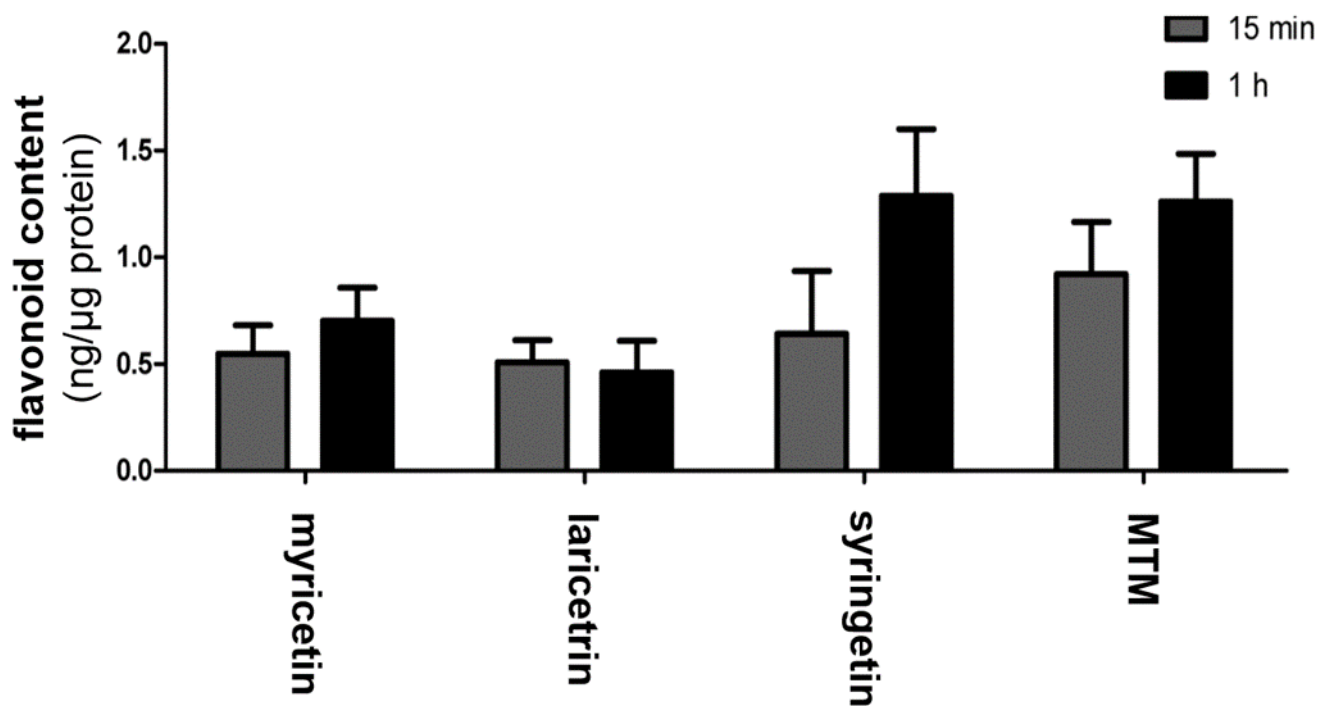


### a) Detection of myricetin/myricetin derivatives in cells

#### Detection of myricetin/myricetin derivatives in Hct116 cells



#### Quantification of myricetin and its metabolites in Hct116 human colon carcinoma cells.

$1 \times 10^6$  Hct116 cells were plated in 60 mm cell culture dishes and allowed to attach for 48 h. Subsequently medium was changed and cells were allowed to grow for further 24 h. Then 50  $\mu$ M myricetin, laringetin, syrengetin, MTM were added. After 15 min/1 h of incubation time, cell culture medium was removed and the cells were washed three times with PBS containing 1% bovine serum albumin. The cell pellet was dissolved in 300  $\mu$ l methanol and lysed by sonification. Afterwards, samples were centrifuged and 20  $\mu$ l of the supernatant was injected into a HPLC system coupled to a UV detector. The flavonoid content was normalized to the protein amount of the cell pellet (Lowry).

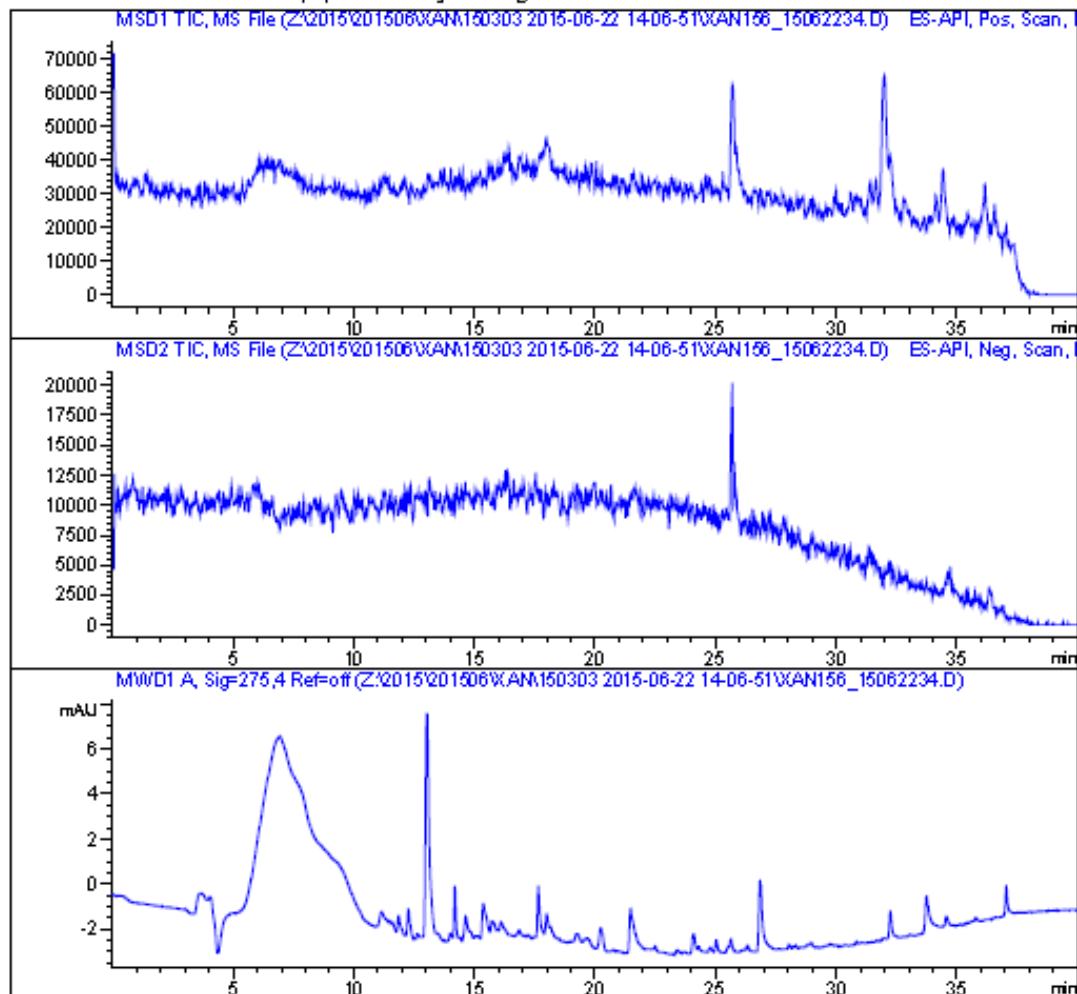
## b) Detection of myricetin/myricetin derivatives in *C. elegans*

### Detection of myricetin/myricetin derivatives in *C. elegans* (representative chromatograms)

Data File Z:\2015\201506\XAN\150303 2015-06-22 14-06-51\XAN156\_15062234.D  
Sample Name: XAN\_156\_1

```
-----  
Acq. Operator   : Administrator Ehrlich           Seq. Line :   32  
Acq. Instrument : Instrument 1                   Location  : Vial 3  
Injection Date  : 6/22/2015 3:50:16 PM           Inj       :    1  
                                           Inj Volume: 5.0 µl  
Acq. Method     : Z:\2015\201506\XAN\150303 2015-06-22 14-06-51\XAN.M  
Last changed    : 6/22/2015 10:54:59 AM by Administrator Ehrlich  
Analysis Method : C:\CHEM32\1\METHODS\NWC\XEA_2015\XAN.M  
Last changed    : 7/14/2015 1:41:04 PM by Administrator Ehrlich  
                (modified after loading)  
Method Info     : Analytik: REVISION "Food & Function"- Artikel Myricetinderivate  
                für XAN & AG Wätjen Biozentrum
```

Additional Info : Peak(s) manually integrated



#### Area Percent Report

```
-----  
Sorted By      :      Signal  
Multiplier     :      1.0000  
Dilution       :      1.0000  
Use Multiplier & Dilution Factor with ISTDs
```

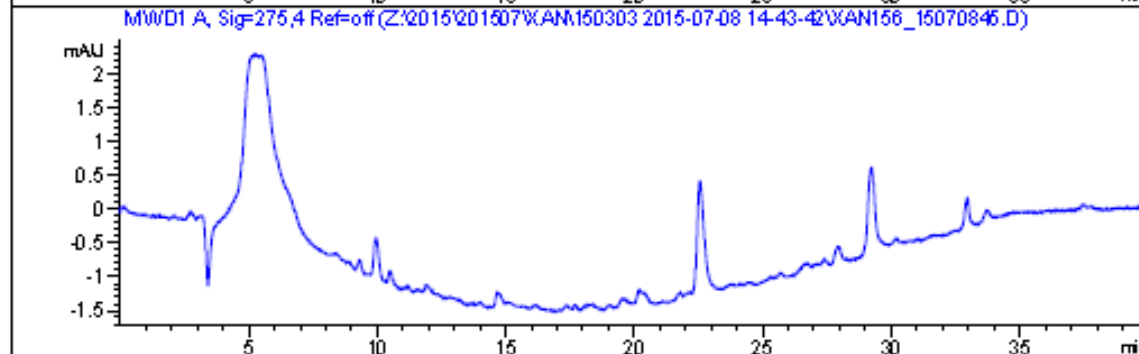
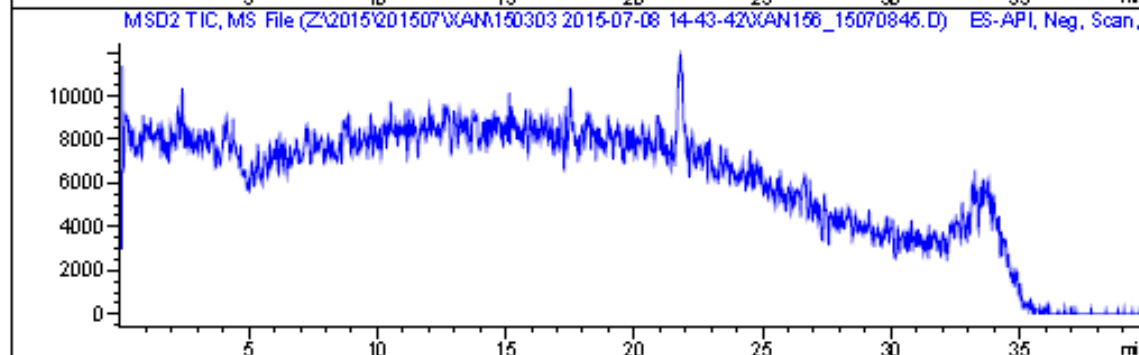
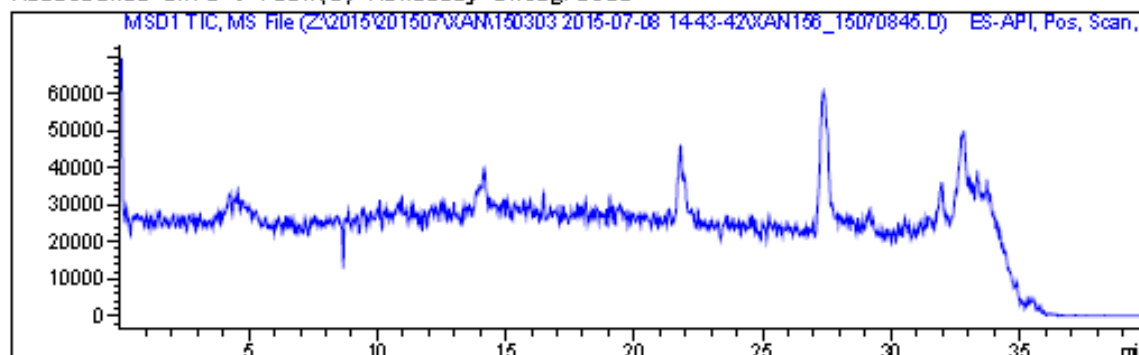
No peaks found



Sample Name: XAN\_156\_2

-----  
Acq. Operator : Administrator Ehrlich                   Seq. Line : 43  
Acq. Instrument : Instrument 1                        Location : Vial 3  
Injection Date : 7/8/2015 4:26:53 PM                Inj : 1  
  Inj Volume : 5.0 µl  
Acq. Method : Z:\2015\201507\XAN\150303 2015-07-08 14-43-42\XAN.M  
Last changed : 7/8/2015 2:31:19 PM by Administrator Ehrlich  
Analysis Method : C:\CHEM32\1\METHODS\MWC\XEA\_2015\XAN.M  
Last changed : 7/14/2015 1:41:04 PM by Administrator Ehrlich  
  (modified after loading)  
Method Info : Analytik: REVISION "Food & Function"- Artikel Myricetinderivate  
  für XAN & AG Wätjen Biozentrum

Additional Info : Peak(s) manually integrated



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Area Percent Report  
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Sorted By : Signal  
Multiplier : 1.0000  
Dilution : 1.0000  
Use Multiplier & Dilution Factor with ISTDs

No peaks found

Sample Name: XAN\_156\_2

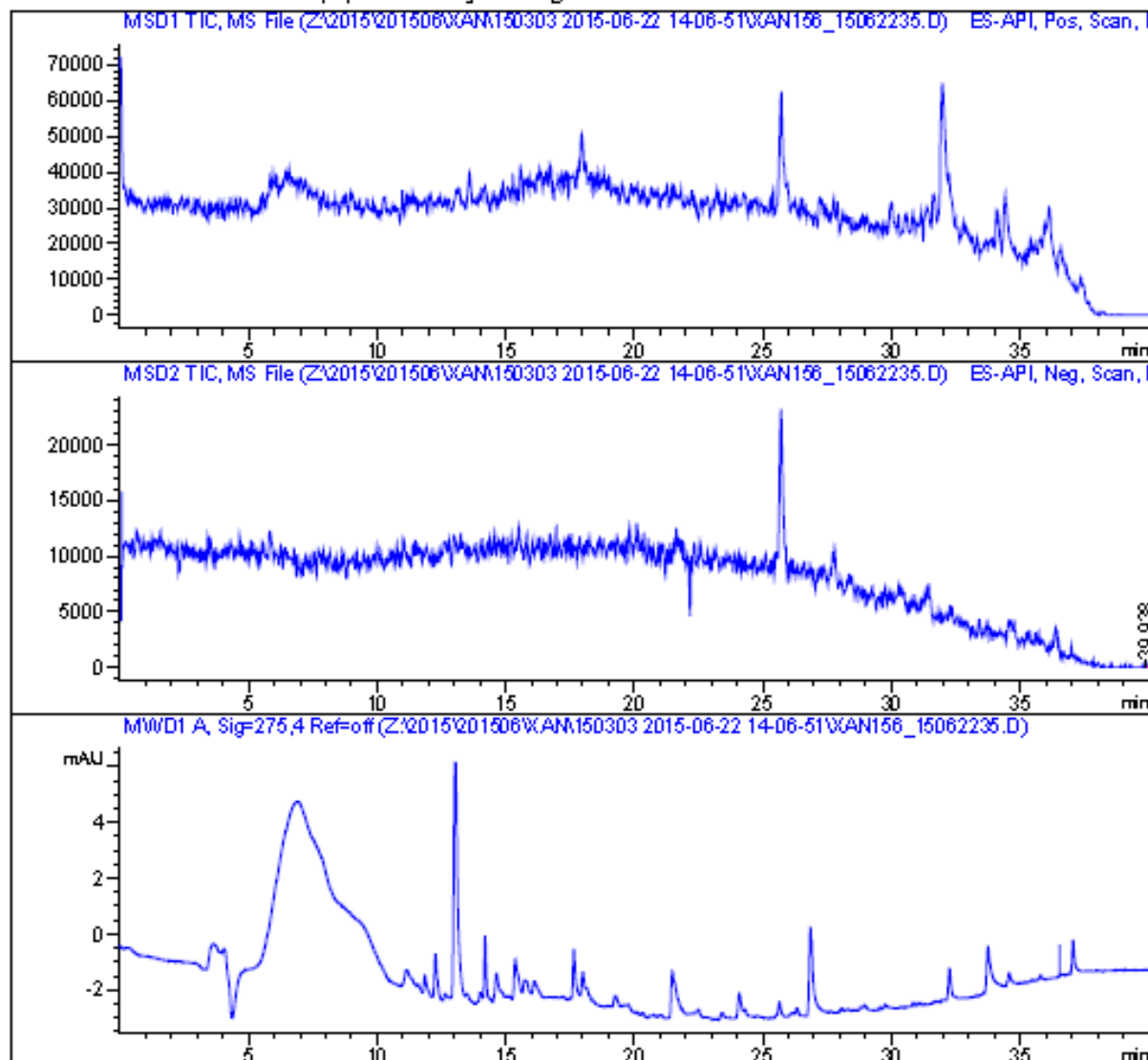
```

-----
Acq. Operator   : Administrator Ehrlich           Seq. Line :   33
Acq. Instrument : Instrument 1                   Location  : Vial 4
Injection Date  : 6/22/2015 4:41:37 PM          Inj       :    1
                                                Inj Volume: 5.0 µl

Acq. Method     : Z:\2015\201506\XAN\150303 2015-06-22 14-06-51\XAN.M
Last changed    : 6/22/2015 10:54:59 AM by Administrator Ehrlich
Analysis Method : C:\CHEM32\1\METHODS\NWC\XEA_2015\XAN.M
Last changed    : 7/14/2015 1:41:04 PM by Administrator Ehrlich
                  (modified after loading)

Method Info     : Analytik: REVISION "Food & Function"- Artikel Myricetin-derivate
                  für XAN & AG Wätjen Biozentrum
  
```

Additional Info : Peak(s) manually integrated



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                          Area Percent Report
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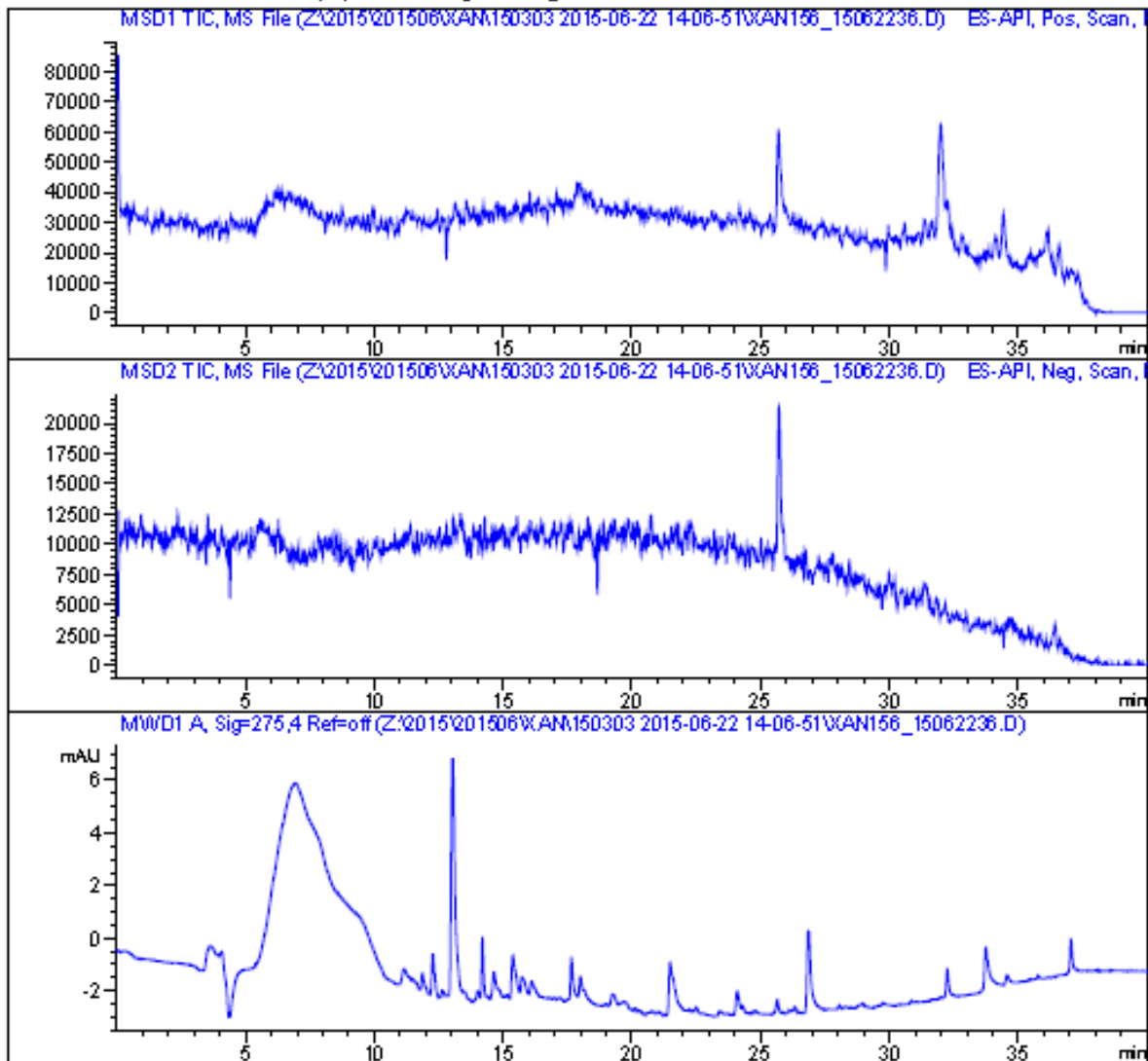
```

Sorted By           :      Signal
Multiplier          :      1.0000
Dilution            :      1.0000
Use Multiplier & Dilution Factor with ISTDs
  
```

Sample Name: XAN\_156\_3

-----  
Acq. Operator : Administrator Ehrlich                   Seq. Line : 34  
Acq. Instrument : Instrument 1                        Location : Vial 5  
Injection Date : 6/22/2015 5:32:59 PM               Inj : 1  
  Inj Volume : 5.0 µl  
Acq. Method : Z:\2015\201506\XAN\150303 2015-06-22 14-06-51\XAN.M  
Last changed : 6/22/2015 10:54:59 AM by Administrator Ehrlich  
Analysis Method : C:\CHEM32\1\METHODS\NWC\XEA\_2015\XAN.M  
Last changed : 7/14/2015 1:41:04 PM by Administrator Ehrlich  
  (modified after loading)  
Method Info : Analytik: REVISION "Food & Function"- Artikel Myricetinderivate  
  für XAN & AG Wätjen Biozentrum

Additional Info : Peak(s) manually integrated



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Area Percent Report  
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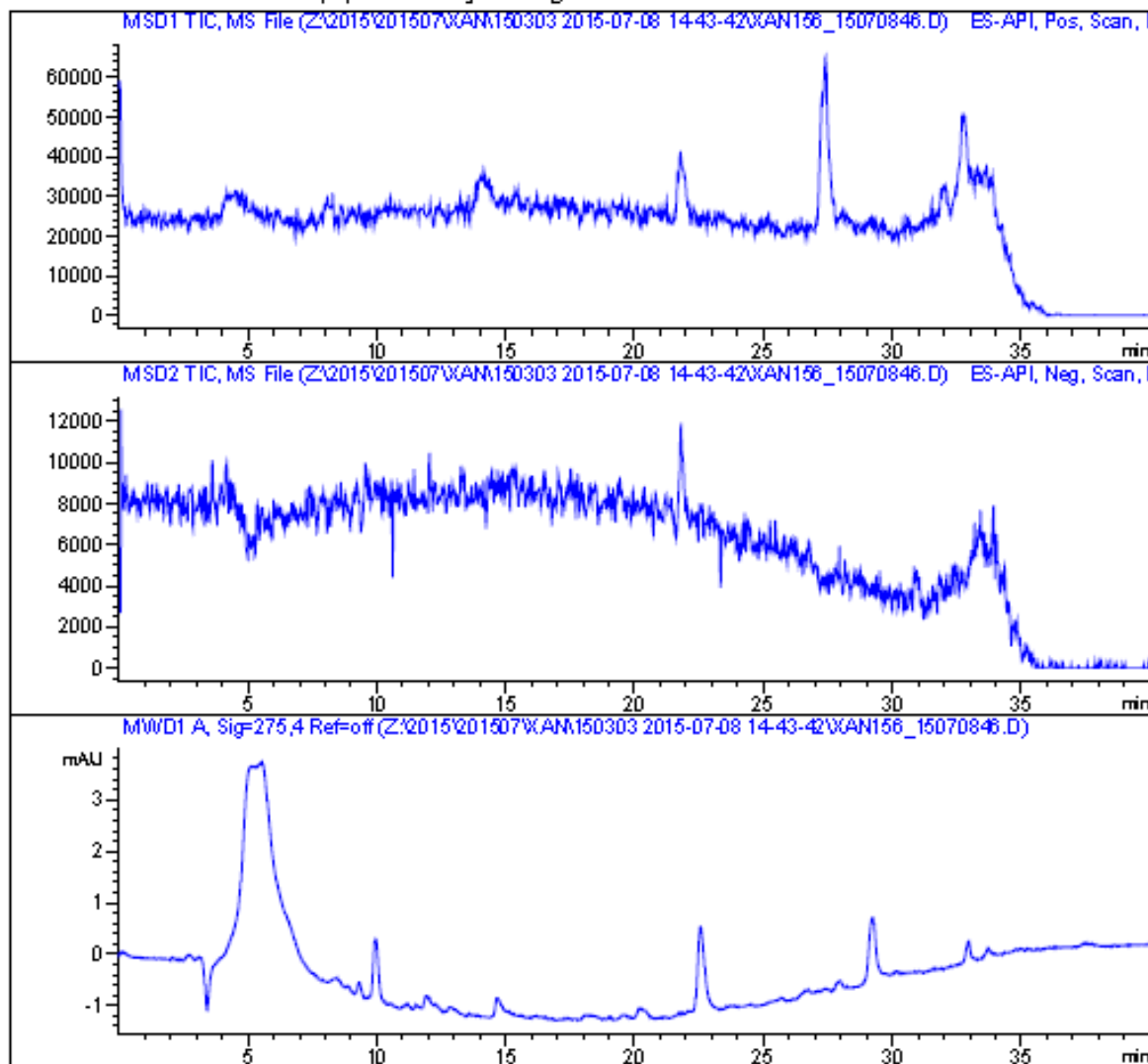
Sorted By : Signal  
Multiplier : 1.0000  
Dilution : 1.0000  
Use Multiplier & Dilution Factor with ISTDs

No peaks found

Sample Name: XAN\_156\_3

-----  
Acq. Operator : Administrator Ehrlich Seq. Line : 44  
Acq. Instrument : Instrument 1 Location : Vial 4  
Injection Date : 7/8/2015 5:18:05 PM Inj : 1  
 Inj Volume: 5.0 µl  
Acq. Method : Z:\2015\201507\XAN\150303 2015-07-08 14-43-42\XAN.M  
Last changed : 7/8/2015 2:31:19 PM by Administrator Ehrlich  
Analysis Method : C:\CHEM32\1\METHODS\NWC\XEA\_2015\XAN.M  
Last changed : 7/14/2015 1:41:04 PM by Administrator Ehrlich  
 (modified after loading)  
Method Info : Analytik: REVISION "Food & Function"- Artikel Myricetinderivate  
 für XAN & AG Wätjen Biozentrum

Additional Info : Peak(s) manually integrated



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Area Percent Report  
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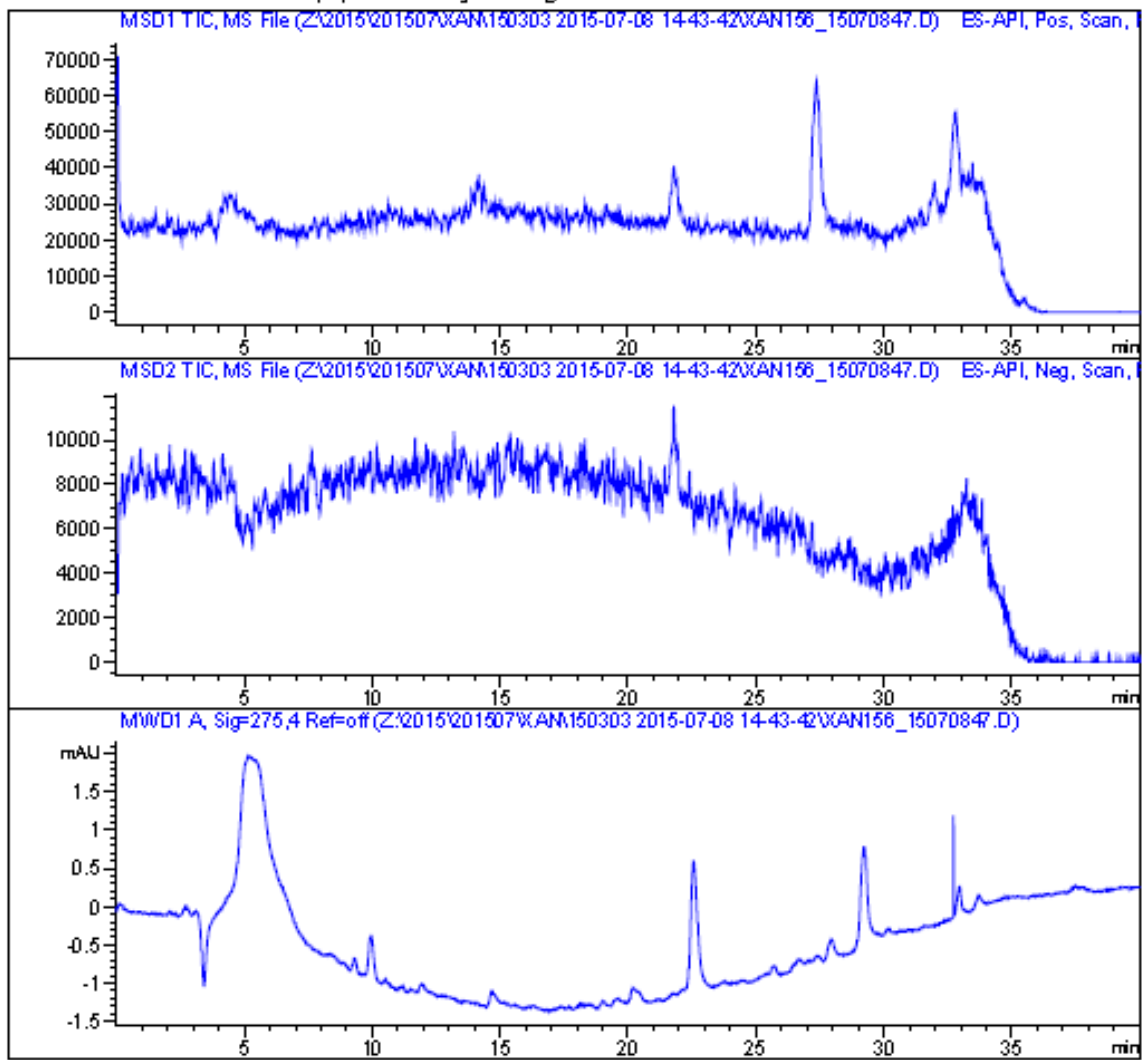
Sorted By : Signal  
Multiplier : 1.0000  
Dilution : 1.0000  
Use Multiplier & Dilution Factor with ISTDs

No peaks found

Sample Name: XAN\_156\_4

-----  
Acq. Operator : Administrator Ehrlich                   Seq. Line : 45  
Acq. Instrument : Instrument 1                        Location : Vial 5  
Injection Date : 7/8/2015 6:09:17 PM                Inj : 1  
  Inj Volume : 5.0 µl  
Acq. Method : Z:\2015\201507\XAN\150303 2015-07-08 14-43-42\XAN.M  
Last changed : 7/8/2015 2:31:19 PM by Administrator Ehrlich  
Analysis Method : C:\CHEM32\1\METHODS\NWC\XEA\_2015\XAN.M  
Last changed : 7/14/2015 1:41:04 PM by Administrator Ehrlich  
  (modified after loading)  
Method Info : Analytik: REVISION "Food & Function"- Artikel Myricetinderivate  
  für XAN & AG Wätjen Biozentrum

Additional Info : Peak(s) manually integrated



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Area Percent Report  
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Sorted By : Signal  
Multiplier : 1.0000  
Dilution : 1.0000  
Use Multiplier & Dilution Factor with ISTDs

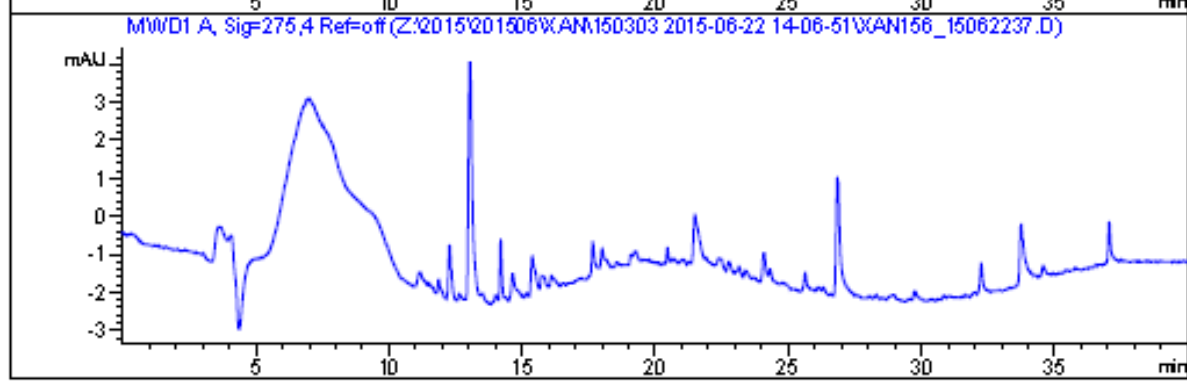
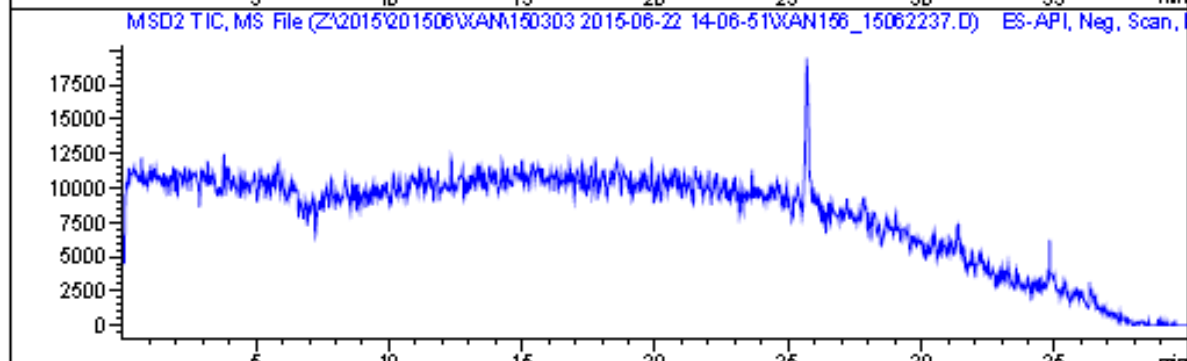
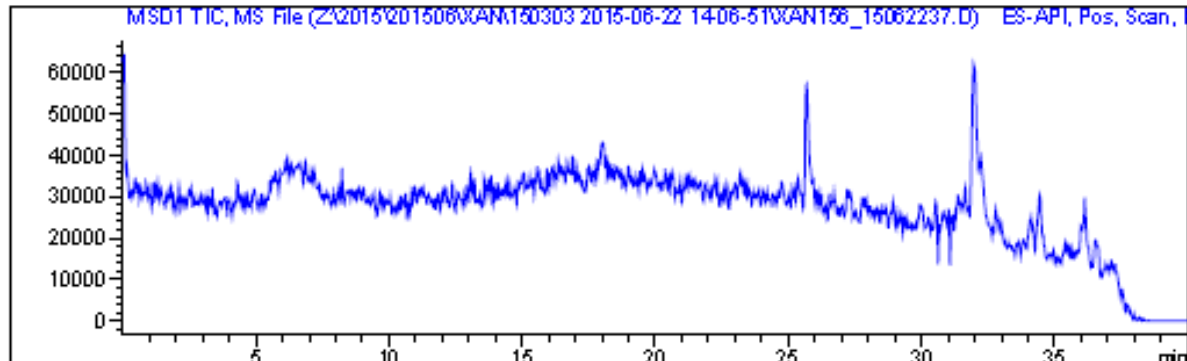
No peaks found



Sample Name: XAN\_156\_4

-----  
Acq. Operator : Administrator Ehrlich                   Seq. Line : 35  
Acq. Instrument : Instrument 1                            Location : Vial 6  
Injection Date : 6/22/2015 6:24:22 PM                   Inj : 1  
  Inj Volume : 5.0 µl  
Acq. Method : Z:\2015\201506\XAN\150303 2015-06-22 14-06-51\XAN.M  
Last changed : 6/22/2015 10:54:59 AM by Administrator Ehrlich  
Analysis Method : C:\CHEM32\1\METHODS\NWC\XEA\_2015\XAN.M  
Last changed : 7/14/2015 1:41:04 PM by Administrator Ehrlich  
  (modified after loading)  
Method Info : Analytik: REVISION "Food & Function"- Artikel Myricetinderivate  
  für XAN & AG Wätjen Biozentrum

Additional Info : Peak(s) manually integrated



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Area Percent Report  
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Sorted By : Signal  
Multiplier : 1.0000  
Dilution : 1.0000  
Use Multiplier & Dilution Factor with ISTDs

No peaks found

Sample Name : XAN\_156\_5

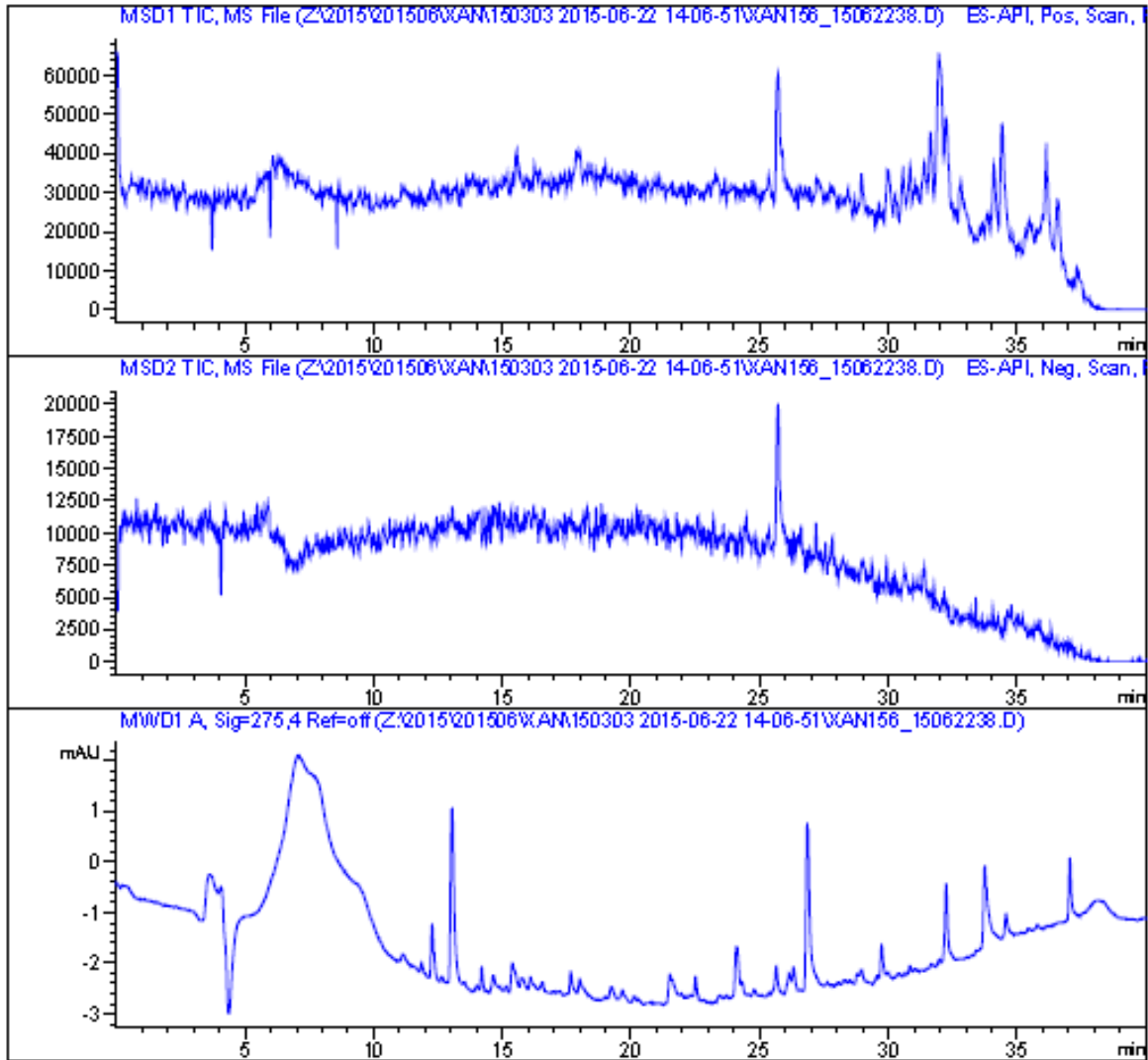
```

-----
Acq. Operator   : Administrator Ehrlich           Seq. Line :   36
Acq. Instrument : Instrument 1                   Location  : Vial 7
Injection Date  : 6/22/2015 7:15:45 PM          Inj       :    1
                                           Inj Volume: 5.0 µl

Acq. Method     : Z:\2015\201506\XAN\150303 2015-06-22 14-06-51\XAN.M
Last changed    : 6/22/2015 10:54:59 AM by Administrator Ehrlich
Analysis Method : C:\CHEM32\1\METHODS\NWC\XEA_2015\XAN.M
Last changed    : 7/14/2015 1:41:04 PM by Administrator Ehrlich
                  (modified after loading)

Method Info     : Analytik: REVISION "Food & Function"- Artikel Myricetin-derivate
                  für XAN & AG Wätjen Biozentrum
    
```

Additional Info : Peak(s) manually integrated



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 Area Percent Report  
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```

Sorted By      :      Signal
Multiplier     :      1.0000
Dilution       :      1.0000
Use Multiplier & Dilution Factor with ISTDs
    
```

No peaks found

Sample Name: XAN\_156\_5

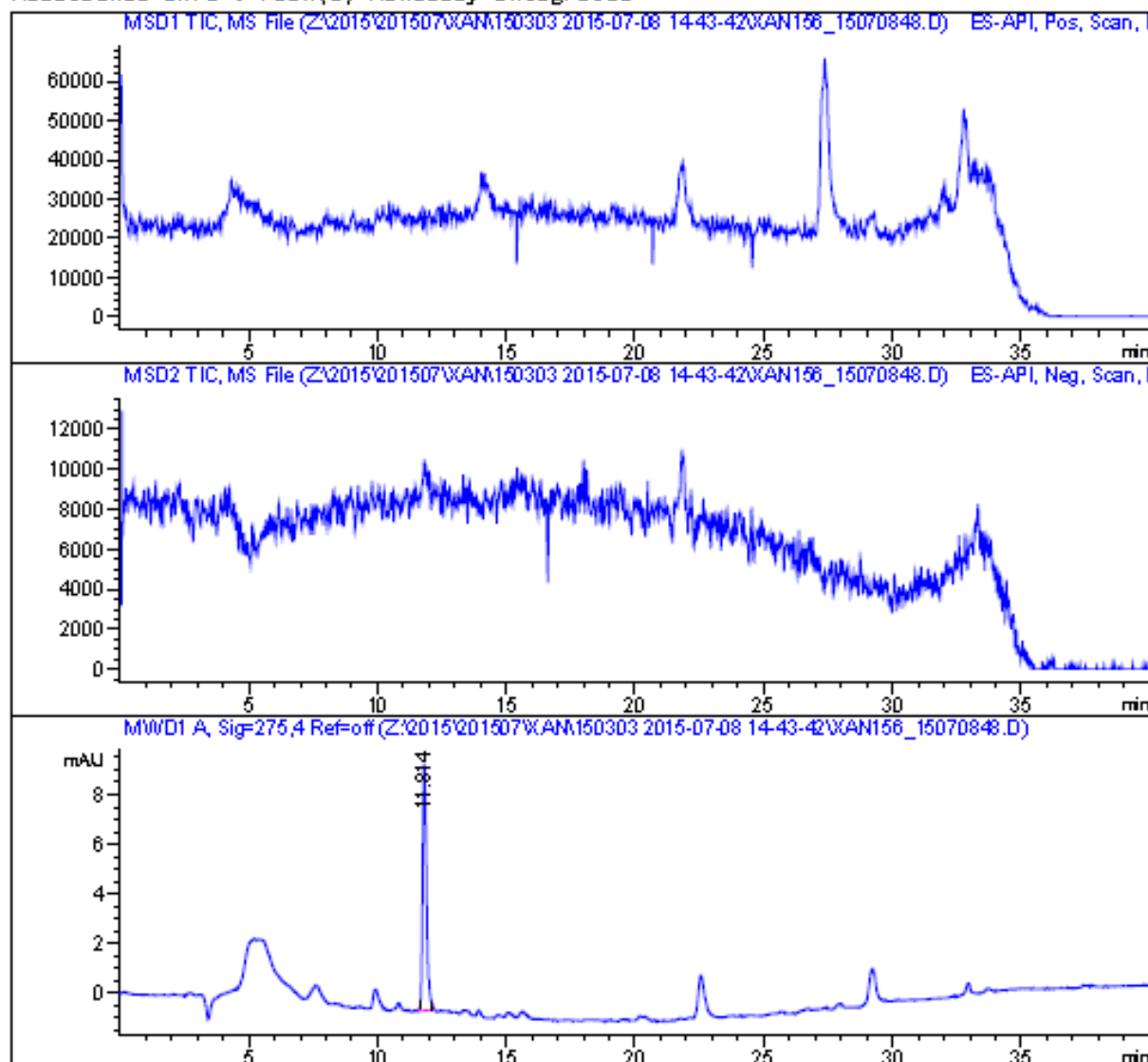
```

-----
Acq. Operator   : Administrator Ehrlich           Seq. Line :   46
Acq. Instrument : Instrument 1                   Location  : Vial 6
Injection Date  : 7/8/2015 7:00:29 PM           Inj       :    1
                                                    Inj Volume: 5.0 µl

Acq. Method    : Z:\2015\201507\XAN\150303 2015-07-08 14-43-42\XAN.M
Last changed   : 7/8/2015 2:31:19 PM by Administrator Ehrlich
Analysis Method: C:\CHEM32\1\METHODS\NWC\XEA_2015\XAN.M
Last changed   : 7/14/2015 1:41:04 PM by Administrator Ehrlich
                (modified after loading)

Method Info    : Analytik: REVISION "Food & Function"- Artikel Myricetinderivate
                für XAN & AG Wätjen Biozentrum
    
```

Additional Info : Peak(s) manually integrated



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 Area Percent Report  
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```

Sorted By      :      Signal
Multiplier     :      1.0000
Dilution       :      1.0000
Use Multiplier & Dilution Factor with ISTDs
    
```