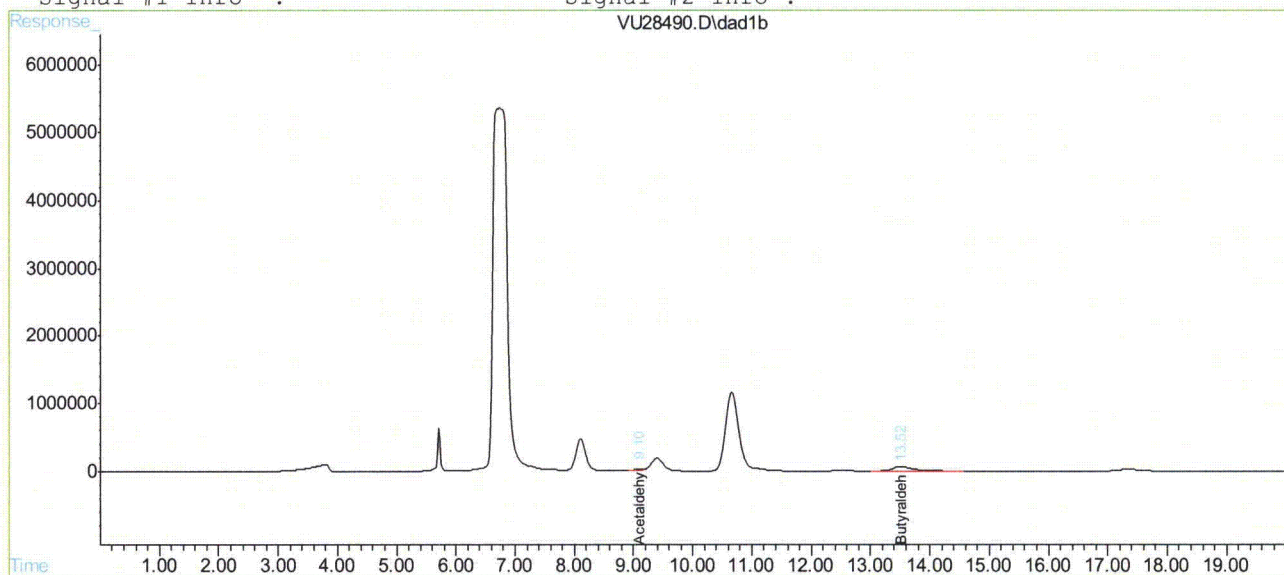
Volume Inj. :

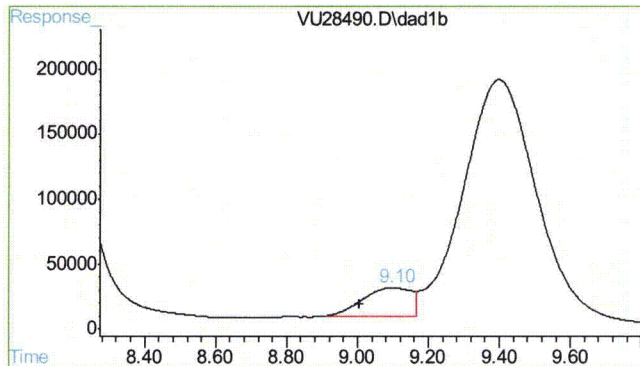
Signal #1 Phase :

Signal #1 Info :

Signal #2 Phase:

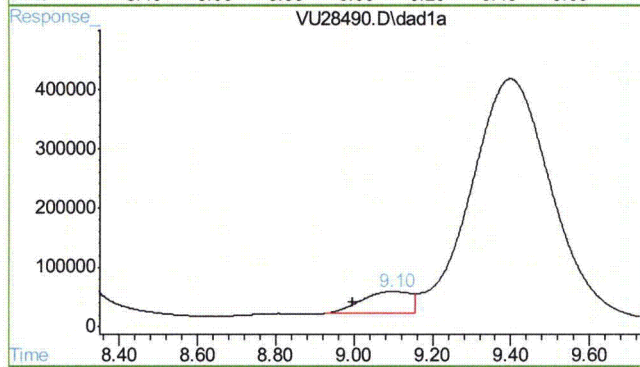
Signal #2 Info :





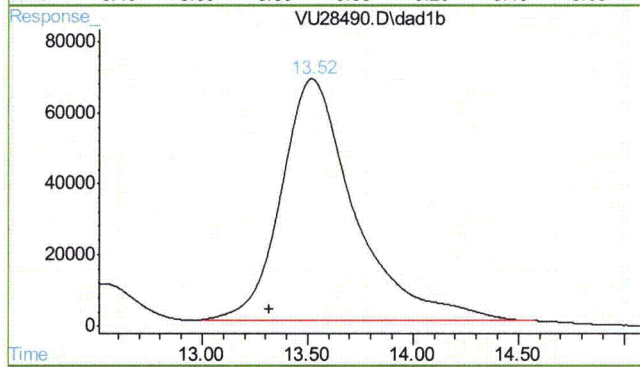
#2 Acetaldehyde

R.T.: 9.098 min  
Delta R.T.: 0.093 min  
Response: 207879  
Conc: 3.08 ppm



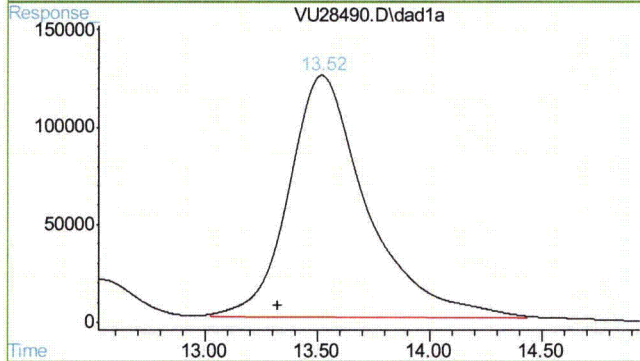
#2 Acetaldehyde

R.T.: 9.096 min  
Delta R.T.: 0.100 min  
Response: 320999  
Conc: 0.56 ppm



#3 Butyraldehyde

R.T.: 13.519 min  
Delta R.T.: 0.200 min  
Response: 1667530  
Conc: 84.68 ug/ml



#3 Butyraldehyde

R.T.: 13.519 min  
Delta R.T.: 0.195 min  
Response: 2992511  
Conc: 83.44 ug/ml m

## Quantitation Report (QT Reviewed)

Data File : D:\HPLC2\DATA\102210\VU28530.D\dad1b.ch Vial: 44  
 Acq On : 22-Oct-2010, 21:59:39 Operator: caobinz  
 Sample : ja58900-12,1ul Inst : G1315A  
 Misc : op22999,gvul289,25,,,1,5 Multiplr: 1.00  
 IntFile : rteint.p

Data File : D:\HPLC2\DATA\102210\VU28530.D\dad1a.ch Vial: 44  
 Acq On : 22-Oct-2010, 21:59:39 Operator: caobinz  
 Sample : ja58900-12,1ul Inst : G1315A  
 Misc : Multiplr: 1.00  
 IntFile : rteint2.p

Quant Time: Oct 23 9:44 2010 Quant Results File: FM102210.RES

Quant Method : D:\HPLC2\METHODS\FM102210.M (RTE Integrator)  
 Title : LC8315FORM/070610/ic1253/op21796  
 Last Update : Fri Oct 22 12:05:41 2010  
 Response via : Initial Calibration  
 DataAcq Meth : F6040D.M

Volume Inj. :  
 Signal #1 Phase : Signal #2 Phase:  
 Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ppm	ppm
-----						
System Monitoring Compounds						
3) s Butyraldehyde	13.05f	13.05f	320026	578600	14.850m	15.164m
Spiked Amount	50.000	Range	10 - 115	Recovery	= 29.70%	30.33%
Target Compounds						
1) Formaldehyde	7.97f	7.97f	1093476	2880804	36.406	34.744m

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.  
 VU28530.D FM102210.M Sat Oct 23 10:57:31 2010 RPT1

## Quantitation Report

Data File : D:\HPLC2\DATA\102210\VU28530.D\dad1b.ch  
Acq On : 22-Oct-2010, 21:59:39  
Sample : ja58900-12,1ul  
Misc : op22999,gvu1289,25,,,1,5  
IntFile : rteint.p

Vial: 44  
Operator: caobinz  
Inst : G1315A  
Multiplr: 1.00

Data File : D:\HPLC2\DATA\102210\VU28530.D\dad1a.ch  
Acq On : 22-Oct-2010, 21:59:39  
Sample : ja58900-12,1ul  
Misc :  
IntFile : rteint2.p

Vial: 44  
Operator: caobinz  
Inst : G1315A  
Multiplr: 1.00

Quant Time: Oct 23 9:44 2010 Quant Results File: FM102210.RES

Quant Method : D:\HPLC2\METHODS\FM102210.M (RTE Integrator)  
Title : LC8315FORM/070610/ic1253/op21796  
Last Update : Fri Oct 22 12:05:41 2010  
Response via : Multiple Level Calibration  
DataAcq Meth : F6040D.M

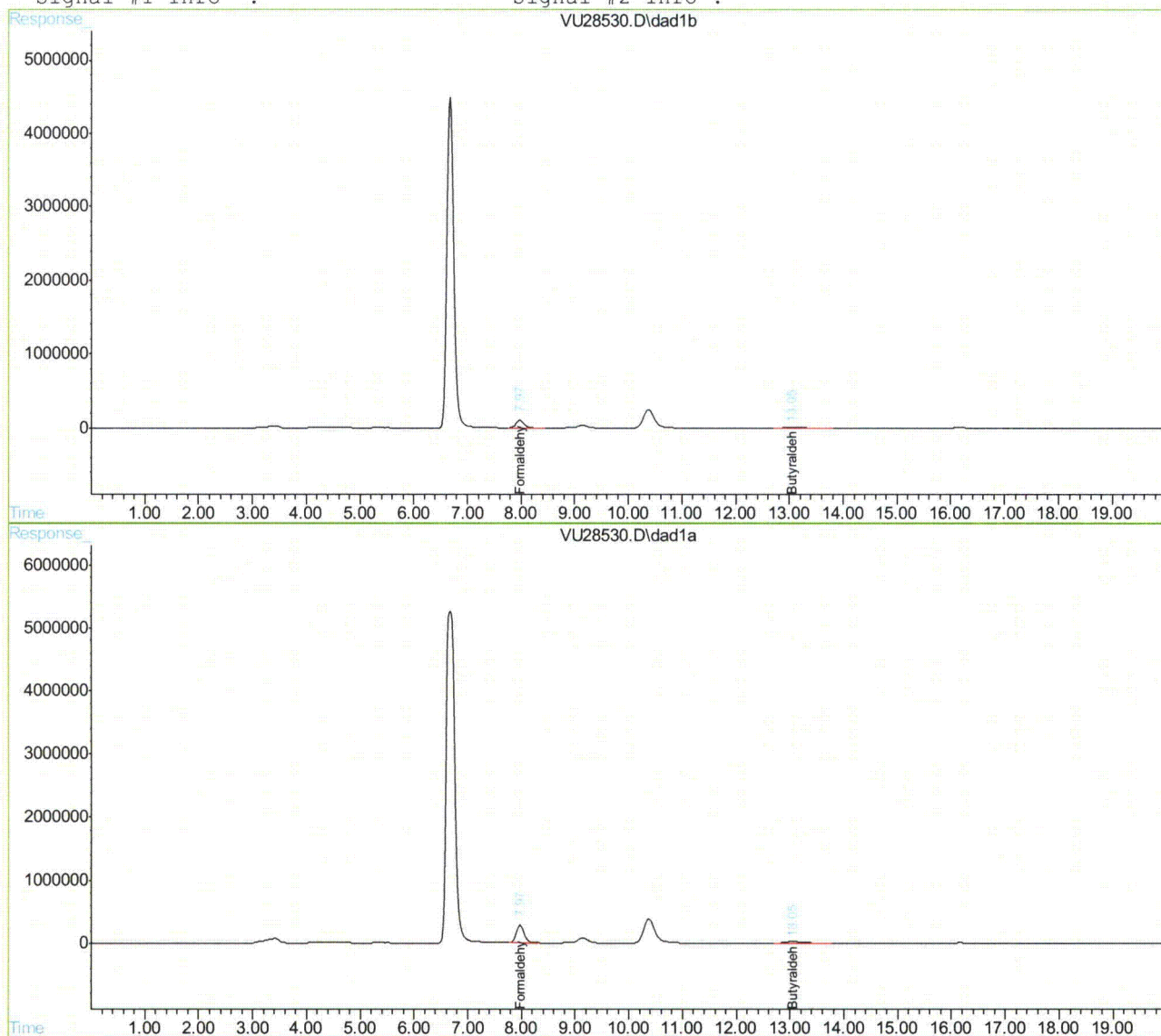
Volume Inj. :

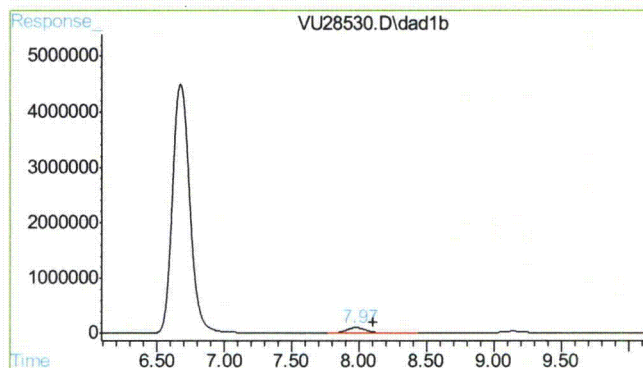
Signal #1 Phase :

Signal #1 Info :

Signal #2 Phase:

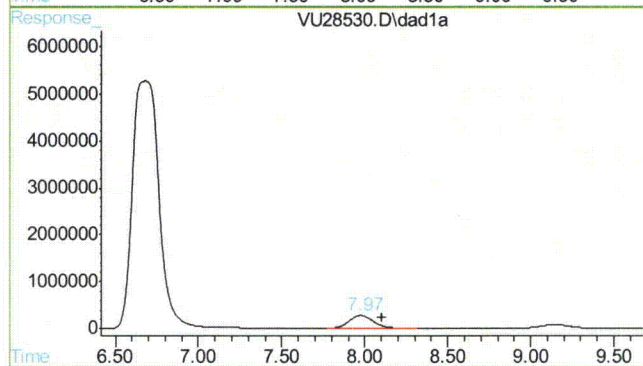
Signal #2 Info :





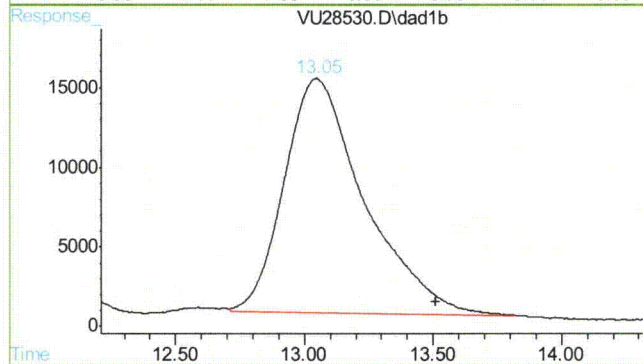
#1 Formaldehyde

R.T.: 7.974 min  
Delta R.T.: -0.128 min  
Response: 1093476  
Conc: 36.41 ppm



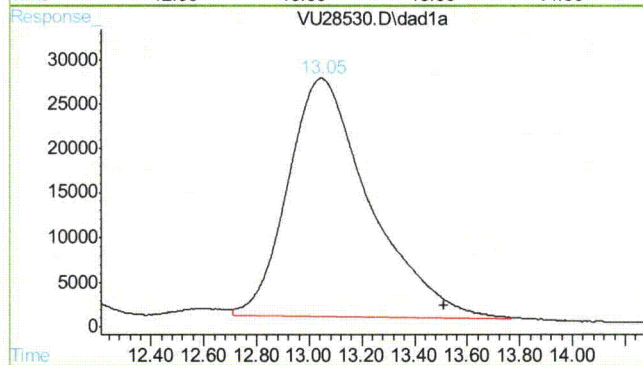
#1 Formaldehyde

R.T.: 7.974 min  
Delta R.T.: -0.128 min  
Response: 2880804  
Conc: 34.74 ppm m



#3 Butyraldehyde

R.T.: 13.047 min  
Delta R.T.: -0.464 min  
Response: 320026  
Conc: 14.85 ug/ml m



#3 Butyraldehyde

R.T.: 13.047 min  
Delta R.T.: -0.464 min  
Response: 578600  
Conc: 15.16 ug/ml m

**John Hamilton  
11/08/10 15:12**

## Quantitation Report (QT Reviewed)

Data File : D:\HPLC2\DATA\102110\VU28491.D\dad1b.ch Vial: 45  
Acq On : 22-Oct-2010, 07:07:57 Operator: caobinz  
Sample : ja58900-14 Inst : G1315A  
Misc : op22999,gvul288,25,,,1 Multiplr: 1.00  
IntFile : rteint.p

Data File : D:\HPLC2\DATA\102110\VU28491.D\dad1a.ch Vial: 45  
Acq On : 22-Oct-2010, 07:07:57 Operator: caobinz  
Sample : ja58900-14 Inst : G1315A  
Misc : Multiplr: 1.00  
IntFile : rteint2.p

Quant Time: Oct 22 9:48 2010 Quant Results File: FM102110.RES

Quant Method : D:\HPLC2\METHODS\FM102110.M (RTE Integrator)  
Title : LC8315FORM/070610/ic1253/op21796  
Last Update : Fri Oct 22 08:44:26 2010  
Response via : Initial Calibration  
DataAcq Meth : F6040D.M

Volume Inj. :  
Signal #1 Phase : Signal #2 Phase:  
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ppm	ppm
-----						
System Monitoring Compounds						
3) s Butyraldehyde	13.52	13.52	1573131	2871835	78.700	79.302m
Spiked Amount	50.000	Range	10 - 115	Recovery	=	157.40%# 158.60%#

Target Compounds						
2) Acetaldehyde	9.10	9.10	126451	197866	1.515	397.854 #

-----  
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.  
VU28491.D FM102110.M Fri Oct 22 10:54:33 2010 RPT1

## Quantitation Report

Data File : D:\HPLC2\DATA\102110\VU28491.D\dad1b.ch  
Acq On : 22-Oct-2010, 07:07:57  
Sample : ja58900-14  
Misc : op22999,gvu1288,25,,,1  
IntFile : rteint.p

Vial: 45  
Operator: caobinz  
Inst : G1315A  
Multiplr: 1.00

Data File : D:\HPLC2\DATA\102110\VU28491.D\dad1a.ch  
Acq On : 22-Oct-2010, 07:07:57  
Sample : ja58900-14  
Misc :  
IntFile : rteint2.p

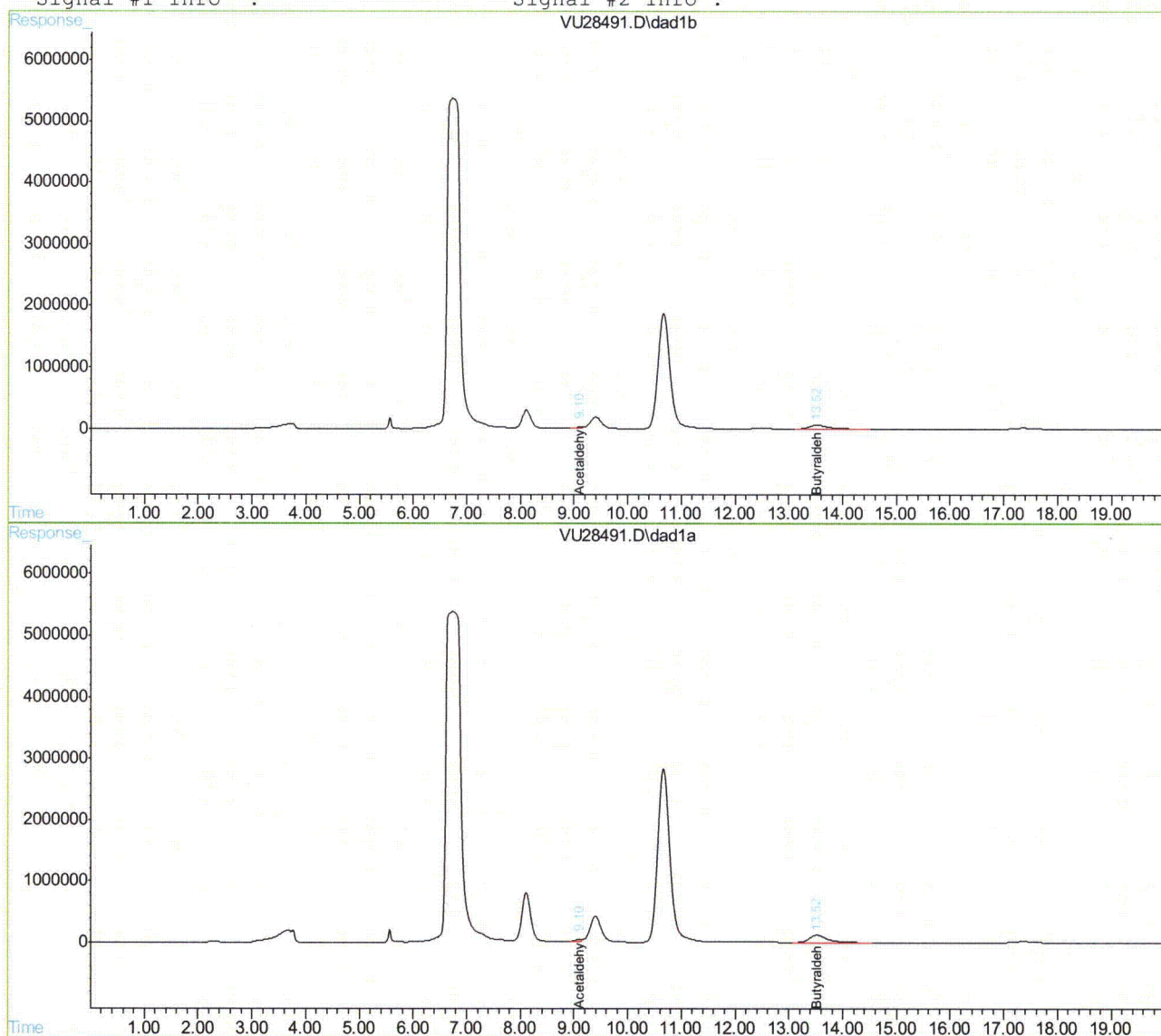
Vial: 45  
Operator: caobinz  
Inst : G1315A  
Multiplr: 1.00

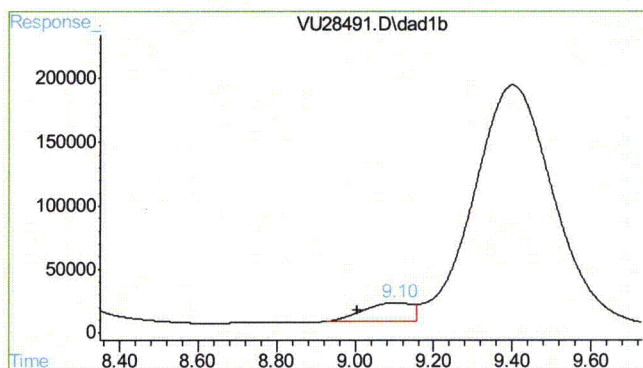
Quant Time: Oct 22 9:48 2010 Quant Results File: FM102110.RES

Quant Method : D:\HPLC2\METHODS\FM102110.M (RTE Integrator)  
Title : LC8315FORM/070610/ic1253/op21796  
Last Update : Fri Oct 22 08:44:26 2010  
Response via : Multiple Level Calibration  
DataAcq Meth : F6040D.M

Volume Inj. :  
Signal #1 Phase :  
Signal #1 Info :

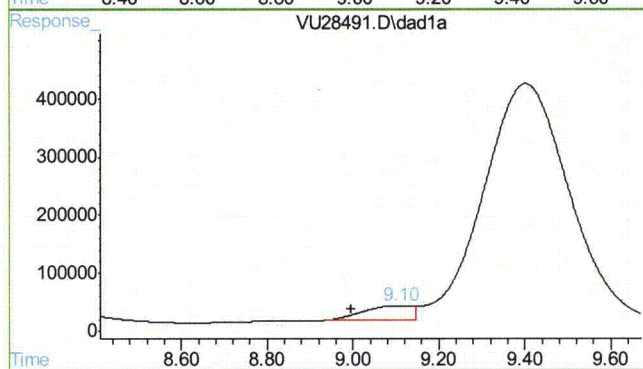
Signal #2 Phase :  
Signal #2 Info :





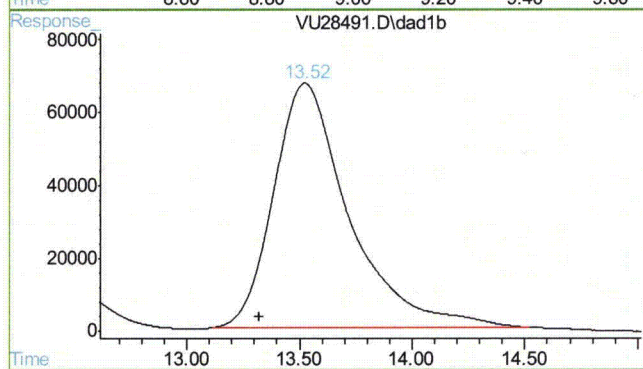
## #2 Acetaldehyde

R.T.: 9.101 min  
Delta R.T.: 0.097 min  
Response: 126451  
Conc: 1.52 ppm



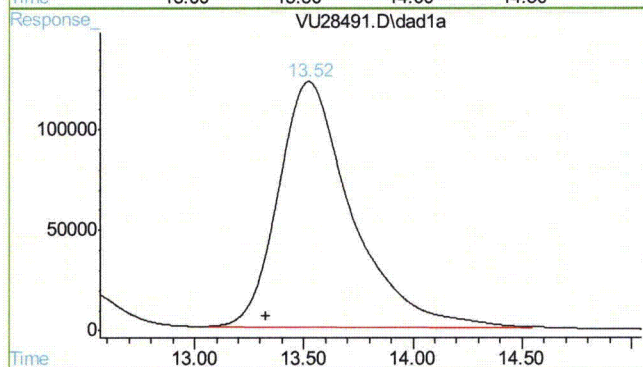
## #2 Acetaldehyde

R.T.: 9.100 min  
Delta R.T.: 0.104 min  
Response: 197866  
Conc: 397.85 ppm



## #3 Butyraldehyde

R.T.: 13.523 min  
Delta R.T.: 0.204 min  
Response: 1573131  
Conc: 78.70 ug/ml



## #3 Butyraldehyde

R.T.: 13.523 min  
Delta R.T.: 0.199 min  
Response: 2871835  
Conc: 79.30 ug/ml m

## Quantitation Report (QT Reviewed)

Data File : D:\HPLC2\DATA\102210\VU28531.D\dad1b.ch Vial: 45  
 Acq On : 22-Oct-2010, 22:20:32 Operator: caobinz  
 Sample : ja58900-14,1ul Inst : G1315A  
 Misc : op22999,gvul289,25,,,1,5 Multiplr: 1.00  
 IntFile : rteint.p

Data File : D:\HPLC2\DATA\102210\VU28531.D\dad1a.ch Vial: 45  
 Acq On : 22-Oct-2010, 22:20:32 Operator: caobinz  
 Sample : ja58900-14,1ul Inst : G1315A  
 Misc : Multiplr: 1.00  
 IntFile : rteint2.p

Quant Time: Oct 23 9:47 2010 Quant Results File: FM102210.RES

Quant Method : D:\HPLC2\METHODS\FM102210.M (RTE Integrator)  
 Title : LC8315FORM/070610/ic1253/op21796  
 Last Update : Sat Oct 23 09:46:07 2010  
 Response via : Initial Calibration  
 DataAcq Meth : F6040D.M

Volume Inj. :  
 Signal #1 Phase : Signal #2 Phase:  
 Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ppm	ppm
-----						
System Monitoring Compounds						
3) s Butyraldehyde	13.08	13.08	329574	583853	15.263m	15.289m
Spiked Amount	50.000	Range	10 - 115	Recovery	= 30.53%	30.58%
Target Compounds						
1) Formaldehyde	7.99	7.99	665664	1847091	20.479m	20.670m

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.  
 VU28531.D FM102210.M Sat Oct 23 10:57:36 2010 RPT1

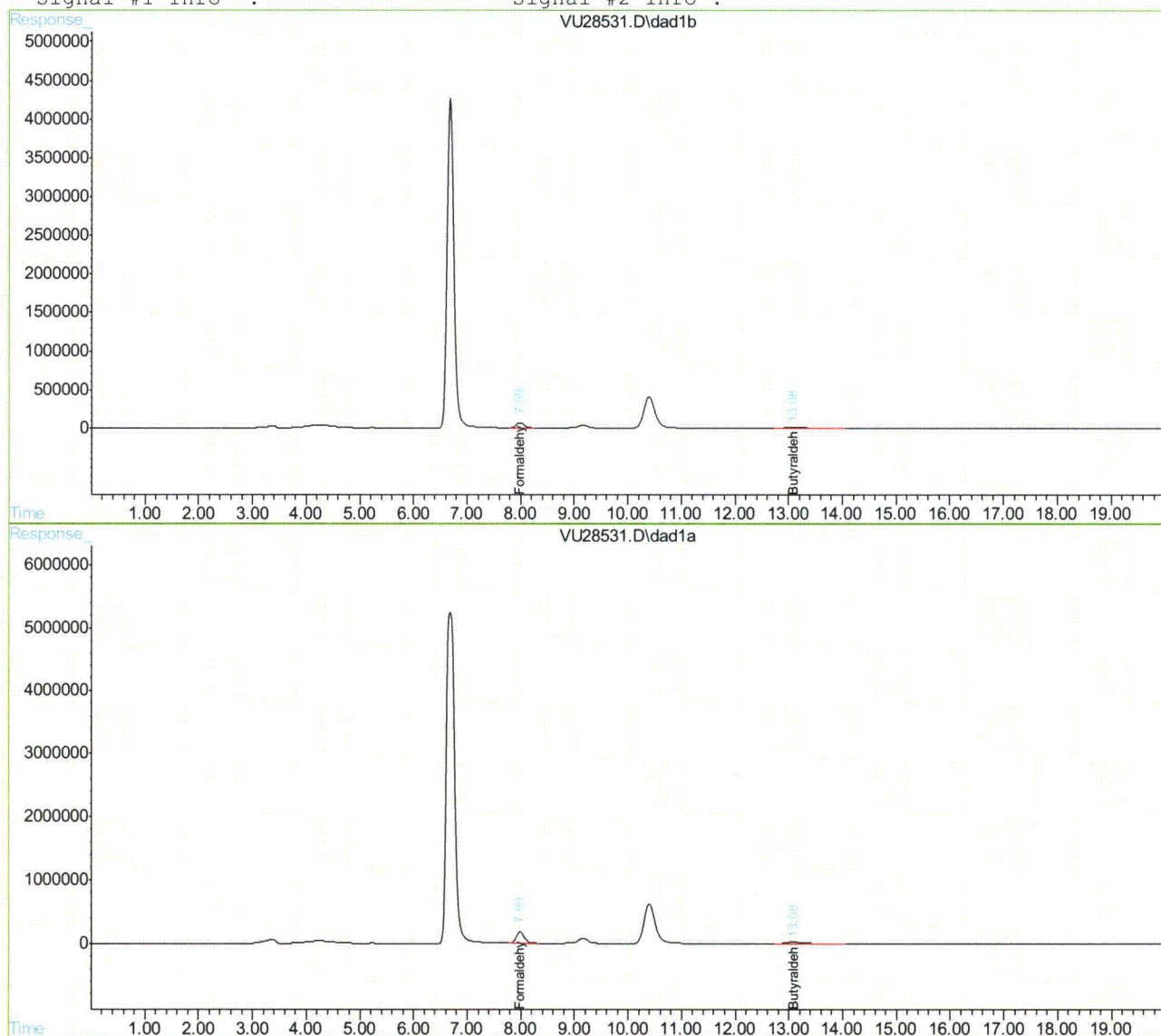
## Quantitation Report

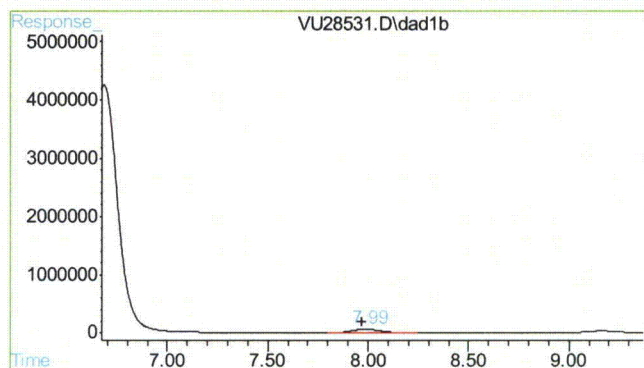
Data File : D:\HPLC2\DATA\102210\VU28531.D\dad1b.ch Vial: 45  
Acq On : 22-Oct-2010, 22:20:32 Operator: caobinz  
Sample : ja58900-14,1ul Inst : G1315A  
Misc : op22999,gvu1289,25,,,1,5 Multiplr: 1.00  
IntFile : rteint.p

Data File : D:\HPLC2\DATA\102210\VU28531.D\dad1a.ch Vial: 45  
Acq On : 22-Oct-2010, 22:20:32 Operator: caobinz  
Sample : ja58900-14,1ul Inst : G1315A  
Misc : Multiplr: 1.00  
IntFile : rteint2.p  
Quant Time: Oct 23 9:47 2010 Quant Results File: FM102210.RES

Quant Method : D:\HPLC2\METHODS\FM102210.M (RTE Integrator)  
Title : LC8315FORM/070610/ic1253/op21796  
Last Update : Sat Oct 23 09:46:07 2010  
Response via : Multiple Level Calibration  
DataAcq Meth : F6040D.M

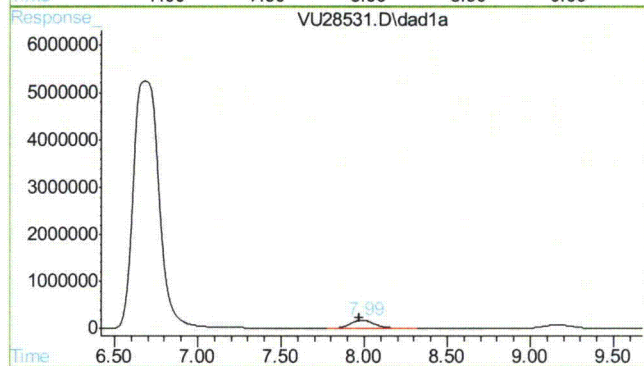
Volume Inj. :  
Signal #1 Phase : Signal #2 Phase:  
Signal #1 Info : Signal #2 Info :





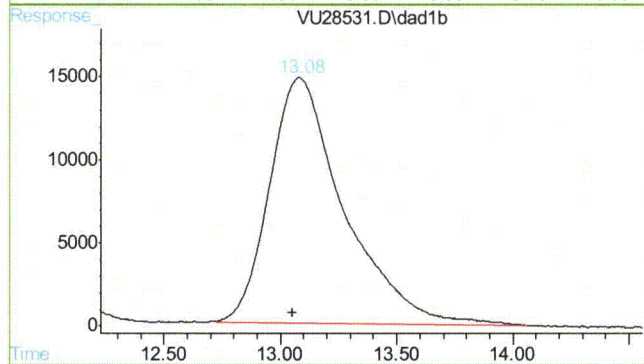
#1 Formaldehyde

R.T.: 7.986 min  
Delta R.T.: 0.016 min  
Response: 665664  
Conc: 20.48 ppm m



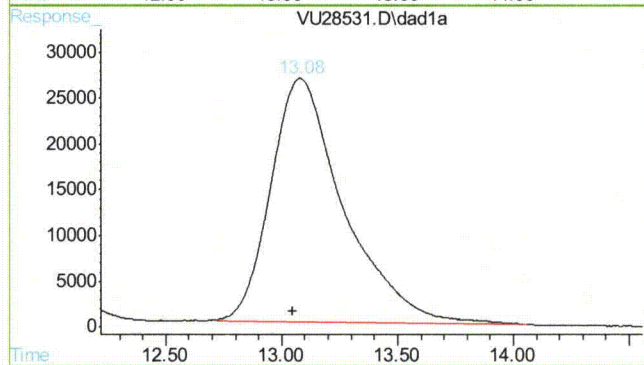
#1 Formaldehyde

R.T.: 7.986 min  
Delta R.T.: 0.016 min  
Response: 1847091  
Conc: 20.67 ppm m



#3 Butyraldehyde

R.T.: 13.081 min  
Delta R.T.: 0.030 min  
Response: 329574  
Conc: 15.26 ug/ml m



#3 Butyraldehyde

R.T.: 13.076 min  
Delta R.T.: 0.031 min  
Response: 583853  
Conc: 15.29 ug/ml m

Nancy Ma  
10/22/10 15:31

## Quantitation Report (QT Reviewed)

Data File : D:\HPLC2\DATA\101910\VU28432.D\dad1b.ch Vial: 1  
Acq On : 19-Oct-2010, 15:59:54 Operator: caobinz  
Sample : op22971-mb Inst : G1315A  
Misc : op22971,gvul286,500,,,1 Multiplr: 1.00  
IntFile : rteint.p

Data File : D:\HPLC2\DATA\101910\VU28432.D\dad1a.ch Vial: 1  
Acq On : 19-Oct-2010, 15:59:54 Operator: caobinz  
Sample : op22971-mb Inst : G1315A  
Misc : Multiplr: 1.00  
IntFile : rteint2.p

Quant Time: Oct 20 16:14 2010 Quant Results File: FM101910.RES

Quant Method : D:\HPLC2\METHODS\FM101910.M (RTE Integrator)  
Title : LC8315FORM/070610/ic1253/op21796  
Last Update : Tue Oct 19 16:05:29 2010  
Response via : Initial Calibration  
DataAcq Meth : F6040D.M

Volume Inj. :  
Signal #1 Phase : Signal #2 Phase:  
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ppm	ppm
-----						
System Monitoring Compounds						
3) s Butyraldehyde	13.33	13.34	1641356	2979853	82.996	83.000m
Spiked Amount	50.000	Range	10 - 115	Recovery	= 165.99%#	166.00%#

Target Compounds

-----  
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.  
VU28432.D FM101910.M Wed Oct 20 16:20:57 2010 RPT1

## Quantitation Report

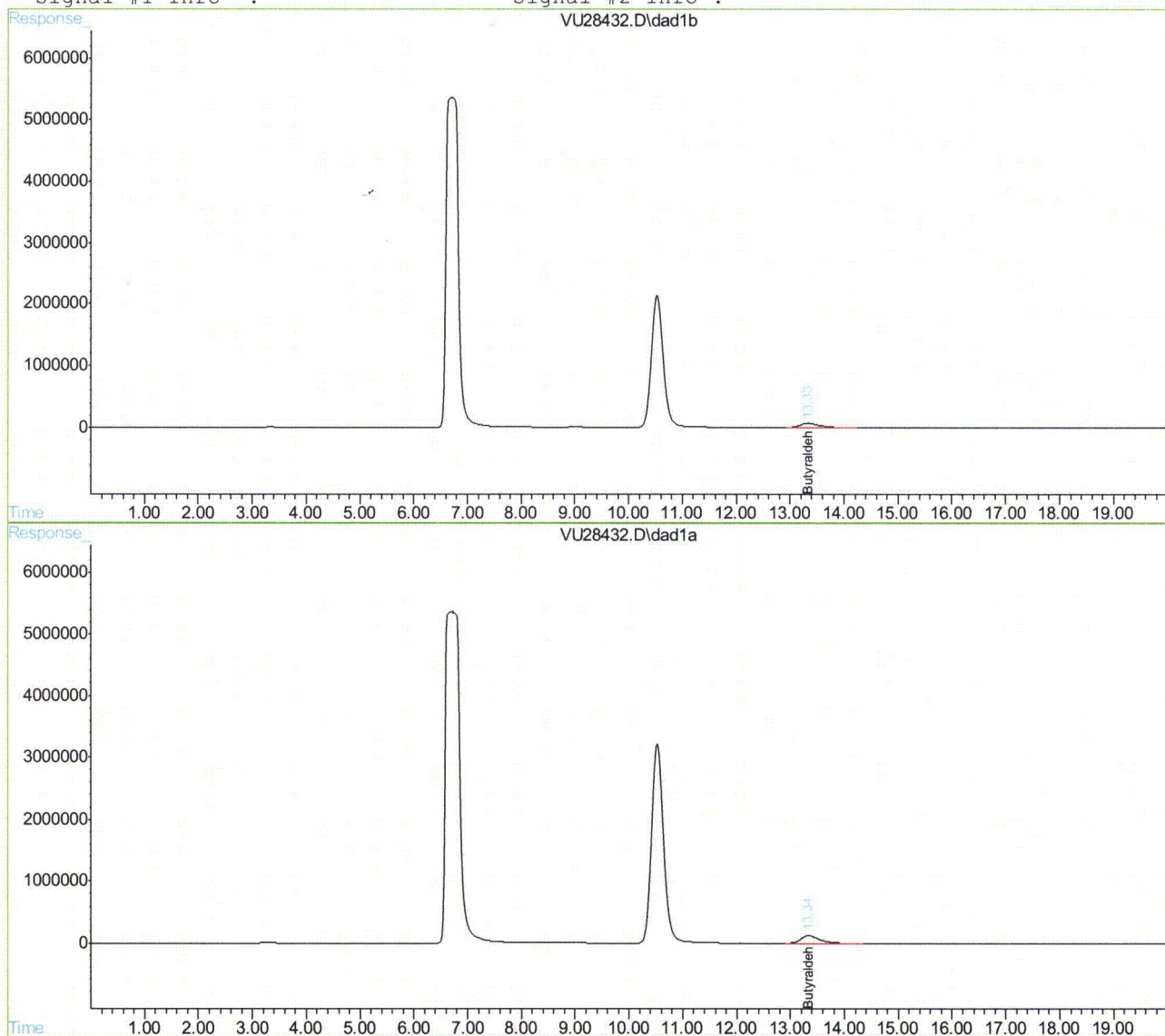
Data File : D:\HPLC2\DATA\101910\VU28432.D\dad1b.ch Vial: 1  
Acq On : 19-Oct-2010, 15:59:54 Operator: caobinz  
Sample : op22971-mb Inst : G1315A  
Misc : op22971,gvu1286,500,,,1 Multiplr: 1.00  
IntFile : rteint.p

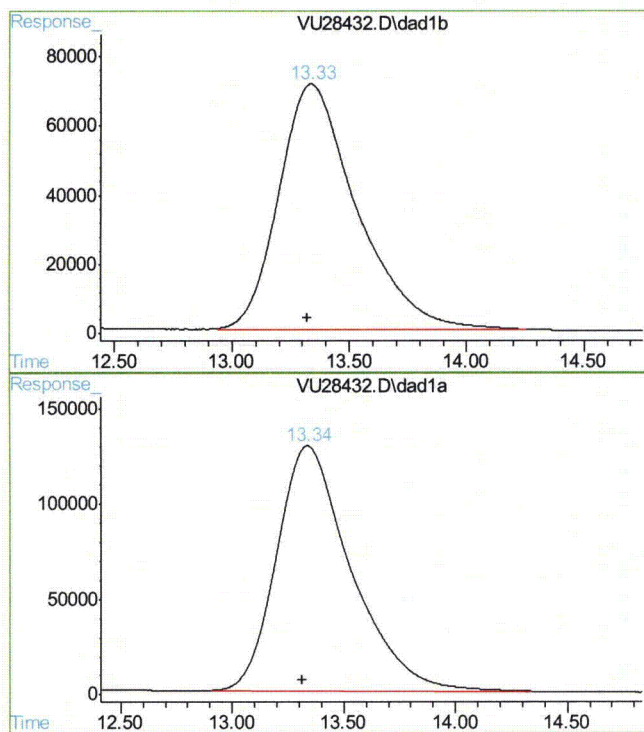
Data File : D:\HPLC2\DATA\101910\VU28432.D\dad1a.ch Vial: 1  
Acq On : 19-Oct-2010, 15:59:54 Operator: caobinz  
Sample : op22971-mb Inst : G1315A  
Misc : Multiplr: 1.00  
IntFile : rteint2.p

Quant Time: Oct 20 16:14 2010 Quant Results File: FM101910.RES

Quant Method : D:\HPLC2\METHODS\FM101910.M (RTE Integrator)  
Title : LC8315FORM/070610/ic1253/op21796  
Last Update : Tue Oct 19 16:05:29 2010  
Response via : Multiple Level Calibration  
DataAcq Meth : F6040D.M

Volume Inj. :  
Signal #1 Phase : Signal #2 Phase:  
Signal #1 Info : Signal #2 Info :





## #3 Butyraldehyde

R.T.: 13.334 min  
Delta R.T.: 0.016 min  
Response: 1641356  
Conc: 83.00 ug/ml

## #3 Butyraldehyde

R.T.: 13.336 min  
Delta R.T.: 0.021 min  
Response: 2979853  
Conc: 83.00 ug/ml m

## Quantitation Report (QT Reviewed)

Data File : D:\HPLC2\DATA\102110\VU28476.D\dadlb.ch Vial: 31  
Acq On : 22-Oct-2010, 01:54:14 Operator: caobinz  
Sample : op22999-mb Inst : G1315A  
Misc : op22999,gvul288,25,,,1 Multiplr: 1.00  
IntFile : rteint.p

Data File : D:\HPLC2\DATA\102110\VU28476.D\dadla.ch Vial: 31  
Acq On : 22-Oct-2010, 01:54:14 Operator: caobinz  
Sample : op22999-mb Inst : G1315A  
Misc : Multiplr: 1.00  
IntFile : rteint2.p

Quant Time: Oct 22 9:37 2010 Quant Results File: FM102110.RES

Quant Method : D:\HPLC2\METHODS\FM102110.M (RTE Integrator)  
Title : LC8315FORM/070610/icl253/op21796  
Last Update : Fri Oct 22 08:44:26 2010  
Response via : Initial Calibration  
DataAcq Meth : F6040D.M

Volume Inj. :  
Signal #1 Phase : Signal #2 Phase:  
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ppm	ppm
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## System Monitoring Compounds

3) s Butyraldehyde	13.35	13.35	1306793	2374973	63.012	63.329
Spiked Amount	50.000	Range	10 - 115	Recovery	= 126.02%#	126.66%#

## Target Compounds

1) Formaldehyde	8.05	8.05	139892	404695	2.805m	2.900m
2) Acetaldehyde	9.01	9.01	96983	159388	0.953m	398.262m#

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.  
VU28476.D FM102110.M Fri Oct 22 10:53:10 2010 RPT1

## Quantitation Report

Data File : D:\HPLC2\DATA\102110\VU28476.D\dad1b.ch  
Acq On : 22-Oct-2010, 01:54:14  
Sample : op22999-mb  
Misc : op22999,gvu1288,25,,,1  
IntFile : rteint.p

Vial: 31  
Operator: caobinz  
Inst : G1315A  
Multiplr: 1.00

Data File : D:\HPLC2\DATA\102110\VU28476.D\dad1a.ch  
Acq On : 22-Oct-2010, 01:54:14  
Sample : op22999-mb  
Misc :  
IntFile : rteint2.p

Vial: 31  
Operator: caobinz  
Inst : G1315A  
Multiplr: 1.00

Quant Time: Oct 22 9:37 2010 Quant Results File: FM102110.RES

Quant Method : D:\HPLC2\METHODS\FM102110.M (RTE Integrator)  
Title : LC8315FORM/070610/ic1253/op21796  
Last Update : Fri Oct 22 08:44:26 2010  
Response via : Multiple Level Calibration  
DataAcq Meth : F6040D.M

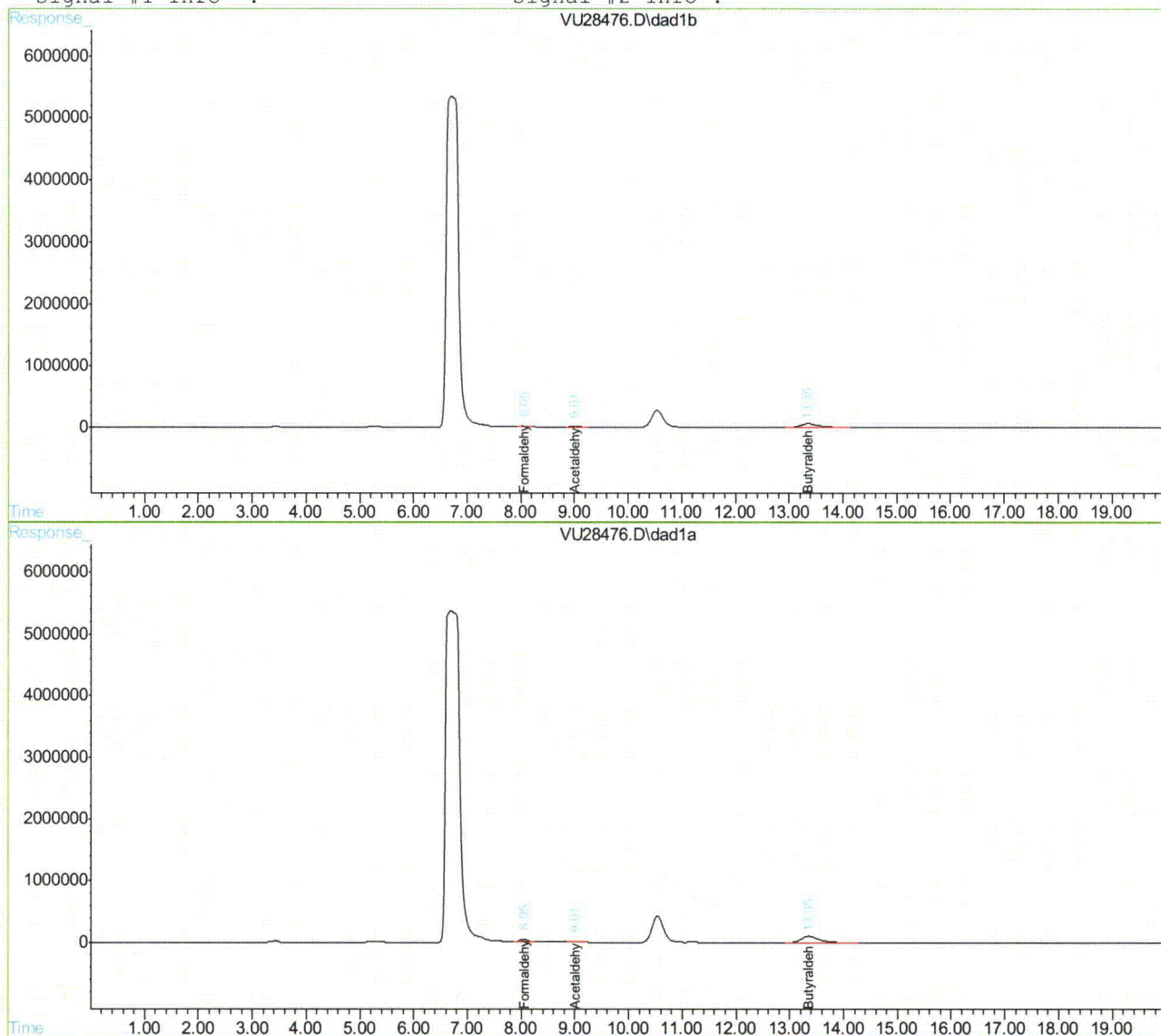
Volume Inj. :

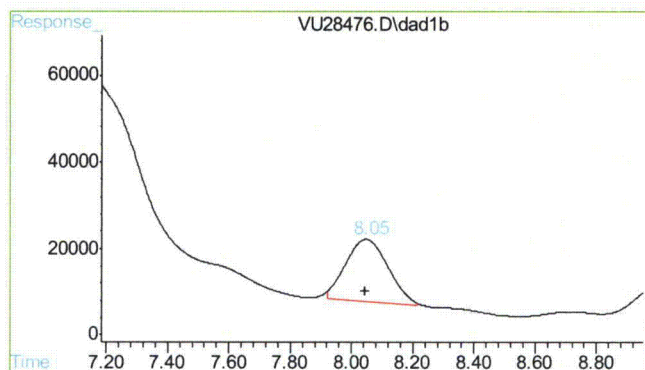
Signal #1 Phase :

Signal #1 Info :

Signal #2 Phase:

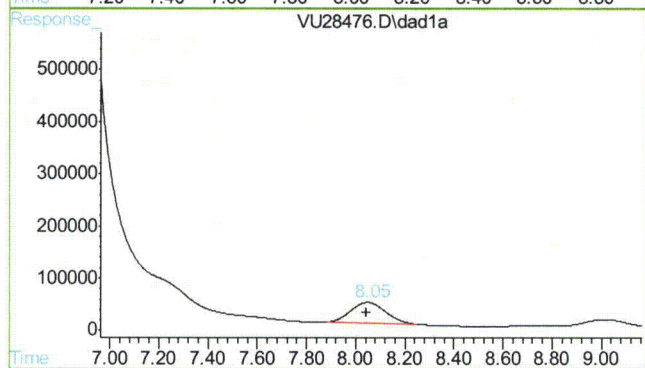
Signal #2 Info :





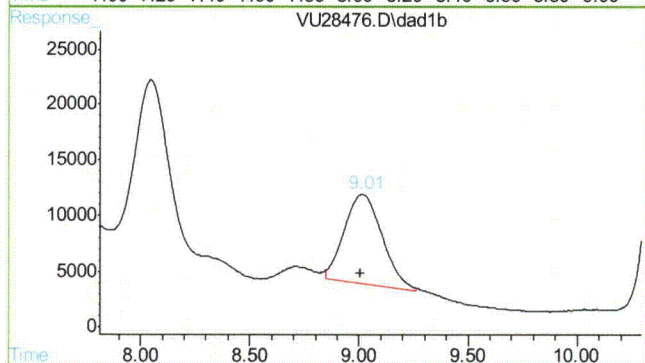
#1 Formaldehyde

R.T.: 8.048 min  
Delta R.T.: 0.004 min  
Response: 139892  
Conc: 2.80 ppm m



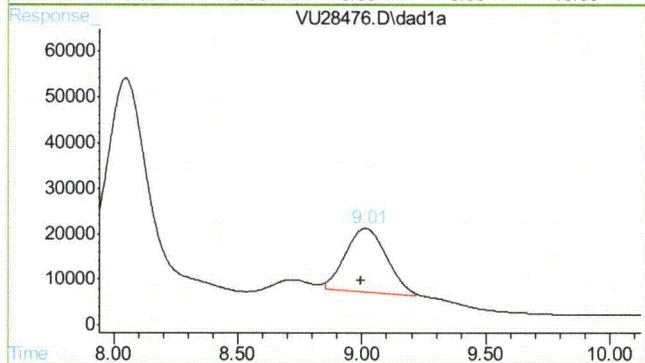
#1 Formaldehyde

R.T.: 8.048 min  
Delta R.T.: 0.002 min  
Response: 404695  
Conc: 2.90 ppm m



#2 Acetaldehyde

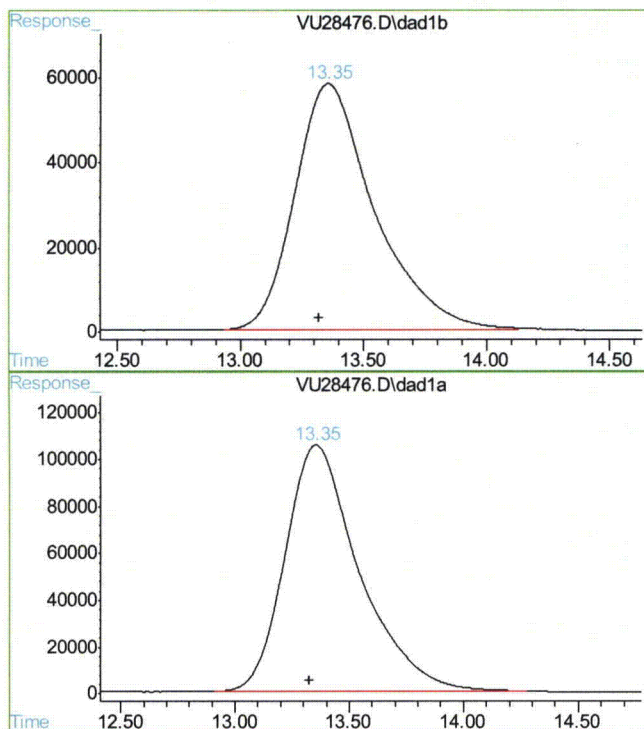
R.T.: 9.009 min  
Delta R.T.: 0.005 min  
Response: 96983  
Conc: 0.95 ppm m



#2 Acetaldehyde

R.T.: 9.011 min  
Delta R.T.: 0.015 min  
Response: 159388  
Conc: 398.26 ppm m

17.2.2 17



#3 Butyraldehyde

R.T.: 13.353 min  
Delta R.T.: 0.034 min  
Response: 1306793  
Conc: 63.01 ug/ml

#3 Butyraldehyde

R.T.: 13.353 min  
Delta R.T.: 0.029 min  
Response: 2374973  
Conc: 63.33 ug/ml

John Hamilton  
11/08/10 15:05

## Quantitation Report (QT Reviewed)

Data File : D:\HPLC2\DATA\102110\VU28492.D\dad1b.ch Vial: 46  
Acq On : 22-Oct-2010, 07:28:49 Operator: caobinz  
Sample : op22999-LB Inst : G1315A  
Misc : op22999,gvul288,25,,,1 Multiplr: 1.00  
IntFile : rteint.p

Data File : D:\HPLC2\DATA\102110\VU28492.D\dad1a.ch Vial: 46  
Acq On : 22-Oct-2010, 07:28:49 Operator: caobinz  
Sample : op22999-LB Inst : G1315A  
Misc : Multiplr: 1.00  
IntFile : rteint2.p

Quant Time: Oct 22 9:49 2010 Quant Results File: FM102110.RES

Quant Method : D:\HPLC2\METHODS\FM102110.M (RTE Integrator)  
Title : LC8315FORM/070610/ic1253/op21796  
Last Update : Fri Oct 22 08:44:26 2010  
Response via : Initial Calibration  
DataAcq Meth : F6040D.M

Volume Inj. :  
Signal #1 Phase : Signal #2 Phase:  
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ppm	ppm
----------	------	------	--------	--------	-----	-----

## System Monitoring Compounds

3) s Butyraldehyde	13.52	13.52	1454445	2637378	71.511	71.567
Spiked Amount	50.000	Range	10 - 115	Recovery	= 143.02%#	143.13%#

## Target Compounds

1) Formaldehyde	8.10	8.10	110588	320030	1.870m	1.912m
2) Acetaldehyde	9.10	9.09	130067	226882	1.584m	397.547m#

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.  
VU28492.D FM102110.M Fri Oct 22 10:54:38 2010 RPT1

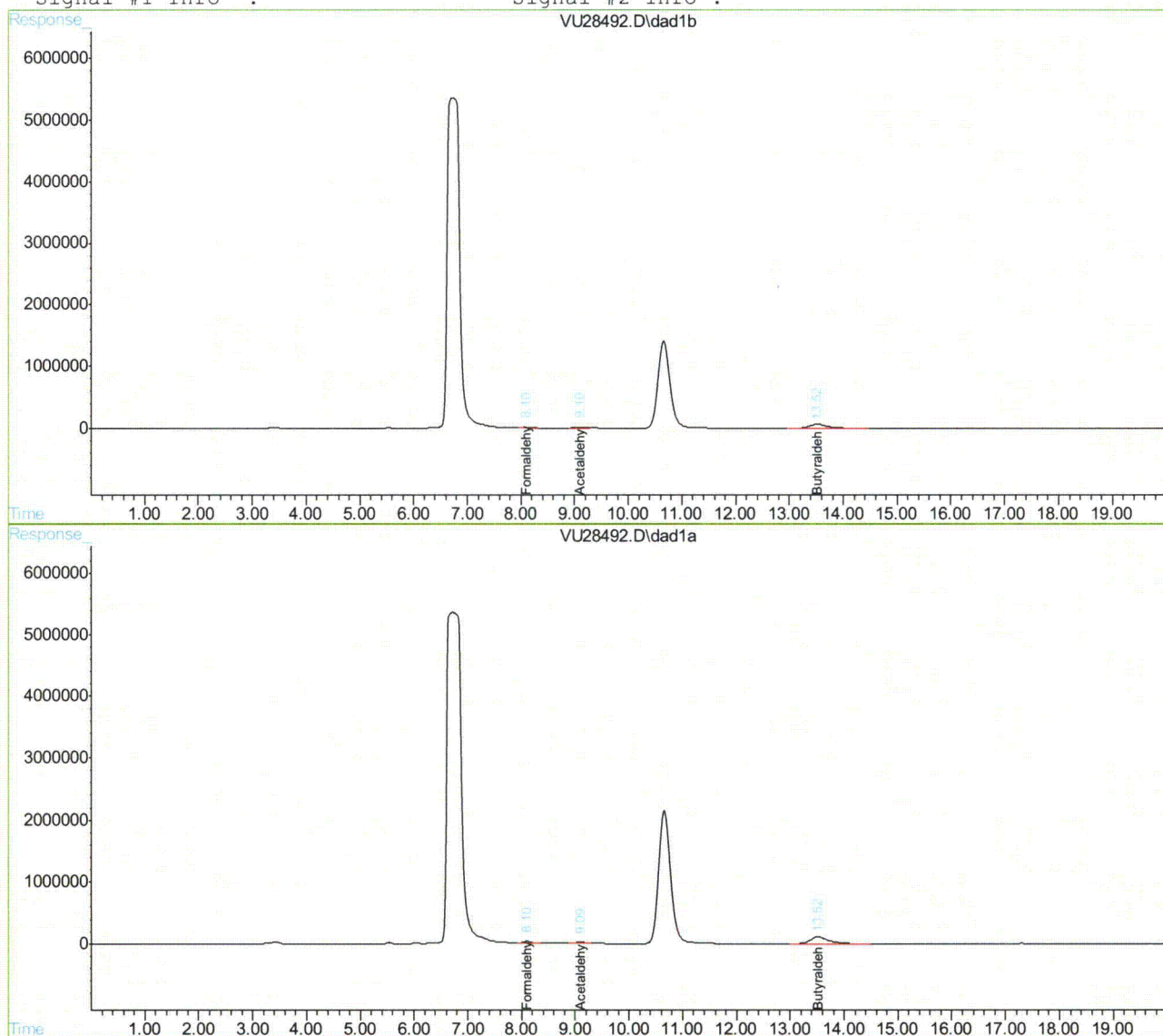
## Quantitation Report

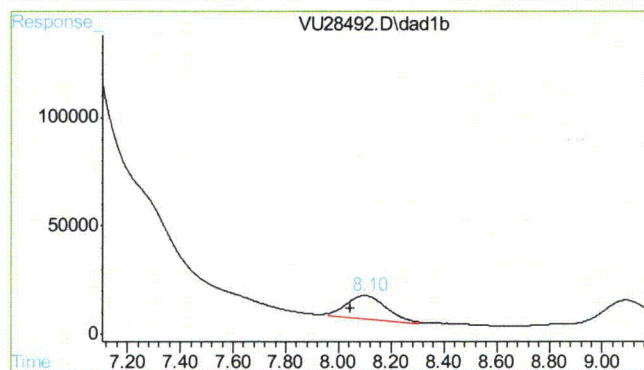
Data File : D:\HPLC2\DATA\102110\VU28492.D\dad1b.ch Vial: 46  
Acq On : 22-Oct-2010, 07:28:49 Operator: caobinz  
Sample : op22999-LB Inst : G1315A  
Misc : op22999,gvu1288,25,,,1 Multiplr: 1.00  
IntFile : rteint.p

Data File : D:\HPLC2\DATA\102110\VU28492.D\dad1a.ch Vial: 46  
Acq On : 22-Oct-2010, 07:28:49 Operator: caobinz  
Sample : op22999-LB Inst : G1315A  
Misc : Multiplr: 1.00  
IntFile : rteint2.p  
Quant Time: Oct 22 9:49 2010 Quant Results File: FM102110.RES

Quant Method : D:\HPLC2\METHODS\FM102110.M (RTE Integrator)  
Title : LC8315FORM/070610/ic1253/op21796  
Last Update : Fri Oct 22 08:44:26 2010  
Response via : Multiple Level Calibration  
DataAcq Meth : F6040D.M

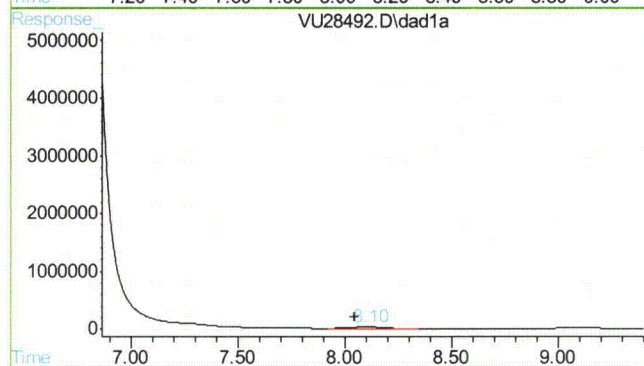
Volume Inj. :  
Signal #1 Phase : Signal #2 Phase:  
Signal #1 Info : Signal #2 Info :





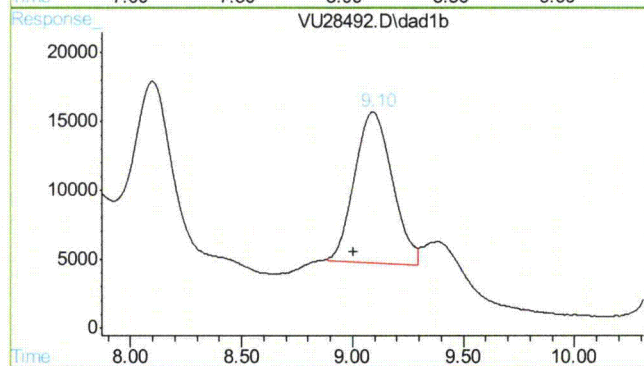
## #1 Formaldehyde

R.T.: 8.100 min  
Delta R.T.: 0.056 min  
Response: 110588  
Conc: 1.87 ppm m



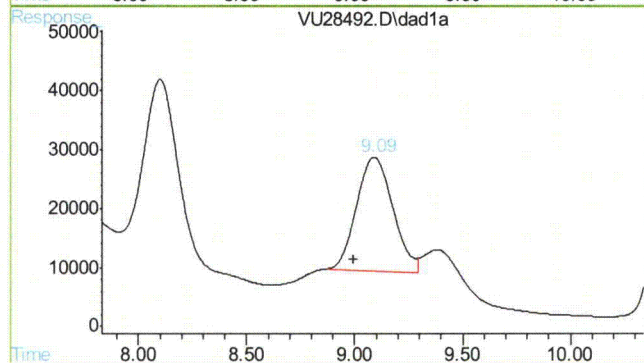
## #1 Formaldehyde

R.T.: 8.100 min  
Delta R.T.: 0.055 min  
Response: 320030  
Conc: 1.91 ppm m



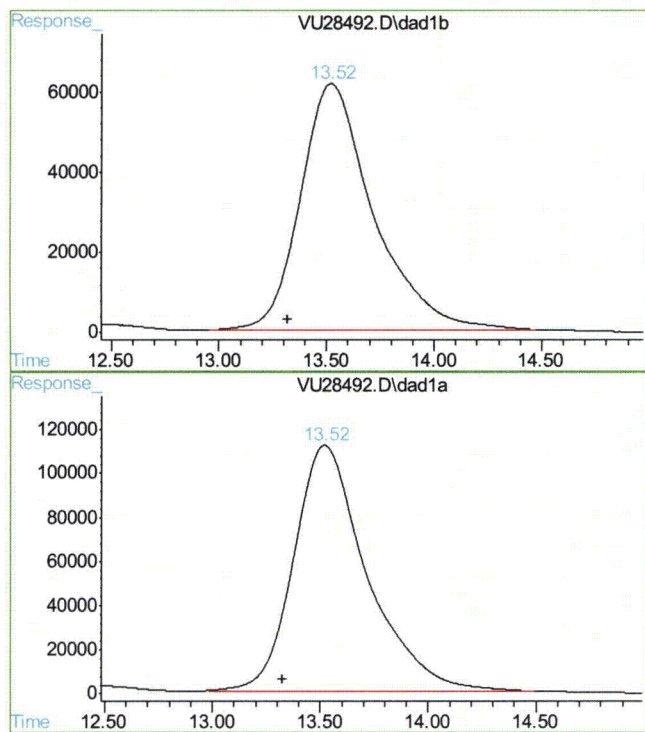
## #2 Acetaldehyde

R.T.: 9.095 min  
Delta R.T.: 0.091 min  
Response: 130067  
Conc: 1.58 ppm m



## #2 Acetaldehyde

R.T.: 9.089 min  
Delta R.T.: 0.093 min  
Response: 226882  
Conc: 397.55 ppm m



## #3 Butyraldehyde

R.T.: 13.517 min  
Delta R.T.: 0.198 min  
Response: 1454445  
Conc: 71.51 ug/ml

## #3 Butyraldehyde

R.T.: 13.519 min  
Delta R.T.: 0.194 min  
Response: 2637378  
Conc: 71.57 ug/ml

Nancy Ma  
10/22/10 15:31

## Quantitation Report (QT Reviewed)

Data File : D:\HPLC2\DATA\101910\VU28433.D\dad1b.ch Vial: 2  
Acq On : 19-Oct-2010, 16:20:47 Operator: caobinz  
Sample : op22971-bs Inst : G1315A  
Misc : op22971,gvul286,500,,,1 Multiplr: 1.00  
IntFile : rteint.p

Data File : D:\HPLC2\DATA\101910\VU28433.D\dad1a.ch Vial: 2  
Acq On : 19-Oct-2010, 16:20:47 Operator: caobinz  
Sample : op22971-bs Inst : G1315A  
Misc : Multiplr: 1.00  
IntFile : rteint2.p

Quant Time: Oct 20 16:14 2010 Quant Results File: FM101910.RES

Quant Method : D:\HPLC2\METHODS\FM101910.M (RTE Integrator)  
Title : LC8315FORM/070610/ic1253/op21796  
Last Update : Tue Oct 19 16:05:29 2010  
Response via : Initial Calibration  
DataAcq Meth : F6040D.M

Volume Inj. :  
Signal #1 Phase : Signal #2 Phase:  
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ppm	ppm
-----						
System Monitoring Compounds						
3) s Butyraldehyde	13.36	13.36	1401089	2539321	68.387	68.440
Spiked Amount	50.000	Range	10 - 115	Recovery	= 136.77%#	136.88%#
Target Compounds						
1) Formaldehyde	8.05	8.05	1237205	3402373	42.156m	42.394m
2) Acetaldehyde	9.02	9.02	608633	1213930	11.006m	10.324m

-----  
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.  
VU28433.D FM101910.M Wed Oct 20 16:21:03 2010 RPT1

## Quantitation Report

Data File : D:\HPLC2\DATA\101910\VU28433.D\dad1b.ch  
Acq On : 19-Oct-2010, 16:20:47  
Sample : op22971-bs  
Misc : op22971,gvu1286,500,,,1  
IntFile : rteint.p

Vial: 2  
Operator: caobinz  
Inst : G1315A  
Multiplr: 1.00

Data File : D:\HPLC2\DATA\101910\VU28433.D\dad1a.ch  
Acq On : 19-Oct-2010, 16:20:47  
Sample : op22971-bs  
Misc :  
IntFile : rteint2.p

Vial: 2  
Operator: caobinz  
Inst : G1315A  
Multiplr: 1.00

Quant Time: Oct 20 16:14 2010 Quant Results File: FM101910.RES

Quant Method : D:\HPLC2\METHODS\FM101910.M (RTE Integrator)  
Title : LC8315FORM/070610/ic1253/op21796  
Last Update : Tue Oct 19 16:05:29 2010  
Response via : Multiple Level Calibration  
DataAcq Meth : F6040D.M

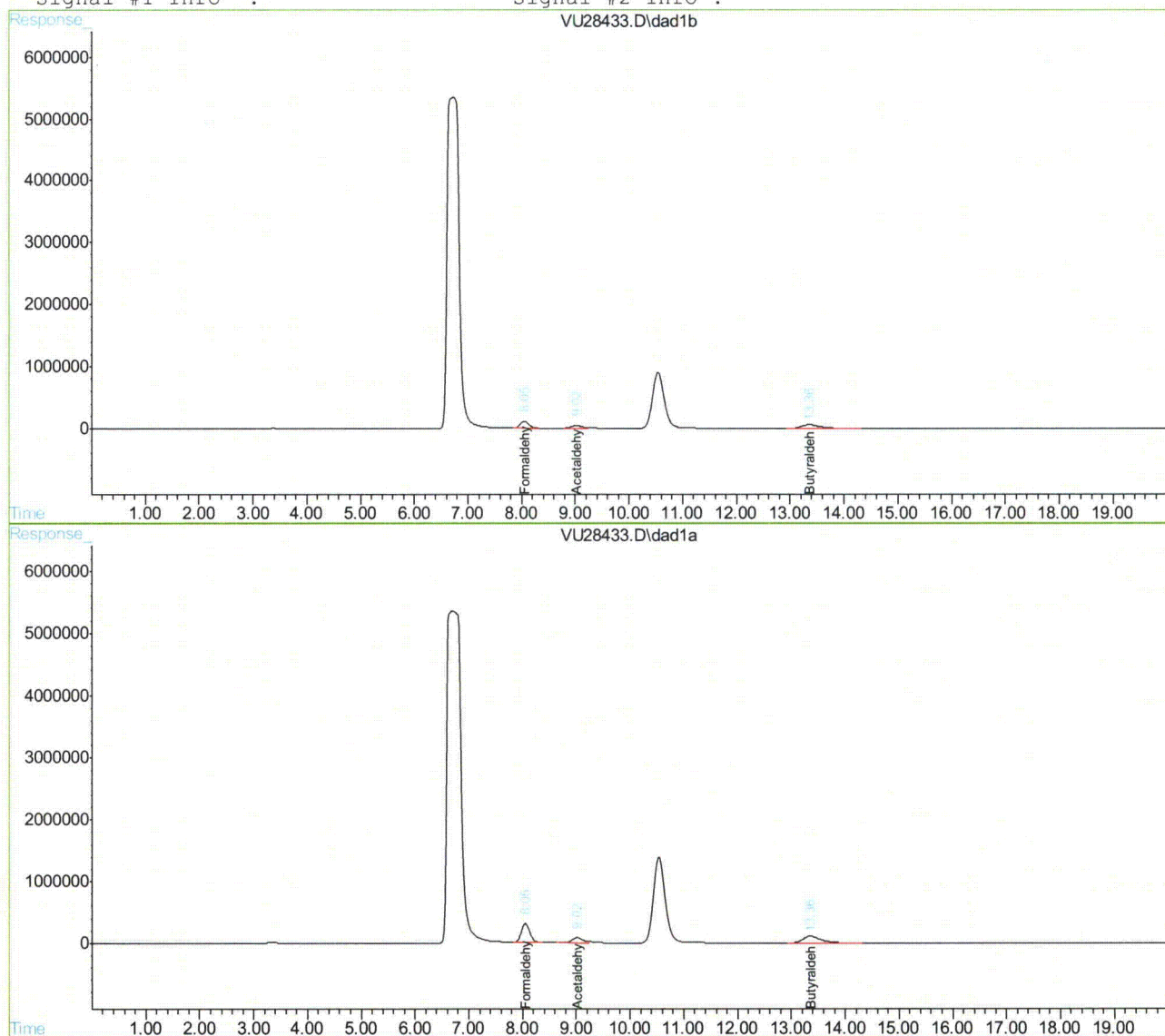
Volume Inj. :

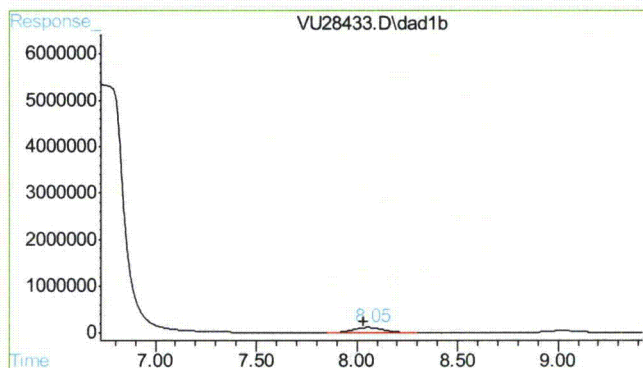
Signal #1 Phase :

Signal #1 Info :

Signal #2 Phase:

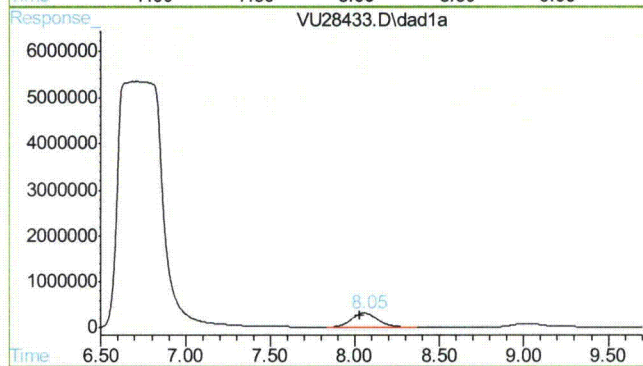
Signal #2 Info :





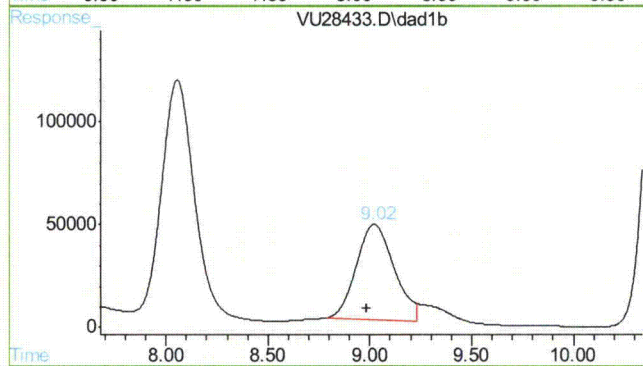
## #1 Formaldehyde

R.T.: 8.054 min  
Delta R.T.: 0.021 min  
Response: 1237205  
Conc: 42.16 ppm m



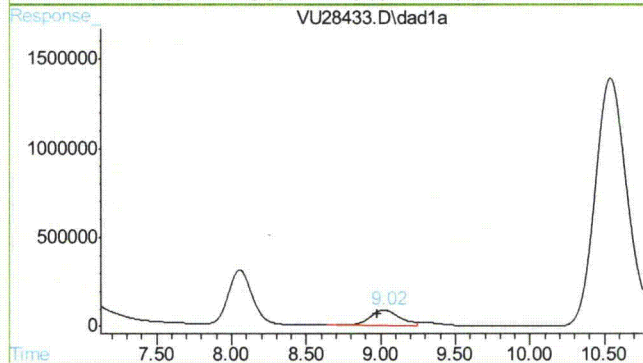
## #1 Formaldehyde

R.T.: 8.054 min  
Delta R.T.: 0.021 min  
Response: 3402373  
Conc: 42.39 ppm m



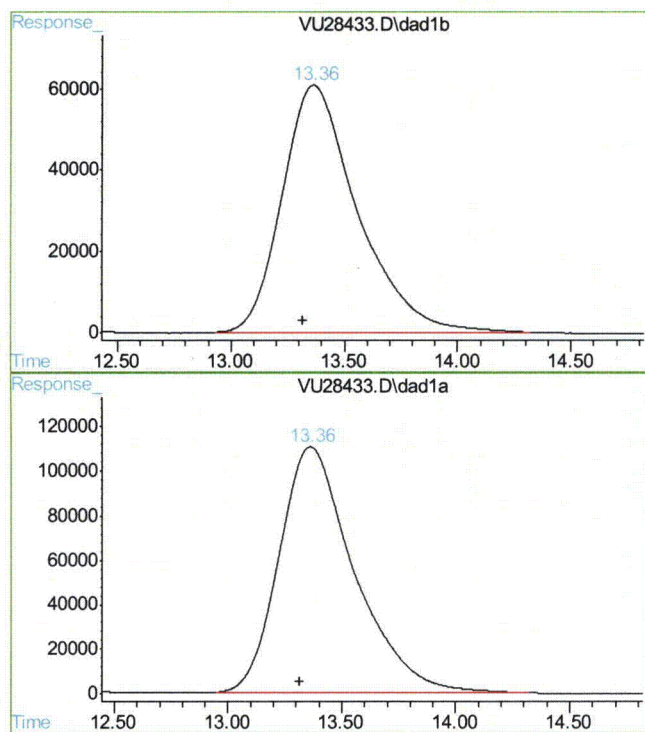
## #2 Acetaldehyde

R.T.: 9.019 min  
Delta R.T.: 0.033 min  
Response: 608633  
Conc: 11.01 ppm m



## #2 Acetaldehyde

R.T.: 9.021 min  
Delta R.T.: 0.041 min  
Response: 1213930  
Conc: 10.32 ppm m



## #3 Butyraldehyde

R.T.: 13.361 min  
Delta R.T.: 0.043 min  
Response: 1401089  
Conc: 68.39 ug/ml

## #3 Butyraldehyde

R.T.: 13.359 min  
Delta R.T.: 0.045 min  
Response: 2539321  
Conc: 68.44 ug/ml

17.4.1  
17

John Hamilton  
11/08/10 15:05

## Quantitation Report (QT Reviewed)

Data File : D:\HPLC2\DATA\102110\VU28477.D\dad1b.ch Vial: 32  
Acq On : 22-Oct-2010, 02:15:10 Operator: caobinz  
Sample : op22999-bs Inst : G1315A  
Misc : op22999,gvul288,25,,,1 Multiplr: 1.00  
IntFile : rteint.p

Data File : D:\HPLC2\DATA\102110\VU28477.D\dad1a.ch Vial: 32  
Acq On : 22-Oct-2010, 02:15:10 Operator: caobinz  
Sample : op22999-bs Inst : G1315A  
Misc : Multiplr: 1.00  
IntFile : rteint2.p

Quant Time: Oct 22 9:37 2010 Quant Results File: FM102110.RES

Quant Method : D:\HPLC2\METHODS\FM102110.M (RTE Integrator)  
Title : LC8315FORM/070610/ic1253/op21796  
Last Update : Fri Oct 22 08:44:26 2010  
Response via : Initial Calibration  
DataAcq Meth : F6040D.M

Volume Inj. :  
Signal #1 Phase : Signal #2 Phase:  
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ppm	ppm
System Monitoring Compounds						
3) s Butyraldehyde	13.36	13.36	1208792	2198509	57.609	58.008
Spiked Amount	50.000	Range	10 - 115	Recovery	= 115.22%#	116.02%#

Target Compounds						
1)	Formaldehyde	8.05	8.05	1137301	3198808	38.136m 39.359m
2)	Acetaldehyde	9.02	9.02	1470483	2747268	29.583m 28.389m

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.  
VU28477.D FM102110.M Fri Oct 22 10:53:17 2010 RPT1

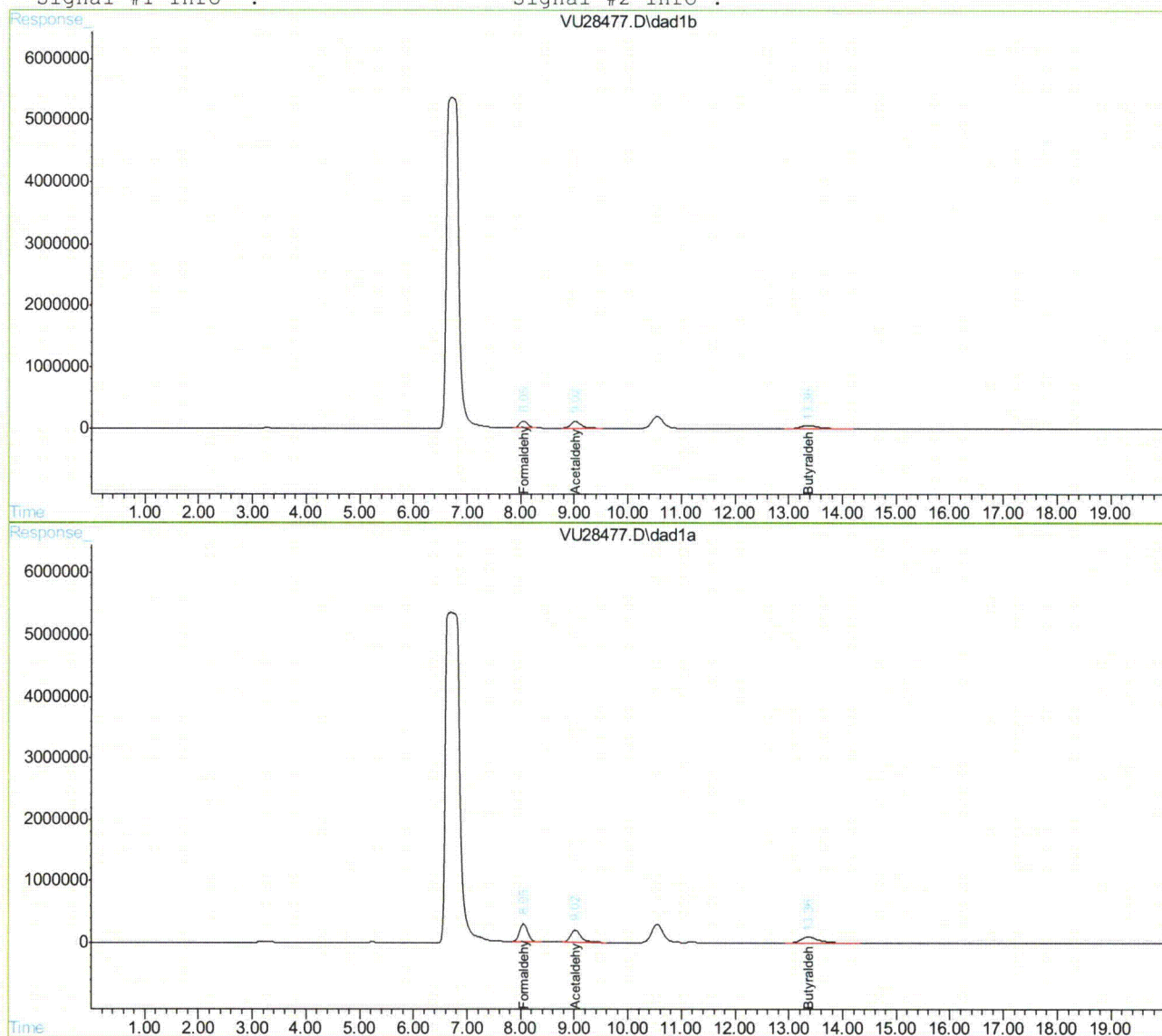
## Quantitation Report

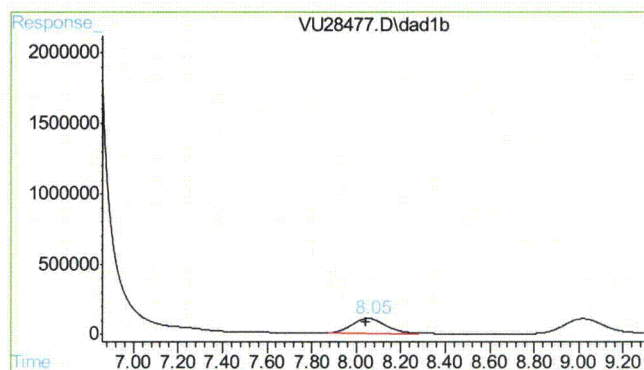
Data File : D:\HPLC2\DATA\102110\VU28477.D\dad1b.ch Vial: 32  
Acq On : 22-Oct-2010, 02:15:10 Operator: caobinz  
Sample : op22999-bs Inst : G1315A  
Misc : op22999,gvu1288,25,,,1 Multiplr: 1.00  
IntFile : rteint.p

Data File : D:\HPLC2\DATA\102110\VU28477.D\dad1a.ch Vial: 32  
Acq On : 22-Oct-2010, 02:15:10 Operator: caobinz  
Sample : op22999-bs Inst : G1315A  
Misc : Multiplr: 1.00  
IntFile : rteint2.p  
Quant Time: Oct 22 9:37 2010 Quant Results File: FM102110.RES

Quant Method : D:\HPLC2\METHODS\FM102110.M (RTE Integrator)  
Title : LC8315FORM/070610/ic1253/op21796  
Last Update : Fri Oct 22 08:44:26 2010  
Response via : Multiple Level Calibration  
DataAcq Meth : F6040D.M

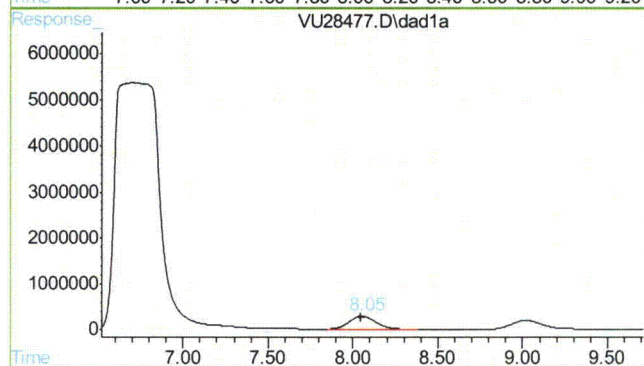
Volume Inj. :  
Signal #1 Phase : Signal #2 Phase:  
Signal #1 Info : Signal #2 Info :





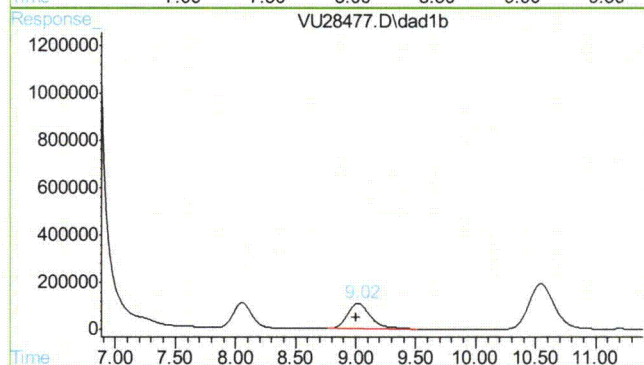
## #1 Formaldehyde

R.T.: 8.052 min  
Delta R.T.: 0.008 min  
Response: 1137301  
Conc: 38.14 ppm m



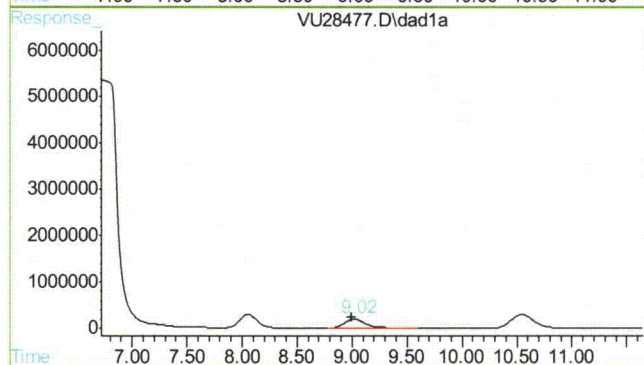
## #1 Formaldehyde

R.T.: 8.052 min  
Delta R.T.: 0.006 min  
Response: 3198808  
Conc: 39.36 ppm m



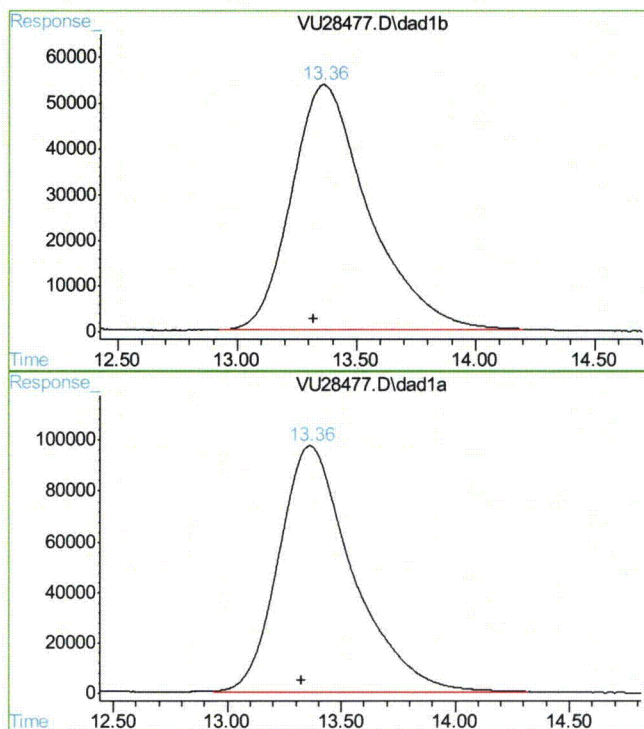
## #2 Acetaldehyde

R.T.: 9.018 min  
Delta R.T.: 0.014 min  
Response: 1470483  
Conc: 29.58 ppm m



## #2 Acetaldehyde

R.T.: 9.018 min  
Delta R.T.: 0.023 min  
Response: 2747268  
Conc: 28.39 ppm m



#3 Butyraldehyde

R.T.: 13.358 min  
Delta R.T.: 0.039 min  
Response: 1208792  
Conc: 57.61 ug/ml

#3 Butyraldehyde

R.T.: 13.358 min  
Delta R.T.: 0.034 min  
Response: 2198509  
Conc: 58.01 ug/ml

17.4.2  
17

Nancy Ma  
10/22/10 15:31

## Quantitation Report (QT Reviewed)

Data File : D:\HPLC2\DATA\101910\VU28434.D\dad1b.ch Vial: 3  
Acq On : 19-Oct-2010, 16:41:40 Operator: caobinz  
Sample : op22971-ms Inst : G1315A  
Misc : op22971,gvu1286,500,,,1 Multiplr: 1.00  
IntFile : rteint.p

Data File : D:\HPLC2\DATA\101910\VU28434.D\dad1a.ch Vial: 3  
Acq On : 19-Oct-2010, 16:41:40 Operator: caobinz  
Sample : op22971-ms Inst : G1315A  
Misc : Multiplr: 1.00  
IntFile : rteint2.p

Quant Time: Oct 20 16:15 2010 Quant Results File: FM101910.RES

Quant Method : D:\HPLC2\METHODS\FM101910.M (RTE Integrator)  
Title : LC8315FORM/070610/ic1253/op21796  
Last Update : Tue Oct 19 16:05:29 2010  
Response via : Initial Calibration  
DataAcq Meth : F6040D.M

Volume Inj. :  
Signal #1 Phase : Signal #2 Phase:  
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ppm	ppm
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## System Monitoring Compounds

3) s Butyraldehyde	13.34	13.34	1578298	2857988	79.021	78.834
Spiked Amount	50.000	Range	10 - 115	Recovery	= 158.04%#	157.67%#

## Target Compounds

1) Formaldehyde	8.05	8.05	1460178	3816991	51.567m	48.795m
2) Acetaldehyde	9.01	9.01	687226	1248651	12.607m	10.714m

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.  
VU28434.D FM101910.M Wed Oct 20 16:21:07 2010 RPT1

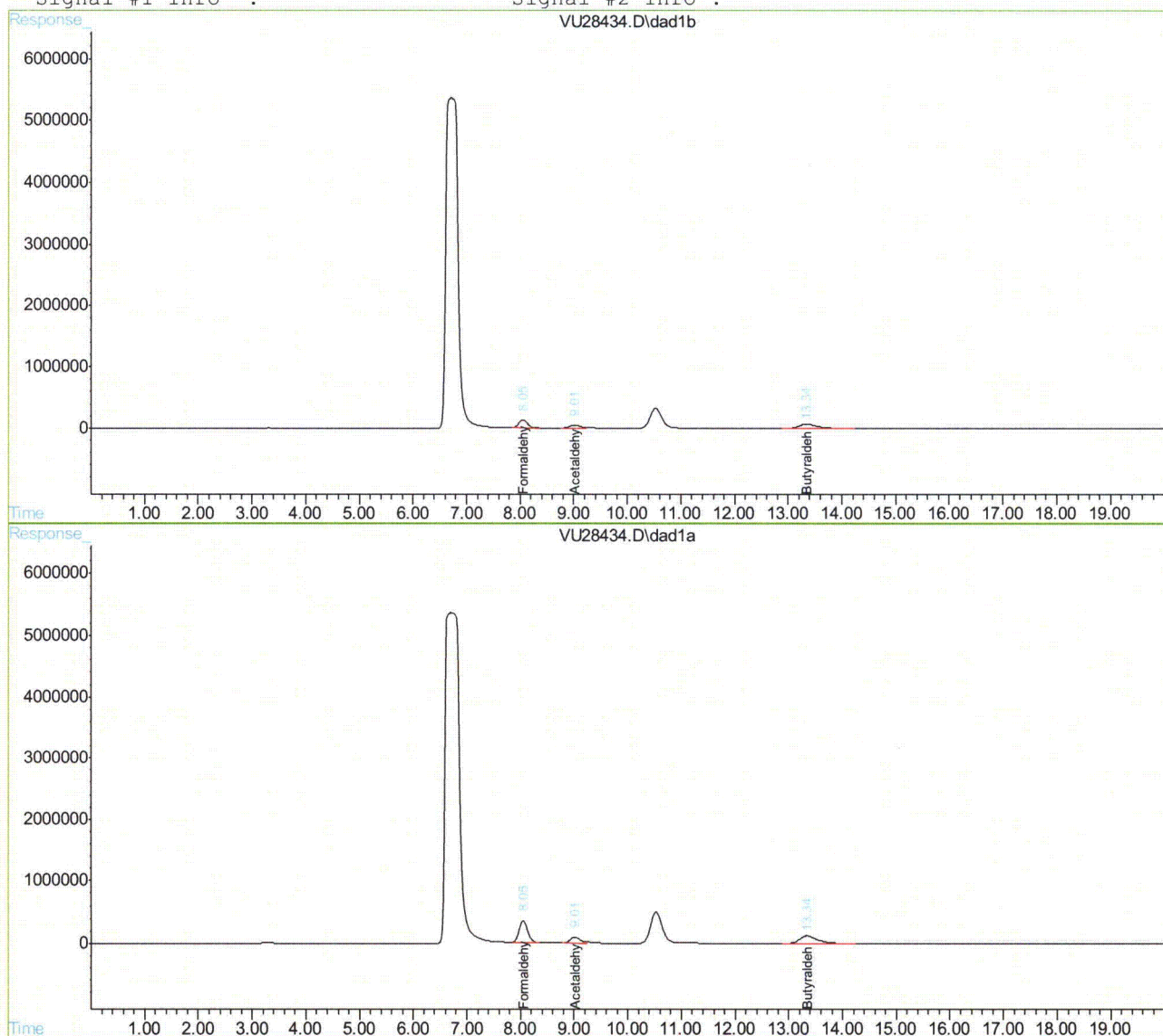
## Quantitation Report

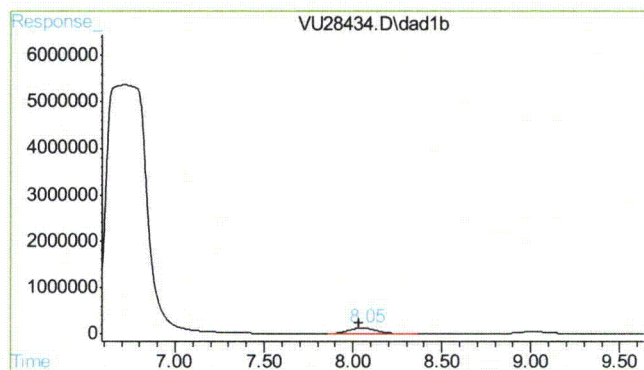
Data File : D:\HPLC2\DATA\101910\VU28434.D\dad1b.ch Vial: 3  
Acq On : 19-Oct-2010, 16:41:40 Operator: caobinz  
Sample : op22971-ms Inst : G1315A  
Misc : op22971,gvul286,500,,,1 Multiplr: 1.00  
IntFile : rteint.p

Data File : D:\HPLC2\DATA\101910\VU28434.D\dad1a.ch Vial: 3  
Acq On : 19-Oct-2010, 16:41:40 Operator: caobinz  
Sample : op22971-ms Inst : G1315A  
Misc : Multiplr: 1.00  
IntFile : rteint2.p  
Quant Time: Oct 20 16:15 2010 Quant Results File: FM101910.RES

Quant Method : D:\HPLC2\METHODS\FM101910.M (RTE Integrator)  
Title : LC8315FORM/070610/ic1253/op21796  
Last Update : Tue Oct 19 16:05:29 2010  
Response via : Multiple Level Calibration  
DataAcq Meth : F6040D.M

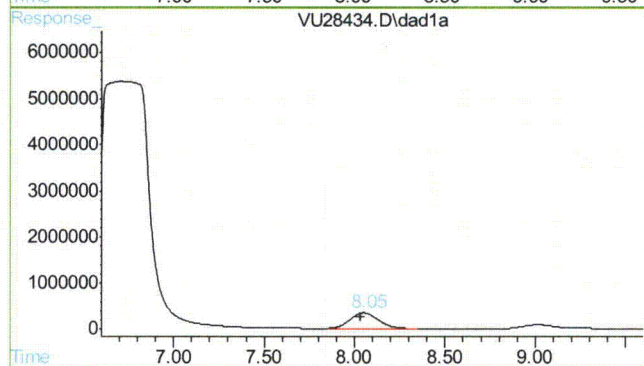
Volume Inj. :  
Signal #1 Phase : Signal #2 Phase:  
Signal #1 Info : Signal #2 Info :





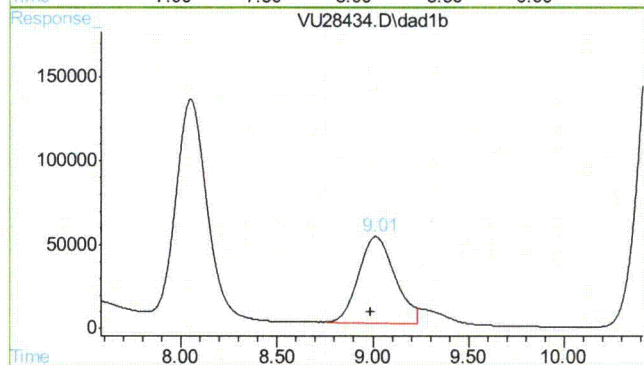
#1 Formaldehyde

R.T.: 8.050 min  
Delta R.T.: 0.018 min  
Response: 1460178  
Conc: 51.57 ppm m



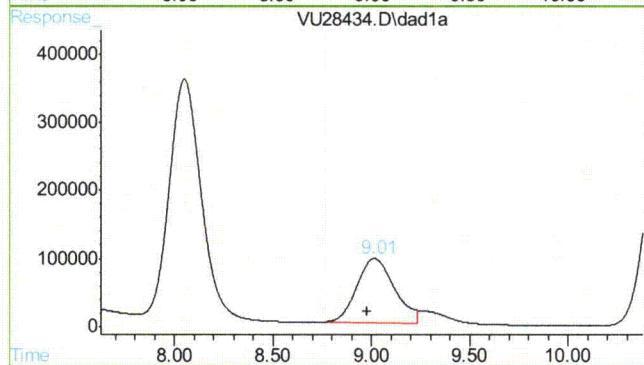
#1 Formaldehyde

R.T.: 8.050 min  
Delta R.T.: 0.018 min  
Response: 3816991  
Conc: 48.80 ppm m



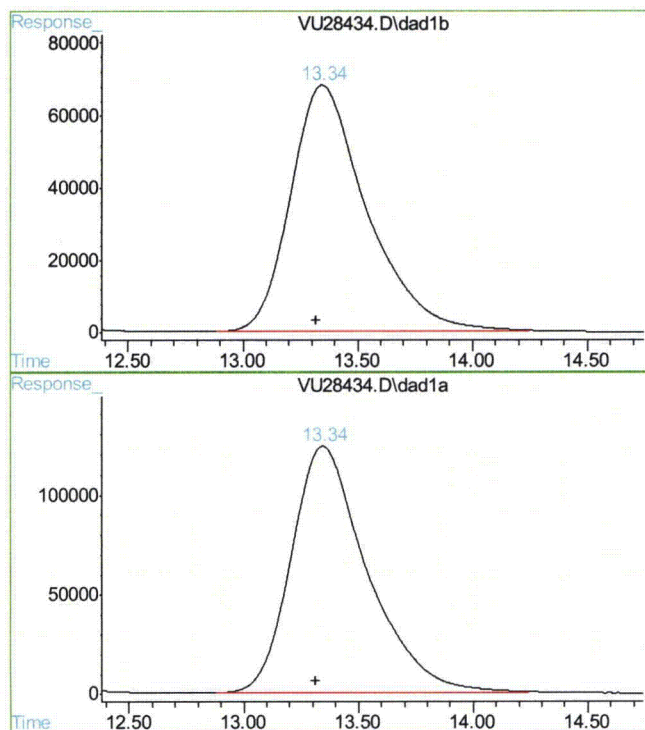
#2 Acetaldehyde

R.T.: 9.014 min  
Delta R.T.: 0.028 min  
Response: 687226  
Conc: 12.61 ppm m



#2 Acetaldehyde

R.T.: 9.014 min  
Delta R.T.: 0.034 min  
Response: 1248651  
Conc: 10.71 ppm m



## #3 Butyraldehyde

R.T.: 13.341 min  
Delta R.T.: 0.023 min  
Response: 1578298  
Conc: 79.02 ug/ml

## #3 Butyraldehyde

R.T.: 13.342 min  
Delta R.T.: 0.028 min  
Response: 2857988  
Conc: 78.83 ug/ml

## Quantitation Report (QT Reviewed)

Data File : D:\HPLC2\DATA\101910\VU28435.D\dad1b.ch Vial: 4  
Acq On : 19-Oct-2010, 17:02:37 Operator: caobinz  
Sample : op22971-msd Inst : G1315A  
Misc : op22971,gvul286,500,,,1 Multiplr: 1.00  
IntFile : rteint.p

Data File : D:\HPLC2\DATA\101910\VU28435.D\dad1a.ch Vial: 4  
Acq On : 19-Oct-2010, 17:02:37 Operator: caobinz  
Sample : op22971-msd Inst : G1315A  
Misc : Multiplr: 1.00  
IntFile : rteint2.p

Quant Time: Oct 20 16:15 2010 Quant Results File: FM101910.RES

Quant Method : D:\HPLC2\METHODS\FM101910.M (RTE Integrator)  
Title : LC8315FORM/070610/ic1253/op21796  
Last Update : Tue Oct 19 16:05:29 2010  
Response via : Initial Calibration  
DataAcq Meth : F6040D.M

Volume Inj. :  
Signal #1 Phase : Signal #2 Phase:  
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ppm	ppm
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## System Monitoring Compounds

3) s Butyraldehyde	13.36	13.35	1456896	2638191	71.656m	71.593
Spiked Amount	50.000	Range	10 - 115	Recovery	= 143.31%#	143.19%#

## Target Compounds

1) Formaldehyde	8.05	8.05	1312417	3508193	45.260m	43.999m
2) Acetaldehyde	9.02	9.02	625156	1142428	11.341m	9.523m

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.  
VU28435.D FM101910.M Wed Oct 20 16:21:13 2010 RPT1

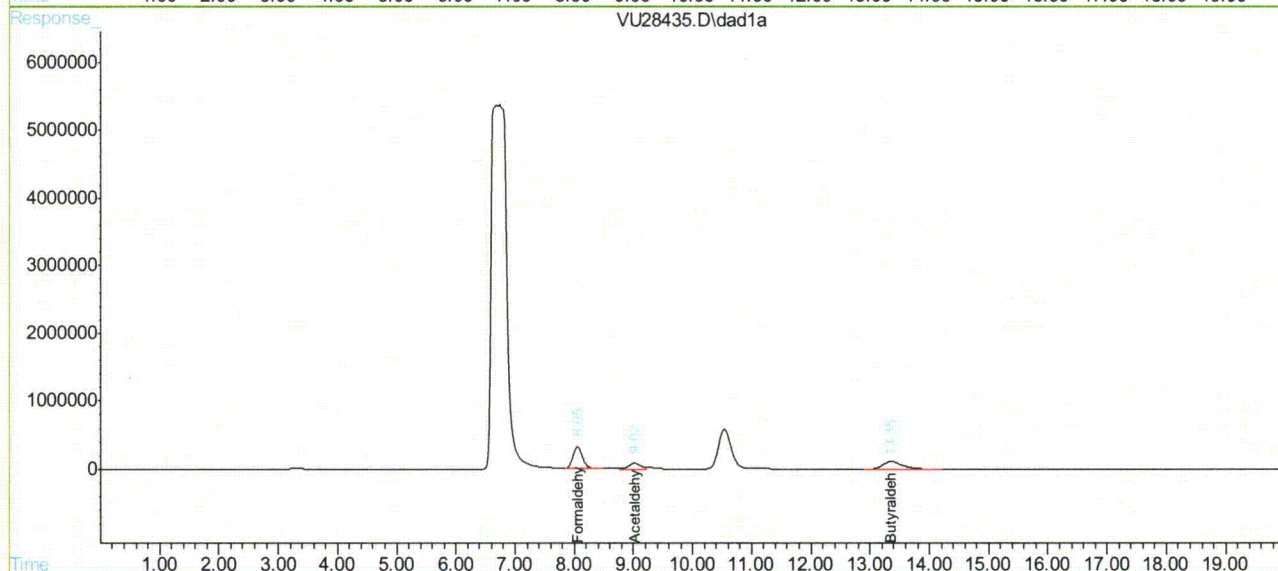
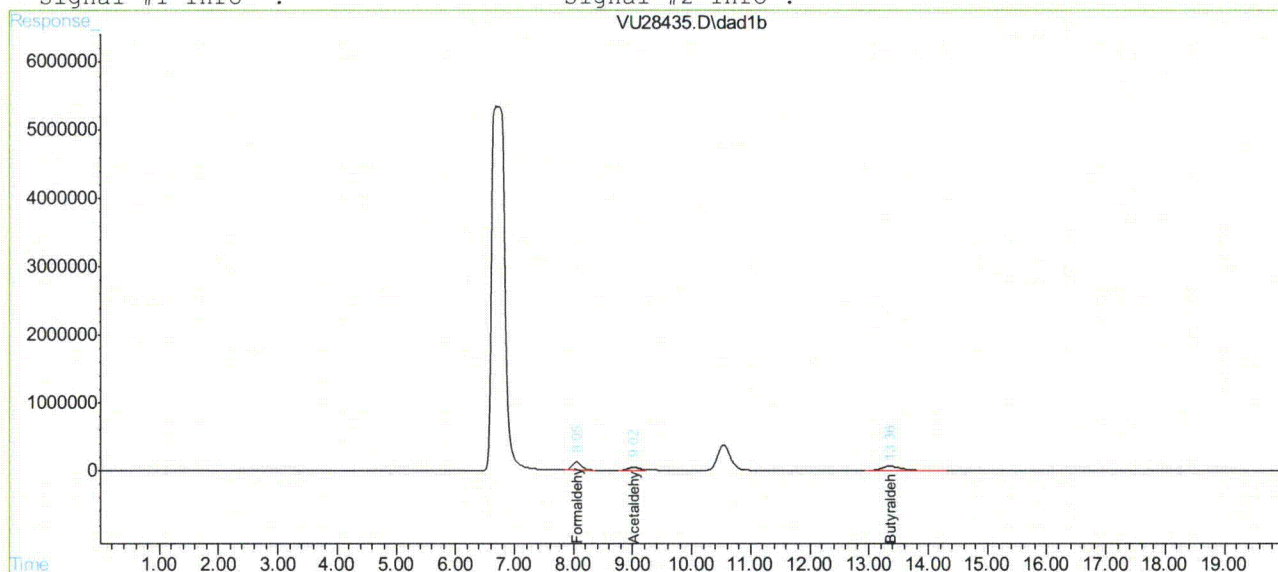
## Quantitation Report

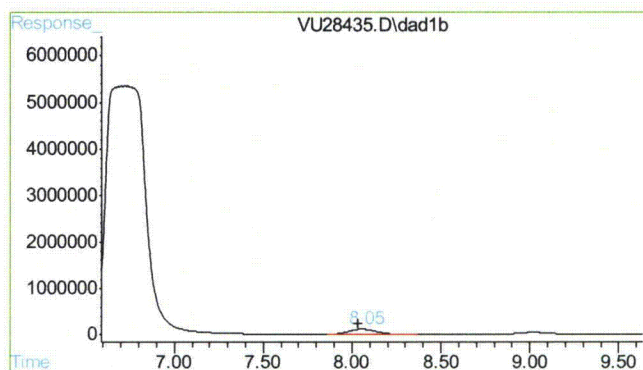
Data File : D:\HPLC2\DATA\101910\VU28435.D\dad1b.ch Vial: 4  
Acq On : 19-Oct-2010, 17:02:37 Operator: caobinz  
Sample : op22971-msd Inst : G1315A  
Misc : op22971,gvul286,500,,,1 Multiplr: 1.00  
IntFile : rteint.p

Data File : D:\HPLC2\DATA\101910\VU28435.D\dad1a.ch Vial: 4  
Acq On : 19-Oct-2010, 17:02:37 Operator: caobinz  
Sample : op22971-msd Inst : G1315A  
Misc : Multiplr: 1.00  
IntFile : rteint2.p  
Quant Time: Oct 20 16:15 2010 Quant Results File: FM101910.RES

Quant Method : D:\HPLC2\METHODS\FM101910.M (RTE Integrator)  
Title : LC8315FORM/070610/ic1253/op21796  
Last Update : Tue Oct 19 16:05:29 2010  
Response via : Multiple Level Calibration  
DataAcq Meth : F6040D.M

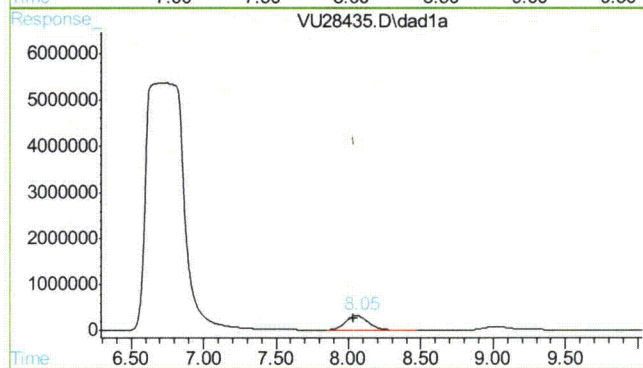
Volume Inj. :  
Signal #1 Phase : Signal #2 Phase:  
Signal #1 Info : Signal #2 Info :





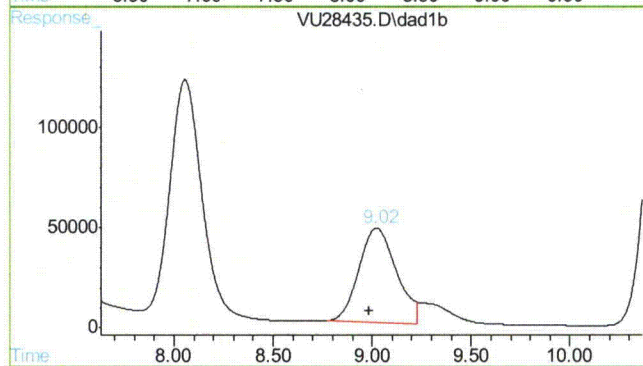
## #1 Formaldehyde

R.T.: 8.055 min  
Delta R.T.: 0.022 min  
Response: 1312417  
Conc: 45.26 ppm m



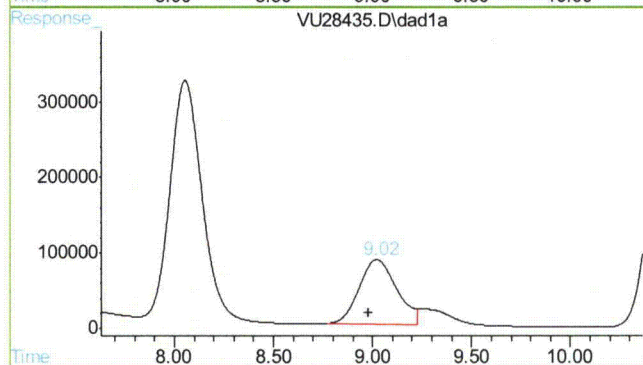
## #1 Formaldehyde

R.T.: 8.055 min  
Delta R.T.: 0.022 min  
Response: 3508193  
Conc: 44.00 ppm m



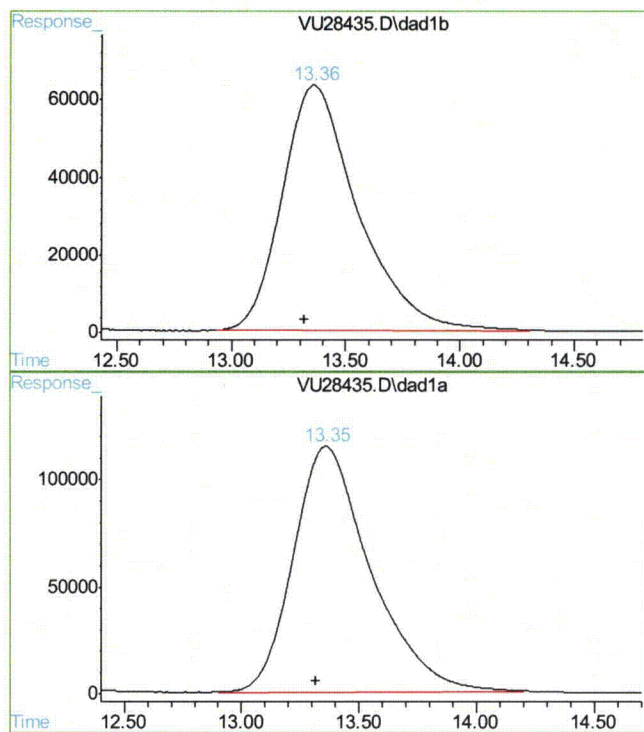
## #2 Acetaldehyde

R.T.: 9.020 min  
Delta R.T.: 0.034 min  
Response: 625156  
Conc: 11.34 ppm m



## #2 Acetaldehyde

R.T.: 9.020 min  
Delta R.T.: 0.040 min  
Response: 1142428  
Conc: 9.52 ppm m



#3 Butyraldehyde

R.T.: 13.357 min  
Delta R.T.: 0.039 min  
Response: 1456896  
Conc: 71.66 ug/ml m

#3 Butyraldehyde

R.T.: 13.355 min  
Delta R.T.: 0.040 min  
Response: 2638191  
Conc: 71.59 ug/ml

John Hamilton  
11/08/10 15:11

## Quantitation Report (QT Reviewed)

Data File : D:\HPLC2\DATA\102210\VU28518.D\dad1b.ch Vial: 33  
Acq On : 22-Oct-2010, 17:48:56 Operator: caobinz  
Sample : op22999-ms,1ul Inst : G1315A  
Misc : op22999,gvul289,25,,,1,5 Multiplr: 1.00  
IntFile : rteint.p

Data File : D:\HPLC2\DATA\102210\VU28518.D\dad1a.ch Vial: 33  
Acq On : 22-Oct-2010, 17:48:56 Operator: caobinz  
Sample : op22999-ms,1ul Inst : G1315A  
Misc : Multiplr: 1.00  
IntFile : rteint2.p

Quant Time: Oct 23 9:29 2010 Quant Results File: FM102210.RES

Quant Method : D:\HPLC2\METHODS\FM102210.M (RTE Integrator)  
Title : LC8315FORM/070610/ic1253/op21796  
Last Update : Fri Oct 22 12:05:41 2010  
Response via : Initial Calibration  
DataAcq Meth : F6040D.M

Volume Inj. :  
Signal #1 Phase : Signal #2 Phase:  
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ppm	ppm
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## System Monitoring Compounds

3) s Butyraldehyde	13.13f	13.13f	353799	623817	16.315m	16.245m
Spiked Amount	50.000	Range	10 - 115	Recovery	=	32.63% 32.49%

## Target Compounds

1) Formaldehyde	8.00f	8.00f	2036041	5399222	79.707	76.838m
2) Acetaldehyde	8.95f	8.95f	357893	657522	6.001m	4.183m#

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.  
VU28518.D FM102210.M Sat Oct 23 10:56:22 2010 RPT1

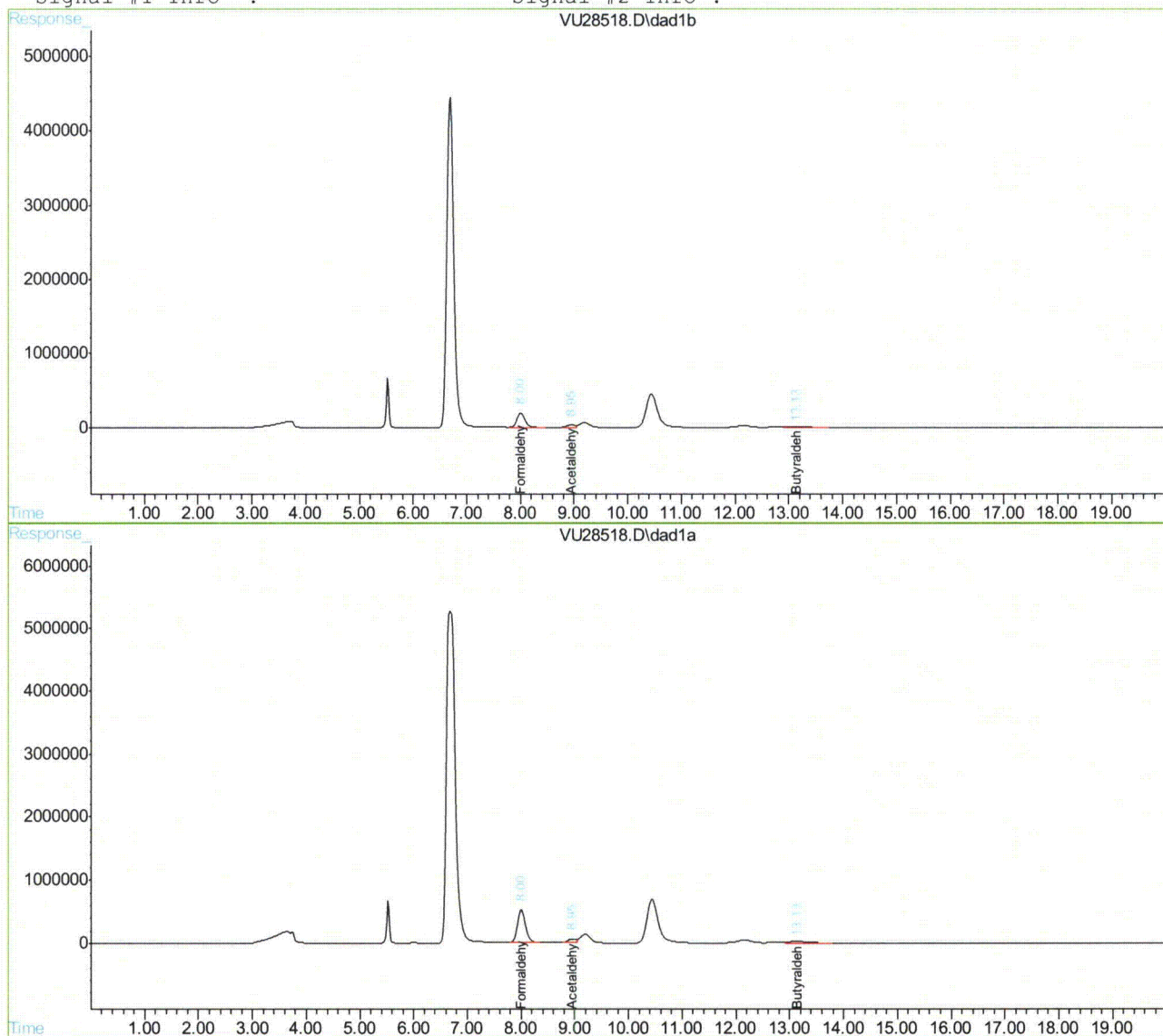
## Quantitation Report

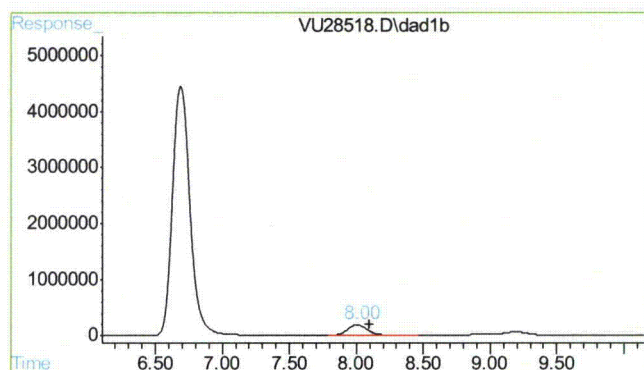
Data File : D:\HPLC2\DATA\102210\VU28518.D\dad1b.ch Vial: 33  
Acq On : 22-Oct-2010, 17:48:56 Operator: caobinz  
Sample : op22999-ms,1ul Inst : G1315A  
Misc : op22999,gvu1289,25,,,1,5 Multiplr: 1.00  
IntFile : rteint.p

Data File : D:\HPLC2\DATA\102210\VU28518.D\dad1a.ch Vial: 33  
Acq On : 22-Oct-2010, 17:48:56 Operator: caobinz  
Sample : op22999-ms,1ul Inst : G1315A  
Misc : Multiplr: 1.00  
IntFile : rteint2.p  
Quant Time: Oct 23 9:29 2010 Quant Results File: FM102210.RES

Quant Method : D:\HPLC2\METHODS\FM102210.M (RTE Integrator)  
Title : LC8315FORM/070610/ic1253/op21796  
Last Update : Fri Oct 22 12:05:41 2010  
Response via : Multiple Level Calibration  
DataAcq Meth : F6040D.M

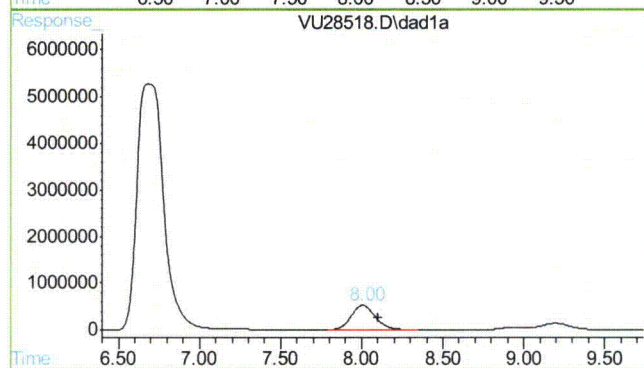
Volume Inj. :  
Signal #1 Phase : Signal #2 Phase:  
Signal #1 Info : Signal #2 Info :





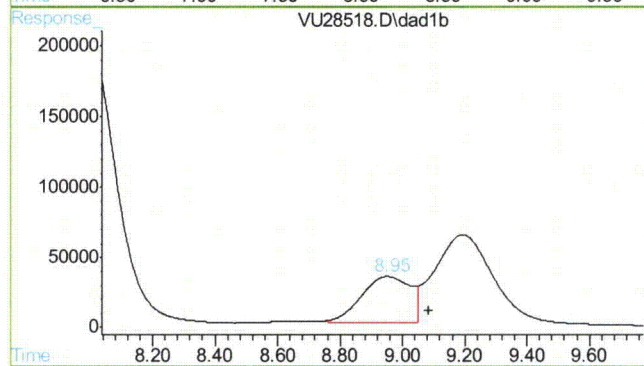
## #1 Formaldehyde

R.T.: 8.004 min  
Delta R.T.: -0.097 min  
Response: 2036041  
Conc: 79.71 ppm



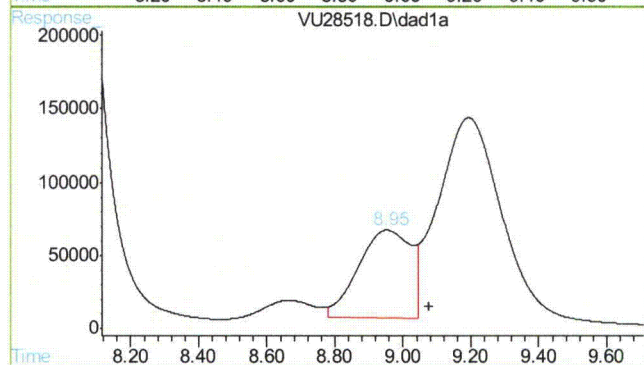
## #1 Formaldehyde

R.T.: 8.004 min  
Delta R.T.: -0.097 min  
Response: 5399222  
Conc: 76.84 ppm



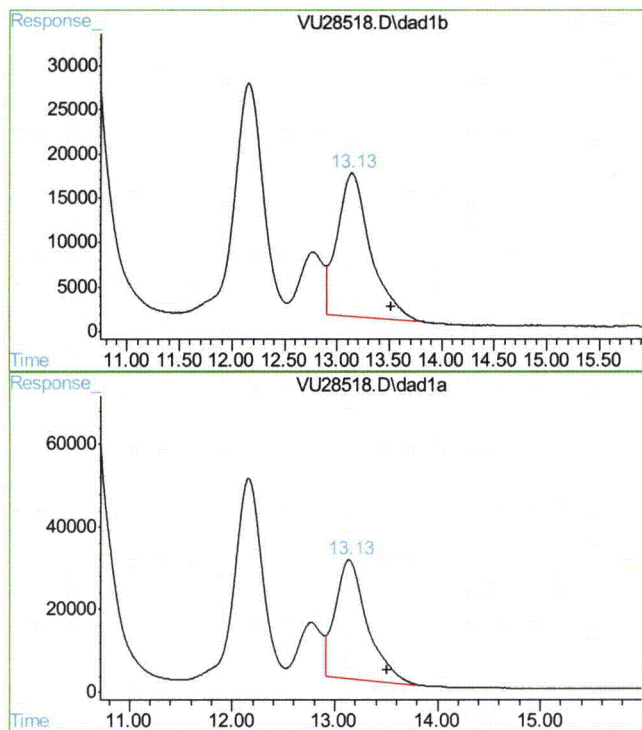
## #2 Acetaldehyde

R.T.: 8.951 min  
Delta R.T.: -0.134 min  
Response: 357893  
Conc: 6.00 ppm



## #2 Acetaldehyde

R.T.: 8.951 min  
Delta R.T.: -0.124 min  
Response: 657522  
Conc: 4.18 ppm



## #3 Butyraldehyde

R.T.: 13.134 min  
Delta R.T.: -0.377 min  
Response: 353799  
Conc: 16.32 ug/ml m

## #3 Butyraldehyde

R.T.: 13.134 min  
Delta R.T.: -0.377 min  
Response: 623817  
Conc: 16.24 ug/ml m

## Quantitation Report (QT Reviewed)

Data File : D:\HPLC2\DATA\102210\VU28519.D\dad1b.ch Vial: 34  
Acq On : 22-Oct-2010, 18:09:47 Operator: caobinz  
Sample : op22999-msd,1ul Inst : G1315A  
Misc : op22999,gvul289,25,,,1,5 Multiplr: 1.00  
IntFile : rteint.p

Data File : D:\HPLC2\DATA\102210\VU28519.D\dad1a.ch Vial: 34  
Acq On : 22-Oct-2010, 18:09:47 Operator: caobinz  
Sample : op22999-msd,1ul Inst : G1315A  
Misc : Multiplr: 1.00  
IntFile : rteint2.p

Quant Time: Oct 23 9:30 2010 Quant Results File: FM102210.RES

Quant Method : D:\HPLC2\METHODS\FM102210.M (RTE Integrator)  
Title : LC8315FORM/070610/icl253/op21796  
Last Update : Fri Oct 22 12:05:41 2010  
Response via : Initial Calibration  
DataAcq Meth : F6040D.M

Volume Inj. :  
Signal #1 Phase : Signal #2 Phase:  
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ppm	ppm
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## System Monitoring Compounds

3) s Butyraldehyde	13.15f	13.15f	338142	641638	15.635m	16.672m
Spiked Amount	50.000	Range	10 - 115	Recovery	= 31.27%	33.34%

## Target Compounds

1) Formaldehyde	8.01f	8.01f	2099155	5725800	83.265m	83.646m
2) Acetaldehyde	8.96f	8.96f	394412	531509	6.720m	2.819 #

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.  
VU28519.D FM102210.M Sat Oct 23 10:56:28 2010 RPT1

## Quantitation Report

Data File : D:\HPLC2\DATA\102210\VU28519.D\dad1b.ch  
Acq On : 22-Oct-2010, 18:09:47  
Sample : op22999-msd,1ul  
Misc : op22999,gvu1289,25,,,1,5  
IntFile : rteint.p

Vial: 34  
Operator: caobinz  
Inst : G1315A  
Multiplr: 1.00

Data File : D:\HPLC2\DATA\102210\VU28519.D\dad1a.ch  
Acq On : 22-Oct-2010, 18:09:47  
Sample : op22999-msd,1ul  
Misc :  
IntFile : rteint2.p

Vial: 34  
Operator: caobinz  
Inst : G1315A  
Multiplr: 1.00

Quant Time: Oct 23 9:30 2010 Quant Results File: FM102210.RES

Quant Method : D:\HPLC2\METHODS\FM102210.M (RTE Integrator)  
Title : LC8315FORM/070610/ic1253/op21796  
Last Update : Fri Oct 22 12:05:41 2010  
Response via : Multiple Level Calibration  
DataAcq Meth : F6040D.M

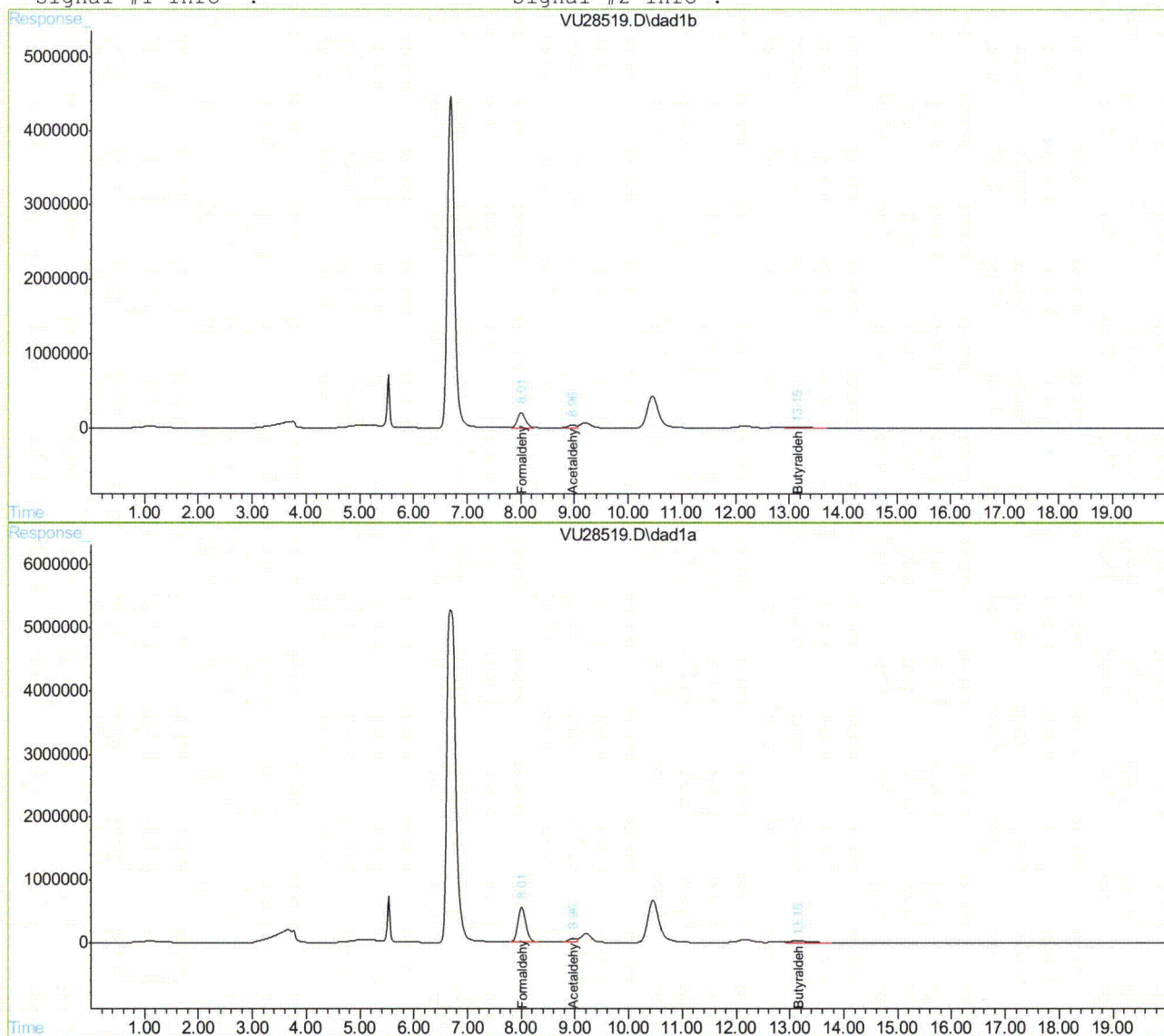
Volume Inj. :

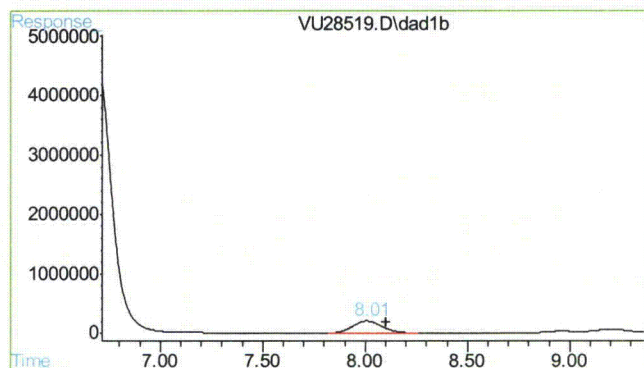
Signal #1 Phase :

Signal #1 Info :

Signal #2 Phase:

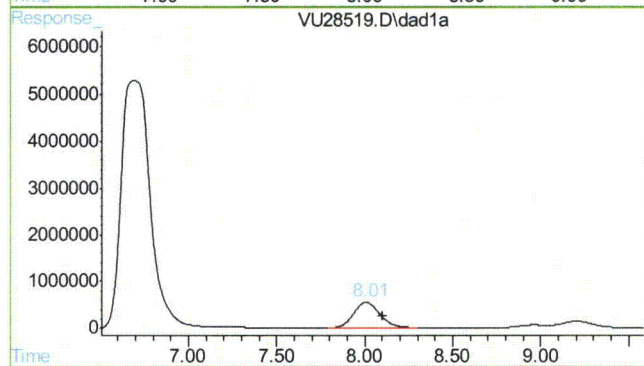
Signal #2 Info :





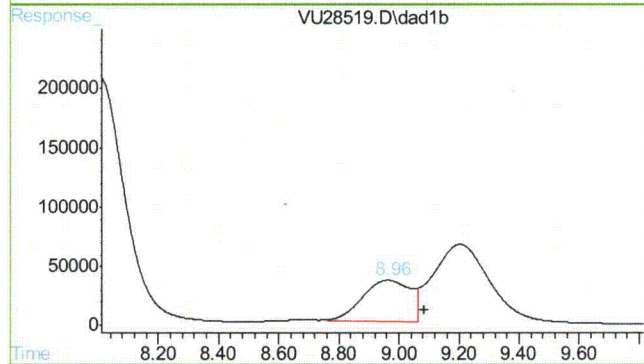
#1 Formaldehyde

R.T.: 8.007 min  
Delta R.T.: -0.095 min  
Response: 2099155  
Conc: 83.27 ppm m



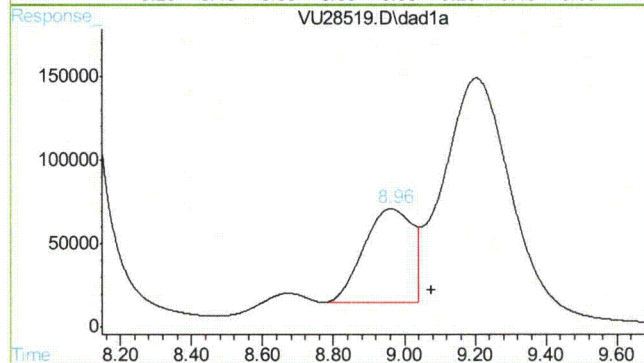
#1 Formaldehyde

R.T.: 8.007 min  
Delta R.T.: -0.095 min  
Response: 5725800  
Conc: 83.65 ppm m



#2 Acetaldehyde

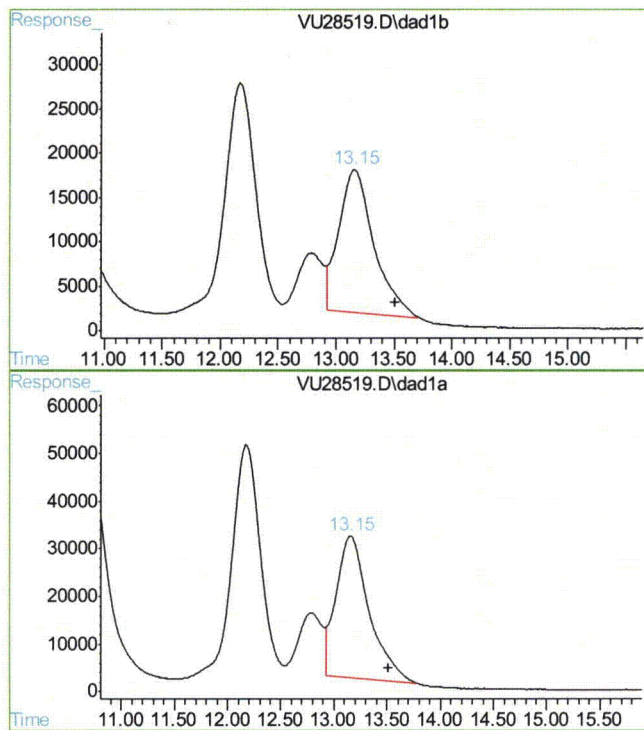
R.T.: 8.964 min  
Delta R.T.: -0.121 min  
Response: 394412  
Conc: 6.72 ppm m



#2 Acetaldehyde

R.T.: 8.962 min  
Delta R.T.: -0.113 min  
Response: 531509  
Conc: 2.82 ppm

17.5.4 17



#3 Butyraldehyde

R.T.: 13.150 min  
Delta R.T.: -0.361 min  
Response: 338142  
Conc: 15.63 ug/ml m

#3 Butyraldehyde

R.T.: 13.149 min  
Delta R.T.: -0.363 min  
Response: 641638  
Conc: 16.67 ug/ml m

John Hamilton  
07/08/10 11:09

## Quantitation Report (QT Reviewed)

Data File : K:\HPLC2\DATA\070610\VU27923.D\dad1b.ch Vial: 1  
Acq On : 06-Jul-2010, 15:01:17 Operator: caobinz  
Sample : ic1253-100,form 100 Inst : G1315A  
Misc : op21785,gvu1253,25,,,1,,soil Multiplr: 1.00  
IntFile : rteint.p

Data File : K:\HPLC2\DATA\070610\VU27923.D\dad1a.ch Vial: 1  
Acq On : 06-Jul-2010, 15:01:17 Operator: sonal  
Sample : form 100 Inst : G1315A  
Misc : Multiplr: 1.00  
IntFile : rteint2.p

Quant Time: Jul 7 9:18 2010 Quant Results File: FM070610.RES

Quant Method : K:\HPLC2\METHODS\FM070610.M (RTE Integrator)  
Title : LC8315FORM/032310/ic1209/op20876  
Last Update : Tue Jun 29 17:17:07 2010  
Response via : Initial Calibration  
DataAcq Meth : F6040D.M

Volume Inj. :  
Signal #1 Phase : Signal #2 Phase:  
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ppm	ppm
System Monitoring Compounds						
3) s Butyraldehyde	13.10	13.10	1878978	3420222	99.280m	99.884m
Spiked Amount	50.000	Range	20 - 115	Recovery	= 198.56%#	199.77%#

Target Compounds						
1)	Formaldehyde	7.97	7.97	2359089	6395037	106.386 101.992
2)	Acetaldehyde	8.91	8.91	3730143	7267805	89.512 97.012

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.  
VU27923.D FM070610.M Wed Jul 07 09:42:27 2010 RPT1

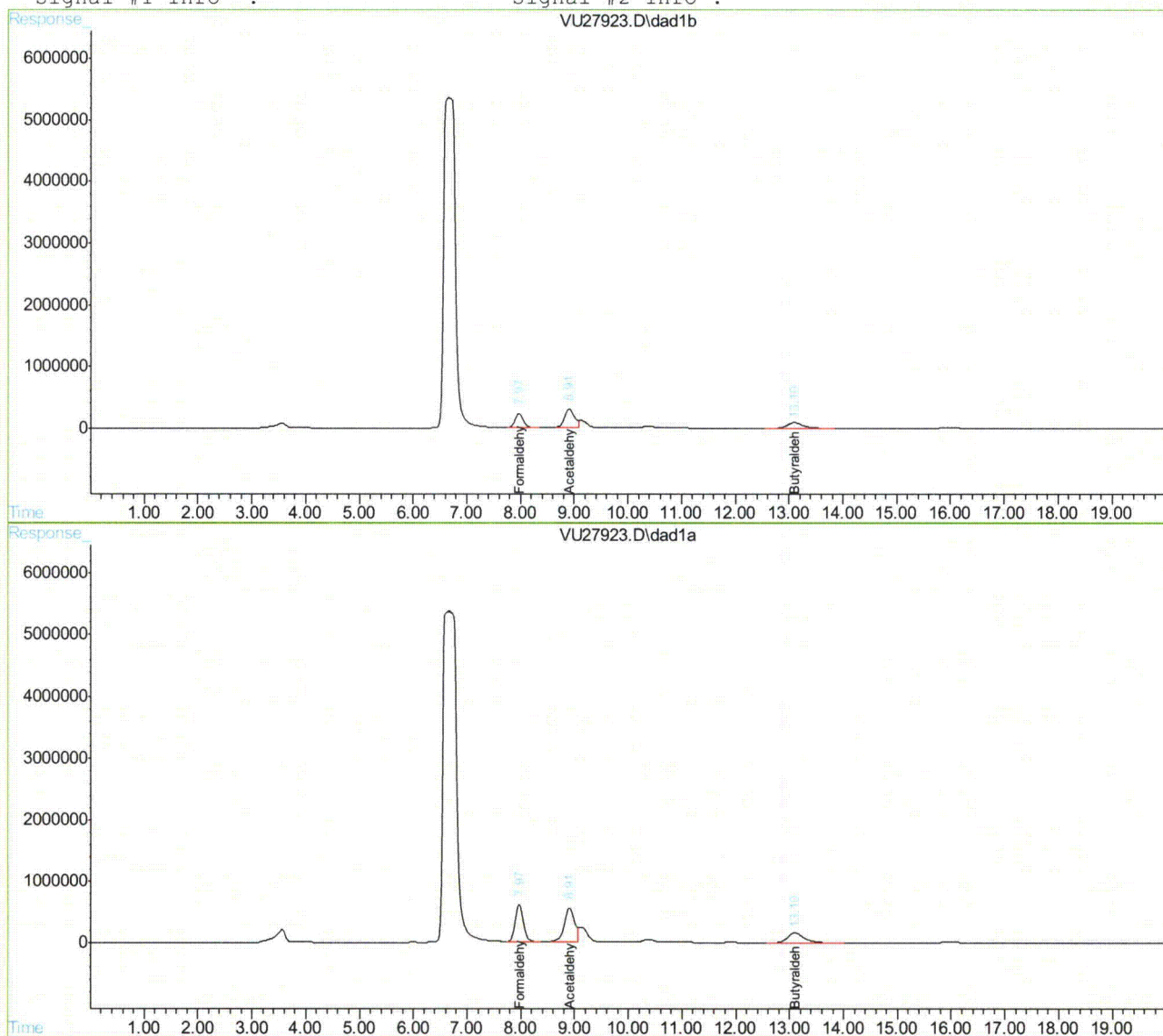
## Quantitation Report

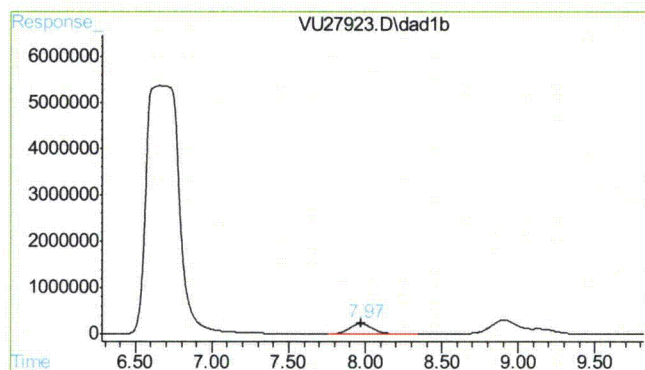
Data File : K:\HPLC2\DATA\070610\VU27923.D\dad1b.ch Vial: 1  
Acq On : 06-Jul-2010, 15:01:17 Operator: caobinz  
Sample : ic1253-100, form 100 Inst : G1315A  
Misc : op21785,gvul253,25,,,1,,soil Multiplr: 1.00  
IntFile : rteint.p

Data File : K:\HPLC2\DATA\070610\VU27923.D\dad1a.ch Vial: 1  
Acq On : 06-Jul-2010, 15:01:17 Operator: sonal  
Sample : form 100 Inst : G1315A  
Misc : Multiplr: 1.00  
IntFile : rteint2.p  
Quant Time: Jul 7 9:18 2010 Quant Results File: FM070610.RES

Quant Method : K:\HPLC2\METHODS\FM070610.M (RTE Integrator)  
Title : LC8315FORM/032310/ic1209/op20876  
Last Update : Tue Jun 29 17:17:07 2010  
Response via : Multiple Level Calibration  
DataAcq Meth : F6040D.M

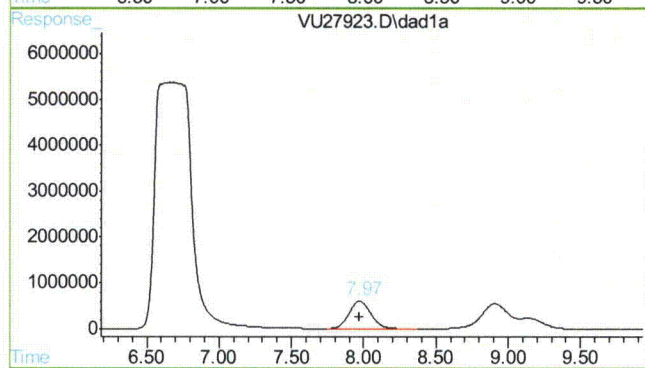
Volume Inj. :  
Signal #1 Phase : Signal #2 Phase:  
Signal #1 Info : Signal #2 Info :





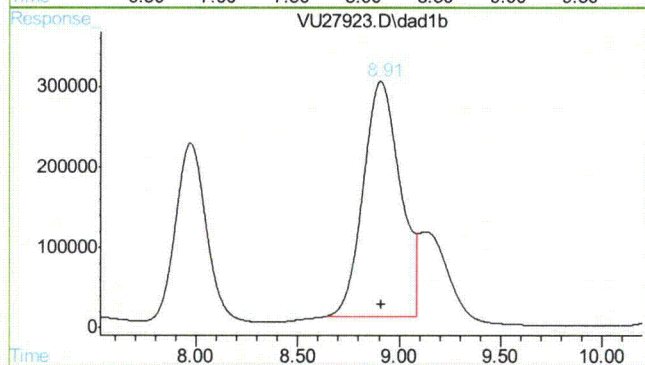
## #1 Formaldehyde

R.T.: 7.971 min  
Delta R.T.: 0.000 min  
Response: 2359089  
Conc: 106.39 ppm



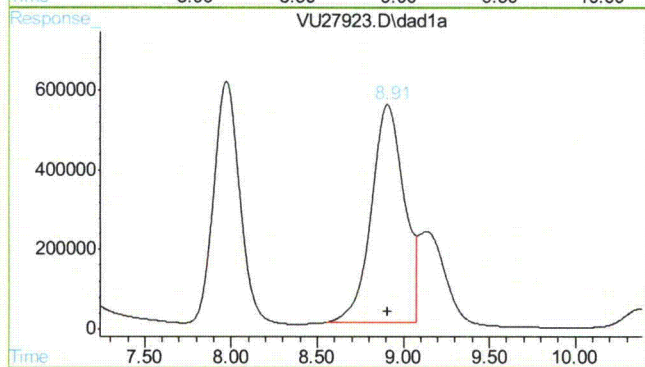
## #1 Formaldehyde

R.T.: 7.971 min  
Delta R.T.: 0.000 min  
Response: 6395037  
Conc: 101.99 ppm



## #2 Acetaldehyde

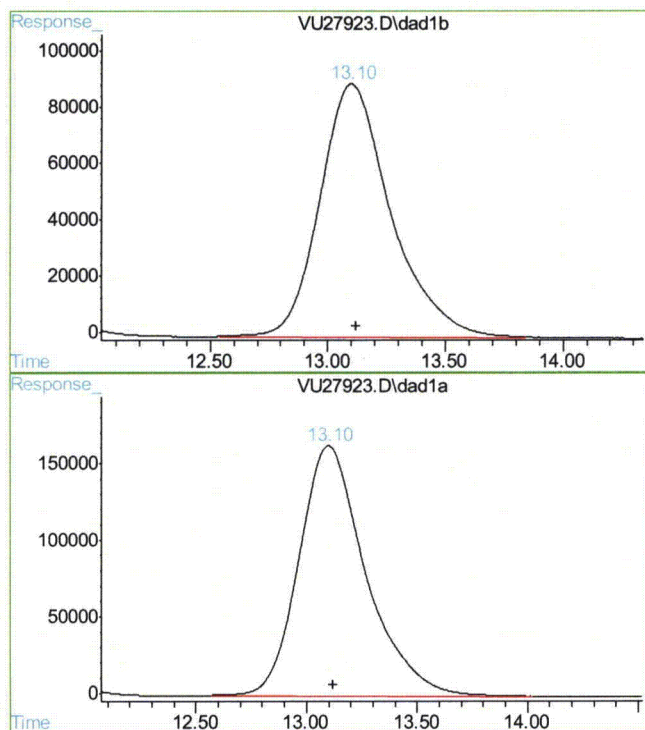
R.T.: 8.906 min  
Delta R.T.: -0.005 min  
Response: 3730143  
Conc: 89.51 ppm



## #2 Acetaldehyde

R.T.: 8.906 min  
Delta R.T.: -0.005 min  
Response: 7267805  
Conc: 97.01 ppm

17.6.1  
17



## #3 Butyraldehyde

R.T.: 13.096 min  
Delta R.T.: -0.026 min  
Response: 1878978  
Conc: 99.28 ug/ml m

## #3 Butyraldehyde

R.T.: 13.096 min  
Delta R.T.: -0.026 min  
Response: 3420222  
Conc: 99.88 ug/ml m

## Quantitation Report (QT Reviewed)

Data File : K:\HPLC2\DATA\070610\VU27924.D\dad1b.ch Vial: 2  
Acq On : 06-Jul-2010, 15:22:12 Operator: caobinz  
Sample : icc1253-50, form 50 Inst : G1315A  
Misc : op21785,gvul1253,25,,,1,,soil Multiplr: 1.00  
IntFile : rteint.p

Data File : K:\HPLC2\DATA\070610\VU27924.D\dad1a.ch Vial: 2  
Acq On : 06-Jul-2010, 15:22:12 Operator: sonal  
Sample : form 50 Inst : G1315A  
Misc : Multiplr: 1.00  
IntFile : rteint2.p

Quant Time: Jul 7 9:21 2010 Quant Results File: FM070610.RES

Quant Method : K:\HPLC2\METHODS\FM070610.M (RTE Integrator)  
Title : LC8315FORM/032310/ic1209/op20876  
Last Update : Wed Jul 07 09:19:45 2010  
Response via : Initial Calibration  
DataAcq Meth : F6040D.M

Volume Inj. :  
Signal #1 Phase : Signal #2 Phase:  
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ppm	ppm
----------	------	------	--------	--------	-----	-----

## System Monitoring Compounds

3) s Butyraldehyde	13.11	13.11	1131974	2040851	54.320m	53.892m
Spiked Amount	50.000	Range	20 - 115	Recovery	= 108.64%	107.78%

## Target Compounds

1) Formaldehyde	7.98	7.98	1466202	4020054	54.905m	54.055m
2) Acetaldehyde	8.91	8.91	2407860	4582061	48.380m	46.580m

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.  
VU27924.D FM070610.M Wed Jul 07 09:42:31 2010 RPT1

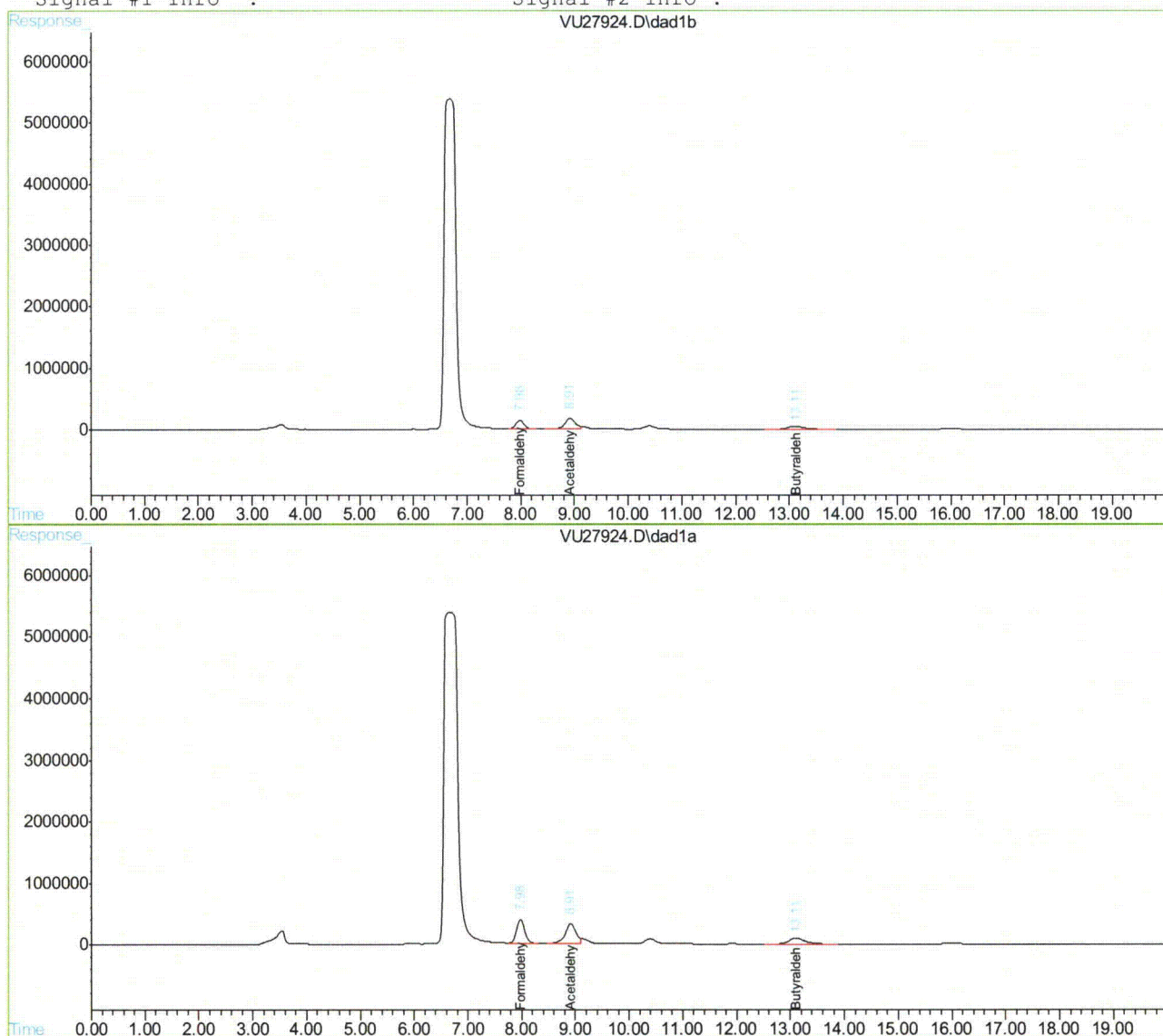
## Quantitation Report

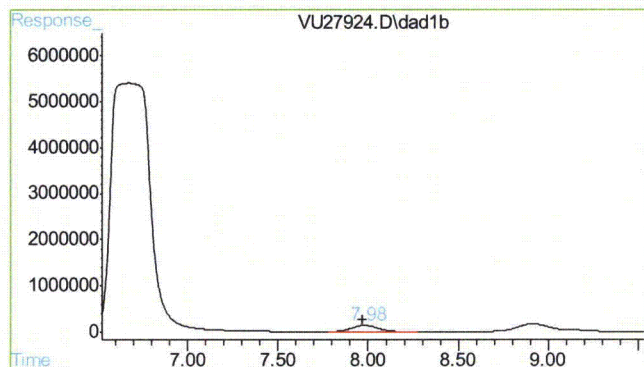
Data File : K:\HPLC2\DATA\070610\VU27924.D\dad1b.ch Vial: 2  
Acq On : 06-Jul-2010, 15:22:12 Operator: caobinz  
Sample : iccl253-50, form 50 Inst : G1315A  
Misc : op21785,gvul253,25,,,1,,soil Multiplr: 1.00  
IntFile : rteint.p

Data File : K:\HPLC2\DATA\070610\VU27924.D\dad1a.ch Vial: 2  
Acq On : 06-Jul-2010, 15:22:12 Operator: sonal  
Sample : form 50 Inst : G1315A  
Misc : Multiplr: 1.00  
IntFile : rteint2.p  
Quant Time: Jul 7 9:21 2010 Quant Results File: FM070610.RES

Quant Method : K:\HPLC2\METHODS\FM070610.M (RTE Integrator)  
Title : LC8315FORM/032310/ic1209/op20876  
Last Update : Wed Jul 07 09:19:45 2010  
Response via : Multiple Level Calibration  
DataAcq Meth : F6040D.M

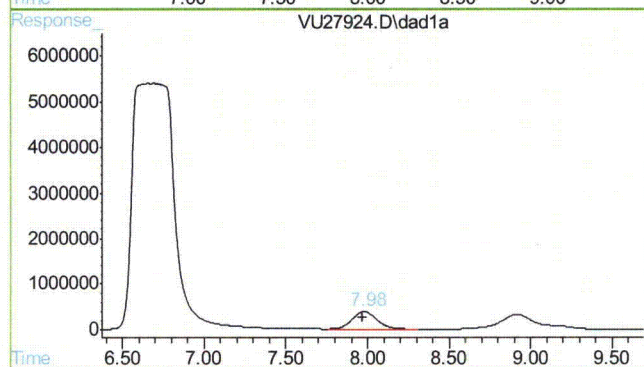
Volume Inj. :  
Signal #1 Phase : Signal #2 Phase:  
Signal #1 Info : Signal #2 Info :





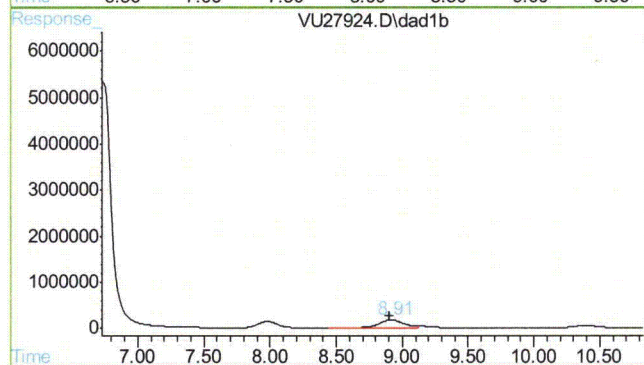
## #1 Formaldehyde

R.T.: 7.978 min  
Delta R.T.: 0.007 min  
Response: 1466202  
Conc: 54.91 ppm m



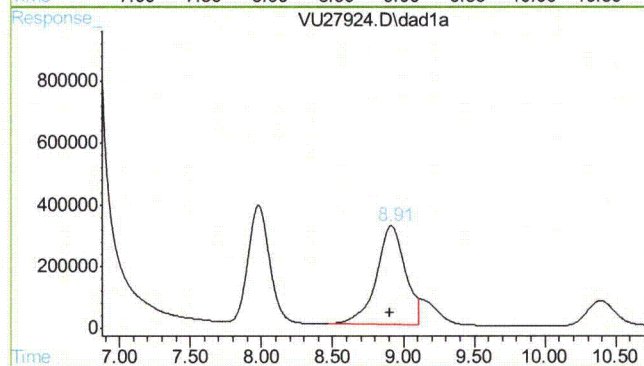
## #1 Formaldehyde

R.T.: 7.978 min  
Delta R.T.: 0.007 min  
Response: 4020054  
Conc: 54.06 ppm m



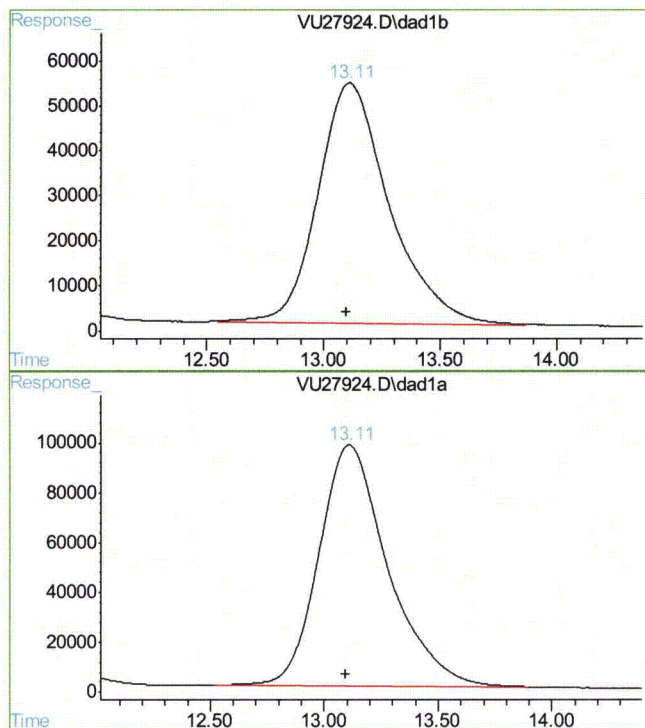
## #2 Acetaldehyde

R.T.: 8.915 min  
Delta R.T.: 0.009 min  
Response: 2407860  
Conc: 48.38 ppm m



## #2 Acetaldehyde

R.T.: 8.913 min  
Delta R.T.: 0.007 min  
Response: 4582061  
Conc: 46.58 ppm m



## #3 Butyraldehyde

R.T.: 13.108 min  
Delta R.T.: 0.012 min  
Response: 1131974  
Conc: 54.32 ug/ml m

## #3 Butyraldehyde

R.T.: 13.107 min  
Delta R.T.: 0.010 min  
Response: 2040851  
Conc: 53.89 ug/ml m

## Quantitation Report (QT Reviewed)

Data File : K:\HPLC2\DATA\070610\VU27925.D\dad1b.ch Vial: 3  
Acq On : 06-Jul-2010, 15:43:11 Operator: caobinz  
Sample : ic1253-20,form 20 Inst : G1315A  
Misc : op21785,gvul253,25,,,1,,soil Multiplr: 1.00  
IntFile : rteint.p

Data File : K:\HPLC2\DATA\070610\VU27925.D\dad1a.ch Vial: 3  
Acq On : 06-Jul-2010, 15:43:11 Operator: sonal  
Sample : form 20 Inst : G1315A  
Misc : Multiplr: 1.00  
IntFile : rteint2.p

Quant Time: Jul 7 9:23 2010 Quant Results File: FM070610.RES

Quant Method : K:\HPLC2\METHODS\FM070610.M (RTE Integrator)  
Title : LC8315FORM/032310/ic1209/op20876  
Last Update : Wed Jul 07 09:21:43 2010  
Response via : Initial Calibration  
DataAcq Meth : F6040D.M

Volume Inj. :  
Signal #1 Phase : Signal #2 Phase:  
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ppm	ppm
-----						
System Monitoring Compounds						
3) s Butyraldehyde	13.10	13.10	336985	604417	15.826m	15.950m
Spiked Amount	50.000	Range	20 - 115	Recovery	=	31.65% 31.90%
Target Compounds						
1) Formaldehyde	7.97	7.97	582867	1589578	18.083m	17.508m
2) Acetaldehyde	8.90	8.90	838277	1687066	15.475m	14.937m

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.  
VU27925.D FM070610.M Wed Jul 07 09:42:37 2010 RPT1

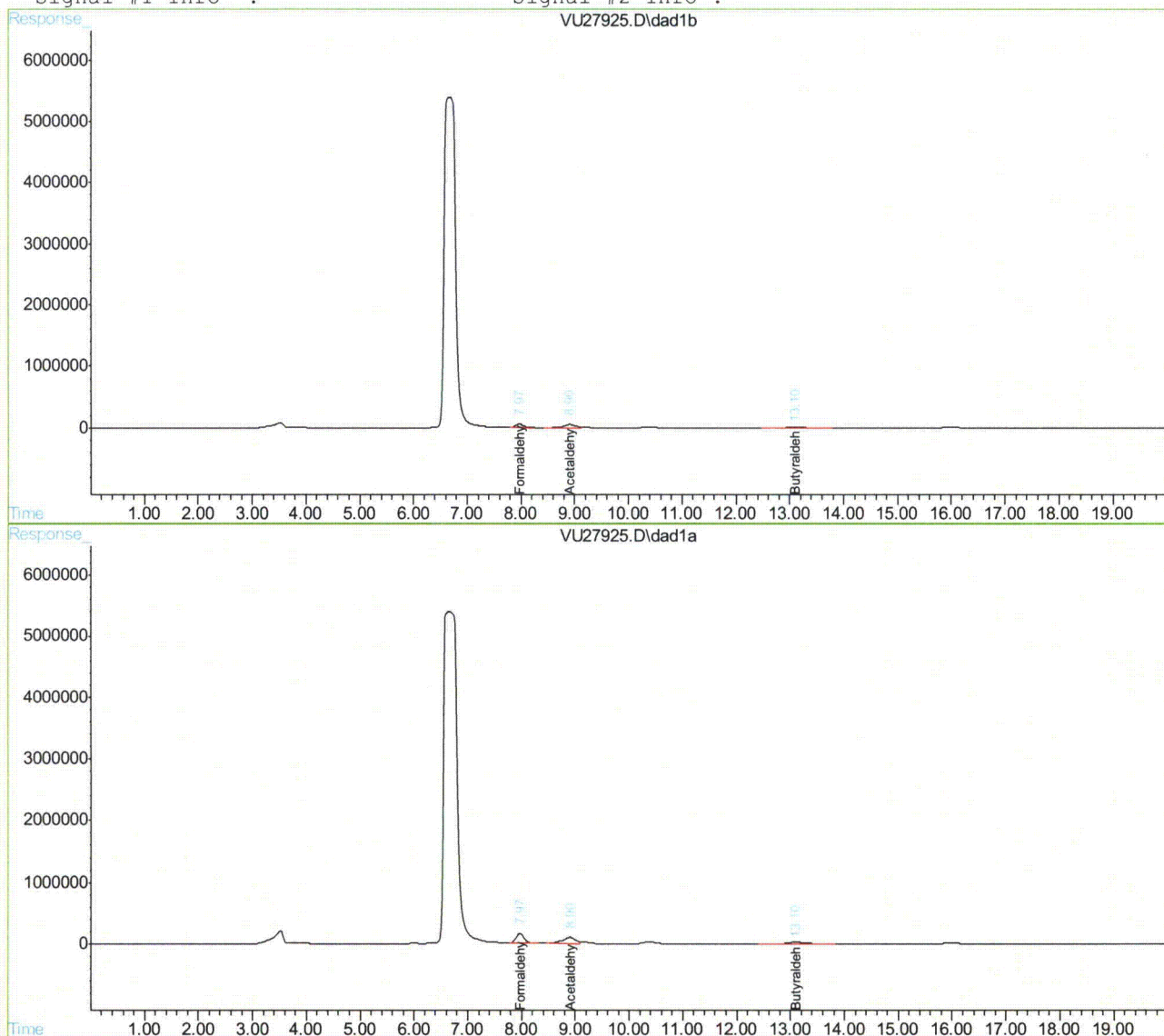
## Quantitation Report

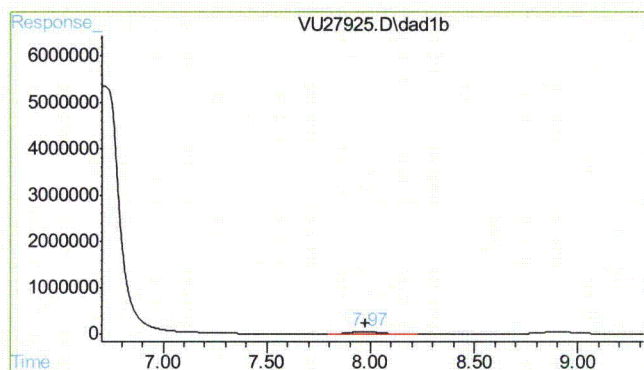
Data File : K:\HPLC2\DATA\070610\VU27925.D\dad1b.ch Vial: 3  
Acq On : 06-Jul-2010, 15:43:11 Operator: caobinz  
Sample : ic1253-20, form 20 Inst : G1315A  
Misc : op21785,gvul253,25,,,1,,soil Multiplr: 1.00  
IntFile : rteint.p

Data File : K:\HPLC2\DATA\070610\VU27925.D\dad1a.ch Vial: 3  
Acq On : 06-Jul-2010, 15:43:11 Operator: sonal  
Sample : form 20 Inst : G1315A  
Misc : Multiplr: 1.00  
IntFile : rteint2.p  
Quant Time: Jul 7 9:23 2010 Quant Results File: FM070610.RES

Quant Method : K:\HPLC2\METHODS\FM070610.M (RTE Integrator)  
Title : LC8315FORM/032310/ic1209/op20876  
Last Update : Wed Jul 07 09:21:43 2010  
Response via : Multiple Level Calibration  
DataAcq Meth : F6040D.M

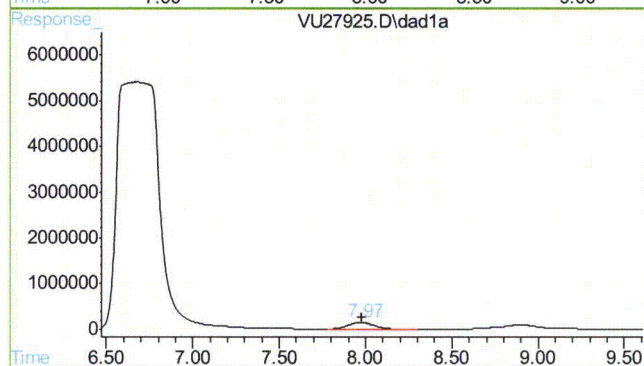
Volume Inj. :  
Signal #1 Phase : Signal #2 Phase:  
Signal #1 Info : Signal #2 Info :





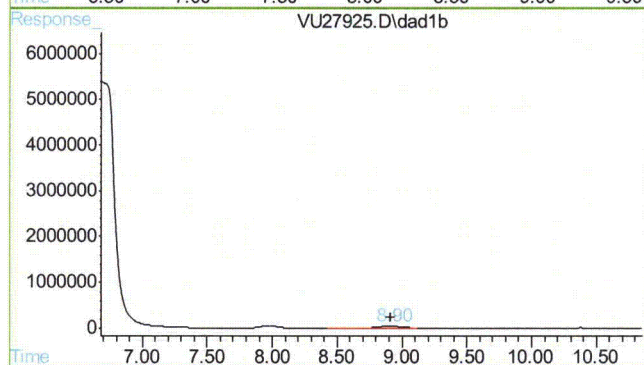
#1 Formaldehyde

R.T.: 7.971 min  
Delta R.T.: -0.007 min  
Response: 582867  
Conc: 18.08 ppm m



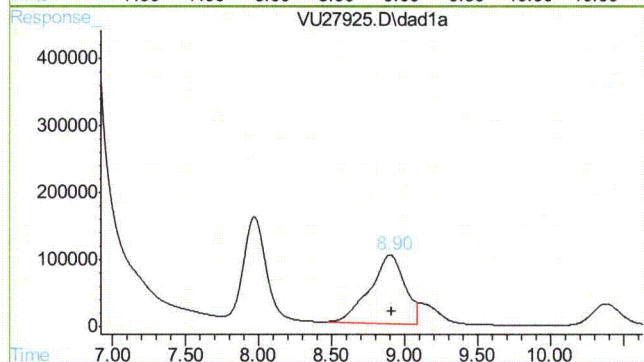
#1 Formaldehyde

R.T.: 7.970 min  
Delta R.T.: -0.009 min  
Response: 1589578  
Conc: 17.51 ppm m



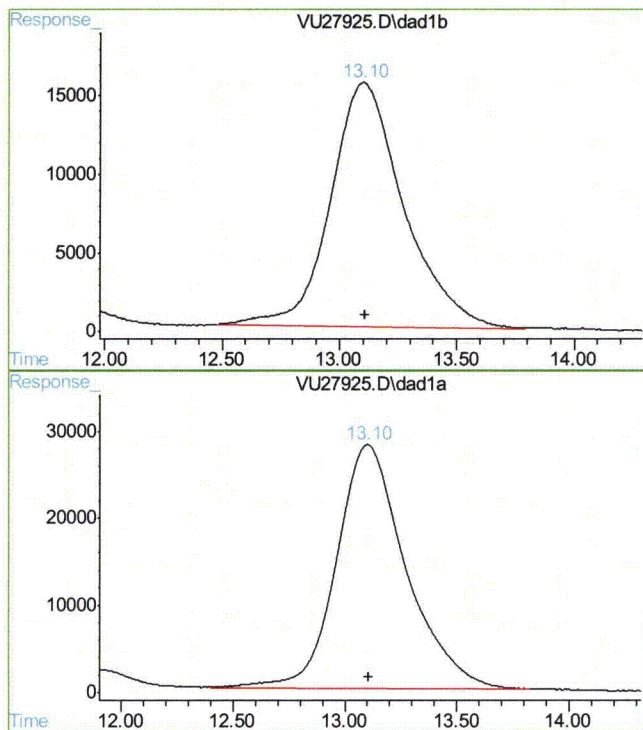
#2 Acetaldehyde

R.T.: 8.903 min  
Delta R.T.: -0.012 min  
Response: 838277  
Conc: 15.47 ppm m



#2 Acetaldehyde

R.T.: 8.898 min  
Delta R.T.: -0.016 min  
Response: 1687066  
Conc: 14.94 ppm m



## #3 Butyraldehyde

R.T.: 13.096 min  
Delta R.T.: -0.012 min  
Response: 336985  
Conc: 15.83 ug/ml m

## #3 Butyraldehyde

R.T.: 13.096 min  
Delta R.T.: -0.011 min  
Response: 604417  
Conc: 15.95 ug/ml m

## Quantitation Report (QT Reviewed)

Data File : K:\HPLC2\DATA\070610\VU27926.D\dad1b.ch Vial: 4  
Acq On : 06-Jul-2010, 16:04:07 Operator: caobinz  
Sample : ic1253-10,form 10 Inst : G1315A  
Misc : op21785,gvul253,25,,,1,,soil Multiplr: 1.00  
IntFile : rteint.p

Data File : K:\HPLC2\DATA\070610\VU27926.D\dad1a.ch Vial: 4  
Acq On : 06-Jul-2010, 16:04:07 Operator: sonal  
Sample : form 10 Inst : G1315A  
Misc : Multiplr: 1.00  
IntFile : rteint2.p

Quant Time: Jul 7 9:25 2010 Quant Results File: FM070610.RES

Quant Method : K:\HPLC2\METHODS\FM070610.M (RTE Integrator)  
Title : LC8315FORM/032310/ic1209/op20876  
Last Update : Wed Jul 07 09:23:52 2010  
Response via : Initial Calibration  
DataAcq Meth : F6040D.M

Volume Inj. :  
Signal #1 Phase : Signal #2 Phase:  
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ppm	ppm
-----						
System Monitoring Compounds						
3) s Butyraldehyde	13.11	13.11	186742	316014	9.498m	9.278m
Spiked Amount	50.000	Range	20 - 115	Recovery	= 19.00%#	18.56%#
Target Compounds						
1) Formaldehyde	7.98	7.98	352338	973839	9.825m	9.767m
2) Acetaldehyde	8.91	8.90	563038	1200404	10.236m	10.005m

-----  
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.  
VU27926.D FM070610.M Wed Jul 07 09:42:44 2010 RPT1

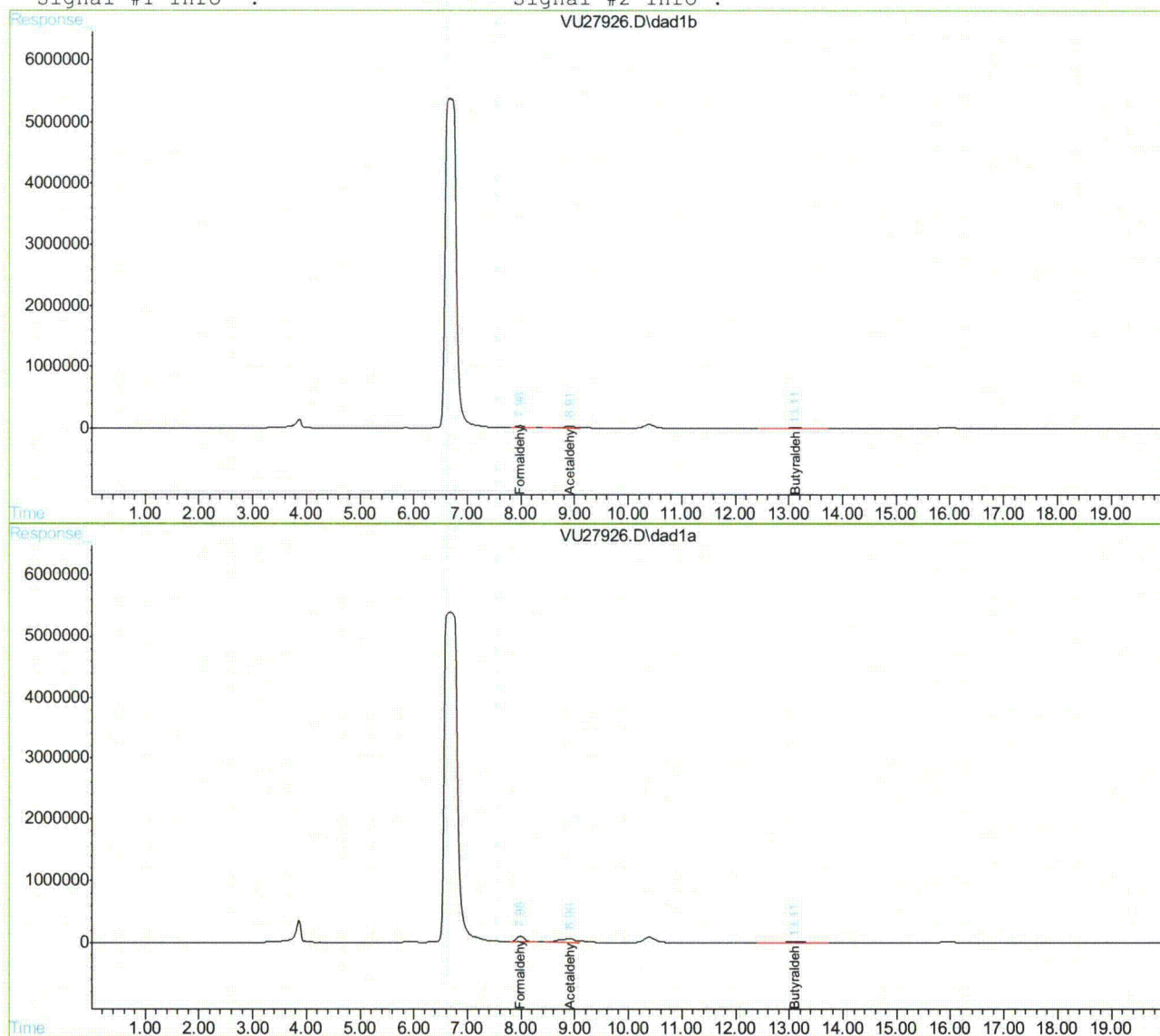
## Quantitation Report

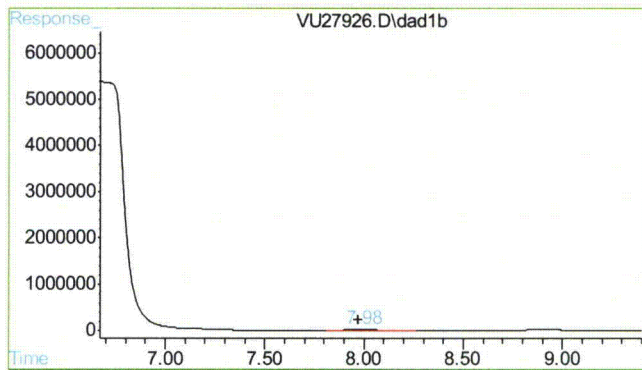
Data File : K:\HPLC2\DATA\070610\VU27926.D\dad1b.ch Vial: 4  
Acq On : 06-Jul-2010, 16:04:07 Operator: caobinz  
Sample : ic1253-10, form 10 Inst : G1315A  
Misc : op21785,gvu1253,25,,,1,,soil Multiplr: 1.00  
IntFile : rteint.p

Data File : K:\HPLC2\DATA\070610\VU27926.D\dad1a.ch Vial: 4  
Acq On : 06-Jul-2010, 16:04:07 Operator: sonal  
Sample : form 10 Inst : G1315A  
Misc : Multiplr: 1.00  
IntFile : rteint2.p  
Quant Time: Jul 7 9:25 2010 Quant Results File: FM070610.RES

Quant Method : K:\HPLC2\METHODS\FM070610.M (RTE Integrator)  
Title : LC8315FORM/032310/ic1209/op20876  
Last Update : Wed Jul 07 09:23:52 2010  
Response via : Multiple Level Calibration  
DataAcq Meth : F6040D.M

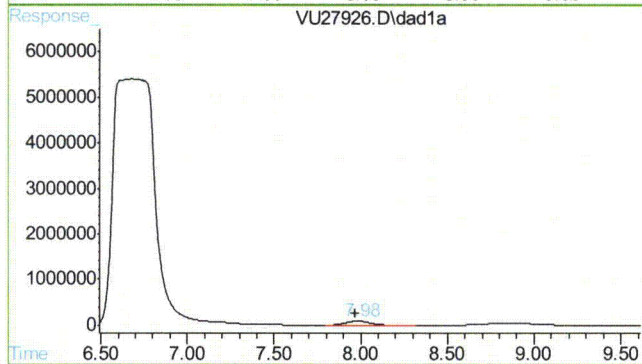
Volume Inj. :  
Signal #1 Phase : Signal #2 Phase:  
Signal #1 Info : Signal #2 Info :





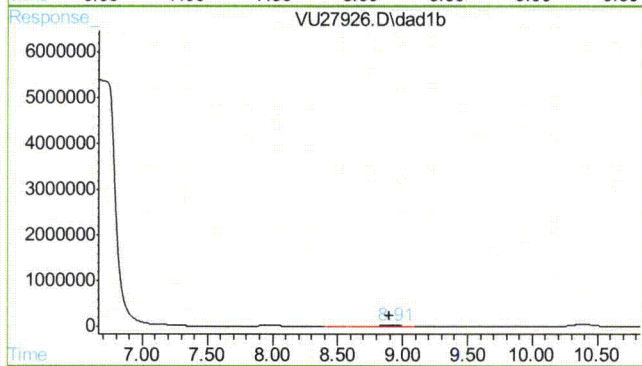
#1 Formaldehyde

R.T.: 7.979 min  
Delta R.T.: 0.008 min  
Response: 352338  
Conc: 9.83 ppm m



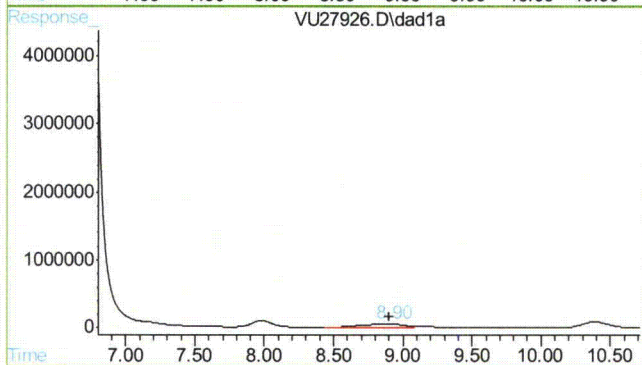
#1 Formaldehyde

R.T.: 7.979 min  
Delta R.T.: 0.010 min  
Response: 973839  
Conc: 9.77 ppm m



#2 Acetaldehyde

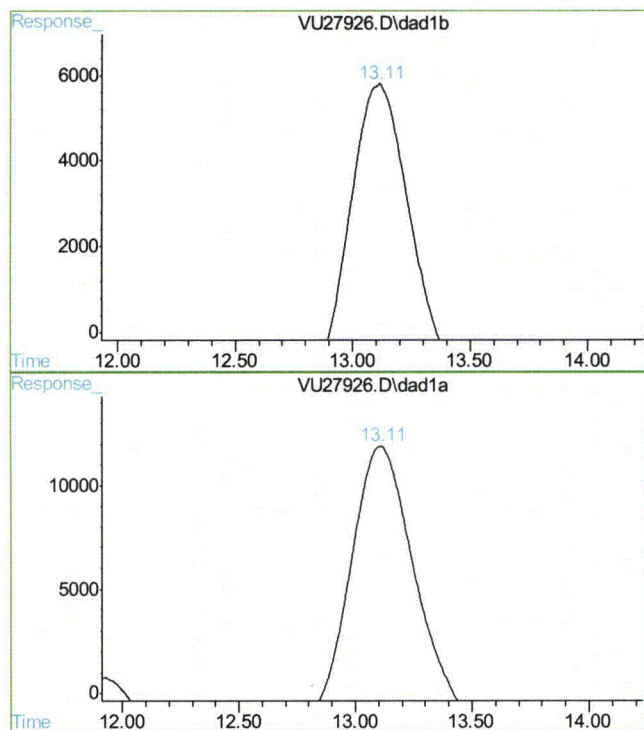
R.T.: 8.908 min  
Delta R.T.: 0.005 min  
Response: 563038  
Conc: 10.24 ppm m



#2 Acetaldehyde

R.T.: 8.899 min  
Delta R.T.: 0.002 min  
Response: 1200404  
Conc: 10.01 ppm m

17.6.4 17



## #3 Butyraldehyde

R.T.: 13.111 min  
Delta R.T.: 0.015 min  
Response: 186742  
Conc: 9.50 ug/ml m

## #3 Butyraldehyde

R.T.: 13.108 min  
Delta R.T.: 0.012 min  
Response: 316014  
Conc: 9.28 ug/ml m

## Quantitation Report (QT Reviewed)

Data File : K:\HPLC2\DATA\070610\VU27927.D\dad1b.ch Vial: 5  
Acq On : 06-Jul-2010, 16:25:02 Operator: caobinz  
Sample : ic1253-5,form 5 Inst : G1315A  
Misc : op21785,gvul253,25,,,1,,soil Multiplr: 1.00  
IntFile : rteint.p

Data File : K:\HPLC2\DATA\070610\VU27927.D\dad1a.ch Vial: 5  
Acq On : 06-Jul-2010, 16:25:02 Operator: sonal  
Sample : form 5 Inst : G1315A  
Misc : Multiplr: 1.00  
IntFile : rteint2.p

Quant Time: Jul 7 9:26 2010 Quant Results File: FM070610.RES

Quant Method : K:\HPLC2\METHODS\FM070610.M (RTE Integrator)  
Title : LC8315FORM/032310/ic1209/op20876  
Last Update : Wed Jul 07 09:25:18 2010  
Response via : Initial Calibration  
DataAcq Meth : F6040D.M

Volume Inj. :  
Signal #1 Phase : Signal #2 Phase:  
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ppm	ppm
-----						
System Monitoring Compounds						
3) s Butyraldehyde	13.12	13.11	102234	171864	6.172m	6.080m
Spiked Amount	50.000	Range	20 - 115	Recovery	=	12.34%# 12.16%#

Target Compounds						
1) Formaldehyde	7.99	7.99	230974	640797	5.650m	5.701m
2) Acetaldehyde	8.91	8.76f	358110	856551	6.127m	6.342m

-----  
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.  
VU27927.D FM070610.M Wed Jul 07 09:42:52 2010 RPT1

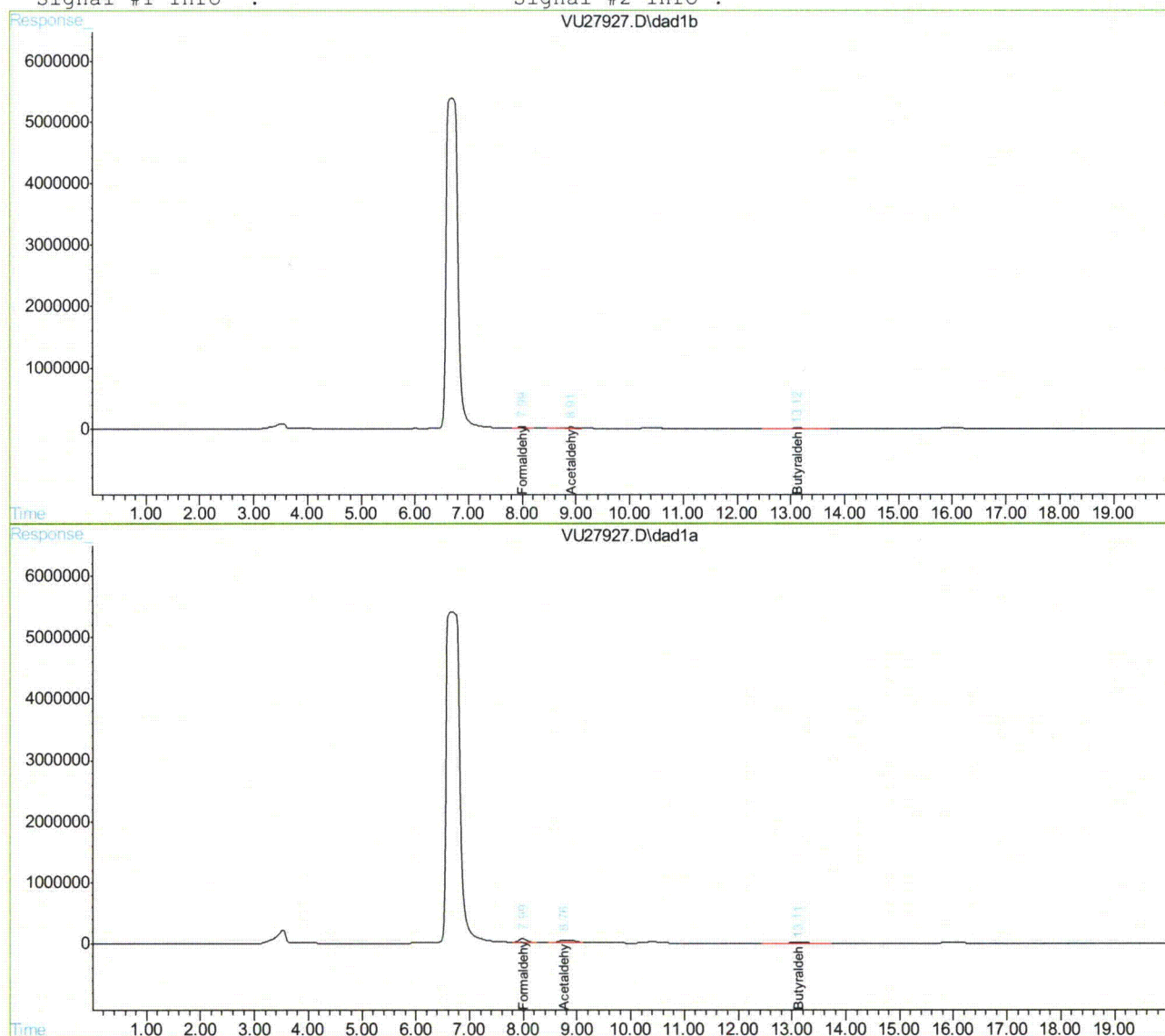
## Quantitation Report

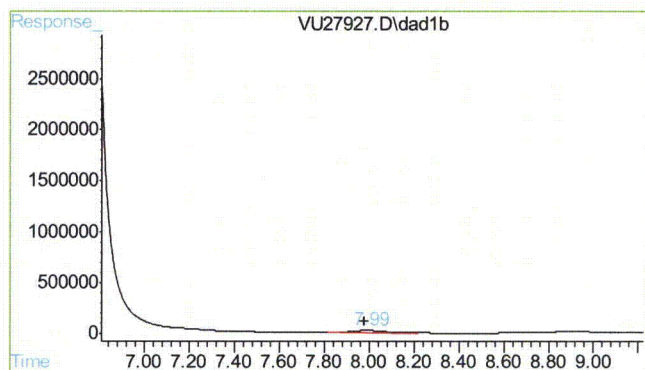
Data File : K:\HPLC2\DATA\070610\VU27927.D\dad1b.ch Vial: 5  
Acq On : 06-Jul-2010, 16:25:02 Operator: caobinz  
Sample : ic1253-5, form 5 Inst : G1315A  
Misc : op21785,gvu1253,25,,,1,,soil Multiplr: 1.00  
IntFile : rteint.p

Data File : K:\HPLC2\DATA\070610\VU27927.D\dad1a.ch Vial: 5  
Acq On : 06-Jul-2010, 16:25:02 Operator: sonal  
Sample : form 5 Inst : G1315A  
Misc : Multiplr: 1.00  
IntFile : rteint2.p  
Quant Time: Jul 7 9:26 2010 Quant Results File: FM070610.RES

Quant Method : K:\HPLC2\METHODS\FM070610.M (RTE Integrator)  
Title : LC8315FORM/032310/ic1209/op20876  
Last Update : Wed Jul 07 09:25:18 2010  
Response via : Multiple Level Calibration  
DataAcq Meth : F6040D.M

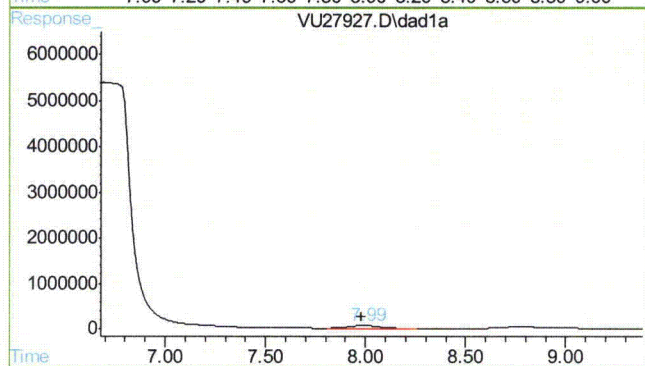
Volume Inj. :  
Signal #1 Phase : Signal #2 Phase:  
Signal #1 Info : Signal #2 Info :





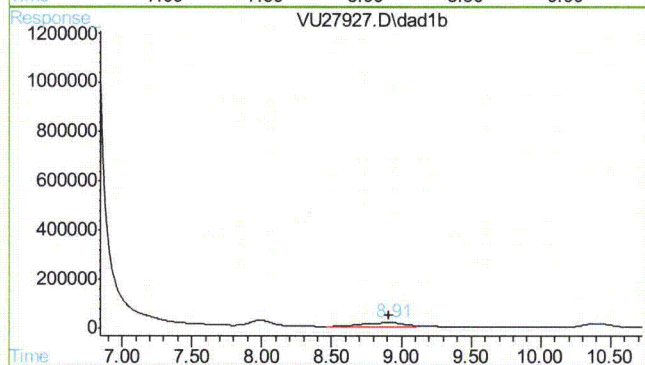
## #1 Formaldehyde

R.T.: 7.988 min  
Delta R.T.: 0.009 min  
Response: 230974  
Conc: 5.65 ppm m



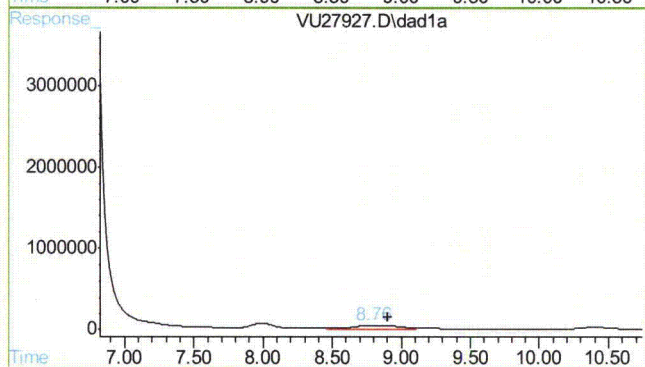
## #1 Formaldehyde

R.T.: 7.990 min  
Delta R.T.: 0.010 min  
Response: 640797  
Conc: 5.70 ppm m



## #2 Acetaldehyde

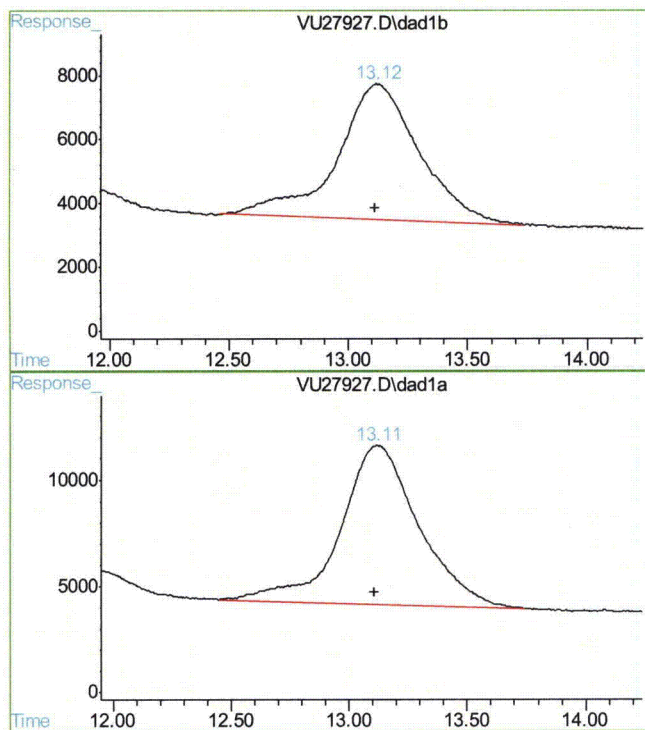
R.T.: 8.912 min  
Delta R.T.: 0.004 min  
Response: 358110  
Conc: 6.13 ppm m



## #2 Acetaldehyde

R.T.: 8.760 min  
Delta R.T.: -0.140 min  
Response: 856551  
Conc: 6.34 ppm m

17.6.5  
17



## #3 Butyraldehyde

R.T.: 13.117 min  
Delta R.T.: 0.005 min  
Response: 102234  
Conc: 6.17 ug/ml m

## #3 Butyraldehyde

R.T.: 13.113 min  
Delta R.T.: 0.005 min  
Response: 171864  
Conc: 6.08 ug/ml m

17.6.5  
17

Manual Integrations  
APPROVED  
(compounds with "m" flag)

John Hamilton  
07/08/10 11:09

## Quantitation Report (QT Reviewed)

Data File : K:\HPLC2\DATA\070610\VU27928.D\dad1b.ch Vial: 6  
Acq On : 06-Jul-2010, 16:45:57 Operator: caobinz  
Sample : ic1253-1,form 1 Inst : G1315A  
Misc : op21785,gvul1253,25,,,1,,soil Multiplr: 1.00  
IntFile : rteint.p

Data File : K:\HPLC2\DATA\070610\VU27928.D\dad1a.ch Vial: 6  
Acq On : 06-Jul-2010, 16:45:57 Operator: sonal  
Sample : form 1 Inst : G1315A  
Misc : Multiplr: 1.00  
IntFile : rteint2.p

Quant Time: Jul 7 9:28 2010 Quant Results File: FM070610.RES

Quant Method : K:\HPLC2\METHODS\FM070610.M (RTE Integrator)  
Title : LC8315FORM/032310/ic1209/op20876  
Last Update : Wed Jul 07 09:26:43 2010  
Response via : Initial Calibration  
DataAcq Meth : F6040D.M

Volume Inj. :  
Signal #1 Phase : Signal #2 Phase:  
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ppm	ppm
-----						
System Monitoring Compounds						
3) s Butyraldehyde	13.14	13.15	39940	57771	3.475m	3.407m
Spiked Amount	50.000	Range	20 - 115	Recovery	=	6.95%# 6.81%#
Target Compounds						
1) Formaldehyde	7.98	7.98	103309	311461	1.484m	1.795m
2) Acetaldehyde	8.75f	8.74	150694	423204	2.111m	1.757m

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.  
VU27928.D FM070610.M Wed Jul 07 09:42:58 2010 RPT1

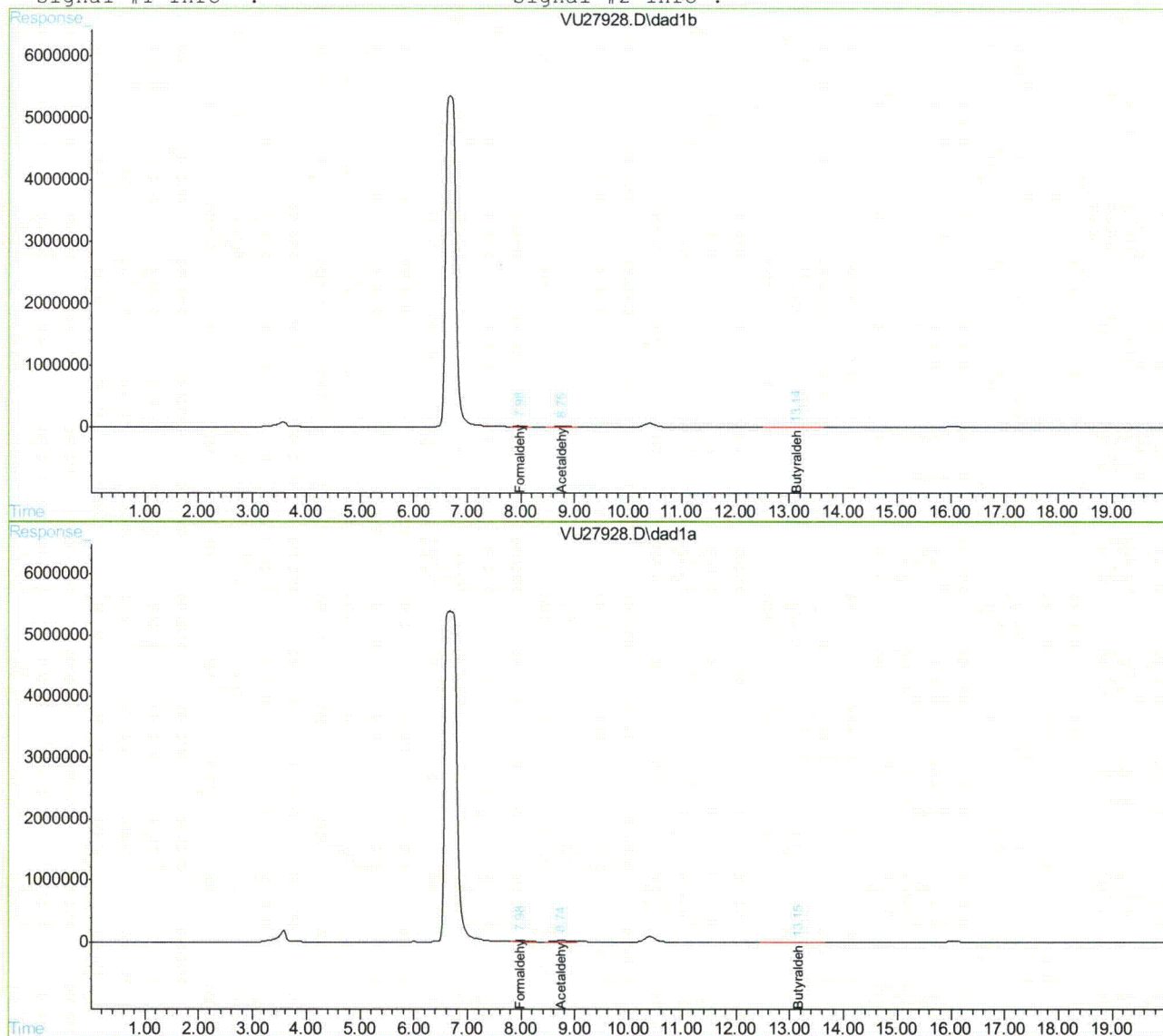
## Quantitation Report

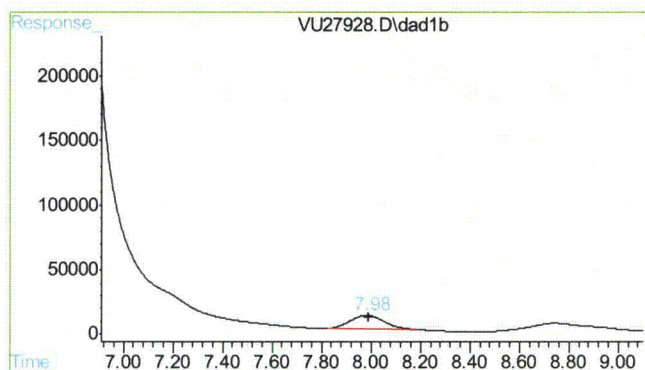
Data File : K:\HPLC2\DATA\070610\VU27928.D\dad1b.ch Vial: 6  
Acq On : 06-Jul-2010, 16:45:57 Operator: caobinz  
Sample : ic1253-1, form 1 Inst : G1315A  
Misc : op21785,gvul253,25,,,1,,soil Multiplr: 1.00  
IntFile : rteint.p

Data File : K:\HPLC2\DATA\070610\VU27928.D\dad1a.ch Vial: 6  
Acq On : 06-Jul-2010, 16:45:57 Operator: sonal  
Sample : form 1 Inst : G1315A  
Misc : Multiplr: 1.00  
IntFile : rteint2.p  
Quant Time: Jul 7 9:28 2010 Quant Results File: FM070610.RES

Quant Method : K:\HPLC2\METHODS\FM070610.M (RTE Integrator)  
Title : LC8315FORM/032310/ic1209/op20876  
Last Update : Wed Jul 07 09:26:43 2010  
Response via : Multiple Level Calibration  
DataAcq Meth : F6040D.M

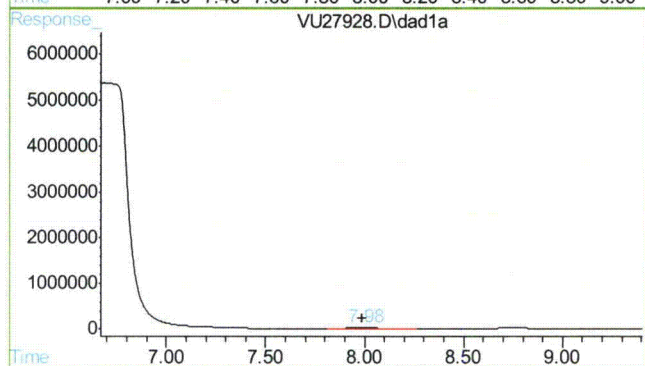
Volume Inj. :  
Signal #1 Phase : Signal #2 Phase:  
Signal #1 Info : Signal #2 Info :





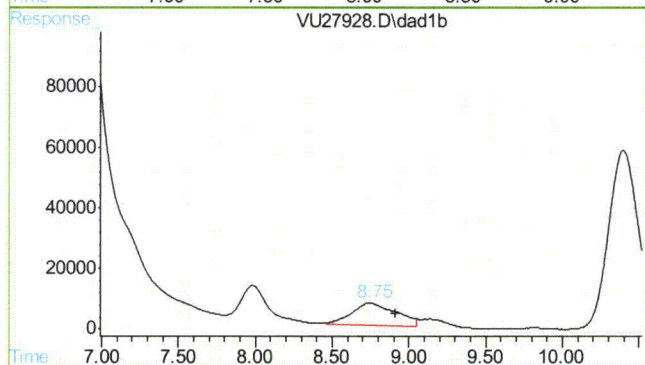
#1 Formaldehyde

R.T.: 7.984 min  
Delta R.T.: -0.004 min  
Response: 103309  
Conc: 1.48 ppm m



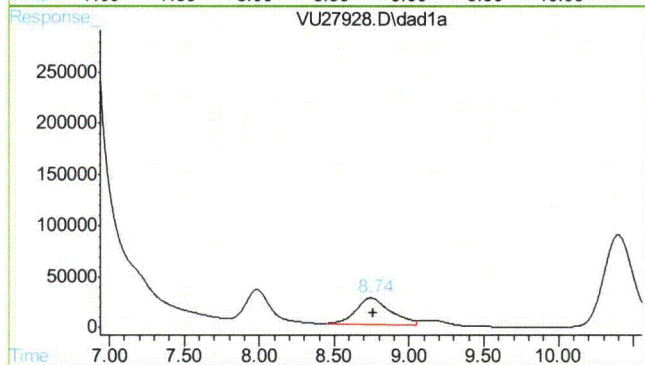
#1 Formaldehyde

R.T.: 7.983 min  
Delta R.T.: -0.007 min  
Response: 311461  
Conc: 1.79 ppm m



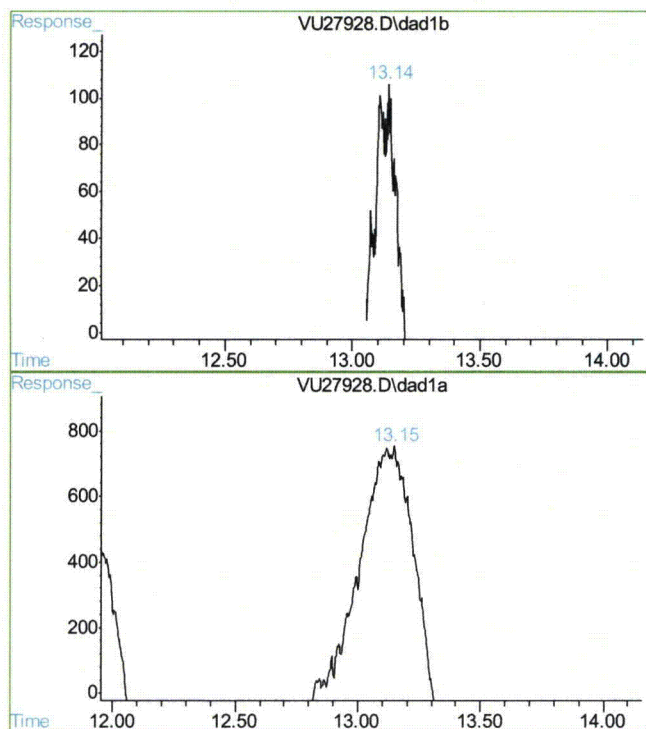
#2 Acetaldehyde

R.T.: 8.748 min  
Delta R.T.: -0.164 min  
Response: 150694  
Conc: 2.11 ppm m



#2 Acetaldehyde

R.T.: 8.744 min  
Delta R.T.: -0.015 min  
Response: 423204  
Conc: 1.76 ppm m



## #3 Butyraldehyde

R.T.: 13.139 min  
Delta R.T.: 0.023 min  
Response: 39940  
Conc: 3.47 ug/ml m

## #3 Butyraldehyde

R.T.: 13.146 min  
Delta R.T.: 0.033 min  
Response: 57771  
Conc: 3.41 ug/ml m

John Hamilton  
07/08/10 11:09

## Quantitation Report (QT Reviewed)

Data File : K:\HPLC2\DATA\070610\VU27929.D\dad1b.ch Vial: 7  
Acq On : 06-Jul-2010, 17:06:55 Operator: caobinz  
Sample : icv1253-50,form 50,icv Inst : G1315A  
Misc : op21785,gvul253,25,,,1,,soil Multiplr: 1.00  
IntFile : rteint.p

Data File : K:\HPLC2\DATA\070610\VU27929.D\dad1a.ch Vial: 7  
Acq On : 06-Jul-2010, 17:06:55 Operator: sonal  
Sample : form 50,icv Inst : G1315A  
Misc : Multiplr: 1.00  
IntFile : rteint2.p

Quant Time: Jul 7 9:36 2010 Quant Results File: FM070610.RES

Quant Method : K:\HPLC2\METHODS\FM070610.M (RTE Integrator)  
Title : LC8315FORM/032310/ic1209/op20876  
Last Update : Wed Jul 07 09:33:41 2010  
Response via : Initial Calibration  
DataAcq Meth : F6040D.M

Volume Inj. :  
Signal #1 Phase : Signal #2 Phase:  
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ppm	ppm
-----						
System Monitoring Compounds						
3) s Butyraldehyde	13.12	13.12	1104909	2017294	52.066m	52.707m
Spiked Amount	50.000	Range	20 - 115	Recovery	= 104.13%	105.41%
Target Compounds						
1) Formaldehyde	7.98	7.98	1440018	3902601	50.689m	50.156m
2) Acetaldehyde	8.92	8.92	2017954	3734977	42.811m	41.120m

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.  
VU27929.D FM070610.M Wed Jul 07 09:43:06 2010 RPT1

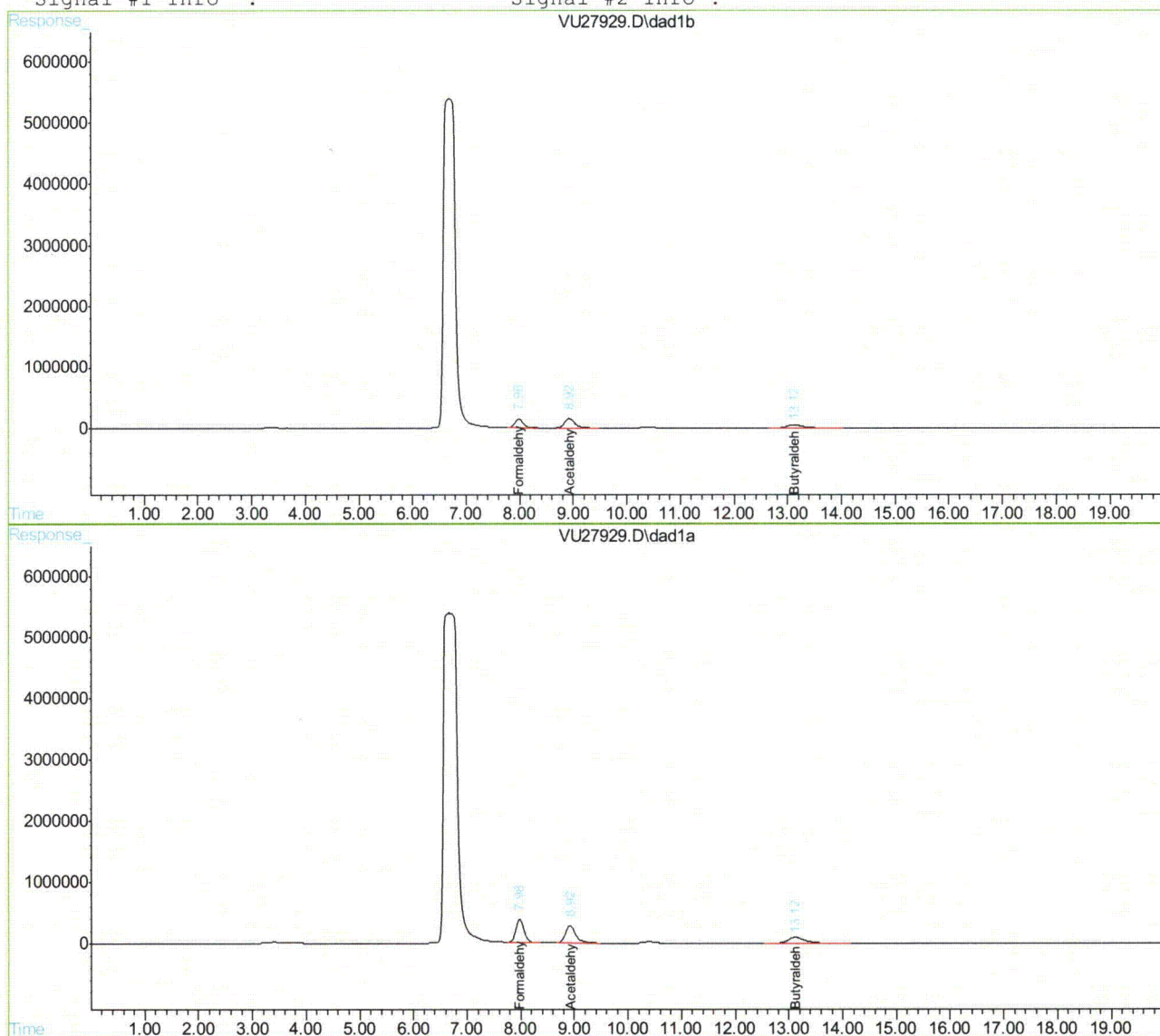
## Quantitation Report

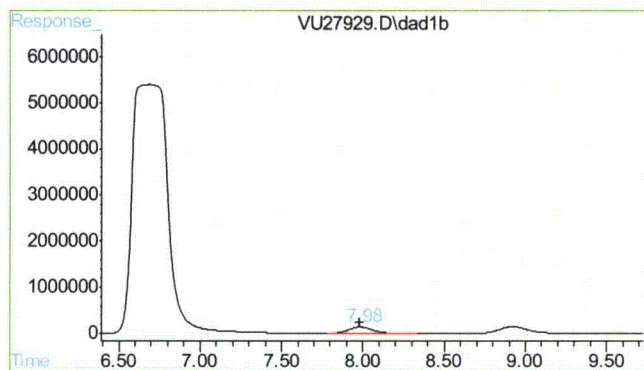
Data File : K:\HPLC2\DATA\070610\VU27929.D\dad1b.ch Vial: 7  
Acq On : 06-Jul-2010, 17:06:55 Operator: caobinz  
Sample : icv1253-50, form 50, icv Inst : G1315A  
Misc : op21785, gvul253, 25, , , 1, , soil Multiplr: 1.00  
IntFile : rteint.p

Data File : K:\HPLC2\DATA\070610\VU27929.D\dad1a.ch Vial: 7  
Acq On : 06-Jul-2010, 17:06:55 Operator: sonal  
Sample : form 50, icv Inst : G1315A  
Misc : Multiplr: 1.00  
IntFile : rteint2.p  
Quant Time: Jul 7 9:36 2010 Quant Results File: FM070610.RES

Quant Method : K:\HPLC2\METHODS\FM070610.M (RTE Integrator)  
Title : LC8315FORM/032310/ic1209/op20876  
Last Update : Wed Jul 07 09:33:41 2010  
Response via : Multiple Level Calibration  
DataAcq Meth : F6040D.M

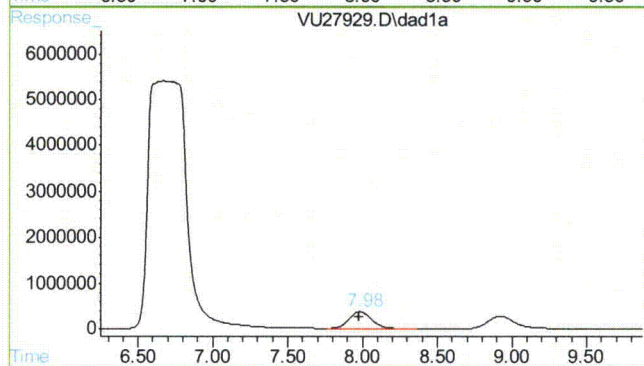
Volume Inj. :  
Signal #1 Phase : Signal #2 Phase:  
Signal #1 Info : Signal #2 Info :





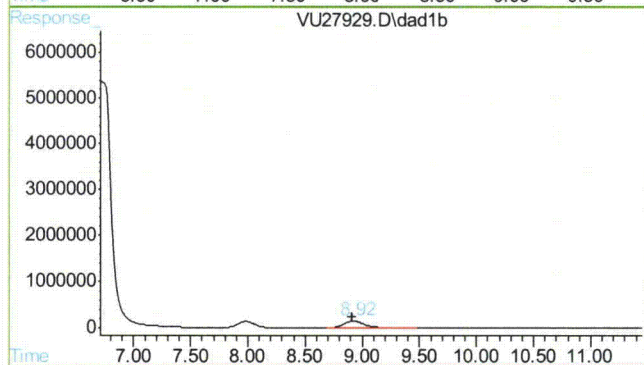
## #1 Formaldehyde

R.T.: 7.983 min  
Delta R.T.: 0.005 min  
Response: 1440018  
Conc: 50.69 ppm m



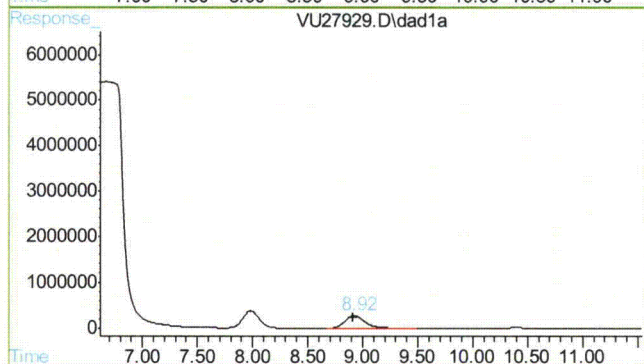
## #1 Formaldehyde

R.T.: 7.983 min  
Delta R.T.: 0.005 min  
Response: 3902601  
Conc: 50.16 ppm m



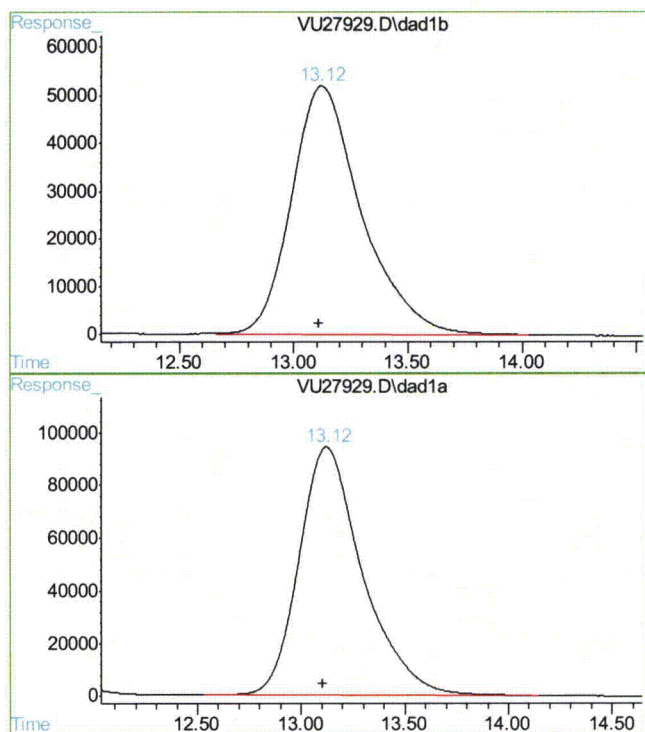
## #2 Acetaldehyde

R.T.: 8.921 min  
Delta R.T.: 0.006 min  
Response: 2017954  
Conc: 42.81 ppm m



## #2 Acetaldehyde

R.T.: 8.921 min  
Delta R.T.: 0.008 min  
Response: 3734977  
Conc: 41.12 ppm m



#3 Butyraldehyde

R.T.: 13.116 min  
Delta R.T.: 0.008 min  
Response: 1104909  
Conc: 52.07 ug/ml m

#3 Butyraldehyde

R.T.: 13.118 min  
Delta R.T.: 0.012 min  
Response: 2017294  
Conc: 52.71 ug/ml m

17.6.7  
17

Nancy Ma  
10/22/10 15:31

## Quantitation Report (QT Reviewed)

Data File : D:\HPLC2\DATA\101910\VU28431.D\dad1b.ch Vial: 51  
Acq On : 19-Oct-2010, 15:28:18 Operator: caobinz  
Sample : cc1253-20,form 20 Inst : G1315A  
Misc : op22971,gvul286,500,,,1 Multiplr: 1.00  
IntFile : rteint.p

Data File : D:\HPLC2\DATA\101910\VU28431.D\dad1a.ch Vial: 51  
Acq On : 19-Oct-2010, 15:28:18 Operator: caobinz  
Sample : form 20 Inst : G1315A  
Misc : Multiplr: 1.00  
IntFile : rteint2.p

Quant Time: Oct 19 16:05 2010 Quant Results File: FM101910.RES

Quant Method : D:\HPLC2\METHODS\FM101910.M (RTE Integrator)  
Title : LC8315FORM/070610/icl253/op21796  
Last Update : Sat Oct 09 14:16:29 2010  
Response via : Initial Calibration  
DataAcq Meth : F6040D.M

Volume Inj. :  
Signal #1 Phase : Signal #2 Phase:  
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ppm	ppm
----------	------	------	--------	--------	-----	-----

## System Monitoring Compounds

3) s Butyraldehyde	13.32	13.31	367088	652930	16.894m	16.943m
Spiked Amount	50.000	Range	10 - 115	Recovery	=	33.79% 33.89%

## Target Compounds

1) Formaldehyde	8.03	8.03	598297	1609209	18.109m	17.605m
2) Acetaldehyde	8.99	8.98	851839	1795242	16.017m	16.961m

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.  
VU28431.D FM101910.M Wed Oct 20 16:20:53 2010 RPT1

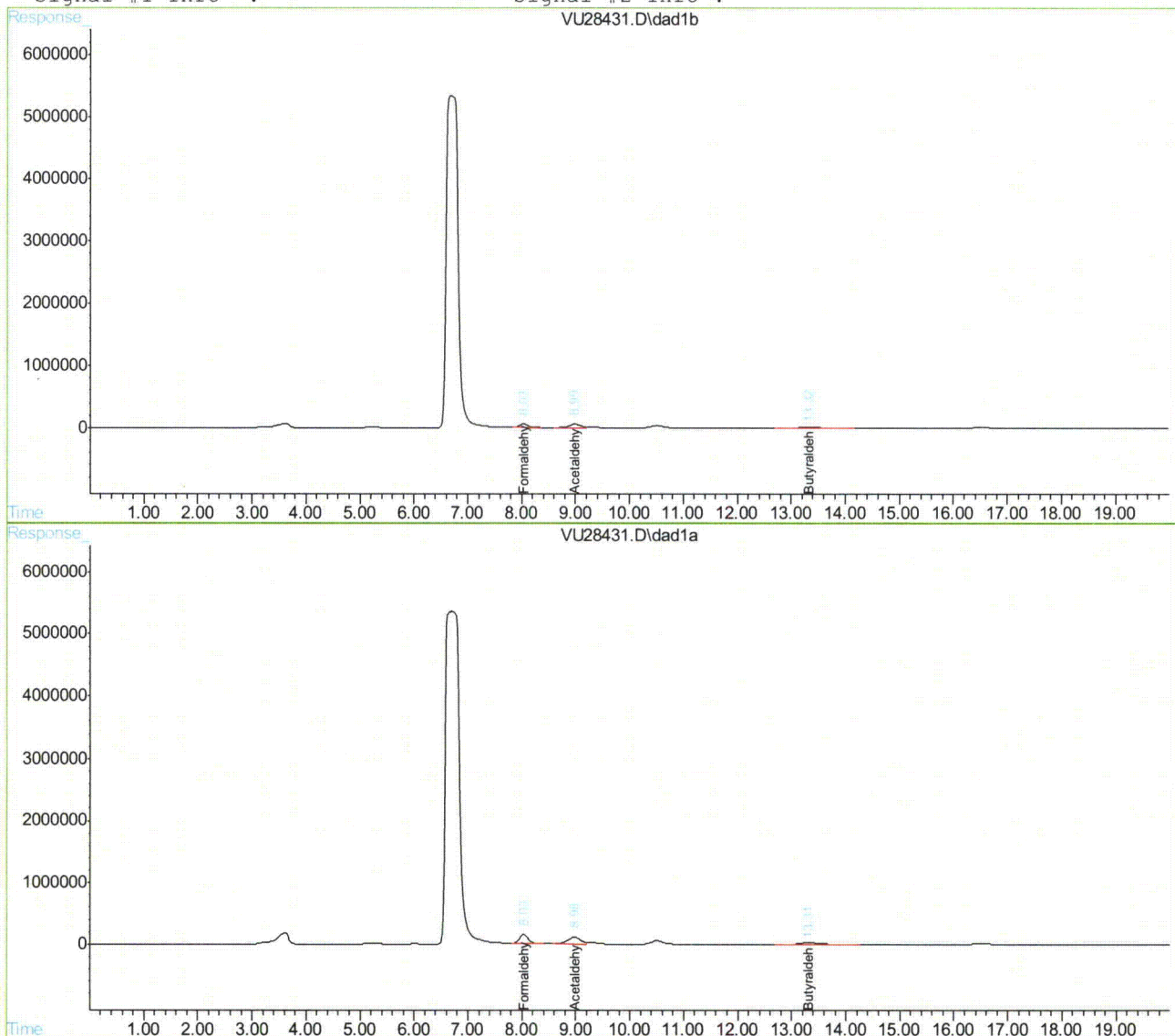
## Quantitation Report

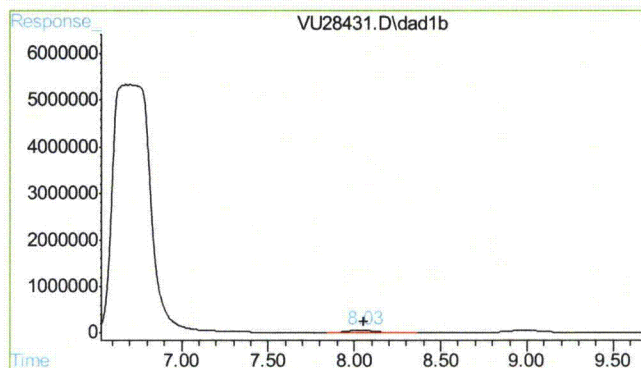
Data File : D:\HPLC2\DATA\101910\VU28431.D\dad1b.ch Vial: 51  
Acq On : 19-Oct-2010, 15:28:18 Operator: caobinz  
Sample : cc1253-20, form 20 Inst : G1315A  
Misc : op22971,gvul286,500,,,1 Multiplr: 1.00  
IntFile : rteint.p

Data File : D:\HPLC2\DATA\101910\VU28431.D\dad1a.ch Vial: 51  
Acq On : 19-Oct-2010, 15:28:18 Operator: caobinz  
Sample : form 20 Inst : G1315A  
Misc : Multiplr: 1.00  
IntFile : rteint2.p  
Quant Time: Oct 19 16:05 2010 Quant Results File: FM101910.RES

Quant Method : D:\HPLC2\METHODS\FM101910.M (RTE Integrator)  
Title : LC8315FORM/070610/ic1253/op21796  
Last Update : Sat Oct 09 14:16:29 2010  
Response via : Multiple Level Calibration  
DataAcq Meth : F6040D.M

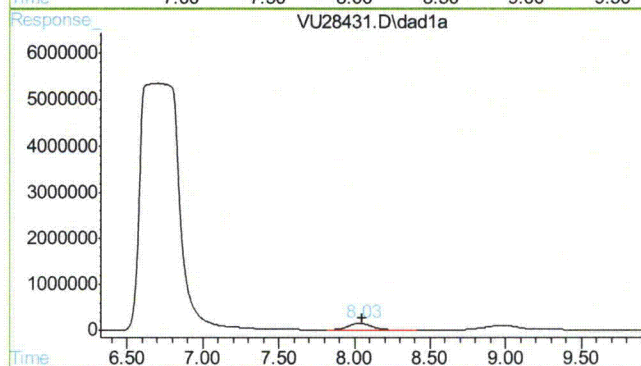
Volume Inj. :  
Signal #1 Phase : Signal #2 Phase:  
Signal #1 Info : Signal #2 Info :





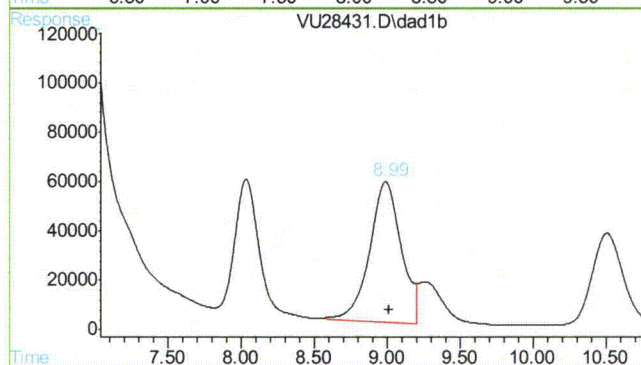
## #1 Formaldehyde

R.T.: 8.033 min  
Delta R.T.: -0.021 min  
Response: 598297  
Conc: 18.11 ppm m



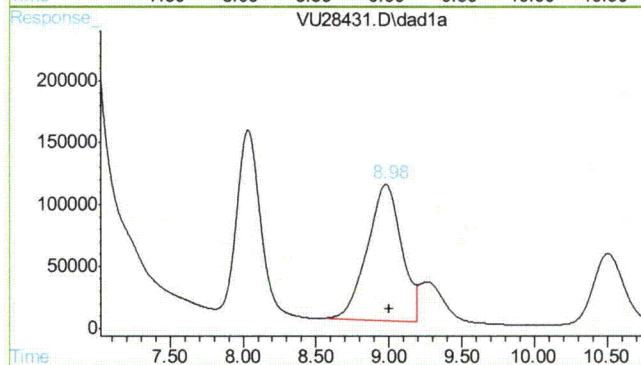
## #1 Formaldehyde

R.T.: 8.033 min  
Delta R.T.: -0.021 min  
Response: 1609209  
Conc: 17.60 ppm m



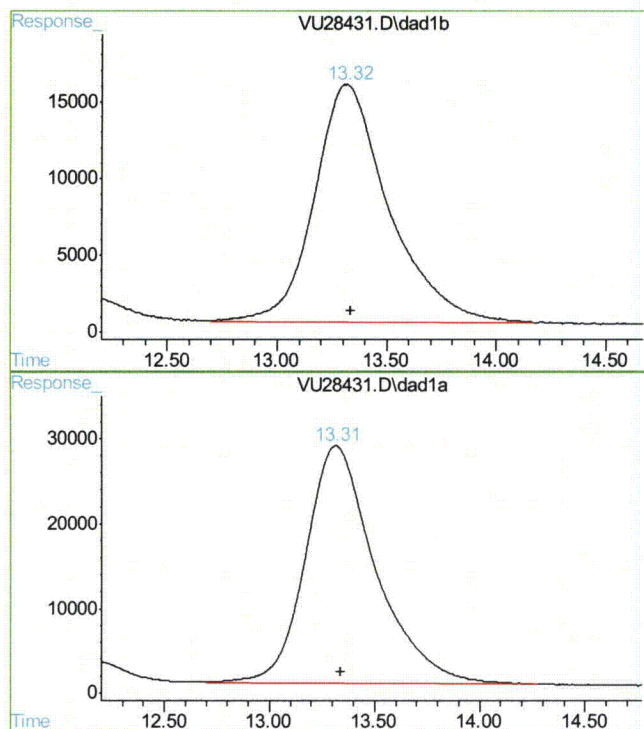
## #2 Acetaldehyde

R.T.: 8.986 min  
Delta R.T.: -0.024 min  
Response: 851839  
Conc: 16.02 ppm m



## #2 Acetaldehyde

R.T.: 8.979 min  
Delta R.T.: -0.022 min  
Response: 1795242  
Conc: 16.96 ppm m



## #3 Butyraldehyde

R.T.: 13.318 min  
Delta R.T.: -0.019 min  
Response: 367088  
Conc: 16.89 ug/ml m

## #3 Butyraldehyde

R.T.: 13.315 min  
Delta R.T.: -0.022 min  
Response: 652930  
Conc: 16.94 ug/ml m