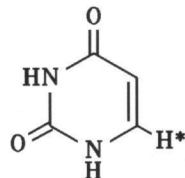




## Product Data Sheet

**MT-656**

**Uracil, [6-<sup>3</sup>H]-**



M.W. <sup>1</sup>H 112.09; <sup>3</sup>H 113.39 @ 18.7 Ci/mmol

**Lot #:** 194-026-0187-A-20091230-DG

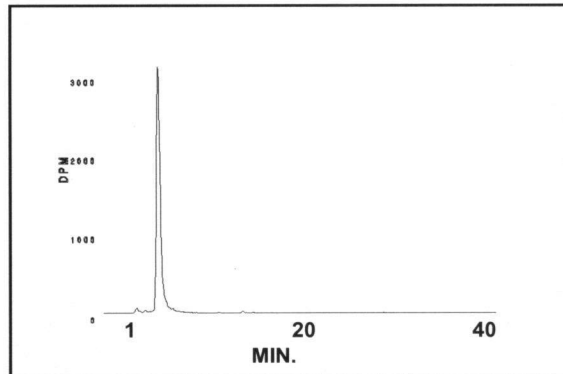
**Specific Activity:** 18.7 Ci/mmol

**Concentration:** 1.0 mCi/ml; 6.06 µg/ml

**Packaged in:** Sterile water solution

**Date of Analysis:** March 01, 2010

**Radiochemical Purity:** 97.3%



HPLC ANALYSIS LOT 194-026-0187-A-20091230-DG  
File Name: intj1454 Date and Time: 3/1/2010 1:48:54 PM  
Unit 19 Radio

Peak #	Area %	Time	Area
1	1.51	3.42000	145.86656
2	1.12	4.24000	108.37489
3	97.37	5.60670	9423.20935
Totals	100.00		9677.45080

**Stability and Storage Recommendation:** The rate of decomposition is approximately .5-1% / month for the first six months after purification when stored at 0-5°C.

**Product Warranty:** Stated on the reverse side of this Product Data Sheet.

**Caution:** Not For Use In Humans Or Clinical Diagnosis. This product is intended for investigational or manufacturing use only. It is pharmaceutically unrefined and is not intended for use in humans. Responsibility for its use in humans, as a diagnostic reagent, and compliance with federal laws rests solely with the purchaser.

**MT-656**

**Uracil, [6-<sup>3</sup>H]-**

**Lot 194-026-0187-A-20091230-DG**

**A) All chromatograms were run using the HPLC method described on the Product Data Sheet.**

**Concentrations and volumes:**

Standard solution concentration was 1.0 mg/ml.

**Uracil, [6-<sup>3</sup>H]-** concentration was 0.3 mCi/ml.

Volume of standard alone injection was 1.0 µl.

Volume of **Uracil, [6-<sup>3</sup>H]-** alone injection was 1.0 µl.

Co-injection solution consisted of 1.0 µl **Uracil, [6-<sup>3</sup>H]-** + 0.5 µl standard.

Volume of co-injection was 1.5 µl.

Volume of blank injection was 1.0 µl.

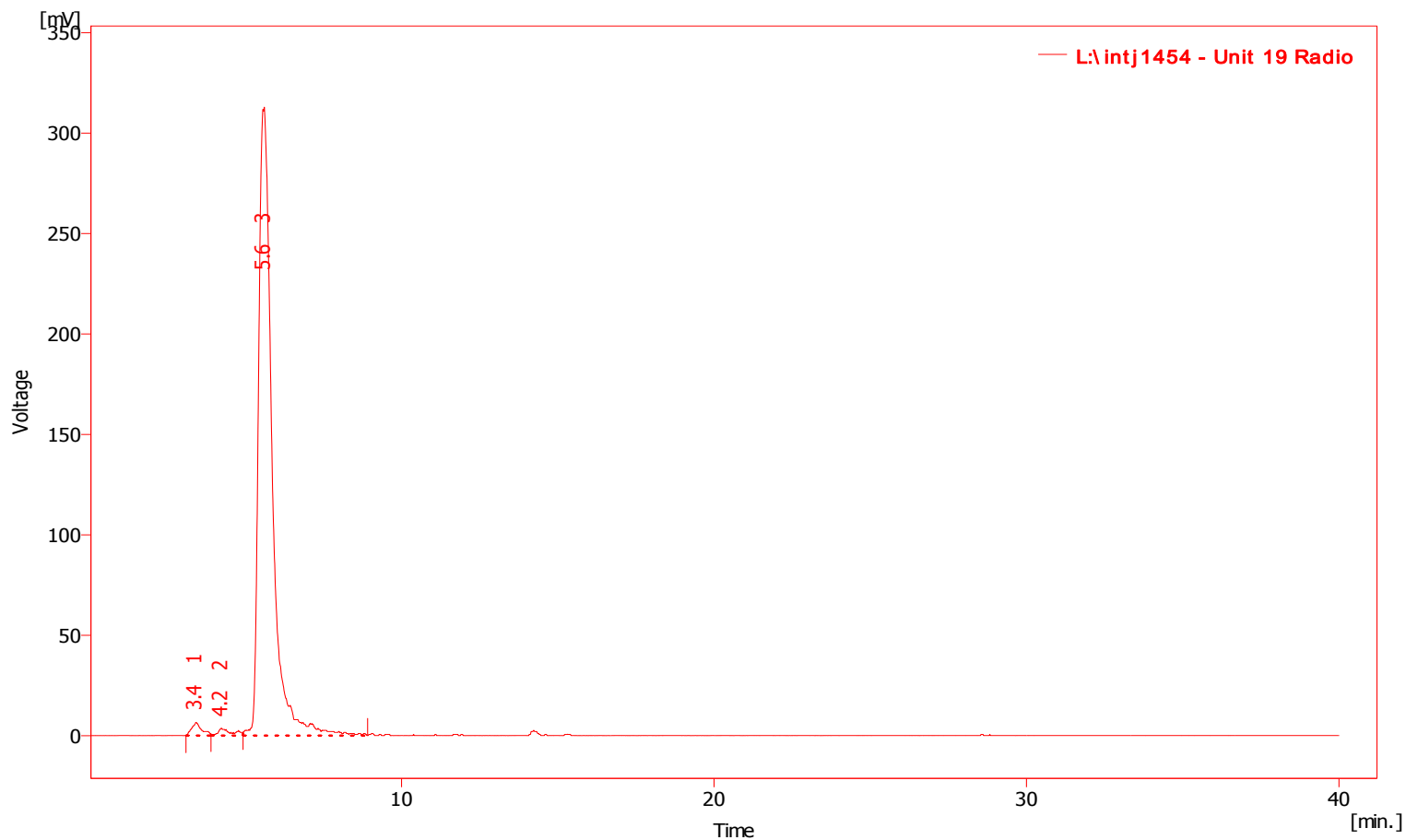
**B) Mass spectrometry – Positive mode**

**C) NMR**

**MT-656**  
**Uracil, [6-3H]-**  
**Lot 194-026-0187-A-20091230-DG**

Chromatogram Info:

File Name	: L:\intj1454	File Created	: 2/28/2014 10:42:12 AM
Origin	: Acquired, Acquisition started 3/1/2010 1:08:56 PM	Acquired Date	: 3/1/2010 1:48:54 PM
Project	: Test	By	: Administrator
Method	: Unit19_40_min_run	By	: Administrator
Description	: Radiochemical trace of 3H material alone	Modified	: 2/28/2014 10:55 AM
Created	: 8/9/2007 1:12 PM		
Column	:	Detection	: Radiochemical
Mobile Phase	:	Temperature	:
Flow Rate	:	Pressure	:
Note	:		



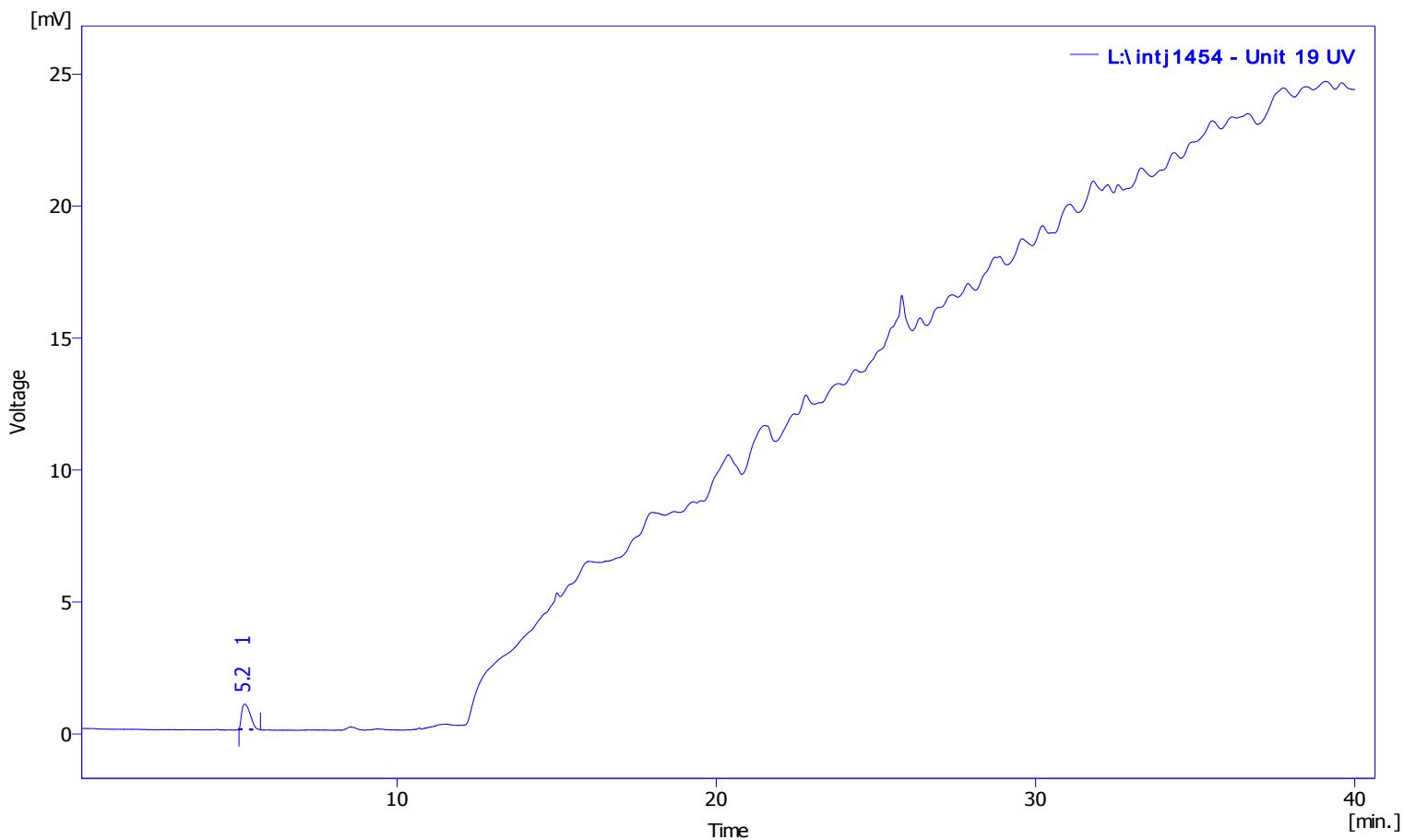
Result Table (Uncal - L:\intj1454 - Unit 19 Radio)

	Compound Name	Reten. Time [min]	Area [mV.s]	Height [mV]	Area [%]	Height [%]	Efficiency [th.pl]	Eff/I [t.p./m]	Symmetry/Tailing [-]	Response Factor	Resolution [-]
1		3.42	145.867	6.54	1.51	2.02	397.17	7943.48	1.30		
2		4.24	108.375	3.71	1.12	1.15	296.95	5939.03	1.51		1.6
3		5.61	9423.209	312.86	97.37	96.83	197.68	3953.66	1.59		2.2
		Total	9677.451	323.10	100.00	100.00					

**MT-656**  
**Uracil, [6-3H]-**  
**Lot 194-026-0187-A-20091230-DG**

Chromatogram Info:

File Name	: L:\intj1454	File Created	: 2/28/2014 10:42:12 AM
Origin	: Acquired, Acquisition started 3/1/2010 1:08:56 PM	Acquired Date	: 3/1/2010 1:48:54 PM
Project	: Test	By	: Administrator
Method	: Unit19_40_min_run	By	: Administrator
Description	: UV trace of 3H material alone	Modified	: 2/28/2014 10:54 AM
Created	: 8/9/2007 1:12 PM		
Column	:	Detection	: UV 260nm
Mobile Phase	:	Temperature	:
Flow Rate	:	Pressure	:
Note	:		



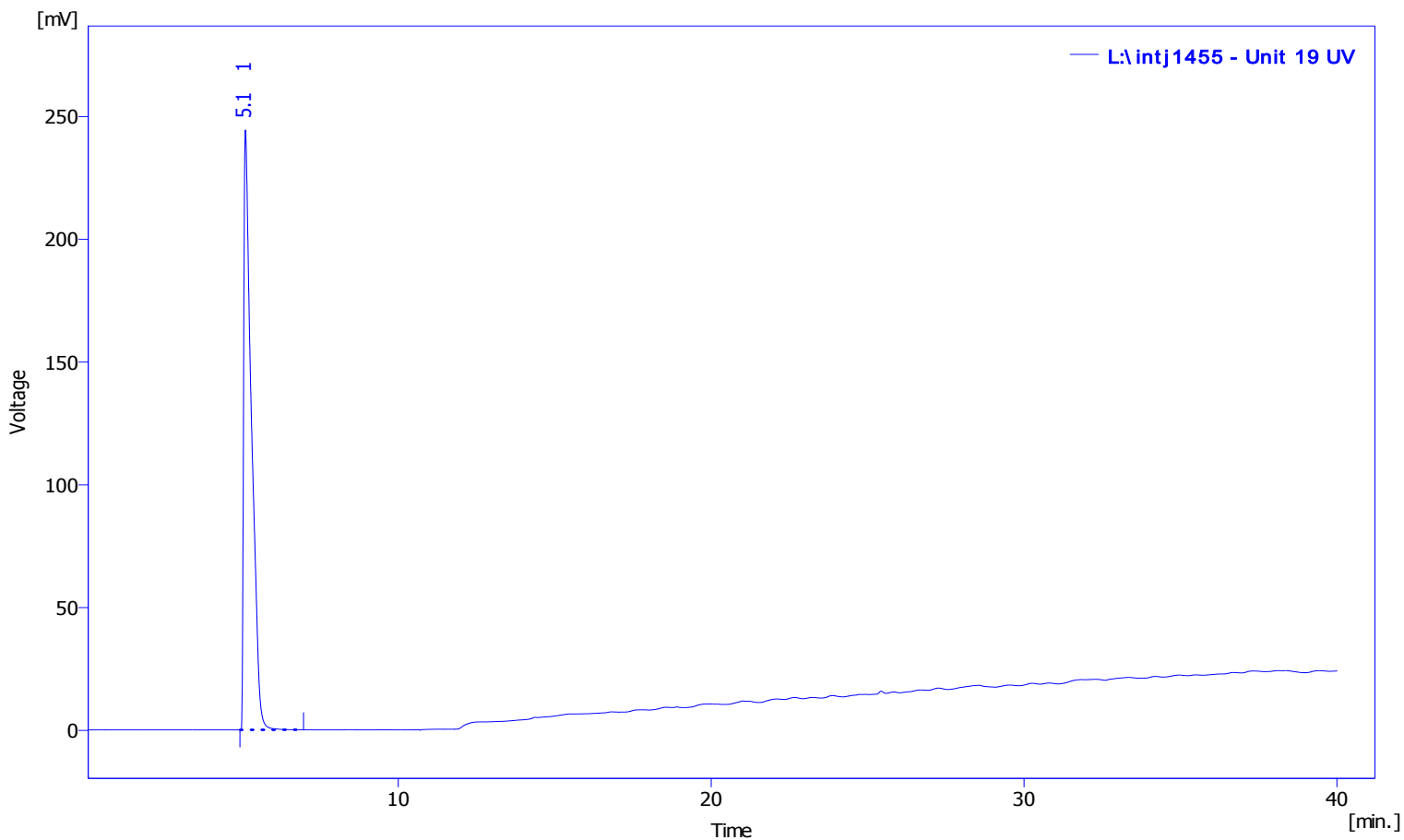
Result Table (Uncal - L:\intj1454 - Unit 19 UV)

	Compound Name	Reten. Time [min]	Area [mV.s]	Height [mV]	Area [%]	Height [%]	Efficiency [th.pl]	Eff/l [t.p./m]	Symmetry/Tailing [-]	Response Factor	Resolution [-]
1		5.22	17.949	0.96	100.00	100.00	2003.43	40068.53	1.72		
		Total	17.949	0.96	100.00	100.00					

**MT-656**  
**Uracil, [6-3H]-**  
**Lot 194-026-0187-A-20091230-DG**

Chromatogram Info:

File Name	: L:\intj1455	File Created	: 2/28/2014 10:42:12 AM
Origin	: Acquired, Acquisition started 3/1/2010 2:28:37 PM	Acquired Date	: 3/1/2010 3:08:35 PM
Project	: Test	By	: Administrator
Method	: Unit19_40_min_run	By	: Administrator
Description	: UV trace of standard material alone	Modified	: 2/28/2014 10:56 AM
Created	: 8/9/2007 1:12 PM		
Column	:	Detection	: UV 260nm
Mobile Phase	:	Temperature	:
Flow Rate	:	Pressure	:
Note	:		



Result Table (Uncal - L:\intj1455 - Unit 19 UV)

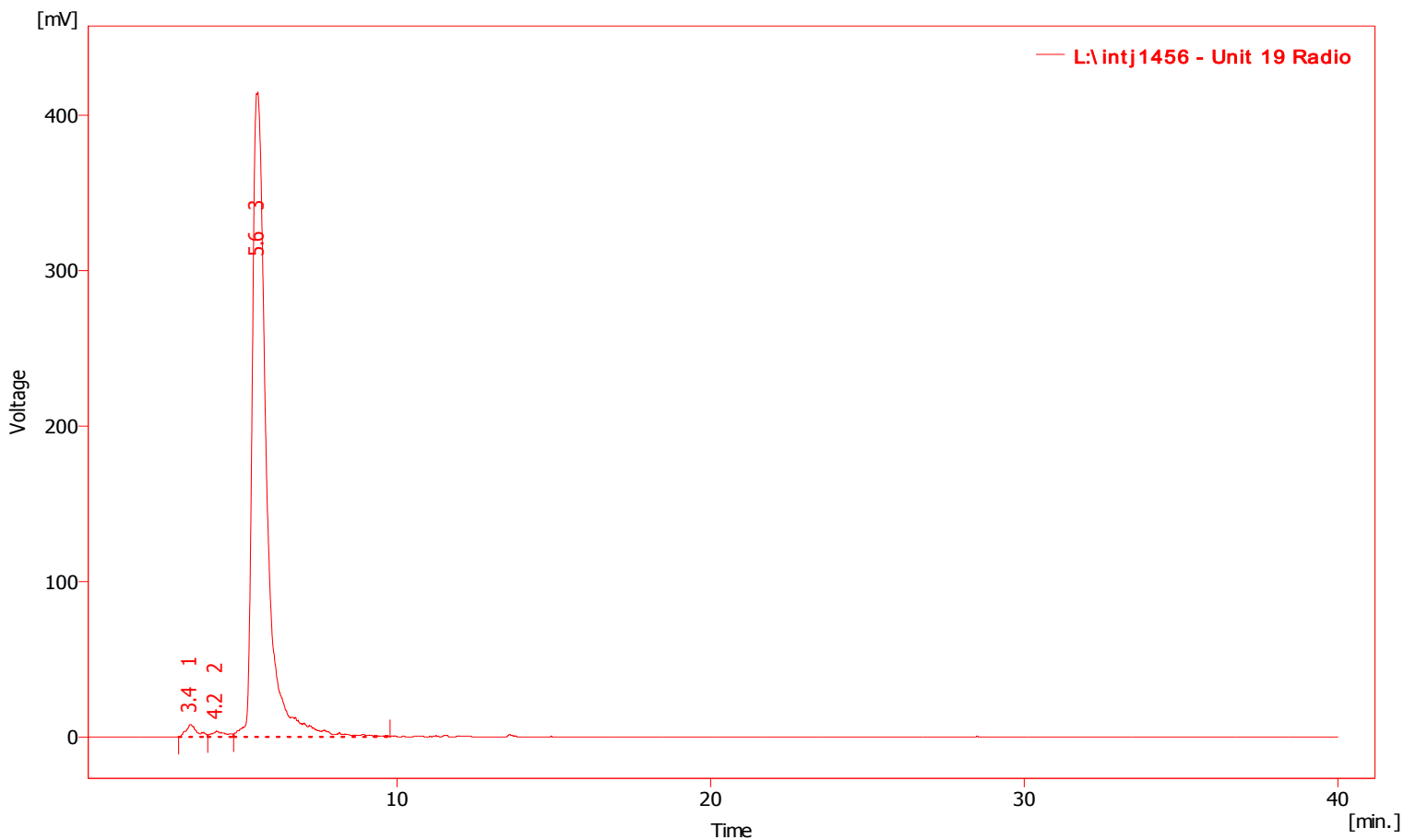
	Compound Name	Reten. Time [min]	Area [mV.s]	Height [mV]	Area [%]	Height [%]	Efficiency [th.pl]	Eff/l [t.p./m]	Symmetry/Tailing [-]	Response Factor	Resolution [-]
1		5.11	4238.149	244.35	100.00	100.00	1271.17	25423.35	2.72		
		Total	4238.149	244.35	100.00	100.00					



**MT-656**  
**Uracil, [6-3H]-**  
**Lot 194-026-0187-A-20091230-DG**

Chromatogram Info:

File Name	: L:\intj1456	File Created	: 2/28/2014 10:42:12 AM
Origin	: Acquired, Acquisition started 3/1/2010 3:37:49 PM	Acquired Date	: 3/1/2010 4:17:48 PM
Project	: Test	By	: Administrator
Method	: Unit19_40_min_run	By	: Administrator
Description	: Radiochemical trace of 3H material co-injected with standard	Modified	: 2/28/2014 10:58 AM
Created	: 8/9/2007 1:12 PM		
Column	:	Detection	: Radiochemical
Mobile Phase	:	Temperature	:
Flow Rate	:	Pressure	:
Note	:		



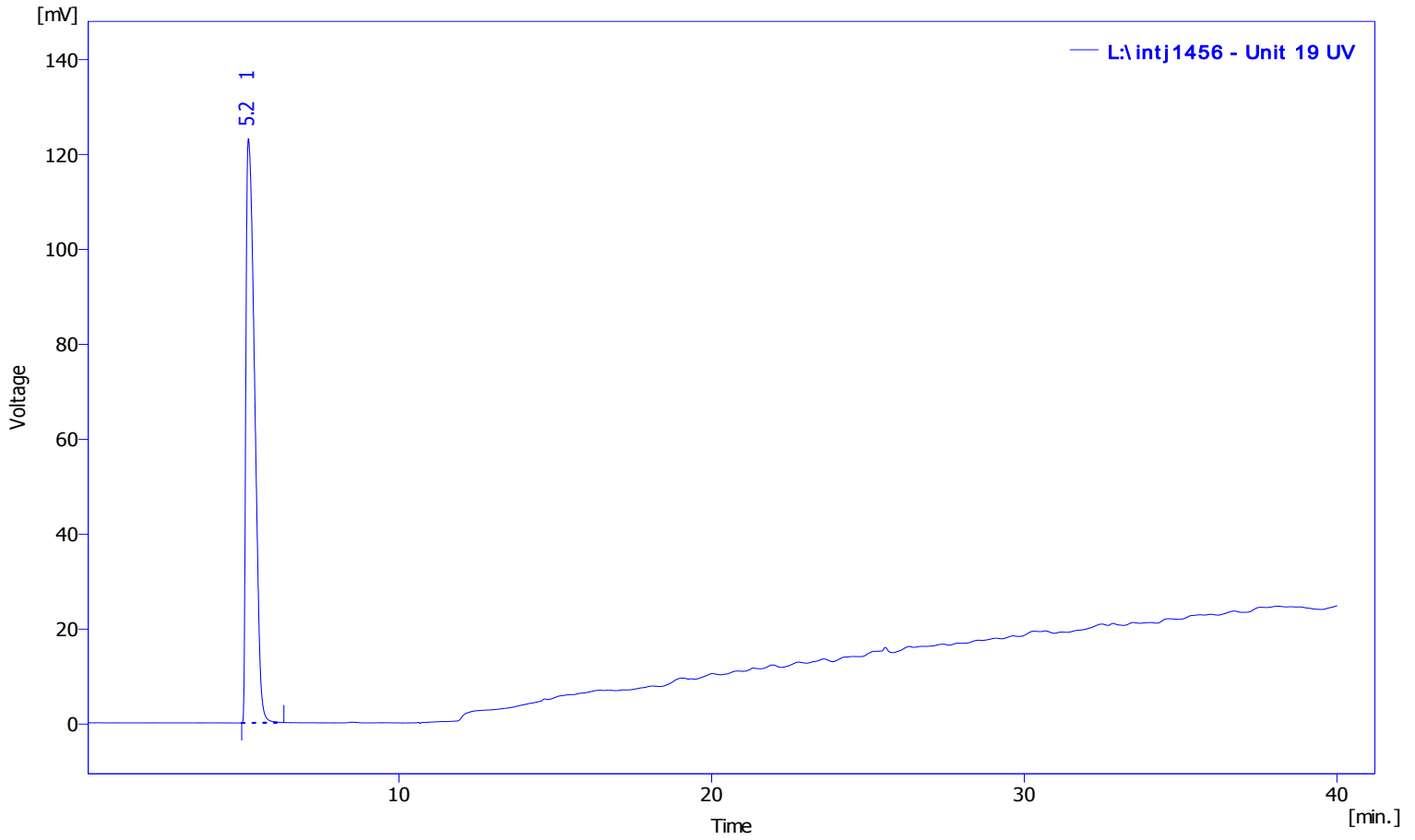
Result Table (Uncal - L:\intj1456 - Unit 19 Radio)

	Compound Name	Reten. Time [min]	Area [mV.s]	Height [mV]	Area [%]	Height [%]	Efficiency [th.pl]	Eff/I [t.p./m]	Symmetry/Tailing [-]	Response Factor	Resolution [-]
1		3.42	197.748	7.93	1.48	1.86	307.91	6158.28	1.37		
2		4.25	115.377	3.89	0.87	0.91	406.69	8133.77	1.46		1.2
3		5.57	13016.228	414.88	97.65	97.23	140.37	2807.46	1.75		1.7
		Total	13329.353	426.70	100.00	100.00					

**MT-656**  
**Uracil, [6-3H]-**  
**Lot 194-026-0187-A-20091230-DG**

Chromatogram Info:

File Name	: L:\intj1456	File Created	: 2/28/2014 10:42:12 AM
Origin	: Acquired, Acquisition started 3/1/2010 3:37:49 PM	Acquired Date	: 3/1/2010 4:17:48 PM
Project	: Test	By	: Administrator
Method	: Unit19_40_min_run	By	: Administrator
Description	: UV trace of 3H material co-injected with standard	Modified	: 2/28/2014 10:57 AM
Created	: 8/9/2007 1:12 PM		
Column	:	Detection	: UV 260nm
Mobile Phase	:	Temperature	:
Flow Rate	:	Pressure	:
Note	:		



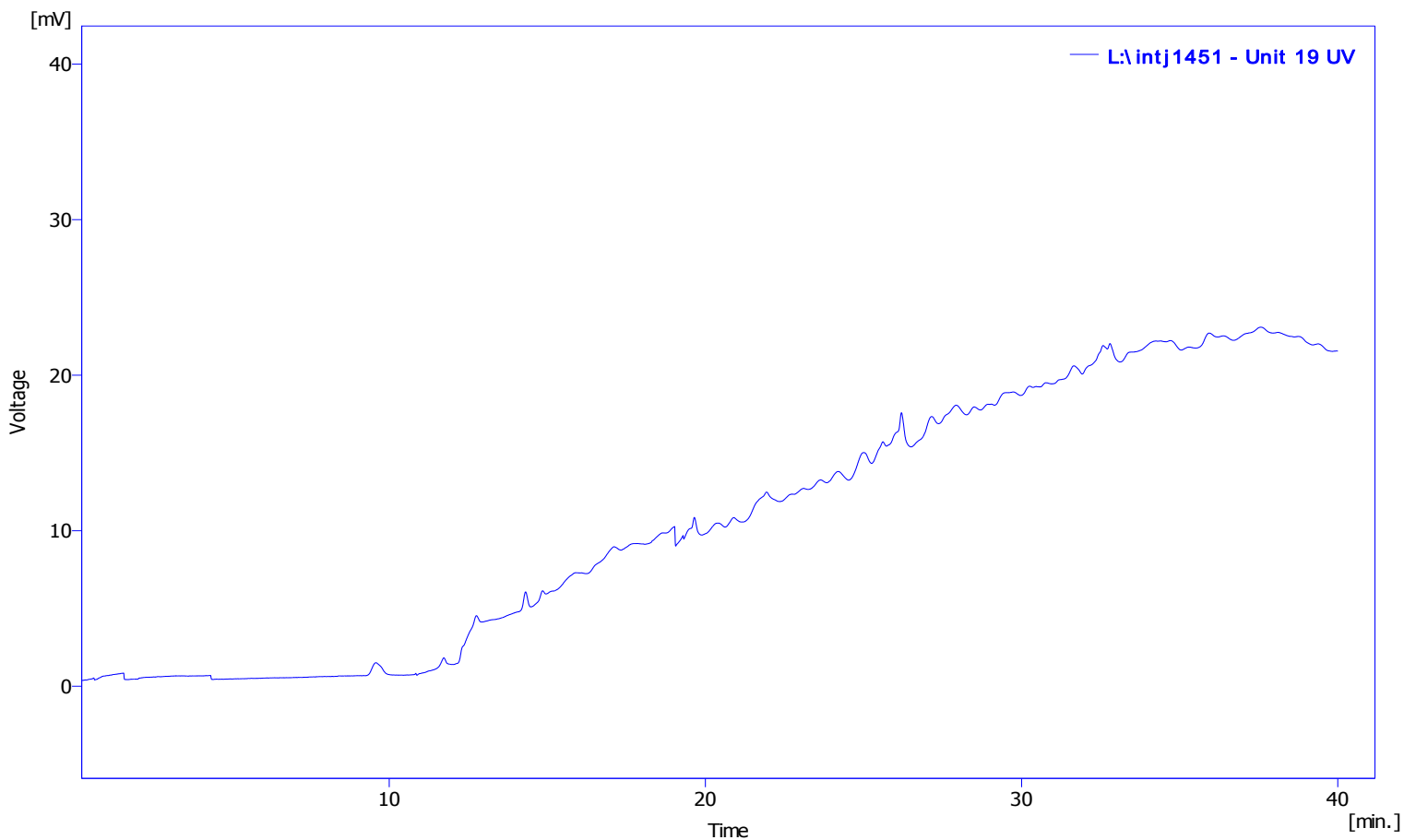
Result Table (Uncal - L:\intj1456 - Unit 19 UV)

	Compound Name	Reten. Time [min]	Area [mV.s]	Height [mV]	Area [%]	Height [%]	Efficiency [th.pl]	Eff/l [t.p./m]	Symmetry/Tailing [-]	Response Factor	Resolution [-]
1		5.18	2387.808	123.09	100.00	100.00	1622.19	32443.76	1.94		
		Total	2387.808	123.09	100.00	100.00					

**MT-656**  
**Uracil, [6-3H]-**  
**Lot 194-026-0187-A-20091230-DG**

Chromatogram Info:

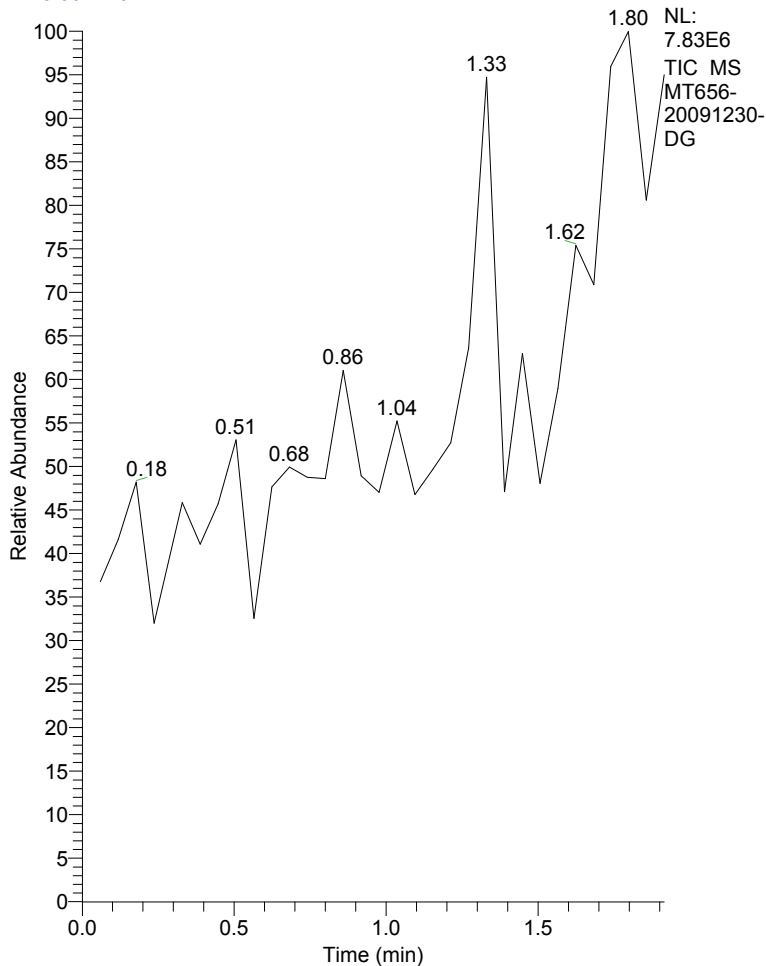
File Name	: L:\intj1451	File Created	: 2/28/2014 10:42:12 AM
Origin	: Acquired, Acquisition started 3/1/2010 9:41:43 AM	Acquired Date	: 3/1/2010 10:21:42 AM
Project	: Test	By	: Administrator
Method	: Unit19_40_min_run	By	: Administrator
Description	: UV trace of blank injection	Modified	: 2/28/2014 10:58 AM
Created	: 8/9/2007 1:12 PM		
Column	:	Detection	: UV 260nm
Mobile Phase	:	Temperature	:
Flow Rate	:	Pressure	:
Note	:		



*Result Table (Uncal - L:\intj1451 - Unit 19 UV)*

Compound Name	Reten. Time [min]	Area [mV.s]	Height [mV]	Area [%]	Height [%]	Efficiency [th.pl]	Eff/I [t.p./m]	Symmetry/Tailing [-]	Response Factor	Resolution [-]
No peak to report										

RT: 0.00 - 1.91



MT656-20091230-DG#1-32 RT: 0.06-1.91 AV:

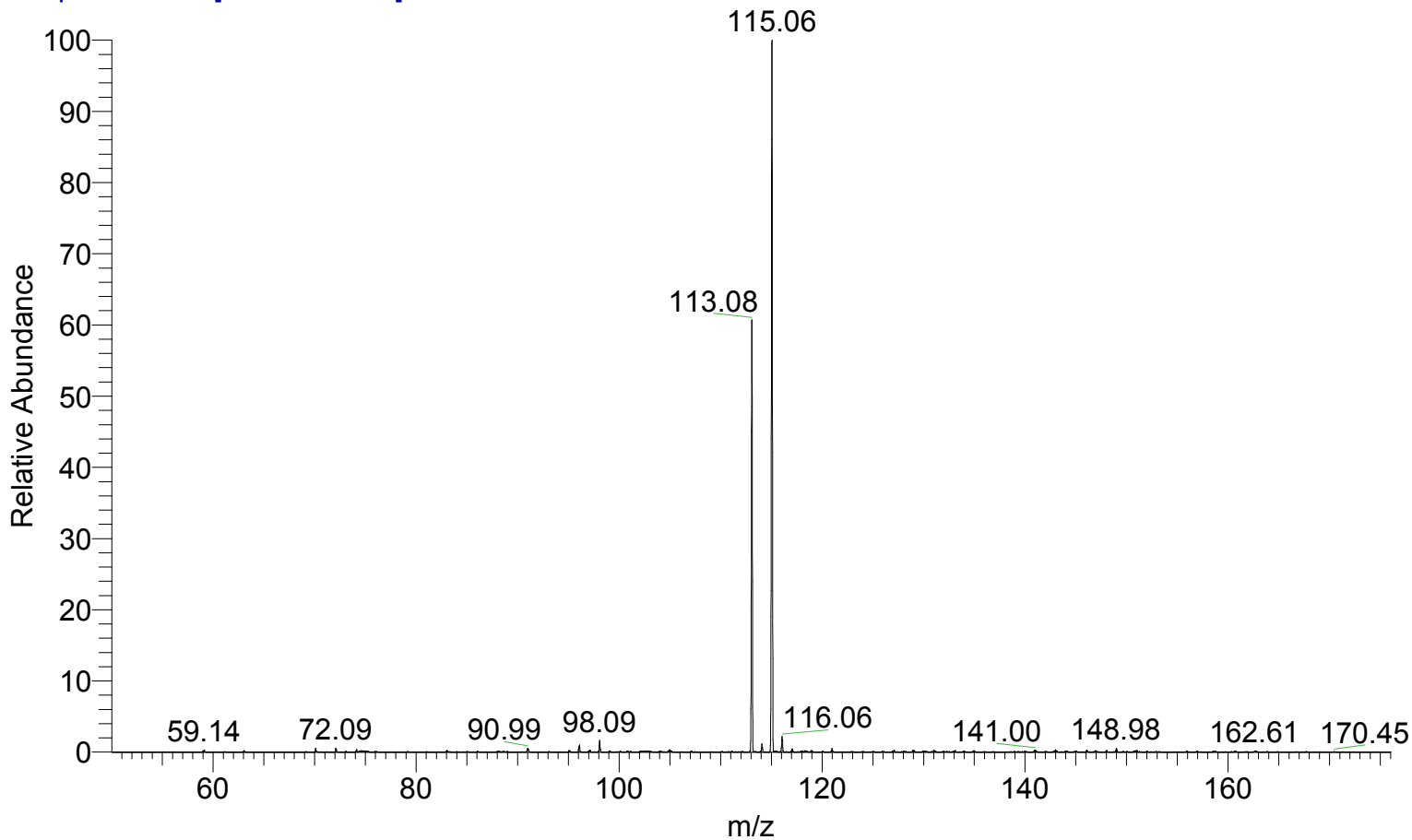
T: + p NSI Z ms [50.00-176.00]

m/z = 108.36-127.69

m/z	Intensity	Relative
112.01	3367.4	0.13
113.08	1349674.9	54.01
114.07	26041.1	1.04
115.05	2498800.0	100.00
116.05	54277.1	2.17
117.02	11685.3	0.47
118.21	12562.8	0.50
118.96	6162.8	0.25
120.10	2926.4	0.12
120.97	10907.2	0.44
121.95	1177.9	0.05
122.92	3050.1	0.12
124.04	2262.8	0.09
124.96	3509.3	0.14
126.01	3712.3	0.15
127.09	7790.3	0.31

MT656-20091230-DG #1-32 RT: 0.06-1.91 AV: 32 NL: 1.05E5

T: + p NSI Z ms [50.00-176.00]



MT656 3H NMR in D2O  
Batch 20091230-DG

7.443  
7.418  
7.349



NAME MT656-20091230-DG  
EXPNO 1  
PROCNO 1  
Date\_ 20100209  
Time\_ 15.10  
INSTRUM spect  
PROBHD 5 mm DUX 3H-1H  
PULPROG zg  
TD 16384  
SOLVENT D2O  
NS 5000  
DS 2  
SWH 6172.839 Hz  
FIDRES 0.376760 Hz  
AQ 1.3271540 sec  
RG 46341  
DW 81.000 usec  
DE 6.00 usec  
TE 300.0 K  
D1 2.00000000 sec  
TD0 1

==== CHANNEL f1 =====  
NUC1 3H  
P1 10.00 usec  
PL1 2.00 dB  
SF01 320.1321857 MHz  
SI 32768  
SF 320.1305850 MHz  
WDW no  
SSB 0  
LB 0.00 Hz  
GB 0  
PC 1.00

