
Final

**Remedial Action Work Plan
for DS003–Site 12
Niagara Falls Air Reserve Station, New York**

Prepared for
Air Force Civil Engineer Center
Environmental Restoration Division
Lackland Air Force Base, Texas 78236-9853

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Acronyms and Abbreviations

AFCEC	Air Force Civil Engineer Center
AMSL	Above mean sea level
bgs	Below ground surface
COPC	Contaminants of potential concern
DCE	Dichloroethene
EA	EA Engineering, P.C. and its affiliate EA Science and Technology
EPA	U.S. Environmental Protection Agency
ft	Feet (or foot)
mg/kg	Milligrams per kilogram
NFARS	Niagara Falls Air Reserve Station
NYSDEC	New York State Department of Environmental Conservation
RA	Remedial action
SAIC	Science Application International Corporation
SC	Site Closeout
SCO	Soil Cleanup Objective
UU/UE	Unlimited use/unrestricted exposure
VOC	Volatile organic compound

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Executive Summary

The U.S. Department of the Air Force, Air Force Civil Engineer Center (AFCEC), on behalf of the 914th Airlift Wing Mission Support Group/Civil Engineering-Environmental, retained Versar, Inc. and its teaming partner EA Engineering, P.C. and its affiliate EA Science and Technology (EA), under Contract No. FA8903-09-D-8588, Task Order 0006. This work is a component of the Performance-Based Remediation Contract activities at the Niagara Falls Air Reserve Station in Niagara Falls, New York.

The goal for this project at DS003–Site 12 is to achieve Site Closeout (SC) as defined by AFCEC. The site has a current status of No Further Response Action Planned according to the New York State Department of Environmental Conservation (NYSDEC). AFCEC confers SC status to an environmental cleanup site when all active remediation and monitoring have been completed, no additional environmental cleanup funds will be expended at the site, and regulators concur that the concentrations of site-related contaminants of potential concern (COPCs) in affected media meet unlimited use/unrestricted exposure (UU/UE) criteria. For the purpose of this project, the UU/UE Soil Cleanup Objectives (SCOs) are represented by the NYSDEC UU/UE SCOs.

On 4–9 September 2013, EA completed a field investigation in accordance with the UU/UE Characterization Quality Assurance Project Plan for Sites DS001, DS003, ST009, ST011, TU956, and TU962 (EA 2013a) to verify that soil at the site meets NYSDEC UU/UE SCOs. Results of the field investigation indicated that concentrations of site-related COPCs (i.e., cis 1,2-dichloroethene and vinyl chloride) in soil exceeded the NYSDEC UU/UE SCOs at one location.

Additional delineation of a localized area of potentially impacted soil was completed in July 2014. Fifteen subsurface soil samples were collected from four locations. Vinyl chloride was reported in soil at three of these locations at concentrations greater than the NYSDEC UU/UE SCOs.

Based on the findings of the UU/UE sampling, soil is the only media of concern and this remedial action is proposed to remove soil impacted with site-related COPCs to meet SCOs to achieve SC. This remedial action consists of an excavation of impacted soil, offsite disposal, and confirmatory sampling.

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1. Introduction and Project Overview

The U.S. Department of the Air Force, Air Force Civil Engineer Center (AFCEC), on behalf of the 914th Airlift Wing Mission Support Group/Civil Engineering-Environmental, has retained Versar, Inc. and its teaming partner EA Engineering, P.C. and its affiliate EA Science and Technology (EA), under Contract No. FA8903-09-D-8588, Task Order 0006, to perform a site investigation and remedial action (RA) at DS003–Site 12 (Building 850 Drum Storage), which has a current status of No Further Response Action Planned. This work is a component of the Performance-Based Remediation Contract activities at the Niagara Falls Air Reserve Station (NFARS) in Niagara Falls, New York.

The site was regulated under the Resource Conservation and Recovery Act program. This program is administered through the New York State Department of Environmental Conservation (NYSDEC) and managed under the Air Force Installation Restoration Program. The current status for DS003–Site 12 is No Further Action, which was approved by the NYSDEC in 1992.

The goal for the site is to obtain Site Closeout (SC), as defined by AFCEC, within the Contract’s period of performance. AFCEC confers SC status to an environmental cleanup site when all active remediation and monitoring have been completed, no additional environmental cleanup funds will be expended at the site, and regulators concur that the concentrations of site-related contaminants of potential concern (COPCs) in affected media meet unlimited use/unrestricted exposure (UU/UE) criteria. For the purpose of this project, the UU/UE criteria are represented by the NYSDEC UU/UE Soil Cleanup Objectives (SCOs).

In order to achieve SC, an RA is required to remove and dispose of soil impacted with volatile organic compounds (VOCs) at concentrations greater than NYSDEC UU/UE SCOs. Based on the results of the site characterization completed in 2013 and 2014, two VOCs were detected in soil at concentrations greater than NYSDEC UU/UE SCOs. These VOCs (specifically, vinyl chloride and cis-1,2-dichloroethene [cis-1,2-DCE]) are chlorinated VOCs and were identified as site-related COPCs. Soil has been identified as the only media of concern. This Work Plan describes the proposed RA at DS003–Site 12, which will be conducted to address impacted soil. Excavation and disposal was selected as the RA because it offers an efficient and effective method to remediate the site based on the site’s small footprint and relatively limited impacts to soil. Other remedial technologies may be more costly or complicated and less effective. Additionally, other technologies may require post-RA monitoring.

1.1 Work Plan Organization

This RA Work Plan has been developed in order to achieve the project goal outlined above and detailed in Section 2. This Work Plan is organized into the following sections:

- **Section 1 – Introduction and Project Overview**—Presents an introduction to the project as a whole, presents the project objectives and scope, identifies key personnel and responsibilities of those individuals, and outlines the Work Plan organization and project description.
- **Section 2 – Proposed Remedial Action**—Contains technology overview and procedures for implementing the RA and confirmation sampling.
- **Section 3 – Project Schedule and Deliverables**—Presents the proposed schedule for project activities and associated deliverables.
- **Section 4 – References.**

1.2 Site Information and Background

Installation Background

NFARS is located in Niagara Falls, New York, approximately 15 miles north of Buffalo. NFARS is located 3.5 miles northeast of the Niagara River, in a lowland area which separates Lake Ontario (to the north) from Lake Erie (to the south). The installation is generally flat, with surface elevations ranging from 585 feet (ft) above mean sea level (AMSL) at the northern boundary of the installation to 600 ft AMSL at the southern boundary. The installation, which adjoins the Niagara Falls International Airport, encompasses approximately 550 acres (Figure 1-1).

NFARS was created in November 1942 and operated by the Aerospace Defense Command, with numerous groups active on the installation between 1946 and 1971. In 1971, the installation was transferred to the Air Force Reserve Command, and the 914th Tactical Airlift Group (later called the 914th Tactical Airlift Wing) became the installation host.

Site Location

DS003–Site 12 is a 0.28-acre open grassy area east of Building 850 adjacent to an aircraft hardstand and taxi area (Figure 1-2). The small area is fenced on the north and east sides. The remainder is open to the airfield.

Site Background

DS003–Site 12 was used during the 1950s and early 1960s as an accumulation point for drums of waste oil and hazardous waste from a nearby hangar. No spills have been documented at DS003–Site 12 and no corrective actions have occurred at the site.

In 1986, as part of a Phase II investigation, two surface water and two sediment samples were collected from the drainage ditch adjacent to the site. Additionally, two soil samples were collected from two borings. Analytical results for the surface water samples indicated that DS003–Site 12 was not affecting surface water quality. Oil and grease were detected in the upstream sediment sample; however, it was concluded that this contamination was likely attributed to runoff from Wagner Drive. Analytical results for soil samples collected from the borings included detections of oil and grease, total organic carbon, and total organic halogens. The Phase II report concluded that the source of contamination at the site may not be the Building 850 Drum Storage Yard (Science Application International Corporation [SAIC] 1986).

A Remedial Investigation/Feasibility Study was conducted from 1989 to 1991 as an expanded investigation of potential contaminant sources at NFARS (SAIC 1991). Six subsurface soil samples and one duplicate sample were collected from two borings (B12-1 and B12-2) (Figure 1-2). Samples were analyzed for total metals (U.S. Environmental Protection Agency [EPA] Method SW3050/6010), VOCs (EPA Method SW8240), semivolatile organic compounds (EPA Method SW3550/8270), and total petroleum hydrocarbons. Soil analytical results indicated the presence of oil and grease and total organic halogens. Metal concentrations were generally within background ranges. A number of VOCs were detected, including trichloroethene at an estimated concentration (0.55 milligrams per kilogram [mg/kg]), which exceeds the current NYSDEC UU/UE SCO (0.47 mg/kg.), *trans*-1,2-DCE, benzene, tetrachloroethene, acetone, and methylene chloride. Acetone was detected in four of the six soil samples at concentrations greater than the UU/UE SCO (0.05 mg/kg). However, similar detections were

reported in two of three method blanks; therefore, the acetone concentrations were attributed to laboratory contamination.

In September 1991, DS003–Site 12 was recommended for No Further Action due to the lack of significant impacts to soil at the site (Headquarters Air Force Reserve 1991). The NYSDEC concurred with this recommendation (NYSDEC 1992).

Site Closeout Confirmation Sampling (September–November 2013)

In September 2013, soil samples were collected to determine if site-related COPCs were less than NYSDEC UU/UE SCOs. Subsurface soil samples were collected from locations where previous impacts had been observed (Figure 1-2). Field activities were completed in accordance with the *UU/UE Characterization Quality Assurance Project Plan for Sites DS001, DS003, ST009, ST011, TU956, and TU962* (EA 2013a) and the subsequent Addendum No. 1 (EA 2013b). Vinyl chloride was detected in one soil sample, a field duplicate (DS003-SB-FD-130905-01), at a concentration (0.037 mg/kg) greater than its UU/UE SCO (0.02 mg/kg) (Table 1-1). However, vinyl chloride was not detected in the parent sample (DS003-SB-01-4-6). A subsequent confirmatory soil sample, along with a duplicate sample, was collected on 6 November 2013 near DS003-SB-01, at the same sample interval depth to confirm the original sampling event results. Vinyl chloride was detected in both samples at concentrations less than the UU/UE SCOs. However, cis-1,2-DCE was detected at a concentration of (0.45 mg/kg) in DS003-SB-01A, which is greater than the UU/UE SCO (0.25 mg/kg). No other VOCs were detected at concentrations greater than their respective UU/UE SCOs.

TABLE 1-1

Site-Related Contaminants of Potential Concern Detected in Subsurface Soil – September–November 2013

Boring Location/Sample Depth (ft bgs) Date	SB-01 (4-6) 09/05/2013	SB-FD-130905-01 (4-6) 09/05/2013	SB-01A (4-6) 11/06/2013	SB-FD- 131106 (4-6) 11/06/2013	6 New York Code of Rules and Regulations Part 375 UU/UE SCO
cis-1,2-DCE	0.092	0.096	0.45 J	0.5 J	0.25
Vinyl Chloride	(<0.00077) U	0.037	0.0085	0.016	0.02

Note: J = The associated numerical value is an estimated concentration.

U = Analyte was not detected above the method detection limit.

bgs = Below ground surface.

All concentrations are in mg/kg.

Highlighted values exceed UU/UE SCOs.

SB-FD-131106 is a field duplicate of SB-01A.

SB-FD-130905-01 is a field duplicate of SB-01.

Additional Subsurface Soil Investigation (July 2014)

An additional investigation was conducted on 10 July 2014 in accordance with the *Pre-Design Investigation Quality Assurance Project Plan Addendum No. 1 Niagara Falls Air Reserve Station, New York* (EA 2014a). Fifteen additional subsurface soil samples were collected using direct-push technology to define the extent of the impacts to subsurface soil at DS003–Site 12. Soil samples were collected at several depths and in an arc surrounding SB-01 and SB-01A (Figure 1-3). Field notes are provided in

Appendix A. Samples from expanded locations were analyzed based on detections of site-related COPCs (e.g., a sample from the next arc was analyzed if site-related COPCs were detected at concentrations greater than UU/UE SCOs). Additional borings along a north-south axis were not installed due to a subsurface water line (Figure 1-3).

Subsurface Soil Analytical Results

One site-related COPC, vinyl chloride, was detected in subsurface soil samples from DS003–Site 12 at a concentration greater than the UU/UE SCOs. During the July 2014 field event, cis-1,2-DCE was not detected at a concentration greater than the UU/UE SCO. No other VOCs were detected at concentrations greater than their respective UU/UE SCOs. Complete analytical results are provided in Appendix B.

TABLE 1-2

Site-Related Contaminants of Potential Concern Detected in Subsurface Soil – July 2014

Soil Boring	Depth (ft bgs)	Vinyl Chloride (mg/kg) (UU/UE SCO is 0.02 mg/kg)	Cis-1,2 DCE (mg/kg) (UU/UE SCO is 0.25 mg/kg)
SB-A1-4	4	0.0092	0.0227
SB-A1-6	6	0.0213	ND (<0.0021)
SB-B1-4	4	0.0021	0.0974
SB-B1-6	6	0.0043	0.0403
SB-B2-5	5	0.0019J	0.0146
SB-B2-6	6	0.0531	0.0182
SB-B2-7	7	0.0394	0.0007J
SB-B3-3	3	0.0043	0.0719
SB-B3-4	4	0.0103	0.163
SB-B3-6	6	0.034	0.0416
SB-B3-7	7	0.0212	0.0024
SB-C5-4	4	ND (<0.002)	0.00082J
SB-C5-6	6	ND (<0.00110)	ND (<0.00023)
SB-C5-7	7	ND (<0.00097)	ND (<0.00021)
FD-140710-1	(SB-B3-6)	0.0273	0.0418
FD-140710-2	(SB-A1-4)	0.0234	0.0211
Note: J = The associated numerical value is an estimated concentration. U = Analyte was not detected above the method detection limit. UU/UE SCO taken from 6 New York Code of Rules and Regulations Part 375. All concentrations are in mg/kg. Highlighted values exceed standards.			

1.3 Remedial Action Objectives

This Work Plan describes activities proposed for the DS003–Site 12 RA. The RA objective is to remove soil impacted with vinyl chloride and cis-1,2 DCE to achieve NYSDEC UU/UE SCOs. The extent of the impact to subsurface soil was characterized during the previous SC confirmation sampling (EA 2014b) and the supplemental subsurface soil sampling was restricted to a 180-square ft area.

All work in support of the RA will be completed in accordance with this Work Plan.

1.4 Remedial Action Scope

A summary of RA activities for the project objectives outlined above is as follows:

- Site preparation including utility clearance, gaining approvals and permits, and mobilizing equipment
- Excavate a 50-square ft area of soil to approximately 8 ft bgs and segregate soil for re-use and offsite disposal based on site characterization sampling previously completed (i.e., re-use soil from 0 to 4 ft bgs for backfill and dispose of soil from 5 to 8 ft bgs)
- Collect confirmatory soil samples from sidewalls and bottom of excavation
- Site restoration following completion of excavation including backfill with certified clean fill
- Completion of Remedial Action Summary Report.

1.5 Project Organization and Responsibilities

Title	Name
Project Officer/Program Manager	Nathan Mullens
Project Manager	Benjamin Young, PE
Senior Technical Review	Michael Hertz, P.G., PMP
Quality Assurance/Quality Control Officer	Jennifer Martin Bouchard, P.G., PMP
Task Manager	Christopher Schroer
Site Safety and Health Officer	Robert Peterson

Project personnel will be qualified to perform the tasks to which they are assigned. Appraisal of the qualifications of field personnel will be made by the Project Manager and will include comparison of the requirements of the job assignment with the relevant experience and training of the proposed personnel. It will also include a determination of whether further training is required and, if so, by what method. Onsite training is an acceptable method, provided such training is given by a person qualified to perform the trainee's assignment and the training does not otherwise impede the progress of the project.

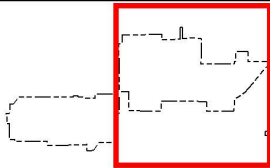
Qualifications of Personnel

Project personnel will be qualified to perform the tasks to which they are assigned. Appraisal of the qualifications of field personnel will be made by the Project Manager and will include comparison of the requirements of the job assignment with the relevant experience and training of the proposed personnel. It will also include a determination of whether further training is required and, if so, by what method. Onsite training is an acceptable method, provided such training is given by a person qualified

to perform the trainee's assignment and the training does not otherwise impede the progress of the project.

Project Subcontractors

EA will serve as the contractor and will hire subcontractors (operator, analytical laboratory, data validator, and waste hauler) as needed to complete the RA.



Installation Area



Approximate Site Boundary

0

0.5

Miles

Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, i-cubed, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping,



Remedial Action Work Plan
for DS003 - Site 12
Niagara Falls Air Reserve Station
Niagara Falls, New York

FIGURE 1-1
Site Location Map

PROJECT MGR:
BY

DESIGNED BY:
FD

CREATED BY:
CJS

CHECKED BY:
MH

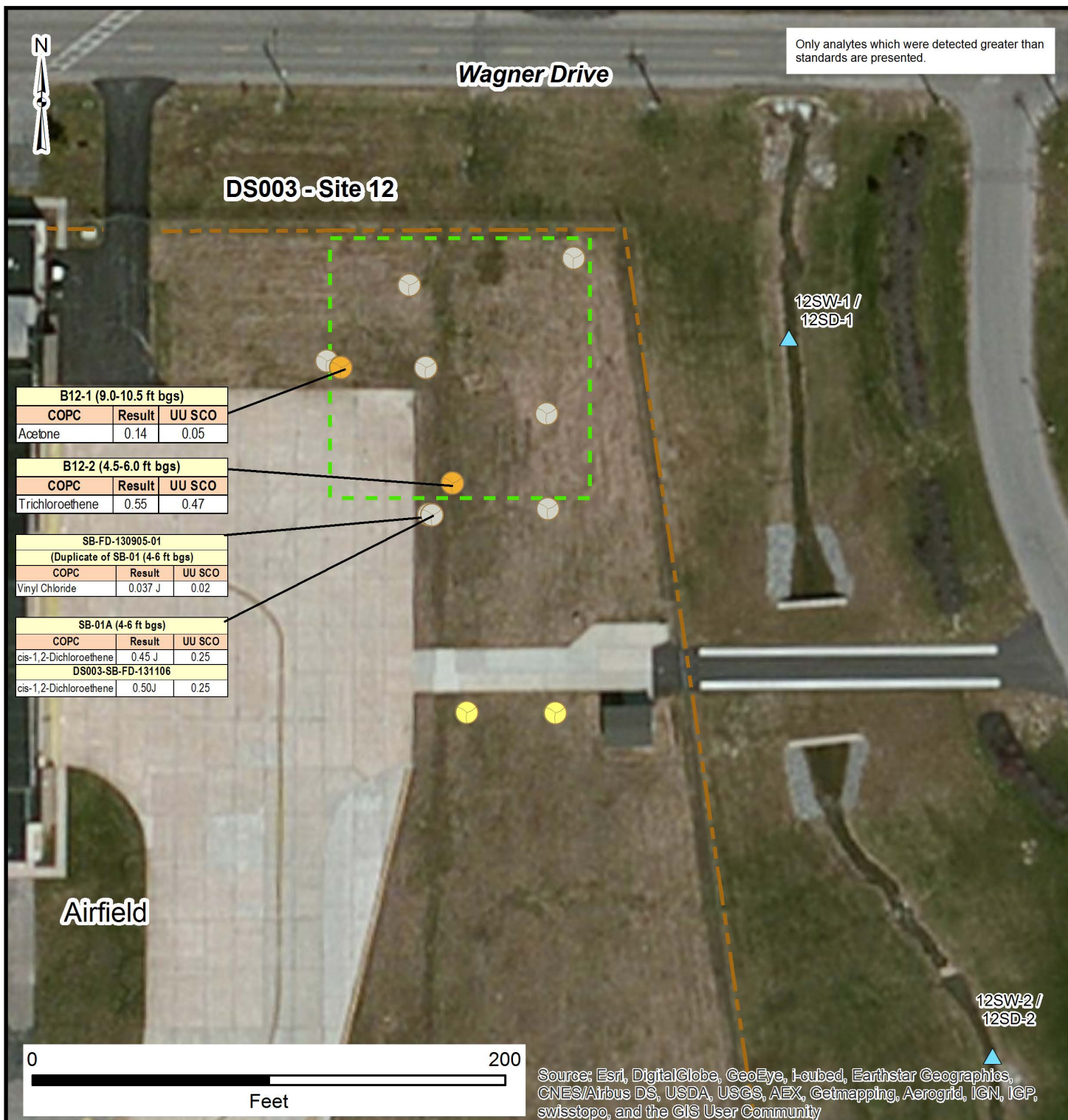
SCALE:
AS SHOWN

DATE:
JANUARY, 2015

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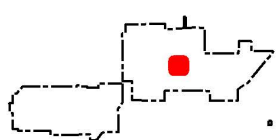


B12-1 (9.0-10.5 ft bgs)		
COPC	Result	UU SCO
Acetone	0.14	0.05

B12-2 (4.5-6.0 ft bgs)		
COPC	Result	UU SCO
Trichloroethene	0.55	0.47

SB-FD-130905-01 (Duplicate of SB-01 (4-6 ft bgs))		
COPC	Result	UU SCO
Vinyl Chloride	0.037 J	0.02

SB-01A (4-6 ft bgs)		
COPC	Result	UU SCO
cis-1,2-Dichloroethene	0.45 J	0.25
DS003-SB-FD-131106		
cis-1,2-Dichloroethene	0.50J	0.25



Site Boundary
Fence Line

Historic Subsurface
Soil Sampling Location
(1986)

Historic Subsurface
Location (1989)

Sample Locations
(2013)

Historic Surface Water /
Sediment Sampling
Location (1986)



Remedial Action Work Plan
for DS003 - Site 12
Niagara Falls Air Reserve Station
Niagara Falls, New York

FIGURE 1-2
DS003 - Site 12
Site Summary Map

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BY

DESIGNED BY:
FD

CREATED BY:
CJS

CHECKED BY:
JMB

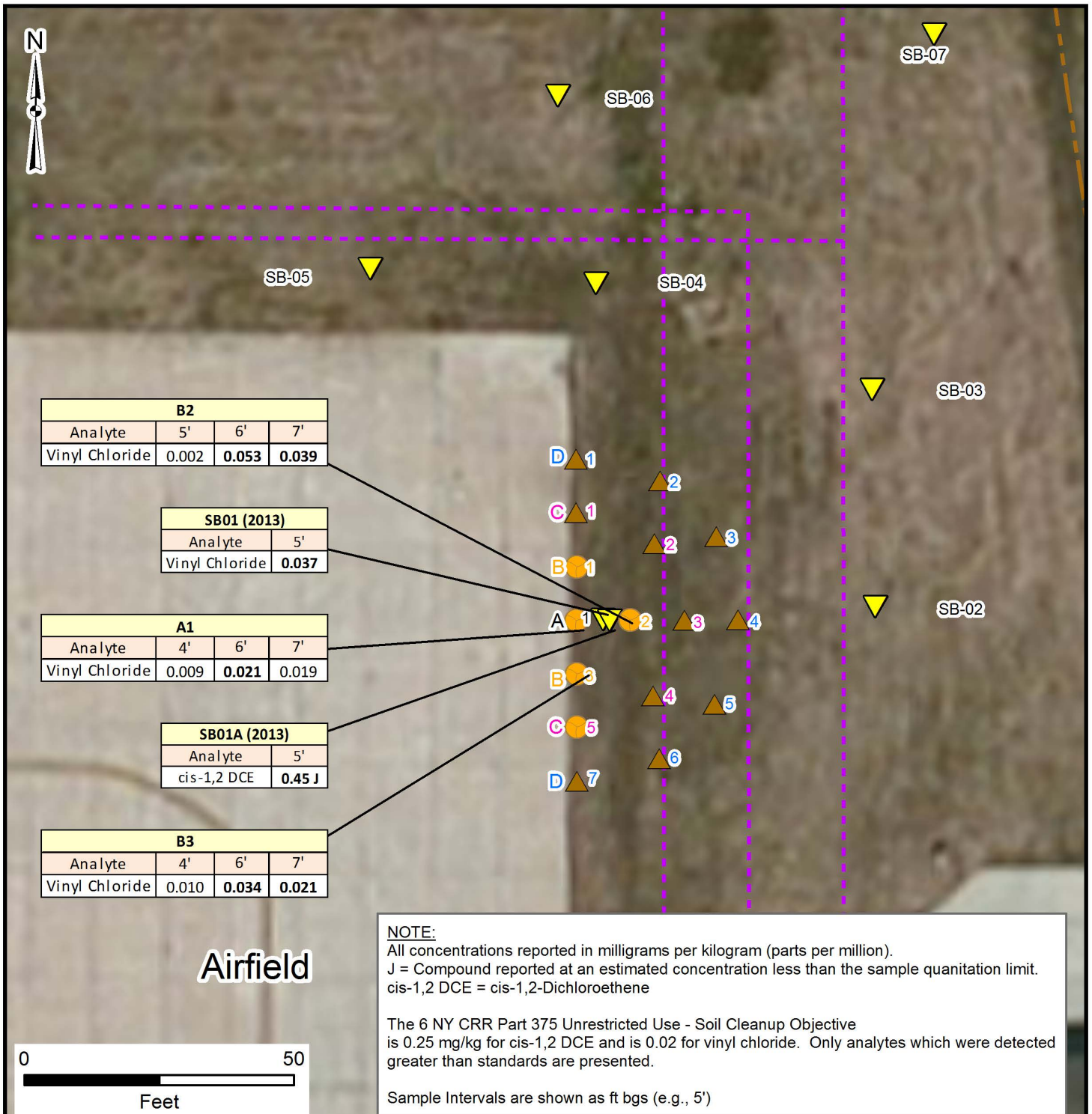
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Remedial Action Work Plan
for DS003 - Site 12
Niagara Falls Air Reserve Station
Niagara Falls, New York

FIGURE 1-3
Supplemental Soil
Boring Results
DS003-Site12

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2. Proposed Remedial Action

2.1 Selected Technology Overview

Impacted soil would be physically removed through mechanical excavation using standard construction equipment (i.e., excavator or backhoe). Soil would be staged or directed loaded into trucks for offsite disposal at an approved facility.

2.2 Implementation of Remedial Action

Overview

This RA for DS003—Site 12 includes excavation and offsite disposal of impacted soil located adjacent to the concrete apron and aircraft parking area. A preliminary site layout for site preparation and RA activities is shown on Figure 2-1. The site surface will be restored to pre-RA conditions after excavation is complete. All work will be completed during normal operational hours Monday through Friday from 0700 to 1600.

Sequence of Field Tasks

Preliminary Coordination Activities

The following preliminary activities will be completed as part of the RA:

- Retain a qualified operator with excavation equipment
- Prepare and review of planning documents (work plans/schedule).

A pre-construction meeting will be held at NFARS prior to any remedial activities.

Once preliminary activities have been completed, site work will be performed in the following general sequence. All remedial activities will be completed in accordance with the *Stormwater Pollution Prevention/Erosion and Sediment Control Plan* (Appendix C).

Mobilization

EA will mobilize all equipment and personnel to the site necessary to begin remediation activities. EA will continue to coordinate with 914th MSG/CEV personnel as necessary, verify existing site conditions, and contact Dig Safely New York for utility clearance.

Site Preparation

Prior to commencement of excavation activities, EA will:

- Complete Air Force Form 103 and obtain dig permit.
- Install temporary orange construction fencing around the site¹ as needed.

¹ Installation of construction fencing within the restricted area is subject to approval from Airfield Management.

- Install temporary erosion controls (a Stormwater Pollution Prevention Plan is included as Appendix C).

Waste Characterization

Prior to the RA, existing characterization data will be submitted to the proposed disposal facility and additional characterization samples will be collected per the disposal facility's requirements. Any additional characterization sampling and analysis will be completed by EA. Additionally, a *Waste/Recycled Materials Log for Contractors* will be completed and submitted to 914 MSG/CEV quarterly during the duration of the RA, as required.

Soil Excavation and Disposal

EA will conduct excavation within proposed boundaries and depths specified on Figure 2-1. EA assumes that soil sampling data collected in 2014 will be sufficient for acceptance by the disposal facility. Soil will be stockpiled as necessary prior to loading into trucks for offsite disposal. EA will manifest the waste and track the number of trucks that leave the site. Appropriate shoring will be placed to protect the existing apron structural integrity during the RA. Soil will be excavated up to the concrete apron. However, based on confirmation sampling analytical results, impacted soil may remain beneath the apron, which may prevent SC. Additionally, EA will complete any repairs necessary to the concrete apron.

Soil Screening/Confirmation Sampling

EA will collect confirmatory laboratory samples to verify that remedial objectives have been met. Each sample will be analyzed for VOCs by USEPA Method 8260. One composite sample will be collected from each excavation sidewall at the rate of one per 30 linear ft of sidewall and one sample from the excavation bottom for every 900 square ft of bottom area. Samples will be analyzed within 24 hours. EA will meet NYSDEC DER-10 confirmation sampling requirements for soil reuse or imported backfill.

Excavation Survey

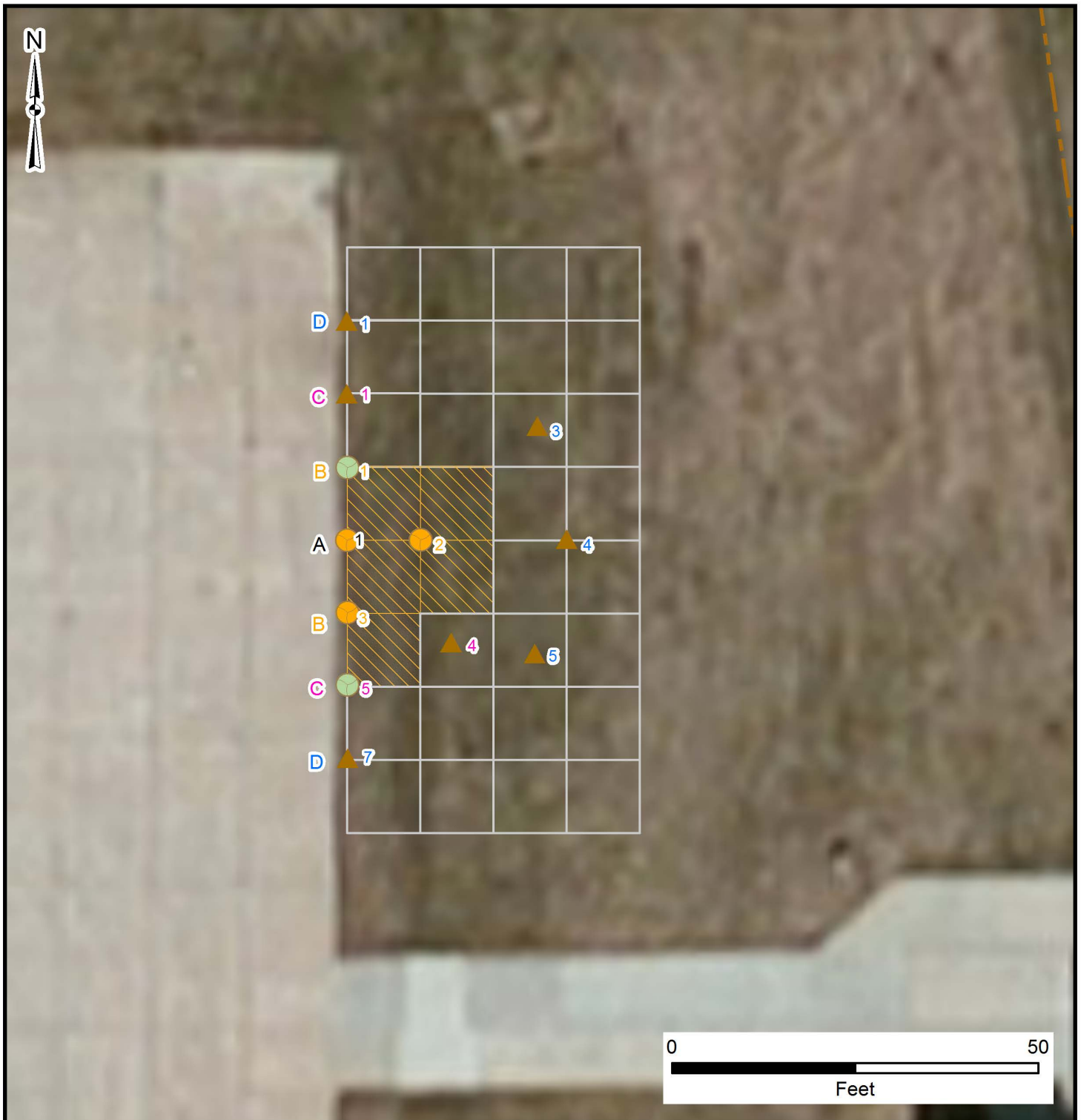
Once the excavations are completed and boundaries have been confirmed, the surveyor will survey the excavation boundaries. The survey will be used to verify the boundaries have not extended beyond the limits approved by EA and to verify the quantity of backfill materials.

Backfill/Restoration

EA will place geotextile along the excavation walls to mark the boundaries and backfill the excavation to within 6 inches of the original grade. Certified clean backfill will be compacted in 1-ft lifts. Topsoil will then be placed to achieve final grade and reseeded with hydroseed. All site restoration will be coordinated with 914th MSG/CEV personnel.

2.3 Investigative-Derived Waste

Due to the nature of the RA, implementation is not expected to generate additional investigative-derived waste. All soil excavated will either be approved for reuse based on analytical results or transported offsite for disposal. Used personal protective equipment will be placed in garbage bags and disposed of as general refuse.



		Remedial Action Work Plan for DS003 - Site 12 Niagara Falls Air Reserve Station Niagara Falls, New York				FIGURE 2-1 Proposed Area of Excavation DS003-Site12	
PROJECT MGR: BY	DESIGNED BY: FD	CREATED BY: CJS	CHECKED BY: MH	SCALE: AS SHOWN	DATE: JANUARY, 2015	PROJECT NO: 6265401	FILE NO: G:\Projects\Federal\IDOD\6265401_AFCEC_NFARS\

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3. Project Schedule and Deliverables

The following schedule identifies the tasks associated with the completion of the work effort and the duration of each. A more detailed schedule will be provided upon approval of the Work Plan. The RA is expected to be completed by June 2015.

It is anticipated that site mobilization for RA activities will be initiated in March 2015 and remedial activities will be completed within 3 weeks of mobilization. The major tasks and anticipated timeframes are listed below:

- Mobilization – 3 days
- Site Preparation – 1 day
- Waste Characterization – 1 day
- Soil Excavation and Disposal – 1 week
- Backfill/Restoration – 1 week.

Deliverables that will be submitted for this RA include this Work Plan and RA Summary Report. The results of the RA will be documented in the RA Summary Report, which will include, at a minimum:

- Summary of the RA and tasks completed
- Site restoration activities
- Summary tables of physical and analytical results
- Data Usability and Summary Report
- Conclusions and recommendations.

The report will be used to document the effectiveness of the RA (e.g., the RA has sufficiently reduced contaminant levels to less than NYSDEC UU/UE SCOs).

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4. References

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Appendix A

Field Log Book

Niagara Falls, NY
NEARS / AFCEC

7/10/2014

0950 - Gauge MW4-7

DW = 7.05 DTB = 10.76

- Begin purging MW4-7. See development form for purge data

Zebrin installed MW4-8

MW4-8 well construction.

2" well / flush mount

Refusal - 10.5' bgs

Saver - 3.5' - 10.5' bgs

Riser - 0.0' - 3.5' bgs

Sand pack - 2.5' - 10.5' bgs

Bentonite Clays - 0.0' - 2.5' bgs.

1215 - Zebrin begins soil borings at

SITE 12.

D5003-SB-D7

Depth (ft bgs)

PID (ppm)

0-1	0.0
1-2	0.0
2-3	0.0
3-4	
4-5	
5-6	
6-7	

↓

Niagara Falls, NY
NEARS / AFCEC

07-10-14

Samples:

D5003-SB-D7-#3 @ 1220

D5003-SB-#7-#4 @ 1221

D5003-SB-D7-#6 @ 1222

D5003-SB-#7-#7 @ 1228

D5003-SB-C#5

Depth (ft bgs)

PID (ppm)

0-1	0.0
1-2	
2-3	
3-4	
4-5	
5-6	
6-7	

↓

Samples: D5003-SB-3 @ 1238

D5003-SB-4 @ 1240

D5003-SB-6 @ 1245

* D5003-SB-7 @ 1247

* MG/mud collected @ 05-7.

Niegar Falls, NY
NFAAS / AFCEC

07-10-14

DS003-SB-B3

Depth (ft bgs)

PID (ppm)

0-1	0.0
1-2	0.0
2-3	0.0
3-4	0.5
4-5	0.0
5-6	0.0
6-7	0.0

Samples: DS003-SB-B3-3 @ 1255

DS003-SB-B3-4 @ 1257

* DS003-SB-B3-6 @ 1301

DS003-SB-B3-7 @ 1303

* DS003-SB-FD-140710-1 collected at B3-6.

Niegar Falls, NY
NFAAS / AFCEC

07-10-14

DS003-SB-A1

Depth (ft bgs)

PID (ppm)

0-1	1.7
1-2	16.1
2-3	2.8
3-4	0.6
4-5	1.4
5-6	0.0
6-7	0.0

Samples: DS003-SB-A1-3 @ 1312

* DS003-SB-A1-4 @ 1313

DS003-SB-A1-6 @ 1320

DS003-SB-A1-7 @ 1329

* DS003-SB-FD-140710-2

DS003-SB-B18

Depth (ft bgs)

PID (ppm)

0-1	0.4
1-2	0.4
2-3	0.0
3-4	0.0
4-5	0.0
5-6	0.0
6-7	0.0

Niagara Falls, NY
NFARS / AT&EC

07/10/14

Samples: DS003-SB-B1-3 @ 1334

DS003-SB-B1-4 @ 1335

DS003-SB-B1-6 @ 1342

DS003-SB-B1-7 @ 1343

MSMSB collected @ B1-3.

DS003-SB-C1

Depth (ft bgs)

PID (ppm)

0-1

0.0

1-2

2-3

3-4

4-5

5-6

6-7

Samples: DS003-SB-C1-3 @ 1380

DS003-SB-C1-4 @ 1357

DS003-SB-C1-6 @ 1357

DS003-SB-C1-7 @ 1400

Niagara Falls, NY
NFARS / AT&EC

07/10/14

DS003-SB-D1

Depth (ft bgs)

PID (ppm)

0-1

0.0

1-2

0.0

2-3

0.0

3-4

0.0

4-5

0.0

5-6

0.0

6-7

0.0

Samples: DS003-SB-D1-3 @ 1407

DS003-SB-D1-4 @ 1408

DS003-SB-D1-6 @ 1414

~~DS003-SB-D1-7 @~~

No recovery for D1-7.

Niagara Falls, NY
NRHRS / ARCEC

07-10-14

DS003-SB-D3

Depth (ft. bgs) PID (ppm)

0-1 0.0
1-2 0.0
2-3 0.0
3-4 0.0
4-5 0.0
5-6 0.0
6-7 0.0

Samples: DS003-SB-D3-3 @ 1450

DS003-SB-D3-4 @ 1450

DS003-SB-D3-6 @ 1500

DS003-SB-D3-7 @ 1519

DS003-SB-B2

Depth (ft. bgs)

PID (ppm)

0-1 0.0
1-2
2-3
3-4
4-5
5-6
6-7

Niagara Falls, NY
NRHRS / ARCEC

07-10-14

Samples: DS003-SB-B2-3 @ 1525

* DS003-SB-B2-5 @ 1535

DS003-SB-B2-6 @ 1530

DS003-SB-B2-7 @ 1532

* 5' ft interval sampled. 4ft all gravel.

DS003-SB-D4

Depth (ft. bgs)

PID (ppm)

0-1 0.0
1-2
2-3
3-4
4-5
5-6
6-7

Samples: DS003-SB-D4-3 @ 1545

DS003-SB-D4-4 @ 1549

* DS003-SB-D4-6 @ 1558

DS003-SB-D4-7 @ 1608

* MSHS collected @ D4-6.

Niagara Falls, NY
NEHRS/AFCEC

07-10-14

DS003-SB-DS

Depth (ft bgs)

PID (gpm)

0-1
0.6

1-2

2-3

3-4

4-5

5-6

6-7

Samples: DS003-SB-DS-3 @ 1610

DS003-SB-DS-4 @ 1612

DS003-SB-DS-6 @ 1614

DS003-SB-DS-7 @ 1616



Niagara Falls, NY
NEHRS/AFCEC

07-11-14

WY: Am- USF, Sunny, 5-7 mph SW.

Pm-

0630- E. Peterson (EA) onsite.

EA collects GPS coordinates of

soil borings at SITE 12.

0700- EA begins developing MW's at

SITE 01.

Refer to monitoring well development logs for well data.

0730- EA deployed PDRS at the following wells.

Well ID	DTW	TIME
MW4-4	5.43	0900
MW4-6	4.98	0930
MW4-5	5.22	1000
MW1-11	5.23	1005
MW1-10	5.70	1008
PZ3-3	1.15	1030
PZ3-3D	0.87	1033

Appendix B

Laboratory Data



07/16/14

Technical Report for

EA Engineering

NFARS, Niagara Falls, NY

6265401

Accutest Job Number: MC32033

Sampling Date: 07/10/14

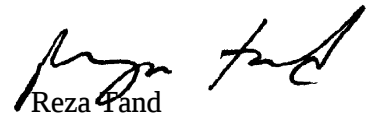
Report to:

EA Engineering
6712 Brooklawn Parkway
Syracuse, NY 13211
byoung@eaest.com; mmiller@eaest.com;
hwilliams@eaest.com; rpeterston@eaest.com
ATTN: Ben Young

Total number of pages in report: **226**



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.


Reza Fand
Lab Director

Client Service contact: Frank DAgostino 508-481-6200

Certifications: MA (M-MA136,SW846 NELAC) CT (PH-0109) NH (250210) RI (00071) ME (MA00136) FL (E87579) NY (11791) NJ (MA926) PA (6801121) ND (R-188) CO MN (11546AA) NC (653) IL (002337) WI (399080220) DoD ELAP (L-A-B L2235)

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Test results relate only to samples analyzed.

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Sample Summary

EA Engineering

Job No: MC32033

NFARS, Niagara Falls, NY
Project No: 6265401

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
MC32033-1	07/10/14	13:18 HWRP	07/11/14	SO	Soil	DS003-SB-A1-4
MC32033-2	07/10/14	13:20 HWRP	07/11/14	SO	Soil	DS003-SB-A1-6
MC32033-3	07/10/14	13:35 HWRP	07/11/14	SO	Soil	DS003-SB-B1-4
MC32033-4	07/10/14	13:42 HWRP	07/11/14	SO	Soil	DS003-SB-B1-6
MC32033-5	07/10/14	12:57 HWRP	07/11/14	SO	Soil	DS003-SB-B3-4
MC32033-6	07/10/14	13:01 HWRP	07/11/14	SO	Soil	DS003-SB-B3-6
MC32033-7	07/10/14	15:35 HWRP	07/11/14	SO	Soil	DS003-SB-B2-5
MC32033-8	07/10/14	15:30 HWRP	07/11/14	SO	Soil	DS003-SB-B2-6

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: EA Engineering

Job No MC32033

Site: NFARS, Niagara Falls, NY

Report Date 7/16/2014 3:08:13 PM

8 Sample(s) were collected on 07/10/2014 and were received at Accutest on 07/11/2014 properly preserved, at 1.8 Deg. C and intact. These Samples received an Accutest job number of MC32033. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Volatiles by GCMS By Method SW846 8260C

Matrix SO	Batch ID: MSM2361
------------------	--------------------------

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) MC31954-1MS, MC31954-1MSD were used as the QC samples indicated.
- MC31954-1MSD for Tert Butyl Alcohol-D9: Outside control limits. Target analytes not associated with this internal standard.
- Blank Spike Recovery(s) for 2-Butanone (MEK), Acetone, Bromomethane, Chloroethane, Chloromethane are outside control limits. Blank Spike meets program technical requirements.
- Matrix Spike Recovery(s) for 1,2,3-Trichlorobenzene, 1,2,4-Trichlorobenzene, 1,2-Dichlorobenzene, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, 2-Butanone (MEK), Acetone, Carbon disulfide, Chlorobenzene, Dichlorodifluoromethane, Ethylbenzene, Isopropylbenzene, Methyl Acetate, Styrene, Tetrachloroethene, Trichloroethene, Xylene (total) are outside control limits. Outside control limits due to possible matrix interference. Refer to Blank Spike.
- Matrix Spike Duplicate Recovery(s) for 1,2,3-Trichlorobenzene, 1,2,4-Trichlorobenzene, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, 2-Butanone (MEK), Acetone, Dichlorodifluoromethane, Styrene are outside control limits. Outside control limits due to possible matrix interference. Refer to Blank Spike.
- Continuing calibration check standard MSM2361-CC2333 dichlorodifluoromethane exceeds 40% Difference (response bias high). Associated samples are non-detect for this compound.

Wet Chemistry By Method SM21 2540 B MOD.

Matrix SO	Batch ID: GN47600
------------------	--------------------------

- Sample(s) MC32033-1DUP were used as the QC samples for Solids, Percent.

The Accutest Laboratories of New England certifies that all analysis were performed within method specification. It is further recommended that this report to be used in its entirety. The Accutest Laboratories of NE, Laboratory Director or assignee as verified by the signature on the cover page has authorized the release of this report (MC32033).

Summary of Hits

Job Number: MC32033
Account: EA Engineering
Project: NFARS, Niagara Falls, NY
Collected: 07/10/14



Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
--------------------------	------------------	-----------------	----	-----	-------	--------

MC32033-1 DS003-SB-A1-4

Benzene	5.2	0.55	0.37	ug/kg	SW846 8260C
Carbon disulfide	1.3 J	5.5	0.14	ug/kg	SW846 8260C
Cyclohexane	7.8	5.5	0.32	ug/kg	SW846 8260C
cis-1,2-Dichloroethene	22.7	2.2	0.49	ug/kg	SW846 8260C
trans-1,2-Dichloroethene	1.5 J	2.2	0.46	ug/kg	SW846 8260C
Ethylbenzene	1.0 J	2.2	0.76	ug/kg	SW846 8260C
Isopropylbenzene	0.32 J	5.5	0.18	ug/kg	SW846 8260C
Methylcyclohexane	14.3	5.5	0.32	ug/kg	SW846 8260C
Toluene	7.1	5.5	0.23	ug/kg	SW846 8260C
Trichloroethene	1.5 J	2.2	0.27	ug/kg	SW846 8260C
Vinyl chloride	9.2	2.2	1.0	ug/kg	SW846 8260C
Xylene (total)	6.8	2.2	0.24	ug/kg	SW846 8260C

MC32033-2 DS003-SB-A1-6

Benzene	0.63	0.54	0.36	ug/kg	SW846 8260C
Cyclohexane	1.5 J	5.4	0.32	ug/kg	SW846 8260C
Methylcyclohexane	2.6 J	5.4	0.31	ug/kg	SW846 8260C
Toluene	1.1 J	5.4	0.22	ug/kg	SW846 8260C
Vinyl chloride	21.3	2.1	0.97	ug/kg	SW846 8260C
Xylene (total)	0.68 J	2.1	0.23	ug/kg	SW846 8260C

MC32033-3 DS003-SB-B1-4

Benzene	2.9	0.47	0.32	ug/kg	SW846 8260C
Carbon disulfide	0.25 J	4.7	0.12	ug/kg	SW846 8260C
Cyclohexane	3.6 J	4.7	0.28	ug/kg	SW846 8260C
cis-1,2-Dichloroethene	97.4	1.9	0.43	ug/kg	SW846 8260C
trans-1,2-Dichloroethene	3.4	1.9	0.40	ug/kg	SW846 8260C
Methylcyclohexane	4.5 J	4.7	0.28	ug/kg	SW846 8260C
Toluene	2.8 J	4.7	0.20	ug/kg	SW846 8260C
Trichloroethene	16.0	1.9	0.23	ug/kg	SW846 8260C
Vinyl chloride	2.1	1.9	0.86	ug/kg	SW846 8260C
Xylene (total)	2.5	1.9	0.21	ug/kg	SW846 8260C

MC32033-4 DS003-SB-B1-6

Benzene	1.7	0.55	0.37	ug/kg	SW846 8260C
Cyclohexane	0.84 J	5.5	0.32	ug/kg	SW846 8260C
cis-1,2-Dichloroethene	40.3	2.2	0.50	ug/kg	SW846 8260C
trans-1,2-Dichloroethene	3.5	2.2	0.46	ug/kg	SW846 8260C
Methylcyclohexane	1.2 J	5.5	0.32	ug/kg	SW846 8260C
Toluene	0.48 J	5.5	0.23	ug/kg	SW846 8260C

Summary of Hits

Job Number: MC32033
Account: EA Engineering
Project: NFARS, Niagara Falls, NY
Collected: 07/10/14



Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
--------------------------	------------------	-----------------	----	-----	-------	--------

Trichloroethene		2.4	2.2	0.27	ug/kg	SW846 8260C
Vinyl chloride		4.3	2.2	1.0	ug/kg	SW846 8260C
Xylene (total)		0.30 J	2.2	0.24	ug/kg	SW846 8260C

MC32033-5 DS003-SB-B3-4

Benzene		2.5	0.50	0.34	ug/kg	SW846 8260C
Cyclohexane		2.9 J	5.0	0.30	ug/kg	SW846 8260C
1,1-Dichloroethene		1.9 J	2.0	0.42	ug/kg	SW846 8260C
cis-1,2-Dichloroethene		163	2.0	0.45	ug/kg	SW846 8260C
trans-1,2-Dichloroethene		24.9	2.0	0.42	ug/kg	SW846 8260C
Methylcyclohexane		3.9 J	5.0	0.29	ug/kg	SW846 8260C
Toluene		2.6 J	5.0	0.21	ug/kg	SW846 8260C
Trichloroethene		16.9	2.0	0.25	ug/kg	SW846 8260C
Vinyl chloride		10.3	2.0	0.91	ug/kg	SW846 8260C
Xylene (total)		2.0	2.0	0.22	ug/kg	SW846 8260C

MC32033-6 DS003-SB-B3-6

Benzene		0.64	0.51	0.35	ug/kg	SW846 8260C
Cyclohexane		1.6 J	5.1	0.30	ug/kg	SW846 8260C
cis-1,2-Dichloroethene		41.6	2.1	0.46	ug/kg	SW846 8260C
trans-1,2-Dichloroethene		4.1	2.1	0.43	ug/kg	SW846 8260C
Methylcyclohexane		2.4 J	5.1	0.30	ug/kg	SW846 8260C
Toluene		1.1 J	5.1	0.21	ug/kg	SW846 8260C
Vinyl chloride		34.0	2.1	0.93	ug/kg	SW846 8260C
Xylene (total)		0.76 J	2.1	0.22	ug/kg	SW846 8260C

MC32033-7 DS003-SB-B2-5

Benzene		1.4	0.57	0.38	ug/kg	SW846 8260C
Chloroform		0.89 J	2.3	0.19	ug/kg	SW846 8260C
Cyclohexane		2.3 J	5.7	0.33	ug/kg	SW846 8260C
cis-1,2-Dichloroethene		14.6	2.3	0.51	ug/kg	SW846 8260C
Methylcyclohexane		3.9 J	5.7	0.33	ug/kg	SW846 8260C
Tetrachloroethene		110	2.3	0.35	ug/kg	SW846 8260C
Toluene		2.2 J	5.7	0.23	ug/kg	SW846 8260C
Trichloroethene		6.7	2.3	0.28	ug/kg	SW846 8260C
Vinyl chloride		1.9 J	2.3	1.0	ug/kg	SW846 8260C
Xylene (total)		2.1 J	2.3	0.25	ug/kg	SW846 8260C

MC32033-8 DS003-SB-B2-6

Benzene		0.75	0.51	0.34	ug/kg	SW846 8260C
Cyclohexane		1.7 J	5.1	0.30	ug/kg	SW846 8260C

Summary of Hits

Job Number: MC32033
Account: EA Engineering
Project: NFARS, Niagara Falls, NY
Collected: 07/10/14



Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
cis-1,2-Dichloroethene		18.2	2.0	0.46	ug/kg	SW846 8260C
Methylcyclohexane		2.7 J	5.1	0.30	ug/kg	SW846 8260C
Tetrachloroethene		0.60 J	2.0	0.32	ug/kg	SW846 8260C
Toluene		1.1 J	5.1	0.21	ug/kg	SW846 8260C
Vinyl chloride		53.1	2.0	0.93	ug/kg	SW846 8260C
Xylene (total)		0.93 J	2.0	0.22	ug/kg	SW846 8260C

Sample Results

Report of Analysis

Accutest Laboratories

Report of Analysis

Page 1 of 2

Client Sample ID:	DS003-SB-A1-4	Date Sampled:	07/10/14
Lab Sample ID:	MC32033-1	Date Received:	07/11/14
Matrix:	SO - Soil	Percent Solids:	76.1
Method:	SW846 8260C		
Project:	NFARS, Niagara Falls, NY		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M66806.D	1	07/16/14	KD	n/a	n/a	MSM2361
Run #2							

Run #	Initial Weight	Final Volume
Run #1	6.00 g	5.0 ml
Run #2		

VOA EA East Project

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	11	3.1	ug/kg	
71-43-2	Benzene	5.2	0.55	0.37	ug/kg	
74-97-5	Bromochloromethane	ND	5.5	0.38	ug/kg	
75-27-4	Bromodichloromethane	ND	2.2	0.23	ug/kg	
75-25-2	Bromoform	ND	2.2	0.39	ug/kg	
74-83-9	Bromomethane	ND	2.2	0.66	ug/kg	
78-93-3	2-Butanone (MEK)	ND	11	3.4	ug/kg	
75-15-0	Carbon disulfide	1.3	5.5	0.14	ug/kg	J
56-23-5	Carbon tetrachloride	ND	2.2	0.24	ug/kg	
108-90-7	Chlorobenzene	ND	2.2	0.17	ug/kg	
75-00-3	Chloroethane	ND	5.5	0.83	ug/kg	
67-66-3	Chloroform	ND	2.2	0.19	ug/kg	
74-87-3	Chloromethane	ND	5.5	0.62	ug/kg	
110-82-7	Cyclohexane	7.8	5.5	0.32	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.5	0.51	ug/kg	
124-48-1	Dibromochloromethane	ND	2.2	0.35	ug/kg	
106-93-4	1,2-Dibromoethane	ND	2.2	0.61	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	2.2	0.23	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	2.2	0.33	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	2.2	0.38	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	2.2	0.89	ug/kg	
75-34-3	1,1-Dichloroethane	ND	2.2	0.29	ug/kg	
107-06-2	1,2-Dichloroethane	ND	2.2	0.35	ug/kg	
75-35-4	1,1-Dichloroethene	ND	2.2	0.45	ug/kg	
156-59-2	cis-1,2-Dichloroethene	22.7	2.2	0.49	ug/kg	
156-60-5	trans-1,2-Dichloroethene	1.5	2.2	0.46	ug/kg	J
78-87-5	1,2-Dichloropropane	ND	2.2	0.46	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	2.2	0.25	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	2.2	0.29	ug/kg	
123-91-1	1,4-Dioxane	ND	27	22	ug/kg	
100-41-4	Ethylbenzene	1.0	2.2	0.76	ug/kg	J
76-13-1	Freon 113	ND	5.5	1.7	ug/kg	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DS003-SB-A1-4	Date Sampled:	07/10/14
Lab Sample ID:	MC32033-1	Date Received:	07/11/14
Matrix:	SO - Soil	Percent Solids:	76.1
Method:	SW846 8260C		
Project:	NFARS, Niagara Falls, NY		

VOA EA East Project

CAS No.	Compound	Result	RL	MDL	Units	Q
591-78-6	2-Hexanone	ND	11	0.83	ug/kg	
74-88-4	Iodomethane	ND	5.5	0.27	ug/kg	
98-82-8	Isopropylbenzene	0.32	5.5	0.18	ug/kg	J
79-20-9	Methyl Acetate	ND	5.5	0.66	ug/kg	
108-87-2	Methylcyclohexane	14.3	5.5	0.32	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	2.2	0.20	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.5	0.59	ug/kg	
75-09-2	Methylene chloride	ND	2.2	0.58	ug/kg	
100-42-5	Styrene	ND	5.5	0.19	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.2	0.43	ug/kg	
127-18-4	Tetrachloroethene	ND	2.2	0.34	ug/kg	
108-88-3	Toluene	7.1	5.5	0.23	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.5	0.47	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.5	0.56	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	2.2	0.24	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	2.2	0.63	ug/kg	
79-01-6	Trichloroethene	1.5	2.2	0.27	ug/kg	J
75-69-4	Trichlorofluoromethane	ND	2.2	0.44	ug/kg	
75-01-4	Vinyl chloride	9.2	2.2	1.0	ug/kg	
1330-20-7	Xylene (total)	6.8	2.2	0.24	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%		70-130%
2037-26-5	Toluene-D8	119%		70-130%
460-00-4	4-Bromofluorobenzene	92%		70-130%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

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Report of Analysis

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Client Sample ID:	DS003-SB-A1-6	Date Sampled:	07/10/14
Lab Sample ID:	MC32033-2	Date Received:	07/11/14
Matrix:	SO - Soil	Percent Solids:	77.7
Method:	SW846 8260C		
Project:	NFARS, Niagara Falls, NY		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M66807.D	1	07/16/14	KD	n/a	n/a	MSM2361
Run #2							

Run #	Initial Weight	Final Volume
Run #1	6.01 g	5.0 ml
Run #2		

VOA EA East Project

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	11	3.0	ug/kg	
71-43-2	Benzene	0.63	0.54	0.36	ug/kg	
74-97-5	Bromochloromethane	ND	5.4	0.37	ug/kg	
75-27-4	Bromodichloromethane	ND	2.1	0.22	ug/kg	
75-25-2	Bromoform	ND	2.1	0.38	ug/kg	
74-83-9	Bromomethane	ND	2.1	0.64	ug/kg	
78-93-3	2-Butanone (MEK)	ND	11	3.3	ug/kg	
75-15-0	Carbon disulfide	ND	5.4	0.14	ug/kg	
56-23-5	Carbon tetrachloride	ND	2.1	0.24	ug/kg	
108-90-7	Chlorobenzene	ND	2.1	0.17	ug/kg	
75-00-3	Chloroethane	ND	5.4	0.81	ug/kg	
67-66-3	Chloroform	ND	2.1	0.18	ug/kg	
74-87-3	Chloromethane	ND	5.4	0.60	ug/kg	
110-82-7	Cyclohexane	1.5	5.4	0.32	ug/kg	J
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.4	0.49	ug/kg	
124-48-1	Dibromochloromethane	ND	2.1	0.35	ug/kg	
106-93-4	1,2-Dibromoethane	ND	2.1	0.60	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	2.1	0.23	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	2.1	0.32	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	2.1	0.37	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	2.1	0.87	ug/kg	
75-34-3	1,1-Dichloroethane	ND	2.1	0.29	ug/kg	
107-06-2	1,2-Dichloroethane	ND	2.1	0.34	ug/kg	
75-35-4	1,1-Dichloroethene	ND	2.1	0.44	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	2.1	0.48	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	2.1	0.45	ug/kg	
78-87-5	1,2-Dichloropropane	ND	2.1	0.45	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	2.1	0.24	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	2.1	0.28	ug/kg	
123-91-1	1,4-Dioxane	ND	27	21	ug/kg	
100-41-4	Ethylbenzene	ND	2.1	0.74	ug/kg	
76-13-1	Freon 113	ND	5.4	1.6	ug/kg	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DS003-SB-A1-6	Date Sampled:	07/10/14
Lab Sample ID:	MC32033-2	Date Received:	07/11/14
Matrix:	SO - Soil	Percent Solids:	77.7
Method:	SW846 8260C		
Project:	NFARS, Niagara Falls, NY		

VOA EA East Project

CAS No.	Compound	Result	RL	MDL	Units	Q
591-78-6	2-Hexanone	ND	11	0.81	ug/kg	
74-88-4	Iodomethane	ND	5.4	0.27	ug/kg	
98-82-8	Isopropylbenzene	ND	5.4	0.18	ug/kg	
79-20-9	Methyl Acetate	ND	5.4	0.65	ug/kg	
108-87-2	Methylcyclohexane	2.6	5.4	0.31	ug/kg	J
1634-04-4	Methyl Tert Butyl Ether	ND	2.1	0.20	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.4	0.58	ug/kg	
75-09-2	Methylene chloride	ND	2.1	0.57	ug/kg	
100-42-5	Styrene	ND	5.4	0.18	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.1	0.42	ug/kg	
127-18-4	Tetrachloroethene	ND	2.1	0.34	ug/kg	
108-88-3	Toluene	1.1	5.4	0.22	ug/kg	J
87-61-6	1,2,3-Trichlorobenzene	ND	5.4	0.46	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.4	0.55	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	2.1	0.23	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	2.1	0.61	ug/kg	
79-01-6	Trichloroethene	ND	2.1	0.26	ug/kg	
75-69-4	Trichlorofluoromethane	ND	2.1	0.43	ug/kg	
75-01-4	Vinyl chloride	21.3	2.1	0.97	ug/kg	
1330-20-7	Xylene (total)	0.68	2.1	0.23	ug/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%		70-130%
2037-26-5	Toluene-D8	119%		70-130%
460-00-4	4-Bromofluorobenzene	98%		70-130%

ND = Not detected MDL = Method Detection Limit

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J = Indicates an estimated value

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N = Indicates presumptive evidence of a compound

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Report of Analysis

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Client Sample ID:	DS003-SB-B1-4	Date Sampled:	07/10/14
Lab Sample ID:	MC32033-3	Date Received:	07/11/14
Matrix:	SO - Soil	Percent Solids:	83.4
Method:	SW846 8260C		
Project:	NFARS, Niagara Falls, NY		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M66808.D	1	07/16/14	KD	n/a	n/a	MSM2361
Run #2							

Run #	Initial Weight	Final Volume
Run #1	6.32 g	5.0 ml
Run #2		

VOA EA East Project

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	9.5	2.7	ug/kg	
71-43-2	Benzene	2.9	0.47	0.32	ug/kg	
74-97-5	Bromochloromethane	ND	4.7	0.33	ug/kg	
75-27-4	Bromodichloromethane	ND	1.9	0.20	ug/kg	
75-25-2	Bromoform	ND	1.9	0.34	ug/kg	
74-83-9	Bromomethane	ND	1.9	0.57	ug/kg	
78-93-3	2-Butanone (MEK)	ND	9.5	2.9	ug/kg	
75-15-0	Carbon disulfide	0.25	4.7	0.12	ug/kg	J
56-23-5	Carbon tetrachloride	ND	1.9	0.21	ug/kg	
108-90-7	Chlorobenzene	ND	1.9	0.15	ug/kg	
75-00-3	Chloroethane	ND	4.7	0.72	ug/kg	
67-66-3	Chloroform	ND	1.9	0.16	ug/kg	
74-87-3	Chloromethane	ND	4.7	0.54	ug/kg	
110-82-7	Cyclohexane	3.6	4.7	0.28	ug/kg	J
96-12-8	1,2-Dibromo-3-chloropropane	ND	4.7	0.44	ug/kg	
124-48-1	Dibromochloromethane	ND	1.9	0.31	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.9	0.53	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	1.9	0.20	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	1.9	0.29	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	1.9	0.33	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	1.9	0.77	ug/kg	
75-34-3	1,1-Dichloroethane	ND	1.9	0.25	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.9	0.31	ug/kg	
75-35-4	1,1-Dichloroethene	ND	1.9	0.39	ug/kg	
156-59-2	cis-1,2-Dichloroethene	97.4	1.9	0.43	ug/kg	
156-60-5	trans-1,2-Dichloroethene	3.4	1.9	0.40	ug/kg	
78-87-5	1,2-Dichloropropane	ND	1.9	0.40	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	1.9	0.21	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	1.9	0.25	ug/kg	
123-91-1	1,4-Dioxane	ND	24	19	ug/kg	
100-41-4	Ethylbenzene	ND	1.9	0.65	ug/kg	
76-13-1	Freon 113	ND	4.7	1.4	ug/kg	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: DS003-SB-B1-4
Lab Sample ID: MC32033-3
Matrix: SO - Soil
Method: SW846 8260C
Project: NFARS, Niagara Falls, NY

Date Sampled: 07/10/14

Date Received: 07/11/14

Percent Solids: 83.4

VOA EA East Project

CAS No.	Compound	Result	RL	MDL	Units	Q
591-78-6	2-Hexanone	ND	9.5	0.72	ug/kg	
74-88-4	Iodomethane	ND	4.7	0.24	ug/kg	
98-82-8	Isopropylbenzene	ND	4.7	0.16	ug/kg	
79-20-9	Methyl Acetate	ND	4.7	0.58	ug/kg	
108-87-2	Methylcyclohexane	4.5	4.7	0.28	ug/kg	J
1634-04-4	Methyl Tert Butyl Ether	ND	1.9	0.17	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	4.7	0.51	ug/kg	
75-09-2	Methylene chloride	ND	1.9	0.50	ug/kg	
100-42-5	Styrene	ND	4.7	0.16	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.9	0.37	ug/kg	
127-18-4	Tetrachloroethene	ND	1.9	0.30	ug/kg	
108-88-3	Toluene	2.8	4.7	0.20	ug/kg	J
87-61-6	1,2,3-Trichlorobenzene	ND	4.7	0.40	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	4.7	0.49	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	1.9	0.21	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	1.9	0.54	ug/kg	
79-01-6	Trichloroethene	16.0	1.9	0.23	ug/kg	
75-69-4	Trichlorofluoromethane	ND	1.9	0.38	ug/kg	
75-01-4	Vinyl chloride	2.1	1.9	0.86	ug/kg	
1330-20-7	Xylene (total)	2.5	1.9	0.21	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		70-130%
2037-26-5	Toluene-D8	119%		70-130%
460-00-4	4-Bromofluorobenzene	90%		70-130%

ND = Not detected MDL = Method Detection Limit

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J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

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Report of Analysis

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Client Sample ID:	DS003-SB-B1-6	Date Sampled:	07/10/14
Lab Sample ID:	MC32033-4	Date Received:	07/11/14
Matrix:	SO - Soil	Percent Solids:	75.8
Method:	SW846 8260C		
Project:	NFARS, Niagara Falls, NY		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M66809.D	1	07/16/14	KD	n/a	n/a	MSM2361
Run #2							

Run #	Initial Weight	Final Volume
Run #1	6.00 g	5.0 ml
Run #2		

VOA EA East Project

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	11	3.1	ug/kg	
71-43-2	Benzene	1.7	0.55	0.37	ug/kg	
74-97-5	Bromochloromethane	ND	5.5	0.38	ug/kg	
75-27-4	Bromodichloromethane	ND	2.2	0.23	ug/kg	
75-25-2	Bromoform	ND	2.2	0.39	ug/kg	
74-83-9	Bromomethane	ND	2.2	0.66	ug/kg	
78-93-3	2-Butanone (MEK)	ND	11	3.4	ug/kg	
75-15-0	Carbon disulfide	ND	5.5	0.14	ug/kg	
56-23-5	Carbon tetrachloride	ND	2.2	0.24	ug/kg	
108-90-7	Chlorobenzene	ND	2.2	0.17	ug/kg	
75-00-3	Chloroethane	ND	5.5	0.83	ug/kg	
67-66-3	Chloroform	ND	2.2	0.19	ug/kg	
74-87-3	Chloromethane	ND	5.5	0.62	ug/kg	
110-82-7	Cyclohexane	0.84	5.5	0.32	ug/kg	J
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.5	0.51	ug/kg	
124-48-1	Dibromochloromethane	ND	2.2	0.35	ug/kg	
106-93-4	1,2-Dibromoethane	ND	2.2	0.61	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	2.2	0.23	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	2.2	0.33	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	2.2	0.38	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	2.2	0.89	ug/kg	
75-34-3	1,1-Dichloroethane	ND	2.2	0.29	ug/kg	
107-06-2	1,2-Dichloroethane	ND	2.2	0.35	ug/kg	
75-35-4	1,1-Dichloroethene	ND	2.2	0.45	ug/kg	
156-59-2	cis-1,2-Dichloroethene	40.3	2.2	0.50	ug/kg	
156-60-5	trans-1,2-Dichloroethene	3.5	2.2	0.46	ug/kg	
78-87-5	1,2-Dichloropropane	ND	2.2	0.46	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	2.2	0.25	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	2.2	0.29	ug/kg	
123-91-1	1,4-Dioxane	ND	27	22	ug/kg	
100-41-4	Ethylbenzene	ND	2.2	0.76	ug/kg	
76-13-1	Freon 113	ND	5.5	1.7	ug/kg	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DS003-SB-B1-6	Date Sampled:	07/10/14
Lab Sample ID:	MC32033-4	Date Received:	07/11/14
Matrix:	SO - Soil	Percent Solids:	75.8
Method:	SW846 8260C		
Project:	NFARS, Niagara Falls, NY		

VOA EA East Project

CAS No.	Compound	Result	RL	MDL	Units	Q
591-78-6	2-Hexanone	ND	11	0.83	ug/kg	
74-88-4	Iodomethane	ND	5.5	0.27	ug/kg	
98-82-8	Isopropylbenzene	ND	5.5	0.18	ug/kg	
79-20-9	Methyl Acetate	ND	5.5	0.67	ug/kg	
108-87-2	Methylcyclohexane	1.2	5.5	0.32	ug/kg	J
1634-04-4	Methyl Tert Butyl Ether	ND	2.2	0.20	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.5	0.59	ug/kg	
75-09-2	Methylene chloride	ND	2.2	0.58	ug/kg	
100-42-5	Styrene	ND	5.5	0.19	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.2	0.43	ug/kg	
127-18-4	Tetrachloroethene	ND	2.2	0.34	ug/kg	
108-88-3	Toluene	0.48	5.5	0.23	ug/kg	J
87-61-6	1,2,3-Trichlorobenzene	ND	5.5	0.47	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.5	0.56	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	2.2	0.24	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	2.2	0.63	ug/kg	
79-01-6	Trichloroethene	2.4	2.2	0.27	ug/kg	
75-69-4	Trichlorofluoromethane	ND	2.2	0.44	ug/kg	
75-01-4	Vinyl chloride	4.3	2.2	1.0	ug/kg	
1330-20-7	Xylene (total)	0.30	2.2	0.24	ug/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		70-130%
2037-26-5	Toluene-D8	118%		70-130%
460-00-4	4-Bromofluorobenzene	92%		70-130%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

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Client Sample ID:	DS003-SB-B3-4	Date Sampled:	07/10/14
Lab Sample ID:	MC32033-5	Date Received:	07/11/14
Matrix:	SO - Soil	Percent Solids:	82.5
Method:	SW846 8260C		
Project:	NFARS, Niagara Falls, NY		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M66810.D	1	07/16/14	KD	n/a	n/a	MSM2361
Run #2							

Run #	Initial Weight	Final Volume
Run #1	6.04 g	5.0 ml
Run #2		

VOA EA East Project

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.8	ug/kg	
71-43-2	Benzene	2.5	0.50	0.34	ug/kg	
74-97-5	Bromochloromethane	ND	5.0	0.35	ug/kg	
75-27-4	Bromodichloromethane	ND	2.0	0.21	ug/kg	
75-25-2	Bromoform	ND	2.0	0.36	ug/kg	
74-83-9	Bromomethane	ND	2.0	0.60	ug/kg	
78-93-3	2-Butanone (MEK)	ND	10	3.1	ug/kg	
75-15-0	Carbon disulfide	ND	5.0	0.13	ug/kg	
56-23-5	Carbon tetrachloride	ND	2.0	0.22	ug/kg	
108-90-7	Chlorobenzene	ND	2.0	0.16	ug/kg	
75-00-3	Chloroethane	ND	5.0	0.76	ug/kg	
67-66-3	Chloroform	ND	2.0	0.17	ug/kg	
74-87-3	Chloromethane	ND	5.0	0.57	ug/kg	
110-82-7	Cyclohexane	2.9	5.0	0.30	ug/kg	J
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	0.46	ug/kg	
124-48-1	Dibromochloromethane	ND	2.0	0.32	ug/kg	
106-93-4	1,2-Dibromoethane	ND	2.0	0.56	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	2.0	0.21	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	2.0	0.30	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	2.0	0.35	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.81	ug/kg	
75-34-3	1,1-Dichloroethane	ND	2.0	0.27	ug/kg	
107-06-2	1,2-Dichloroethane	ND	2.0	0.32	ug/kg	
75-35-4	1,1-Dichloroethene	1.9	2.0	0.42	ug/kg	J
156-59-2	cis-1,2-Dichloroethene	163	2.0	0.45	ug/kg	
156-60-5	trans-1,2-Dichloroethene	24.9	2.0	0.42	ug/kg	
78-87-5	1,2-Dichloropropane	ND	2.0	0.42	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	2.0	0.23	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	2.0	0.26	ug/kg	
123-91-1	1,4-Dioxane	ND	25	20	ug/kg	
100-41-4	Ethylbenzene	ND	2.0	0.69	ug/kg	
76-13-1	Freon 113	ND	5.0	1.5	ug/kg	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: DS003-SB-B3-4
Lab Sample ID: MC32033-5
Matrix: SO - Soil
Method: SW846 8260C
Project: NFARS, Niagara Falls, NY

Date Sampled: 07/10/14

Date Received: 07/11/14

Percent Solids: 82.5

VOA EA East Project

CAS No.	Compound	Result	RL	MDL	Units	Q
591-78-6	2-Hexanone	ND	10	0.76	ug/kg	
74-88-4	Iodomethane	ND	5.0	0.25	ug/kg	
98-82-8	Isopropylbenzene	ND	5.0	0.17	ug/kg	
79-20-9	Methyl Acetate	ND	5.0	0.61	ug/kg	
108-87-2	Methylcyclohexane	3.9	5.0	0.29	ug/kg	J
1634-04-4	Methyl Tert Butyl Ether	ND	2.0	0.18	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	0.54	ug/kg	
75-09-2	Methylene chloride	ND	2.0	0.53	ug/kg	
100-42-5	Styrene	ND	5.0	0.17	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	0.39	ug/kg	
127-18-4	Tetrachloroethene	ND	2.0	0.31	ug/kg	
108-88-3	Toluene	2.6	5.0	0.21	ug/kg	J
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.43	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.51	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	2.0	0.22	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	2.0	0.58	ug/kg	
79-01-6	Trichloroethene	16.9	2.0	0.25	ug/kg	
75-69-4	Trichlorofluoromethane	ND	2.0	0.40	ug/kg	
75-01-4	Vinyl chloride	10.3	2.0	0.91	ug/kg	
1330-20-7	Xylene (total)	2.0	2.0	0.22	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		70-130%
2037-26-5	Toluene-D8	118%		70-130%
460-00-4	4-Bromofluorobenzene	92%		70-130%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

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Report of Analysis

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Client Sample ID:	DS003-SB-B3-6	Date Sampled:	07/10/14
Lab Sample ID:	MC32033-6	Date Received:	07/11/14
Matrix:	SO - Soil	Percent Solids:	78.6
Method:	SW846 8260C		
Project:	NFARS, Niagara Falls, NY		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M66811.D	1	07/16/14	KD	n/a	n/a	MSM2361
Run #2							

Run #	Initial Weight	Final Volume
Run #1	6.20 g	5.0 ml
Run #2		

VOA EA East Project

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.9	ug/kg	
71-43-2	Benzene	0.64	0.51	0.35	ug/kg	
74-97-5	Bromochloromethane	ND	5.1	0.35	ug/kg	
75-27-4	Bromodichloromethane	ND	2.1	0.21	ug/kg	
75-25-2	Bromoform	ND	2.1	0.36	ug/kg	
74-83-9	Bromomethane	ND	2.1	0.62	ug/kg	
78-93-3	2-Butanone (MEK)	ND	10	3.2	ug/kg	
75-15-0	Carbon disulfide	ND	5.1	0.13	ug/kg	
56-23-5	Carbon tetrachloride	ND	2.1	0.23	ug/kg	
108-90-7	Chlorobenzene	ND	2.1	0.16	ug/kg	
75-00-3	Chloroethane	ND	5.1	0.78	ug/kg	
67-66-3	Chloroform	ND	2.1	0.17	ug/kg	
74-87-3	Chloromethane	ND	5.1	0.58	ug/kg	
110-82-7	Cyclohexane	1.6	5.1	0.30	ug/kg	J
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.1	0.47	ug/kg	
124-48-1	Dibromochloromethane	ND	2.1	0.33	ug/kg	
106-93-4	1,2-Dibromoethane	ND	2.1	0.57	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	2.1	0.22	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	2.1	0.31	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	2.1	0.35	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	2.1	0.83	ug/kg	
75-34-3	1,1-Dichloroethane	ND	2.1	0.27	ug/kg	
107-06-2	1,2-Dichloroethane	ND	2.1	0.33	ug/kg	
75-35-4	1,1-Dichloroethene	ND	2.1	0.42	ug/kg	
156-59-2	cis-1,2-Dichloroethene	41.6	2.1	0.46	ug/kg	
156-60-5	trans-1,2-Dichloroethene	4.1	2.1	0.43	ug/kg	
78-87-5	1,2-Dichloropropane	ND	2.1	0.43	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	2.1	0.23	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	2.1	0.27	ug/kg	
123-91-1	1,4-Dioxane	ND	26	21	ug/kg	
100-41-4	Ethylbenzene	ND	2.1	0.71	ug/kg	
76-13-1	Freon 113	ND	5.1	1.6	ug/kg	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DS003-SB-B3-6	Date Sampled:	07/10/14
Lab Sample ID:	MC32033-6	Date Received:	07/11/14
Matrix:	SO - Soil	Percent Solids:	78.6
Method:	SW846 8260C		
Project:	NFARS, Niagara Falls, NY		

VOA EA East Project

CAS No.	Compound	Result	RL	MDL	Units	Q
591-78-6	2-Hexanone	ND	10	0.78	ug/kg	
74-88-4	Iodomethane	ND	5.1	0.26	ug/kg	
98-82-8	Isopropylbenzene	ND	5.1	0.17	ug/kg	
79-20-9	Methyl Acetate	ND	5.1	0.62	ug/kg	
108-87-2	Methylcyclohexane	2.4	5.1	0.30	ug/kg	J
1634-04-4	Methyl Tert Butyl Ether	ND	2.1	0.19	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.1	0.55	ug/kg	
75-09-2	Methylene chloride	ND	2.1	0.55	ug/kg	
100-42-5	Styrene	ND	5.1	0.17	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.1	0.40	ug/kg	
127-18-4	Tetrachloroethene	ND	2.1	0.32	ug/kg	
108-88-3	Toluene	1.1	5.1	0.21	ug/kg	J
87-61-6	1,2,3-Trichlorobenzene	ND	5.1	0.44	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.1	0.53	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	2.1	0.22	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	2.1	0.59	ug/kg	
79-01-6	Trichloroethene	ND	2.1	0.25	ug/kg	
75-69-4	Trichlorofluoromethane	ND	2.1	0.41	ug/kg	
75-01-4	Vinyl chloride	34.0	2.1	0.93	ug/kg	
1330-20-7	Xylene (total)	0.76	2.1	0.22	ug/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%		70-130%
2037-26-5	Toluene-D8	118%		70-130%
460-00-4	4-Bromofluorobenzene	94%		70-130%

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J = Indicates an estimated value

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N = Indicates presumptive evidence of a compound

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Report of Analysis

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Client Sample ID:	DS003-SB-B2-5	Date Sampled:	07/10/14
Lab Sample ID:	MC32033-7	Date Received:	07/11/14
Matrix:	SO - Soil	Percent Solids:	76.0
Method:	SW846 8260C		
Project:	NFARS, Niagara Falls, NY		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M66812.D	1	07/16/14	KD	n/a	n/a	MSM2361
Run #2							

Run #	Initial Weight	Final Volume
Run #1	5.82 g	5.0 ml
Run #2		

VOA EA East Project

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	11	3.2	ug/kg	
71-43-2	Benzene	1.4	0.57	0.38	ug/kg	
74-97-5	Bromochloromethane	ND	5.7	0.39	ug/kg	
75-27-4	Bromodichloromethane	ND	2.3	0.24	ug/kg	
75-25-2	Bromoform	ND	2.3	0.40	ug/kg	
74-83-9	Bromomethane	ND	2.3	0.68	ug/kg	
78-93-3	2-Butanone (MEK)	ND	11	3.5	ug/kg	
75-15-0	Carbon disulfide	ND	5.7	0.15	ug/kg	
56-23-5	Carbon tetrachloride	ND	2.3	0.25	ug/kg	
108-90-7	Chlorobenzene	ND	2.3	0.18	ug/kg	
75-00-3	Chloroethane	ND	5.7	0.85	ug/kg	
67-66-3	Chloroform	0.89	2.3	0.19	ug/kg	J
74-87-3	Chloromethane	ND	5.7	0.64	ug/kg	
110-82-7	Cyclohexane	2.3	5.7	0.33	ug/kg	J
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.7	0.52	ug/kg	
124-48-1	Dibromochloromethane	ND	2.3	0.36	ug/kg	
106-93-4	1,2-Dibromoethane	ND	2.3	0.63	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	2.3	0.24	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	2.3	0.34	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	2.3	0.39	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	2.3	0.91	ug/kg	
75-34-3	1,1-Dichloroethane	ND	2.3	0.30	ug/kg	
107-06-2	1,2-Dichloroethane	ND	2.3	0.36	ug/kg	
75-35-4	1,1-Dichloroethene	ND	2.3	0.47	ug/kg	
156-59-2	cis-1,2-Dichloroethene	14.6	2.3	0.51	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	2.3	0.47	ug/kg	
78-87-5	1,2-Dichloropropane	ND	2.3	0.47	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	2.3	0.26	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	2.3	0.30	ug/kg	
123-91-1	1,4-Dioxane	ND	28	23	ug/kg	
100-41-4	Ethylbenzene	ND	2.3	0.78	ug/kg	
76-13-1	Freon 113	ND	5.7	1.7	ug/kg	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DS003-SB-B2-5	Date Sampled:	07/10/14
Lab Sample ID:	MC32033-7	Date Received:	07/11/14
Matrix:	SO - Soil	Percent Solids:	76.0
Method:	SW846 8260C		
Project:	NFARS, Niagara Falls, NY		

VOA EA East Project

CAS No.	Compound	Result	RL	MDL	Units	Q
591-78-6	2-Hexanone	ND	11	0.86	ug/kg	
74-88-4	Iodomethane	ND	5.7	0.28	ug/kg	
98-82-8	Isopropylbenzene	ND	5.7	0.19	ug/kg	
79-20-9	Methyl Acetate	ND	5.7	0.69	ug/kg	
108-87-2	Methylcyclohexane	3.9	5.7	0.33	ug/kg	J
1634-04-4	Methyl Tert Butyl Ether	ND	2.3	0.21	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.7	0.61	ug/kg	
75-09-2	Methylene chloride	ND	2.3	0.60	ug/kg	
100-42-5	Styrene	ND	5.7	0.19	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.3	0.44	ug/kg	
127-18-4	Tetrachloroethene	110	2.3	0.35	ug/kg	
108-88-3	Toluene	2.2	5.7	0.23	ug/kg	J
87-61-6	1,2,3-Trichlorobenzene	ND	5.7	0.48	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.7	0.58	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	2.3	0.25	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	2.3	0.65	ug/kg	
79-01-6	Trichloroethene	6.7	2.3	0.28	ug/kg	
75-69-4	Trichlorofluoromethane	ND	2.3	0.45	ug/kg	
75-01-4	Vinyl chloride	1.9	2.3	1.0	ug/kg	J
1330-20-7	Xylene (total)	2.1	2.3	0.25	ug/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		70-130%
2037-26-5	Toluene-D8	117%		70-130%
460-00-4	4-Bromofluorobenzene	92%		70-130%

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J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

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Client Sample ID:	DS003-SB-B2-6	Date Sampled:	07/10/14
Lab Sample ID:	MC32033-8	Date Received:	07/11/14
Matrix:	SO - Soil	Percent Solids:	79.0
Method:	SW846 8260C		
Project:	NFARS, Niagara Falls, NY		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M66813.D	1	07/16/14	KD	n/a	n/a	MSM2361
Run #2							

Run #	Initial Weight	Final Volume
Run #1	6.20 g	5.0 ml
Run #2		

VOA EA East Project

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.9	ug/kg	
71-43-2	Benzene	0.75	0.51	0.34	ug/kg	
74-97-5	Bromochloromethane	ND	5.1	0.35	ug/kg	
75-27-4	Bromodichloromethane	ND	2.0	0.21	ug/kg	
75-25-2	Bromoform	ND	2.0	0.36	ug/kg	
74-83-9	Bromomethane	ND	2.0	0.61	ug/kg	
78-93-3	2-Butanone (MEK)	ND	10	3.1	ug/kg	
75-15-0	Carbon disulfide	ND	5.1	0.13	ug/kg	
56-23-5	Carbon tetrachloride	ND	2.0	0.22	ug/kg	
108-90-7	Chlorobenzene	ND	2.0	0.16	ug/kg	
75-00-3	Chloroethane	ND	5.1	0.77	ug/kg	
67-66-3	Chloroform	ND	2.0	0.17	ug/kg	
74-87-3	Chloromethane	ND	5.1	0.58	ug/kg	
110-82-7	Cyclohexane	1.7	5.1	0.30	ug/kg	J
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.1	0.47	ug/kg	
124-48-1	Dibromochloromethane	ND	2.0	0.33	ug/kg	
106-93-4	1,2-Dibromoethane	ND	2.0	0.57	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	2.0	0.22	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	2.0	0.31	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	2.0	0.35	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.83	ug/kg	
75-34-3	1,1-Dichloroethane	ND	2.0	0.27	ug/kg	
107-06-2	1,2-Dichloroethane	ND	2.0	0.33	ug/kg	
75-35-4	1,1-Dichloroethene	ND	2.0	0.42	ug/kg	
156-59-2	cis-1,2-Dichloroethene	18.2	2.0	0.46	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	2.0	0.43	ug/kg	
78-87-5	1,2-Dichloropropane	ND	2.0	0.43	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	2.0	0.23	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	2.0	0.27	ug/kg	
123-91-1	1,4-Dioxane	ND	26	20	ug/kg	
100-41-4	Ethylbenzene	ND	2.0	0.70	ug/kg	
76-13-1	Freon 113	ND	5.1	1.6	ug/kg	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DS003-SB-B2-6	Date Sampled:	07/10/14
Lab Sample ID:	MC32033-8	Date Received:	07/11/14
Matrix:	SO - Soil	Percent Solids:	79.0
Method:	SW846 8260C		
Project:	NFARS, Niagara Falls, NY		

VOA EA East Project

CAS No.	Compound	Result	RL	MDL	Units	Q
591-78-6	2-Hexanone	ND	10	0.77	ug/kg	
74-88-4	Iodomethane	ND	5.1	0.26	ug/kg	
98-82-8	Isopropylbenzene	ND	5.1	0.17	ug/kg	
79-20-9	Methyl Acetate	ND	5.1	0.62	ug/kg	
108-87-2	Methylcyclohexane	2.7	5.1	0.30	ug/kg	J
1634-04-4	Methyl Tert Butyl Ether	ND	2.0	0.19	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.1	0.55	ug/kg	
75-09-2	Methylene chloride	ND	2.0	0.54	ug/kg	
100-42-5	Styrene	ND	5.1	0.17	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	0.40	ug/kg	
127-18-4	Tetrachloroethene	0.60	2.0	0.32	ug/kg	J
108-88-3	Toluene	1.1	5.1	0.21	ug/kg	J
87-61-6	1,2,3-Trichlorobenzene	ND	5.1	0.44	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.1	0.52	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	2.0	0.22	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	2.0	0.59	ug/kg	
79-01-6	Trichloroethene	ND	2.0	0.25	ug/kg	
75-69-4	Trichlorofluoromethane	ND	2.0	0.41	ug/kg	
75-01-4	Vinyl chloride	53.1	2.0	0.93	ug/kg	
1330-20-7	Xylene (total)	0.93	2.0	0.22	ug/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%		70-130%
2037-26-5	Toluene-D8	118%		70-130%
460-00-4	4-Bromofluorobenzene	97%		70-130%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Misc. Forms

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Custody Documents and Other Forms

Includes the following where applicable:

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

Client / Reporting Information		Project Information		Requested Analysis (see TEST CODE sheet)												Matrix Codes
Company Name EA Engineering Street Address 10712 Brookdown Hwy, Ste 104 City Syracuse, NY 13211 Project Contact Rob Peterson - rpeterson@east.com Phone # 315-708-1183 Sample(s) Name(s) RP/HW		Project Name NFARS - Site 12 Soil Sampling Street: Billing Information (If different from Report to) Company Name northestop@earth.com Street Address City Niagara Falls, NY State Zip Attention: Ben Young		Matrix Codes DW - Drinking Water GW - Ground Water WW - Water SW - Surface Water SO - Soil SL - Sludge SED - Sediment OI - Oil LIQ - Other Liquid AIR - Air SOL - Other Solid WP - Wipe FB - Field Blank EB - Equipment Blank RB - Rinse Blank TB - Trip Blank												LAB USE ONLY
Field ID / Point of Collection MECH/DI Vial # Date Time Sampled by Matrix # of bottles HCl NaOH INOC3 INOC4 INONE DI Water MEOH ENCORE Bovine		Number of preserved Bottles 7/10/14 1318 1320 1335 1342 1257 1301 1535 1530												100, 100.5		
Turnaround Time (Business days) ☐ Std. 10 Business Days ☐ Std. 5 Business Days (By Contract only) ☐ 5 Day RUSH ☐ 3 Day EMERGENCY ☐ 2 Day EMERGENCY ☒ 1 Day EMERGENCY Emergency & Rush T/A date available VIA Lablink		Approved By (Accutest PM): / Date: RUSH!		Data Deliverable Information ☐ Commercial "A" (Level 1) ☐ Commercial "B" (Level 2) ☐ FULLT1 (Level 3+4) ☐ CT RCP ☐ MA MCP ☐ NYASP Category A ☒ NYASP Category B ☐ State Forms ☒ EOD Format ERRINS ☒ Other UNDEC ERRINS EDD Commercial "A" = Results Only Commercial "B" = Results + QC Summary												Comments / Special Instructions ACCUTEST SYRACUSE-SC
Sample Custody must be documented below each time samples change possession, including courier delivery.																
Relinquished by Sampler: 1 Sherry Williams Date Time: 7/10/14 1730		Received By: 1 [Signature] Date Time: 7/10/14 1730		Relinquished By: 2 [Signature] Date Time: 7/10/14 1730		Received By: 2 [Signature] Date Time: 7/10/14 1730		Emergency & Rush T/A date available VIA Lablink								
Relinquished by Sampler: 3 Date Time:		Received By: 3 Date Time:		Relinquished By: 4 Date Time:		Received By: 4 Date Time:		Emergency & Rush T/A date available VIA Lablink								
Relinquished by: 5 Date Time:		Received By: 5 Date Time:		Relinquished By: 6 Date Time:		Received By: 6 Date Time:		Emergency & Rush T/A date available VIA Lablink								

5.1

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: MC32033 **Client:** EA ENGINEERING **Immediate Client Services Action Required:** No
Date / Time Received: 7/11/2014 **Delivery Method:** **Client Service Action Required at Login:** No
Project: NFARS SITE 12 SOIL SAMPLING **No. Coolers:** 1 **Airbill #'s:**

<u>Cooler Security</u>	<u>Y</u>	<u>or</u>	<u>N</u>	<u>Y</u>	<u>or</u>	<u>N</u>
1. Custody Seals Present:	☒		☐	3. COC Present:	☒	☐
2. Custody Seals Intact:	☒		☐	4. Smpl Dates/Time OK	☒	☐

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

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

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

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

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

Comments

Internal Sample Tracking Chronicle

EA Engineering

Job No: MC32033

NFARS, Niagara Falls, NY

Project No: 6265401

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
MC32033-1 Collected: 10-JUL-14 13:18 By: HWRP Received: 11-JUL-14 By: DS003-SB-A1-4						
MC32033-1	SM21 2540 B MOD.	14-JUL-14	HS			%SOL
MC32033-1	SW846 8260C	16-JUL-14 04:56	KD			V8260SL
MC32033-2 Collected: 10-JUL-14 13:20 By: HWRP Received: 11-JUL-14 By: DS003-SB-A1-6						
MC32033-2	SM21 2540 B MOD.	14-JUL-14	HS			%SOL
MC32033-2	SW846 8260C	16-JUL-14 05:25	KD			V8260SL
MC32033-3 Collected: 10-JUL-14 13:35 By: HWRP Received: 11-JUL-14 By: DS003-SB-B1-4						
MC32033-3	SM21 2540 B MOD.	14-JUL-14	HS			%SOL
MC32033-3	SW846 8260C	16-JUL-14 05:55	KD			V8260SL
MC32033-4 Collected: 10-JUL-14 13:42 By: HWRP Received: 11-JUL-14 By: DS003-SB-B1-6						
MC32033-4	SM21 2540 B MOD.	14-JUL-14	HS			%SOL
MC32033-4	SW846 8260C	16-JUL-14 06:25	KD			V8260SL
MC32033-5 Collected: 10-JUL-14 12:57 By: HWRP Received: 11-JUL-14 By: DS003-SB-B3-4						
MC32033-5	SM21 2540 B MOD.	14-JUL-14	HS			%SOL
MC32033-5	SW846 8260C	16-JUL-14 06:54	KD			V8260SL
MC32033-6 Collected: 10-JUL-14 13:01 By: HWRP Received: 11-JUL-14 By: DS003-SB-B3-6						
MC32033-6	SM21 2540 B MOD.	14-JUL-14	HS			%SOL
MC32033-6	SW846 8260C	16-JUL-14 07:23	KD			V8260SL
MC32033-7 Collected: 10-JUL-14 15:35 By: HWRP Received: 11-JUL-14 By: DS003-SB-B2-5						
MC32033-7	SM21 2540 B MOD.	14-JUL-14	HS			%SOL

Internal Sample Tracking Chronicle

EA Engineering

Job No: MC32033

NFARS, Niagara Falls, NY
Project No: 6265401

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
MC32033-7	SW846 8260C	16-JUL-14 07:53	KD			V8260SL
MC32033-8 Collected: 10-JUL-14 15:30 By: HWRP Received: 11-JUL-14 By: DS003-SB-B2-6						
MC32033-8	SM21 2540 B MOD.	14-JUL-14	HS			%SOL
MC32033-8	SW846 8260C	16-JUL-14 08:22	KD			V8260SL

Accutest Internal Chain of Custody

Page 1 of 2

Job Number: MC32033
Account: EAENYS EA Engineering
Project: NFARS, Niagara Falls, NY
Received: 07/11/14

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
MC32033-1.1	Walk In Ref #9	Hamid Siamak	07/14/14 09:06	Retrieve from Storage
MC32033-1.1	Hamid Siamak	Walk In Ref #9	07/14/14 11:47	Return to Storage
MC32033-1.2	VOC Ref #10	Krysten Dufort	07/15/14 12:47	Retrieve from Storage
MC32033-1.2	Krysten Dufort	GCMSM	07/15/14 12:47	Load on Instrument
MC32033-1.4	VOC Ref #10	Jaime Maslowski	07/11/14 15:32	Retrieve from Storage
MC32033-1.4	Jaime Maslowski	VOC Ref #10	07/14/14 10:46	Return to Storage
MC32033-2.1	Walk In Ref #9	Hamid Siamak	07/14/14 09:06	Retrieve from Storage
MC32033-2.1	Hamid Siamak	Walk In Ref #9	07/14/14 11:47	Return to Storage
MC32033-2.3	VOC Ref #10	Krysten Dufort	07/15/14 12:47	Retrieve from Storage
MC32033-2.3	Krysten Dufort	GCMSM	07/15/14 12:47	Load on Instrument
MC32033-2.4	VOC Ref #10	Jaime Maslowski	07/11/14 15:32	Retrieve from Storage
MC32033-2.4	Jaime Maslowski	VOC Ref #10	07/14/14 10:46	Return to Storage
MC32033-3.1	Walk In Ref #9	Hamid Siamak	07/14/14 09:06	Retrieve from Storage
MC32033-3.1	Hamid Siamak	Walk In Ref #9	07/14/14 11:47	Return to Storage
MC32033-3.3	VOC Ref #10	Krysten Dufort	07/15/14 12:47	Retrieve from Storage
MC32033-3.3	Krysten Dufort	GCMSM	07/15/14 12:47	Load on Instrument
MC32033-3.4	VOC Ref #10	Jaime Maslowski	07/11/14 15:32	Retrieve from Storage
MC32033-3.4	Jaime Maslowski	VOC Ref #10	07/14/14 10:46	Return to Storage
MC32033-4.1	Walk In Ref #9	Hamid Siamak	07/14/14 09:06	Retrieve from Storage
MC32033-4.1	Hamid Siamak	Walk In Ref #9	07/14/14 11:47	Return to Storage
MC32033-4.2	VOC Ref #10	Krysten Dufort	07/15/14 12:47	Retrieve from Storage
MC32033-4.2	Krysten Dufort	GCMSM	07/15/14 12:47	Load on Instrument
MC32033-4.4	VOC Ref #10	Jaime Maslowski	07/11/14 15:32	Retrieve from Storage
MC32033-4.4	Jaime Maslowski	VOC Ref #10	07/14/14 10:46	Return to Storage
MC32033-5.1	Walk In Ref #9	Hamid Siamak	07/14/14 09:06	Retrieve from Storage
MC32033-5.1	Hamid Siamak	Walk In Ref #9	07/14/14 11:47	Return to Storage
MC32033-5.3	VOC Ref #10	Krysten Dufort	07/15/14 12:47	Retrieve from Storage
MC32033-5.3	Krysten Dufort	GCMSM	07/15/14 12:47	Load on Instrument
MC32033-5.4	VOC Ref #10	Jaime Maslowski	07/11/14 15:32	Retrieve from Storage
MC32033-5.4	Jaime Maslowski	VOC Ref #10	07/14/14 10:46	Return to Storage

Accutest Internal Chain of Custody

Page 2 of 2

Job Number: MC32033
Account: EAENYS EA Engineering
Project: NFARS, Niagara Falls, NY
Received: 07/11/14

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
MC32033-6.1	Walk In Ref #9	Hamid Siamak	07/14/14 09:06	Retrieve from Storage
MC32033-6.1	Hamid Siamak	Walk In Ref #9	07/14/14 11:47	Return to Storage
MC32033-6.2	VOC Ref #10	Krysten Dufort	07/15/14 12:47	Retrieve from Storage
MC32033-6.2	Krysten Dufort	GCMSM	07/15/14 12:47	Load on Instrument
MC32033-6.4	VOC Ref #10	Jaime Maslowski	07/11/14 15:32	Retrieve from Storage
MC32033-6.4	Jaime Maslowski	VOC Ref #10	07/14/14 10:46	Return to Storage
MC32033-7.1	Walk In Ref #9	Hamid Siamak	07/14/14 09:06	Retrieve from Storage
MC32033-7.1	Hamid Siamak	Walk In Ref #9	07/14/14 11:47	Return to Storage
MC32033-7.3	VOC Ref #10	Krysten Dufort	07/15/14 12:47	Retrieve from Storage
MC32033-7.3	Krysten Dufort	GCMSM	07/15/14 12:47	Load on Instrument
MC32033-7.4	VOC Ref #10	Jaime Maslowski	07/11/14 15:32	Retrieve from Storage
MC32033-7.4	Jaime Maslowski	VOC Ref #10	07/14/14 10:46	Return to Storage
MC32033-8.1	Walk In Ref #9	Hamid Siamak	07/14/14 09:06	Retrieve from Storage
MC32033-8.1	Hamid Siamak	Walk In Ref #9	07/14/14 11:47	Return to Storage
MC32033-8.2	VOC Ref #10	Krysten Dufort	07/15/14 12:47	Retrieve from Storage
MC32033-8.2	Krysten Dufort	GCMSM	07/15/14 12:47	Load on Instrument
MC32033-8.4	VOC Ref #10	Jaime Maslowski	07/11/14 15:32	Retrieve from Storage
MC32033-8.4	Jaime Maslowski	VOC Ref #10	07/14/14 10:46	Return to Storage

GC/MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Instrument Performance Checks (BFB)
- Internal Standard Area Summaries
- Surrogate Recovery Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: MC32033
Account: EAENYS EA Engineering
Project: NFARS, Niagara Falls, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSM2361-MB	M66795.D	1	07/15/14	KD	n/a	n/a	MSM2361

The QC reported here applies to the following samples:

Method: SW846 8260C

MC32033-1, MC32033-2, MC32033-3, MC32033-4, MC32033-5, MC32033-6, MC32033-7, MC32033-8

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.8	ug/kg	
71-43-2	Benzene	ND	0.50	0.34	ug/kg	
74-97-5	Bromochloromethane	ND	5.0	0.35	ug/kg	
75-27-4	Bromodichloromethane	ND	2.0	0.21	ug/kg	
75-25-2	Bromoform	ND	2.0	0.35	ug/kg	
74-83-9	Bromomethane	ND	2.0	0.60	ug/kg	
78-93-3	2-Butanone (MEK)	ND	10	3.1	ug/kg	
75-15-0	Carbon disulfide	ND	5.0	0.13	ug/kg	
56-23-5	Carbon tetrachloride	ND	2.0	0.22	ug/kg	
108-90-7	Chlorobenzene	ND	2.0	0.16	ug/kg	
75-00-3	Chloroethane	ND	5.0	0.76	ug/kg	
67-66-3	Chloroform	ND	2.0	0.17	ug/kg	
74-87-3	Chloromethane	ND	5.0	0.56	ug/kg	
110-82-7	Cyclohexane	ND	5.0	0.29	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	0.46	ug/kg	
124-48-1	Dibromochloromethane	ND	2.0	0.32	ug/kg	
106-93-4	1,2-Dibromoethane	ND	2.0	0.56	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	2.0	0.21	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	2.0	0.30	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	2.0	0.35	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.81	ug/kg	
75-34-3	1,1-Dichloroethane	ND	2.0	0.27	ug/kg	
107-06-2	1,2-Dichloroethane	ND	2.0	0.32	ug/kg	
75-35-4	1,1-Dichloroethene	ND	2.0	0.41	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	2.0	0.45	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	2.0	0.42	ug/kg	
78-87-5	1,2-Dichloropropane	ND	2.0	0.42	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	2.0	0.23	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	2.0	0.26	ug/kg	
123-91-1	1,4-Dioxane	ND	25	20	ug/kg	
100-41-4	Ethylbenzene	ND	2.0	0.69	ug/kg	
76-13-1	Freon 113	ND	5.0	1.5	ug/kg	
591-78-6	2-Hexanone	ND	10	0.76	ug/kg	
74-88-4	Iodomethane	ND	5.0	0.25	ug/kg	
98-82-8	Isopropylbenzene	ND	5.0	0.17	ug/kg	
79-20-9	Methyl Acetate	ND	5.0	0.61	ug/kg	

Method Blank Summary

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Job Number: MC32033
Account: EAENYS EA Engineering
Project: NFARS, Niagara Falls, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSM2361-MB	M66795.D	1	07/15/14	KD	n/a	n/a	MSM2361

The QC reported here applies to the following samples:

Method: SW846 8260C

MC32033-1, MC32033-2, MC32033-3, MC32033-4, MC32033-5, MC32033-6, MC32033-7, MC32033-8

CAS No.	Compound	Result	RL	MDL	Units	Q
108-87-2	Methylcyclohexane	ND	5.0	0.29	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	2.0	0.18	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	0.54	ug/kg	
75-09-2	Methylene chloride	ND	2.0	0.53	ug/kg	
100-42-5	Styrene	ND	5.0	0.17	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	0.39	ug/kg	
127-18-4	Tetrachloroethene	ND	2.0	0.31	ug/kg	
108-88-3	Toluene	ND	5.0	0.21	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.43	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.51	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	2.0	0.22	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	2.0	0.57	ug/kg	
79-01-6	Trichloroethene	ND	2.0	0.24	ug/kg	
75-69-4	Trichlorofluoromethane	ND	2.0	0.40	ug/kg	
75-01-4	Vinyl chloride	ND	2.0	0.91	ug/kg	
1330-20-7	Xylene (total)	ND	2.0	0.22	ug/kg	

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	92% 70-130%
2037-26-5	Toluene-D8	118% 70-130%
460-00-4	4-Bromofluorobenzene	85% 70-130%

Blank Spike Summary

Job Number: MC32033
Account: EAENYS EA Engineering
Project: NFARS, Niagara Falls, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSM2361-BS	M66792.D	1	07/15/14	KD	n/a	n/a	MSM2361

The QC reported here applies to the following samples:

Method: SW846 8260C

MC32033-1, MC32033-2, MC32033-3, MC32033-4, MC32033-5, MC32033-6, MC32033-7, MC32033-8

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
67-64-1	Acetone	50	23.3	47* a	70-130
71-43-2	Benzene	50	59.1	118	70-130
74-97-5	Bromochloromethane	50	58.5	117	70-130
75-27-4	Bromodichloromethane	50	56.9	114	70-130
75-25-2	Bromoform	50	61.4	123	70-130
74-83-9	Bromomethane	50	65.3	131* a	70-130
78-93-3	2-Butanone (MEK)	50	31.5	63* a	70-130
75-15-0	Carbon disulfide	50	50.7	101	70-130
56-23-5	Carbon tetrachloride	50	52.3	105	70-130
108-90-7	Chlorobenzene	50	58.6	117	70-130
75-00-3	Chloroethane	50	69.9	140* a	70-130
67-66-3	Chloroform	50	55.0	110	70-130
74-87-3	Chloromethane	50	65.6	131* a	70-130
110-82-7	Cyclohexane	50	51.7	103	70-130
96-12-8	1,2-Dibromo-3-chloropropane	50	45.0	90	70-130
124-48-1	Dibromochloromethane	50	61.5	123	70-130
106-93-4	1,2-Dibromoethane	50	56.1	112	70-130
95-50-1	1,2-Dichlorobenzene	50	54.3	109	70-130
541-73-1	1,3-Dichlorobenzene	50	53.5	107	70-130
106-46-7	1,4-Dichlorobenzene	50	51.3	103	70-130
75-71-8	Dichlorodifluoromethane	50	49.2	98	70-130
75-34-3	1,1-Dichloroethane	50	55.7	111	70-130
107-06-2	1,2-Dichloroethane	50	50.9	102	70-130
75-35-4	1,1-Dichloroethene	50	63.3	127	70-130
156-59-2	cis-1,2-Dichloroethene	50	57.9	116	70-130
156-60-5	trans-1,2-Dichloroethene	50	63.4	127	70-130
78-87-5	1,2-Dichloropropane	50	53.6	107	70-130
10061-01-5	cis-1,3-Dichloropropene	50	53.1	106	70-130
10061-02-6	trans-1,3-Dichloropropene	50	55.5	111	70-130
123-91-1	1,4-Dioxane	250	231	92	70-130
100-41-4	Ethylbenzene	50	57.0	114	70-130
76-13-1	Freon 113	50	55.6	111	70-130
591-78-6	2-Hexanone	50	40.2	80	70-130
74-88-4	Iodomethane	50	53.4	107	70-130
98-82-8	Isopropylbenzene	50	54.9	110	70-130
79-20-9	Methyl Acetate	50	53.3	107	33-141

* = Outside of Control Limits.

Blank Spike Summary

Page 2 of 2

Job Number: MC32033
Account: EAENYS EA Engineering
Project: NFARS, Niagara Falls, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSM2361-BS	M66792.D	1	07/15/14	KD	n/a	n/a	MSM2361

The QC reported here applies to the following samples:

Method: SW846 8260C

MC32033-1, MC32033-2, MC32033-3, MC32033-4, MC32033-5, MC32033-6, MC32033-7, MC32033-8

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
108-87-2	Methylcyclohexane	50	52.6	105	78-140
1634-04-4	Methyl Tert Butyl Ether	50	50.4	101	70-130
108-10-1	4-Methyl-2-pentanone (MIBK)	50	52.3	105	70-130
75-09-2	Methylene chloride	50	59.5	119	70-130
100-42-5	Styrene	50	56.8	114	70-130
79-34-5	1,1,2,2-Tetrachloroethane	50	53.0	106	70-130
127-18-4	Tetrachloroethene	50	55.5	111	70-130
108-88-3	Toluene	50	55.1	110	70-130
87-61-6	1,2,3-Trichlorobenzene	50	49.5	99	70-130
120-82-1	1,2,4-Trichlorobenzene	50	47.3	95	70-130
71-55-6	1,1,1-Trichloroethane	50	53.4	107	70-130
79-00-5	1,1,2-Trichloroethane	50	54.7	109	70-130
79-01-6	Trichloroethene	50	50.4	101	70-130
75-69-4	Trichlorofluoromethane	50	56.0	112	70-130
75-01-4	Vinyl chloride	50	60.7	121	70-130
1330-20-7	Xylene (total)	150	172	115	70-130

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	92%	70-130%
2037-26-5	Toluene-D8	117%	70-130%
460-00-4	4-Bromofluorobenzene	85%	70-130%

(a) Outside control limits. Blank Spike meets program technical requirements.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 2

Job Number: MC32033
Account: EAENYS EA Engineering
Project: NFARS, Niagara Falls, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MC31954-1MS	M66801.D	1	07/16/14	KD	n/a	n/a	MSM2361
MC31954-1MSD	M66802.D	1	07/16/14	KD	n/a	n/a	MSM2361
MC31954-1	M66800.D	1	07/16/14	KD	n/a	n/a	MSM2361

The QC reported here applies to the following samples:

Method: SW846 8260C

MC32033-1, MC32033-2, MC32033-3, MC32033-4, MC32033-5, MC32033-6, MC32033-7, MC32033-8

CAS No.	Compound	MC31954-1 ug/kg	Spike Q ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND	52.2	22.3	43* a	54.4	26.6	49* a	18	70-130/30
71-43-2	Benzene	ND	52.2	39.3	75	54.4	48.0	88	20	70-130/30
74-97-5	Bromochloromethane	ND	52.2	43.0	82	54.4	51.4	95	18	70-130/30
75-27-4	Bromodichloromethane	ND	52.2	39.9	76	54.4	46.9	86	16	70-130/30
75-25-2	Bromoform	ND	52.2	47.0	90	54.4	52.9	97	12	70-130/30
74-83-9	Bromomethane	ND	52.2	44.5	85	54.4	49.4	91	10	70-130/30
78-93-3	2-Butanone (MEK)	ND	52.2	29.2	56* a	54.4	33.7	62* a	14	70-130/30
75-15-0	Carbon disulfide	0.58	52.2	35.9	68* a	54.4	42.8	78	18	70-130/30
56-23-5	Carbon tetrachloride	ND	52.2	36.5	70	54.4	43.0	79	16	70-130/30
108-90-7	Chlorobenzene	ND	52.2	36.2	69* a	54.4	42.6	78	16	70-130/30
75-00-3	Chloroethane	ND	52.2	47.3	91	54.4	53.4	98	12	70-130/30
67-66-3	Chloroform	ND	52.2	38.8	74	54.4	46.2	85	17	70-130/30
74-87-3	Chloromethane	ND	52.2	46.1	88	54.4	51.9	95	12	70-130/30
110-82-7	Cyclohexane	ND	52.2	36.8	71	54.4	42.0	77	13	70-130/30
96-12-8	1,2-Dibromo-3-chloropropane	ND	52.2	44.2	85	54.4	47.8	88	8	70-130/30
124-48-1	Dibromochloromethane	ND	52.2	42.3	81	54.4	50.7	93	18	70-130/30
106-93-4	1,2-Dibromoethane	ND	52.2	39.9	76	54.4	47.7	88	18	70-130/30
95-50-1	1,2-Dichlorobenzene	ND	52.2	34.1	65* a	54.4	39.9	73	16	70-130/30
541-73-1	1,3-Dichlorobenzene	ND	52.2	31.8	61* a	54.4	37.5	69* a	16	70-130/30
106-46-7	1,4-Dichlorobenzene	ND	52.2	30.7	59* a	54.4	36.5	67* a	17	70-130/30
75-71-8	Dichlorodifluoromethane	ND	52.2	34.3	66* a	54.4	37.7	69* a	9	70-130/30
75-34-3	1,1-Dichloroethane	ND	52.2	39.7	76	54.4	47.1	87	17	70-130/30
107-06-2	1,2-Dichloroethane	ND	52.2	38.3	73	54.4	45.6	84	17	70-130/30
75-35-4	1,1-Dichloroethene	ND	52.2	44.7	86	54.4	53.1	98	17	70-130/30
156-59-2	cis-1,2-Dichloroethene	ND	52.2	40.7	78	54.4	48.3	89	17	70-130/30
156-60-5	trans-1,2-Dichloroethene	ND	52.2	43.1	83	54.4	52.2	96	19	70-130/30
78-87-5	1,2-Dichloropropane	ND	52.2	36.9	71	54.4	44.8	82	19	70-130/30
10061-01-5	cis-1,3-Dichloropropene	ND	52.2	36.9	71	54.4	43.8	81	17	70-130/30
10061-02-6	trans-1,3-Dichloropropene	ND	52.2	40.2	77	54.4	47.5	87	17	70-130/30
123-91-1	1,4-Dioxane	ND	261	259	99	272	279	103	7	70-130/30
100-41-4	Ethylbenzene	ND	52.2	35.2	67* a	54.4	41.1	76	15	70-130/30
76-13-1	Freon 113	ND	52.2	40.8	78	54.4	45.9	84	12	70-130/30
591-78-6	2-Hexanone	ND	52.2	40.3	77	54.4	46.2	85	14	70-130/30
74-88-4	Iodomethane	ND	52.2	37.5	72	54.4	44.4	82	17	70-130/30
98-82-8	Isopropylbenzene	ND	52.2	33.6	64* a	54.4	38.8	71	14	70-130/30
79-20-9	Methyl Acetate	ND	52.2	12.1	23* a	54.4	16.3	30	30	30-160/30

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 2 of 2

Job Number: MC32033
Account: EAENYS EA Engineering
Project: NFARS, Niagara Falls, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MC31954-1MS	M66801.D	1	07/16/14	KD	n/a	n/a	MSM2361
MC31954-1MSD	M66802.D	1	07/16/14	KD	n/a	n/a	MSM2361
MC31954-1	M66800.D	1	07/16/14	KD	n/a	n/a	MSM2361

The QC reported here applies to the following samples:

Method: SW846 8260C

MC32033-1, MC32033-2, MC32033-3, MC32033-4, MC32033-5, MC32033-6, MC32033-7, MC32033-8

CAS No.	Compound	MC31954-1 ug/kg	Spike Q ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
108-87-2	Methylcyclohexane	ND	52.2	36.4	70	54.4	40.2	74	10	43-163/30
1634-04-4	Methyl Tert Butyl Ether	ND	52.2	40.5	78	54.4	47.5	87	16	70-130/30
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	52.2	54.2	104	54.4	61.6	113	13	70-130/30
75-09-2	Methylene chloride	ND	52.2	44.7	86	54.4	52.7	97	16	70-130/30
100-42-5	Styrene	ND	52.2	20.0	38* a	54.4	22.3	41* a	11	70-130/30
79-34-5	1,1,2,2-Tetrachloroethane	ND	52.2	43.8	84	54.4	50.0	92	13	70-130/30
127-18-4	Tetrachloroethene	ND	52.2	34.1	65* a	54.4	39.7	73	15	70-130/30
108-88-3	Toluene	0.29	52.2	37.0	70	54.4	44.0	80	17	70-130/30
87-61-6	1,2,3-Trichlorobenzene	ND	52.2	30.8	59* a	54.4	34.7	64* a	12	70-130/30
120-82-1	1,2,4-Trichlorobenzene	ND	52.2	26.5	51* a	54.4	31.1	57* a	16	70-130/30
71-55-6	1,1,1-Trichloroethane	ND	52.2	37.8	72	54.4	44.3	81	16	70-130/30
79-00-5	1,1,2-Trichloroethane	ND	52.2	41.1	79	54.4	49.0	90	18	70-130/30
79-01-6	Trichloroethene	ND	52.2	34.7	66* a	54.4	41.5	76	18	70-130/30
75-69-4	Trichlorofluoromethane	ND	52.2	38.2	73	54.4	43.9	81	14	70-130/30
75-01-4	Vinyl chloride	ND	52.2	41.9	80	54.4	47.5	87	13	70-130/30
1330-20-7	Xylene (total)	ND	157	106	68* a	163	124	76	16	70-130/30

CAS No.	Surrogate Recoveries	MS	MSD	MC31954-1	Limits
1868-53-7	Dibromofluoromethane	99%	101%	101%	70-130%
2037-26-5	Toluene-D8	118%	119%	120%	70-130%
460-00-4	4-Bromofluorobenzene	83%	85%	85%	70-130%

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

* = Outside of Control Limits.

Instrument Performance Check (BFB)

Job Number: MC32033
Account: EAENYS EA Engineering
Project: NFARS, Niagara Falls, NY

Sample: MSM2318-BFB
Lab File ID: M65779.D
Instrument ID: GCMSM
Injection Date: 05/29/14
Injection Time: 08:09

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	19493	19.7	Pass
75	30.0 - 60.0% of mass 95	41669	42.1	Pass
95	Base peak, 100% relative abundance	99091	100.0	Pass
96	5.0 - 9.0% of mass 95	6533	6.59	Pass
173	Less than 2.0% of mass 174	771	0.78 (0.91) ^a	Pass
174	50.0 - 150.0% of mass 95	84835	85.6	Pass
175	5.0 - 9.0% of mass 174	6214	6.27 (7.32) ^a	Pass
176	95.0 - 101.0% of mass 174	80931	81.7 (95.4) ^a	Pass
177	5.0 - 9.0% of mass 176	5198	5.25 (6.42) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
MSM2333-IC2333	M65786A.D	05/29/14	11:40	03:31	Initial cal 0.5
MSM2318-IC2318	M65786.D	05/29/14	11:40	03:31	Initial cal 0.5
MSM2318-IC2318	M65787.D	05/29/14	12:10	04:01	Initial cal 2
MSM2333-IC2333	M65787A.D	05/29/14	12:10	04:01	Initial cal 2
MSM2318-IC2318	M65788.D	05/29/14	12:40	04:31	Initial cal 5
MSM2333-IC2333	M65788A.D	05/29/14	12:40	04:31	Initial cal 5
MSM2318-IC2318	M65789.D	05/29/14	13:09	05:00	Initial cal 10
MSM2333-IC2333	M65789A.D	05/29/14	13:09	05:00	Initial cal 10
MSM2333-IC2333	M65790A.D	05/29/14	13:39	05:30	Initial cal 20
MSM2318-IC2318	M65790.D	05/29/14	13:39	05:30	Initial cal 20
MSM2333-ICC2333	M65791A.D	05/29/14	14:09	06:00	Initial cal 50
MSM2318-ICC2318	M65791.D	05/29/14	14:09	06:00	Initial cal 50
MSM2318-IC2318	M65792.D	05/29/14	14:38	06:29	Initial cal 100
MSM2333-IC2333	M65792A.D	05/29/14	14:38	06:29	Initial cal 100
MSM2333-IC2333	M65793A.D	05/29/14	15:07	06:58	Initial cal 200
MSM2318-IC2318	M65793.D	05/29/14	15:07	06:58	Initial cal 200
MSM2333-IC2333	M65794A.D	05/29/14	15:37	07:28	Initial cal 400
MSM2318-IC2318	M65794.D	05/29/14	15:37	07:28	Initial cal 400

Instrument Performance Check (BFB)

Job Number: MC32033
Account: EAENYS EA Engineering
Project: NFARS, Niagara Falls, NY

Sample: MSM2318-BFB	Injection Date: 05/29/14
Lab File ID: M65796.D	Injection Time: 16:41
Instrument ID: GCMSM	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	19655	19.8	Pass
75	30.0 - 60.0% of mass 95	42083	42.4	Pass
95	Base peak, 100% relative abundance	99204	100.0	Pass
96	5.0 - 9.0% of mass 95	6275	6.33	Pass
173	Less than 2.0% of mass 174	727	0.73 (0.86) ^a	Pass
174	50.0 - 150.0% of mass 95	84093	84.8	Pass
175	5.0 - 9.0% of mass 174	6089	6.14 (7.24) ^a	Pass
176	95.0 - 101.0% of mass 174	81712	82.4 (97.2) ^a	Pass
177	5.0 - 9.0% of mass 176	5403	5.45 (6.61) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
MSM2318-CC2318	M65797.D	05/29/14	17:10	00:29	Continuing cal 50
MSM2318-ICV2318	M65797.D	05/29/14	17:10	00:29	Initial cal verification 50
MSM2333-ICV2333	M65798A.D	05/29/14	17:39	00:58	Initial cal verification 50
MSM2318-MB	M65800.D	05/29/14	18:38	01:57	Method Blank
ZZZZZZ	M65801.D	05/29/14	19:07	02:26	(unrelated sample)
ZZZZZZ	M65802.D	05/29/14	19:37	02:56	(unrelated sample)
ZZZZZZ	M65803.D	05/29/14	20:06	03:25	(unrelated sample)
ZZZZZZ	M65804.D	05/29/14	20:35	03:54	(unrelated sample)
ZZZZZZ	M65805.D	05/29/14	21:05	04:24	(unrelated sample)
ZZZZZZ	M65806.D	05/29/14	21:34	04:53	(unrelated sample)
ZZZZZZ	M65807.D	05/29/14	22:03	05:22	(unrelated sample)
ZZZZZZ	M65808.D	05/29/14	22:32	05:51	(unrelated sample)
ZZZZZZ	M65809.D	05/29/14	23:01	06:20	(unrelated sample)
ZZZZZZ	M65810.D	05/29/14	23:30	06:49	(unrelated sample)
ZZZZZZ	M65811.D	05/29/14	23:59	07:18	(unrelated sample)
ZZZZZZ	M65812.D	05/30/14	00:28	07:47	(unrelated sample)
ZZZZZZ	M65813.D	05/30/14	00:57	08:16	(unrelated sample)
ZZZZZZ	M65814.D	05/30/14	01:27	08:46	(unrelated sample)
ZZZZZZ	M65815.D	05/30/14	01:56	09:15	(unrelated sample)
ZZZZZZ	M65816.D	05/30/14	02:25	09:44	(unrelated sample)
ZZZZZZ	M65817.D	05/30/14	02:54	10:13	(unrelated sample)
ZZZZZZ	M65818.D	05/30/14	03:23	10:42	(unrelated sample)
ZZZZZZ	M65819.D	05/30/14	03:52	11:11	(unrelated sample)
ZZZZZZ	M65820.D	05/30/14	04:21	11:40	(unrelated sample)

Instrument Performance Check (BFB)

Job Number: MC32033
Account: EAENYS EA Engineering
Project: NFARS, Niagara Falls, NY

Sample: MSM2361-BFB
Lab File ID: M66790.D
Instrument ID: GCMSM
Injection Date: 07/15/14
Injection Time: 21:04

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	13794	19.4	Pass
75	30.0 - 60.0% of mass 95	27839	39.2	Pass
95	Base peak, 100% relative abundance	71087	100.0	Pass
96	5.0 - 9.0% of mass 95	4515	6.35	Pass
173	Less than 2.0% of mass 174	424	0.60 (0.72) ^a	Pass
174	50.0 - 150.0% of mass 95	58498	82.3	Pass
175	5.0 - 9.0% of mass 174	4442	6.25 (7.59) ^a	Pass
176	95.0 - 101.0% of mass 174	58055	81.7 (99.2) ^a	Pass
177	5.0 - 9.0% of mass 176	3670	5.16 (6.32) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
MSM2361-CC2333	M66790.D	07/15/14	21:04	00:00	Continuing cal 50
MSM2361-BS	M66792.D	07/15/14	22:03	00:59	Blank Spike
MSM2361-MB	M66795.D	07/15/14	23:31	02:27	Method Blank
ZZZZZZ	M66797.D	07/16/14	00:30	03:26	(unrelated sample)
ZZZZZZ	M66798.D	07/16/14	00:59	03:55	(unrelated sample)
ZZZZZZ	M66799.D	07/16/14	01:29	04:25	(unrelated sample)
MC31954-1	M66800.D	07/16/14	01:59	04:55	(used for QC only; not part of job MC32033)
MC31954-1MS	M66801.D	07/16/14	02:28	05:24	Matrix Spike
MC31954-1MSD	M66802.D	07/16/14	02:58	05:54	Matrix Spike Duplicate
ZZZZZZ	M66803.D	07/16/14	03:27	06:23	(unrelated sample)
ZZZZZZ	M66804.D	07/16/14	03:57	06:53	(unrelated sample)
ZZZZZZ	M66805.D	07/16/14	04:26	07:22	(unrelated sample)
MC32033-1	M66806.D	07/16/14	04:56	07:52	DS003-SB-A1-4
MC32033-2	M66807.D	07/16/14	05:25	08:21	DS003-SB-A1-6
MC32033-3	M66808.D	07/16/14	05:55	08:51	DS003-SB-B1-4
MC32033-4	M66809.D	07/16/14	06:25	09:21	DS003-SB-B1-6
MC32033-5	M66810.D	07/16/14	06:54	09:50	DS003-SB-B3-4
MC32033-6	M66811.D	07/16/14	07:23	10:19	DS003-SB-B3-6
MC32033-7	M66812.D	07/16/14	07:53	10:49	DS003-SB-B2-5
MC32033-8	M66813.D	07/16/14	08:22	11:18	DS003-SB-B2-6
MSM2361-ECC2333	M66814.D	07/16/14	08:51	11:47	Ending cal 50

Volatile Internal Standard Area Summary

Page 1 of 1

Job Number: MC32033
Account: EAENYS EA Engineering
Project: NFARS, Niagara Falls, NY

Check Std: MSM2361-CC2333
Lab File ID: M66790.D
Instrument ID: GCMSM
Injection Date: 07/15/14
Injection Time: 21:04
Method: SW846 8260C

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	199121	9.35	320492	10.23	138637	13.50	178447	16.07	69873	6.86
Upper Limit ^a	398242	9.85	640984	10.73	277274	14.00	356894	16.57	139746	7.36
Lower Limit ^b	99561	8.85	160246	9.73	69319	13.00	89224	15.57	34937	6.36

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
MSM2361-BS	209006	9.35	335050	10.23	137750	13.50	186867	16.07	72275	6.85
MSM2361-MB	203563	9.35	323257	10.23	137533	13.50	187788	16.07	72556	6.85
ZZZZZZ	208372	9.35	328331	10.23	141903	13.51	193034	16.07	71406	6.85
ZZZZZZ	198058	9.35	313017	10.23	133958	13.51	183711	16.07	74325	6.85
ZZZZZZ	193034	9.35	306643	10.23	127288	13.51	159971	16.07	76613	6.85
MC31954-1	216592	9.35	348597	10.23	154865	13.51	220061	16.07	144906 ^c	6.85
MC31954-1MS	208149	9.35	340293	10.23	153383	13.50	212496	16.07	131634	6.84
MC31954-1MSD	218885	9.35	355268	10.23	159725	13.51	215365	16.07	139986 ^c	6.85
ZZZZZZ	213783	9.35	344887	10.23	152815	13.51	220925	16.07	131300	6.85
ZZZZZZ	214365	9.35	350103	10.23	155244	13.50	219008	16.07	138740	6.85
ZZZZZZ	207102	9.35	335047	10.23	148633	13.50	206515	16.07	133432	6.86
MC32033-1	198617	9.35	325583	10.23	140408	13.51	171077	16.07	111834	6.85
MC32033-2	184008	9.35	299731	10.23	122790	13.51	142442	16.07	89228	6.85
MC32033-3	192771	9.35	314780	10.23	138063	13.51	177904	16.07	114048	6.85
MC32033-4	199301	9.35	324878	10.23	139964	13.50	174398	16.07	126328	6.86
MC32033-5	188135	9.35	309965	10.23	133009	13.51	164311	16.07	111306	6.85
MC32033-6	177465	9.35	290970	10.23	120189	13.51	141481	16.07	102907	6.84
MC32033-7	179330	9.35	295064	10.23	122677	13.51	149915	16.07	75249	6.85
MC32033-8	182729	9.35	299241	10.23	123674	13.50	138115	16.07	106697	6.85
MSM2361-ECC2333	199477	9.35	324646	10.23	141059	13.51	179254	16.07	71616	6.86

IS 1 = Pentafluorobenzene
IS 2 = 1,4-Difluorobenzene
IS 3 = Chlorobenzene-D5
IS 4 = 1,4-Dichlorobenzene-d4
IS 5 = Tert Butyl Alcohol-D9

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.

(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

(c) Outside control limits. Target analytes not associated with this internal standard.

Volatile Surrogate Recovery Summary

Page 1 of 1

Job Number: MC32033
Account: EAENYS EA Engineering
Project: NFARS, Niagara Falls, NY

Method: SW846 8260C **Matrix:** SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3
MC32033-1	M66806.D	105	119	92
MC32033-2	M66807.D	105	119	98
MC32033-3	M66808.D	104	119	90
MC32033-4	M66809.D	103	118	92
MC32033-5	M66810.D	104	118	92
MC32033-6	M66811.D	105	118	94
MC32033-7	M66812.D	104	117	92
MC32033-8	M66813.D	105	118	97
MC31954-1MS	M66801.D	99	118	83
MC31954-1MSD	M66802.D	101	119	85
MSM2361-BS	M66792.D	92	117	85
MSM2361-MB	M66795.D	92	118	85

Surrogate Compounds	Recovery Limits
S1 = Dibromofluoromethane	70-130%
S2 = Toluene-D8	70-130%
S3 = 4-Bromofluorobenzene	70-130%

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Initial Calibration Summary

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Job Number: MC32033
Account: EAENYS EA Engineering
Project: NFARS, Niagara Falls, NY

Sample: MSM2333-ICC2333
Lab FileID: M65791A.D

Response Factor Report GCMS M

Method : C:\msdchem\1\methods\M140529D0DS.M (RTE Integrator)
Title : SW-846 Method 8260
Last Update : Wed Jun 11 13:34:57 2014
Response via : Initial Calibration

Calibration Files

.5 =m65786A.D 20 =m65790A.D 2 =m65787A.D 5 =m65788A.D
10 =m65789A.D 50 =m65791A.D 100 =m65792A.D 200 =m65793A.D
400 =m65794A.D =

Compound	.5	20	2	5	10	50	100	200	400	Avg	%RSD
1) I tert butyl alcohol-d9 -----ISTD-----											
2) tertiary butyl alcohol	1.702	2.200	1.916	1.943	1.641	1.406	1.589	1.720	1.765	13.96	
3) Ethanol	0.216	0.177	0.217	0.194	0.201	0.181	0.205	0.220	0.201	8.13	
4) I pentafluorobenzene -----ISTD-----											
5) dichlorodifluoromethane	0.583	0.851	0.632	0.575	0.658	0.523	0.588	0.568	0.622	16.25	
---- Linear regression ---- Coefficient = 0.9988											
Response Ratio = 0.01243 + 0.56821 *A											
6) chloromethane	0.949	1.189	1.069	0.973	1.083	0.877	0.976	0.954	1.009	9.76	
7) vinyl chloride	0.752	0.968	0.844	0.790	0.882	0.704	0.781	0.720	0.805	11.03	
8) bromomethane	0.499	0.570	0.545	0.537	0.571	0.456	0.514	0.504	0.525	7.43	
9) chloroethane	0.389		0.458	0.417	0.428	0.339	0.383	0.379	0.399	9.71	
10) ethyl ether	0.402	0.539	0.478	0.470	0.430	0.351	0.388	0.417	0.434	13.66	
11) acetonitrile	0.168		0.172	0.188	0.125	0.112	0.106	0.124	0.142	23.21	
---- Linear regression ---- Coefficient = 0.9927											
Response Ratio = -0.00030 + 0.12031 *A											
12) trichlorofluoromethane	0.997	1.134	1.033	1.038	1.141	0.903	1.027	1.025	1.037	7.29	
13) freon-113	0.759	0.871	0.811	0.782	0.737	0.608	0.654	0.672	0.737	11.87	
14) acrolein	0.043		0.065	0.055	0.050	0.037	0.046	0.056	0.050	18.91	
---- Quadratic regression ---- Coefficient = 0.9988											
Response Ratio = 0.02435 + 0.03282 *A + 0.00058 *A^2											
15) 1,1-dichloroethene	0.621	0.741	0.722	0.652	0.590	0.477	0.518	0.533	0.607	15.72	
---- Linear regression ---- Coefficient = 0.9987											
Response Ratio = 0.00852 + 0.52689 *A											
16) acetone	0.109			0.129	0.092	0.104	0.098	0.111	0.107	11.82	
17) Methyl Acetate											

Initial Calibration Summary

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Job Number: MC32033
Account: EAENYS EA Engineering
Project: NFARS, Niagara Falls, NY

Sample: MSM2333-ICC2333
Lab FileID: M65791A.D

	0.324	0.484	0.449	0.393	0.361	0.398	0.450	0.408	13.72
18)	methylene chloride								
	0.661	0.853	0.728	0.692	0.621	0.504	0.552	0.571	0.648
	---- Linear regression ---- Coefficient = 0.9969								
	Response Ratio = 0.01613 + 0.55821 *A								
19)	methyl tert butyl ether								
	1.437	1.828	1.535	1.470	1.367	1.201	1.297	1.378	1.439
20)	acrylonitrile								
	0.160	0.209	0.187	0.172	0.168	0.180	0.202	0.183	9.78
21)	allyl chloride								
	1.342	1.646	1.359	1.366	1.266	1.019	1.119	1.162	1.285
	---- Linear regression ---- Coefficient = 0.9984								
	Response Ratio = 0.00082 + 1.14879 *A								
22)	trans-1,2-dichloroethene								
	0.666	0.814	0.729	0.714	0.640	0.508	0.557	0.582	0.651
	---- Linear regression ---- Coefficient = 0.9962								
	Response Ratio = 0.01513 + 0.56727 *A								
23)	iodomethane								
	1.322	1.413	1.381	1.344	1.261	1.024	1.124	1.157	1.253
24)	carbon disulfide								
	2.161	2.496	2.292	2.211	2.072	1.659	1.821	1.861	2.072
25)	propionitrile								
	0.060	0.077	0.065	0.076	0.066	0.071	0.081	0.071	10.51
26)	vinyl acetate								
	0.995	0.932	0.960	1.045	0.962	1.059	1.188	1.020	8.58
27)	chloroprene								
	1.036	1.336	1.104	0.988	0.792	0.864	0.913	1.005	17.92
	---- Linear regression ---- Coefficient = 0.9963								
	Response Ratio = 0.04594 + 0.87755 *A								
28)	di-isopropyl ether								
	2.471	2.755	2.608	2.486	2.375	2.006	2.164	2.301	2.396
29)	methacrylonitrile								
	0.273	0.311	0.321	0.317	0.270	0.300	0.341	0.305	8.50
30)	2-butanone								
	0.077	0.089	0.079	0.068	0.068	0.072	0.085	0.077#	10.65
31)	Hexane								
	1.311	1.586	1.361	1.321	1.273	1.043	1.124	1.187	1.276
32)	1,1-dichloroethane								
	1.202	1.372	1.234	1.241	1.157	0.937	1.023	1.078	1.156
33)	tert-butyl ethyl ether								
	1.949	2.157	2.028	1.964	1.896	1.608	1.751	1.867	1.903
34)	isobutyl alcohol								
	0.095	0.153	0.150	0.082	0.068	0.077	0.078	0.100	35.72
	---- Linear regression ---- Coefficient = 0.9936								
	Response Ratio = 0.04768 + 0.07402 *A								
35)	2,2-dichloropropane								
	1.010	1.077	1.020	0.951	0.791	0.837	0.856	0.935	11.53
36)	cis-1,2-dichloroethene								
	0.696	0.718	0.768	0.699	0.650	0.537	0.590	0.623	0.660
37)	ethyl acetate								
	0.474	0.764	0.752	0.412	0.341	0.383	0.387	0.502	35.72
	---- Linear regression ---- Coefficient = 0.9936								
	Response Ratio = 0.04765 + 0.37006 *A								
38)	bromochloromethane								

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Initial Calibration Summary

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Job Number: MC32033
Account: EAENYS EA Engineering
Project: NFARS, Niagara Falls, NY

Sample: MSM2333-ICC2333
Lab FileID: M65791A.D

		0.359	0.408	0.383	0.361	0.333	0.285	0.309	0.331	0.346	11.48
39)	chloroform	1.070	1.118	1.075	1.100	1.008	0.833	0.906	0.960	1.009	10.08
40)	dibromofluoromethane (s)	0.518		0.574	0.570	0.435	0.432			0.506	13.74
41)	Tetrahydrofuran	0.162		0.222	0.165	0.162	0.152	0.165	0.185	0.173	13.67
42)	1,1,1-trichloroethane	1.097	1.300	1.247	1.104	1.051	0.855	0.929	0.966	1.068	14.30
43)	I 1,4-difluorobenzene	-----ISTD-----									
44)	Cyclohexane	0.950	1.125	1.014	0.984	0.910	0.731	0.772	0.799	0.911	14.83
45)	carbon tetrachloride	0.708	0.789	0.739	0.735	0.673	0.548	0.579	0.603	0.672	12.85
46)	1,1-dichloropropene	0.558	0.604	0.571	0.574	0.529	0.428	0.458	0.489	0.526	11.84
47)	benzene	2.160	1.527	1.666	1.552	1.575	1.435	1.165	1.262	1.543	19.45
		---- Quadratic regression ---- Coefficient = 0.9945									
		Response Ratio = 0.01117 + 1.37686 *A + -0.03666 *A^2									
48)	1,2-dichloroethane	0.444	0.473	0.462	0.460	0.440	0.370	0.400	0.431	0.435	7.94
49)	tert-amyl methyl ether	0.936	0.987	0.954	0.950	0.929	0.795	0.837	0.895	0.910	7.09
50)	heptane	0.931	1.005	1.003	0.980	0.900	0.732	0.773	0.820	0.893	11.93
51)	trichloroethene	0.460	0.503	0.460	0.477	0.431	0.366	0.417	0.485	0.450	9.76
52)	1,2-dichloropropane	0.423	0.498	0.456	0.435	0.405	0.334	0.361	0.392	0.413	12.64
53)	dibromomethane	0.214	0.297	0.235	0.229	0.203	0.174	0.186	0.203	0.218	17.47
		---- Linear regression ---- Coefficient = 0.9962									
		Response Ratio = 0.00428 + 0.19410 *A									
54)	bromodichloromethane	0.476	0.554	0.476	0.480	0.444	0.375	0.408	0.442	0.457	11.80
55)	Methylcyclohexane	0.808	0.899	0.858	0.818	0.787	0.634	0.672	0.700	0.772	12.15
56)	2-chloroethyl vinyl ether	0.128	0.175	0.155	0.146	0.151	0.116	0.135	0.157	0.145	12.64
57)	methyl methacrylate	0.161	0.226	0.221	0.203	0.171	0.156	0.168	0.192	0.187	14.64
58)	1,4-dioxane	0.004		0.004	0.003	0.003	0.004	0.003	0.004	0.004#	11.29
59)	cis-1,3-dichloropropene	0.558	0.622	0.575	0.565	0.538	0.453	0.493	0.546	0.544	9.51
60)	toluene-d8 (s)	1.275		1.318	1.304	0.968	0.958	0.867	0.868	1.080	19.40
		---- Linear regression ---- Coefficient = 0.9962									
		Response Ratio = 0.08323 + 0.87043 *A									
61)	4-methyl-2-pentanone	0.363		0.416	0.433	0.365	0.344	0.352	0.400	0.382	8.95
62)	toluene	0.980	1.155	1.043	1.022	0.926	0.762	0.819	0.894	0.950	13.38
63)	trans-1,3-dichloropropene	0.447	0.502	0.468	0.467	0.430	0.367	0.393	0.436	0.439	9.85

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Initial Calibration Summary

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Job Number: MC32033
Account: EAENYS EA Engineering
Project: NFARS, Niagara Falls, NY

Sample: MSM2333-ICC2333
Lab FileID: M65791A.D

64)	1,1,2-trichloroethane	0.223	0.275	0.262	0.240	0.218	0.189	0.201	0.225	0.229	12.68
65)	ethyl methacrylate	0.375	0.461	0.409	0.397	0.371	0.330	0.326	0.369	0.380	11.49
66)	I chlorobenzene-d5	-----ISTD-----									
67)	tetrachloroethene	1.269	1.124	1.227	1.119	1.155	1.097	0.898	0.987	1.069	10.26
68)	1,3-dichloropropane	1.035	1.137	1.043	1.081	1.029	0.886	0.978	1.070	1.032	7.24
69)	dibromochloromethane	0.927	1.055	0.940	0.965	0.931	0.801	0.886	0.975	0.935	7.82
70)	1,2-dibromoethane	0.726	0.856	0.749	0.732	0.703	0.618	0.669	0.737	0.724	9.48
71)	2-hexanone	0.758		0.850	0.804	0.779	0.756	0.759	0.865	0.796	5.73
72)	chlorobenzene	2.908	3.157	2.850	2.967	2.784	2.289	2.518	2.728	2.775	9.73
73)	1,1,1,2-tetrachloroethane	1.145	1.246	1.132	1.143	1.145	0.963	1.047	1.108	1.116	7.39
74)	ethylbenzene	4.779	5.281	4.774	4.862	4.607	3.739	4.054	4.335	4.554	10.78
75)	m,p-xylene	1.978	2.167	1.952	1.991	1.894	1.530	1.660	1.790	1.870	10.83
76)	o-xylene	1.986	2.126	1.936	1.988	1.901	1.558	1.680	1.794	1.871	9.85
77)	styrene	3.176	3.697	3.295	3.264	3.051	2.505	2.591	2.801	3.048	13.07
78)	bromoform	0.590	0.652	0.569	0.592	0.590	0.510	0.559	0.618	0.585	7.15
79)	trans-1,4-dichloro-2-butene	0.321		0.357	0.439	0.312	0.275	0.294	0.319	0.331	16.32
	---- Linear regression ----	Coefficient = 0.9950									
	Response Ratio =	0.00978 + 0.30400 *A									
80)	I 1,4-dichlorobenzene-d	-----ISTD-----									
81)	isopropylbenzene	4.201	4.238	4.260	4.240	4.095	3.366	3.707	4.045	4.019	7.97
82)	bromofluorobenzene (s)	0.974		1.028	0.963	0.792	0.799	0.710		0.878	14.51
83)	bromobenzene	1.026	1.078	1.094	1.019	0.991	0.833	0.897	0.994	0.992	8.85
84)	1,1,2,2-tetrachloroethane	0.685	0.855	0.758	0.731	0.716	0.636	0.680	0.756	0.727	9.11
85)	1,2,3-trichloropropane	0.814	0.902	0.896	0.839	0.835	0.752	0.799	0.895	0.842	6.38
86)	n-propylbenzene	4.844	5.191	4.979	4.906	4.716	3.825	4.101	4.505	4.633	10.02
87)	2-chlorotoluene	2.780	3.060	2.907	2.850	2.710	2.221	2.405	2.637	2.696	10.13
88)	4-chlorotoluene	2.918	3.118	2.965	2.922	2.770	2.295	2.450	2.709	2.768	10.00
89)	1,3,5-trimethylbenzene	3.845	4.086	3.918	3.866	3.755	3.128	3.416	3.796	3.726	8.24
90)	tert-butylbenzene	1.946	1.942	1.992	1.917	1.950	1.641	1.827	2.013	1.904	6.29
91)	1,2,4-trimethylbenzene	3.821	3.960	3.863	3.802	3.683	3.070	3.300	3.666	3.646	8.38
92)	sec-butylbenzene										

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Initial Calibration Summary

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Job Number: MC32033
Account: EAENYS EA Engineering
Project: NFARS, Niagara Falls, NY

Sample: MSM2333-ICC2333
Lab FileID: M65791A.D

		5.034	5.185	4.989	4.996	4.905	4.090	4.486	4.950	4.830	7.45
93)	1,3-dichlorobenzene	2.228	2.386	2.284	2.258	2.160	1.776	1.918	2.107	2.140	9.45
94)	p-isopropyltoluene	4.630	5.071	4.648	4.678	4.522	3.761	4.073	4.507	4.486	8.93
95)	1,4-dichlorobenzene	2.276	2.585	2.384	2.334	2.208	1.812	1.938	2.133	2.209	11.21
96)	1,2-dichlorobenzene	2.163	2.310	2.146	2.157	2.069	1.752	1.959	2.050	2.076	8.00
97)	n-butylbenzene	4.105	4.395	4.166	4.053	3.942	3.273	3.485	3.810	3.904	9.47
98)	1,2-dibromo-3-chloropropane	0.196	0.264	0.216	0.179	0.166	0.171	0.189	0.197	17.09	
	---- Linear regression ----	Coefficient = 0.9971									
	Response Ratio =	-0.00983 + 0.18631 *A									
99)	1,3,5-trichlorobenzene	1.834	2.008	1.828	1.835	1.781	1.506	1.629	1.760	1.773	8.48
100)	1,2,4-trichlorobenzene	1.689	1.890	1.716	1.696	1.648	1.412	1.525	1.617	1.649	8.55
101)	hexachlorobutadiene	0.859	0.950	0.909	0.858	0.843	0.712	0.775	0.826	0.842	8.80
102)	naphthalene	3.826	4.497	4.023	4.011	3.886	3.521	3.756	4.003	3.940	7.12
103)	1,2,3-trichlorobenzene	1.534	1.736	1.585	1.541	1.524	1.316	1.421	1.487	1.518	8.04
104)	2-methylnaphthalene	2.379		2.577	2.487	2.462	2.248	2.399	2.576	2.447	4.77
105)	1-methylnaphthalene	6.611		8.185	7.120	6.932	6.757	6.761	7.160	7.075	7.47

 (#) = Out of Range ### Number of calibration levels exceeded format ###

M140529D0DS.M

Wed Jun 11 15:09:03 2014

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Initial Calibration Verification

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Job Number: MC32033
 Account: EAENYS EA Engineering
 Project: NFARS, Niagara Falls, NY

Sample: MSM2333-ICV2333
 Lab FileID: M65798A.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\M140529S\m65798A.D Vial: 19
 Acq On : 29 May 2014 5:39 pm Operator: krystend
 Sample : ICV2333-50 Inst : GCMS M
 Misc : MS31905,MSM2333,5,,,5,1 Multiplr: 1.00
 MS Integration Params: RTEINT.P

Method : C:\msdchem\1\methods\M140529D0DS.M (RTE Integrator)
 Title : SW-846 Method 8260
 Last Update : Wed Jun 11 13:34:57 2014
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	tert butyl alcohol-d9	1.000	1.000	0.0	100	0.00	6.86
2 P	tertiary butyl alcohol	1.765	1.655	6.2	101	0.00	6.93
3 P	Ethanol	0.201	0.183	9.0	91	0.00	5.70
4 I	pentafluorobenzene	1.000	1.000	0.0	97	0.00	9.35
----- Amount Calc. %Drift -----							
5 P	dichlorodifluoromethane	50.000	51.138	-2.3	87	0.00	4.45
----- AvgRF CCRF %Dev -----							
6 P	chloromethane	1.009	1.026	-1.7	92	0.00	4.70
7 P	vinyl chloride	0.805	0.791	1.7	87	0.00	4.97
8 P	bromomethane	0.525	0.490	6.7	83	0.00	5.50
9 P	chloroethane	0.399	0.414	-3.8	93	0.00	5.66
10 P	ethyl ether	0.434	0.422	2.8	95	0.00	6.57
----- Amount Calc. %Drift -----							
11 P	acetonitrile	50.000	40.595	18.8	75	0.00	6.37
----- AvgRF CCRF %Dev -----							
12 P	trichlorofluoromethane	1.037	0.893	13.9	76	0.00	6.34
13 P	freon-113	0.737	0.742	-0.7	97	0.00	7.16
----- Amount Calc. %Drift -----							
14 P	acrolein	250.000	239.646	4.1	75	0.00	6.32
15 P	1,1-dichloroethene	50.000	57.316	-14.6	100	0.00	6.93
----- AvgRF CCRF %Dev -----							
16 P	acetone	0.107	0.089#	16.8	94	0.00	6.47
17 P	Methyl Acetate	0.408	0.418	-2.5	103	0.00	7.13
----- Amount Calc. %Drift -----							
18 P	methylene chloride	50.000	56.109	-12.2	100	0.00	7.09
----- AvgRF CCRF %Dev -----							
19 P	methyl tert butyl ether	1.439	1.383	3.9	98	0.00	7.90
20 P	acrylonitrile	0.183	0.172	6.0	97	0.00	7.00
----- Amount Calc. %Drift -----							
21 P	allyl chloride	50.000	53.241	-6.5	93	0.00	7.19
22 P	trans-1,2-dichloroethene	50.000	56.764	-13.5	100	0.00	7.81

Initial Calibration Verification

Job Number: MC32033
Account: EAENYS EA Engineering
Project: NFARS, Niagara Falls, NY

Sample: MSM2333-ICV2333
Lab FileID: M65798A.D

		AvgRF	CCRF	%Dev			
23 P	iodomethane	1.253	1.171	6.5	90	0.00	6.99
24 P	carbon disulfide	2.072	1.962	5.3	92	0.00	7.37
25 P	propionitrile	0.071	0.072	-1.4	91	0.00	8.16
26 P	vinyl acetate	1.020	1.068	-4.7	99	0.00	8.17
		Amount	Calc.	%Drift			
27 P	chloroprene	50.000	54.369	-8.7	98	0.00	8.44
		AvgRF	CCRF	%Dev			
28 P	di-isopropyl ether	2.396	2.394	0.1	97	0.00	8.48
29 P	methacrylonitrile	0.305	0.307	-0.7	94	0.00	8.60
30 P	2-butanone	0.077	0.067#	13.0	96	0.00	8.50
31 P	Hexane	1.276	1.261	1.2	96	0.00	8.46
32 P	1,1-dichloroethane	1.156	1.169	-1.1	98	0.00	8.06
33 P	tert-butyl ethyl ether	1.903	1.892	0.6	96	0.00	8.88
		Amount	Calc.	%Drift			
34 P	isobutyl alcohol	250.000	247.042	1.2	97	0.00	8.88
		AvgRF	CCRF	%Dev			
35 P	2,2-dichloropropane	0.935	0.990	-5.9	101	0.00	8.94
36 P	cis-1,2-dichloroethene	0.660	0.665	-0.8	99	0.00	8.65
		Amount	Calc.	%Drift			
37 P	ethyl acetate	50.000	49.395	1.2	97	0.00	8.88
		AvgRF	CCRF	%Dev			
38 P	bromochloromethane	0.346	0.338	2.3	98	0.00	8.82
39 P	chloroform	1.009	1.002	0.7	96	0.00	8.86
40 S	dibromofluoromethane (s)	0.506	0.411	18.8	91	0.00	8.98
41 P	Tetrahydrofuran	0.173	0.159	8.1	95	0.00	9.19
42 P	1,1,1-trichloroethane	1.068	1.044	2.2	96	0.00	9.62
43 I	1,4-difluorobenzene	1.000	1.000	0.0	97	0.00	10.23
44 P	Cyclohexane	0.911	0.899	1.3	96	0.00	9.91
45 P	carbon tetrachloride	0.672	0.665	1.0	96	0.00	10.00
46 P	1,1-dichloropropene	0.526	0.533	-1.3	98	0.00	9.80
		Amount	Calc.	%Drift			
47 P	benzene	50.000	54.042	-8.1	98	0.00	10.03
		AvgRF	CCRF	%Dev			
48 P	1,2-dichloroethane	0.435	0.432	0.7	95	0.00	9.52
49 P	tert-amyl methyl ether	0.910	0.920	-1.1	96	0.00	10.14
50 P	heptane	0.893	0.862	3.5	93	0.00	10.51
51 P	trichloroethene	0.450	0.430	4.4	97	0.00	10.66
52 P	1,2-dichloropropane	0.413	0.394	4.6	94	0.00	10.62
		Amount	Calc.	%Drift			
53 P	dibromomethane	50.000	49.911	0.2	95	0.00	10.59
		AvgRF	CCRF	%Dev			
54 P	bromodichloromethane	0.457	0.461	-0.9	101	0.00	10.71
55 P	Methylcyclohexane	0.772	0.776	-0.5	96	0.00	11.17
56 P	2-chloroethyl vinyl ether	0.145	0.114	21.4#	73	0.00	11.09
57 P	methyl methacrylate	0.187	0.165	11.8	94	0.00	10.80
58 P	1,4-dioxane	0.004	0.004#	0.0	107	0.00	10.81
59 P	cis-1,3-dichloropropene	0.544	0.532	2.2	96	0.00	11.33

Initial Calibration Verification

Page 3 of 4

Job Number: MC32033
 Account: EAENYS EA Engineering
 Project: NFARS, Niagara Falls, NY

Sample: MSM2333-ICV2333
 Lab FileID: M65798A.D

		Amount	Calc.	%Drift			
60 S	toluene-d8 (s)	55.000	59.506	-8.2	102	0.00	12.04
		AvgRF	CCRF	%Dev			
61 P	4-methyl-2-pentanone	0.382	0.362	5.2	96	0.00	11.42
62 P	toluene	0.950	0.946	0.4	99	0.00	12.11
63 P	trans-1,3-dichloropropene	0.439	0.462	-5.2	104	0.00	11.75
64 P	1,1,2-trichloroethane	0.229	0.214	6.6	95	0.00	11.93
65 P	ethyl methacrylate	0.380	0.362	4.7	95	0.00	12.12
66 I	chlorobenzene-d5	1.000	1.000	0.0	104	0.00	13.51
67 P	tetrachloroethene	1.105	1.019	7.8	97	0.00	12.86
68 P	1,3-dichloropropane	1.032	0.952	7.8	96	0.00	12.16
69 P	dibromochloromethane	0.935	0.893	4.5	100	0.00	12.46
70 P	1,2-dibromoethane	0.724	0.649	10.4	96	0.00	12.71
71 P	2-hexanone	0.796	0.668	16.1	89	0.00	12.28
72 P	chlorobenzene	2.775	2.630	5.2	98	0.00	13.54
73 P	1,1,1,2-tetrachloroethane	1.116	1.069	4.2	97	0.00	13.46
74 P	ethylbenzene	4.554	4.413	3.1	100	0.00	13.71
75 P	m,p-xylene	1.870	1.802	3.6	99	0.00	13.90
76 P	o-xylene	1.871	1.806	3.5	99	0.00	14.31
77 P	styrene	3.048	2.897	5.0	99	0.00	14.24
78 P	bromoform	0.585	0.544	7.0	96	0.00	14.07
		Amount	Calc.	%Drift			
79 P	trans-1,4-dichloro-2-bute	50.000	46.595	6.8	98	0.00	14.46
		AvgRF	CCRF	%Dev			
80 I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	100	0.00	16.07
81 P	isopropylbenzene	4.019	4.187	-4.2	103	0.00	14.68
82 S	bromofluorobenzene (s)	0.878	0.723	17.7	92	0.00	14.74
83 P	bromobenzene	0.992	0.970	2.2	98	0.00	14.97
84 P	1,1,2,2-tetrachloroethane	0.727	0.724	0.4	101	0.00	14.32
85 P	1,2,3-trichloropropane	0.842	0.819	2.7	98	0.00	14.47
86 P	n-propylbenzene	4.633	4.471	3.5	95	0.00	15.12
87 P	2-chlorotoluene	2.696	2.678	0.7	99	0.00	15.24
88 P	4-chlorotoluene	2.768	2.761	0.3	100	0.00	15.32
89 P	1,3,5-trimethylbenzene	3.726	3.604	3.3	96	0.00	15.40
90 P	tert-butylbenzene	1.904	1.897	0.4	98	0.00	15.71
91 P	1,2,4-trimethylbenzene	3.646	3.529	3.2	96	0.00	15.81
92 P	sec-butylbenzene	4.830	4.872	-0.9	100	0.00	15.93
93 P	1,3-dichlorobenzene	2.140	2.162	-1.0	100	0.00	16.04
94 P	p-isopropyltoluene	4.486	4.417	1.5	98	0.00	16.10
95 P	1,4-dichlorobenzene	2.209	2.188	1.0	99	0.00	16.10
96 P	1,2-dichlorobenzene	2.076	2.111	-1.7	102	0.00	16.47
97 P	n-butylbenzene	3.904	3.843	1.6	98	0.00	16.52
		Amount	Calc.	%Drift			
98 P	1,2-dibromo-3-chloropropa	50.000	48.423	3.2	96	0.00	16.95
		AvgRF	CCRF	%Dev			
99 P	1,3,5-trichlorobenzene	1.773	1.688	4.8	95	0.00	17.76
100 P	1,2,4-trichlorobenzene	1.649	1.654	-0.3	101	0.00	18.31
101 P	hexachlorobutadiene	0.842	0.819	2.7	97	0.00	18.60
102 P	naphthalene	3.940	4.001	-1.5	103	0.00	18.58
103 P	1,2,3-trichlorobenzene	1.518	1.536	-1.2	101	0.00	18.79
104 P	2-methylnaphthalene	2.447	2.578	-5.4	105	0.00	19.97
105 P	1-methylnaphthalene	7.075	7.005	1.0	101	0.00	20.23

6.7.2
6

Initial Calibration Verification

Job Number: MC32033
Account: EAENYS EA Engineering
Project: NFARS, Niagara Falls, NY

Sample: MSM2333-ICV2333
Lab FileID: M65798A.D

(#) = Out of Range SPCC's out = 3 CCC's out = 0
m65791A.D M140529D0DS.M Wed Jun 11 15:08:54 2014

Continuing Calibration Summary

Page 1 of 4

Job Number: MC32033
 Account: EAENYS EA Engineering
 Project: NFARS, Niagara Falls, NY

Sample: MSM2361-CC2333
 Lab FileID: M66790.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\M140715S\m66790.D Vial: 26
 Acq On : 15 Jul 2014 9:04 pm Operator: krystend
 Sample : cc2333-50 Inst : GCMS M
 Misc : MS32287,MSM2361,5,,,5,1 Multiplr: 1.00
 MS Integration Params: RTEINT.P

Method : C:\msdchem\1\methods\M140529D0DS.M (RTE Integrator)
 Title : SW-846 Method 8260
 Last Update : Wed Jun 11 13:34:57 2014
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	tert butyl alcohol-d9	1.000	1.000	0.0	62	0.00	6.86
2 P	tertiary butyl alcohol	1.765	1.885	-6.8	71	0.00	6.94
3 P	Ethanol	0.201	0.250	-24.4#	77	-0.03	5.67
4 I	pentafluorobenzene	1.000	1.000	0.0	70	0.00	9.35
5 P	dichlorodifluoromethane	50.000	75.892	-51.8#	93	0.00	4.44
	----- Amount Calc. %Drift -----						
	----- AvgRF CCRF %Dev -----						
6 P	chloromethane	1.009	1.325	-31.3#	86	0.00	4.70
7 P	vinyl chloride	0.805	0.964	-19.8	77	0.00	4.97
8 P	bromomethane	0.525	0.636	-21.1#	78	0.00	5.50
9 P	chloroethane	0.399	0.440	-10.3	72	0.00	5.66
10 P	ethyl ether	0.434	0.447	-3.0	73	0.00	6.57
	----- Amount Calc. %Drift -----						
11 P	acetonitrile	50.000	34.678	30.6#	47	-0.02	6.35
	----- AvgRF CCRF %Dev -----						
12 P	trichlorofluoromethane	1.037	1.117	-7.7	69	0.00	6.34
13 P	freon-113	0.737	0.776	-5.3	74	0.00	7.16
	----- Amount Calc. %Drift -----						
14 P	acrolein	250.000	305.441	-22.2#	68	0.00	6.32
15 P	1,1-dichloroethene	50.000	57.000	-14.0	72	0.00	6.93
	----- AvgRF CCRF %Dev -----						
16 P	acetone	0.107	0.081#	24.3#	62	0.00	6.47
17 P	Methyl Acetate	0.408	0.386	5.4	69	0.00	7.13
	----- Amount Calc. %Drift -----						
18 P	methylene chloride	50.000	59.335	-18.7	77	0.00	7.09
	----- AvgRF CCRF %Dev -----						
19 P	methyl tert butyl ether	1.439	1.444	-0.3	74	0.00	7.90
20 P	acrylonitrile	0.183	0.194	-6.0	79	0.00	7.00
	----- Amount Calc. %Drift -----						
21 P	allyl chloride	50.000	56.673	-13.3	72	0.00	7.19
22 P	trans-1,2-dichloroethene	50.000	58.259	-16.5	74	0.00	7.80

Continuing Calibration Summary

Job Number: MC32033
Account: EAENYS EA Engineering
Project: NFARS, Niagara Falls, NY

Sample: MSM2361-CC2333
Lab FileID: M66790.D

		AvgRF	CCRF	%Dev			
23 P	iodomethane	1.253	1.402	-11.9	78	0.00	6.99
24 P	carbon disulfide	2.072	2.100	-1.4	71	0.00	7.37
25 P	propionitrile	0.071	0.073	-2.8	68	-0.05	8.11
26 P	vinyl acetate	1.020	1.554	-52.4#	104	0.00	8.17
		Amount	Calc.	%Drift			
27 P	chloroprene	50.000	52.911	-5.8	69	0.00	8.44
		AvgRF	CCRF	%Dev			
28 P	di-isopropyl ether	2.396	2.710	-13.1	80	0.00	8.48
29 P	methacrylonitrile	0.305	0.315	-3.3	70	0.00	8.60
30 P	2-butanone	0.077	0.059#	23.4#	61	0.00	8.50
31 P	Hexane	1.276	1.202	5.8	66	0.00	8.46
32 P	1,1-dichloroethane	1.156	1.209	-4.6	73	0.00	8.06
33 P	tert-butyl ethyl ether	1.903	2.014	-5.8	75	0.00	8.88
		Amount	Calc.	%Drift			
34 P	isobutyl alcohol	250.000	243.151	2.7	69	0.00	8.88
		AvgRF	CCRF	%Dev			
35 P	2,2-dichloropropane	0.935	0.949	-1.5	70	0.00	8.94
36 P	cis-1,2-dichloroethene	0.660	0.732	-10.9	79	0.00	8.65
		Amount	Calc.	%Drift			
37 P	ethyl acetate	50.000	48.638	2.7	69	0.00	8.88
		AvgRF	CCRF	%Dev			
38 P	bromochloromethane	0.346	0.387	-11.8	82	0.00	8.82
39 P	chloroform	1.009	1.090	-8.0	76	0.00	8.86
40 S	dibromofluoromethane (s)	0.506	0.430	15.0	69	0.00	8.98
41 P	Tetrahydrofuran	0.173	0.183	-5.8	79	0.00	9.19
42 P	1,1,1-trichloroethane	1.068	1.119	-4.8	75	0.00	9.62
43 I	1,4-difluorobenzene	1.000	1.000	0.0	73	0.00	10.23
44 P	Cyclohexane	0.911	0.919	-0.9	74	0.00	9.91
45 P	carbon tetrachloride	0.672	0.684	-1.8	74	0.00	10.00
46 P	1,1-dichloropropene	0.526	0.517	1.7	72	0.00	9.80
		Amount	Calc.	%Drift			
47 P	benzene	50.000	55.271	-10.5	76	0.00	10.03
		AvgRF	CCRF	%Dev			
48 P	1,2-dichloroethane	0.435	0.433	0.5	72	0.00	9.52
49 P	tert-amyl methyl ether	0.910	0.945	-3.8	74	0.00	10.14
50 P	heptane	0.893	0.834	6.6	68	0.00	10.51
51 P	trichloroethene	0.450	0.441	2.0	75	0.00	10.66
52 P	1,2-dichloropropane	0.413	0.431	-4.4	78	0.00	10.62
		Amount	Calc.	%Drift			
53 P	dibromomethane	50.000	54.051	-8.1	77	0.00	10.59
		AvgRF	CCRF	%Dev			
54 P	bromodichloromethane	0.457	0.476	-4.2	78	0.00	10.71
55 P	Methylcyclohexane	0.772	0.765	0.9	71	0.00	11.17
56 P	2-chloroethyl vinyl ether	0.145	0.117	19.3	57	0.00	11.09
57 P	methyl methacrylate	0.187	0.173	7.5	74	0.00	10.80
58 P	1,4-dioxane	0.004	0.003#	25.0#	72	0.00	10.80
59 P	cis-1,3-dichloropropene	0.544	0.547	-0.6	74	0.00	11.33

Continuing Calibration Summary

Job Number: MC32033
Account: EAENYS EA Engineering
Project: NFARS, Niagara Falls, NY

Sample: MSM2361-CC2333
Lab FileID: M66790.D

		Amount	Calc.	%Drift			
60 S	toluene-d8 (s)	55.000	59.100	-7.5	76	0.00	12.04
		AvgRF	CCRF	%Dev			
61 P	4-methyl-2-pentanone	0.382	0.388	-1.6	78	0.00	11.42
62 P	toluene	0.950	0.987	-3.9	78	0.00	12.11
63 P	trans-1,3-dichloropropene	0.439	0.432	1.6	74	0.00	11.75
64 P	1,1,2-trichloroethane	0.229	0.235	-2.6	79	0.00	11.93
65 P	ethyl methacrylate	0.380	0.377	0.8	74	0.00	12.12
66 I	chlorobenzene-d5	1.000	1.000	0.0	77	0.00	13.50
67 P	tetrachloroethene	1.105	1.103	0.2	77	0.00	12.86
68 P	1,3-dichloropropane	1.032	1.028	0.4	77	0.00	12.16
69 P	dibromochloromethane	0.935	1.012	-8.2	84	0.00	12.46
70 P	1,2-dibromoethane	0.724	0.726	-0.3	79	0.00	12.71
71 P	2-hexanone	0.796	0.658	17.3	65	0.00	12.29
72 P	chlorobenzene	2.775	2.893	-4.3	80	0.00	13.54
73 P	1,1,1,2-tetrachloroethane	1.116	1.208	-8.2	81	0.00	13.46
74 P	ethylbenzene	4.554	4.623	-1.5	77	0.00	13.71
75 P	m,p-xylene	1.870	1.888	-1.0	77	0.00	13.90
76 P	o-xylene	1.871	1.945	-4.0	79	0.00	14.31
77 P	styrene	3.048	3.077	-1.0	78	0.00	14.24
78 P	bromoform	0.585	0.649	-10.9	85	0.00	14.07
		Amount	Calc.	%Drift			
79 P	trans-1,4-dichloro-2-bute	50.000	44.283	11.4	69	0.00	14.46
		AvgRF	CCRF	%Dev			
80 I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	79	0.00	16.07
81 P	isopropylbenzene	4.019	4.021	-0.0	78	0.00	14.68
82 S	bromofluorobenzene (s)	0.878	0.684	22.1#	69	0.00	14.74
83 P	bromobenzene	0.992	1.001	-0.9	80	0.00	14.97
84 P	1,1,2,2-tetrachloroethane	0.727	0.715	1.7	79	0.00	14.32
85 P	1,2,3-trichloropropane	0.842	0.785	6.8	75	0.00	14.47
86 P	n-propylbenzene	4.633	4.416	4.7	74	0.00	15.12
87 P	2-chlorotoluene	2.696	2.575	4.5	75	0.00	15.24
88 P	4-chlorotoluene	2.768	2.612	5.6	75	0.00	15.32
89 P	1,3,5-trimethylbenzene	3.726	3.629	2.6	77	0.00	15.40
90 P	tert-butylbenzene	1.904	1.800	5.5	73	0.00	15.70
91 P	1,2,4-trimethylbenzene	3.646	3.521	3.4	76	0.00	15.81
92 P	sec-butylbenzene	4.830	4.788	0.9	77	0.00	15.92
93 P	1,3-dichlorobenzene	2.140	2.130	0.5	78	0.00	16.03
94 P	p-isopropyltoluene	4.486	4.315	3.8	76	0.00	16.10
95 P	1,4-dichlorobenzene	2.209	2.171	1.7	78	0.00	16.10
96 P	1,2-dichlorobenzene	2.076	2.119	-2.1	81	0.00	16.47
97 P	n-butylbenzene	3.904	3.598	7.8	72	0.00	16.52
		Amount	Calc.	%Drift			
98 P	1,2-dibromo-3-chloropropa	50.000	44.707	10.6	69	0.00	16.95
		AvgRF	CCRF	%Dev			
99 P	1,3,5-trichlorobenzene	1.773	1.630	8.1	73	0.00	17.76
100 P	1,2,4-trichlorobenzene	1.649	1.509	8.5	73	0.00	18.30
101 P	hexachlorobutadiene	0.842	0.768	8.8	72	0.00	18.60
102 P	naphthalene	3.940	3.894	1.2	79	0.00	18.58
103 P	1,2,3-trichlorobenzene	1.518	1.452	4.3	76	0.00	18.79
104 P	2-methylnaphthalene	2.447	2.268	7.3	73	0.00	19.97
105 P	1-methylnaphthalene	7.075	6.476	8.5	74	0.00	20.23

Continuing Calibration Summary

Page 4 of 4

Job Number: MC32033
Account: EAENYS EA Engineering
Project: NFARS, Niagara Falls, NY

Sample: MSM2361-CC2333
Lab FileID: M66790.D

(#) = Out of Range
m65791A.D M140529D0DS.M

SPCC's out = 3 CCC's out = 0
Wed Jul 16 12:41:10 2014

6.7.3

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Continuing Calibration Summary

Page 1 of 4

Job Number: MC32033
 Account: EAENYS EA Engineering
 Project: NFARS, Niagara Falls, NY

Sample: MSM2361-ECC2333
 Lab FileID: M66814.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\M140715S\m66814.D Vial: 50
 Acq On : 16 Jul 2014 8:51 am Operator: krystend
 Sample : ecc2333-50 Inst : GCMS M
 Misc : MS32289,MSM2361,5,,,5,1 Multiplr: 1.00
 MS Integration Params: RTEINT.P

Method : C:\msdchem\1\methods\M140529D0DS.M (RTE Integrator)
 Title : SW-846 Method 8260
 Last Update : Wed Jun 11 13:34:57 2014
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	tert butyl alcohol-d9	1.000	1.000	0.0	63	0.00	6.86
2 P	tertiary butyl alcohol	1.765	1.914	-8.4	74	0.00	6.94
3 P	Ethanol	0.201	0.259	-28.9#	81	-0.03	5.68
4 I	pentafluorobenzene	1.000	1.000	0.0	70	0.00	9.35
----- Amount Calc. %Drift -----							
5 P	dichlorodifluoromethane	50.000	67.357	-34.7#	83	0.00	4.44
----- AvgRF CCRF %Dev -----							
6 P	chloromethane	1.009	1.221	-21.0#	79	0.00	4.70
7 P	vinyl chloride	0.805	0.879	-9.2	70	0.00	4.97
8 P	bromomethane	0.525	0.558	-6.3	69	0.00	5.50
9 P	chloroethane	0.399	0.384	3.8	63	0.00	5.67
10 P	ethyl ether	0.434	0.476	-9.7	78	0.00	6.57
----- Amount Calc. %Drift -----							
11 P	acetonitrile	50.000	36.068	27.9#	48	-0.03	6.34
----- AvgRF CCRF %Dev -----							
12 P	trichlorofluoromethane	1.037	1.000	3.6	62	0.00	6.33
13 P	freon-113	0.737	0.805	-9.2	77	0.00	7.16
----- Amount Calc. %Drift -----							
14 P	acrolein	250.000	258.294	-3.3	58	0.00	6.32
15 P	1,1-dichloroethene	50.000	59.385	-18.8	76	0.00	6.93
----- AvgRF CCRF %Dev -----							
16 P	acetone	0.107	0.050#	53.3#	38#	0.01	6.49
17 P	Methyl Acetate	0.408	0.455	-11.5	81	0.00	7.13
----- Amount Calc. %Drift -----							
18 P	methylene chloride	50.000	62.175	-24.3#	80	0.00	7.09
----- AvgRF CCRF %Dev -----							
19 P	methyl tert butyl ether	1.439	1.498	-4.1	77	0.00	7.90
20 P	acrylonitrile	0.183	0.201	-9.8	82	0.00	7.00
----- Amount Calc. %Drift -----							
21 P	allyl chloride	50.000	61.381	-22.8#	78	0.00	7.19
22 P	trans-1,2-dichloroethene	50.000	60.861	-21.7#	78	0.00	7.81

6.7.4

6

Continuing Calibration Summary

Job Number: MC32033
Account: EAENYS EA Engineering
Project: NFARS, Niagara Falls, NY

Sample: MSM2361-ECC2333
Lab FileID: M66814.D

		AvgRF	CCRF	%Dev			
23 P	iodomethane	1.253	1.455	-16.1	81	0.00	6.99
24 P	carbon disulfide	2.072	2.165	-4.5	73	0.00	7.38
25 P	propionitrile	0.071	0.077	-8.5	71	0.00	8.16
26 P	vinyl acetate	1.020	1.440	-41.2#	97	0.00	8.17
		Amount	Calc.	%Drift			
27 P	chloroprene	50.000	56.632	-13.3	74	0.00	8.44
		AvgRF	CCRF	%Dev			
28 P	di-isopropyl ether	2.396	2.934	-22.5#	87	0.00	8.48
29 P	methacrylonitrile	0.305	0.349	-14.4	78	0.00	8.60
30 P	2-butanone	0.077	0.049#	36.4#	51	0.00	8.51
31 P	Hexane	1.276	1.303	-2.1	72	0.00	8.46
32 P	1,1-dichloroethane	1.156	1.284	-11.1	78	0.00	8.06
33 P	tert-butyl ethyl ether	1.903	2.131	-12.0	79	0.00	8.88
		Amount	Calc.	%Drift			
34 P	isobutyl alcohol	250.000	274.617	-9.8	77	0.00	8.88
		AvgRF	CCRF	%Dev			
35 P	2,2-dichloropropane	0.935	0.924	1.2	68	0.00	8.94
36 P	cis-1,2-dichloroethene	0.660	0.758	-14.8	82	0.00	8.65
		Amount	Calc.	%Drift			
37 P	ethyl acetate	50.000	54.893	-9.8	77	0.00	8.88
		AvgRF	CCRF	%Dev			
38 P	bromochloromethane	0.346	0.401	-15.9	85	0.00	8.82
39 P	chloroform	1.009	1.151	-14.1	80	0.00	8.86
40 S	dibromofluoromethane (s)	0.506	0.433	14.4	70	0.00	8.98
41 P	Tetrahydrofuran	0.173	0.194	-12.1	84	0.00	9.19
42 P	1,1,1-trichloroethane	1.068	1.168	-9.4	78	0.00	9.62
43 I	1,4-difluorobenzene	1.000	1.000	0.0	74	0.00	10.23
44 P	Cyclohexane	0.911	0.941	-3.3	77	0.00	9.91
45 P	carbon tetrachloride	0.672	0.707	-5.2	78	0.00	10.00
46 P	1,1-dichloropropene	0.526	0.520	1.1	73	0.00	9.80
		Amount	Calc.	%Drift			
47 P	benzene	50.000	56.908	-13.8	79	0.00	10.03
		AvgRF	CCRF	%Dev			
48 P	1,2-dichloroethane	0.435	0.458	-5.3	77	0.00	9.52
49 P	tert-amyl methyl ether	0.910	0.965	-6.0	77	0.00	10.14
50 P	heptane	0.893	0.872	2.4	72	0.00	10.51
51 P	trichloroethene	0.450	0.451	-0.2	78	0.00	10.66
52 P	1,2-dichloropropane	0.413	0.451	-9.2	83	0.00	10.62
		Amount	Calc.	%Drift			
53 P	dibromomethane	50.000	56.083	-12.2	81	0.00	10.59
		AvgRF	CCRF	%Dev			
54 P	bromodichloromethane	0.457	0.497	-8.8	83	0.00	10.71
55 P	Methylcyclohexane	0.772	0.775	-0.4	73	0.00	11.18
56 P	2-chloroethyl vinyl ether	0.145	0.102	29.7#	50#	0.00	11.09
57 P	methyl methacrylate	0.187	0.178	4.8	77	0.00	10.80
58 P	1,4-dioxane	0.004	0.003#	25.0#	76	0.00	10.80
59 P	cis-1,3-dichloropropene	0.544	0.543	0.2	75	0.00	11.33

Continuing Calibration Summary

Job Number: MC32033
Account: EAENYS EA Engineering
Project: NFARS, Niagara Falls, NY

Sample: MSM2361-ECC2333
Lab FileID: M66814.D

		Amount	Calc.	%Drift			
60 S	toluene-d8 (s)	55.000	58.699	-6.7	77	0.00	12.04
		AvgRF	CCRF	%Dev			
61 P	4-methyl-2-pentanone	0.382	0.418	-9.4	85	0.00	11.42
62 P	toluene	0.950	1.006	-5.9	81	0.00	12.11
63 P	trans-1,3-dichloropropene	0.439	0.420	4.3	72	0.00	11.75
64 P	1,1,2-trichloroethane	0.229	0.247	-7.9	84	0.00	11.93
65 P	ethyl methacrylate	0.380	0.382	-0.5	76	0.00	12.12
66 I	chlorobenzene-d5	1.000	1.000	0.0	78	0.00	13.51
67 P	tetrachloroethene	1.105	1.081	2.2	77	0.00	12.86
68 P	1,3-dichloropropane	1.032	1.068	-3.5	81	0.00	12.16
69 P	dibromochloromethane	0.935	1.036	-10.8	87	0.00	12.46
70 P	1,2-dibromoethane	0.724	0.751	-3.7	84	0.00	12.71
71 P	2-hexanone	0.796	0.606	23.9#	61	0.00	12.29
72 P	chlorobenzene	2.775	2.864	-3.2	81	0.00	13.54
73 P	1,1,1,2-tetrachloroethane	1.116	1.259	-12.8	86	0.00	13.46
74 P	ethylbenzene	4.554	4.582	-0.6	78	0.00	13.71
75 P	m,p-xylene	1.870	1.882	-0.6	78	0.00	13.90
76 P	o-xylene	1.871	1.950	-4.2	80	0.00	14.31
77 P	styrene	3.048	3.034	0.5	78	0.00	14.24
78 P	bromoform	0.585	0.653	-11.6	87	0.00	14.07
		Amount	Calc.	%Drift			
79 P	trans-1,4-dichloro-2-bute	50.000	41.523	17.0	66	0.00	14.46
		AvgRF	CCRF	%Dev			
80 I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	80	0.00	16.07
81 P	isopropylbenzene	4.019	4.027	-0.2	78	0.00	14.68
82 S	bromofluorobenzene (s)	0.878	0.684	22.1#	69	0.00	14.74
83 P	bromobenzene	0.992	1.003	-1.1	81	0.00	14.97
84 P	1,1,2,2-tetrachloroethane	0.727	0.752	-3.4	84	0.00	14.32
85 P	1,2,3-trichloropropane	0.842	0.782	7.1	75	0.00	14.47
86 P	n-propylbenzene	4.633	4.306	7.1	73	0.00	15.12
87 P	2-chlorotoluene	2.696	2.556	5.2	75	0.00	15.24
88 P	4-chlorotoluene	2.768	2.512	9.2	72	0.00	15.32
89 P	1,3,5-trimethylbenzene	3.726	3.511	5.8	75	0.00	15.40
90 P	tert-butylbenzene	1.904	1.824	4.2	75	0.00	15.71
91 P	1,2,4-trimethylbenzene	3.646	3.419	6.2	74	0.00	15.81
92 P	sec-butylbenzene	4.830	4.689	2.9	76	0.00	15.93
93 P	1,3-dichlorobenzene	2.140	2.020	5.6	75	0.00	16.03
94 P	p-isopropyltoluene	4.486	4.080	9.1	72	0.00	16.10
95 P	1,4-dichlorobenzene	2.209	2.040	7.7	74	0.00	16.10
96 P	1,2-dichlorobenzene	2.076	2.058	0.9	79	0.00	16.47
97 P	n-butylbenzene	3.904	3.285	15.9	66	0.00	16.52
		Amount	Calc.	%Drift			
98 P	1,2-dibromo-3-chloropropa	50.000	47.939	4.1	75	0.00	16.95
		AvgRF	CCRF	%Dev			
99 P	1,3,5-trichlorobenzene	1.773	1.348	24.0#	60	0.00	17.76
100 P	1,2,4-trichlorobenzene	1.649	1.253	24.0#	61	0.00	18.31
101 P	hexachlorobutadiene	0.842	0.708	15.9	67	0.00	18.60
102 P	naphthalene	3.940	3.801	3.5	78	0.00	18.58
103 P	1,2,3-trichlorobenzene	1.518	1.297	14.6	68	0.00	18.79
104 P	2-methylnaphthalene	2.447	2.038	16.7	66	0.00	19.97
105 P	1-methylnaphthalene	7.075	6.415	9.3	74	0.00	20.23

Continuing Calibration Summary

Job Number: MC32033
Account: EAENYS EA Engineering
Project: NFARS, Niagara Falls, NY

Sample: MSM2361-ECC2333
Lab FileID: M66814.D

(#) = Out of Range SPCC's out = 3 CCC's out = 0
m65791A.D M140529D0DS.M Wed Jul 16 12:44:05 2014

GC/MS Volatiles

Raw Data

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\M140715S\
 Data File : m66806.D
 Acq On : 16 Jul 2014 4:56 am
 Operator : krystend
 Sample : mc32033-1
 Misc : MS32289,MSM2361,5.995,,,5,1
 ALS Vial : 42 Sample Multiplier: 1

Quant Time: Jul 16 09:35:03 2014
 Quant Method : C:\msdchem\1\methods\M140529D0DS.M
 Quant Title : SW-846 Method 8260
 QLast Update : Wed Jun 11 13:34:57 2014
 Response via : Initial Calibration

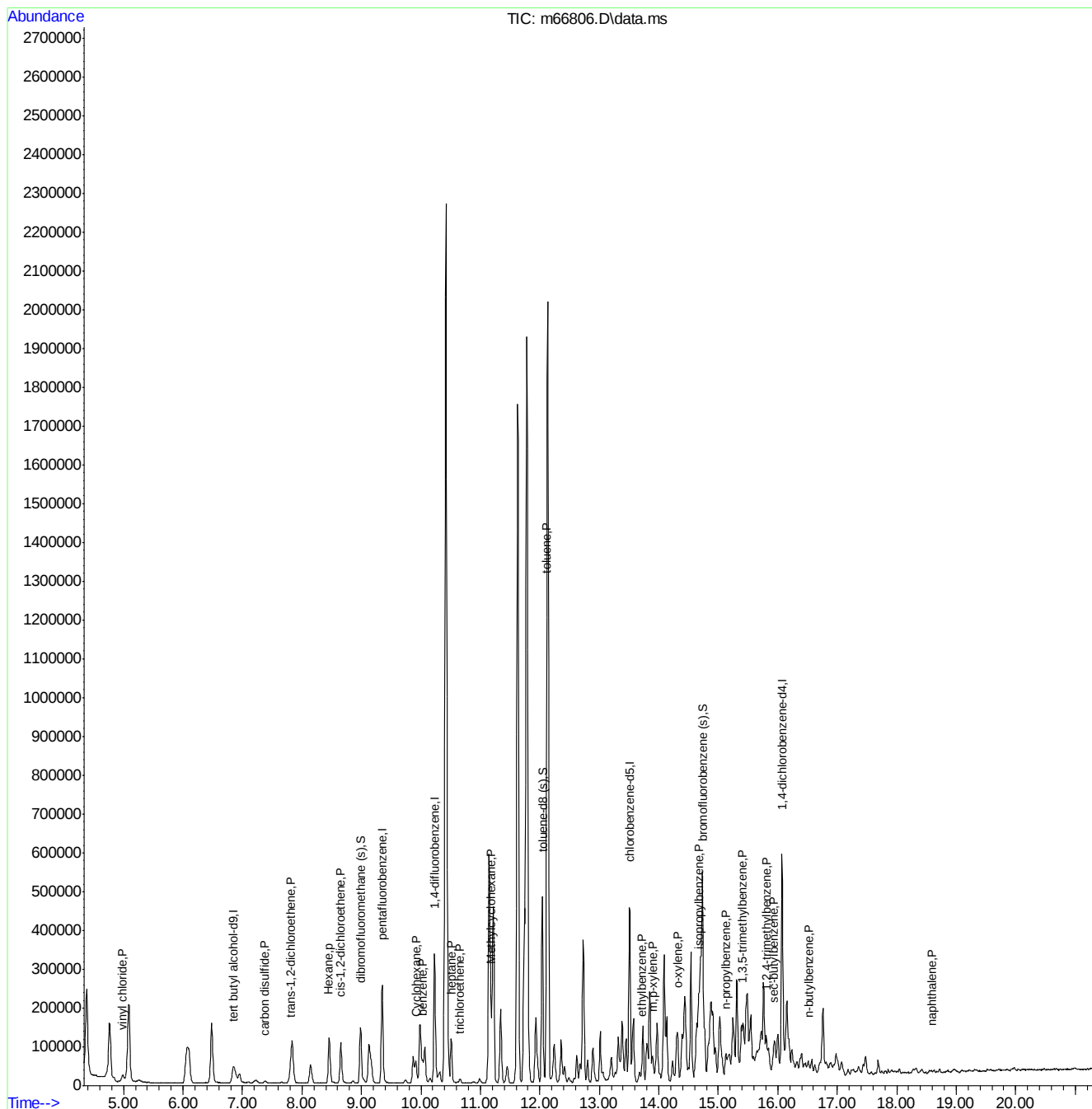
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	6.850	65	111834	500.00	ug/kg	0.00
4) pentafluorobenzene	9.349	168	198617	50.00	ug/kg	0.00
43) 1,4-difluorobenzene	10.231	114	325583	50.00	ug/kg	0.00
66) chlorobenzene-d5	13.505	82	140408	50.00	ug/kg	0.00
80) 1,4-dichlorobenzene-d4	16.072	152	171077	50.00	ug/kg	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	8.985	113	105143	52.30	ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	104.60%		
60) toluene-d8 (s)	12.043	98	365112	59.64	ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	119.28%		
82) bromofluorobenzene (s)	14.738	95	138893	46.25	ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	92.50%		
Target Compounds						
						Qvalue
7) vinyl chloride	4.984	62	26910	8.41	ug/kg	99
22) trans-1,2-dichloroethene	7.806	96	6175	1.41	ug/kg	90
24) carbon disulfide	7.375	76	9607	1.17	ug/kg	86
31) Hexane	8.453	41	52584	10.38	ug/kg#	64
36) cis-1,2-dichloroethene	8.655	96	54277	20.70	ug/kg	97
44) Cyclohexane	9.915	56	42397	7.15	ug/kg	94
47) benzene	10.029	78	45724	4.71	ug/kg	100
50) heptane	10.507	43	61709	10.62	ug/kg	95
51) trichloroethene	10.656	95	3949	1.35	ug/kg	89
55) Methylcyclohexane	11.181	83	65808	13.09	ug/kg	93
62) toluene	12.117	92	39904	6.45	ug/kg	91
74) ethylbenzene	13.714	91	11908	0.93	ug/kg	99
75) m,p-xylene	13.896	106	24609	4.69	ug/kg	93
76) o-xylene	14.313	106	8171	1.56	ug/kg	94
81) isopropylbenzene	14.671	105	3987	0.29	ug/kg	78
86) n-propylbenzene	15.129	91	5690	0.36	ug/kg	88
89) 1,3,5-trimethylbenzene	15.398	105	12222	0.96	ug/kg	95
91) 1,2,4-trimethylbenzene	15.809	105	27856	2.23	ug/kg	97
92) sec-butylbenzene	15.930	105	10757	0.65	ug/kg	96
97) n-butylbenzene	16.516	91	6964	0.52	ug/kg#	13
102) naphthalene	18.584	128	4207	0.31	ug/kg	100

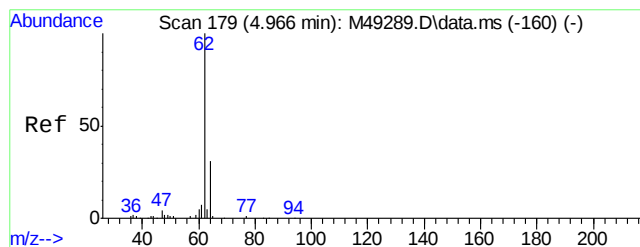
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\M140715S\
Data File : m66806.D
Acq On : 16 Jul 2014 4:56 am
Operator : krystend
Sample : mc32033-1
Misc : MS32289,MSM2361,5.995,,,5,1
ALS Vial : 42 Sample Multiplier: 1

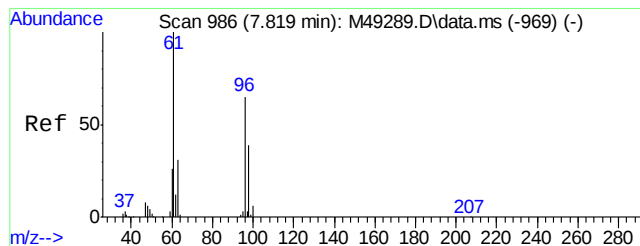
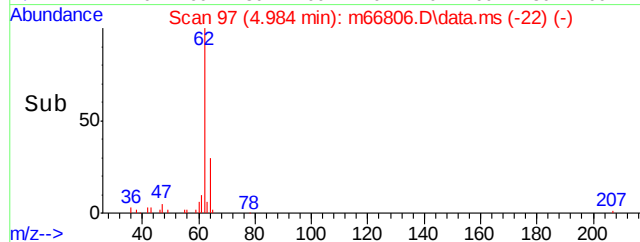
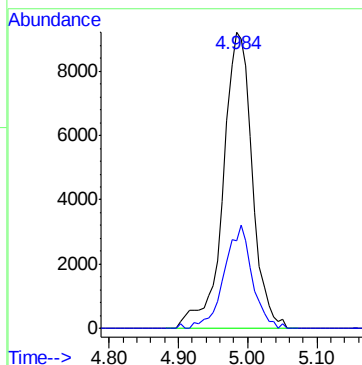
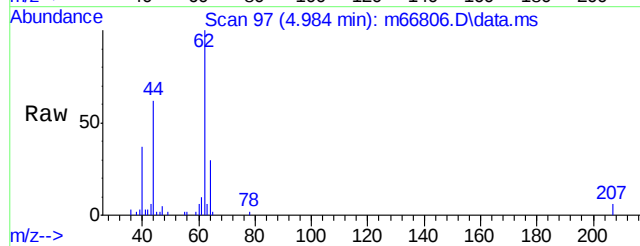
Quant Time: Jul 16 09:35:03 2014
Quant Method : C:\msdchem\1\methods\M140529D0DS.M
Quant Title : SW-846 Method 8260
QLast Update : Wed Jun 11 13:34:57 2014
Response via : Initial Calibration





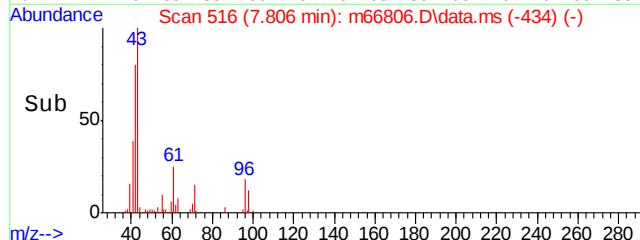
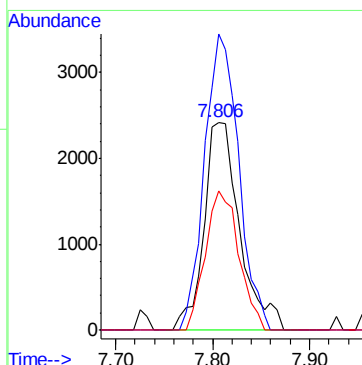
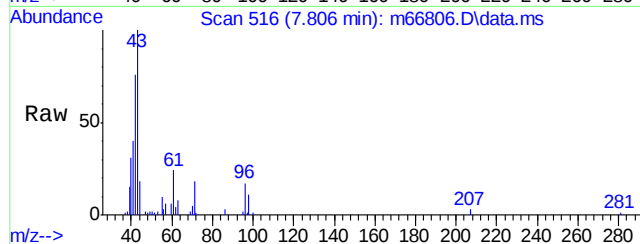
#7
vinyl chloride
Concen: 8.41 ug/kg
RT: 4.984 min Scan# 97
Delta R.T. 0.007 min
Lab File: m66806.D
Acq: 16 Jul 2014 4:56 am

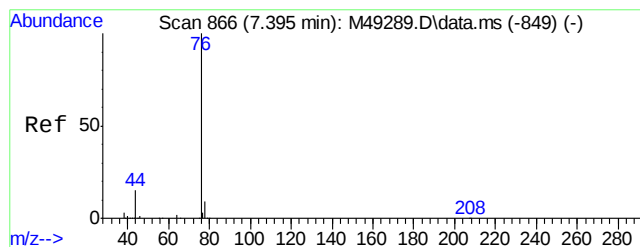
Tgt Ion	Ratio	Lower	Upper
62	100		
64	29.6	0.4	60.4



#22
trans-1,2-dichloroethene
Concen: 1.41 ug/kg
RT: 7.806 min Scan# 516
Delta R.T. 0.000 min
Lab File: m66806.D
Acq: 16 Jul 2014 4:56 am

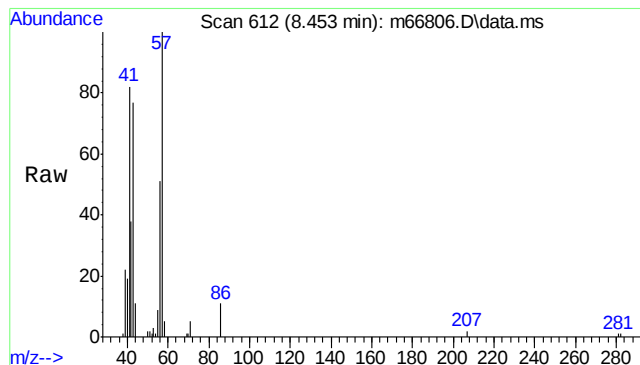
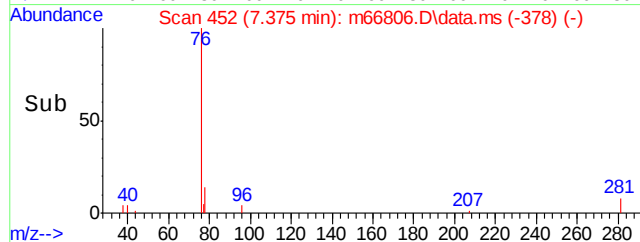
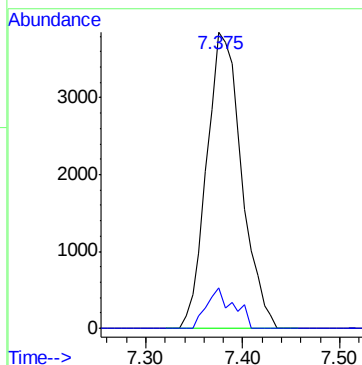
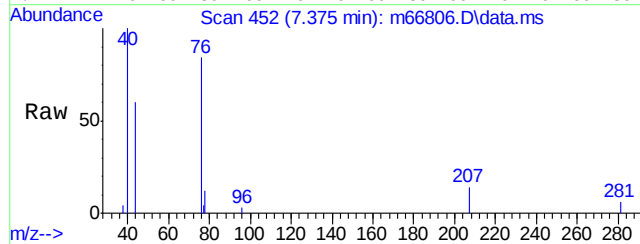
Tgt Ion	Ratio	Lower	Upper
96	100		
61	142.3	127.6	187.6
98	66.7	32.3	92.3





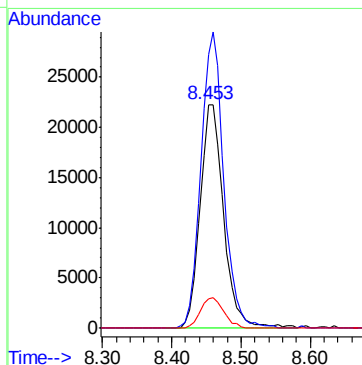
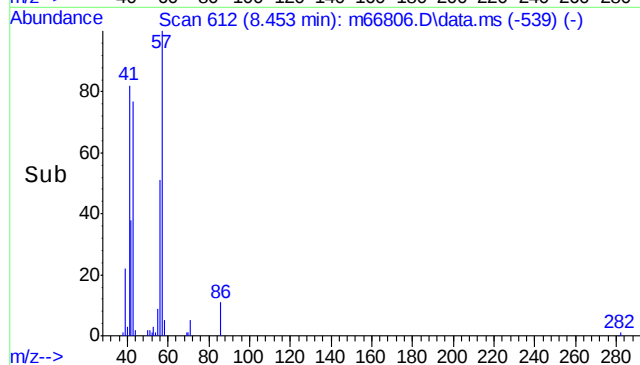
#24
carbon disulfide
Concen: 1.17 ug/kg
RT: 7.375 min Scan# 452
Delta R.T. 0.000 min
Lab File: m66806.D
Acq: 16 Jul 2014 4:56 am

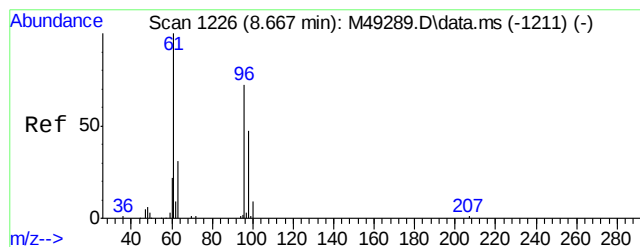
Tgt Ion:	76	Resp:	9607
Ion Ratio	Lower	Upper	
76	100		
78	13.7	0.0	38.8



#31
Hexane
Concen: 10.38 ug/kg
RT: 8.453 min Scan# 612
Delta R.T. -0.006 min
Lab File: m66806.D
Acq: 16 Jul 2014 4:56 am

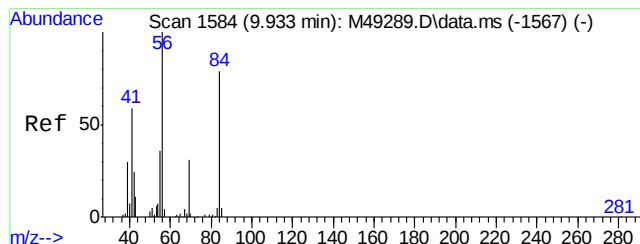
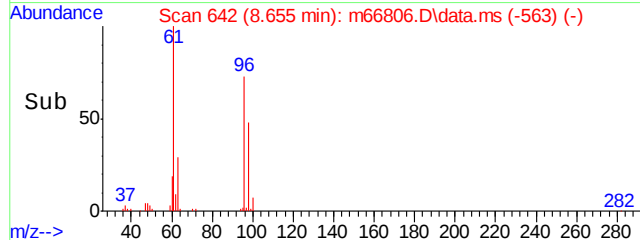
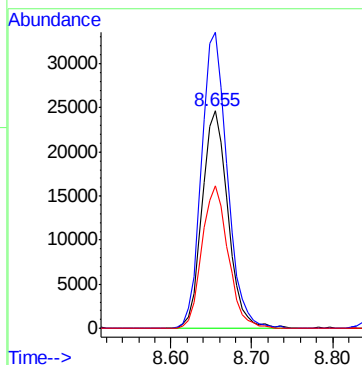
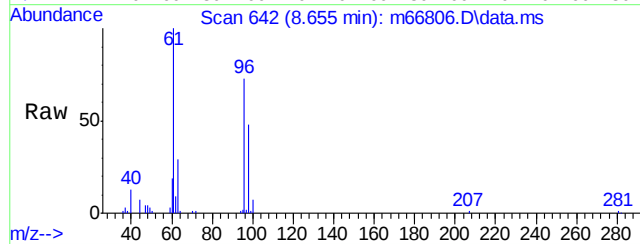
Tgt Ion:	41	Resp:	52584
Ion Ratio	Lower	Upper	
41	100		
57	127.9	72.9	109.3#
86	13.4	8.5	12.7#





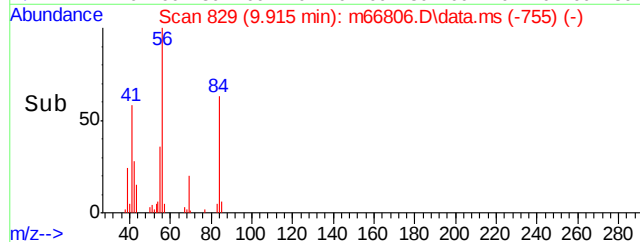
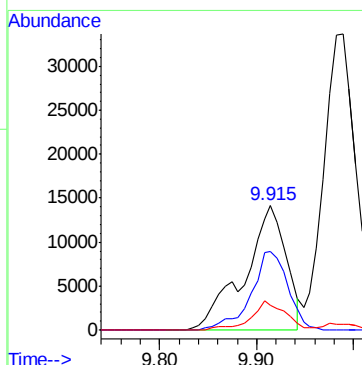
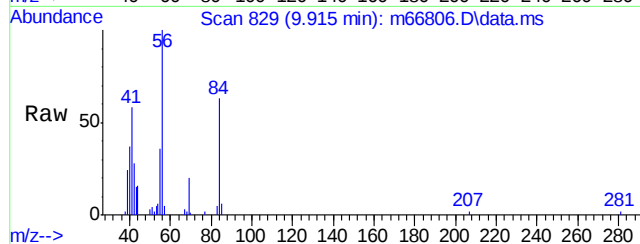
#36
cis-1,2-dichloroethene
Concen: 20.70 ug/kg
RT: 8.655 min Scan# 642
Delta R.T. -0.000 min
Lab File: m66806.D
Acq: 16 Jul 2014 4:56 am

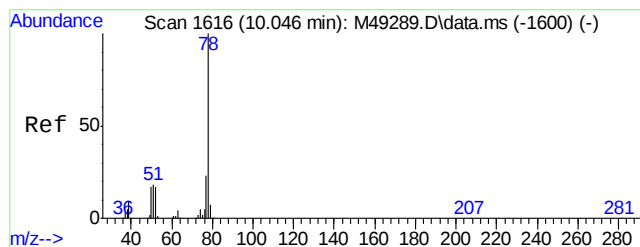
Tgt Ion	Ratio	Lower	Upper
96	100		
61	136.4	111.6	171.6
98	65.6	35.5	95.5



#44
Cyclohexane
Concen: 7.15 ug/kg
RT: 9.915 min Scan# 829
Delta R.T. 0.001 min
Lab File: m66806.D
Acq: 16 Jul 2014 4:56 am

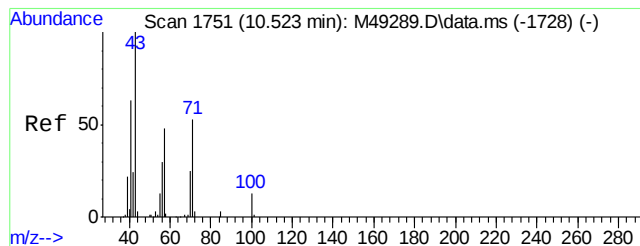
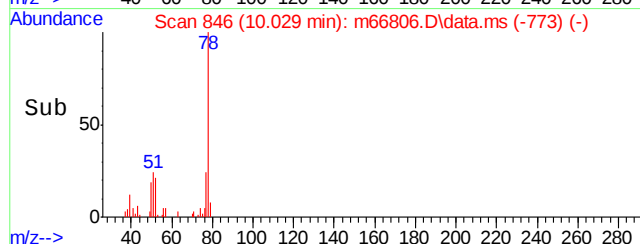
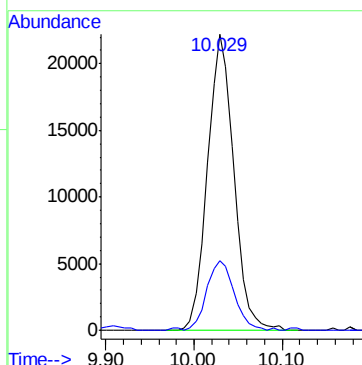
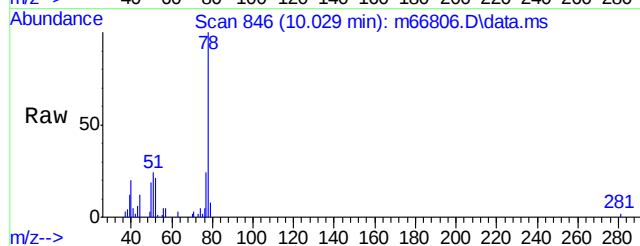
Tgt Ion	Ratio	Lower	Upper
56	100		
84	63.2	47.2	87.2
69	19.6	3.6	43.6





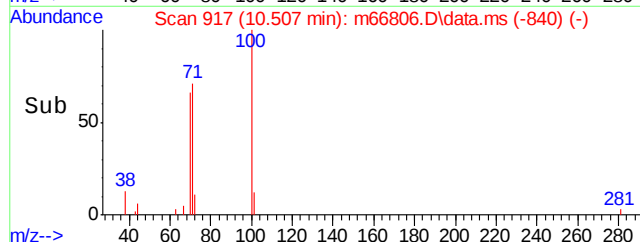
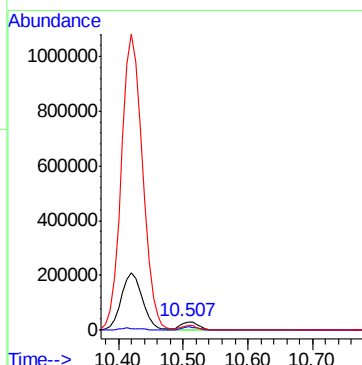
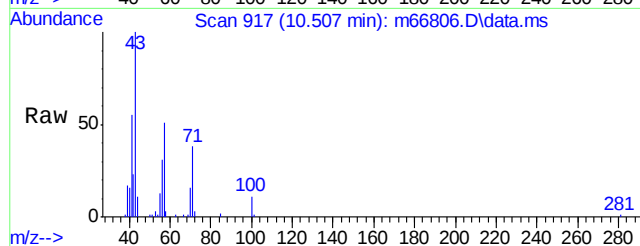
#47
benzene
Concen: 4.71 ug/kg
RT: 10.029 min Scan# 846
Delta R.T. 0.000 min
Lab File: m66806.D
Acq: 16 Jul 2014 4:56 am

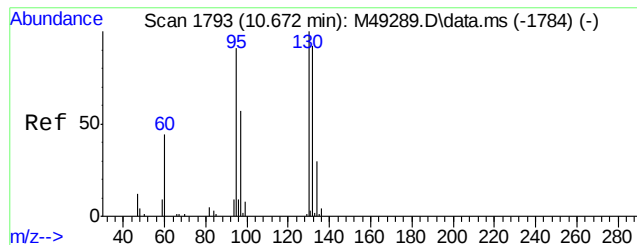
Tgt Ion: 78 Resp: 45724
Ion Ratio Lower Upper
78 100
77 23.6 0.0 53.5



#50
heptane
Concen: 10.62 ug/kg
RT: 10.507 min Scan# 917
Delta R.T. 0.000 min
Lab File: m66806.D
Acq: 16 Jul 2014 4:56 am

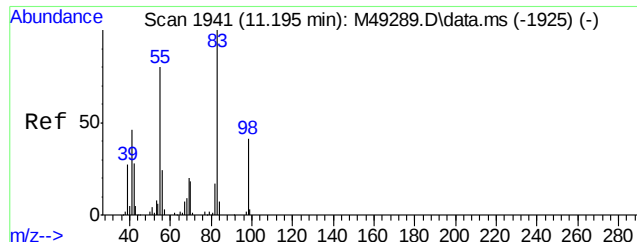
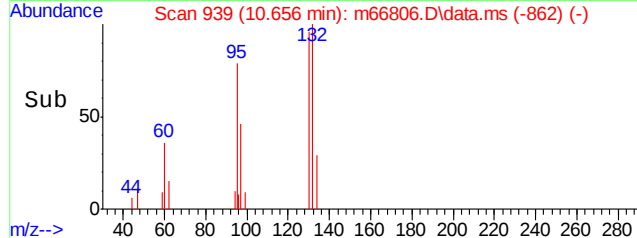
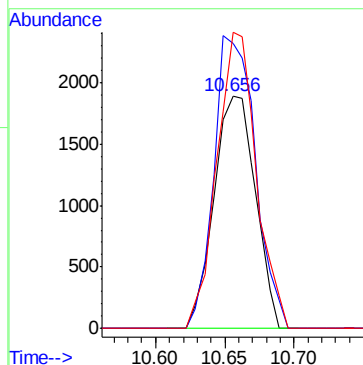
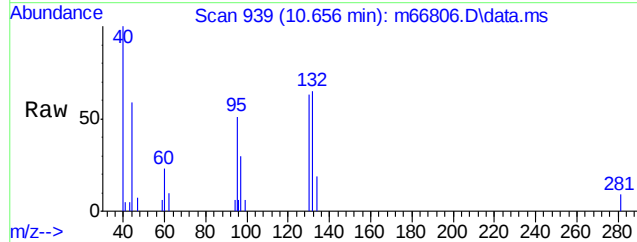
Tgt Ion: 43 Resp: 61709
Ion Ratio Lower Upper
43 100
71 37.9 11.3 71.3
57 50.5 17.8 77.8





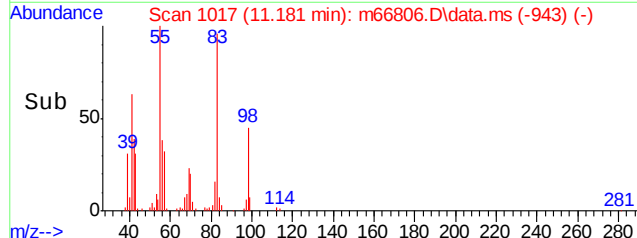
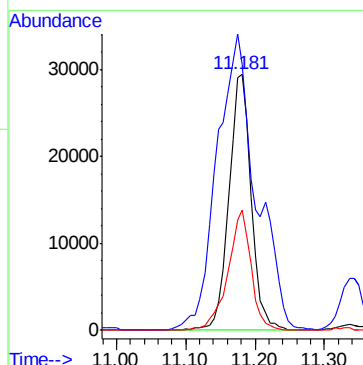
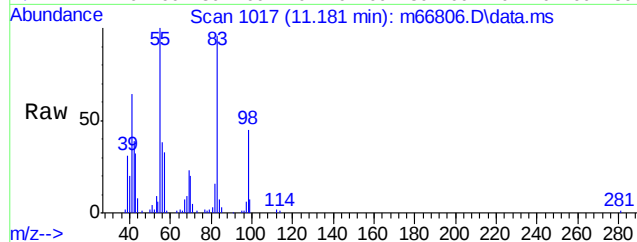
#51
trichloroethene
Concen: 1.35 ug/kg
RT: 10.656 min Scan# 939
Delta R.T. 0.001 min
Lab File: m66806.D
Acq: 16 Jul 2014 4:56 am

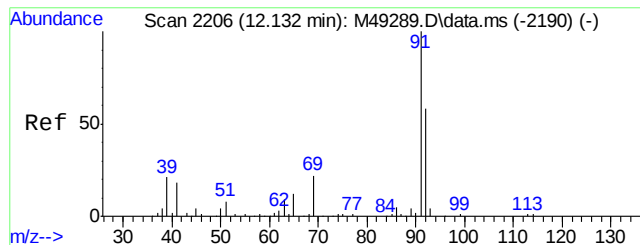
Tgt Ion	Ratio	Lower	Upper
95	100		
130	122.6	84.0	144.0
132	127.4	81.4	141.4



#55
Methylcyclohexane
Concen: 13.09 ug/kg
RT: 11.181 min Scan# 1017
Delta R.T. 0.000 min
Lab File: m66806.D
Acq: 16 Jul 2014 4:56 am

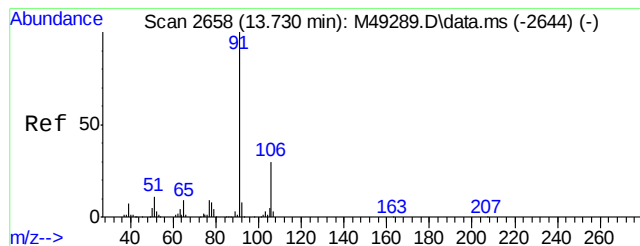
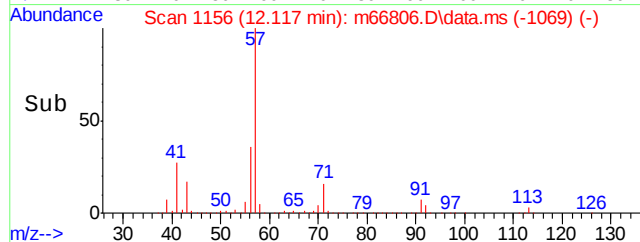
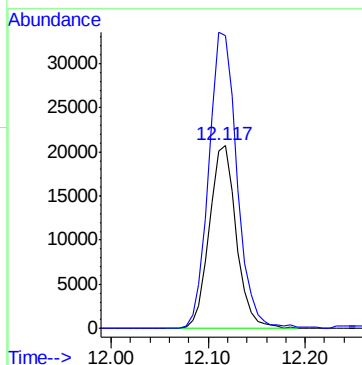
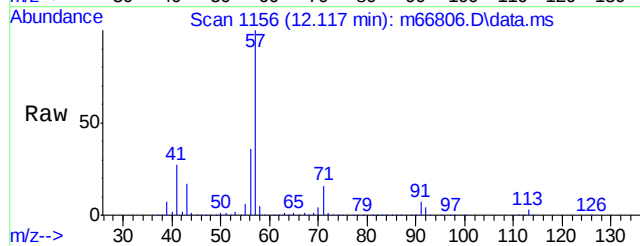
Tgt Ion	Ratio	Lower	Upper
83	100		
55	103.8	75.2	115.2
98	46.9	24.6	64.6





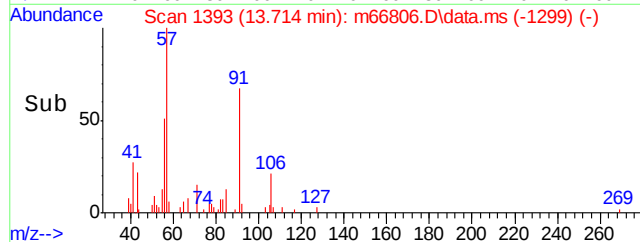
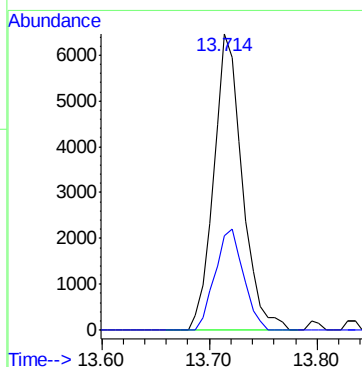
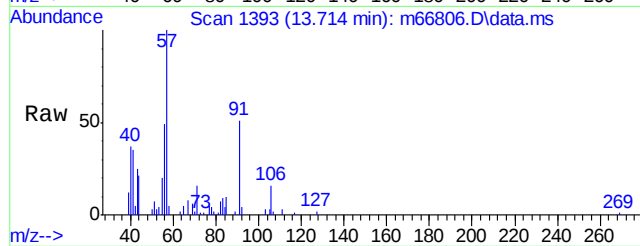
#62
toluene
Concen: 6.45 ug/kg
RT: 12.117 min Scan# 1156
Delta R.T. 0.006 min
Lab File: m66806.D
Acq: 16 Jul 2014 4:56 am

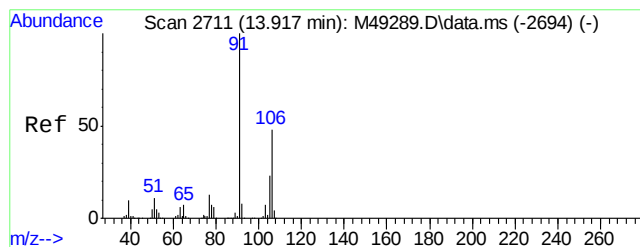
Tgt Ion	Ratio	Lower	Upper
92	100		
91	160.2	143.2	203.2



#74
ethylbenzene
Concen: 0.93 ug/kg
RT: 13.714 min Scan# 1393
Delta R.T. -0.000 min
Lab File: m66806.D
Acq: 16 Jul 2014 4:56 am

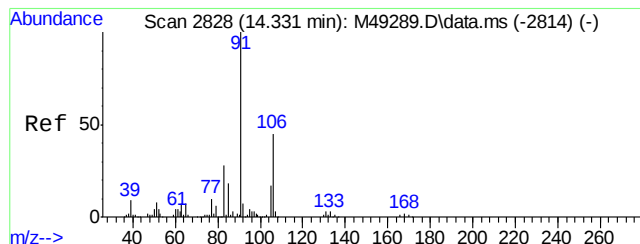
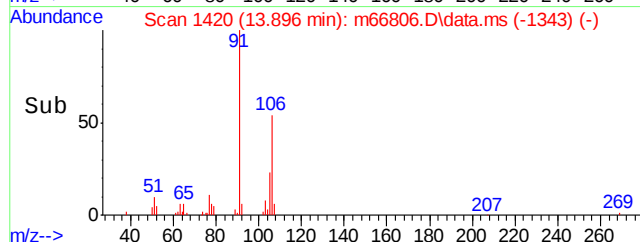
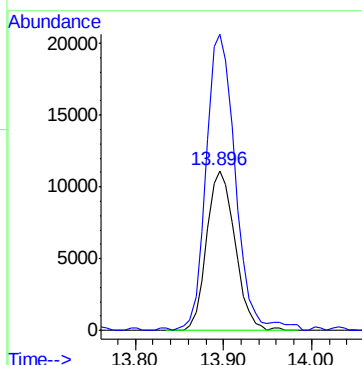
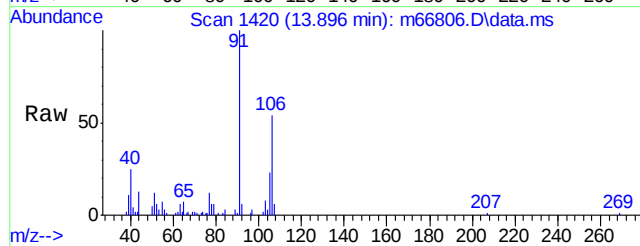
Tgt Ion	Ratio	Lower	Upper
91	100		
106	32.0	2.7	62.7





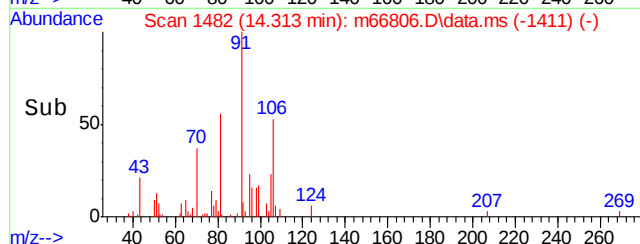
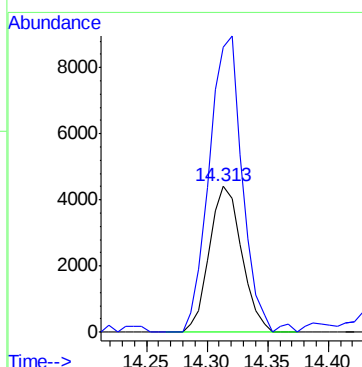
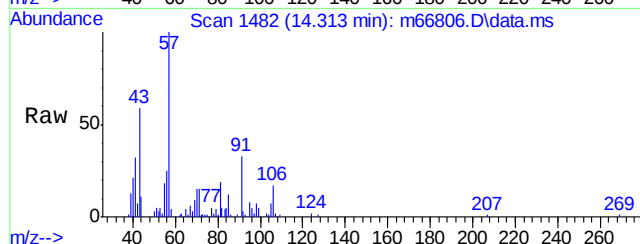
#75
m,p-xylene
Concen: 4.69 ug/kg
RT: 13.896 min Scan# 1420
Delta R.T. -0.000 min
Lab File: m66806.D
Acq: 16 Jul 2014 4:56 am

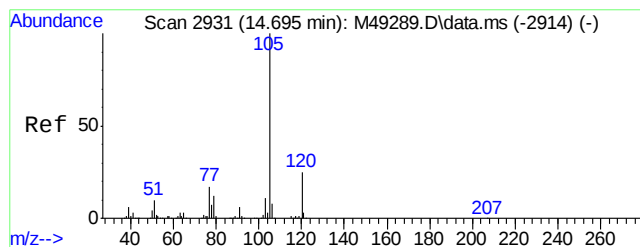
Tgt Ion	Ratio	Lower	Upper
106	100		
91	184.0	164.1	224.1



#76
o-xylene
Concen: 1.56 ug/kg
RT: 14.313 min Scan# 1482
Delta R.T. 0.000 min
Lab File: m66806.D
Acq: 16 Jul 2014 4:56 am

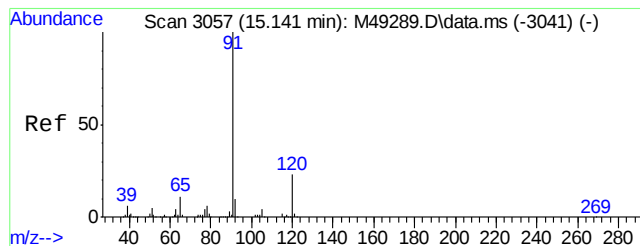
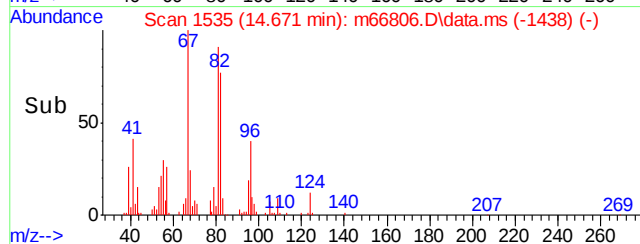
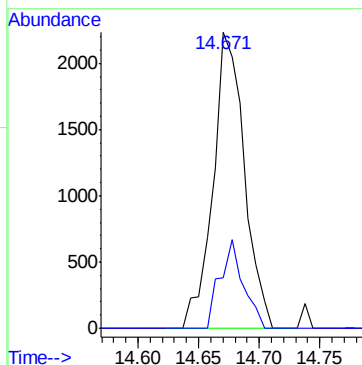
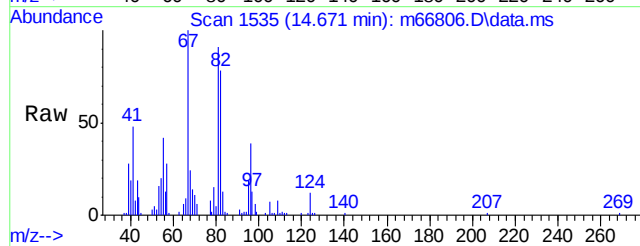
Tgt Ion	Ratio	Lower	Upper
106	100		
91	194.9	173.6	233.6





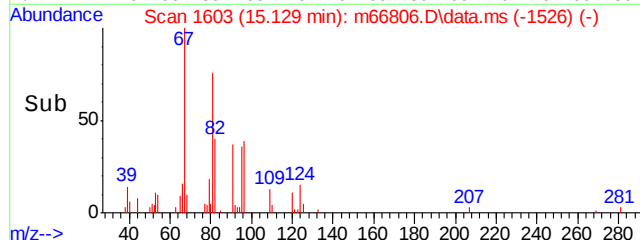
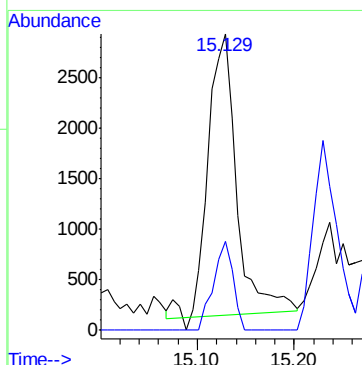
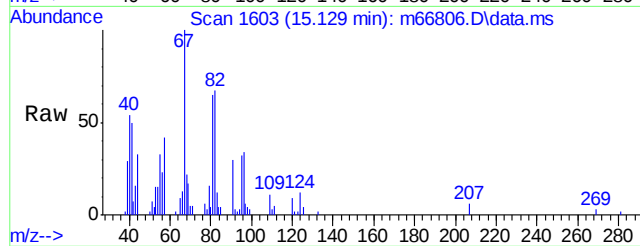
#81
isopropylbenzene
Concen: 0.29 ug/kg
RT: 14.671 min Scan# 1535
Delta R.T. -0.006 min
Lab File: m66806.D
Acq: 16 Jul 2014 4:56 am

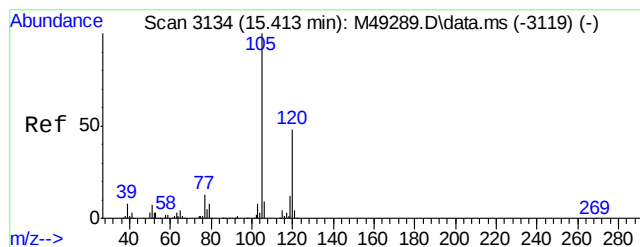
Tgt Ion	Ratio	Lower	Upper
105	100		
120	16.9	0.0	58.8



#86
n-propylbenzene
Concen: 0.36 ug/kg
RT: 15.129 min Scan# 1603
Delta R.T. 0.007 min
Lab File: m66806.D
Acq: 16 Jul 2014 4:56 am

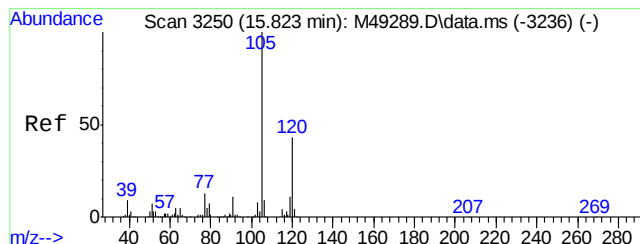
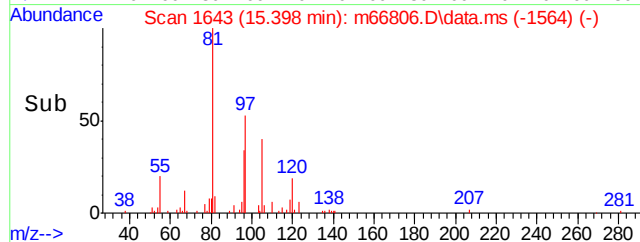
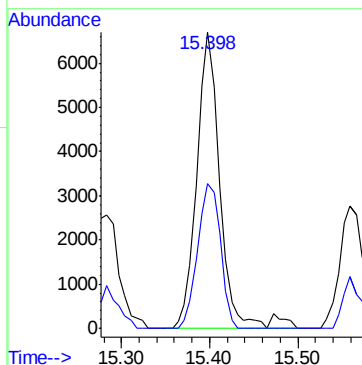
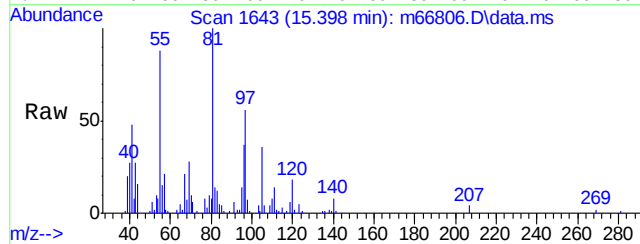
Tgt Ion	Ratio	Lower	Upper
91	100		
120	32.1	0.0	56.0





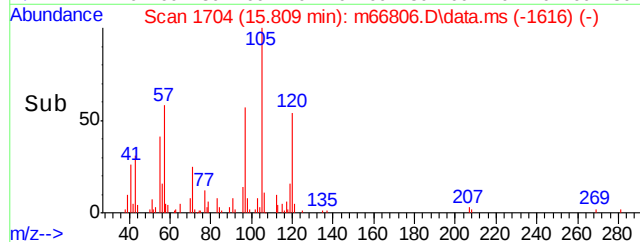
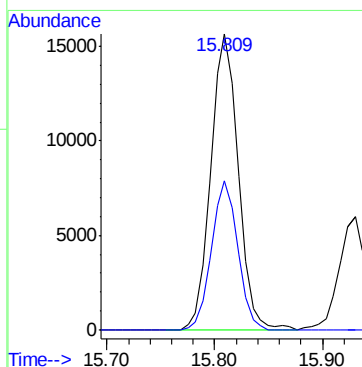
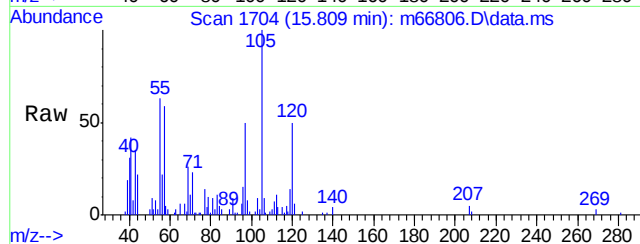
#89
1,3,5-trimethylbenzene
Concen: 0.96 ug/kg
RT: 15.398 min Scan# 1643
Delta R.T. 0.000 min
Lab File: m66806.D
Acq: 16 Jul 2014 4:56 am

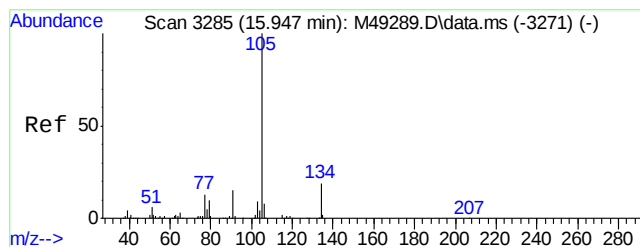
Tgt Ion	Ratio	Lower	Upper
105	100		
120	48.9	22.1	82.1



#91
1,2,4-trimethylbenzene
Concen: 2.23 ug/kg
RT: 15.809 min Scan# 1704
Delta R.T. -0.000 min
Lab File: m66806.D
Acq: 16 Jul 2014 4:56 am

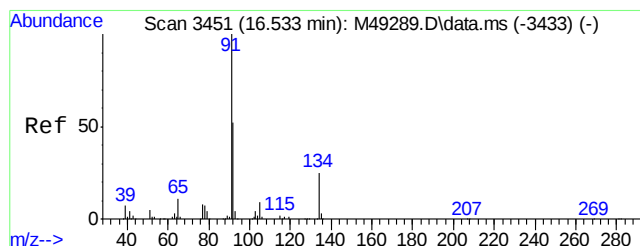
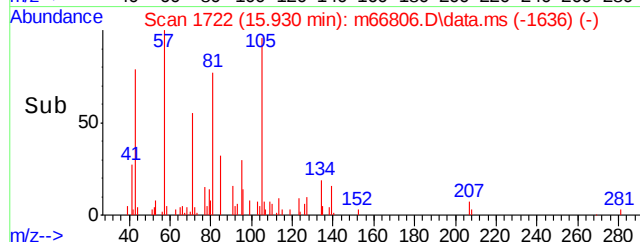
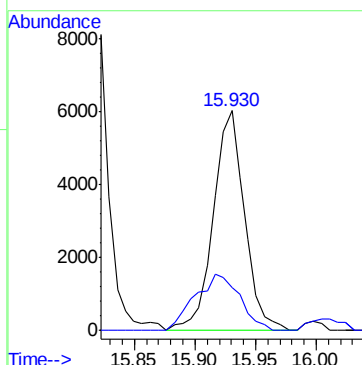
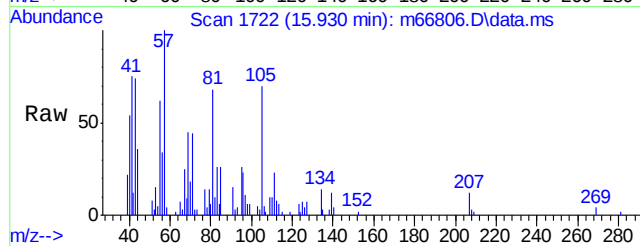
Tgt Ion	Ratio	Lower	Upper
105	100		
120	50.3	18.6	78.6





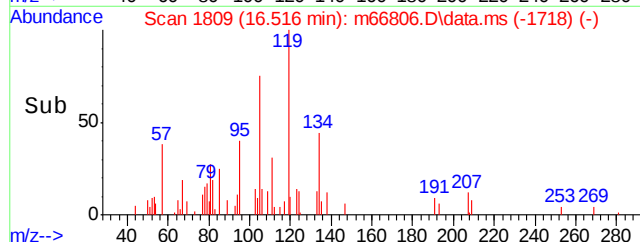
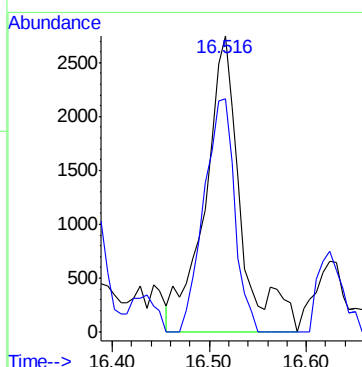
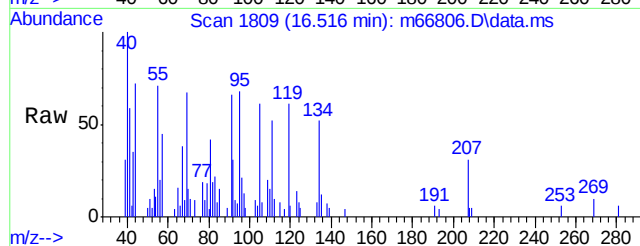
#92
sec-butylbenzene
Concen: 0.65 ug/kg
RT: 15.930 min Scan# 1722
Delta R.T. 0.000 min
Lab File: m66806.D
Acq: 16 Jul 2014 4:56 am

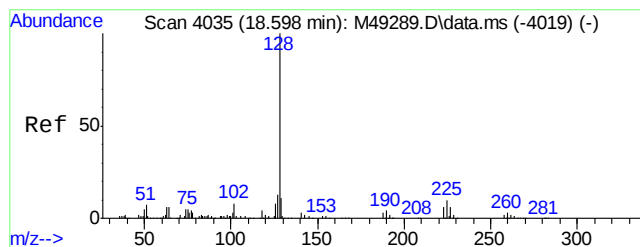
Tgt Ion	Ratio	Lower	Upper
105	100		
134	19.7	0.0	51.6



#97
n-butylbenzene
Concen: 0.52 ug/kg
RT: 16.516 min Scan# 1809
Delta R.T. 0.000 min
Lab File: m66806.D
Acq: 16 Jul 2014 4:56 am

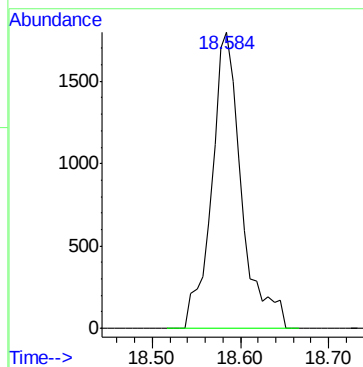
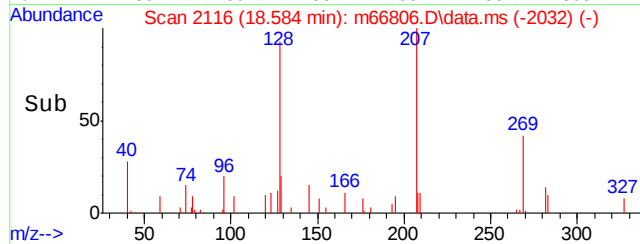
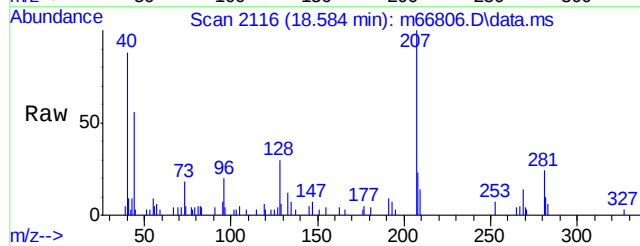
Tgt Ion	Ratio	Lower	Upper
91	100		
134	79.0	1.1	61.1#





#102
 naphthalene
 Concen: 0.31 ug/kg
 RT: 18.584 min Scan# 2116
 Delta R.T. 0.007 min
 Lab File: m66806.D
 Acq: 16 Jul 2014 4:56 am

Tgt Ion:128 Resp: 4207



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\M140715\
 Data File : m66807.D
 Acq On : 16 Jul 2014 5:25 am
 Operator : krystend
 Sample : mc32033-2
 Misc : MS32289,MSM2361,6.012,,,5,1
 ALS Vial : 43 Sample Multiplier: 1

Quant Time: Jul 16 09:38:38 2014
 Quant Method : C:\msdchem\1\methods\M140529D0DS.M
 Quant Title : SW-846 Method 8260
 QLast Update : Wed Jun 11 13:34:57 2014
 Response via : Initial Calibration

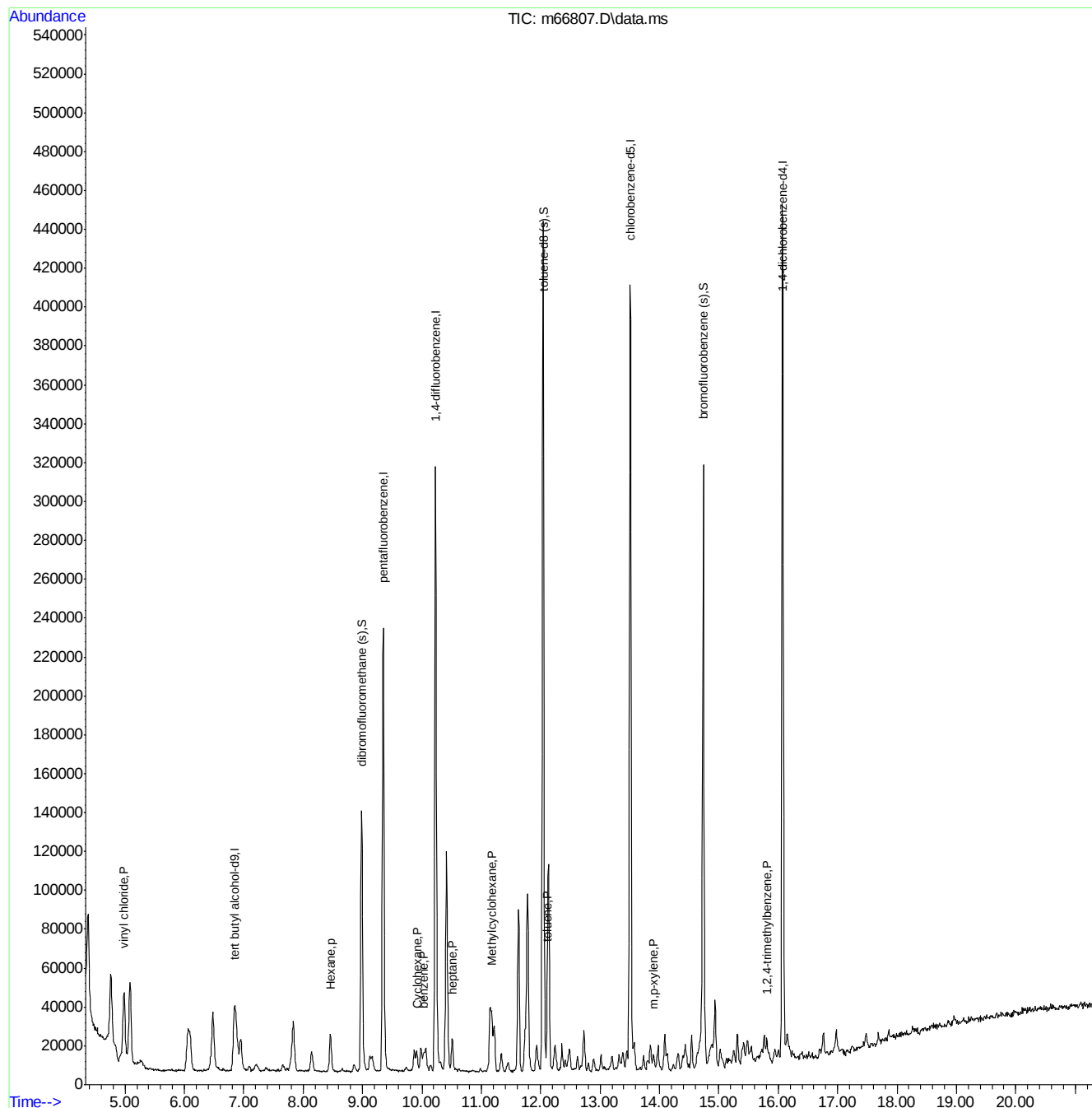
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	6.850	65	89228	500.00	ug/kg	0.00
4) pentafluorobenzene	9.349	168	184008	50.00	ug/kg	0.00
43) 1,4-difluorobenzene	10.231	114	299731	50.00	ug/kg	0.00
66) chlorobenzene-d5	13.505	82	122790	50.00	ug/kg	0.00
80) 1,4-dichlorobenzene-d4	16.072	152	142442	50.00	ug/kg	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	8.985	113	97873	52.55	ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	105.10%		
60) toluene-d8 (s)	12.043	98	335140	59.45	ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	118.90%		
82) bromofluorobenzene (s)	14.738	95	121947	48.77	ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	97.54%		
Target Compounds						
					Qvalue	
7) vinyl chloride	4.984	62	58928	19.88	ug/kg	99
31) Hexane	8.460	41	9272	1.97	ug/kg#	64
44) Cyclohexane	9.915	56	7727	1.42	ug/kg	89
47) benzene	10.029	78	8189	0.59	ug/kg	92
50) heptane	10.507	43	9303	1.74	ug/kg	88
55) Methylcyclohexane	11.174	83	11037	2.38	ug/kg	96
62) toluene	12.111	92	5631	0.99	ug/kg	89
75) m,p-xylene	13.896	106	2929	0.64	ug/kg	98
91) 1,2,4-trimethylbenzene	15.809	105	3344	0.32	ug/kg	99

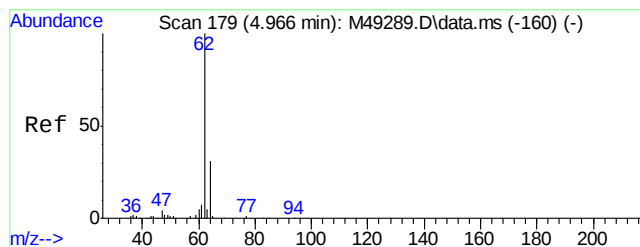
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\M140715S\
Data File : m66807.D
Acq On : 16 Jul 2014 5:25 am
Operator : krystend
Sample : mc32033-2
Misc : MS32289,MSM2361,6.012,,,5,1
ALS Vial : 43 Sample Multiplier: 1

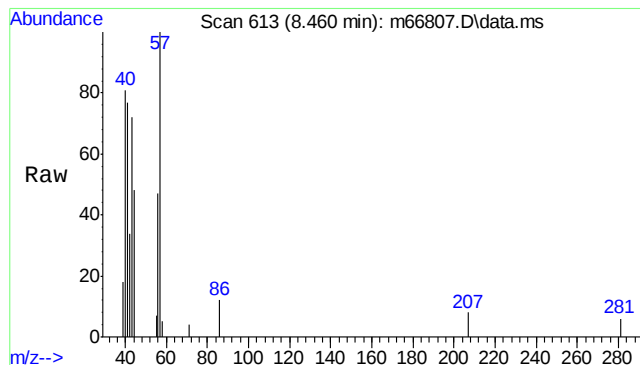
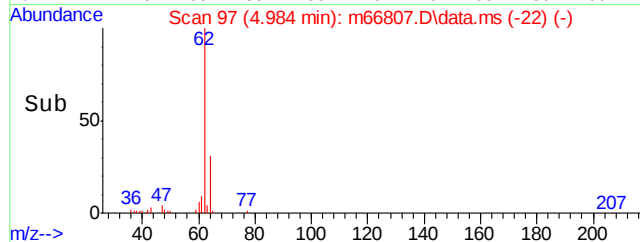
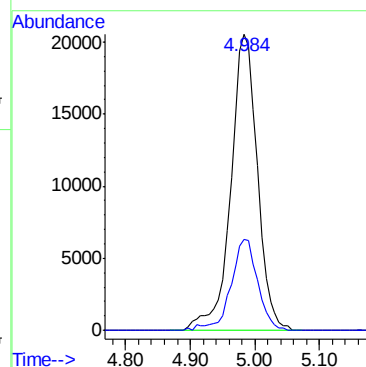
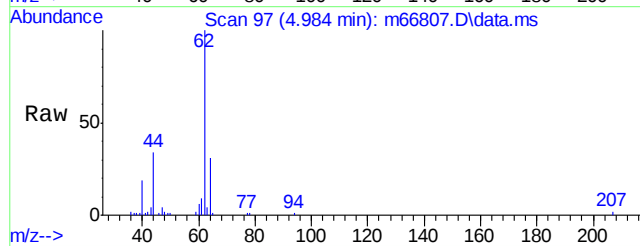
Quant Time: Jul 16 09:38:38 2014
Quant Method : C:\msdchem\1\methods\M140529D0DS.M
Quant Title : SW-846 Method 8260
QLast Update : Wed Jun 11 13:34:57 2014
Response via : Initial Calibration





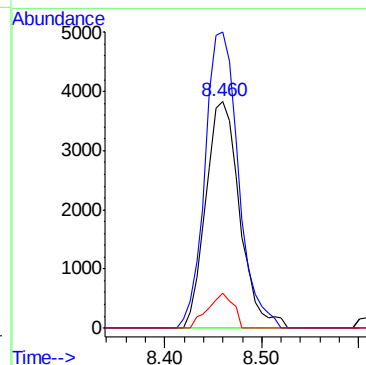
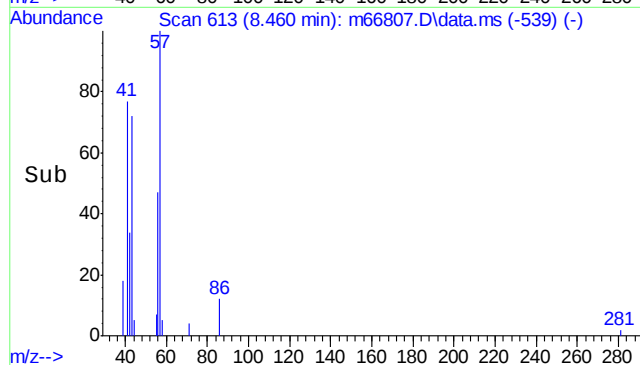
#7
vinyl chloride
Concen: 19.88 ug/kg
RT: 4.984 min Scan# 97
Delta R.T. 0.007 min
Lab File: m66807.D
Acq: 16 Jul 2014 5:25 am

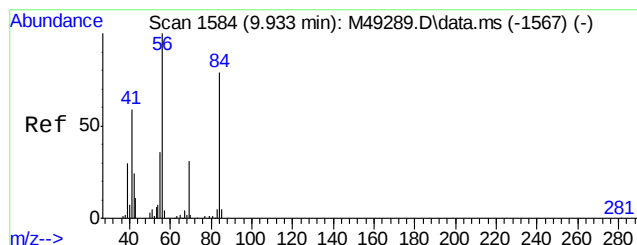
Tgt Ion: 62 Resp: 58928
Ion Ratio Lower Upper
62 100
64 30.8 0.4 60.4



#31
Hexane
Concen: 1.97 ug/kg
RT: 8.460 min Scan# 613
Delta R.T. 0.001 min
Lab File: m66807.D
Acq: 16 Jul 2014 5:25 am

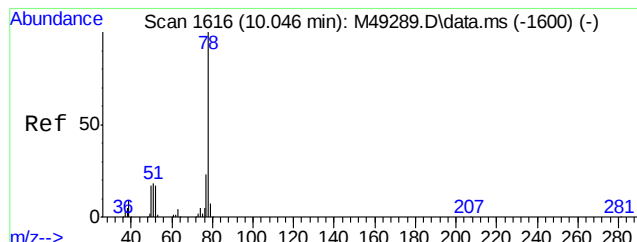
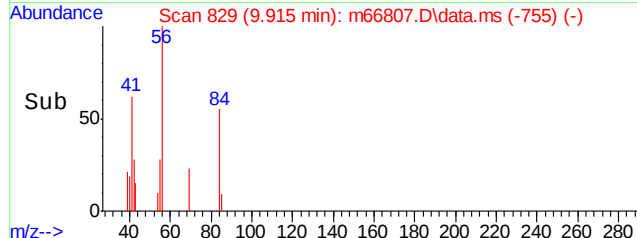
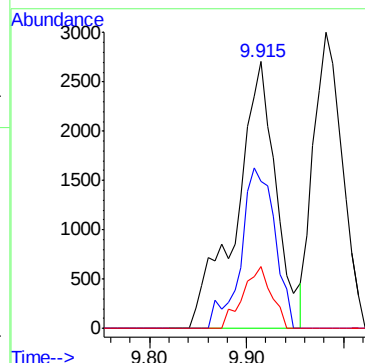
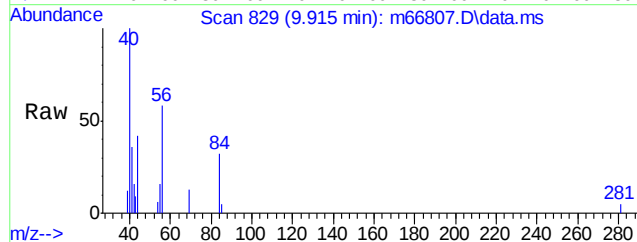
Tgt Ion: 41 Resp: 9272
Ion Ratio Lower Upper
41 100
57 128.7 72.9 109.3#
86 11.5 8.5 12.7





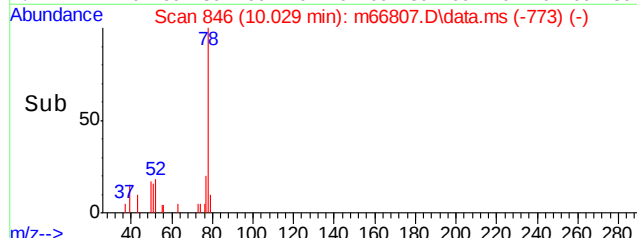
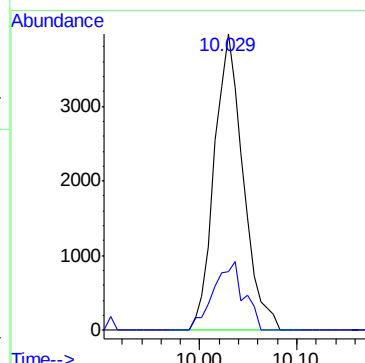
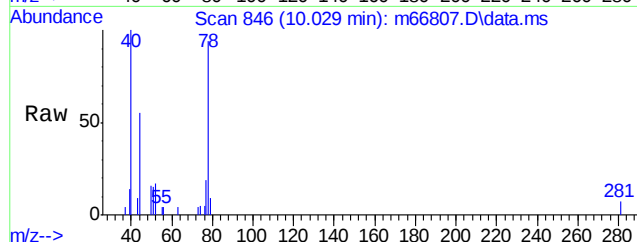
#44
Cyclohexane
Concen: 1.42 ug/kg
RT: 9.915 min Scan# 829
Delta R.T. 0.001 min
Lab File: m66807.D
Acq: 16 Jul 2014 5:25 am

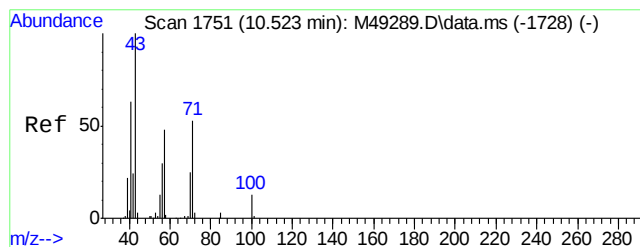
Tgt Ion	Ratio	Lower	Upper
56	100		
84	55.3	47.2	87.2
69	23.2	3.6	43.6



#47
benzene
Concen: 0.59 ug/kg
RT: 10.029 min Scan# 846
Delta R.T. 0.000 min
Lab File: m66807.D
Acq: 16 Jul 2014 5:25 am

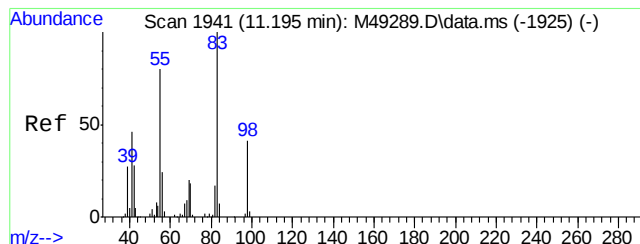
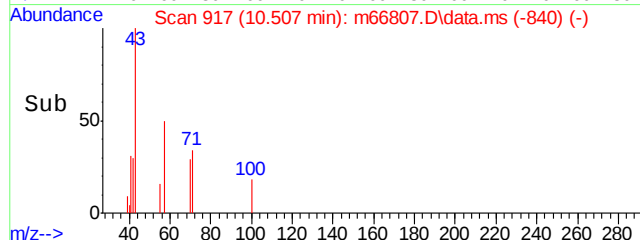
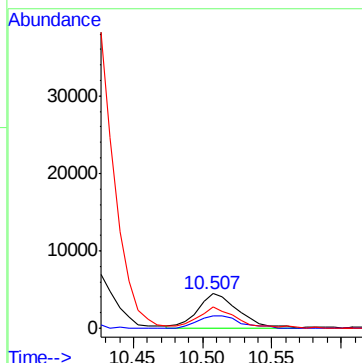
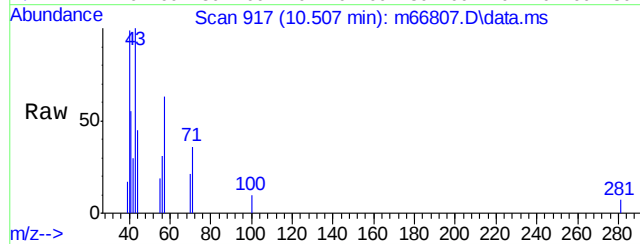
Tgt Ion	Ratio	Lower	Upper
78	100		
77	19.7	0.0	53.5





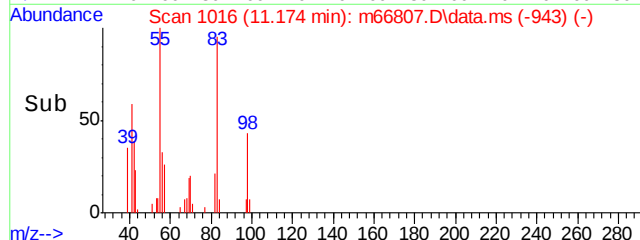
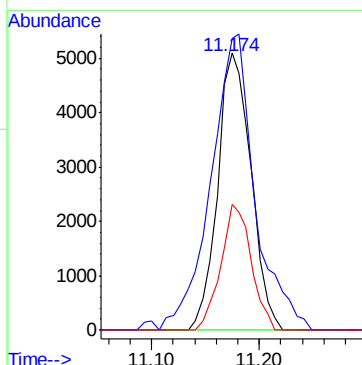
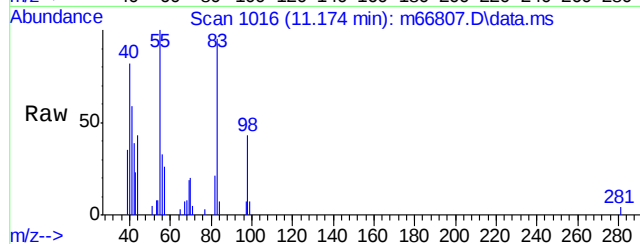
#50
heptane
Concen: 1.74 ug/kg
RT: 10.507 min Scan# 917
Delta R.T. 0.000 min
Lab File: m66807.D
Acq: 16 Jul 2014 5:25 am

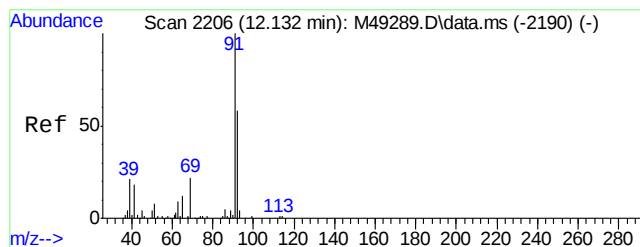
Tgt Ion:	43	Resp:	9303
Ion Ratio	Lower	Upper	
43	100		
71	35.6	11.3	71.3
57	57.6	17.8	77.8



#55
Methylcyclohexane
Concen: 2.38 ug/kg
RT: 11.174 min Scan# 1016
Delta R.T. -0.007 min
Lab File: m66807.D
Acq: 16 Jul 2014 5:25 am

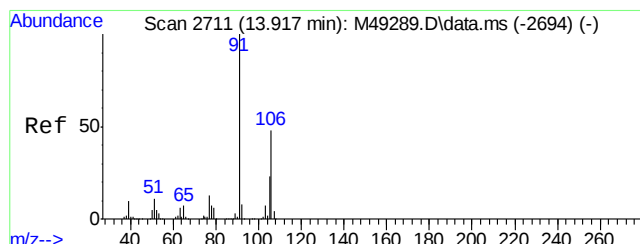
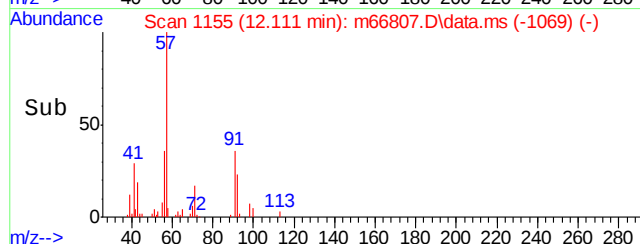
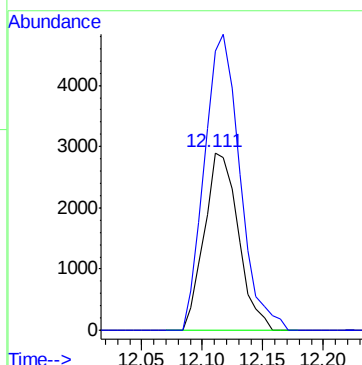
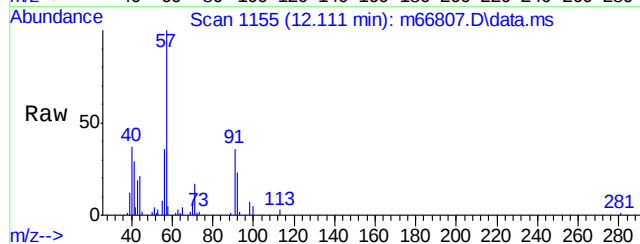
Tgt Ion:	83	Resp:	11037
Ion Ratio	Lower	Upper	
83	100		
55	101.0	75.2	115.2
98	45.4	24.6	64.6





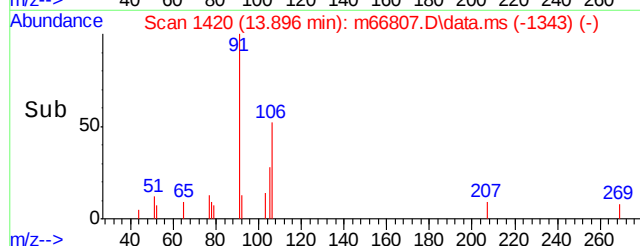
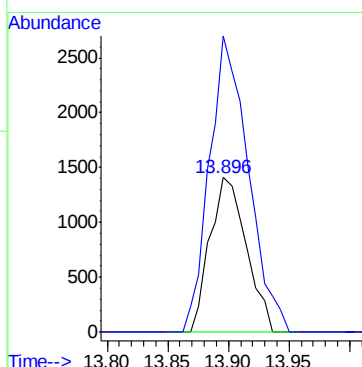
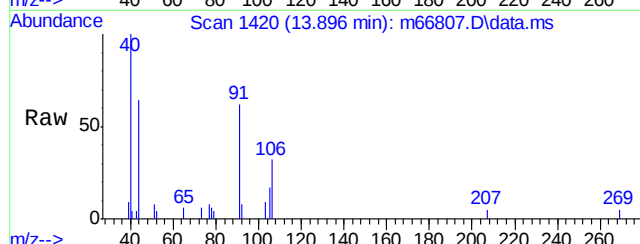
#62
toluene
Concen: 0.99 ug/kg
RT: 12.111 min Scan# 1155
Delta R.T. -0.000 min
Lab File: m66807.D
Acq: 16 Jul 2014 5:25 am

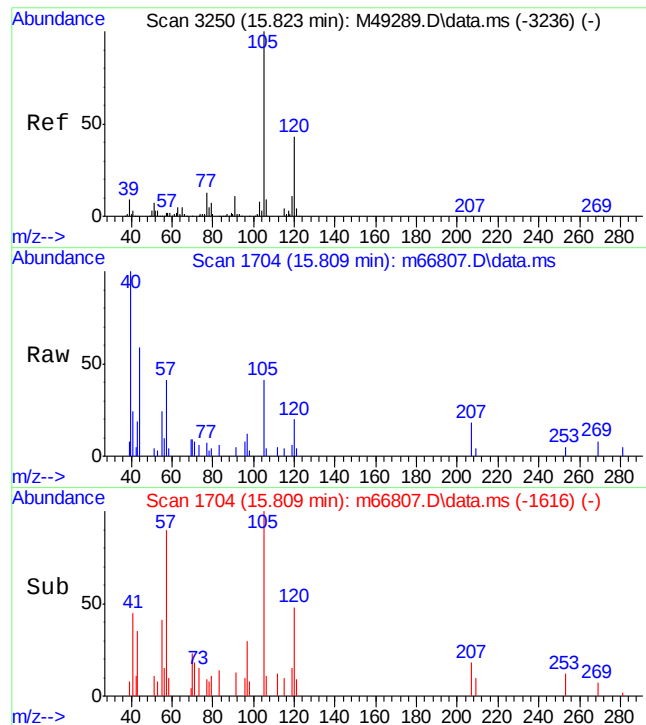
Tgt Ion: 92 Resp: 5631
Ion Ratio Lower Upper
92 100
91 157.3 143.2 203.2



#75
m,p-xylene
Concen: 0.64 ug/kg
RT: 13.896 min Scan# 1420
Delta R.T. -0.000 min
Lab File: m66807.D
Acq: 16 Jul 2014 5:25 am

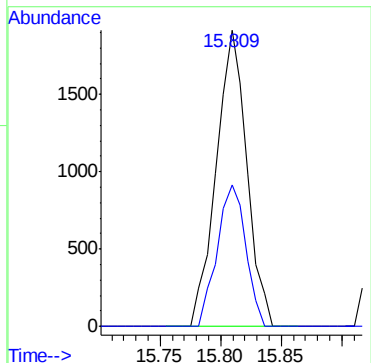
Tgt Ion: 106 Resp: 2929
Ion Ratio Lower Upper
106 100
91 191.6 164.1 224.1





#91
1,2,4-trimethylbenzene
Concen: 0.32 ug/kg
RT: 15.809 min Scan# 1704
Delta R.T. -0.000 min
Lab File: m66807.D
Acq: 16 Jul 2014 5:25 am

Tgt Ion	Ratio	Lower	Upper
105	100		
120	47.6	18.6	78.6



7.1.2
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\M140715S\
 Data File : m66808.D
 Acq On : 16 Jul 2014 5:55 am
 Operator : krystend
 Sample : mc32033-3
 Misc : MS32289,MSM2361,6.32,,,5,1
 ALS Vial : 44 Sample Multiplier: 1

Quant Time: Jul 16 09:40:58 2014
 Quant Method : C:\msdchem\1\methods\M140529D0DS.M
 Quant Title : SW-846 Method 8260
 QLast Update : Wed Jun 11 13:34:57 2014
 Response via : Initial Calibration

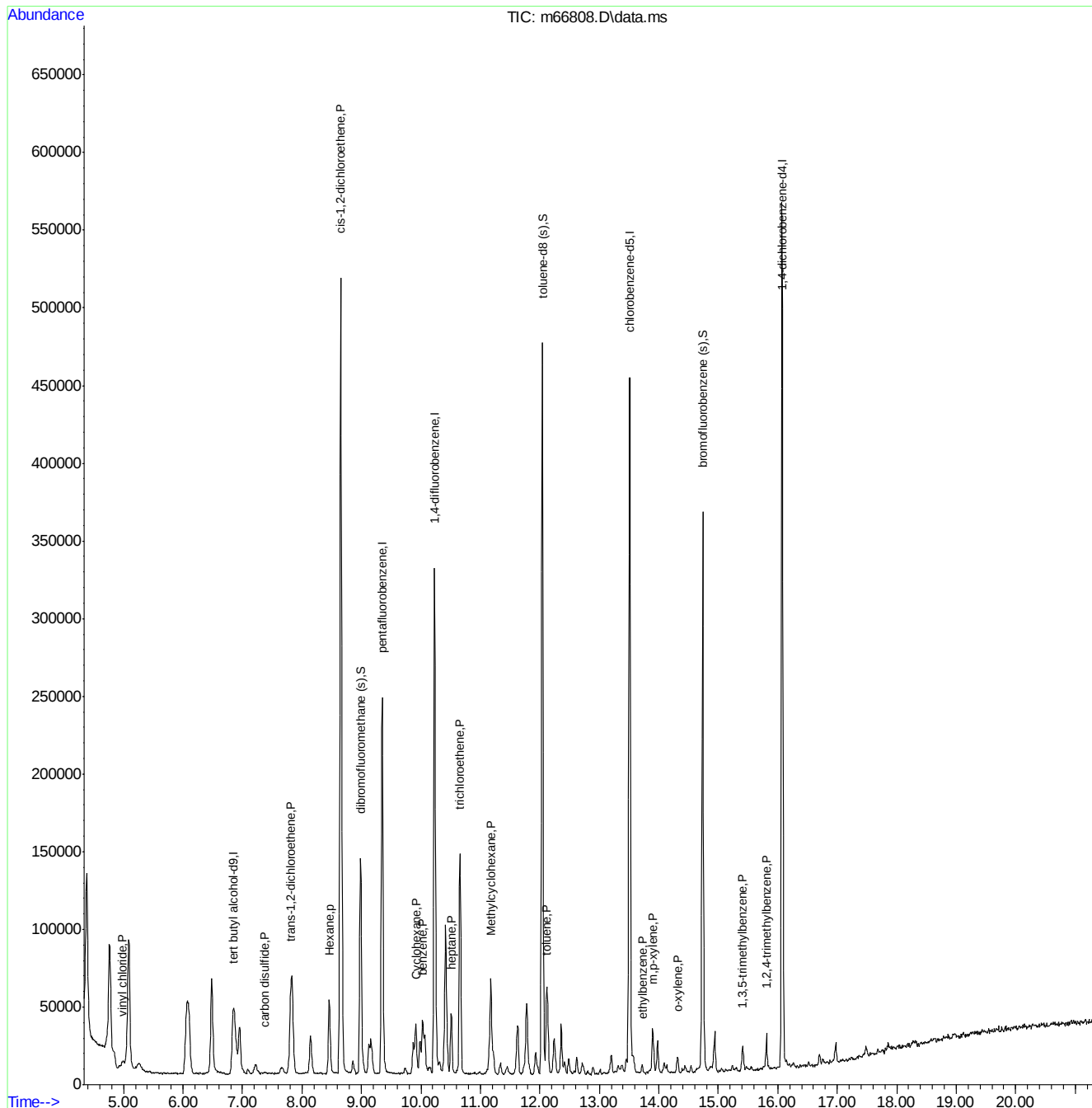
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	6.850	65	114048	500.00	ug/kg	0.00
4) pentafluorobenzene	9.349	168	192771	50.00	ug/kg	0.00
43) 1,4-difluorobenzene	10.231	114	314780	50.00	ug/kg	0.00
66) chlorobenzene-d5	13.512	82	138063	50.00	ug/kg	0.00
80) 1,4-dichlorobenzene-d4	16.072	152	177904	50.00	ug/kg	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	8.985	113	101760	52.15	ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	104.30%		
60) toluene-d8 (s)	12.043	98	352989	59.63	ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	119.26%		
82) bromofluorobenzene (s)	14.738	95	141026	45.15	ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	90.30%		
Target Compounds						
						Qvalue
7) vinyl chloride	4.984	62	6737	2.17	ug/kg	94
22) trans-1,2-dichloroethene	7.813	96	10641	3.53	ug/kg	95
24) carbon disulfide	7.375	76	2106	0.26	ug/kg	71
31) Hexane	8.460	41	21864	4.45	ug/kg#	68
36) cis-1,2-dichloroethene	8.655	96	261239	102.63	ug/kg	96
44) Cyclohexane	9.915	56	21905	3.82	ug/kg	92
47) benzene	10.029	78	30179	3.08	ug/kg	97
50) heptane	10.507	43	22043	3.92	ug/kg	98
51) trichloroethene	10.656	95	47806	16.88	ug/kg	98
55) Methylcyclohexane	11.181	83	23020	4.74	ug/kg	96
62) toluene	12.111	92	17969	3.00	ug/kg	98
74) ethylbenzene	13.721	91	4365	0.35	ug/kg	99
75) m,p-xylene	13.896	106	10601	2.05	ug/kg	96
76) o-xylene	14.313	106	2944	0.57	ug/kg	98
89) 1,3,5-trimethylbenzene	15.398	105	4861	0.37	ug/kg	96
91) 1,2,4-trimethylbenzene	15.809	105	9929	0.77	ug/kg	95

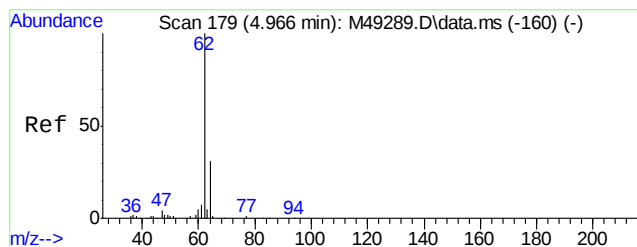
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\M140715S\
Data File : m66808.D
Acq On : 16 Jul 2014 5:55 am
Operator : krystend
Sample : mc32033-3
Misc : MS32289,MSM2361,6.32,,,5,1
ALS Vial : 44 Sample Multiplier: 1

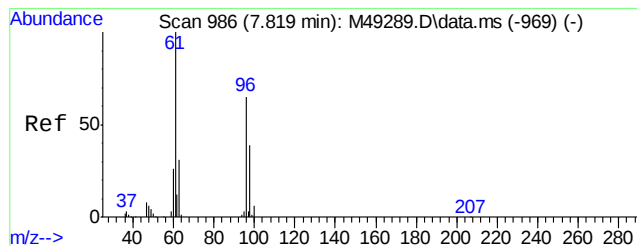
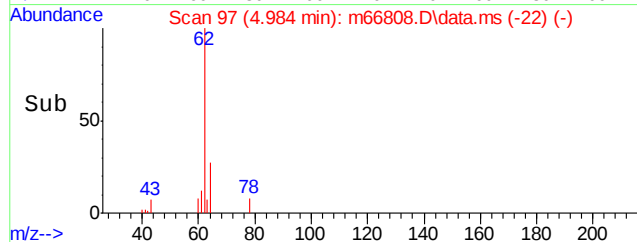
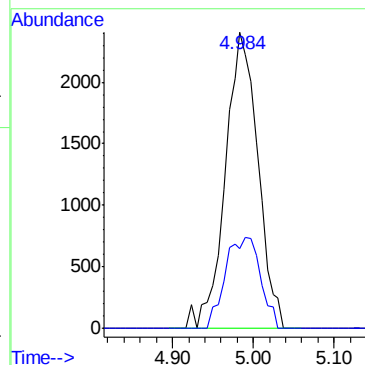
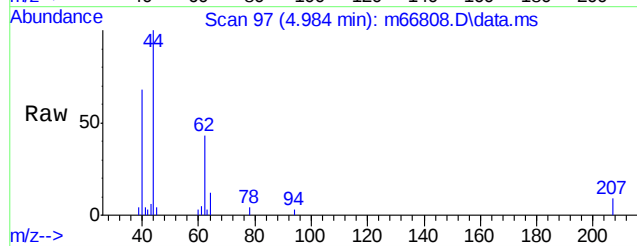
Quant Time: Jul 16 09:40:58 2014
Quant Method : C:\msdchem\1\methods\M140529D0DS.M
Quant Title : SW-846 Method 8260
QLast Update : Wed Jun 11 13:34:57 2014
Response via : Initial Calibration





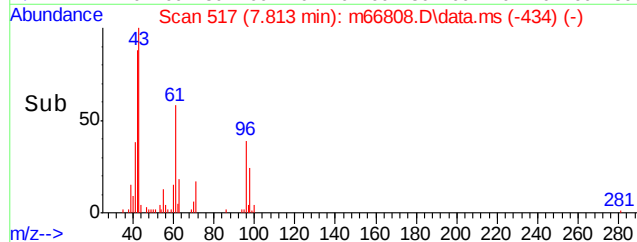
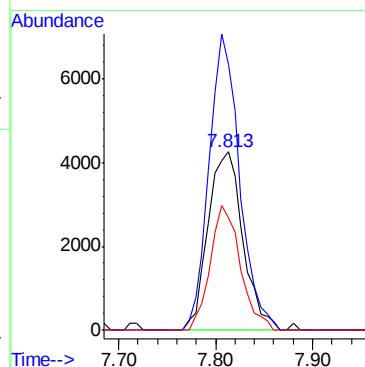
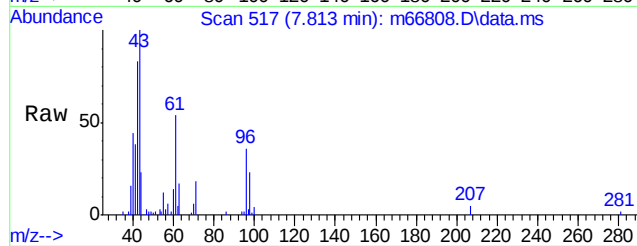
#7
vinyl chloride
Concen: 2.17 ug/kg
RT: 4.984 min Scan# 97
Delta R.T. 0.007 min
Lab File: m66808.D
Acq: 16 Jul 2014 5:55 am

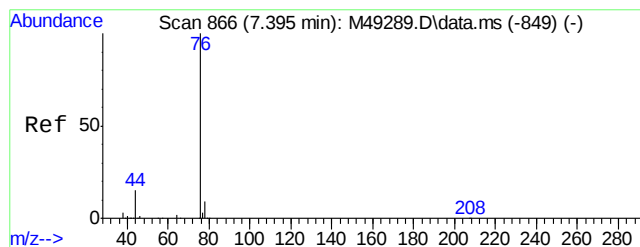
Tgt Ion	Ratio	Lower	Upper
62	100		
64	27.0	0.4	60.4



#22
trans-1,2-dichloroethene
Concen: 3.53 ug/kg
RT: 7.813 min Scan# 517
Delta R.T. 0.007 min
Lab File: m66808.D
Acq: 16 Jul 2014 5:55 am

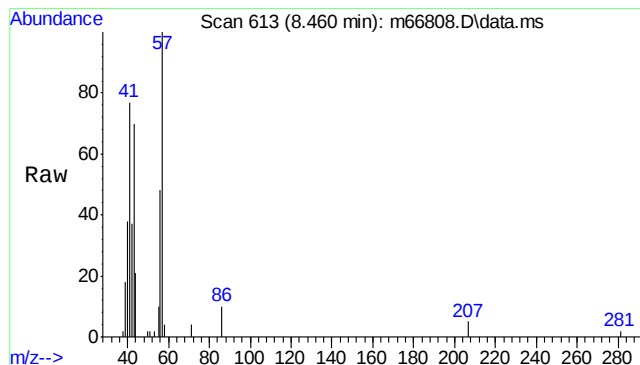
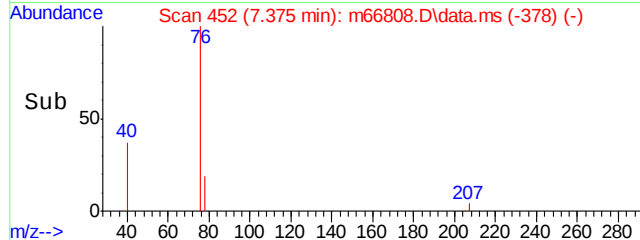
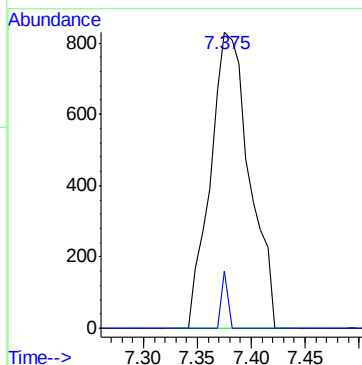
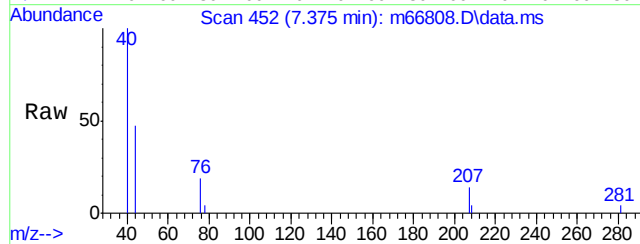
Tgt Ion	Ratio	Lower	Upper
96	100		
61	149.4	127.6	187.6
98	63.1	32.3	92.3





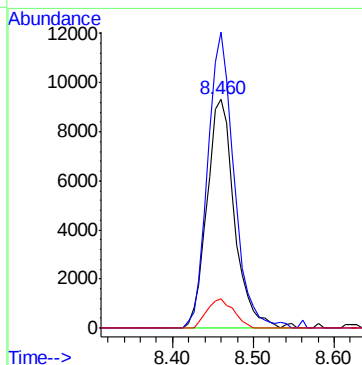
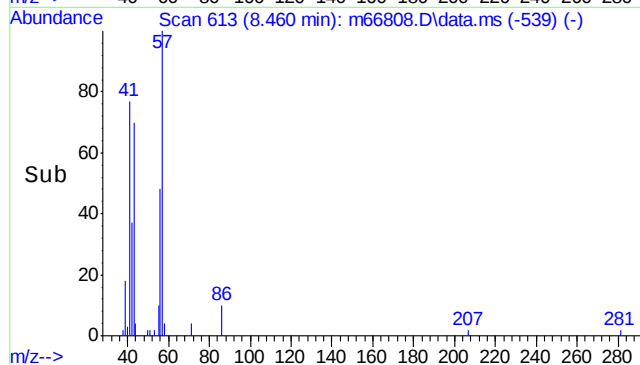
#24
carbon disulfide
Concen: 0.26 ug/kg
RT: 7.375 min Scan# 452
Delta R.T. 0.000 min
Lab File: m66808.D
Acq: 16 Jul 2014 5:55 am

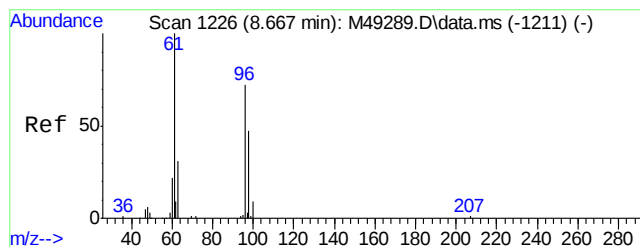
Tgt Ion	Ratio	Lower	Upper
76	100		
78	19.4	0.0	38.8



#31
Hexane
Concen: 4.45 ug/kg
RT: 8.460 min Scan# 613
Delta R.T. 0.001 min
Lab File: m66808.D
Acq: 16 Jul 2014 5:55 am

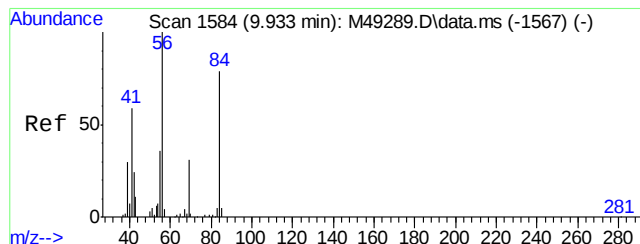
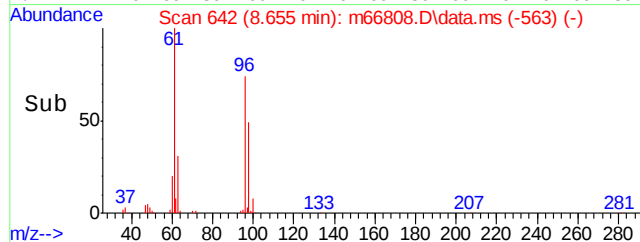
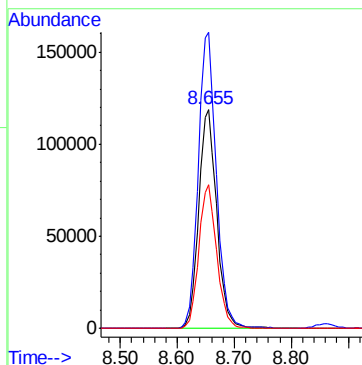
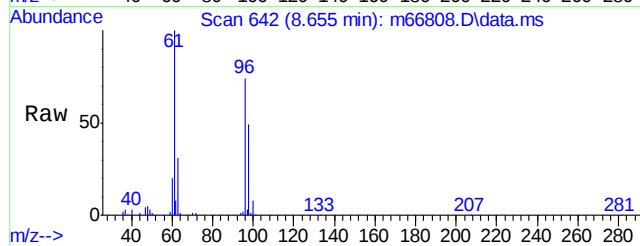
Tgt Ion	Ratio	Lower	Upper
41	100		
57	124.4	72.9	109.3#
86	12.3	8.5	12.7





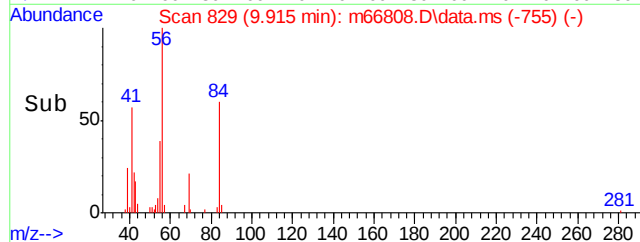
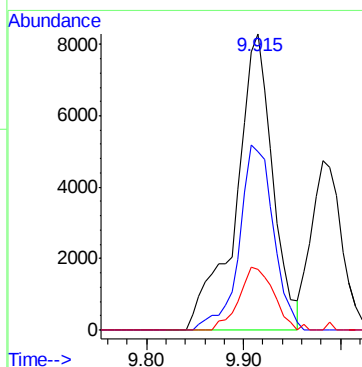
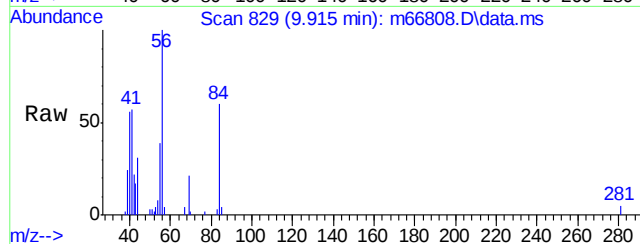
#36
cis-1,2-dichloroethene
Concen: 102.63 ug/kg
RT: 8.655 min Scan# 642
Delta R.T. -0.000 min
Lab File: m66808.D
Acq: 16 Jul 2014 5:55 am

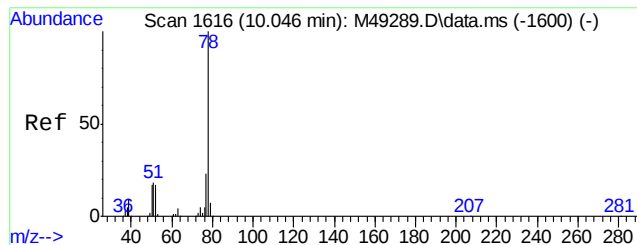
Tgt Ion	Ratio	Lower	Upper
96	100		
61	135.1	111.6	171.6
98	65.8	35.5	95.5



#44
Cyclohexane
Concen: 3.82 ug/kg
RT: 9.915 min Scan# 829
Delta R.T. 0.001 min
Lab File: m66808.D
Acq: 16 Jul 2014 5:55 am

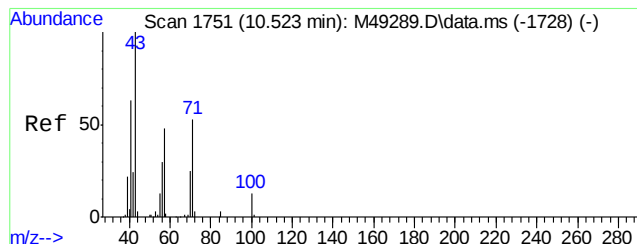
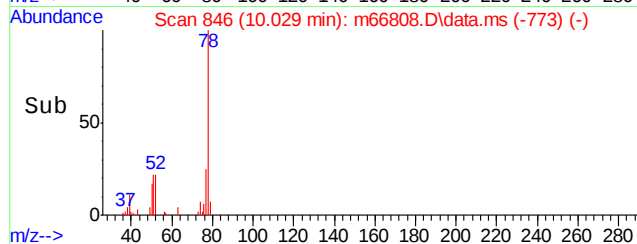
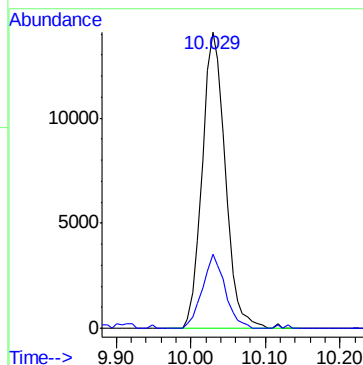
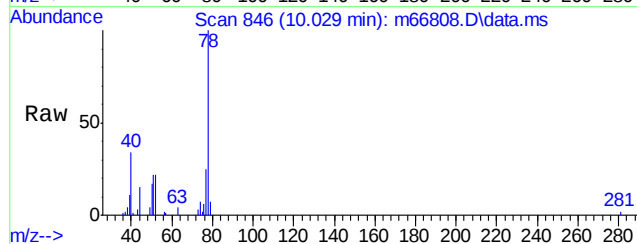
Tgt Ion	Ratio	Lower	Upper
56	100		
84	60.3	47.2	87.2
69	20.5	3.6	43.6





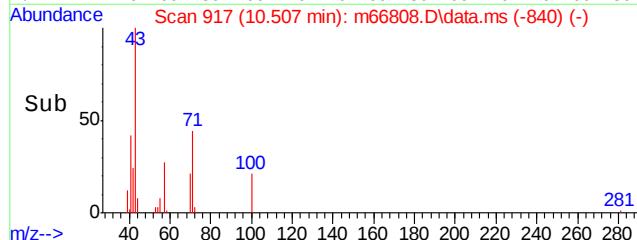
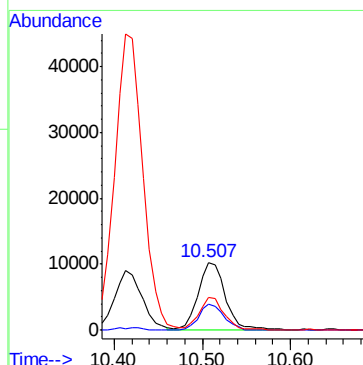
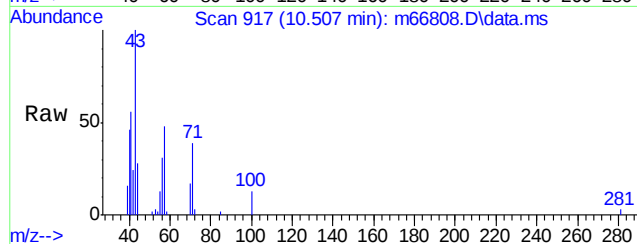
#47
benzene
Concen: 3.08 ug/kg
RT: 10.029 min Scan# 846
Delta R.T. 0.000 min
Lab File: m66808.D
Acq: 16 Jul 2014 5:55 am

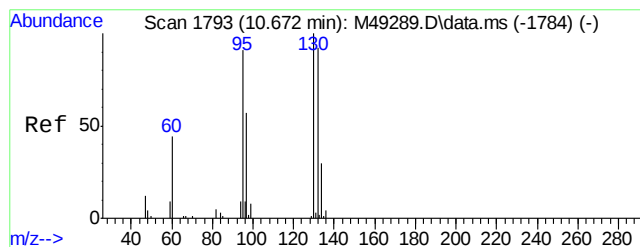
Tgt Ion	Ratio	Lower	Upper
78	100		
77	24.9	0.0	53.5



#50
heptane
Concen: 3.92 ug/kg
RT: 10.507 min Scan# 917
Delta R.T. 0.000 min
Lab File: m66808.D
Acq: 16 Jul 2014 5:55 am

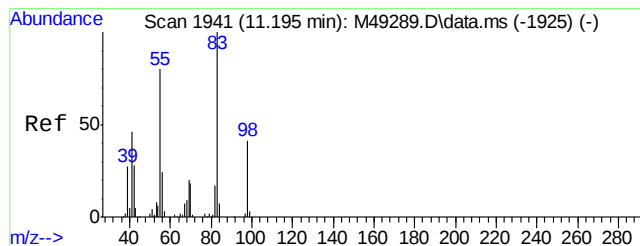
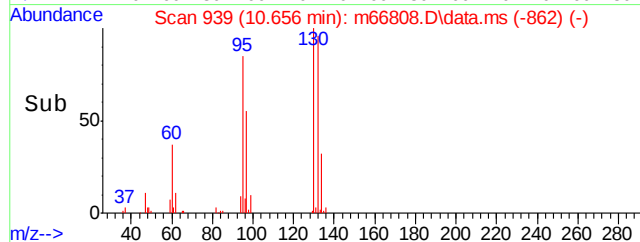
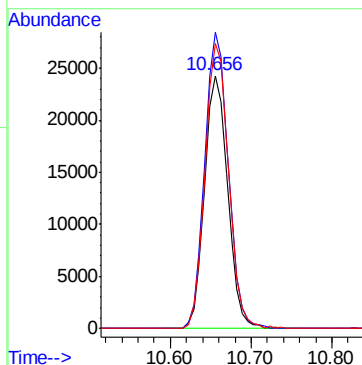
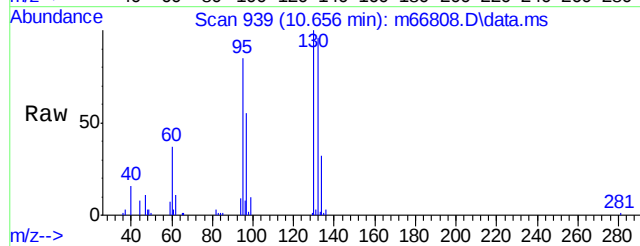
Tgt Ion	Ratio	Lower	Upper
43	100		
71	38.8	11.3	71.3
57	47.6	17.8	77.8





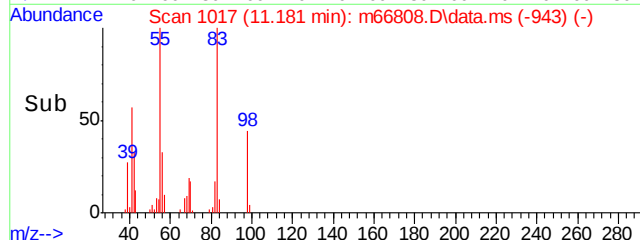
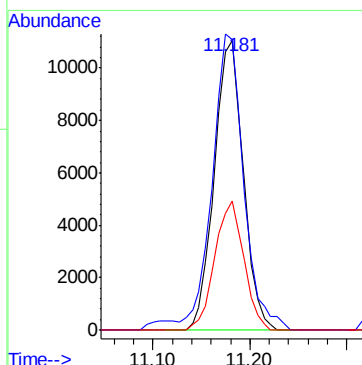
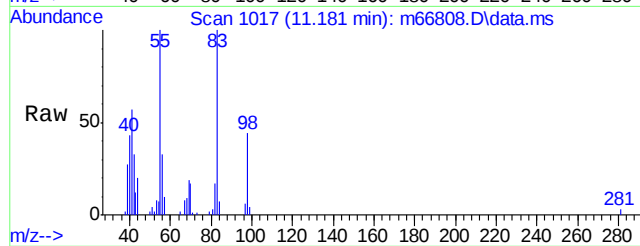
#51
trichloroethene
Concen: 16.88 ug/kg
RT: 10.656 min Scan# 939
Delta R.T. 0.001 min
Lab File: m66808.D
Acq: 16 Jul 2014 5:55 am

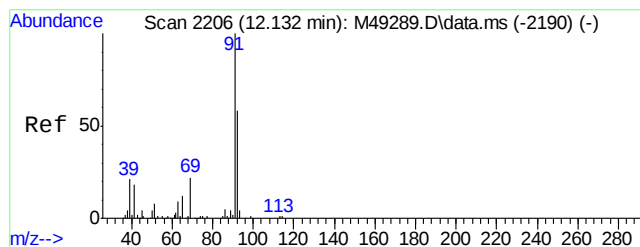
Tgt Ion	Ratio	Lower	Upper
95	100		
130	117.1	84.0	144.0
132	112.7	81.4	141.4



#55
Methylcyclohexane
Concen: 4.74 ug/kg
RT: 11.181 min Scan# 1017
Delta R.T. 0.000 min
Lab File: m66808.D
Acq: 16 Jul 2014 5:55 am

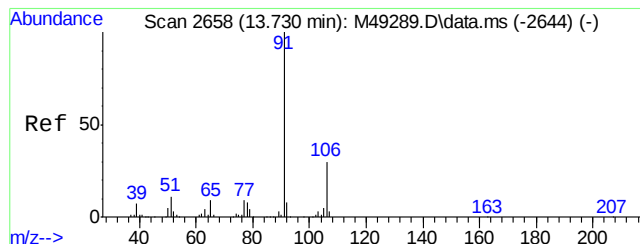
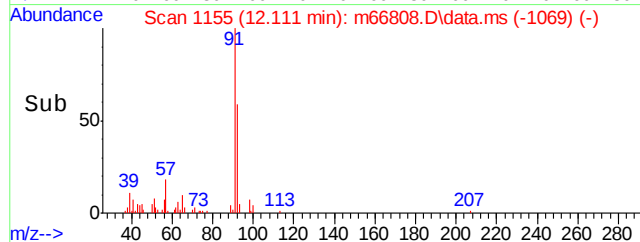
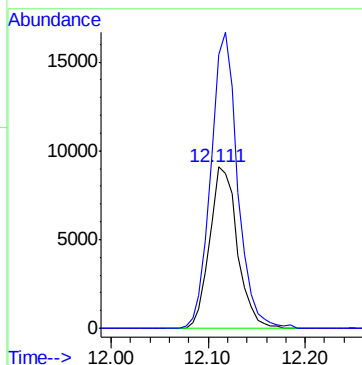
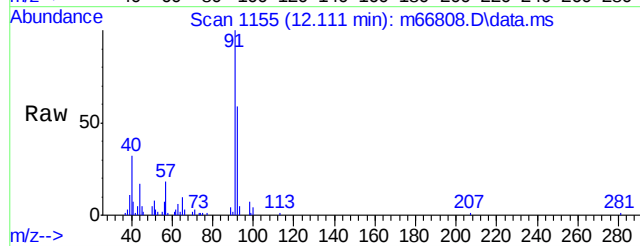
Tgt Ion	Ratio	Lower	Upper
83	100		
55	100.5	75.2	115.2
98	44.4	24.6	64.6





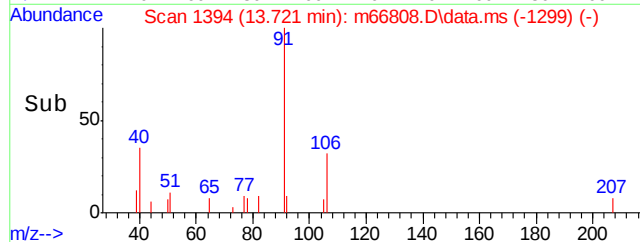
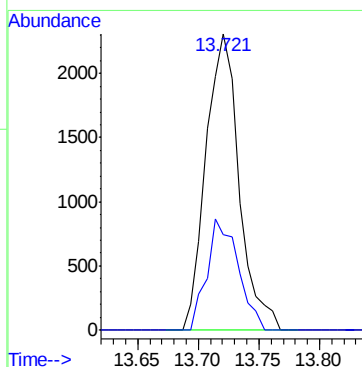
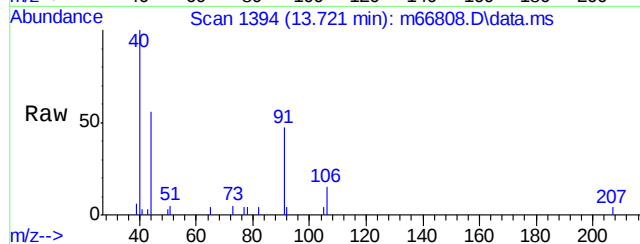
#62
toluene
Concen: 3.00 ug/kg
RT: 12.111 min Scan# 1155
Delta R.T. -0.000 min
Lab File: m66808.D
Acq: 16 Jul 2014 5:55 am

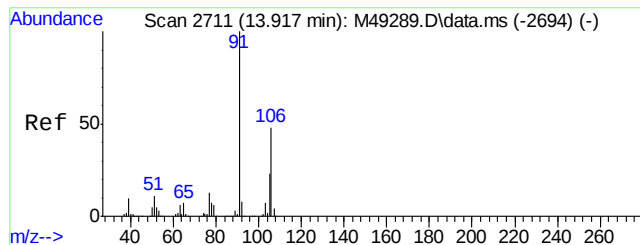
Tgt Ion: 92 Resp: 17969
Ion Ratio Lower Upper
92 100
91 170.0 143.2 203.2



#74
ethylbenzene
Concen: 0.35 ug/kg
RT: 13.721 min Scan# 1394
Delta R.T. 0.007 min
Lab File: m66808.D
Acq: 16 Jul 2014 5:55 am

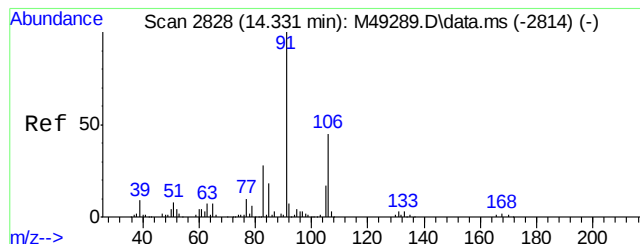
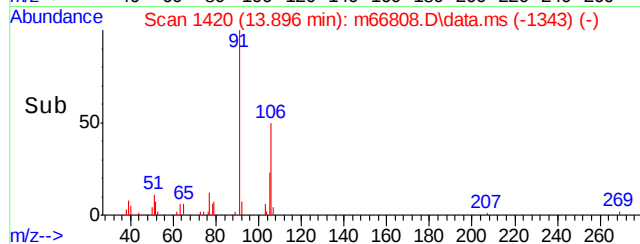
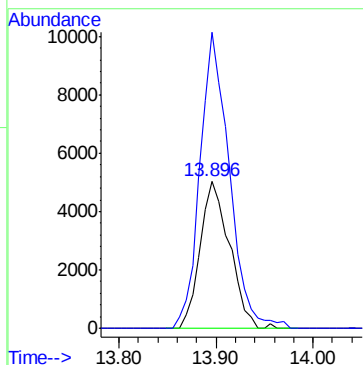
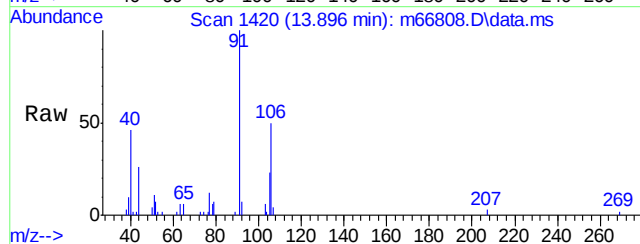
Tgt Ion: 91 Resp: 4365
Ion Ratio Lower Upper
91 100
106 32.1 2.7 62.7





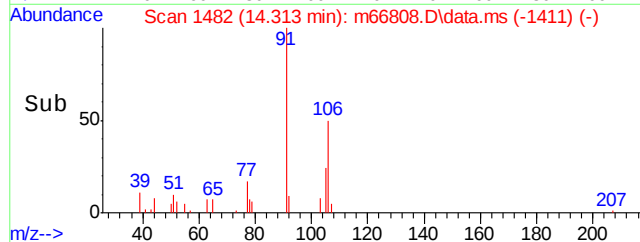
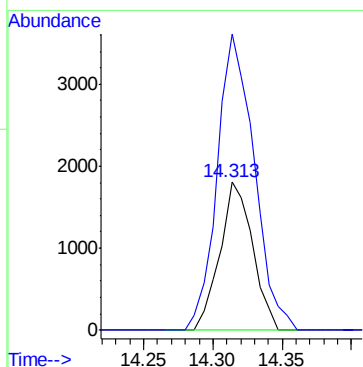
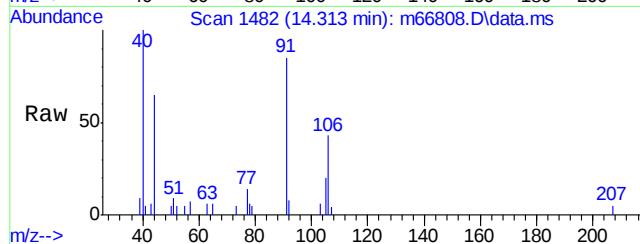
#75
m,p-xylene
Concen: 2.05 ug/kg
RT: 13.896 min Scan# 1420
Delta R.T. -0.000 min
Lab File: m66808.D
Acq: 16 Jul 2014 5:55 am

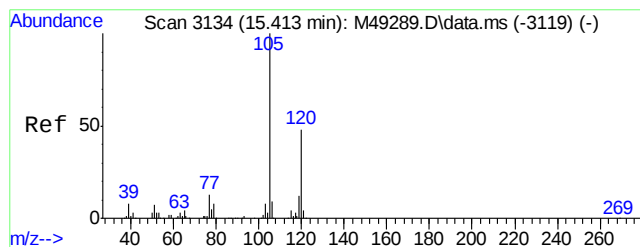
Tgt Ion	Ratio	Lower	Upper
106	100		
91	200.8	164.1	224.1



#76
o-xylene
Concen: 0.57 ug/kg
RT: 14.313 min Scan# 1482
Delta R.T. 0.000 min
Lab File: m66808.D
Acq: 16 Jul 2014 5:55 am

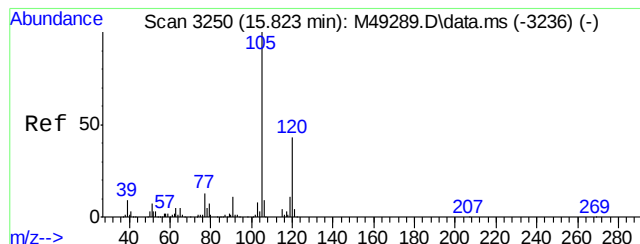
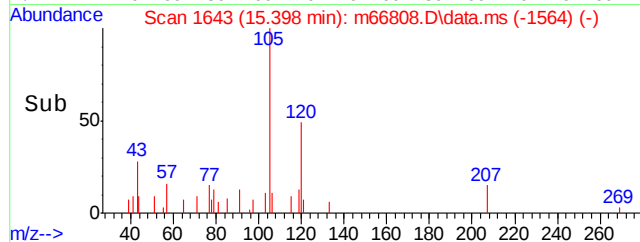
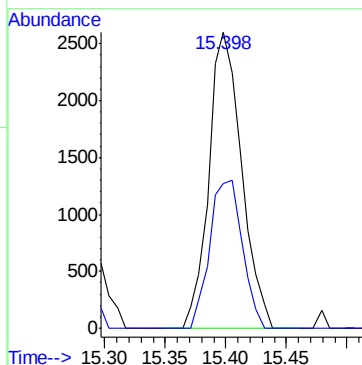
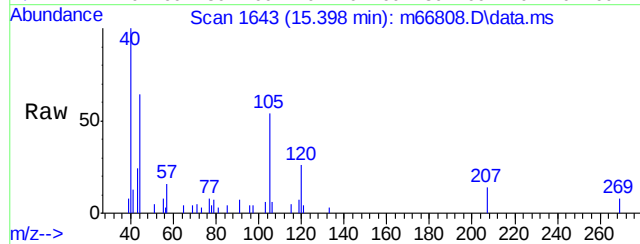
Tgt Ion	Ratio	Lower	Upper
106	100		
91	200.5	173.6	233.6





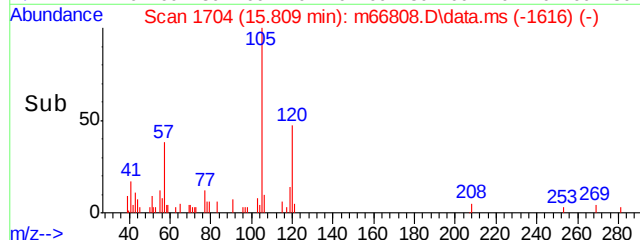
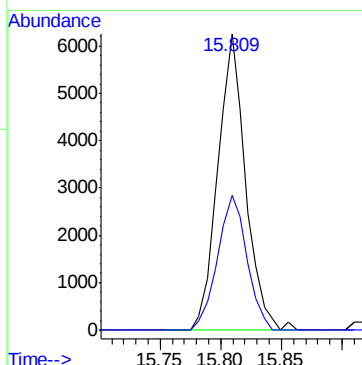
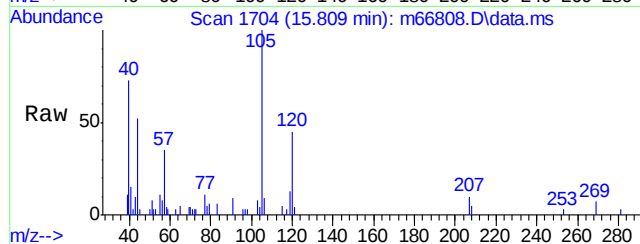
#89
1,3,5-trimethylbenzene
Concen: 0.37 ug/kg
RT: 15.398 min Scan# 1643
Delta R.T. 0.000 min
Lab File: m66808.D
Acq: 16 Jul 2014 5:55 am

Tgt Ion	Ratio	Lower	Upper
105	100		
120	49.0	22.1	82.1



#91
1,2,4-trimethylbenzene
Concen: 0.77 ug/kg
RT: 15.809 min Scan# 1704
Delta R.T. -0.000 min
Lab File: m66808.D
Acq: 16 Jul 2014 5:55 am

Tgt Ion	Ratio	Lower	Upper
105	100		
120	45.5	18.6	78.6



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\M140715\
 Data File : m66809.D
 Acq On : 16 Jul 2014 6:25 am
 Operator : krystend
 Sample : mc32033-4
 Misc : MS32289,MSM2361,6.003,,,5,1
 ALS Vial : 45 Sample Multiplier: 1

Quant Time: Jul 16 09:42:19 2014
 Quant Method : C:\msdchem\1\methods\M140529D0DS.M
 Quant Title : SW-846 Method 8260
 QLast Update : Wed Jun 11 13:34:57 2014
 Response via : Initial Calibration

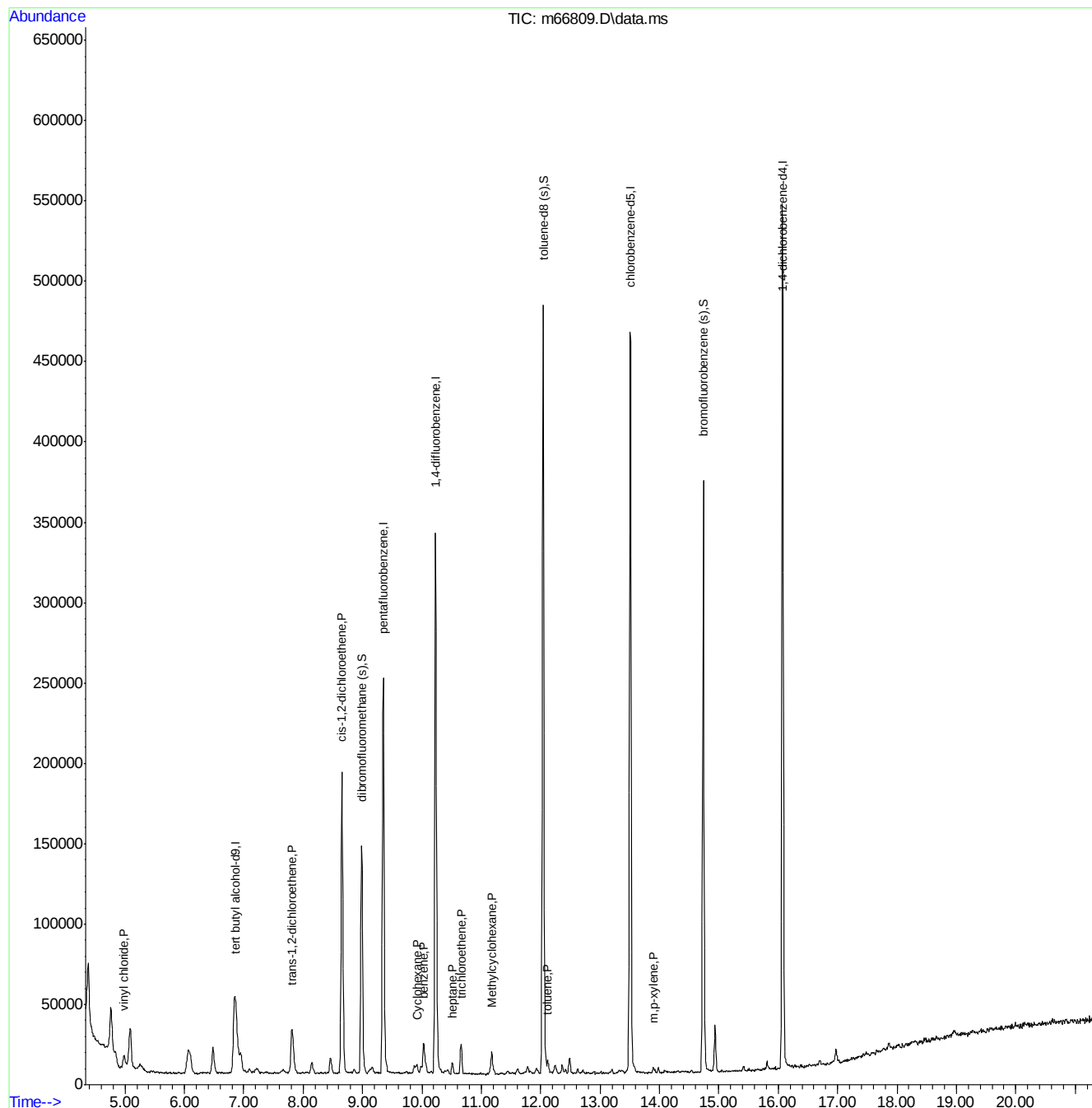
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	6.856	65	126328	500.00	ug/kg	0.00
4) pentafluorobenzene	9.349	168	199301	50.00	ug/kg	0.00
43) 1,4-difluorobenzene	10.231	114	324878	50.00	ug/kg	0.00
66) chlorobenzene-d5	13.505	82	139964	50.00	ug/kg	0.00
80) 1,4-dichlorobenzene-d4	16.072	152	174398	50.00	ug/kg	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	8.985	113	103932	51.52	ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	103.04%		
60) toluene-d8 (s)	12.043	98	361504	59.14	ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	118.28%		
82) bromofluorobenzene (s)	14.738	95	141569	46.24	ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	92.48%		
Target Compounds						
						Qvalue
7) vinyl chloride	4.983	62	12426	3.87	ug/kg	98
22) trans-1,2-dichloroethene	7.813	96	10269	3.21	ug/kg	94
36) cis-1,2-dichloroethene	8.648	96	96512	36.67	ug/kg	91
44) Cyclohexane	9.921	56	4528	0.77	ug/kg	97
47) benzene	10.029	78	17610	1.56	ug/kg	99
50) heptane	10.514	43	4147	0.71	ug/kg	93
51) trichloroethene	10.662	95	6380	2.18	ug/kg	97
55) Methylcyclohexane	11.181	83	5587	1.11	ug/kg	93
62) toluene	12.117	92	2687	0.44	ug/kg	84
75) m,p-xylene	13.902	106	1433	0.27	ug/kg#	75

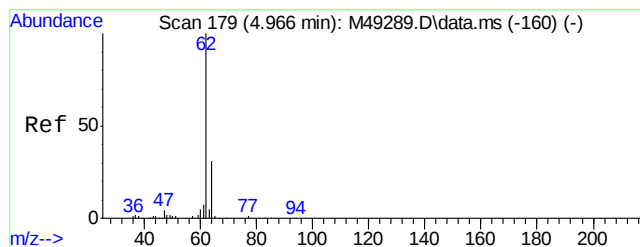
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\M140715S\
Data File : m66809.D
Acq On : 16 Jul 2014 6:25 am
Operator : krystend
Sample : mc32033-4
Misc : MS32289,MSM2361,6.003,,,5,1
ALS Vial : 45 Sample Multiplier: 1

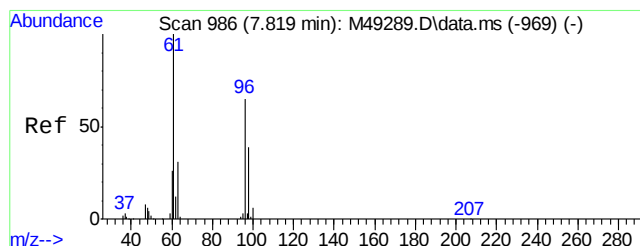
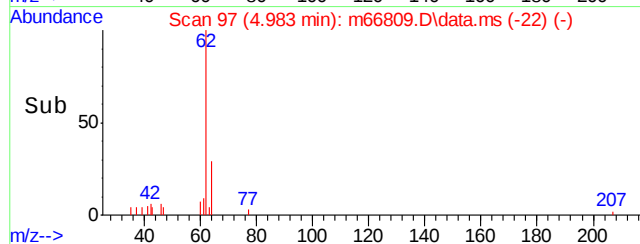
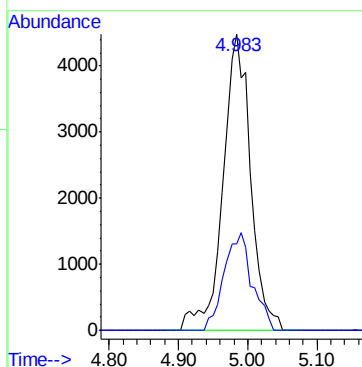
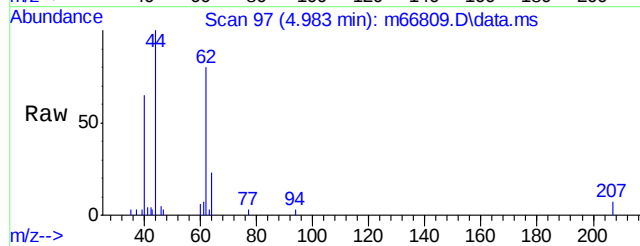
Quant Time: Jul 16 09:42:19 2014
Quant Method : C:\msdchem\1\methods\M140529D0DS.M
Quant Title : SW-846 Method 8260
QLast Update : Wed Jun 11 13:34:57 2014
Response via : Initial Calibration





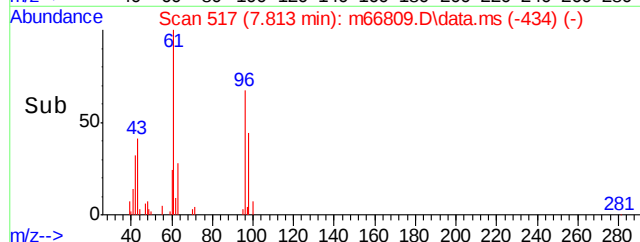
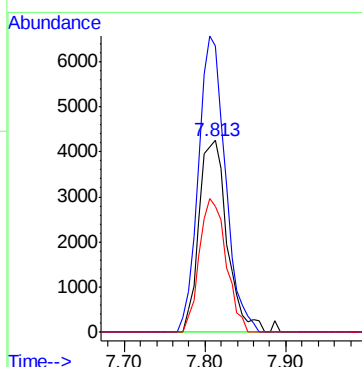
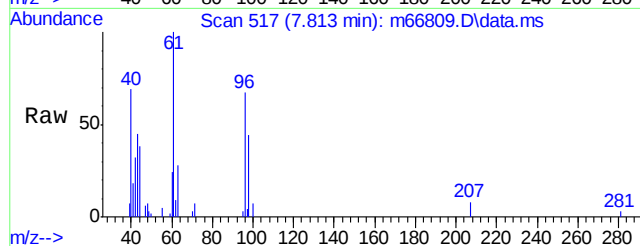
#7
vinyl chloride
Concen: 3.87 ug/kg
RT: 4.983 min Scan# 97
Delta R.T. 0.006 min
Lab File: m66809.D
Acq: 16 Jul 2014 6:25 am

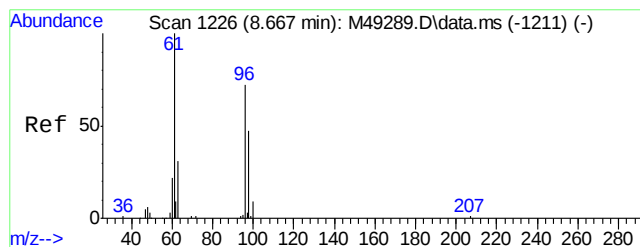
Tgt Ion	Ratio	Lower	Upper
62	100		
64	29.3	0.4	60.4



#22
trans-1,2-dichloroethene
Concen: 3.21 ug/kg
RT: 7.813 min Scan# 517
Delta R.T. 0.007 min
Lab File: m66809.D
Acq: 16 Jul 2014 6:25 am

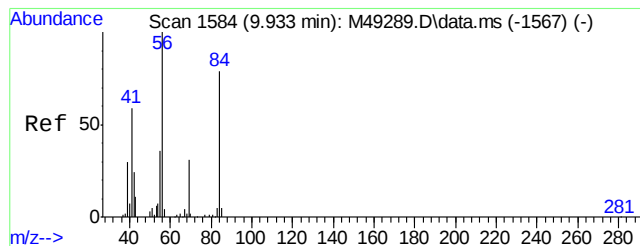
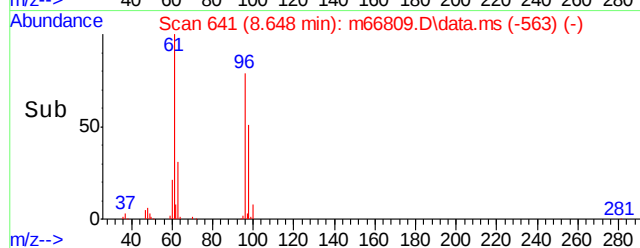
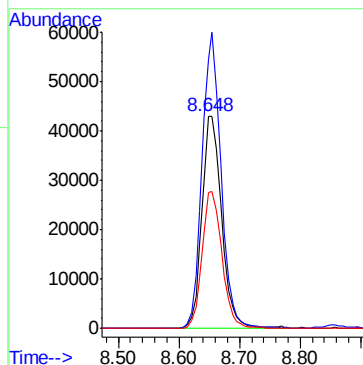
Tgt Ion	Ratio	Lower	Upper
96	100		
61	149.2	127.6	187.6
98	65.7	32.3	92.3





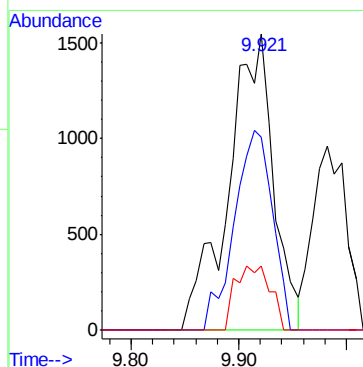
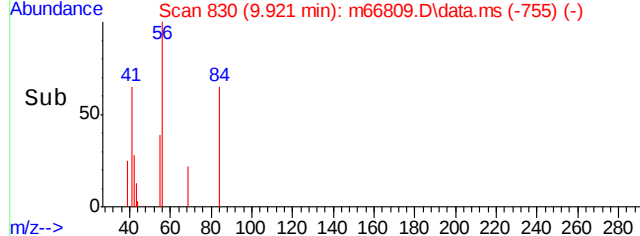
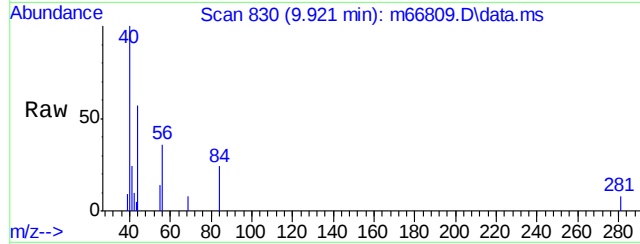
#36
cis-1,2-dichloroethene
Concen: 36.67 ug/kg
RT: 8.648 min Scan# 641
Delta R.T. -0.007 min
Lab File: m66809.D
Acq: 16 Jul 2014 6:25 am

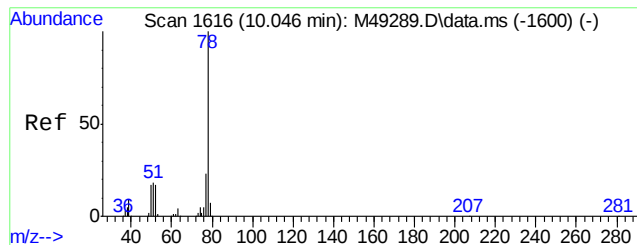
Tgt Ion:	96	Resp:	96512
Ion Ratio	Lower	Upper	
96	100		
61	126.7	111.6	171.6
98	64.0	35.5	95.5



#44
Cyclohexane
Concen: 0.77 ug/kg
RT: 9.921 min Scan# 830
Delta R.T. 0.007 min
Lab File: m66809.D
Acq: 16 Jul 2014 6:25 am

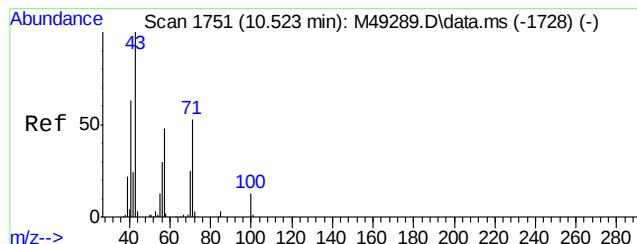
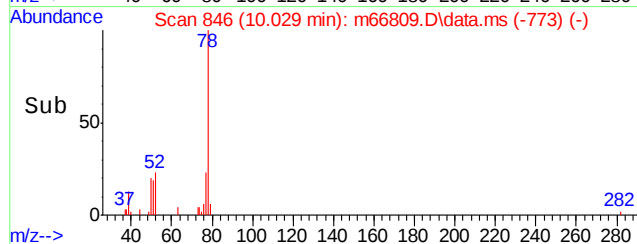
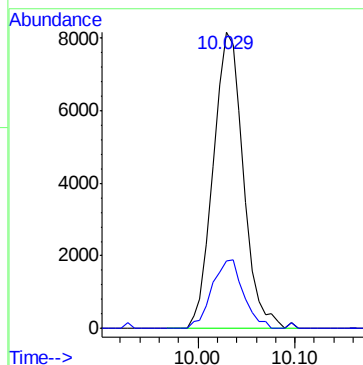
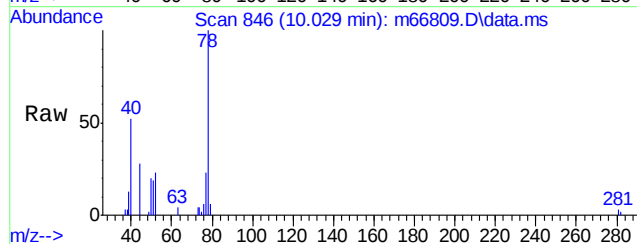
Tgt Ion:	56	Resp:	4528
Ion Ratio	Lower	Upper	
56	100		
84	65.1	47.2	87.2
69	21.8	3.6	43.6





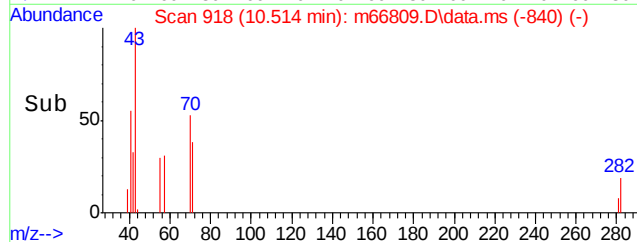
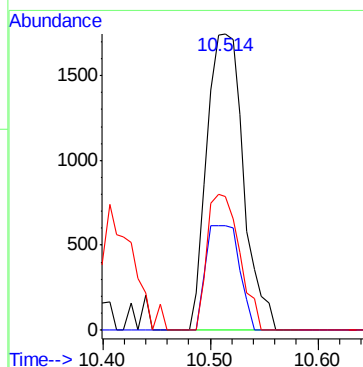
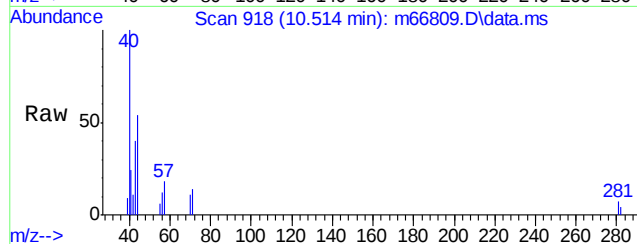
#47
benzene
Concen: 1.56 ug/kg
RT: 10.029 min Scan# 846
Delta R.T. -0.000 min
Lab File: m66809.D
Acq: 16 Jul 2014 6:25 am

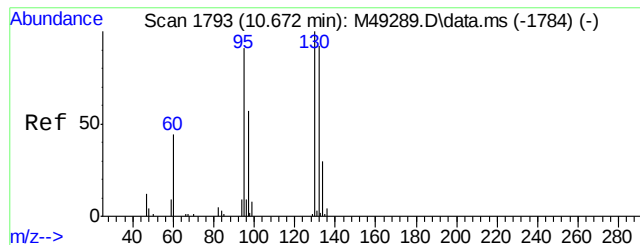
Tgt Ion	Ratio	Lower	Upper
78	100		
77	22.9	0.0	53.5



#50
heptane
Concen: 0.71 ug/kg
RT: 10.514 min Scan# 918
Delta R.T. 0.007 min
Lab File: m66809.D
Acq: 16 Jul 2014 6:25 am

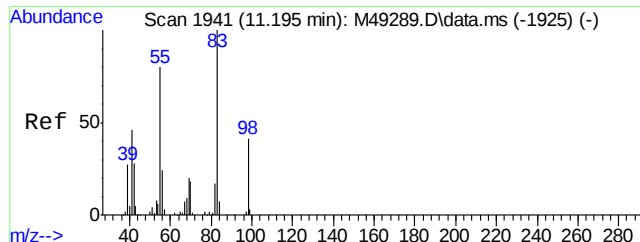
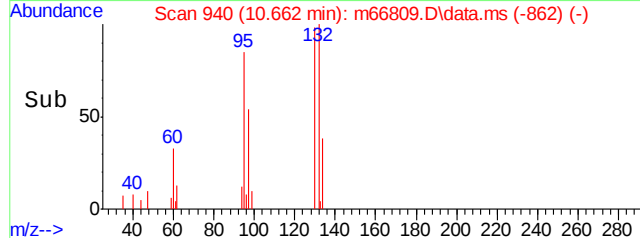
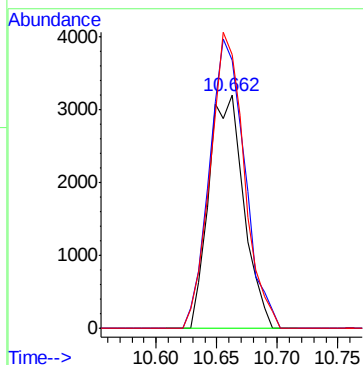
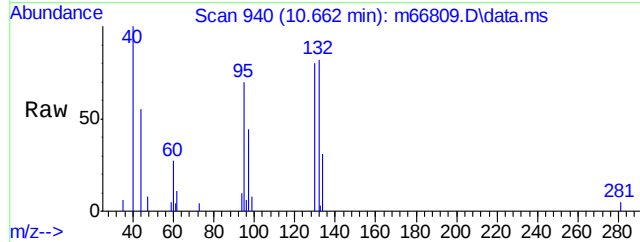
Tgt Ion	Ratio	Lower	Upper
43	100		
71	35.2	11.3	71.3
57	45.1	17.8	77.8





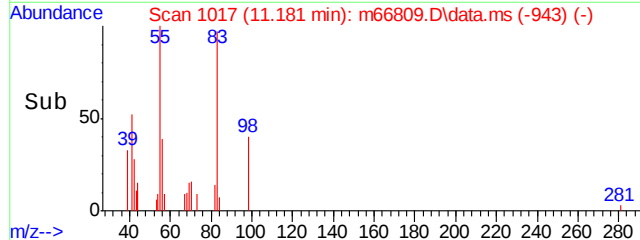
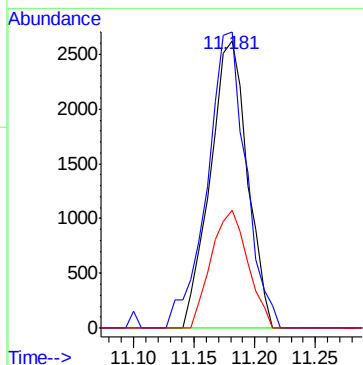
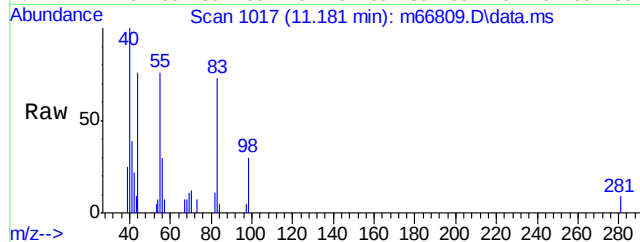
#51
trichloroethene
Concen: 2.18 ug/kg
RT: 10.662 min Scan# 940
Delta R.T. 0.007 min
Lab File: m66809.D
Acq: 16 Jul 2014 6:25 am

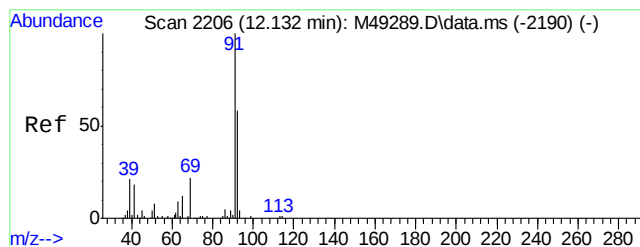
Tgt Ion	Ratio	Lower	Upper
95	100		
130	114.9	84.0	144.0
132	117.4	81.4	141.4



#55
Methylcyclohexane
Concen: 1.11 ug/kg
RT: 11.181 min Scan# 1017
Delta R.T. -0.000 min
Lab File: m66809.D
Acq: 16 Jul 2014 6:25 am

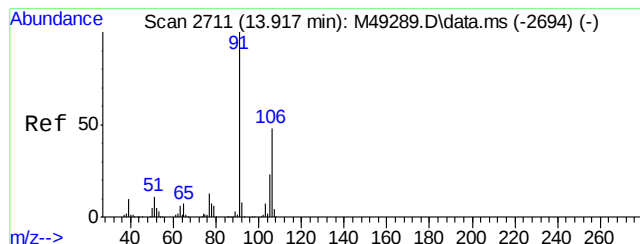
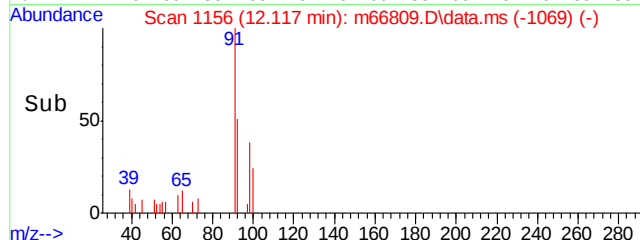
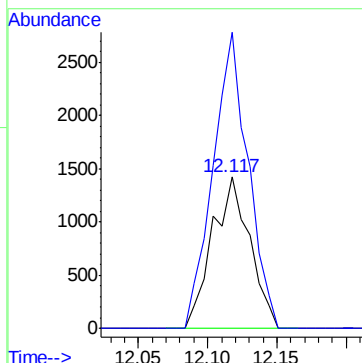
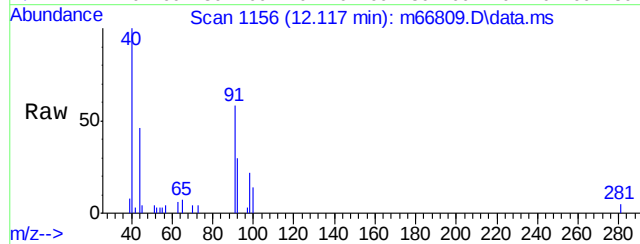
Tgt Ion	Ratio	Lower	Upper
83	100		
55	103.3	75.2	115.2
98	41.1	24.6	64.6





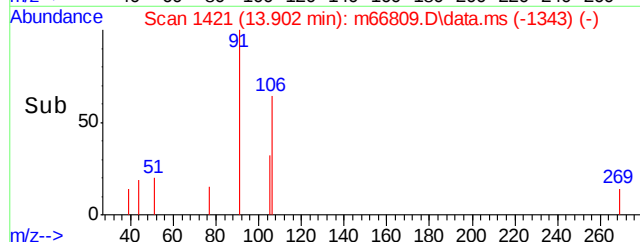
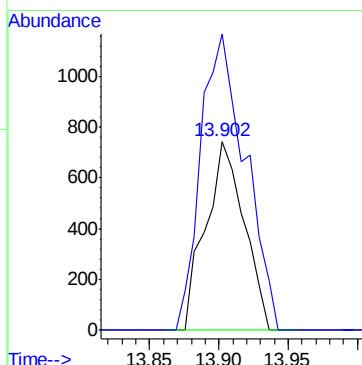
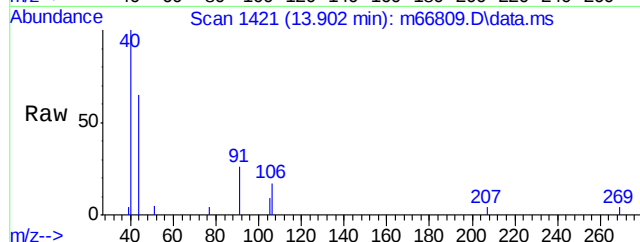
#62
toluene
Concen: 0.44 ug/kg
RT: 12.117 min Scan# 1156
Delta R.T. 0.006 min
Lab File: m66809.D
Acq: 16 Jul 2014 6:25 am

Tgt Ion: 92 Resp: 2687
Ion Ratio Lower Upper
92 100
91 196.1 143.2 203.2



#75
m,p-xylene
Concen: 0.27 ug/kg
RT: 13.902 min Scan# 1421
Delta R.T. 0.006 min
Lab File: m66809.D
Acq: 16 Jul 2014 6:25 am

Tgt Ion: 106 Resp: 1433
Ion Ratio Lower Upper
106 100
91 156.6 164.1 224.1#



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\M140715\
 Data File : m66810.D
 Acq On : 16 Jul 2014 6:54 am
 Operator : krystend
 Sample : mc32033-5
 Misc : MS32289,MSM2361,6.036,,,5,1
 ALS Vial : 46 Sample Multiplier: 1

Quant Time: Jul 16 09:43:40 2014
 Quant Method : C:\msdchem\1\methods\M140529D0DS.M
 Quant Title : SW-846 Method 8260
 QLast Update : Wed Jun 11 13:34:57 2014
 Response via : Initial Calibration

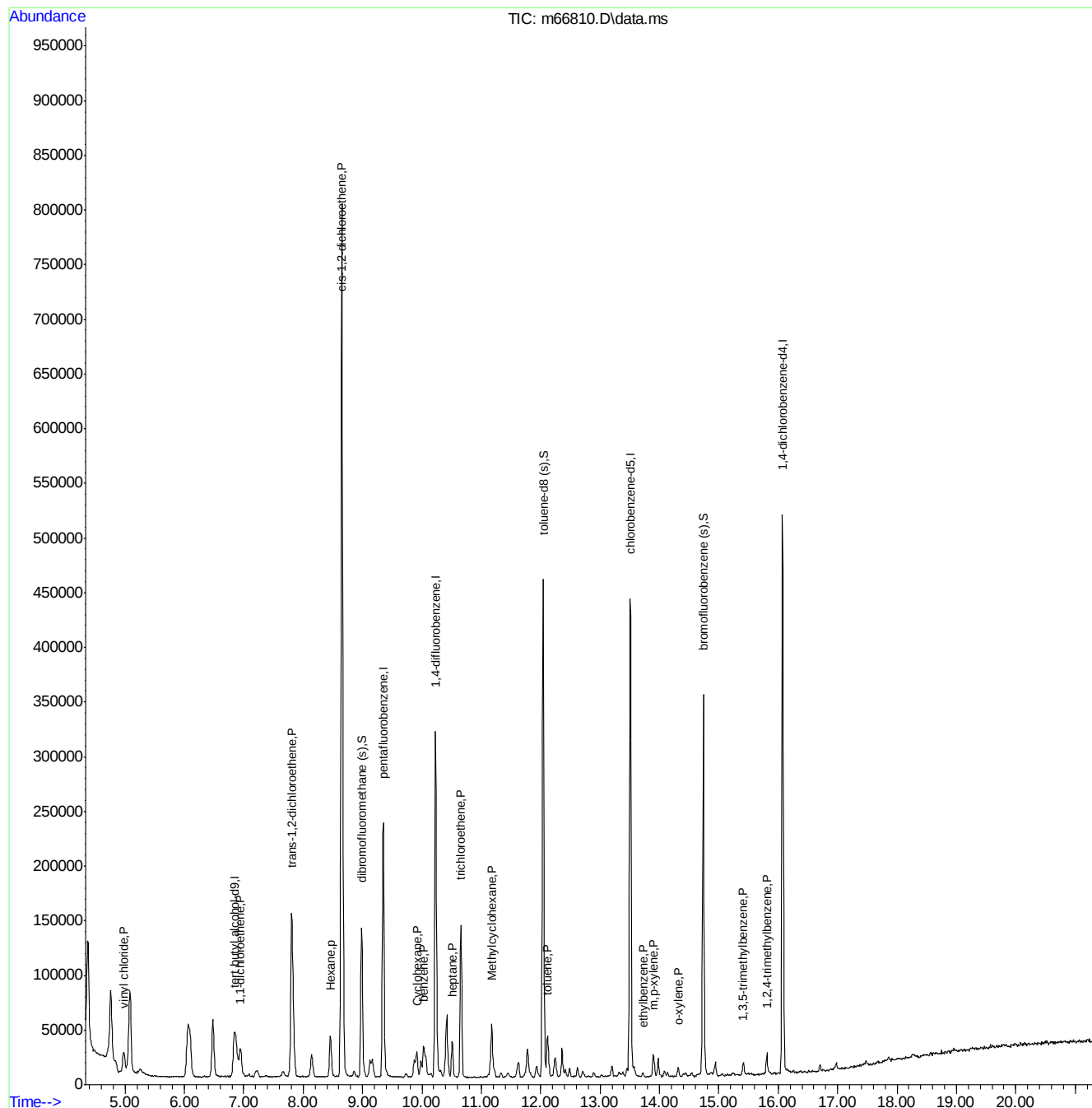
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	6.849	65	111306	500.00	ug/kg	0.00
4) pentafluorobenzene	9.349	168	188135	50.00	ug/kg	0.00
43) 1,4-difluorobenzene	10.231	114	309965	50.00	ug/kg	0.00
66) chlorobenzene-d5	13.505	82	133009	50.00	ug/kg	0.00
80) 1,4-dichlorobenzene-d4	16.072	152	164311	50.00	ug/kg	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	8.985	113	98881	51.93	ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	103.86%		
60) toluene-d8 (s)	12.043	98	343101	58.80	ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	117.60%		
82) bromofluorobenzene (s)	14.738	95	132793	46.04	ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	92.08%		
Target Compounds						
						Qvalue
7) vinyl chloride	4.977	62	31210	10.30	ug/kg	96
15) 1,1-dichloroethene	6.937	96	5285	1.86	ug/kg	82
22) trans-1,2-dichloroethene	7.806	96	55676	24.75	ug/kg	97
31) Hexane	8.459	41	17731	3.69	ug/kg#	66
36) cis-1,2-dichloroethene	8.648	96	403860	162.57	ug/kg	98
44) Cyclohexane	9.915	56	16063	2.85	ug/kg	93
47) benzene	10.029	78	25007	2.53	ug/kg	92
50) heptane	10.507	43	18377	3.32	ug/kg	99
51) trichloroethene	10.656	95	47048	16.87	ug/kg	98
55) Methylcyclohexane	11.181	83	18818	3.93	ug/kg	89
62) toluene	12.111	92	15318	2.60	ug/kg	92
74) ethylbenzene	13.721	91	3691	0.30	ug/kg	91
75) m,p-xylene	13.896	106	7616	1.53	ug/kg	83
76) o-xylene	14.320	106	2353	0.47	ug/kg	87
89) 1,3,5-trimethylbenzene	15.398	105	3442	0.28	ug/kg	91
91) 1,2,4-trimethylbenzene	15.809	105	6624	0.55	ug/kg	92

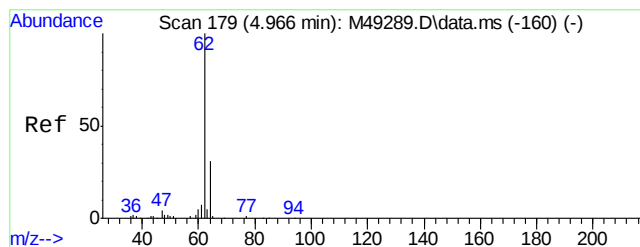
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\M140715S\
Data File : m66810.D
Acq On : 16 Jul 2014 6:54 am
Operator : krystend
Sample : mc32033-5
Misc : MS32289,MSM2361,6.036,,,5,1
ALS Vial : 46 Sample Multiplier: 1

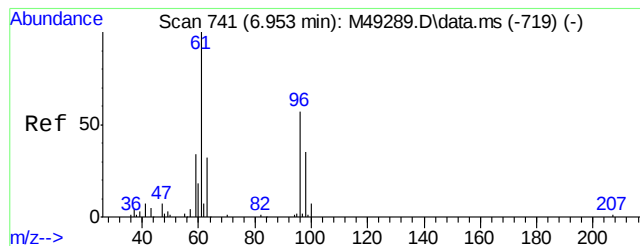
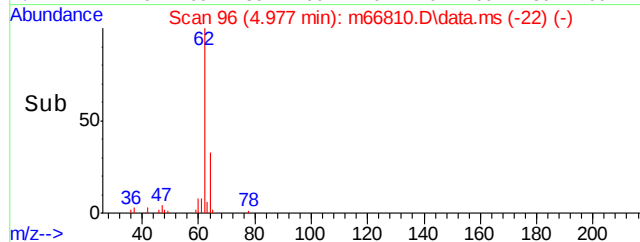
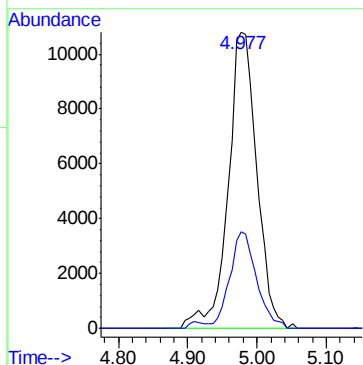
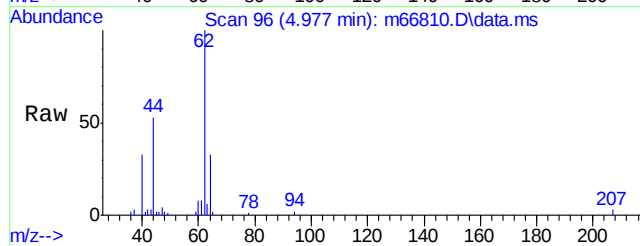
Quant Time: Jul 16 09:43:40 2014
Quant Method : C:\msdchem\1\methods\M140529D0DS.M
Quant Title : SW-846 Method 8260
QLast Update : Wed Jun 11 13:34:57 2014
Response via : Initial Calibration





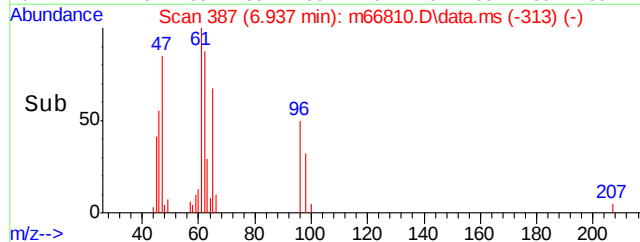
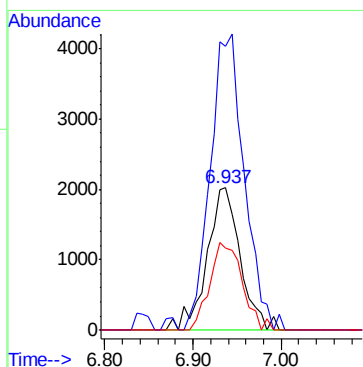
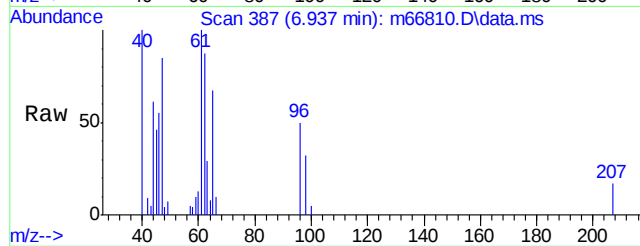
#7
vinyl chloride
Concen: 10.30 ug/kg
RT: 4.977 min Scan# 96
Delta R.T. -0.000 min
Lab File: m66810.D
Acq: 16 Jul 2014 6:54 am

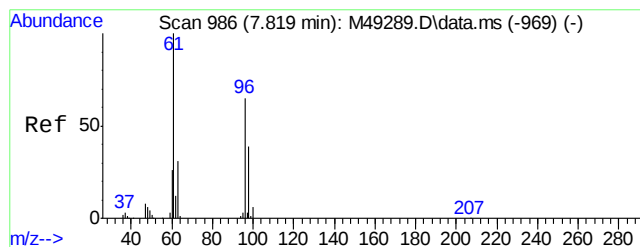
Tgt Ion: 62 Resp: 31210
Ion Ratio Lower Upper
62 100
64 32.7 0.4 60.4



#15
1,1-dichloroethene
Concen: 1.86 ug/kg
RT: 6.937 min Scan# 387
Delta R.T. 0.000 min
Lab File: m66810.D
Acq: 16 Jul 2014 6:54 am

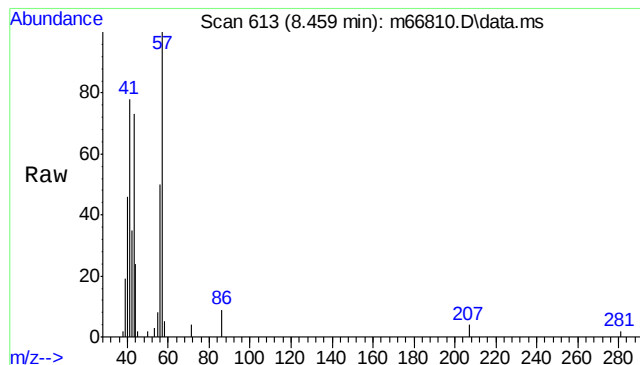
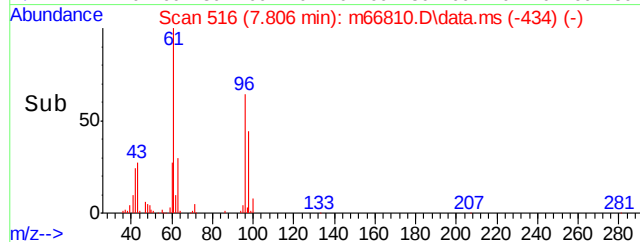
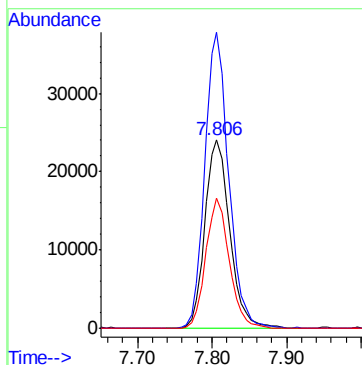
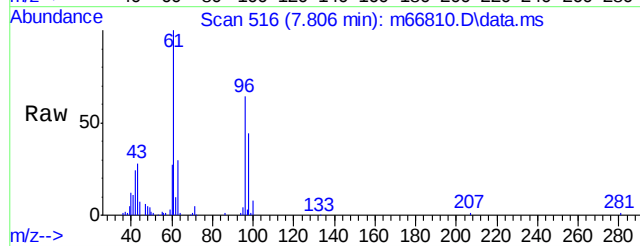
Tgt Ion: 96 Resp: 5285
Ion Ratio Lower Upper
96 100
61 199.6 140.2 200.2
63 57.3 22.9 82.9





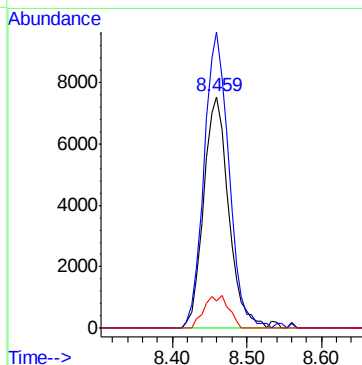
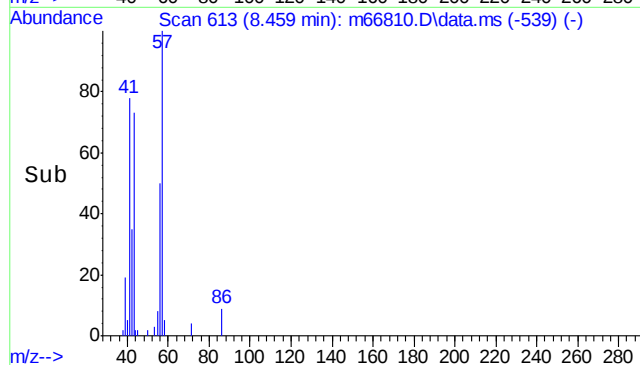
#22
trans-1,2-dichloroethene
Concen: 24.75 ug/kg
RT: 7.806 min Scan# 516
Delta R.T. 0.000 min
Lab File: m66810.D
Acq: 16 Jul 2014 6:54 am

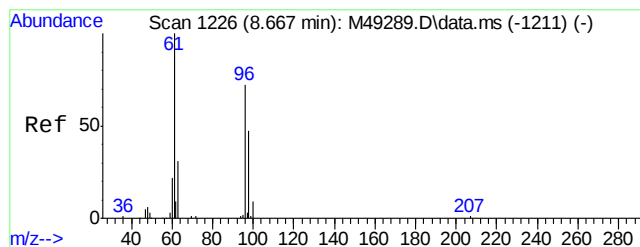
Tgt Ion	Ratio	Lower	Upper
96	100		
61	157.4	127.6	187.6
98	69.2	32.3	92.3



#31
Hexane
Concen: 3.69 ug/kg
RT: 8.459 min Scan# 613
Delta R.T. 0.000 min
Lab File: m66810.D
Acq: 16 Jul 2014 6:54 am

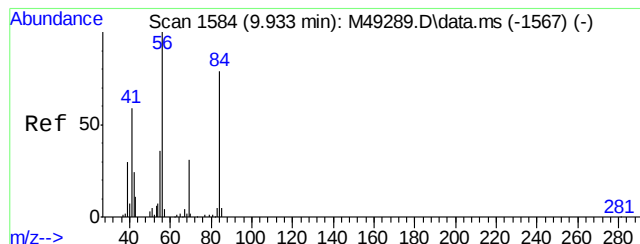
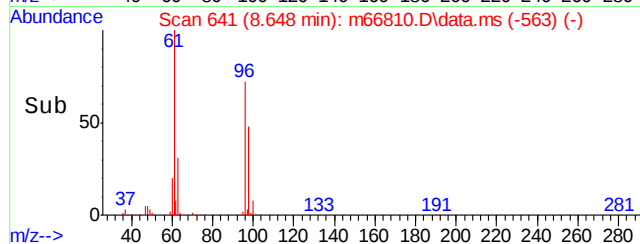
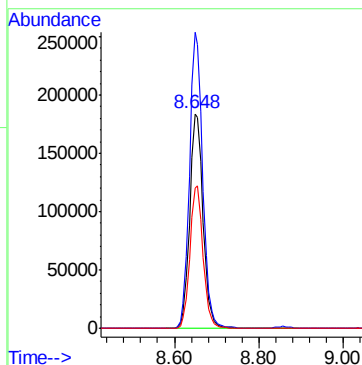
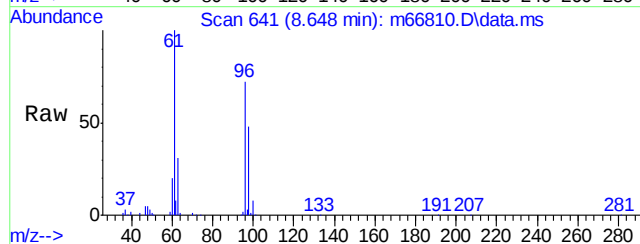
Tgt Ion	Ratio	Lower	Upper
41	100		
57	126.5	72.9	109.3#
86	13.5	8.5	12.7#





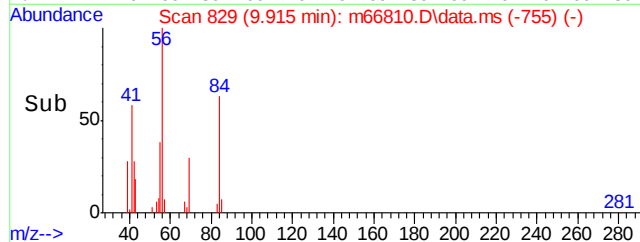
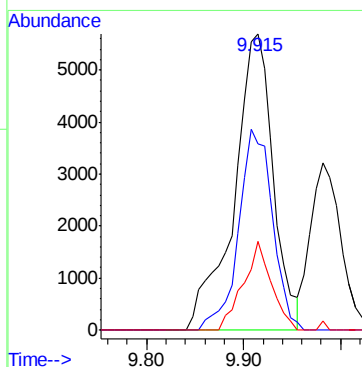
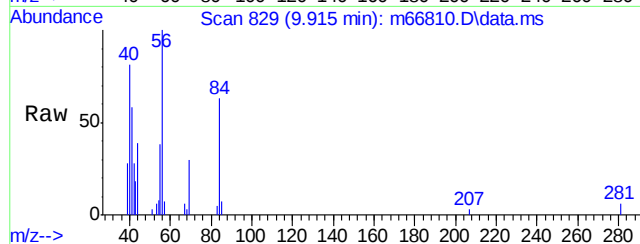
#36
 cis-1,2-dichloroethene
 Concen: 162.57 ug/kg
 RT: 8.648 min Scan# 641
 Delta R.T. -0.007 min
 Lab File: m66810.D
 Acq: 16 Jul 2014 6:54 am

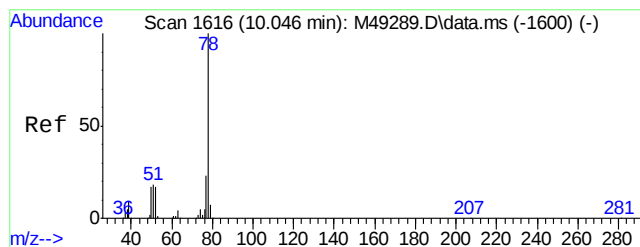
Tgt Ion:	96	Resp:	403860
Ion Ratio	Lower	Upper	
96	100		
61	138.2	111.6	171.6
98	65.7	35.5	95.5



#44
 Cyclohexane
 Concen: 2.85 ug/kg
 RT: 9.915 min Scan# 829
 Delta R.T. 0.001 min
 Lab File: m66810.D
 Acq: 16 Jul 2014 6:54 am

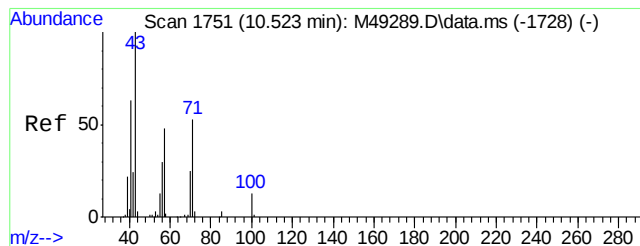
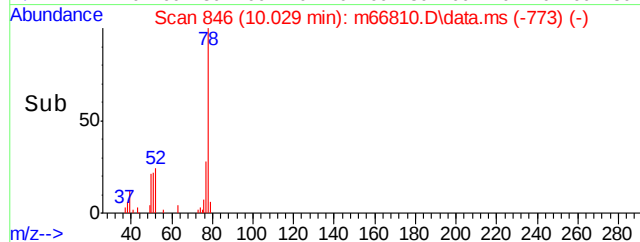
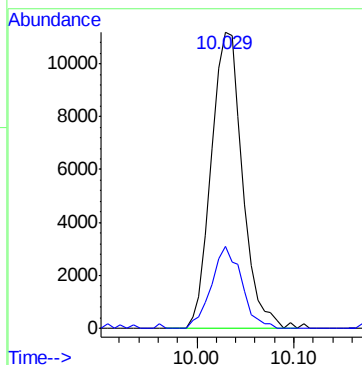
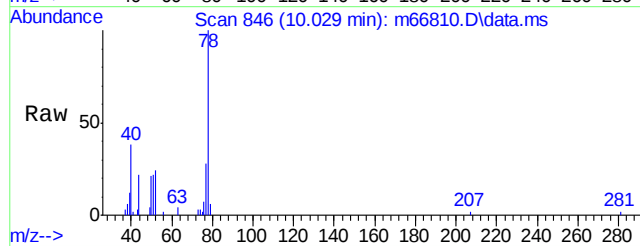
Tgt Ion:	56	Resp:	16063
Ion Ratio	Lower	Upper	
56	100		
84	62.8	47.2	87.2
69	29.8	3.6	43.6





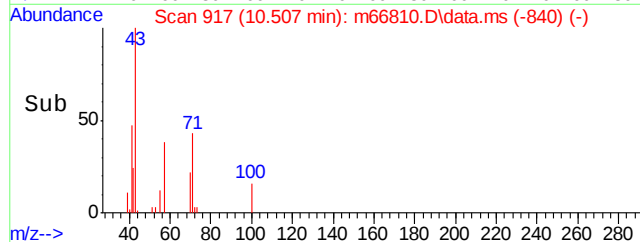
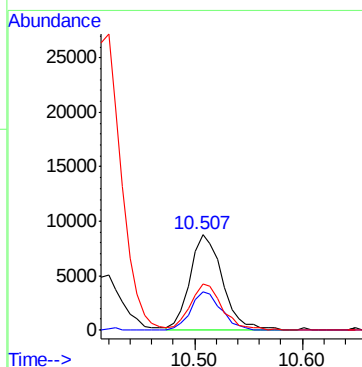
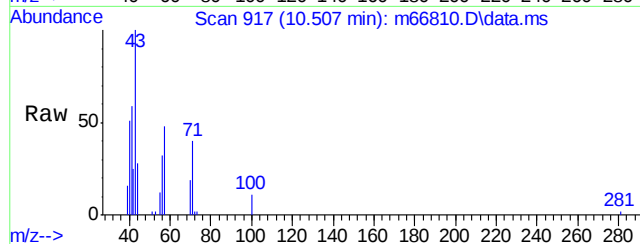
#47
benzene
Concen: 2.53 ug/kg
RT: 10.029 min Scan# 846
Delta R.T. 0.000 min
Lab File: m66810.D
Acq: 16 Jul 2014 6:54 am

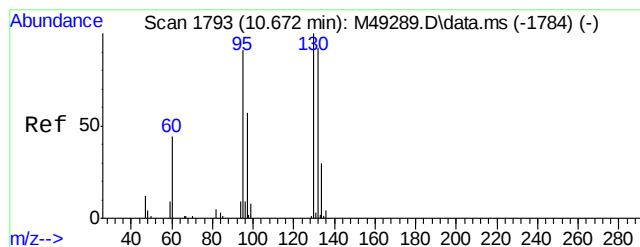
Tgt Ion:	78	Resp:	25007
Ion Ratio	Lower	Upper	
78	100		
77	27.6	0.0	53.5



#50
heptane
Concen: 3.32 ug/kg
RT: 10.507 min Scan# 917
Delta R.T. 0.000 min
Lab File: m66810.D
Acq: 16 Jul 2014 6:54 am

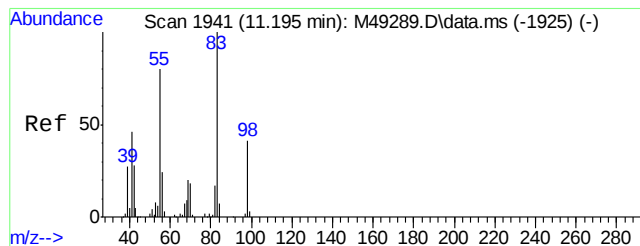
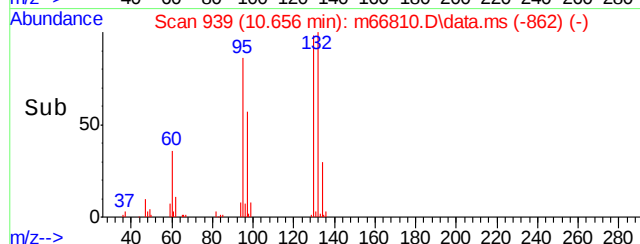
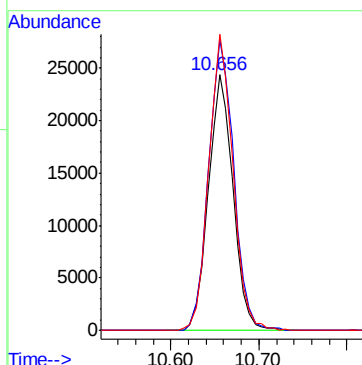
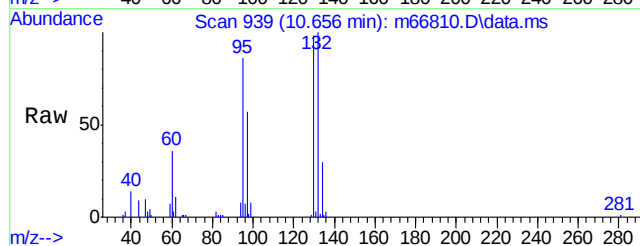
Tgt Ion:	43	Resp:	18377
Ion Ratio	Lower	Upper	
43	100		
71	40.2	11.3	71.3
57	48.3	17.8	77.8





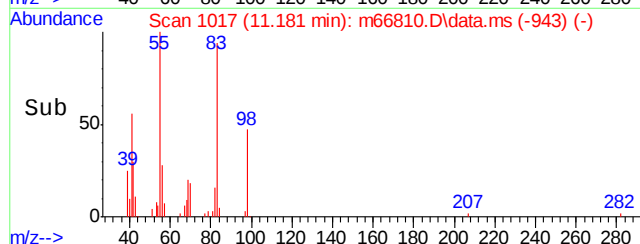
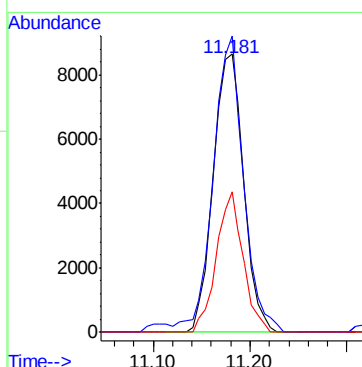
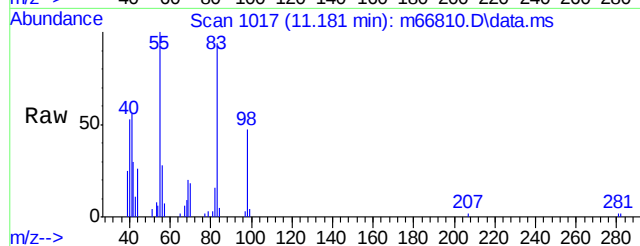
#51
trichloroethene
Concen: 16.87 ug/kg
RT: 10.656 min Scan# 939
Delta R.T. 0.001 min
Lab File: m66810.D
Acq: 16 Jul 2014 6:54 am

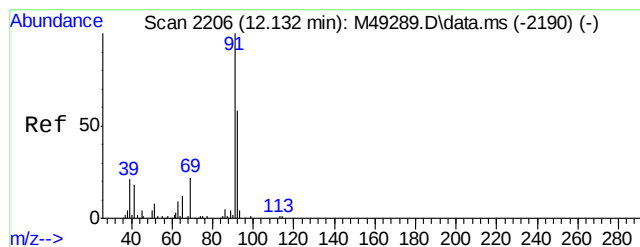
Tgt Ion	Ratio	Lower	Upper
95	100		
130	113.6	84.0	144.0
132	115.8	81.4	141.4



#55
Methylcyclohexane
Concen: 3.93 ug/kg
RT: 11.181 min Scan# 1017
Delta R.T. -0.000 min
Lab File: m66810.D
Acq: 16 Jul 2014 6:54 am

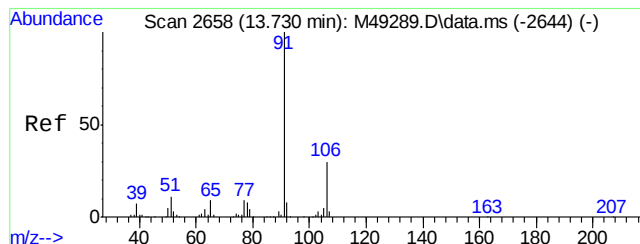
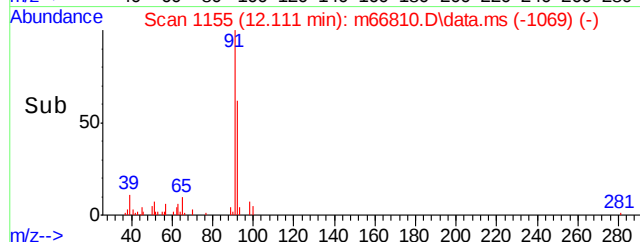
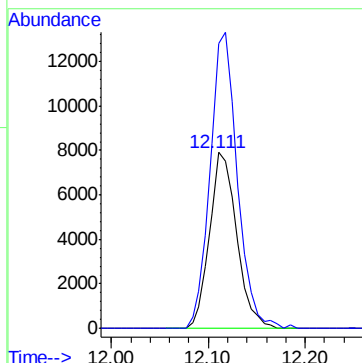
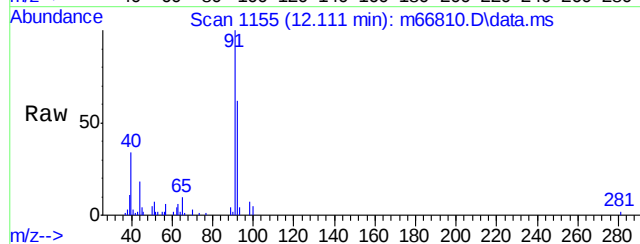
Tgt Ion	Ratio	Lower	Upper
83	100		
55	106.5	75.2	115.2
98	50.5	24.6	64.6





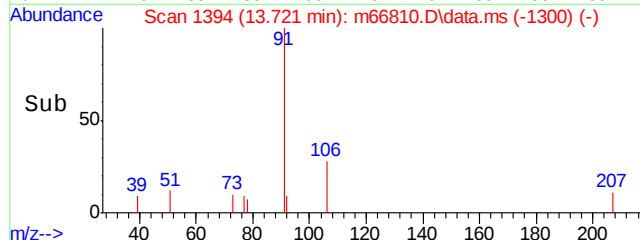
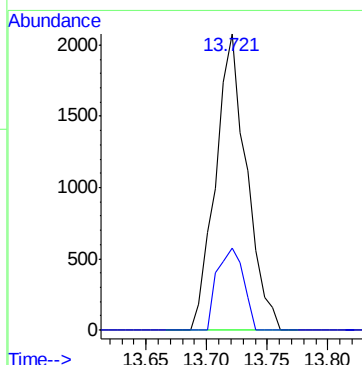
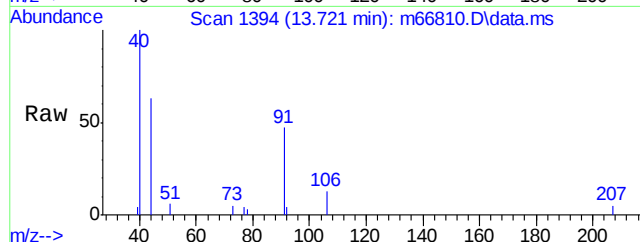
#62
toluene
Concen: 2.60 ug/kg
RT: 12.111 min Scan# 1155
Delta R.T. -0.000 min
Lab File: m66810.D
Acq: 16 Jul 2014 6:54 am

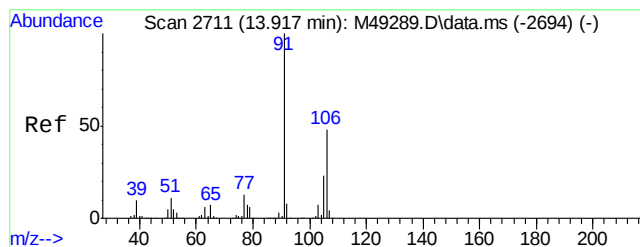
Tgt Ion: 92 Resp: 15318
Ion Ratio Lower Upper
92 100
91 162.0 143.2 203.2



#74
ethylbenzene
Concen: 0.30 ug/kg
RT: 13.721 min Scan# 1394
Delta R.T. 0.007 min
Lab File: m66810.D
Acq: 16 Jul 2014 6:54 am

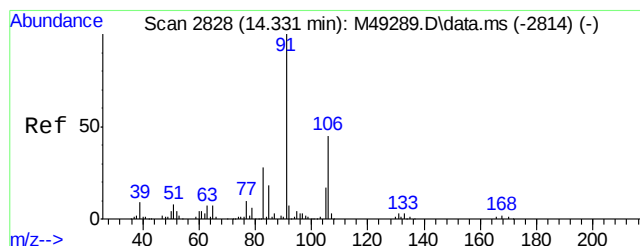
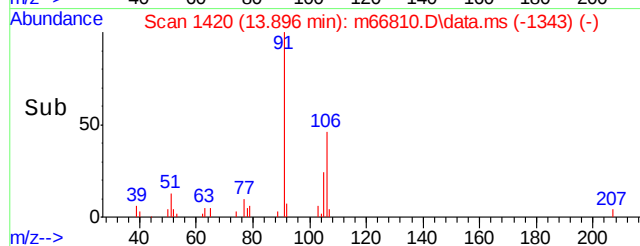
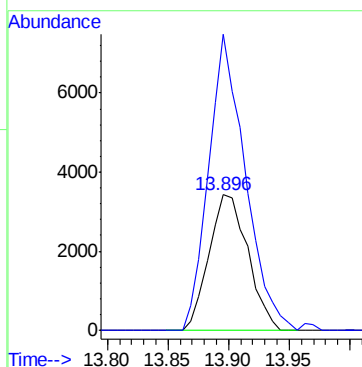
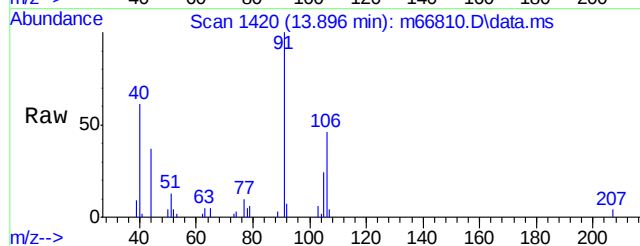
Tgt Ion: 91 Resp: 3691
Ion Ratio Lower Upper
91 100
106 27.6 2.7 62.7





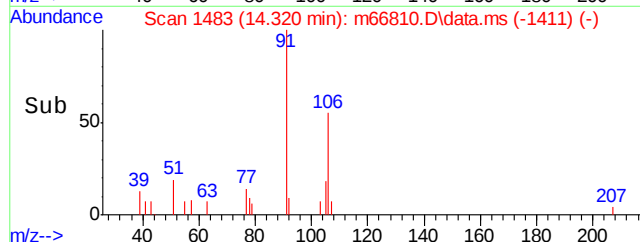
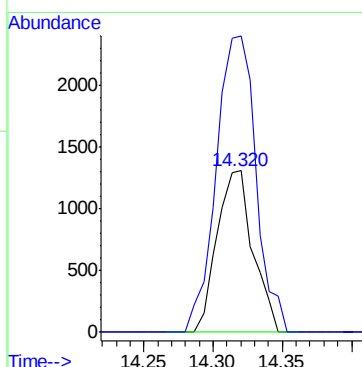
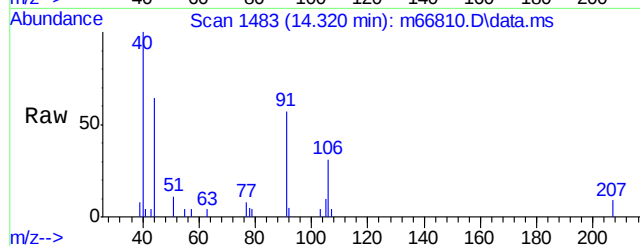
#75
m,p-xylene
Concen: 1.53 ug/kg
RT: 13.896 min Scan# 1420
Delta R.T. -0.000 min
Lab File: m66810.D
Acq: 16 Jul 2014 6:54 am

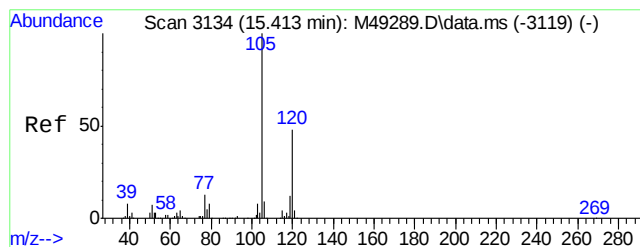
Tgt Ion:106 Resp: 7616
Ion Ratio Lower Upper
106 100
91 218.8 164.1 224.1



#76
o-xylene
Concen: 0.47 ug/kg
RT: 14.320 min Scan# 1483
Delta R.T. 0.007 min
Lab File: m66810.D
Acq: 16 Jul 2014 6:54 am

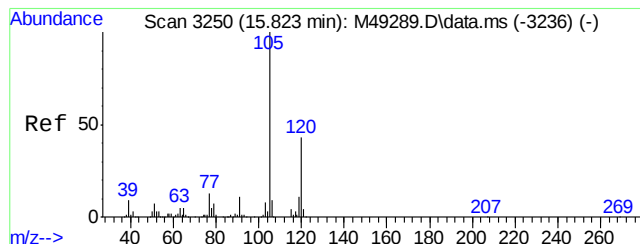
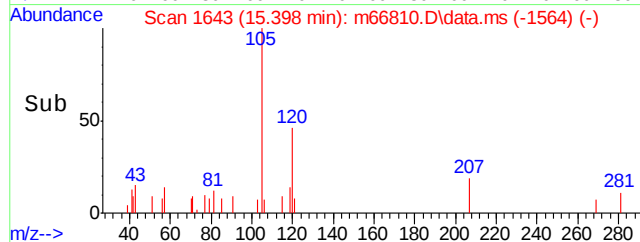
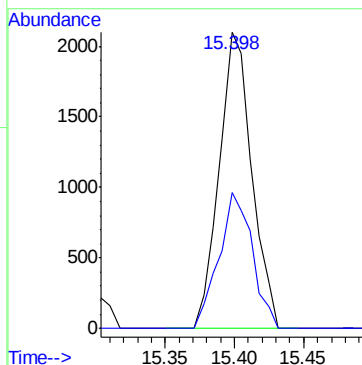
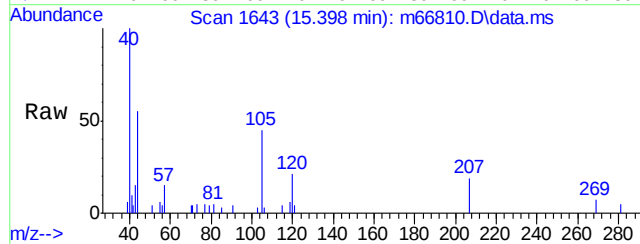
Tgt Ion:106 Resp: 2353
Ion Ratio Lower Upper
106 100
91 183.3 173.6 233.6





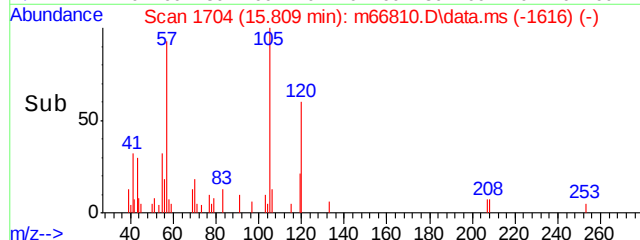
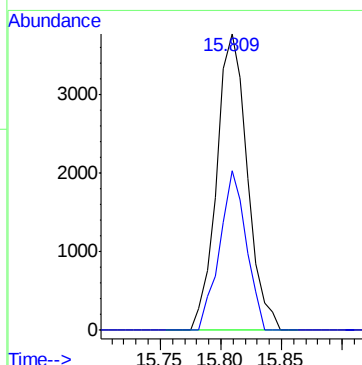
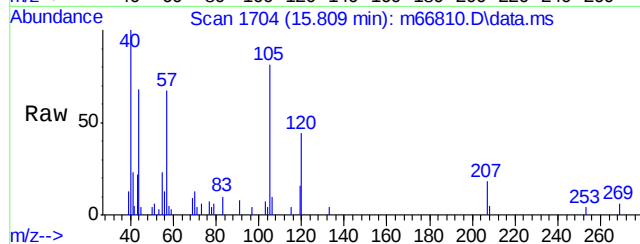
#89
1,3,5-trimethylbenzene
Concen: 0.28 ug/kg
RT: 15.398 min Scan# 1643
Delta R.T. -0.000 min
Lab File: m66810.D
Acq: 16 Jul 2014 6:54 am

Tgt Ion	Ratio	Lower	Upper
105	100		
120	46.0	22.1	82.1



#91
1,2,4-trimethylbenzene
Concen: 0.55 ug/kg
RT: 15.809 min Scan# 1704
Delta R.T. -0.000 min
Lab File: m66810.D
Acq: 16 Jul 2014 6:54 am

Tgt Ion	Ratio	Lower	Upper
105	100		
120	54.0	18.6	78.6



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\M140715\
 Data File : m66811.D
 Acq On : 16 Jul 2014 7:23 am
 Operator : krystend
 Sample : mc32033-6
 Misc : MS32289,MSM2361,6.197,,,5,1
 ALS Vial : 47 Sample Multiplier: 1

Quant Time: Jul 16 09:48:40 2014
 Quant Method : C:\msdchem\1\methods\M140529D0DS.M
 Quant Title : SW-846 Method 8260
 QLast Update : Wed Jun 11 13:34:57 2014
 Response via : Initial Calibration

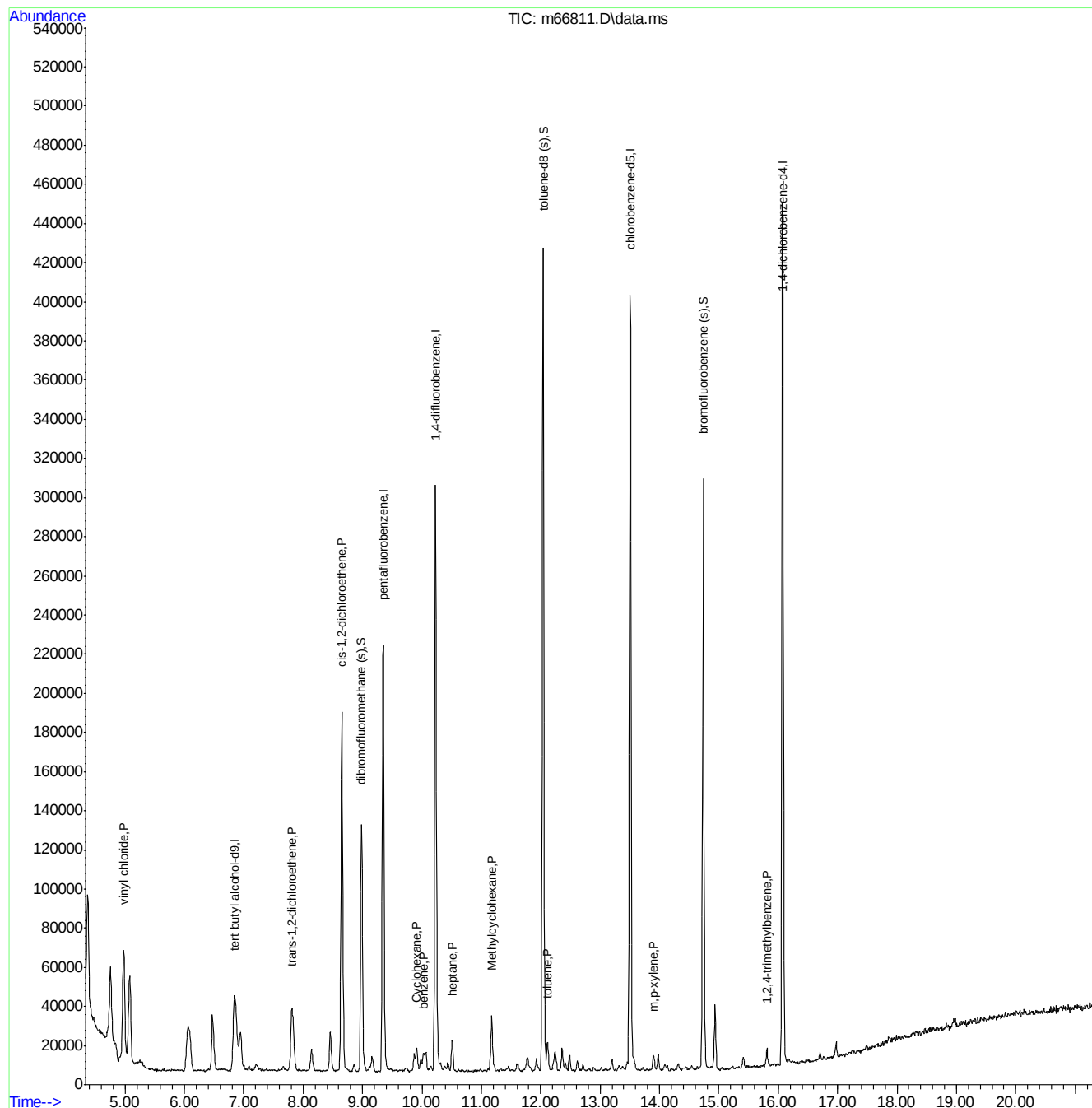
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	6.843	65	102907	500.00	ug/kg	-0.01
4) pentafluorobenzene	9.349	168	177465	50.00	ug/kg	0.00
43) 1,4-difluorobenzene	10.231	114	290970	50.00	ug/kg	0.00
66) chlorobenzene-d5	13.505	82	120189	50.00	ug/kg	0.00
80) 1,4-dichlorobenzene-d4	16.072	152	141481	50.00	ug/kg	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	8.978	113	94627	52.68	ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	105.36%		
60) toluene-d8 (s)	12.043	98	322573	58.90	ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	117.80%		
82) bromofluorobenzene (s)	14.738	95	116656	46.97	ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	93.94%		
Target Compounds						
					Qvalue	
7) vinyl chloride	4.977	62	94711	33.14	ug/kg	100
22) trans-1,2-dichloroethene	7.806	96	10633	3.95	ug/kg	90
36) cis-1,2-dichloroethene	8.648	96	94932	40.51	ug/kg	96
44) Cyclohexane	9.908	56	8335	1.57	ug/kg	96
47) benzene	10.029	78	8275	0.63	ug/kg	98
50) heptane	10.507	43	9105	1.75	ug/kg	99
55) Methylcyclohexane	11.174	83	10443	2.32	ug/kg	86
62) toluene	12.111	92	5977	1.08	ug/kg	97
75) m,p-xylene	13.903	106	3325	0.74	ug/kg	91
91) 1,2,4-trimethylbenzene	15.809	105	3224	0.31	ug/kg	99

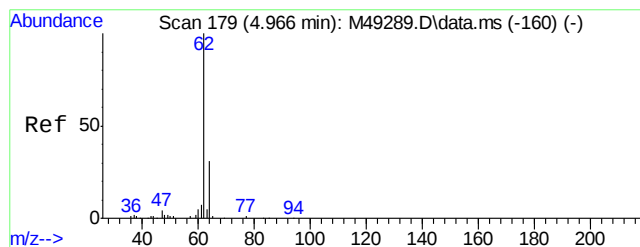
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\M140715S\
Data File : m66811.D
Acq On : 16 Jul 2014 7:23 am
Operator : krystend
Sample : mc32033-6
Misc : MS32289,MSM2361,6.197,,,5,1
ALS Vial : 47 Sample Multiplier: 1

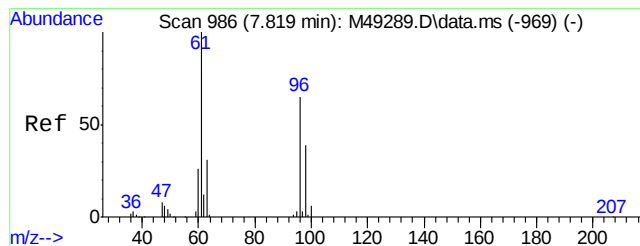
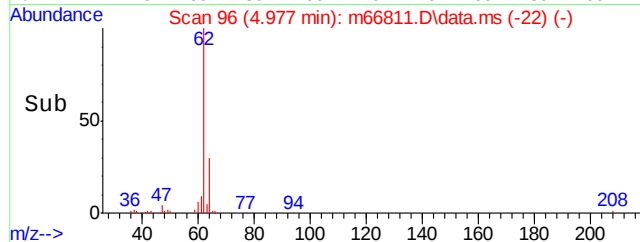
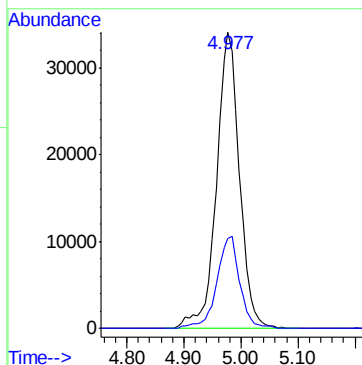
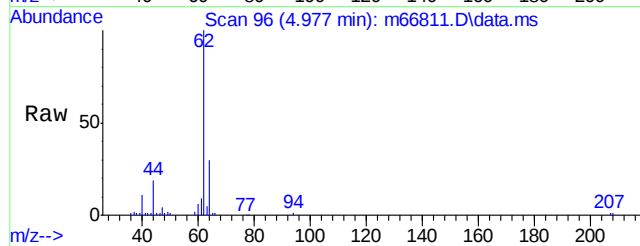
Quant Time: Jul 16 09:48:40 2014
Quant Method : C:\msdchem\1\methods\M140529D0DS.M
Quant Title : SW-846 Method 8260
QLast Update : Wed Jun 11 13:34:57 2014
Response via : Initial Calibration





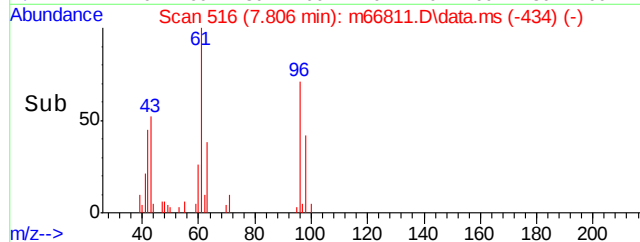
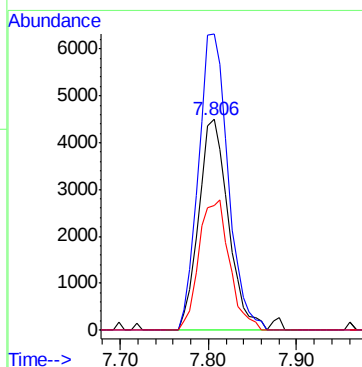
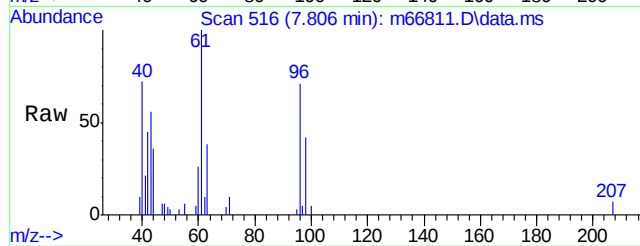
#7
vinyl chloride
Concen: 33.14 ug/kg
RT: 4.977 min Scan# 96
Delta R.T. -0.000 min
Lab File: m66811.D
Acq: 16 Jul 2014 7:23 am

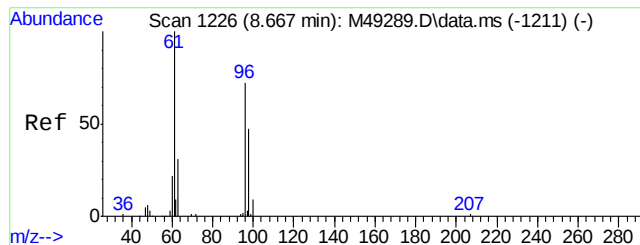
Tgt Ion:	62	Resp:	94711
Ion Ratio	Lower	Upper	
62	100		
64	30.4	0.4	60.4



#22
trans-1,2-dichloroethene
Concen: 3.95 ug/kg
RT: 7.806 min Scan# 516
Delta R.T. 0.000 min
Lab File: m66811.D
Acq: 16 Jul 2014 7:23 am

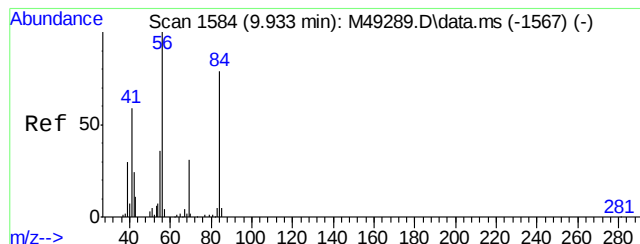
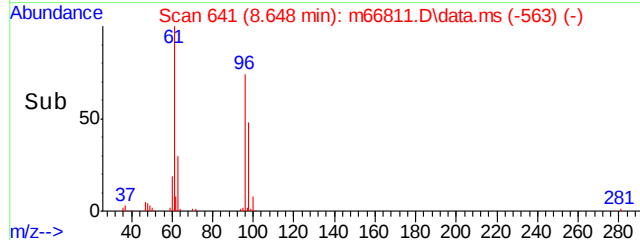
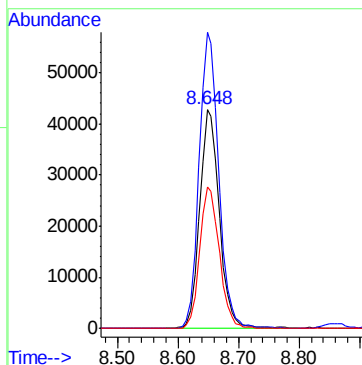
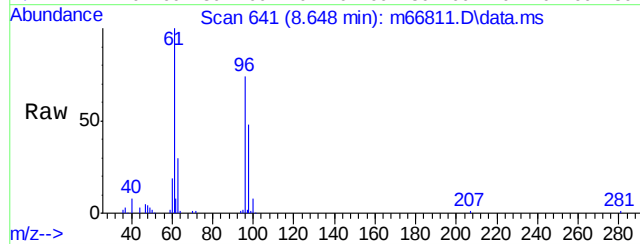
Tgt Ion:	96	Resp:	10633
Ion Ratio	Lower	Upper	
96	100		
61	140.6	127.6	187.6
98	59.1	32.3	92.3





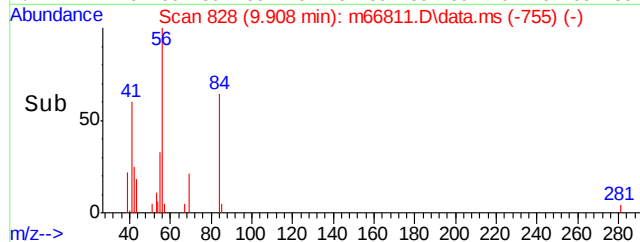
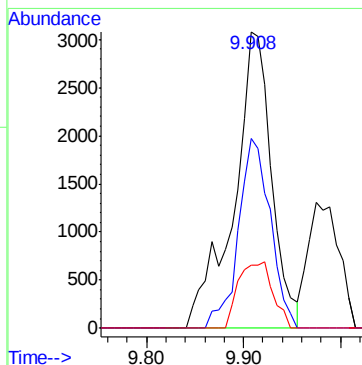
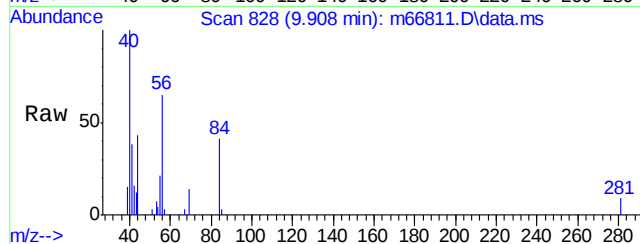
#36
cis-1,2-dichloroethene
Concen: 40.51 ug/kg
RT: 8.648 min Scan# 641
Delta R.T. -0.007 min
Lab File: m66811.D
Acq: 16 Jul 2014 7:23 am

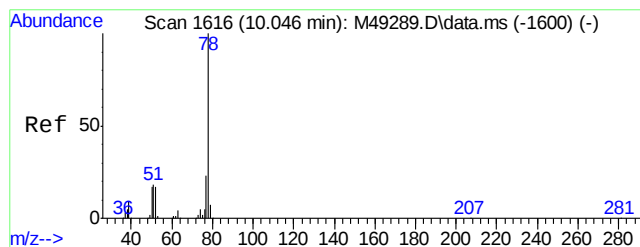
Tgt Ion	Ratio	Lower	Upper
96	100		
61	135.1	111.6	171.6
98	64.5	35.5	95.5



#44
Cyclohexane
Concen: 1.57 ug/kg
RT: 9.908 min Scan# 828
Delta R.T. -0.006 min
Lab File: m66811.D
Acq: 16 Jul 2014 7:23 am

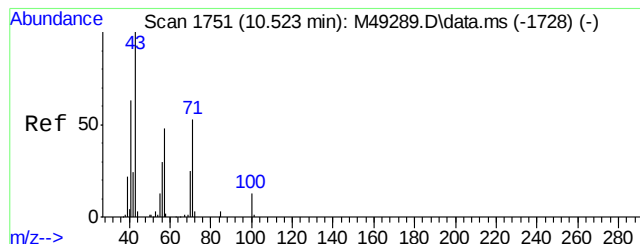
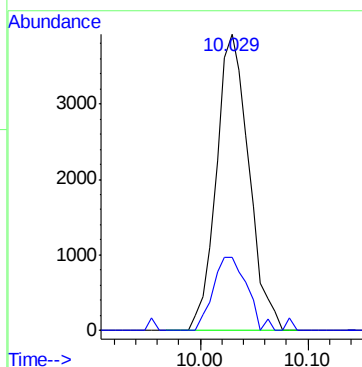
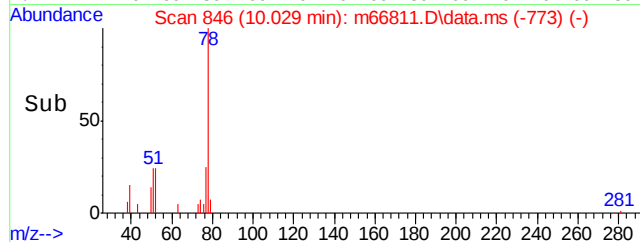
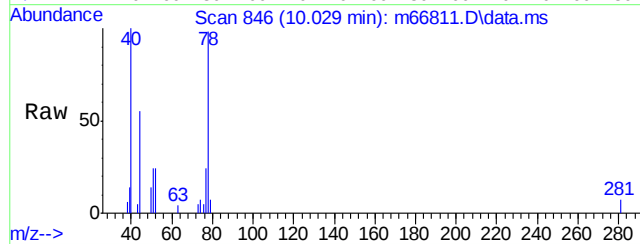
Tgt Ion	Ratio	Lower	Upper
56	100		
84	64.1	47.2	87.2
69	21.3	3.6	43.6





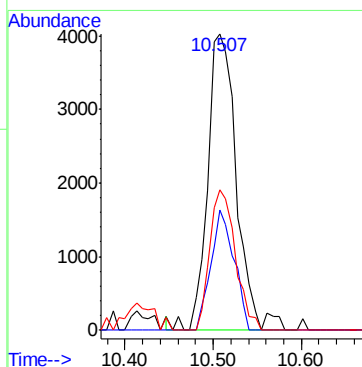
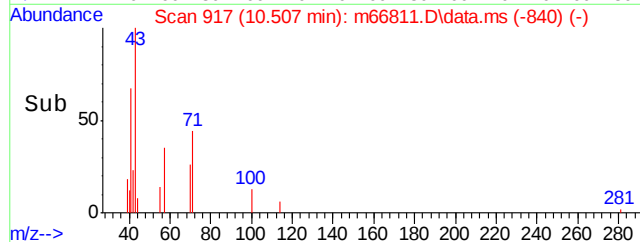
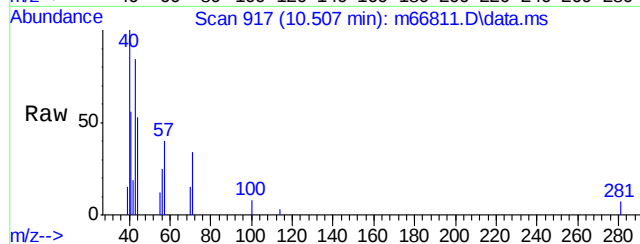
#47
benzene
Concen: 0.63 ug/kg
RT: 10.029 min Scan# 846
Delta R.T. 0.000 min
Lab File: m66811.D
Acq: 16 Jul 2014 7:23 am

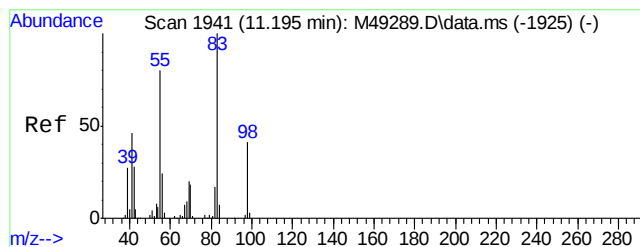
Tgt Ion	Ratio	Lower	Upper
78	100		
77	24.6	0.0	53.5



#50
heptane
Concen: 1.75 ug/kg
RT: 10.507 min Scan# 917
Delta R.T. 0.000 min
Lab File: m66811.D
Acq: 16 Jul 2014 7:23 am

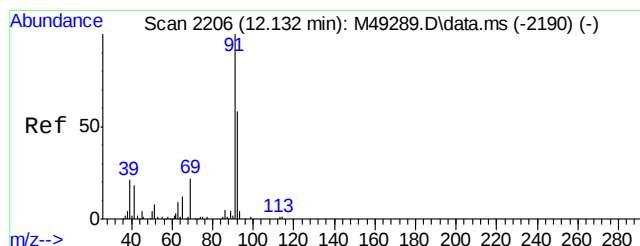
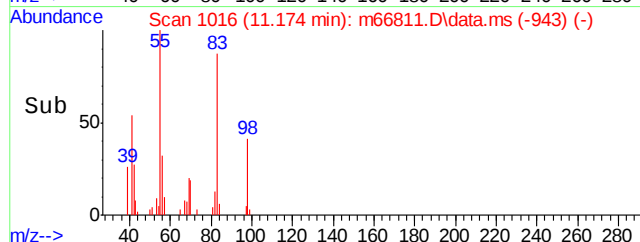
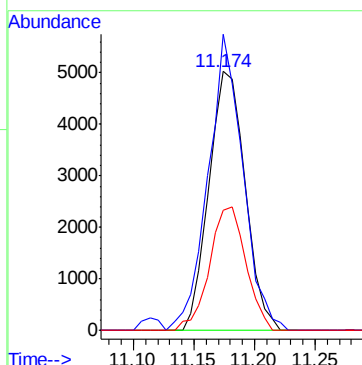
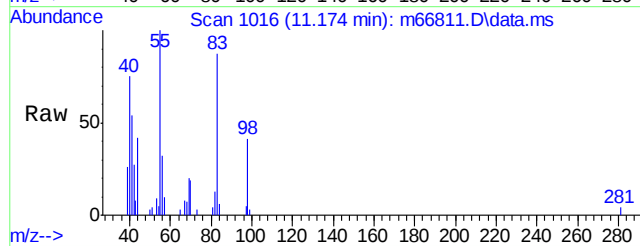
Tgt Ion	Ratio	Lower	Upper
43	100		
71	40.7	11.3	71.3
57	47.5	17.8	77.8





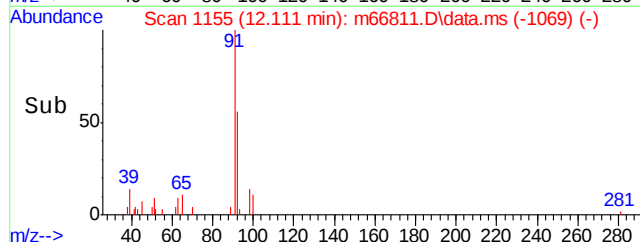
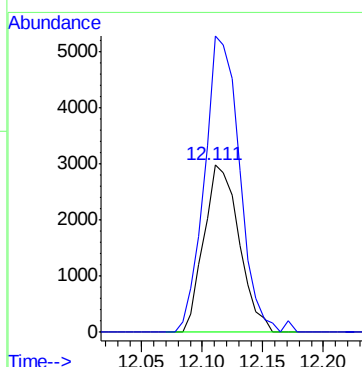
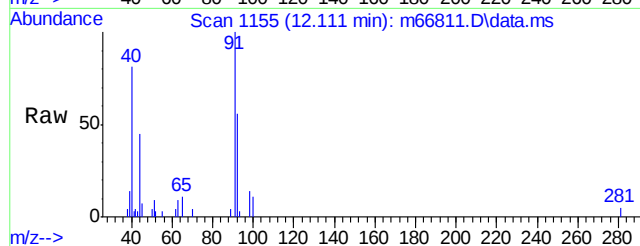
#55
Methylcyclohexane
Concen: 2.32 ug/kg
RT: 11.174 min Scan# 1016
Delta R.T. -0.007 min
Lab File: m66811.D
Acq: 16 Jul 2014 7:23 am

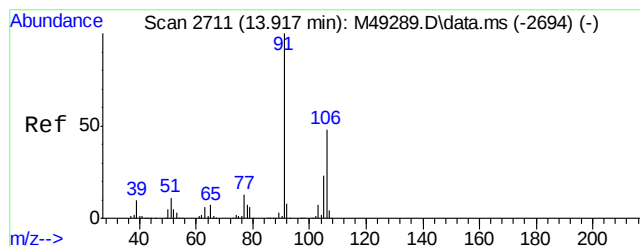
Tgt Ion:	83	Resp:	10443
Ion Ratio	Lower	Upper	
83	100		
55	114.4	75.2	115.2
98	46.5	24.6	64.6



#62
toluene
Concen: 1.08 ug/kg
RT: 12.111 min Scan# 1155
Delta R.T. -0.000 min
Lab File: m66811.D
Acq: 16 Jul 2014 7:23 am

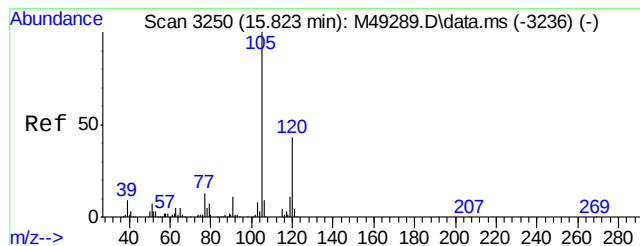
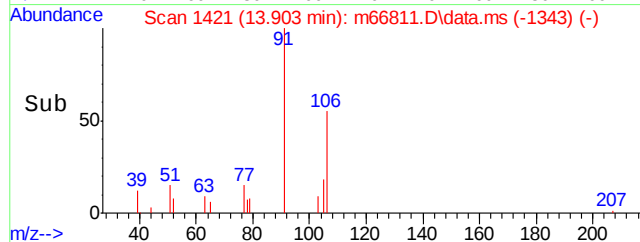
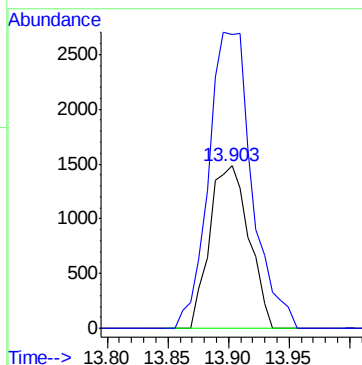
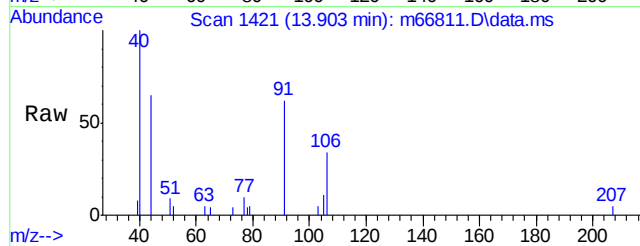
Tgt Ion:	92	Resp:	5977
Ion Ratio	Lower	Upper	
92	100		
91	177.6	143.2	203.2





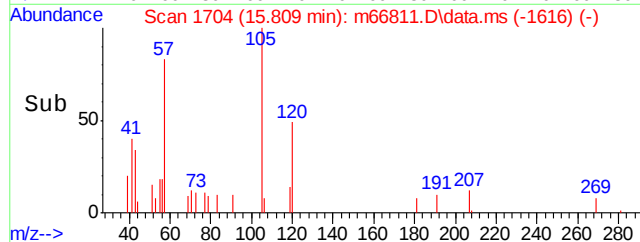
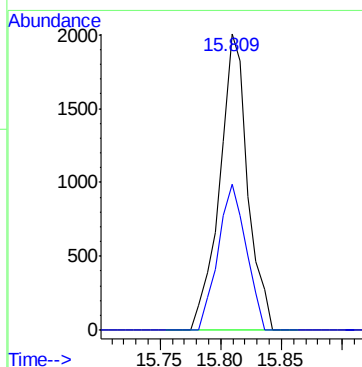
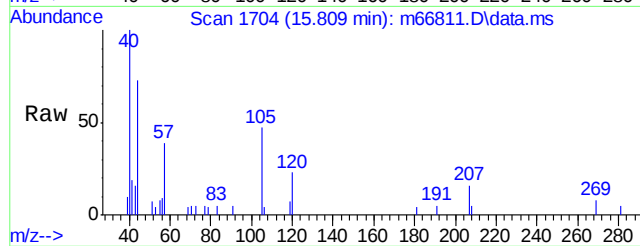
#75
m,p-xylene
Concen: 0.74 ug/kg
RT: 13.903 min Scan# 1421
Delta R.T. 0.007 min
Lab File: m66811.D
Acq: 16 Jul 2014 7:23 am

Tgt Ion:106 Resp: 3325
Ion Ratio Lower Upper
106 100
91 181.3 164.1 224.1



#91
1,2,4-trimethylbenzene
Concen: 0.31 ug/kg
RT: 15.809 min Scan# 1704
Delta R.T. -0.000 min
Lab File: m66811.D
Acq: 16 Jul 2014 7:23 am

Tgt Ion:105 Resp: 3224
Ion Ratio Lower Upper
105 100
120 49.4 18.6 78.6



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\M140715\
 Data File : m66812.D
 Acq On : 16 Jul 2014 7:53 am
 Operator : krystend
 Sample : mc32033-7
 Misc : MS32289,MSM2361,5.822,,,5,1
 ALS Vial : 48 Sample Multiplier: 1

Quant Time: Jul 16 09:50:01 2014
 Quant Method : C:\msdchem\1\methods\M140529D0DS.M
 Quant Title : SW-846 Method 8260
 QLast Update : Wed Jun 11 13:34:57 2014
 Response via : Initial Calibration

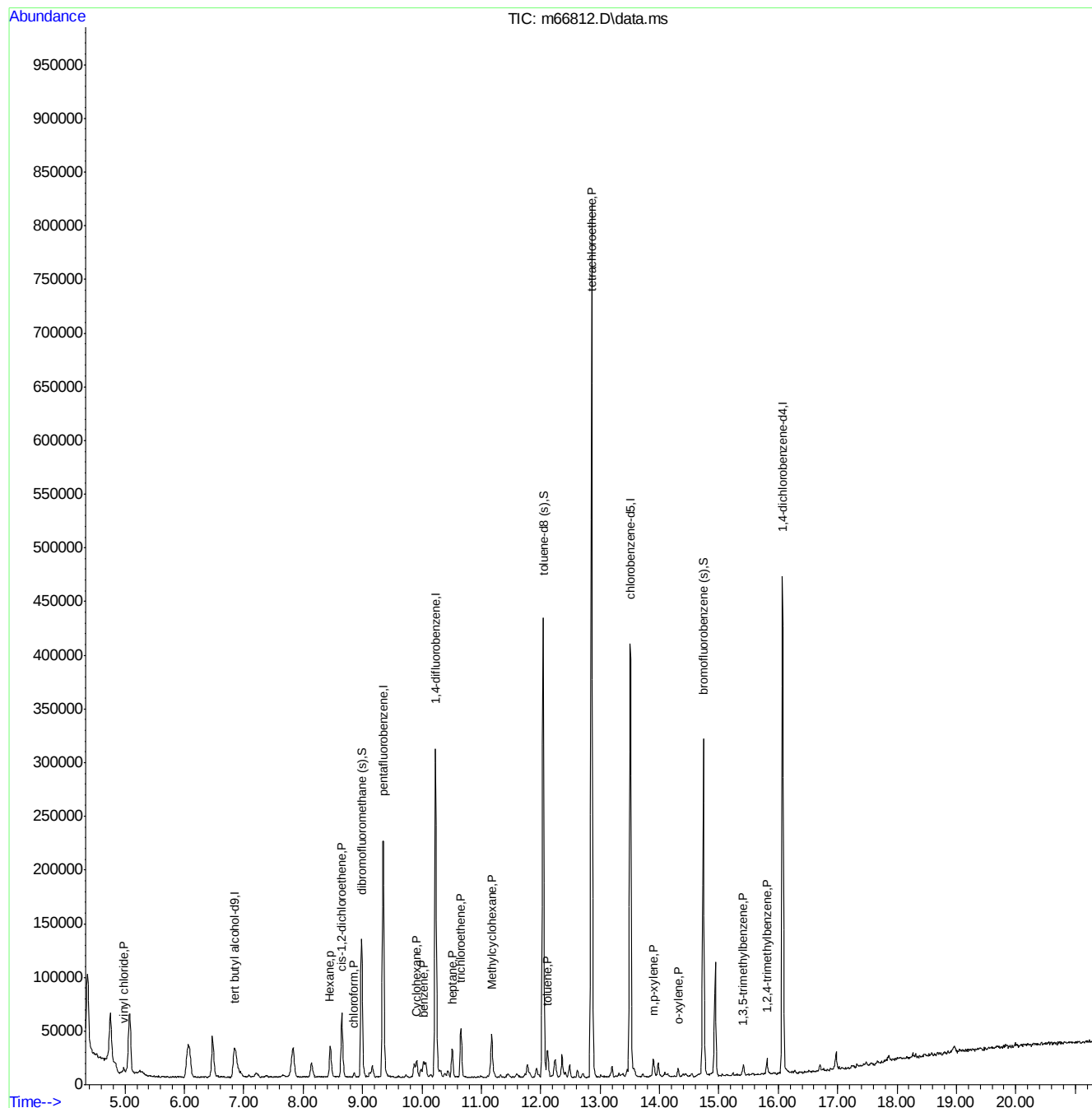
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	6.849	65	75249	500.00	ug/kg	0.00
4) pentafluorobenzene	9.349	168	179330	50.00	ug/kg	0.00
43) 1,4-difluorobenzene	10.231	114	295064	50.00	ug/kg	0.00
66) chlorobenzene-d5	13.505	82	122677	50.00	ug/kg	0.00
80) 1,4-dichlorobenzene-d4	16.072	152	149915	50.00	ug/kg	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	8.985	113	94003	51.79	ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	103.58%		
60) toluene-d8 (s)	12.043	98	325991	58.68	ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	117.36%		
82) bromofluorobenzene (s)	14.738	95	120664	45.85	ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	91.70%		
Target Compounds						
					Qvalue	
7) vinyl chloride	4.977	62	4910	1.70	ug/kg	88
31) Hexane	8.453	41	13993	3.06	ug/kg#	76
36) cis-1,2-dichloroethene	8.655	96	30507	12.88	ug/kg	93
39) chloroform	8.857	83	2839	0.78	ug/kg	97
44) Cyclohexane	9.908	56	11153	2.08	ug/kg	91
47) benzene	10.029	78	13178	1.22	ug/kg	96
50) heptane	10.507	43	14956	2.84	ug/kg	97
51) trichloroethene	10.656	95	15822	5.96	ug/kg	96
55) Methylcyclohexane	11.181	83	15535	3.41	ug/kg	97
62) toluene	12.117	92	11093	1.98	ug/kg	100
67) tetrachloroethene	12.858	166	264520	97.58	ug/kg	98
75) m,p-xylene	13.902	106	6585	1.43	ug/kg	83
76) o-xylene	14.313	106	2010	0.44	ug/kg	89
89) 1,3,5-trimethylbenzene	15.398	105	2897	0.26	ug/kg	94
91) 1,2,4-trimethylbenzene	15.809	105	6202	0.57	ug/kg	95

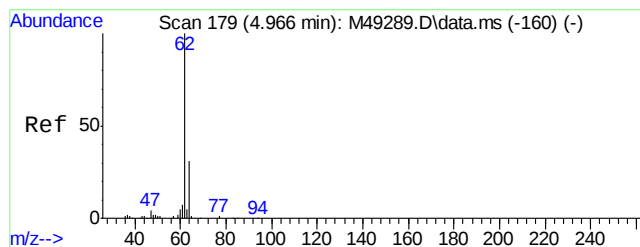
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\M140715S\
Data File : m66812.D
Acq On : 16 Jul 2014 7:53 am
Operator : krystend
Sample : mc32033-7
Misc : MS32289,MSM2361,5.822,,,5,1
ALS Vial : 48 Sample Multiplier: 1

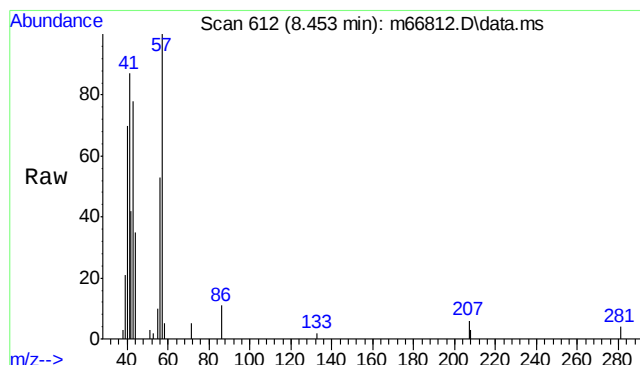
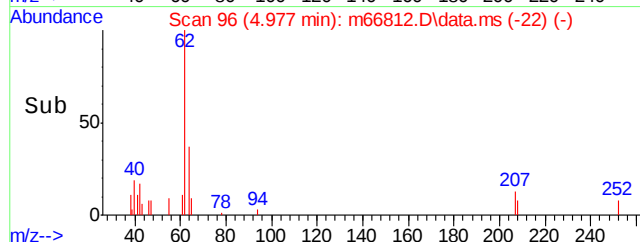
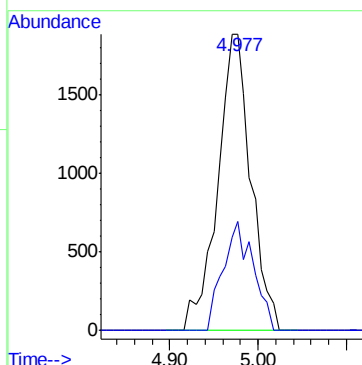
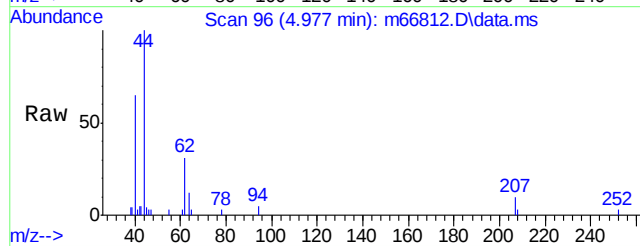
Quant Time: Jul 16 09:50:01 2014
Quant Method : C:\msdchem\1\methods\M140529D0DS.M
Quant Title : SW-846 Method 8260
QLast Update : Wed Jun 11 13:34:57 2014
Response via : Initial Calibration





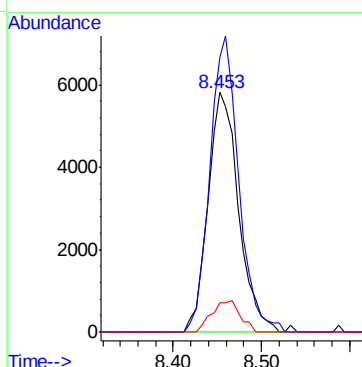
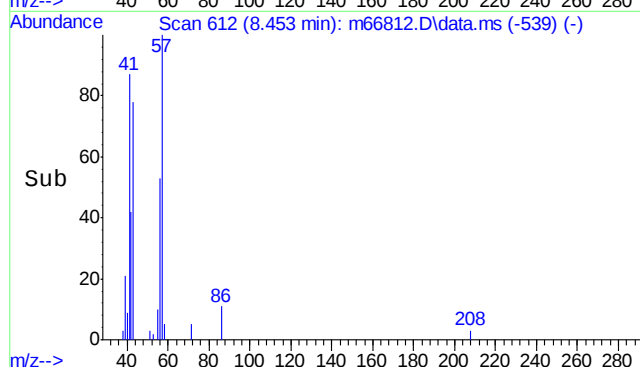
#7
vinyl chloride
Concen: 1.70 ug/kg
RT: 4.977 min Scan# 96
Delta R.T. -0.000 min
Lab File: m66812.D
Acq: 16 Jul 2014 7:53 am

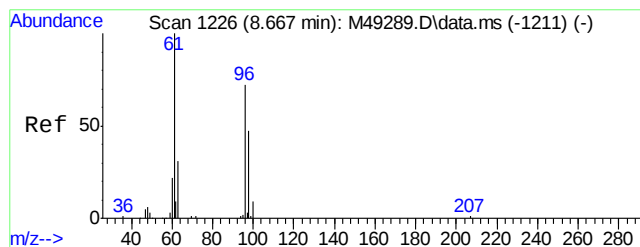
Tgt Ion	Ratio	Lower	Upper
62	100		
64	36.9	0.4	60.4



#31
Hexane
Concen: 3.06 ug/kg
RT: 8.453 min Scan# 612
Delta R.T. -0.006 min
Lab File: m66812.D
Acq: 16 Jul 2014 7:53 am

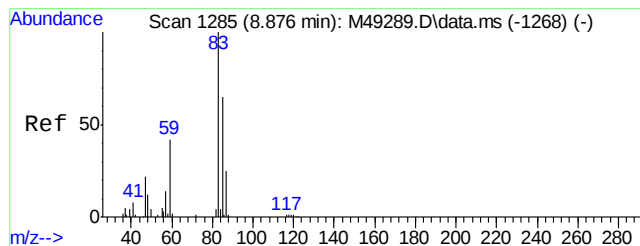
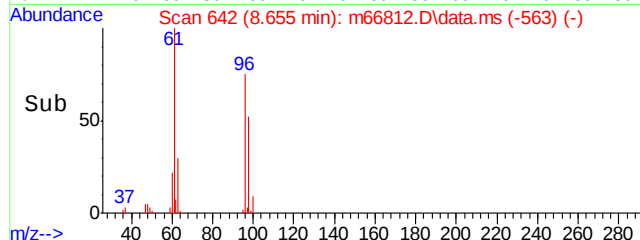
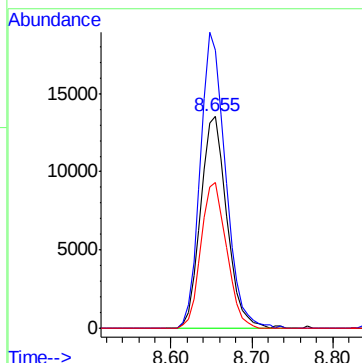
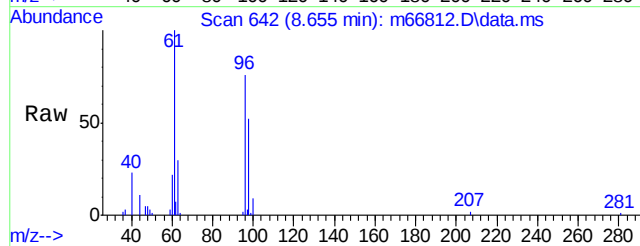
Tgt Ion	Ratio	Lower	Upper
41	100		
57	116.3	72.9	109.3#
86	12.1	8.5	12.7





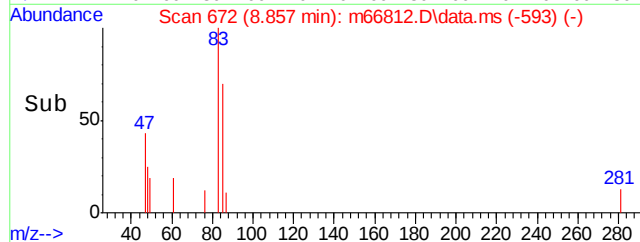
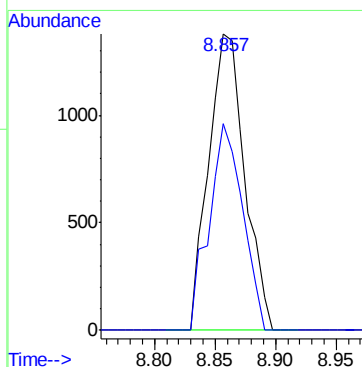
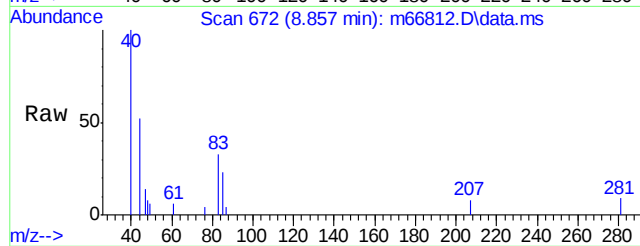
#36
cis-1,2-dichloroethene
Concen: 12.88 ug/kg
RT: 8.655 min Scan# 642
Delta R.T. -0.000 min
Lab File: m66812.D
Acq: 16 Jul 2014 7:53 am

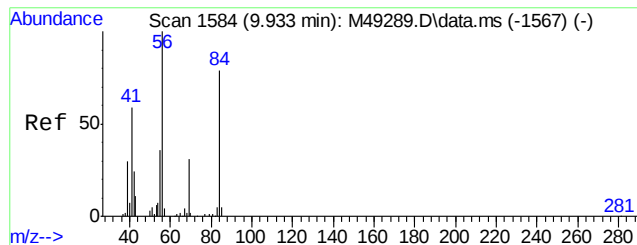
Tgt Ion	Ratio	Lower	Upper
96	100		
61	131.2	111.6	171.6
98	68.6	35.5	95.5



#39
chloroform
Concen: 0.78 ug/kg
RT: 8.857 min Scan# 672
Delta R.T. -0.000 min
Lab File: m66812.D
Acq: 16 Jul 2014 7:53 am

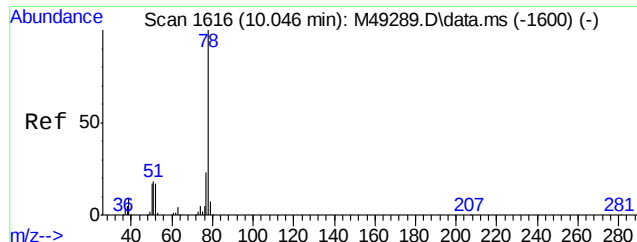
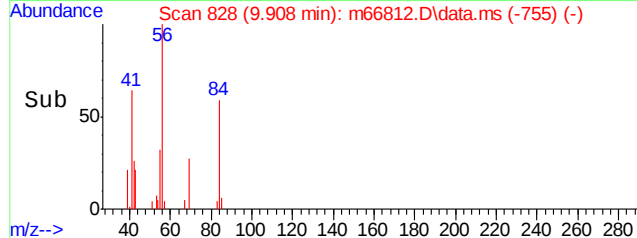
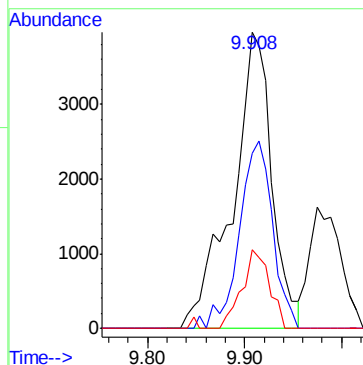
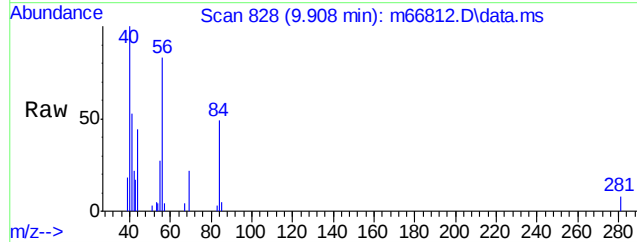
Tgt Ion	Ratio	Lower	Upper
83	100		
85	69.8	37.4	97.4





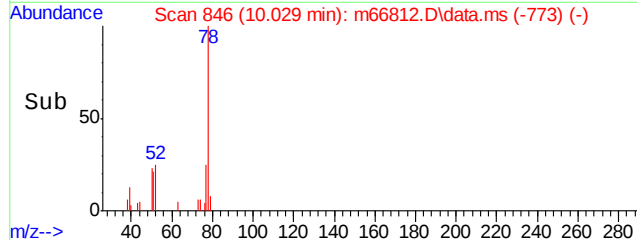
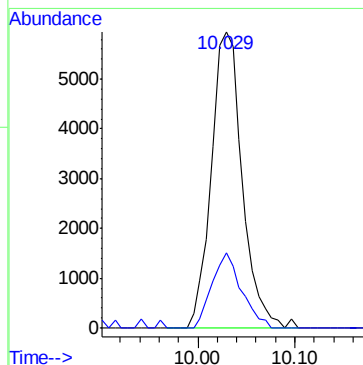
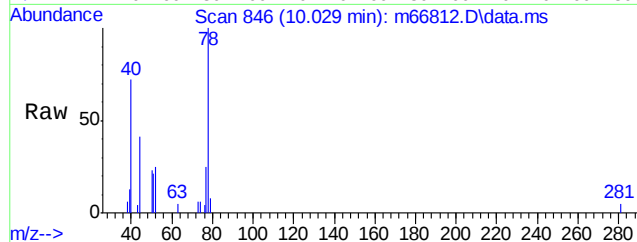
#44
Cyclohexane
Concen: 2.08 ug/kg
RT: 9.908 min Scan# 828
Delta R.T. -0.006 min
Lab File: m66812.D
Acq: 16 Jul 2014 7:53 am

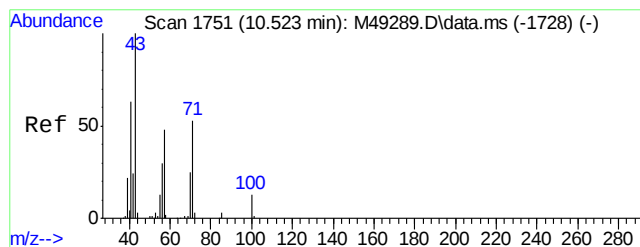
Tgt Ion	Ratio	Lower	Upper
56	100		
84	59.0	47.2	87.2
69	26.7	3.6	43.6



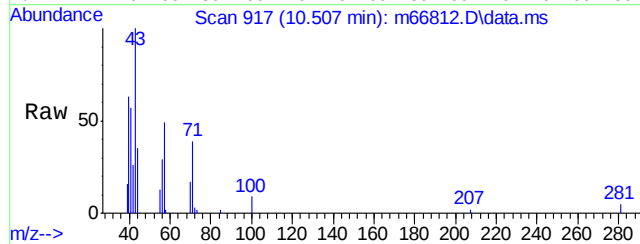
#47
benzene
Concen: 1.22 ug/kg
RT: 10.029 min Scan# 846
Delta R.T. 0.000 min
Lab File: m66812.D
Acq: 16 Jul 2014 7:53 am

Tgt Ion	Ratio	Lower	Upper
78	100		
77	25.4	0.0	53.5

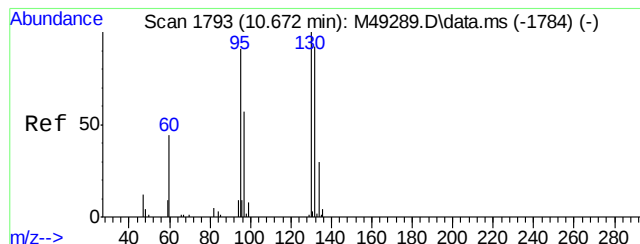
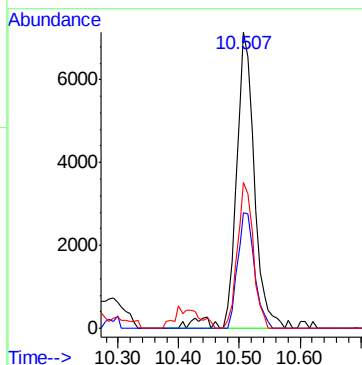
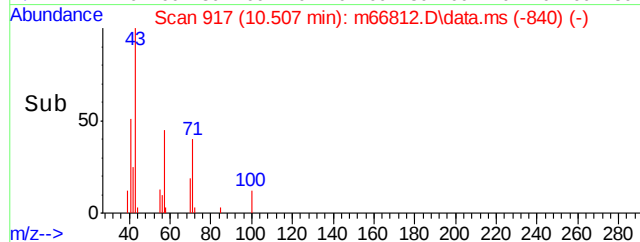




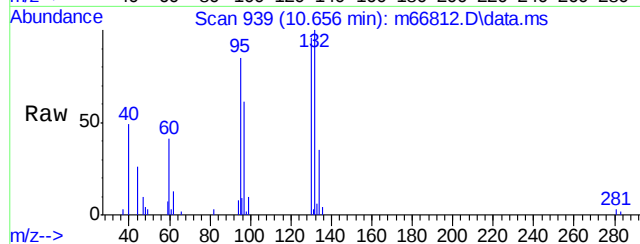
#50
heptane
Concen: 2.84 ug/kg
RT: 10.507 min Scan# 917
Delta R.T. 0.000 min
Lab File: m66812.D
Acq: 16 Jul 2014 7:53 am



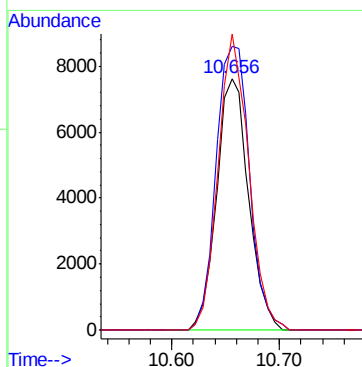
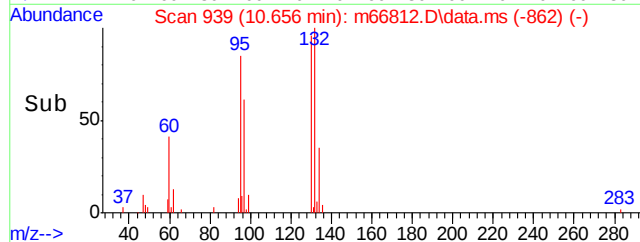
Tgt Ion	Ratio	Lower	Upper
43	100		
71	38.9	11.3	71.3
57	49.4	17.8	77.8

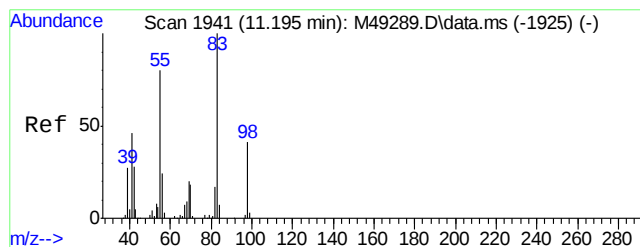


#51
trichloroethene
Concen: 5.96 ug/kg
RT: 10.656 min Scan# 939
Delta R.T. 0.001 min
Lab File: m66812.D
Acq: 16 Jul 2014 7:53 am

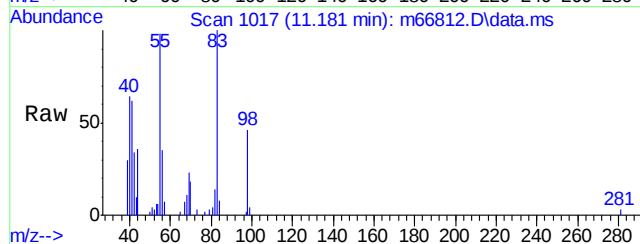


Tgt Ion	Ratio	Lower	Upper
95	100		
130	112.8	84.0	144.0
132	117.8	81.4	141.4

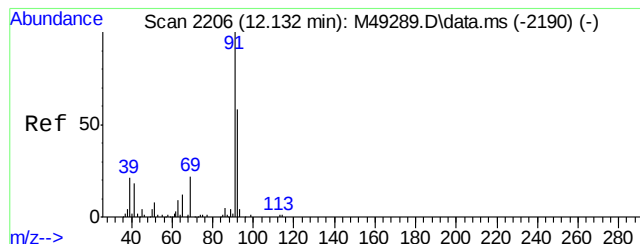
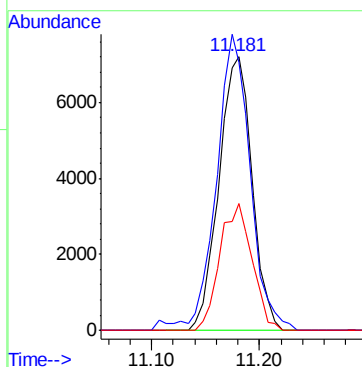
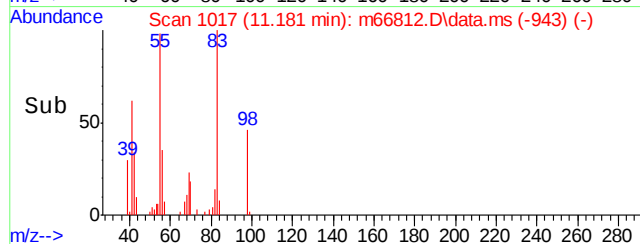




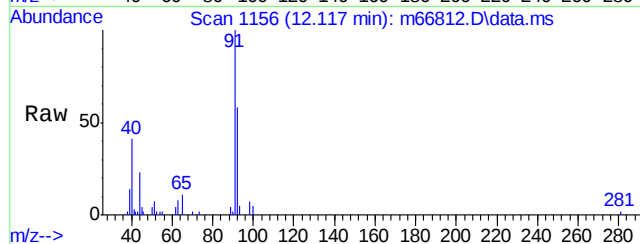
#55
Methylcyclohexane
Concen: 3.41 ug/kg
RT: 11.181 min Scan# 1017
Delta R.T. -0.000 min
Lab File: m66812.D
Acq: 16 Jul 2014 7:53 am



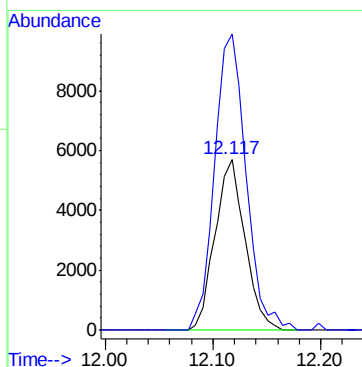
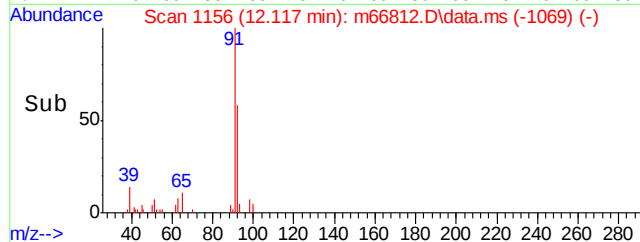
Tgt Ion	Ratio	Lower	Upper
83	100		
55	97.9	75.2	115.2
98	46.1	24.6	64.6

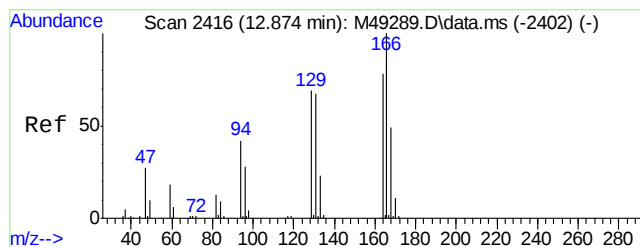


#62
toluene
Concen: 1.98 ug/kg
RT: 12.117 min Scan# 1156
Delta R.T. 0.006 min
Lab File: m66812.D
Acq: 16 Jul 2014 7:53 am



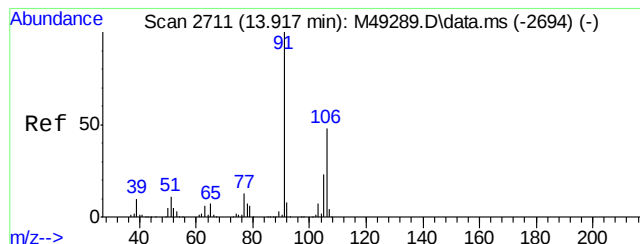
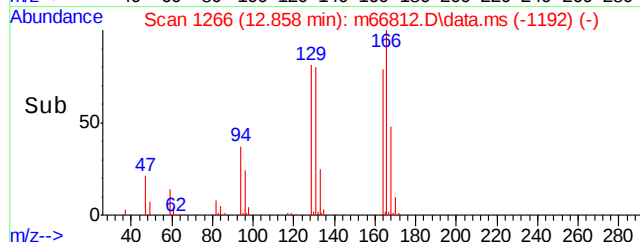
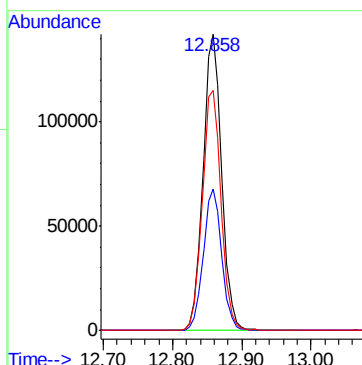
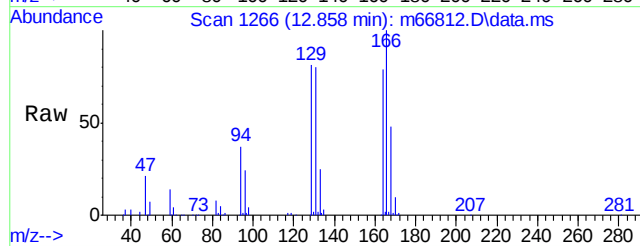
Tgt Ion	Ratio	Lower	Upper
92	100		
91	173.3	143.2	203.2





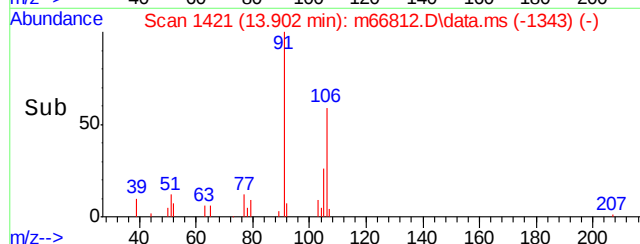
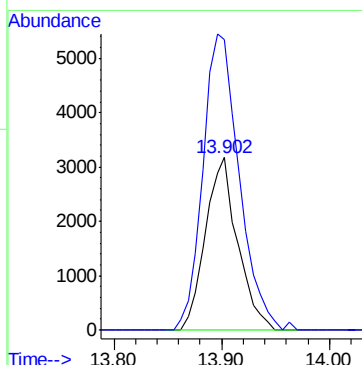
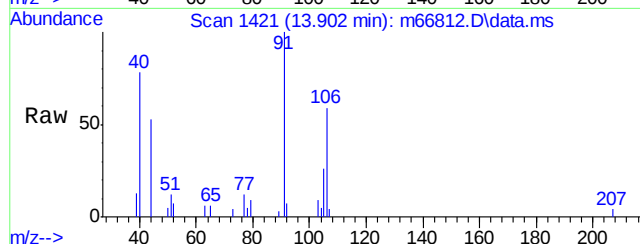
#67
tetrachloroethene
Concen: 97.58 ug/kg
RT: 12.858 min Scan# 1266
Delta R.T. 0.000 min
Lab File: m66812.D
Acq: 16 Jul 2014 7:53 am

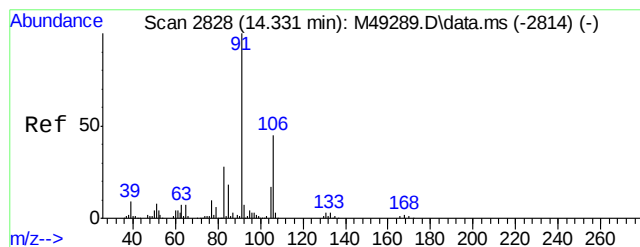
Tgt Ion	Ratio	Lower	Upper
166	100		
168	47.6	18.1	78.1
129	81.1	54.2	114.2



#75
m,p-xylene
Concen: 1.43 ug/kg
RT: 13.902 min Scan# 1421
Delta R.T. 0.006 min
Lab File: m66812.D
Acq: 16 Jul 2014 7:53 am

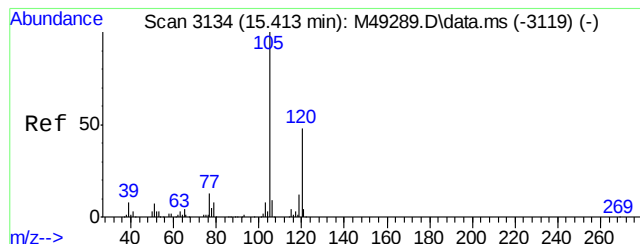
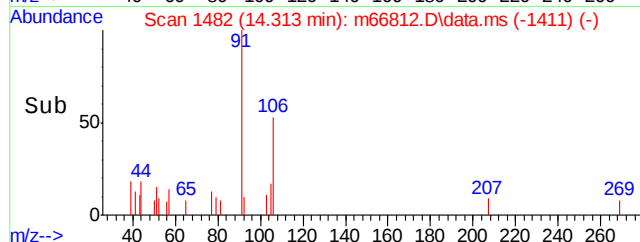
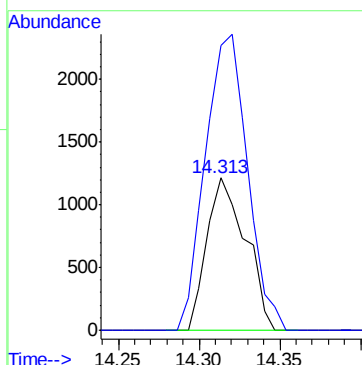
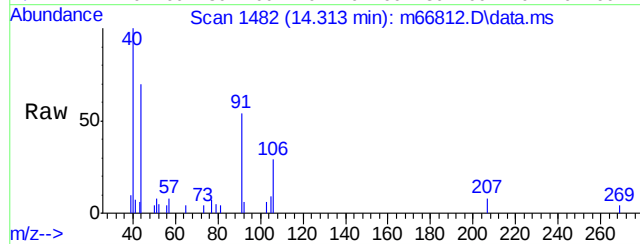
Tgt Ion	Ratio	Lower	Upper
106	100		
91	168.2	164.1	224.1





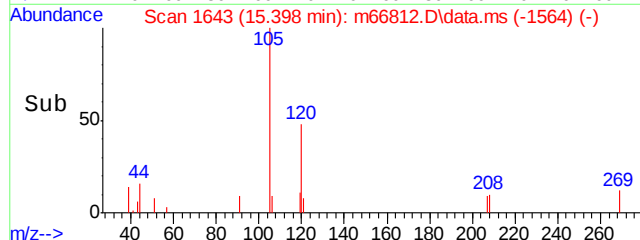
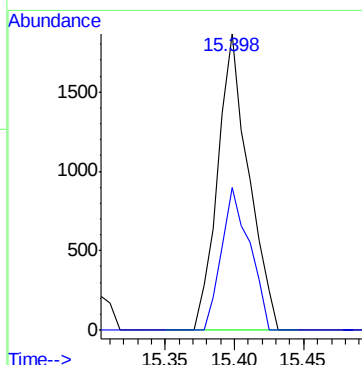
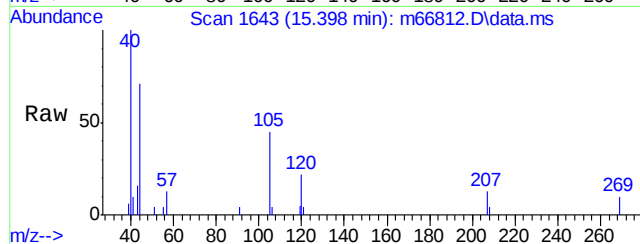
#76
o-xylene
Concen: 0.44 ug/kg
RT: 14.313 min Scan# 1482
Delta R.T. 0.000 min
Lab File: m66812.D
Acq: 16 Jul 2014 7:53 am

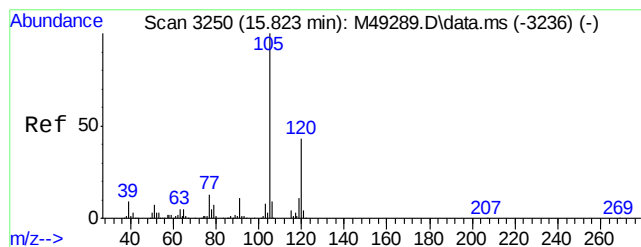
Tgt Ion:106 Resp: 2010
Ion Ratio Lower Upper
106 100
91 187.4 173.6 233.6



#89
1,3,5-trimethylbenzene
Concen: 0.26 ug/kg
RT: 15.398 min Scan# 1643
Delta R.T. -0.000 min
Lab File: m66812.D
Acq: 16 Jul 2014 7:53 am

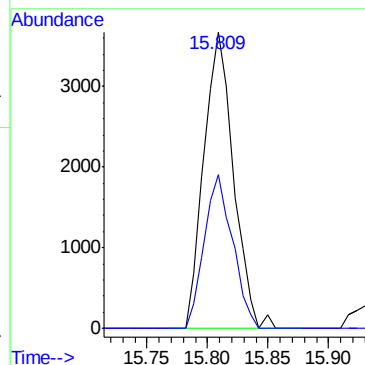
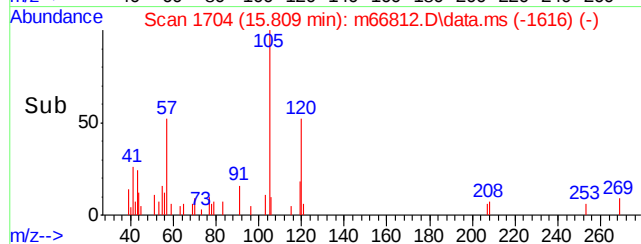
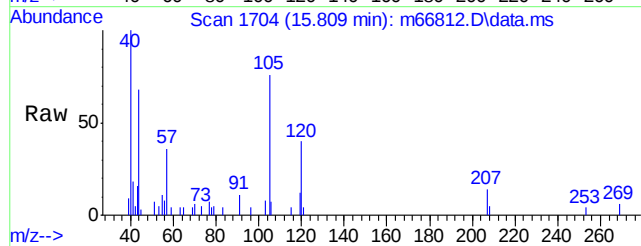
Tgt Ion:105 Resp: 2897
Ion Ratio Lower Upper
105 100
120 48.2 22.1 82.1





#91
1,2,4-trimethylbenzene
Concen: 0.57 ug/kg
RT: 15.809 min Scan# 1704
Delta R.T. -0.000 min
Lab File: m66812.D
Acq: 16 Jul 2014 7:53 am

Tgt Ion:	105	Resp:	6202
Ion Ratio	Lower	Upper	
105	100		
120	52.1	18.6	78.6



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\M140715\
 Data File : m66813.D
 Acq On : 16 Jul 2014 8:22 am
 Operator : krystend
 Sample : mc32033-8
 Misc : MS32289,MSM2361,6.201,,,5,1
 ALS Vial : 49 Sample Multiplier: 1

Quant Time: Jul 16 09:50:54 2014
 Quant Method : C:\msdchem\1\methods\M140529D0DS.M
 Quant Title : SW-846 Method 8260
 QLast Update : Wed Jun 11 13:34:57 2014
 Response via : Initial Calibration

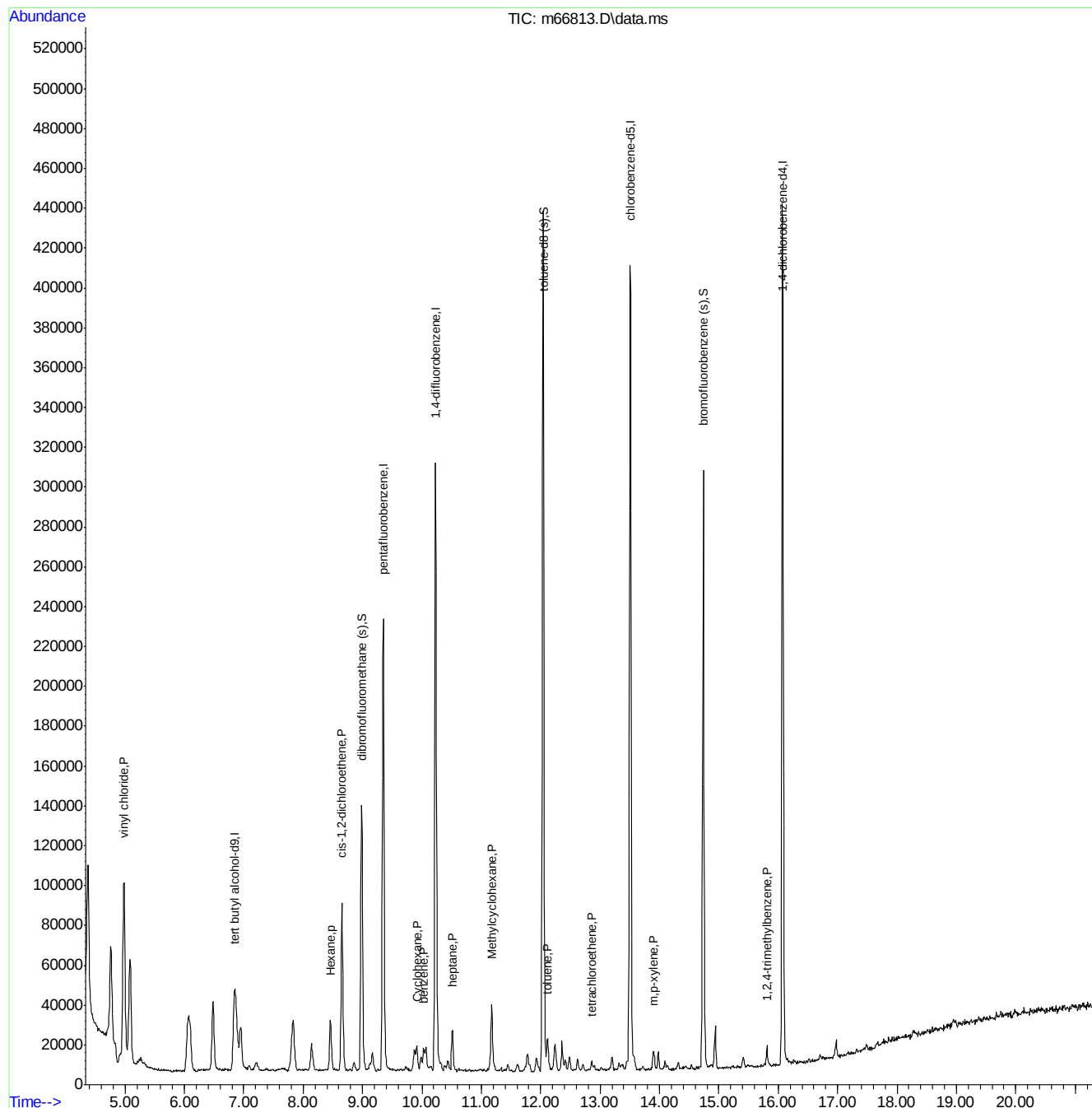
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	6.849	65	106697	500.00	ug/kg	0.00
4) pentafluorobenzene	9.349	168	182729	50.00	ug/kg	0.00
43) 1,4-difluorobenzene	10.231	114	299241	50.00	ug/kg	0.00
66) chlorobenzene-d5	13.505	82	123674	50.00	ug/kg	0.00
80) 1,4-dichlorobenzene-d4	16.072	152	138115	50.00	ug/kg	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	8.985	113	97349	52.63	ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	105.26%		
60) toluene-d8 (s)	12.043	98	331105	58.78	ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	117.56%		
82) bromofluorobenzene (s)	14.738	95	118093	48.70	ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	97.40%		
Target Compounds						
					Qvalue	
7) vinyl chloride	4.983	62	153022	52.00	ug/kg	99
31) Hexane	8.459	41	11702	2.51	ug/kg#	71
36) cis-1,2-dichloroethene	8.655	96	42931	17.79	ug/kg	98
44) Cyclohexane	9.914	56	9021	1.66	ug/kg	88
47) benzene	10.029	78	9436	0.74	ug/kg	95
50) heptane	10.507	43	11652	2.18	ug/kg	99
55) Methylcyclohexane	11.174	83	12223	2.65	ug/kg	92
62) toluene	12.117	92	6372	1.12	ug/kg	94
67) tetrachloroethene	12.865	166	1600	0.59	ug/kg	82
75) m,p-xylene	13.902	106	4205	0.91	ug/kg#	79
91) 1,2,4-trimethylbenzene	15.809	105	3988	0.40	ug/kg	98

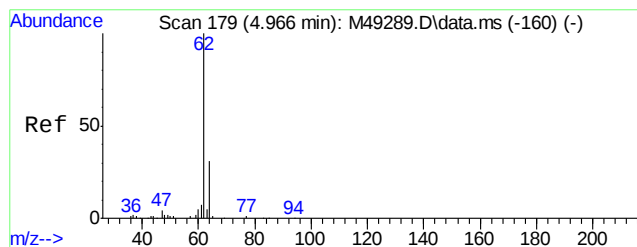
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\M140715S\
Data File : m66813.D
Acq On : 16 Jul 2014 8:22 am
Operator : krystend
Sample : mc32033-8
Misc : MS32289,MSM2361,6.201,,,5,1
ALS Vial : 49 Sample Multiplier: 1

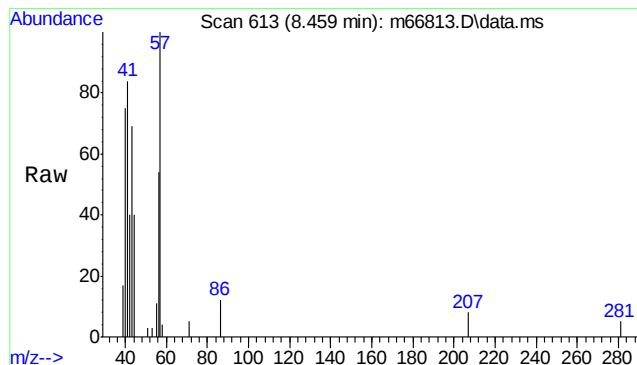
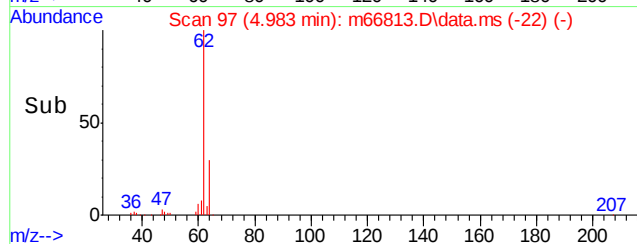
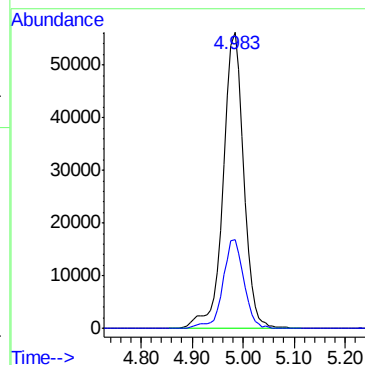
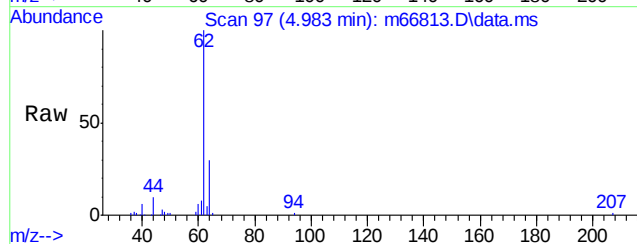
Quant Time: Jul 16 09:50:54 2014
Quant Method : C:\msdchem\1\methods\M140529D0DS.M
Quant Title : SW-846 Method 8260
QLast Update : Wed Jun 11 13:34:57 2014
Response via : Initial Calibration





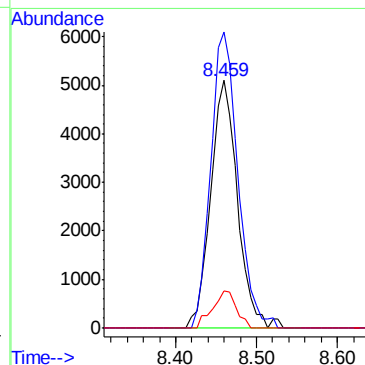
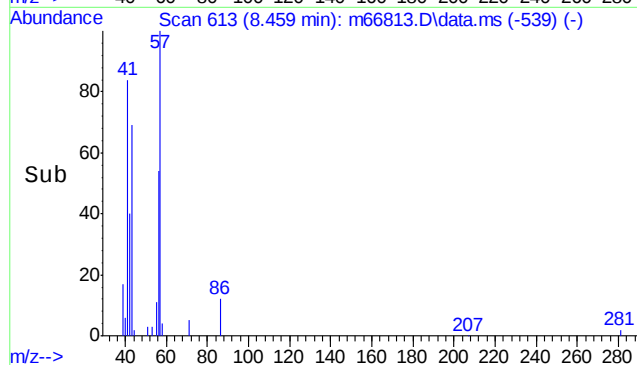
#7
vinyl chloride
Concen: 52.00 ug/kg
RT: 4.983 min Scan# 97
Delta R.T. 0.006 min
Lab File: m66813.D
Acq: 16 Jul 2014 8:22 am

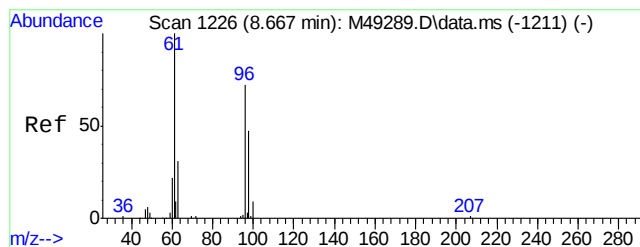
Tgt Ion: 62 Resp: 153022
Ion Ratio Lower Upper
62 100
64 30.1 0.4 60.4



#31
Hexane
Concen: 2.51 ug/kg
RT: 8.459 min Scan# 613
Delta R.T. 0.000 min
Lab File: m66813.D
Acq: 16 Jul 2014 8:22 am

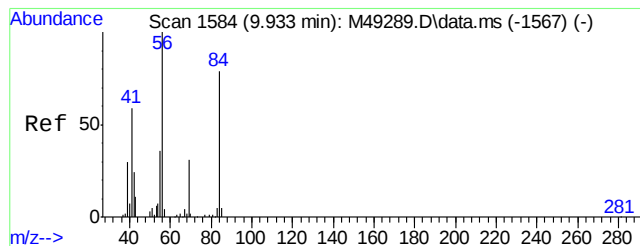
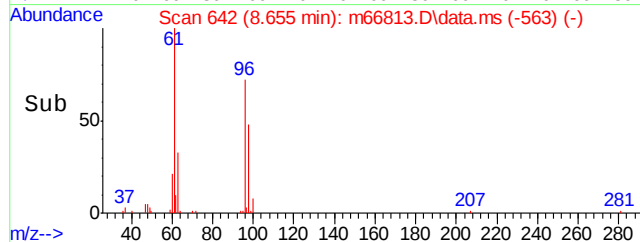
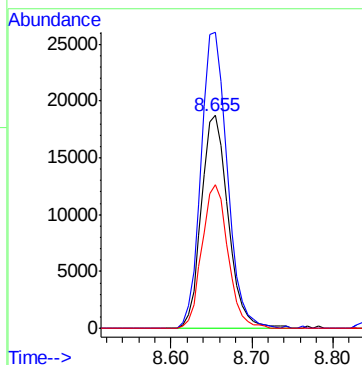
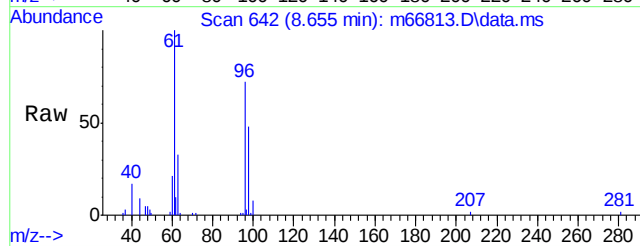
Tgt Ion: 41 Resp: 11702
Ion Ratio Lower Upper
41 100
57 120.9 72.9 109.3#
86 13.3 8.5 12.7#





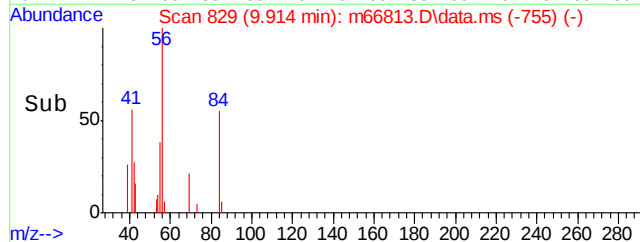
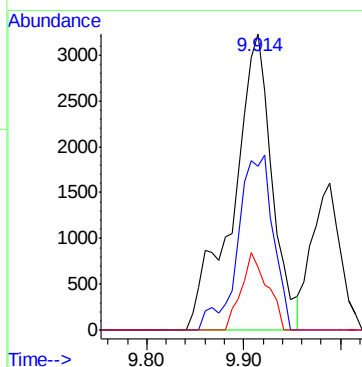
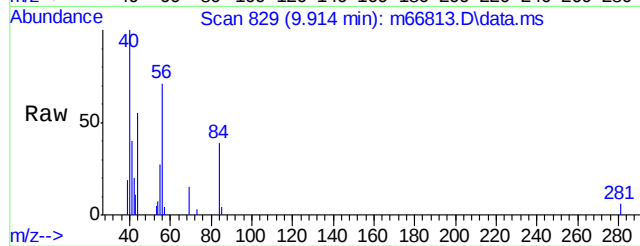
#36
cis-1,2-dichloroethene
Concen: 17.79 ug/kg
RT: 8.655 min Scan# 642
Delta R.T. -0.000 min
Lab File: m66813.D
Acq: 16 Jul 2014 8:22 am

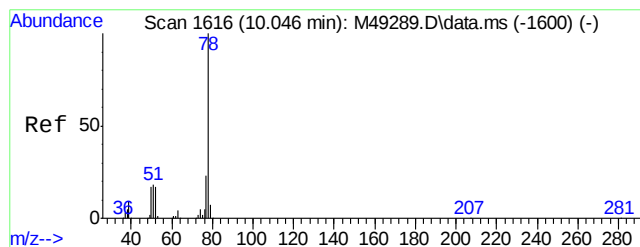
Tgt Ion:	96	Resp:	42931
Ion Ratio	Lower	Upper	
96	100		
61	139.0	111.6	171.6
98	67.3	35.5	95.5



#44
Cyclohexane
Concen: 1.66 ug/kg
RT: 9.914 min Scan# 829
Delta R.T. 0.000 min
Lab File: m66813.D
Acq: 16 Jul 2014 8:22 am

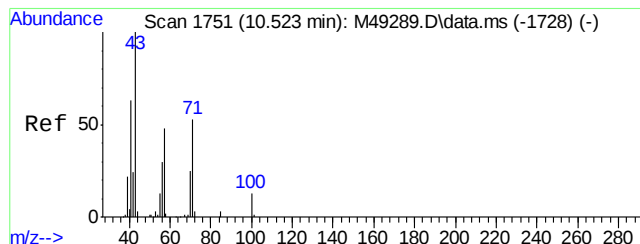
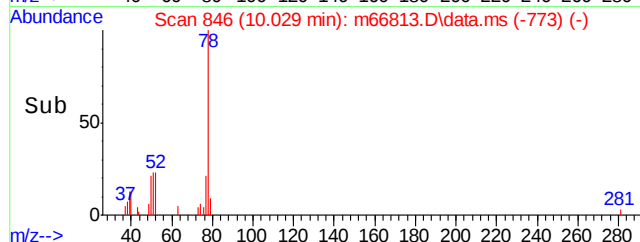
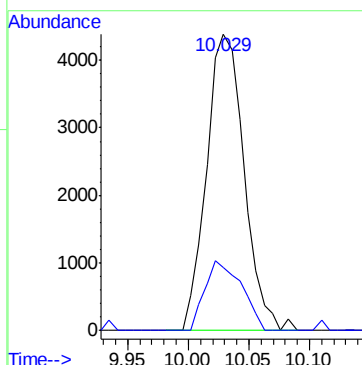
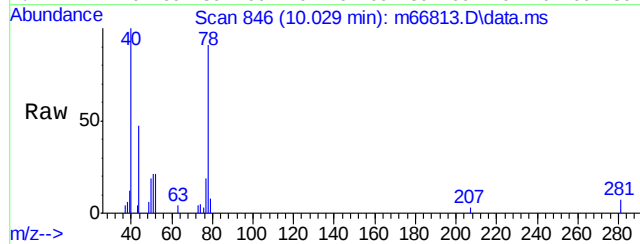
Tgt Ion:	56	Resp:	9021
Ion Ratio	Lower	Upper	
56	100		
84	55.1	47.2	87.2
69	21.4	3.6	43.6





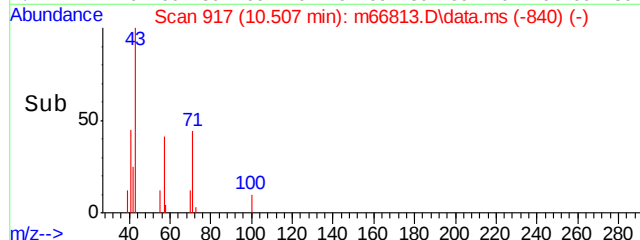
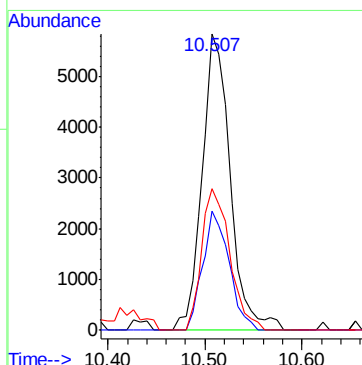
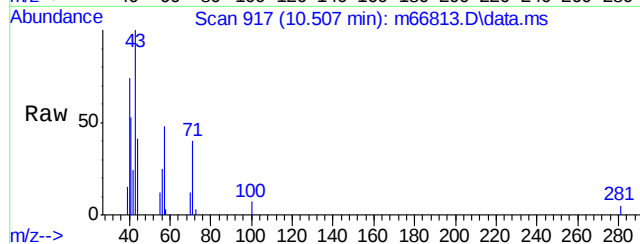
#47
benzene
Concen: 0.74 ug/kg
RT: 10.029 min Scan# 846
Delta R.T. 0.000 min
Lab File: m66813.D
Acq: 16 Jul 2014 8:22 am

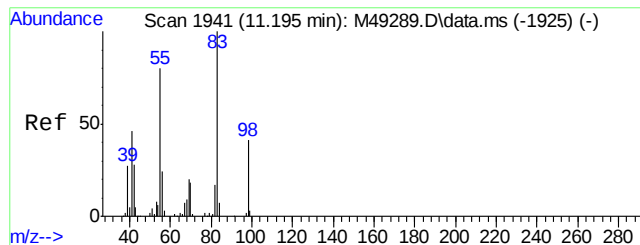
Tgt Ion: 78 Resp: 9436
Ion Ratio Lower Upper
78 100
77 21.2 0.0 53.5



#50
heptane
Concen: 2.18 ug/kg
RT: 10.507 min Scan# 917
Delta R.T. 0.000 min
Lab File: m66813.D
Acq: 16 Jul 2014 8:22 am

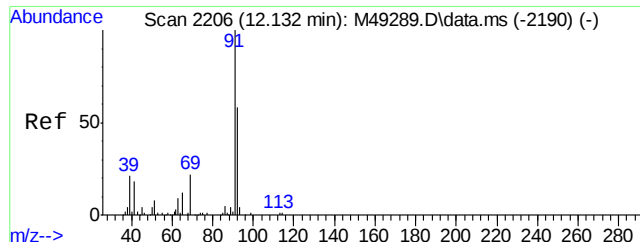
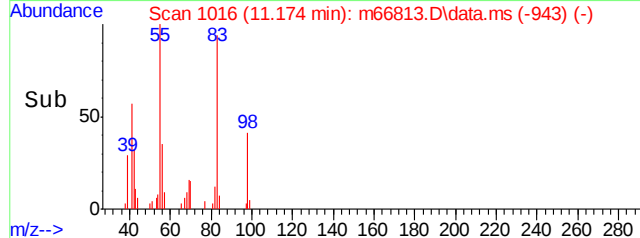
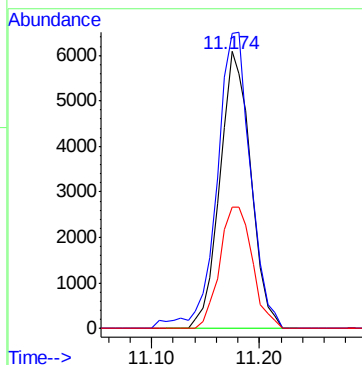
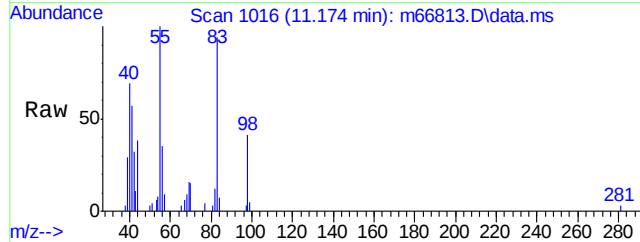
Tgt Ion: 43 Resp: 11652
Ion Ratio Lower Upper
43 100
71 40.0 11.3 71.3
57 47.6 17.8 77.8





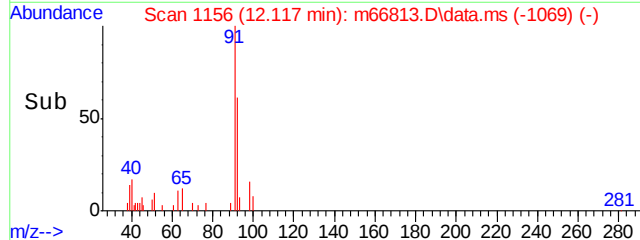
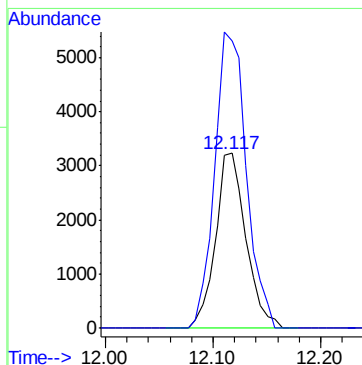
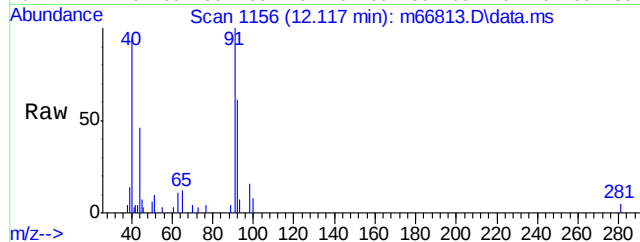
#55
Methylcyclohexane
Concen: 2.65 ug/kg
RT: 11.174 min Scan# 1016
Delta R.T. -0.007 min
Lab File: m66813.D
Acq: 16 Jul 2014 8:22 am

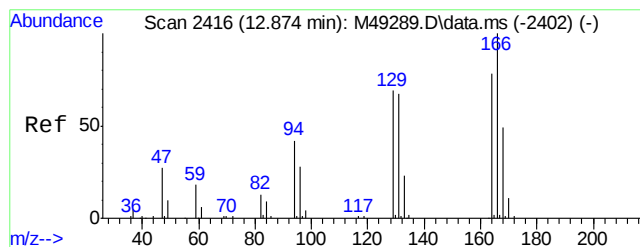
Tgt Ion	Ratio	Lower	Upper
83	100		
55	106.3	75.2	115.2
98	43.8	24.6	64.6



#62
toluene
Concen: 1.12 ug/kg
RT: 12.117 min Scan# 1156
Delta R.T. 0.006 min
Lab File: m66813.D
Acq: 16 Jul 2014 8:22 am

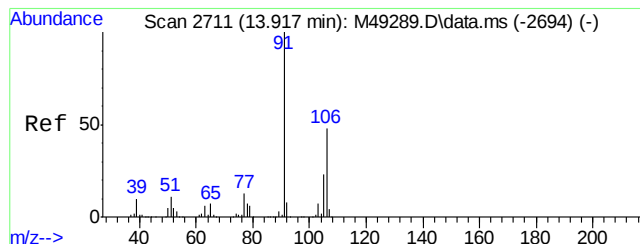
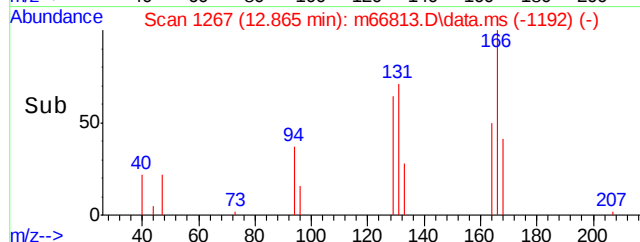
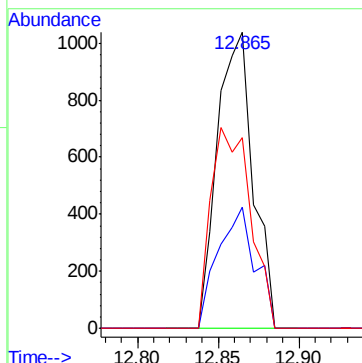
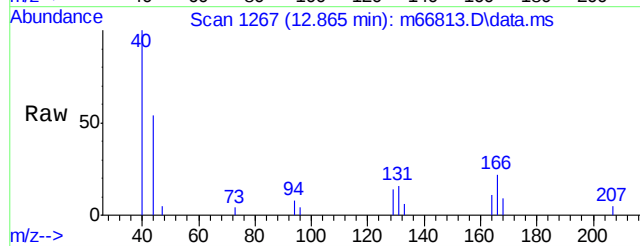
Tgt Ion	Ratio	Lower	Upper
92	100		
91	164.3	143.2	203.2





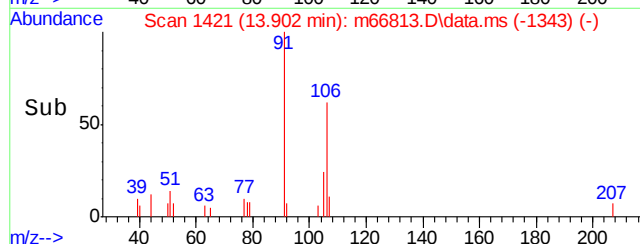
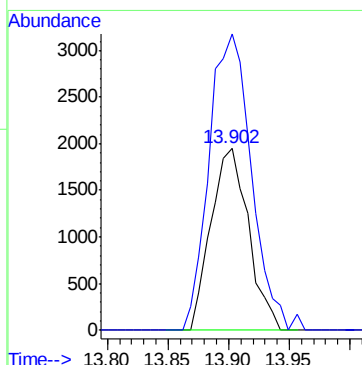
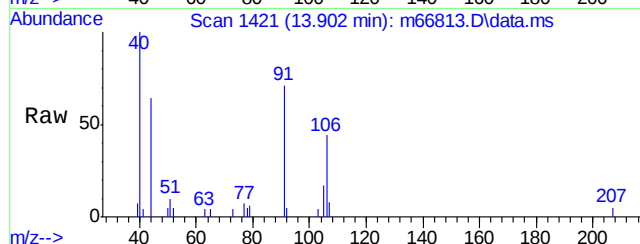
#67
tetrachloroethene
Concen: 0.59 ug/kg
RT: 12.865 min Scan# 1267
Delta R.T. 0.007 min
Lab File: m66813.D
Acq: 16 Jul 2014 8:22 am

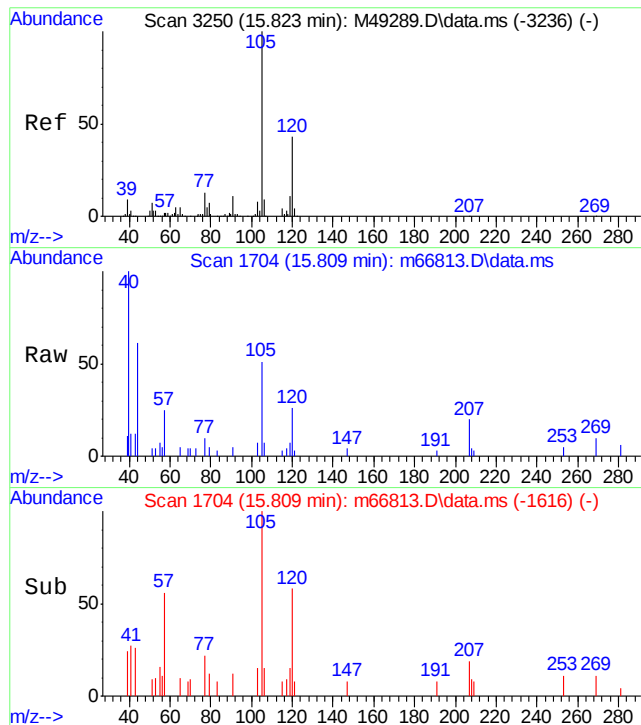
Tgt Ion	Ratio	Lower	Upper
166	100		
168	40.9	18.1	78.1
129	64.3	54.2	114.2



#75
m,p-xylene
Concen: 0.91 ug/kg
RT: 13.902 min Scan# 1421
Delta R.T. 0.006 min
Lab File: m66813.D
Acq: 16 Jul 2014 8:22 am

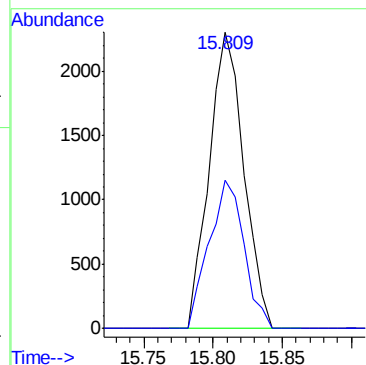
Tgt Ion	Ratio	Lower	Upper
106	100		
91	162.5	164.1	224.1#





#91
 1,2,4-trimethylbenzene
 Concen: 0.40 ug/kg
 RT: 15.809 min Scan# 1704
 Delta R.T. -0.000 min
 Lab File: m66813.D
 Acq: 16 Jul 2014 8:22 am

Tgt Ion	Ratio	Lower	Upper
105	100		
120	50.1	18.6	78.6



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\M140715S\
Data File : m66795.D
Acq On : 15 Jul 2014 11:31 pm
Operator : krystend
Sample : mb
Misc : MS32289,MSM2361,5,,,5,1
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Jul 16 09:23:54 2014
Quant Method : C:\msdchem\1\methods\M140529D0DS.M
Quant Title : SW-846 Method 8260
QLast Update : Wed Jun 11 13:34:57 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	6.849	65	72556	500.00	ug/kg	0.00
4) pentafluorobenzene	9.349	168	203563	50.00	ug/kg	0.00
43) 1,4-difluorobenzene	10.231	114	323257	50.00	ug/kg	0.00
66) chlorobenzene-d5	13.505	82	137533	50.00	ug/kg	0.00
80) 1,4-dichlorobenzene-d4	16.072	152	187788	50.00	ug/kg	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	8.985	113	94363	45.80	ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	91.60%		
60) toluene-d8 (s)	12.043	98	359718	59.14	ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	118.28%		
82) bromofluorobenzene (s)	14.738	95	140797	42.71	ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	85.42%		

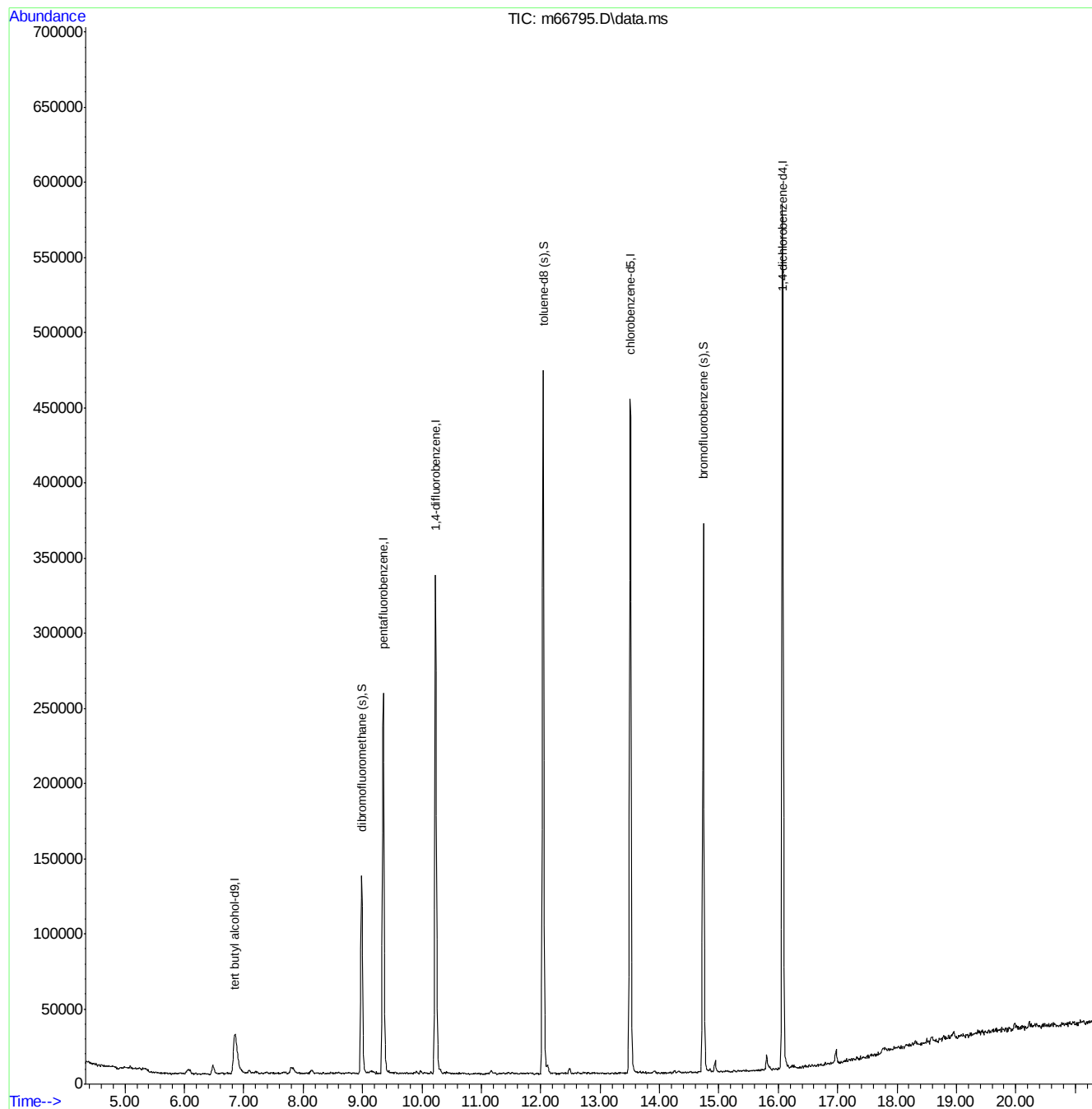
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\M140715S\
Data File : m66795.D
Acq On : 15 Jul 2014 11:31 pm
Operator : krystend
Sample : mb
Misc : MS32289,MSM2361,5,,,5,1
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Jul 16 09:23:54 2014
Quant Method : C:\msdchem\1\methods\M140529D0DS.M
Quant Title : SW-846 Method 8260
QLast Update : Wed Jun 11 13:34:57 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\M140715S\
 Data File : m66792.D
 Acq On : 15 Jul 2014 10:03 pm
 Operator : krystend
 Sample : bs
 Misc : MS32289,MSM2361,5,,,5,1
 ALS Vial : 28 Sample Multiplier: 1

Quant Time: Jul 16 08:48:23 2014
 Quant Method : C:\msdchem\1\methods\M140529D0DS.M
 Quant Title : SW-846 Method 8260
 QLast Update : Wed Jun 11 13:34:57 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	6.849	65	72275	500.00	ug/kg	0.00
4) pentafluorobenzene	9.349	168	209006	50.00	ug/kg	0.00
43) 1,4-difluorobenzene	10.231	114	335050	50.00	ug/kg	0.00
66) chlorobenzene-d5	13.505	82	137750m	50.00	ug/kg	0.00
80) 1,4-dichlorobenzene-d4	16.072	152	186867	50.00	ug/kg	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	8.985	113	96889	45.80	ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	91.60%		
60) toluene-d8 (s)	12.043	98	370249	58.70	ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	117.40%		
82) bromofluorobenzene (s)	14.738	95	138628	42.26	ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	84.52%		
Target Compounds						
						Qvalue
2) tertiary butyl alcohol	6.930	59	140213	549.70	ug/kg	99
3) Ethanol	5.684	45	167365	5751.46	ug/kg	99
5) dichlorodifluoromethane	4.451	85	119377	49.17	ug/kg	100
6) chloromethane	4.707	50	276507	65.56	ug/kg	98
7) vinyl chloride	4.977	62	204198	60.66	ug/kg	99
8) bromomethane	5.509	96	143219	65.29	ug/kg	99
9) chloroethane	5.671	64	116453	69.86	ug/kg	94
10) ethyl ether	6.573	59	97646	53.79	ug/kg	96
11) acetonitrile	6.358	41	23665	47.18	ug/kg#	54
12) trichlorofluoromethane	6.331	101	242926	56.02	ug/kg	99
13) freon-113	7.159	101	171098	55.56	ug/kg	98
14) acrolein	6.324	56	51120	303.26	ug/kg	99
15) 1,1-dichloroethene	6.930	96	141094	63.25	ug/kg	96
16) acetone	6.479	58	10459	23.31	ug/kg#	63
17) Methyl Acetate	7.126	43	91012	53.31	ug/kg	98
18) methylene chloride	7.092	84	142303m	59.54	ug/kg	
19) methyl tert butyl ether	7.900	73	303254	50.41	ug/kg	98
20) acrylonitrile	7.004	53	40201	52.68	ug/kg	98
21) allyl chloride	7.186	41	298004	62.02	ug/kg	99
22) trans-1,2-dichloroethene	7.806	96	153577	63.43	ug/kg	94
23) iodomethane	6.991	142	279967	53.44	ug/kg	96
24) carbon disulfide	7.375	76	439250	50.73	ug/kg	100
25) propionitrile	8.109	54	15556	52.56	ug/kg	100
26) vinyl acetate	8.170	43	241544	56.64	ug/kg	98
27) chloroprene	8.439	53	259389	68.09	ug/kg	98
28) di-isopropyl ether	8.480	45	580657	57.98	ug/kg	95
29) methacrylonitrile	8.601	41	69636	54.66	ug/kg	98
30) 2-butanone	8.500	72	10149	31.52	ug/kg#	2
31) Hexane	8.459	41	264723	49.64	ug/kg	99
32) 1,1-dichloroethane	8.062	63	269033	55.69	ug/kg	99
33) tert-butyl ethyl ether	8.884	59	444964	55.95	ug/kg	100
34) isobutyl alcohol	8.884	43	89595	257.37	ug/kg	82
35) 2,2-dichloropropane	8.944	77	205331	52.56	ug/kg	98
36) cis-1,2-dichloroethene	8.648	96	159885	57.93	ug/kg	95

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\M140715S\
 Data File : m66792.D
 Acq On : 15 Jul 2014 10:03 pm
 Operator : krystend
 Sample : bs
 Misc : MS32289,MSM2361,5,,,5,1
 ALS Vial : 28 Sample Multiplier: 1

Quant Time: Jul 16 08:48:23 2014
 Quant Method : C:\msdchem\1\methods\M140529D0DS.M
 Quant Title : SW-846 Method 8260
 QLast Update : Wed Jun 11 13:34:57 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
37) ethyl acetate	8.884	43	89595	51.48	ug/kg	95
38) bromochloromethane	8.823	128	84546	58.45	ug/kg	91
39) chloroform	8.857	83	231798	54.98	ug/kg	98
41) Tetrahydrofuran	9.194	42	40080	55.42	ug/kg	97
42) 1,1,1-trichloroethane	9.625	97	238596	53.42	ug/kg	98
44) Cyclohexane	9.914	56	315239	51.65	ug/kg	100
45) carbon tetrachloride	9.995	117	235239	52.26	ug/kg	98
46) 1,1-dichloropropene	9.800	75	178857	50.71	ug/kg	96
47) benzene	10.029	78	531556	59.06	ug/kg	98
48) 1,2-dichloroethane	9.524	62	148509	50.93	ug/kg	98
49) tert-amyl methyl ether	10.144	73	315646	51.74	ug/kg	99
50) heptane	10.507	43	292179	48.84	ug/kg	98
51) trichloroethene	10.655	95	151967	50.42	ug/kg	94
52) 1,2-dichloropropane	10.622	63	148339	53.59	ug/kg	99
53) dibromomethane	10.595	93	74099	55.87	ug/kg	94
54) bromodichloromethane	10.709	83	174067	56.87	ug/kg	98
55) Methylcyclohexane	11.181	83	272177	52.61	ug/kg	99
56) 2-chloroethyl vinyl ether	11.087	63	49806	51.11	ug/kg	97
57) methyl methacrylate	10.797	69	60273	48.07	ug/kg	99
58) 1,4-dioxane	10.797	88	5677	231.06	ug/kg	93
59) cis-1,3-dichloropropene	11.329	75	193654	53.14	ug/kg	100
61) 4-methyl-2-pentanone	11.423	43	133979	52.34	ug/kg	96
62) toluene	12.111	92	351053	55.13	ug/kg	100
63) trans-1,3-dichloropropene	11.754	75	163024	55.47	ug/kg	93
64) 1,1,2-trichloroethane	11.929	83	83902	54.66	ug/kg	97
65) ethyl methacrylate	12.124	69	129114	50.73	ug/kg	100
67) tetrachloroethene	12.858	166	168938	55.50	ug/kg	96
68) 1,3-dichloropropane	12.164	76	156681	55.08	ug/kg	100
69) dibromochloromethane	12.461	129	158529	61.55	ug/kg	99
70) 1,2-dibromoethane	12.710	107	111766	56.05	ug/kg	97
71) 2-hexanone	12.286	43	88176	40.22	ug/kg	100
72) chlorobenzene	13.539	112	447937	58.59	ug/kg	99
73) 1,1,1,2-tetrachloroethane	13.458	131	184684	60.06	ug/kg	99
74) ethylbenzene	13.714	91	715006	56.99	ug/kg	98
75) m,p-xylene	13.896	106	584836	113.50	ug/kg	97
76) o-xylene	14.313	106	299131	58.03	ug/kg	96
77) styrene	14.239	104	476751	56.78	ug/kg	97
78) bromoform	14.071	173	98938	61.38	ug/kg	99
79) trans-1,4-dichloro-2-b...	14.462	53	41269	47.67	ug/kg#	78
81) isopropylbenzene	14.677	105	823964	54.86	ug/kg	99
83) bromobenzene	14.967	156	200508	54.11	ug/kg	92
84) 1,1,2,2-tetrachloroethane	14.320	83	143960	52.99	ug/kg	99
85) 1,2,3-trichloropropane	14.462	75	150949	47.99	ug/kg	97
86) n-propylbenzene	15.122	91	847329	48.93	ug/kg	99
87) 2-chlorotoluene	15.243	91	514623	51.07	ug/kg	97
88) 4-chlorotoluene	15.317	91	517704	50.04	ug/kg	98
89) 1,3,5-trimethylbenzene	15.398	105	693650	49.81	ug/kg	99
90) tert-butylbenzene	15.708	91	360883	50.73	ug/kg	92
91) 1,2,4-trimethylbenzene	15.809	105	676837	49.68	ug/kg	99
92) sec-butylbenzene	15.930	105	950171	52.64	ug/kg	100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\M140715S\
 Data File : m66792.D
 Acq On : 15 Jul 2014 10:03 pm
 Operator : krystend
 Sample : bs
 Misc : MS32289,MSM2361,5,,,5,1
 ALS Vial : 28 Sample Multiplier: 1

Quant Time: Jul 16 08:48:23 2014
 Quant Method : C:\msdchem\1\methods\M140529D0DS.M
 Quant Title : SW-846 Method 8260
 QLast Update : Wed Jun 11 13:34:57 2014
 Response via : Initial Calibration

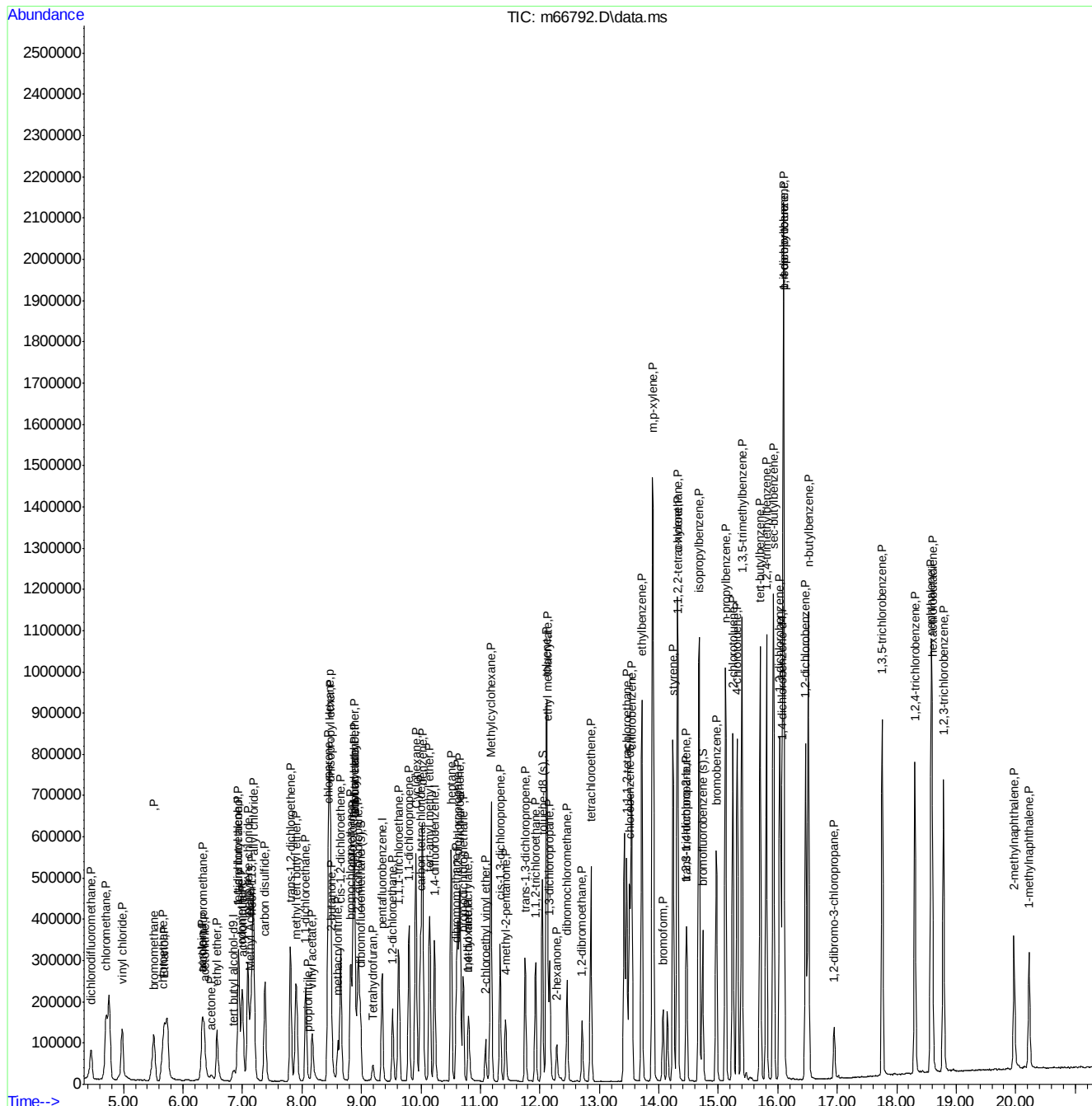
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
93)	1,3-dichlorobenzene	16.031	146	427947	53.52	ug/kg	98
94)	p-isopropyltoluene	16.098	119	835973	49.86	ug/kg	98
95)	1,4-dichlorobenzene	16.098	146	423358	51.29	ug/kg	99
96)	1,2-dichlorobenzene	16.469	146	421186	54.29	ug/kg	99
97)	n-butylbenzene	16.516	91	692373	47.46	ug/kg	98
98)	1,2-dibromo-3-chloropr...	16.947	75	29477	44.97	ug/kg	80
99)	1,3,5-trichlorobenzene	17.756	180	312118	47.11	ug/kg	99
100)	1,2,4-trichlorobenzene	18.308	180	291325	47.27	ug/kg	100
101)	hexachlorobutadiene	18.598	225	150172	47.74	ug/kg	99
102)	naphthalene	18.577	128	760130	51.62	ug/kg	100
103)	1,2,3-trichlorobenzene	18.786	180	280906	49.52	ug/kg	99
104)	2-methylnaphthalene	19.972	142	220800	24.14	ug/kg	98
105)	1-methylnaphthalene	20.228	TIC	642003	24.28	ug/kg	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\M140715S\
Data File : m66792.D
Acq On : 15 Jul 2014 10:03 pm
Operator : krystend
Sample : bs
Misc : MS32289,MSM2361,5,,,5,1
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Jul 16 08:48:23 2014
Quant Method : C:\msdchem\1\methods\M140529D0DS.M
Quant Title : SW-846 Method 8260
QLast Update : Wed Jun 11 13:34:57 2014
Response via : Initial Calibration



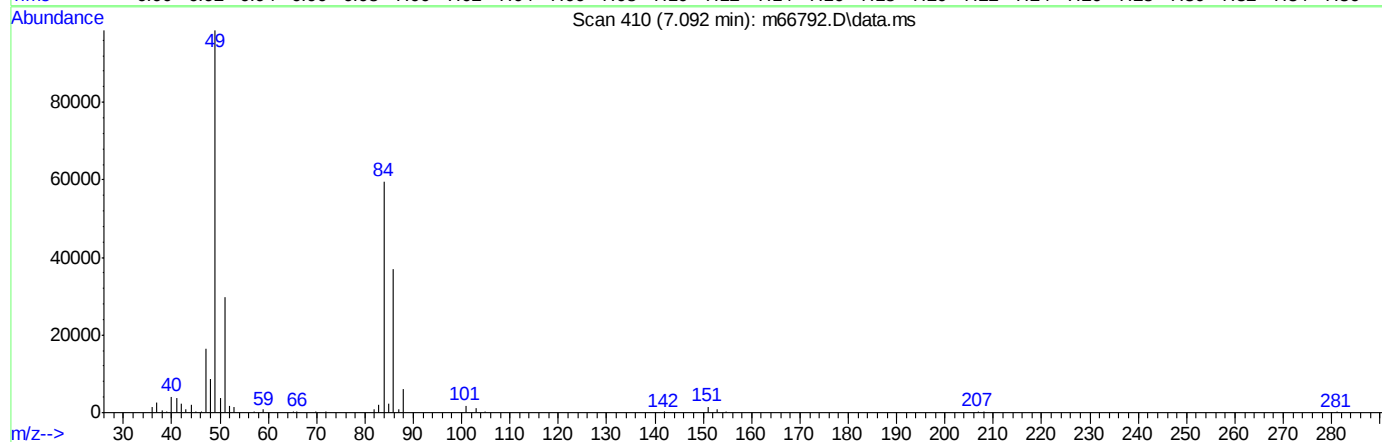
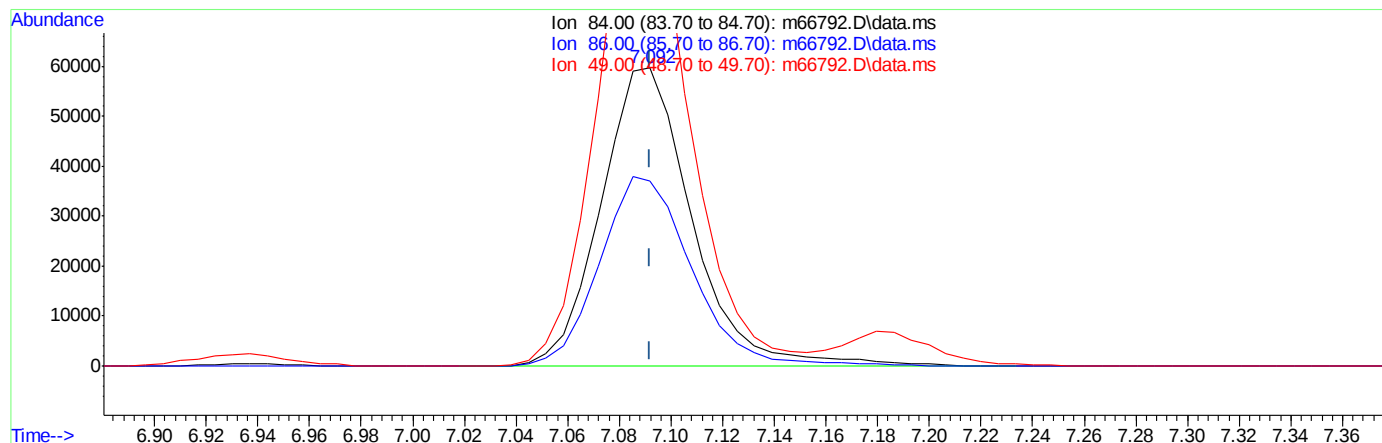
M140529D0DS.M Wed Jul 16 12:41:47 2014

Page: 4

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\M140715S\
Data File : m66792.D
Acq On : 15 Jul 2014 10:03 pm
Operator : krystend
Sample : bs
Misc : MS32289,MSM2361,5,,,5,1
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Jul 16 08:46:58 2014
Quant Method : C:\msdchem\1\methods\M140529D0DS.M
Quant Title : SW-846 Method 8260
QLast Update : Wed Jun 11 13:34:57 2014
Response via : Initial Calibration



(18) methylene chloride (P)

7.092min (-0.000) 61.46ug/kg

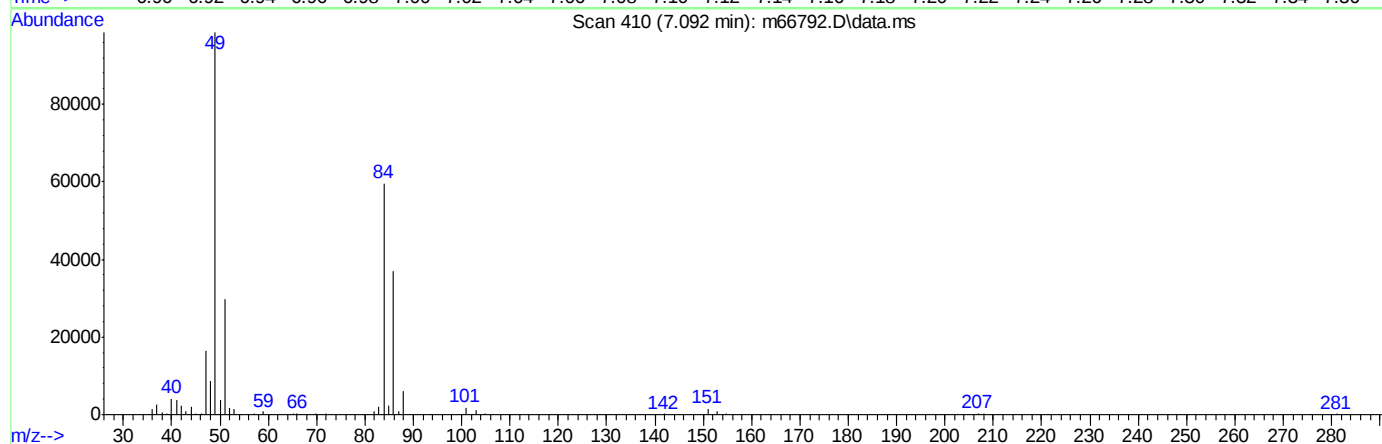
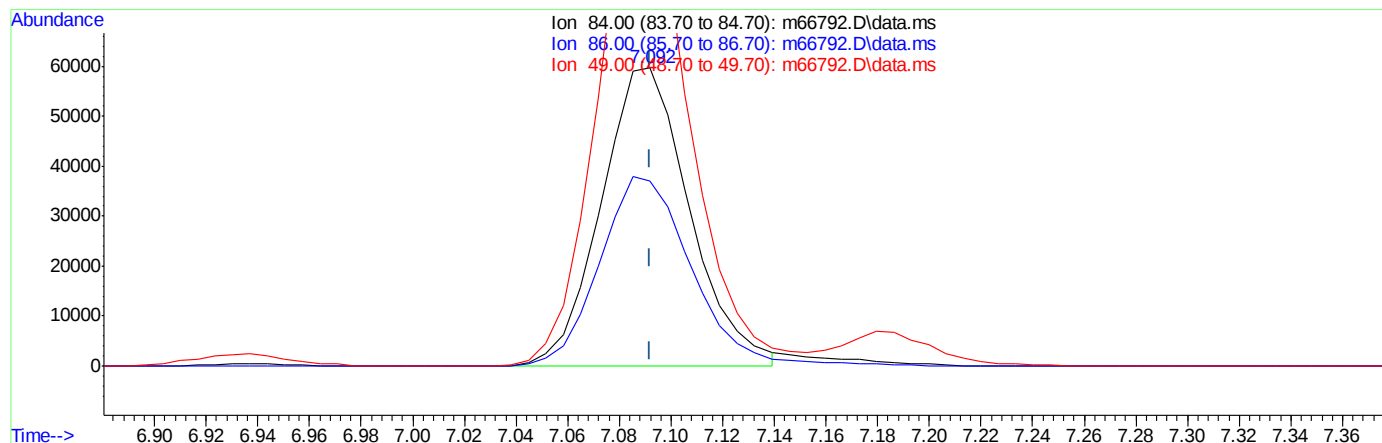
response 146782

Ion	Exp%	Act%
84.00	100	100
86.00	66.10	62.24
49.00	165.60	165.26
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\M140715S\
Data File : m66792.D
Acq On : 15 Jul 2014 10:03 pm
Operator : krystend
Sample : bs
Misc : MS32289,MSM2361,5,,,5,1
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Jul 16 08:46:58 2014
Quant Method : C:\msdchem\1\methods\M140529D0DS.M
Quant Title : SW-846 Method 8260
QLast Update : Wed Jun 11 13:34:57 2014
Response via : Initial Calibration



TIC: m66792.D\data.ms

(18) methylene chloride (P)

7.092min (-0.000) 59.54ug/kg m

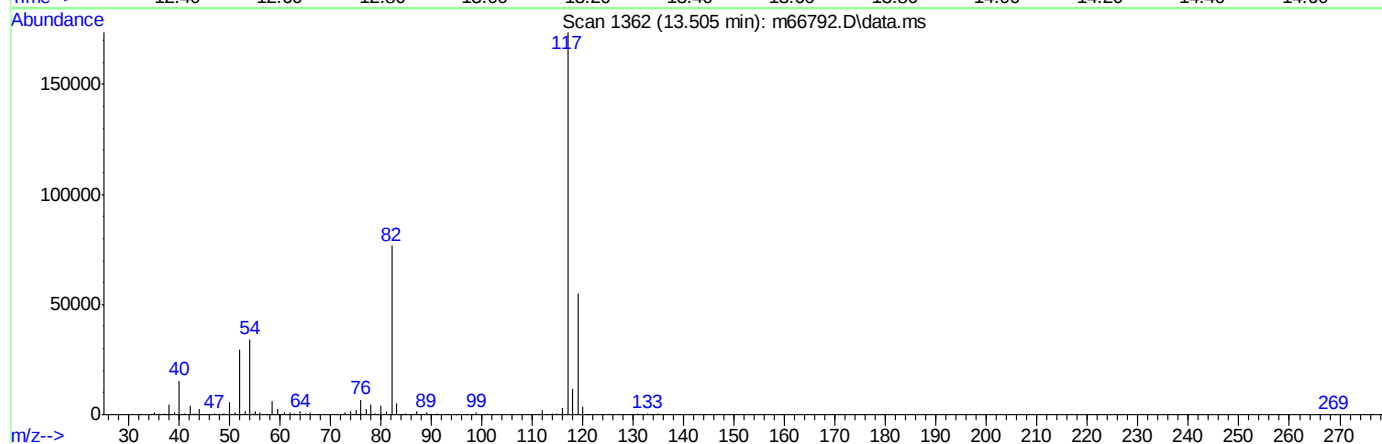
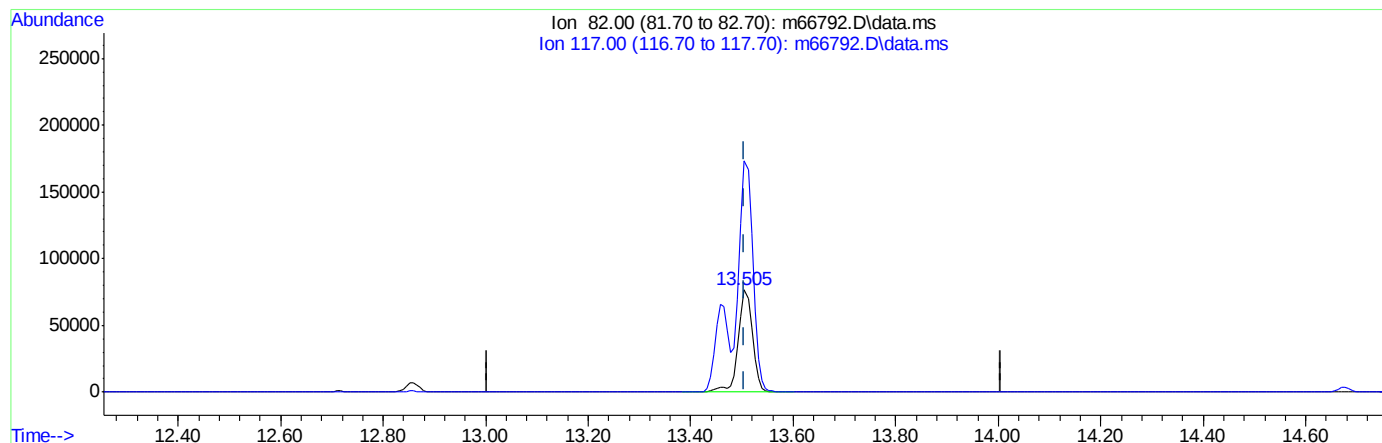
response 142303

Ion	Exp%	Act%
84.00	100	100
86.00	66.10	62.24
49.00	165.60	165.26
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\M140715S\
Data File : m66792.D
Acq On : 15 Jul 2014 10:03 pm
Operator : krystend
Sample : bs
Misc : MS32289,MSM2361,5,,,5,1
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Jul 16 08:46:58 2014
Quant Method : C:\msdchem\1\methods\M140529D0DS.M
Quant Title : SW-846 Method 8260
QLast Update : Wed Jun 11 13:34:57 2014
Response via : Initial Calibration



(66) chlorobenzene-d5 (I)

13.505min (-0.000) 50.00ug/kg

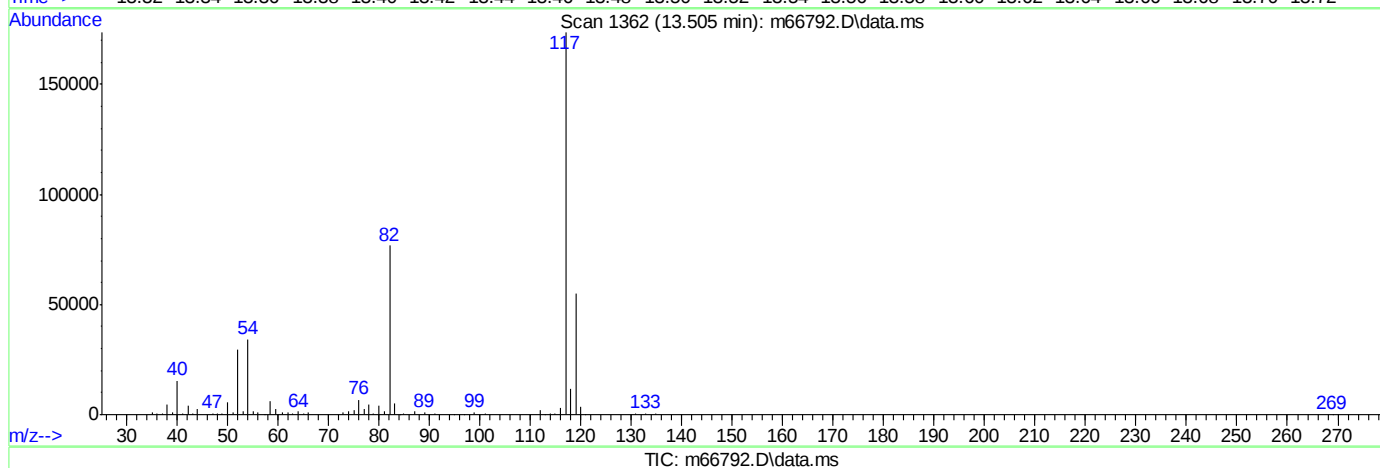
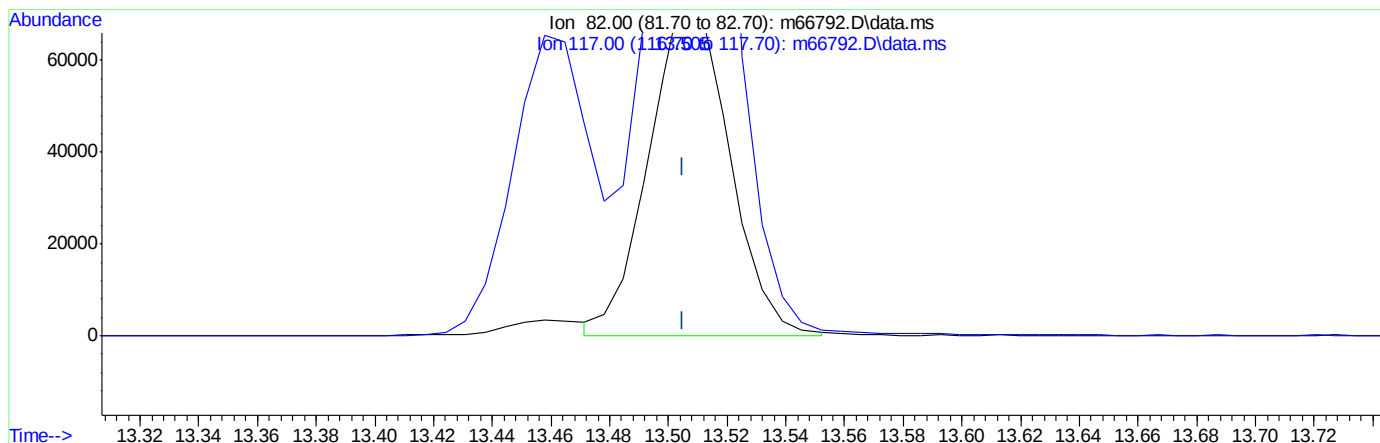
response 144708

Ion	Exp%	Act%
82.00	100	100
117.00	213.40	226.47
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\M140715S\
Data File : m66792.D
Acq On : 15 Jul 2014 10:03 pm
Operator : krystend
Sample : bs
Misc : MS32289,MSM2361,5,,,5,1
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Jul 16 08:46:58 2014
Quant Method : C:\msdchem\1\methods\M140529D0DS.M
Quant Title : SW-846 Method 8260
QLast Update : Wed Jun 11 13:34:57 2014
Response via : Initial Calibration



(66) chlorobenzene-d5 (I)

13.505min (-0.000) 50.00ug/kg m

response 137750

Ion	Exp%	Act%
82.00	100	100
117.00	213.40	226.47
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\M140715S\
 Data File : m66801.D
 Acq On : 16 Jul 2014 2:28 am
 Operator : krystend
 Sample : mc31954-1ms
 Misc : MS32289,MSM2361,4.990,,,5,1
 ALS Vial : 37 Sample Multiplier: 1

Quant Time: Jul 16 09:28:12 2014
 Quant Method : C:\msdchem\1\methods\M140529D0DS.M
 Quant Title : SW-846 Method 8260
 QLast Update : Wed Jun 11 13:34:57 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	6.843	65	131634	500.00	ug/kg	-0.01
4) pentafluorobenzene	9.349	168	208149	50.00	ug/kg	0.00
43) 1,4-difluorobenzene	10.231	114	340293	50.00	ug/kg	0.00
66) chlorobenzene-d5	13.505	82	153383	50.00	ug/kg	0.00
80) 1,4-dichlorobenzene-d4	16.071	152	212496	50.00	ug/kg	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	8.978	113	104642	49.67	ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	99.34%		
60) toluene-d8 (s)	12.043	98	377770	58.99	ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	117.98%		
82) bromofluorobenzene (s)	14.738	95	154519	41.42	ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	82.84%		
Target Compounds						
						Qvalue
2) tertiary butyl alcohol	6.937	59	160014	344.44	ug/kg	93
3) Ethanol	5.664	45	174978	3301.54	ug/kg	98
5) dichlorodifluoromethane	4.444	85	80254	32.83	ug/kg	98
6) chloromethane	4.700	50	185699	44.21	ug/kg	100
7) vinyl chloride	4.970	62	134496	40.12	ug/kg	97
8) bromomethane	5.502	96	93149	42.64	ug/kg	97
9) chloroethane	5.664	64	75285	45.35	ug/kg	94
10) ethyl ether	6.566	59	73115	40.44	ug/kg	94
11) acetonitrile	6.358	41	18528	37.12	ug/kg#	49
12) trichlorofluoromethane	6.331	101	158035	36.60	ug/kg	96
13) freon-113	7.152	101	119986	39.13	ug/kg	94
14) acrolein	6.337	56	9513	32.17	ug/kg	91
15) 1,1-dichloroethene	6.930	96	95631	42.79	ug/kg	98
16) acetone	6.472	58	9537	21.34	ug/kg#	86
17) Methyl Acetate	7.152	43	19764	11.62	ug/kg	82
18) methylene chloride	7.085	84	102917	42.84	ug/kg	97
19) methyl tert butyl ether	7.900	73	232670	38.84	ug/kg	99
20) acrylonitrile	7.004	53	33726	44.37	ug/kg	99
21) allyl chloride	7.186	41	202592	42.33	ug/kg	99
22) trans-1,2-dichloroethene	7.806	96	100769	41.34	ug/kg	96
23) iodomethane	6.991	142	187487	35.93	ug/kg	99
24) carbon disulfide	7.375	76	296858	34.42	ug/kg	99
25) propionitrile	8.109	54	12285	41.68	ug/kg	100
26) vinyl acetate	8.190	43	43962	10.35	ug/kg	99
27) chloroprene	8.439	53	157475	40.49	ug/kg	96
28) di-isopropyl ether	8.480	45	403263	40.43	ug/kg	95
29) methacrylonitrile	8.601	41	56453	44.49	ug/kg	94
30) 2-butanone	8.500	72	8984	28.02	ug/kg#	51
31) Hexane	8.459	41	190249	35.82	ug/kg	100
32) 1,1-dichloroethane	8.062	63	183074	38.05	ug/kg	100
33) tert-butyl ethyl ether	8.884	59	312634	39.47	ug/kg	99
34) isobutyl alcohol	8.884	43	84854	243.17	ug/kg	88
35) 2,2-dichloropropane	8.944	77	138911	35.71	ug/kg	98
36) cis-1,2-dichloroethene	8.648	96	107172	38.99	ug/kg	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\M140715S\
 Data File : m66801.D
 Acq On : 16 Jul 2014 2:28 am
 Operator : krystend
 Sample : mc31954-1ms
 Misc : MS32289,MSM2361,4.990,,,5,1
 ALS Vial : 37 Sample Multiplier: 1

Quant Time: Jul 16 09:28:12 2014
 Quant Method : C:\msdchem\1\methods\M140529D0DS.M
 Quant Title : SW-846 Method 8260
 QLast Update : Wed Jun 11 13:34:57 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
37) ethyl acetate	8.884	43	84854	48.64	ug/kg	88
38) bromochloromethane	8.823	128	59358	41.21	ug/kg	97
39) chloroform	8.857	83	156253	37.22	ug/kg	99
41) Tetrahydrofuran	9.187	42	36222	50.29	ug/kg	97
42) 1,1,1-trichloroethane	9.625	97	161226	36.25	ug/kg	97
44) Cyclohexane	9.914	56	218431	35.24	ug/kg	99
45) carbon tetrachloride	9.995	117	159741	34.94	ug/kg	95
46) 1,1-dichloropropene	9.800	75	121948	34.04	ug/kg	99
47) benzene	10.029	78	349647	37.66	ug/kg	99
48) 1,2-dichloroethane	9.524	62	108796	36.74	ug/kg	99
49) tert-amyl methyl ether	10.143	73	225653	36.42	ug/kg	100
50) heptane	10.507	43	205251	33.78	ug/kg	96
51) trichloroethene	10.655	95	101747	33.23	ug/kg	97
52) 1,2-dichloropropane	10.622	63	99267	35.31	ug/kg	99
53) dibromomethane	10.602	93	55633	41.01	ug/kg	96
54) bromodichloromethane	10.709	83	118976	38.27	ug/kg	100
55) Methylcyclohexane	11.174	83	183172	34.86	ug/kg	97
57) methyl methacrylate	10.804	69	49112	38.57	ug/kg	98
58) 1,4-dioxane	10.804	88	6184	247.82	ug/kg	91
59) cis-1,3-dichloropropene	11.329	75	130972	35.38	ug/kg	99
61) 4-methyl-2-pentanone	11.423	43	135052	51.94	ug/kg	95
62) toluene	12.110	92	228954	35.40	ug/kg	100
63) trans-1,3-dichloropropene	11.753	75	115113	38.56	ug/kg	94
64) 1,1,2-trichloroethane	11.929	83	61433	39.40	ug/kg	95
65) ethyl methacrylate	12.124	69	104811	40.55	ug/kg	98
67) tetrachloroethene	12.858	166	110588	32.63	ug/kg	96
68) 1,3-dichloropropane	12.164	76	116149	36.67	ug/kg	99
69) dibromochloromethane	12.461	129	116289	40.55	ug/kg	98
70) 1,2-dibromoethane	12.710	107	84908	38.24	ug/kg	97
71) 2-hexanone	12.286	43	94277	38.62	ug/kg	98
72) chlorobenzene	13.539	112	294894	34.64	ug/kg	99
73) 1,1,1,2-tetrachloroethane	13.458	131	125867	36.76	ug/kg	99
74) ethylbenzene	13.714	91	471139	33.73	ug/kg	98
75) m,p-xylene	13.896	106	383102	66.77	ug/kg	97
76) o-xylene	14.313	106	201235	35.06	ug/kg	95
77) styrene	14.239	104	178904	19.14	ug/kg	97
78) bromoform	14.071	173	80853	45.05	ug/kg	100
79) trans-1,4-dichloro-2-b...	14.461	53	36210	37.22	ug/kg#	77
81) isopropylbenzene	14.677	105	550297	32.22	ug/kg	99
83) bromobenzene	14.967	156	134367	31.88	ug/kg	94
84) 1,1,2,2-tetrachloroethane	14.320	83	129794	42.01	ug/kg	97
85) 1,2,3-trichloropropane	14.468	75	134099	37.49	ug/kg	98
86) n-propylbenzene	15.122	91	560201	28.45	ug/kg	99
87) 2-chlorotoluene	15.243	91	338351	29.53	ug/kg	96
88) 4-chlorotoluene	15.317	91	336261	28.58	ug/kg	97
89) 1,3,5-trimethylbenzene	15.398	105	457259	28.87	ug/kg	100
90) tert-butylbenzene	15.708	91	234502	28.99	ug/kg	92
91) 1,2,4-trimethylbenzene	15.809	105	440569	28.44	ug/kg	100
92) sec-butylbenzene	15.930	105	630114	30.70	ug/kg	100
93) 1,3-dichlorobenzene	16.031	146	277023	30.47	ug/kg	97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\M140715\
 Data File : m66801.D
 Acq On : 16 Jul 2014 2:28 am
 Operator : krystend
 Sample : mc31954-1ms
 Misc : MS32289,MSM2361,4.990,,,5,1
 ALS Vial : 37 Sample Multiplier: 1

Quant Time: Jul 16 09:28:12 2014
 Quant Method : C:\msdchem\1\methods\M140529D0DS.M
 Quant Title : SW-846 Method 8260
 QLast Update : Wed Jun 11 13:34:57 2014
 Response via : Initial Calibration

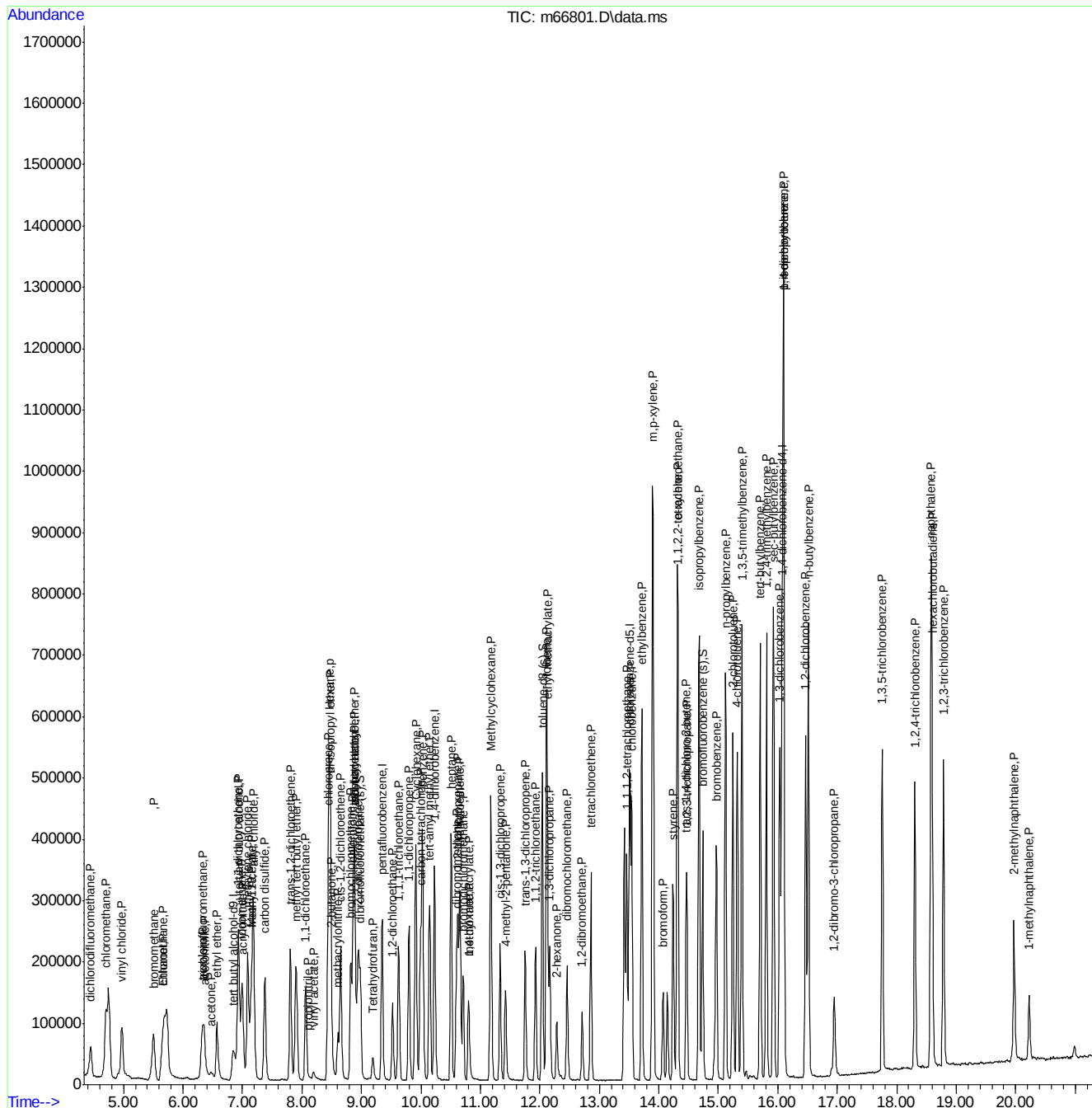
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
94) p-isopropyltoluene	16.098	119	555660	29.15	ug/kg	98
95) 1,4-dichlorobenzene	16.098	146	275999	29.40	ug/kg	98
96) 1,2-dichlorobenzene	16.469	146	288121	32.66	ug/kg	98
97) n-butylbenzene	16.516	91	452467	27.27	ug/kg	100
98) 1,2-dibromo-3-chloropr...	16.947	75	31409	42.31	ug/kg	88
99) 1,3,5-trichlorobenzene	17.756	180	188106	24.97	ug/kg	100
100) 1,2,4-trichlorobenzene	18.308	180	178267	25.44	ug/kg	100
101) hexachlorobutadiene	18.598	225	97581	27.28	ug/kg	97
102) naphthalene	18.577	128	648312	38.71	ug/kg	100
103) 1,2,3-trichlorobenzene	18.786	180	190384	29.51	ug/kg	99
104) 2-methylnaphthalene	19.972	142	152897	14.70	ug/kg	99
105) 1-methylnaphthalene	20.228	TIC	245504m	8.16	ug/kg	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\M140715S\
Data File : m66801.D
Acq On : 16 Jul 2014 2:28 am
Operator : krystend
Sample : mc31954-1ms
Misc : MS32289, MSM2361, 4.990,,, 5, 1
ALS Vial : 37 Sample Multiplier: 1

Quant Time: Jul 16 09:28:12 2014
Quant Method : C:\msdchem\1\methods\M140529D0DS.M
Quant Title : SW-846 Method 8260
QLast Update : Wed Jun 11 13:34:57 2014
Response via : Initial Calibration



M140529D0DS.M Wed Jul 16 12:42:25 2014

Page: 4

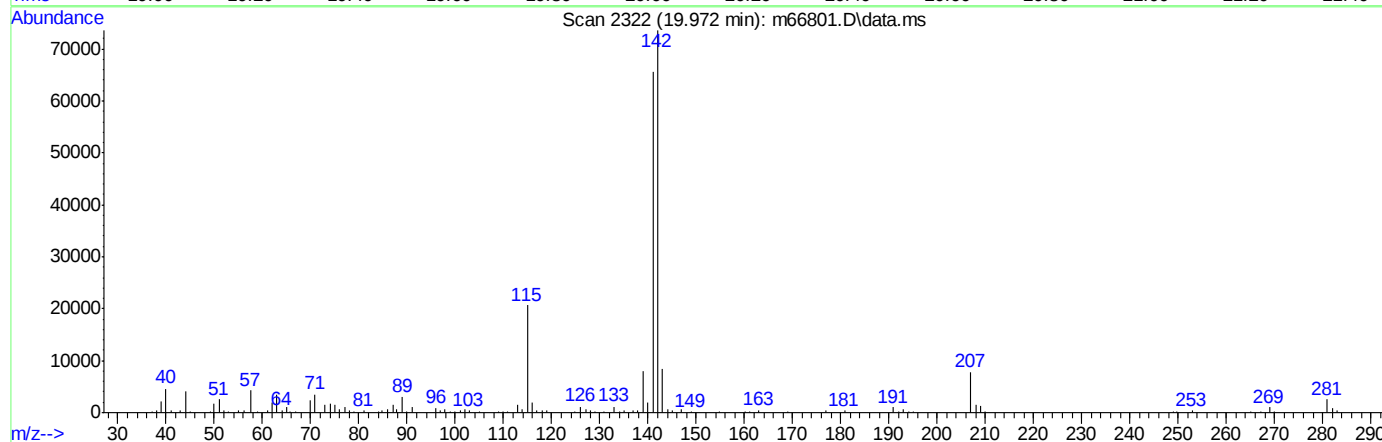
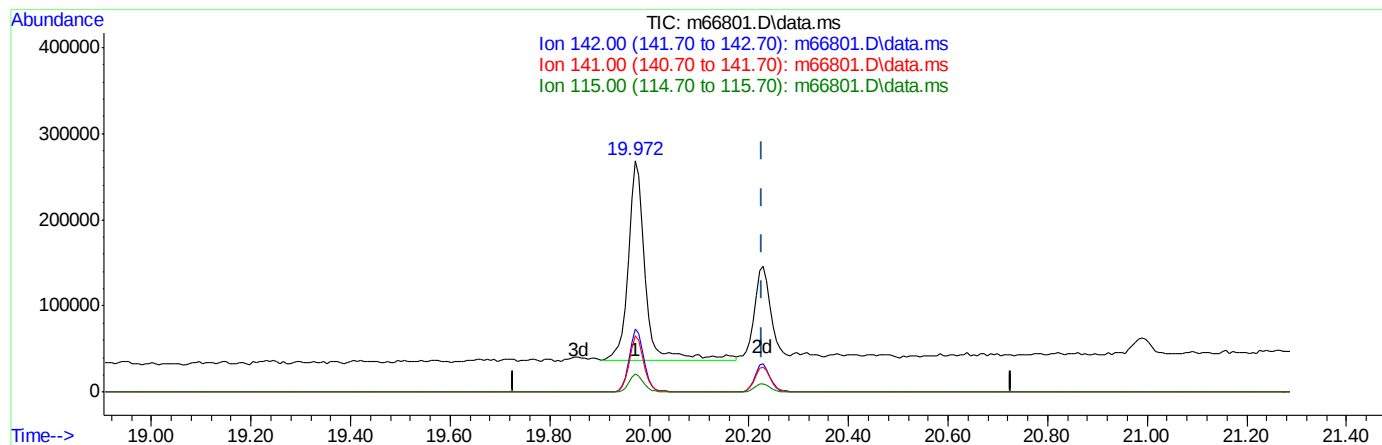
7.4.1



Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\M140715S\
Data File : m66801.D
Acq On : 16 Jul 2014 2:28 am
Operator : krystend
Sample : mc31954-1ms
Misc : MS32289,MSM2361,4.990,,,5,1
ALS Vial : 37 Sample Multiplier: 1

Quant Time: Jul 16 09:27:24 2014
Quant Method : C:\msdchem\1\methods\M140529D0DS.M
Quant Title : SW-846 Method 8260
QLast Update : Wed Jun 11 13:34:57 2014
Response via : Initial Calibration



(105) 1-methylnaphthalene (P)

19.972min (-0.256) 18.49ug/kg

response 555968

Signal	Exp%	Act%
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TIC	100	100
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142.00	30.00	27.50
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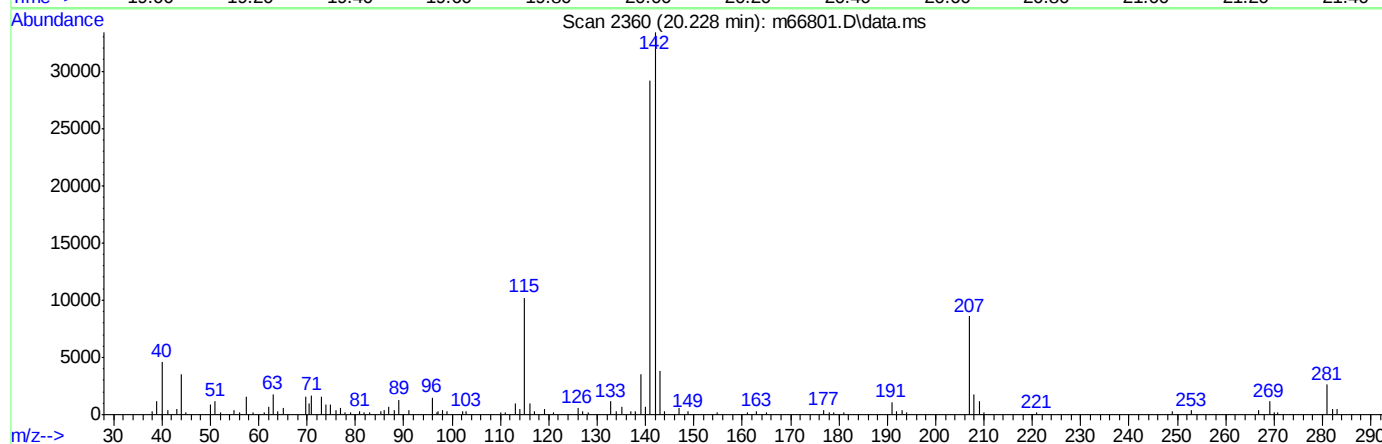
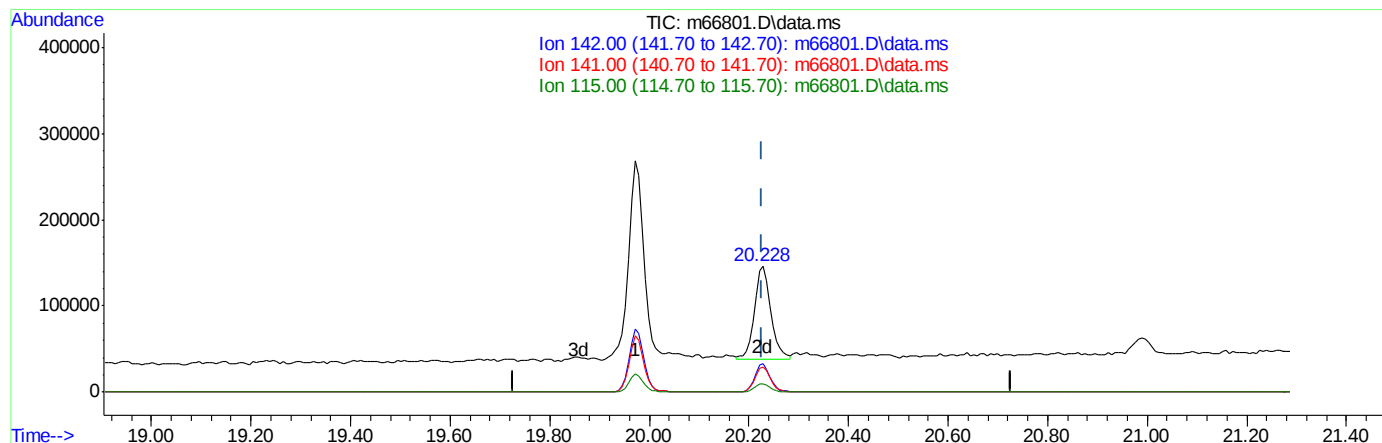
141.00	27.10	24.32
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115.00	9.60	8.43
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Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\M140715S\
Data File : m66801.D
Acq On : 16 Jul 2014 2:28 am
Operator : krystend
Sample : mc31954-1ms
Misc : MS32289,MSM2361,4.990,,,5,1
ALS Vial : 37 Sample Multiplier: 1

Quant Time: Jul 16 09:27:24 2014
Quant Method : C:\msdchem\1\methods\M140529D0DS.M
Quant Title : SW-846 Method 8260
QLast Update : Wed Jun 11 13:34:57 2014
Response via : Initial Calibration



(105) 1-methylnaphthalene (P)

20.228min (-0.000) 8.16ug/kg m

response 245504

Signal	Exp%	Act%
--------	------	------

TIC	100	100
-----	-----	-----

142.00	30.00	62.28#
--------	-------	--------

141.00	27.10	55.08#
--------	-------	--------

115.00	9.60	19.08#
--------	------	--------

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\M140715S\
Data File : m66802.D
Acq On : 16 Jul 2014 2:58 am
Operator : krystend
Sample : mc31954-1msd
Misc : MS32289,MSM2361,4.788,,,5,1
ALS Vial : 38 Sample Multiplier: 1

Quant Time: Jul 16 09:29:20 2014
Quant Method : C:\msdchem\1\methods\M140529D0DS.M
Quant Title : SW-846 Method 8260
QLast Update : Wed Jun 11 13:34:57 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	6.850	65	139986	500.00	ug/kg	0.00
4) pentafluorobenzene	9.349	168	218885	50.00	ug/kg	0.00
43) 1,4-difluorobenzene	10.231	114	355268	50.00	ug/kg	0.00
66) chlorobenzene-d5	13.505	82	159725	50.00	ug/kg	0.00
80) 1,4-dichlorobenzene-d4	16.072	152	215365	50.00	ug/kg	0.00

System Monitoring Compounds						
40) dibromofluoromethane (s)	8.985	113	111399	50.28	ug/kg	0.00
Spiked Amount	50.000	Range	70 - 130	Recovery	=	100.56%
60) toluene-d8 (s)	12.043	98	398281	59.62	ug/kg	0.00
Spiked Amount	50.000	Range	70 - 130	Recovery	=	119.24%
82) bromofluorobenzene (s)	14.738	95	161432	42.70	ug/kg	0.00
Spiked Amount	50.000	Range	70 - 130	Recovery	=	85.40%

Target Compounds						Qvalue
2) tertiary butyl alcohol	6.944	59	175493	355.22	ug/kg	96
3) Ethanol	5.671	45	178894	3174.04	ug/kg	99
5) dichlorodifluoromethane	4.451	85	88892	34.64	ug/kg	98
6) chloromethane	4.707	50	210863	47.74	ug/kg	100
7) vinyl chloride	4.977	62	154015	43.69	ug/kg	100
8) bromomethane	5.516	96	104276	45.39	ug/kg	99
9) chloroethane	5.671	64	85682	49.08	ug/kg	95
10) ethyl ether	6.573	59	88177	46.38	ug/kg	97
11) acetonitrile	6.371	41	20774	39.57	ug/kg#	46
12) trichlorofluoromethane	6.338	101	183161	40.33	ug/kg	99
13) freon-113	7.166	101	136054	42.19	ug/kg	98
14) acrolein	6.344	56	11395	41.61	ug/kg	91
15) 1,1-dichloroethene	6.937	96	114390	48.78	ug/kg	98
16) acetone	6.492	58	11488	24.44	ug/kg#	60
17) Methyl Acetate	7.153	43	26867	15.03	ug/kg	78
18) methylene chloride	7.092	84	121975	48.47	ug/kg	97
19) methyl tert butyl ether	7.900	73	275309	43.70	ug/kg	98
20) acrylonitrile	7.004	53	38001	47.55	ug/kg	99
21) allyl chloride	7.186	41	241386	47.96	ug/kg	98
22) trans-1,2-dichloroethene	7.806	96	122567	48.02	ug/kg	94
23) iodomethane	6.998	142	223752	40.78	ug/kg	98
24) carbon disulfide	7.375	76	356882	39.35	ug/kg	99
25) propionitrile	8.102	54	14738	47.54	ug/kg	100
26) vinyl acetate	8.190	43	44590	9.98	ug/kg	99
27) chloroprene	8.439	53	180329	44.32	ug/kg	100
28) di-isopropyl ether	8.480	45	482406	46.00	ug/kg	96
29) methacrylonitrile	8.601	41	67009	50.22	ug/kg	91
30) 2-butanone	8.500	72	10459	31.02	ug/kg#	26
31) Hexane	8.460	41	211745	37.91	ug/kg	98
32) 1,1-dichloroethane	8.069	63	219252	43.34	ug/kg	99
33) tert-butyl ethyl ether	8.884	59	373662	44.86	ug/kg	99
34) isobutyl alcohol	8.884	43	96723	266.30	ug/kg	82
35) 2,2-dichloropropane	8.945	77	158390	38.72	ug/kg	99
36) cis-1,2-dichloroethene	8.655	96	128458	44.45	ug/kg	94

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\M140715S\
 Data File : m66802.D
 Acq On : 16 Jul 2014 2:58 am
 Operator : krystend
 Sample : mc31954-1msd
 Misc : MS32289,MSM2361,4.788,,,5,1
 ALS Vial : 38 Sample Multiplier: 1

Quant Time: Jul 16 09:29:20 2014
 Quant Method : C:\msdchem\1\methods\M140529D0DS.M
 Quant Title : SW-846 Method 8260
 QLast Update : Wed Jun 11 13:34:57 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
37) ethyl acetate	8.884	43	96723	53.27	ug/kg	94
38) bromochloromethane	8.823	128	71614	47.28	ug/kg	96
39) chloroform	8.857	83	187620	42.50	ug/kg	100
41) Tetrahydrofuran	9.194	42	39888	52.66	ug/kg	95
42) 1,1,1-trichloroethane	9.625	97	190482	40.72	ug/kg	98
44) Cyclohexane	9.915	56	250017	38.64	ug/kg	98
45) carbon tetrachloride	9.995	117	188677	39.53	ug/kg	97
46) 1,1-dichloropropene	9.800	75	144024	38.51	ug/kg	96
47) benzene	10.029	78	425245	44.10	ug/kg	97
48) 1,2-dichloroethane	9.524	62	129505	41.89	ug/kg	100
49) tert-amyl methyl ether	10.150	73	265762	41.08	ug/kg	98
50) heptane	10.507	43	210579	33.20	ug/kg	97
51) trichloroethene	10.656	95	121983	38.17	ug/kg	96
52) 1,2-dichloropropane	10.622	63	120781	41.15	ug/kg	100
53) dibromomethane	10.595	93	64849	45.92	ug/kg	95
54) bromodichloromethane	10.709	83	139987	43.13	ug/kg	99
55) Methylcyclohexane	11.181	83	202727	36.95	ug/kg	98
57) methyl methacrylate	10.804	69	58212	43.79	ug/kg	99
58) 1,4-dioxane	10.811	88	6685	256.61	ug/kg	95
59) cis-1,3-dichloropropene	11.329	75	155523	40.25	ug/kg	99
61) 4-methyl-2-pentanone	11.417	43	153783	56.66	ug/kg	95
62) toluene	12.111	92	272903	40.42	ug/kg	99
63) trans-1,3-dichloropropene	11.754	75	135977	43.63	ug/kg	93
64) 1,1,2-trichloroethane	11.929	83	73256	45.01	ug/kg	99
65) ethyl methacrylate	12.124	69	122494	45.39	ug/kg	99
67) tetrachloroethene	12.858	166	128760	36.48	ug/kg	98
68) 1,3-dichloropropane	12.165	76	139080	42.17	ug/kg	100
69) dibromochloromethane	12.461	129	139092	46.57	ug/kg	100
70) 1,2-dibromoethane	12.710	107	101314	43.82	ug/kg	95
71) 2-hexanone	12.286	43	107975	42.47	ug/kg	98
72) chlorobenzene	13.539	112	347476	39.20	ug/kg	99
73) 1,1,1,2-tetrachloroethane	13.458	131	148589	41.67	ug/kg	97
74) ethylbenzene	13.714	91	549157	37.75	ug/kg	98
75) m,p-xylene	13.896	106	449391	75.22	ug/kg	94
76) o-xylene	14.313	106	232076	38.83	ug/kg	95
77) styrene	14.239	104	199579	20.50	ug/kg	97
78) bromoform	14.071	173	90936	48.65	ug/kg	96
79) trans-1,4-dichloro-2-b...	14.462	53	39364	38.93	ug/kg#	71
81) isopropylbenzene	14.677	105	617575	35.68	ug/kg	100
83) bromobenzene	14.967	156	157583	36.90	ug/kg	94
84) 1,1,2,2-tetrachloroethane	14.320	83	143945	45.97	ug/kg	99
85) 1,2,3-trichloropropane	14.468	75	148285	40.91	ug/kg	99
86) n-propylbenzene	15.122	91	634892	31.81	ug/kg	100
87) 2-chlorotoluene	15.243	91	390077	33.59	ug/kg	95
88) 4-chlorotoluene	15.317	91	390824	32.78	ug/kg	98
89) 1,3,5-trimethylbenzene	15.398	105	513464	31.99	ug/kg	98
90) tert-butylbenzene	15.708	91	257228	31.37	ug/kg	90
91) 1,2,4-trimethylbenzene	15.809	105	500444	31.87	ug/kg	100
92) sec-butylbenzene	15.930	105	682645	32.82	ug/kg	99
93) 1,3-dichlorobenzene	16.031	146	317817	34.49	ug/kg	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\M140715\
Data File : m66802.D
Acq On : 16 Jul 2014 2:58 am
Operator : krystend
Sample : mc31954-1msd
Misc : MS32289,MSM2361,4.788,,,5,1
ALS Vial : 38 Sample Multiplier: 1

Quant Time: Jul 16 09:29:20 2014
Quant Method : C:\msdchem\1\methods\M140529D0DS.M
Quant Title : SW-846 Method 8260
QLast Update : Wed Jun 11 13:34:57 2014
Response via : Initial Calibration

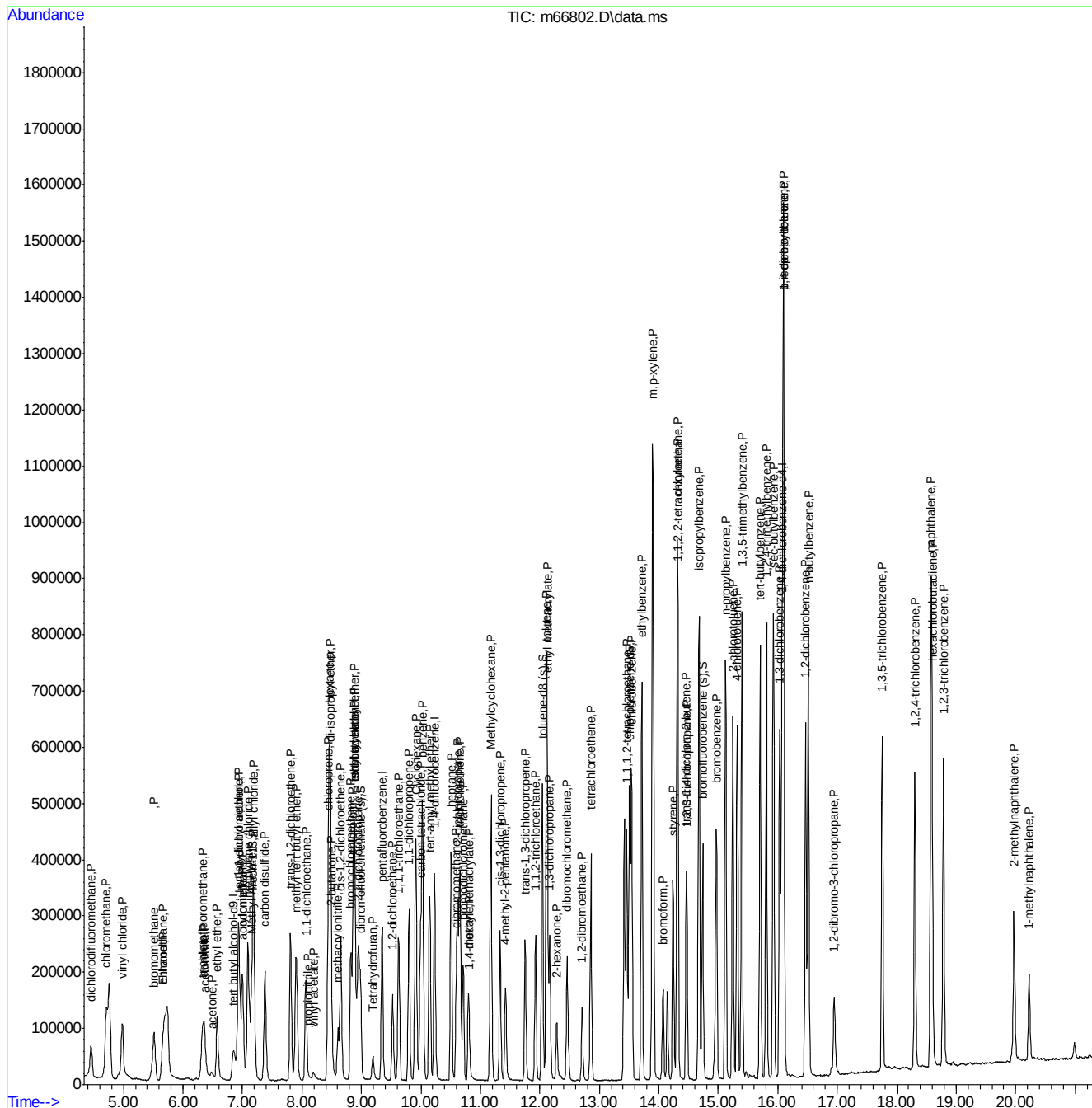
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
94)	p-isopropyltoluene	16.099	119	598100	30.95	ug/kg	99
95)	1,4-dichlorobenzene	16.099	146	319611	33.60	ug/kg	98
96)	1,2-dichlorobenzene	16.469	146	327758	36.66	ug/kg	99
97)	n-butylbenzene	16.516	91	487463	28.99	ug/kg	98
98)	1,2-dibromo-3-chloropr...	16.947	75	33140	43.94	ug/kg	83
99)	1,3,5-trichlorobenzene	17.756	180	214760	28.13	ug/kg	99
100)	1,2,4-trichlorobenzene	18.308	180	203304	28.62	ug/kg	99
101)	hexachlorobutadiene	18.598	225	97016	26.76	ug/kg	100
102)	naphthalene	18.578	128	716273	42.20	ug/kg	100
103)	1,2,3-trichlorobenzene	18.786	180	208844	31.94	ug/kg	99
104)	2-methylnaphthalene	19.972	142	181231	17.20	ug/kg	100
105)	1-methylnaphthalene	20.228	TIC	379699	12.46	ug/kg	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\M140715S\
Data File : m66802.D
Acq On : 16 Jul 2014 2:58 am
Operator : krystend
Sample : mc31954-1msd
Misc : MS32289, MSM2361, 4.788,,, 5, 1
ALS Vial : 38 Sample Multiplier: 1

Quant Time: Jul 16 09:29:20 2014
Quant Method : C:\msdchem\1\methods\M140529D0DS.M
Quant Title : SW-846 Method 8260
QLast Update : Wed Jun 11 13:34:57 2014
Response via : Initial Calibration



M140529D0DS.M Wed Jul 16 12:42:29 2014

Page: 4

7.4.2

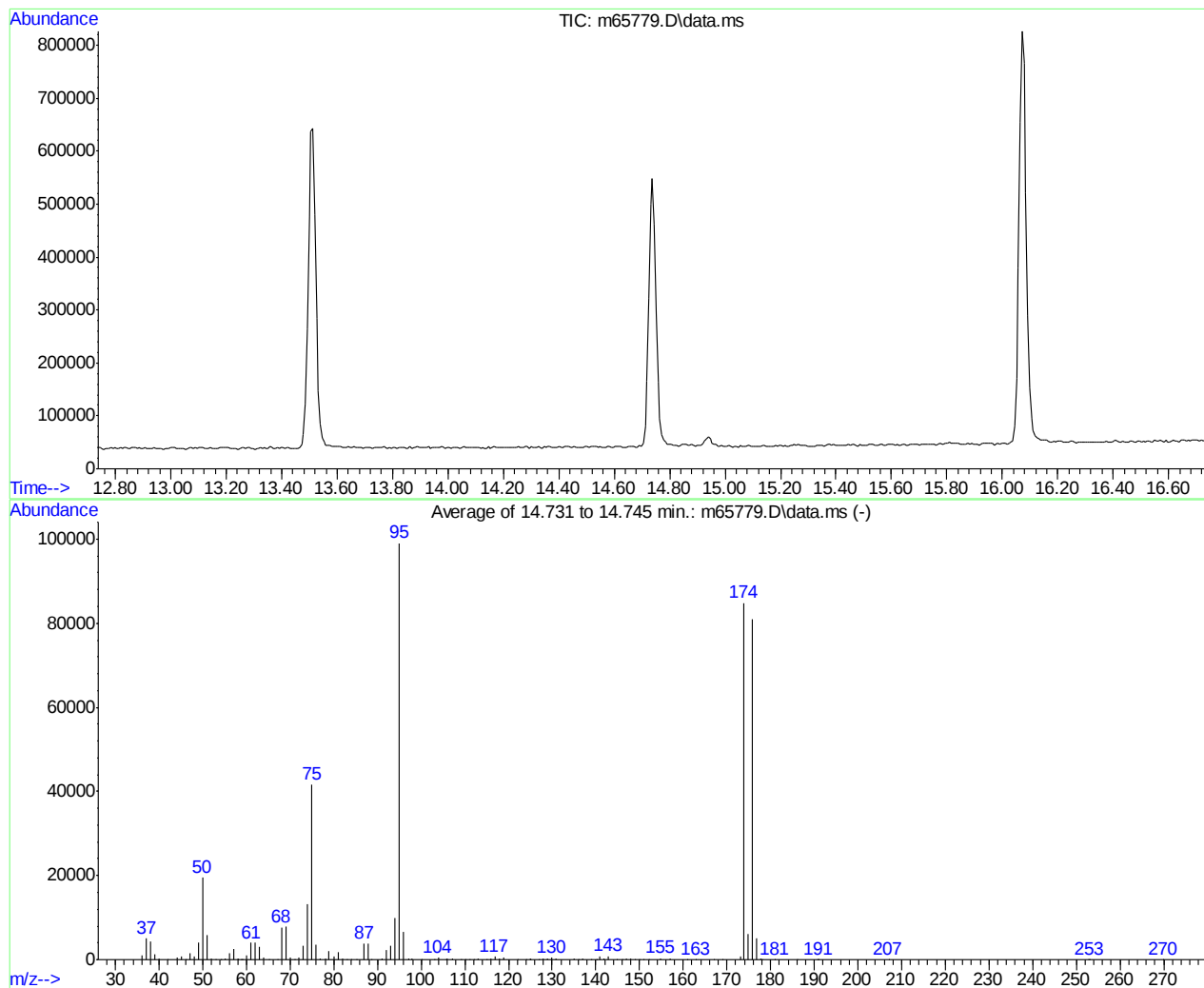


BFB

Data File : C:\msdchem\1\data\M140529S\m65779.D
Acq On : 29 May 2014 8:09 am
Sample : bfb
Misc : MS31905,MSM2318,5,,5,1
MS Integration Params: RTEINT.P

Vial: 3
Operator: krystend
Inst : GCMS M
Multiplr: 1.00

Method : C:\msdchem\1\methods\M140314S.M (RTE Integrator)
Title : SW-846 Method 8260



Spectrum Information: Average of 14.731 to 14.745 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	19.7	19493	PASS
75	95	30	60	42.1	41669	PASS
95	95	100	100	100.0	99091	PASS
96	95	5	9	6.6	6533	PASS
173	174	0.00	2	0.9	771	PASS
174	95	50	150	85.6	84835	PASS
175	174	5	9	7.3	6214	PASS
176	174	95	101	95.4	80931	PASS
177	176	5	9	6.4	5198	PASS

m65779.D M140314S.M Thu May 29 11:07:52 2014

Average of 14.731 to 14.745 min.: m65779.D\data.ms

bfb

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.05	1142	49.00	4014	58.90	54	70.00	588
37.05	4999	49.95	19493	59.05	105	71.05	33
38.10	4293	51.00	5798	60.05	971	72.00	507
39.00	1401	52.05	345	61.00	4007	73.00	3350
40.00	209	53.00	26	62.00	4082	74.00	13109
42.00	83	54.05	94	63.00	2992	75.00	41669
44.00	503	55.00	368	64.00	422	76.00	3655
45.00	833	56.00	1470	65.05	10	76.95	369
46.10	134	57.00	2427	67.00	130	78.00	342
47.05	1462	58.00	67	68.00	7636	78.90	1927
48.05	679	58.15	209	69.00	7986	79.95	708

Average of 14.731 to 14.745 min.: m65779.D\data.ms

bfb

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
80.90	1793	94.00	9971	109.10	31	123.95	130
81.95	370	94.95	99091	110.05	31	124.90	178
83.05	53	96.00	6533	111.00	108	125.10	62
84.00	59	97.05	278	112.00	72	127.00	53
85.10	66	97.90	225	113.00	137	127.90	285
86.95	3887	100.00	50	114.90	68	129.00	300
87.95	3770	103.10	56	115.95	226	129.90	394
88.70	62	103.90	401	116.90	651	130.85	227
91.00	367	105.80	119	117.85	377	134.90	151
92.00	2344	105.95	245	118.95	556	135.90	55
93.00	3430	107.05	171	122.00	51	136.95	259

Average of 14.731 to 14.745 min.: m65779.D\data.ms

bfb

Modified:subtracted

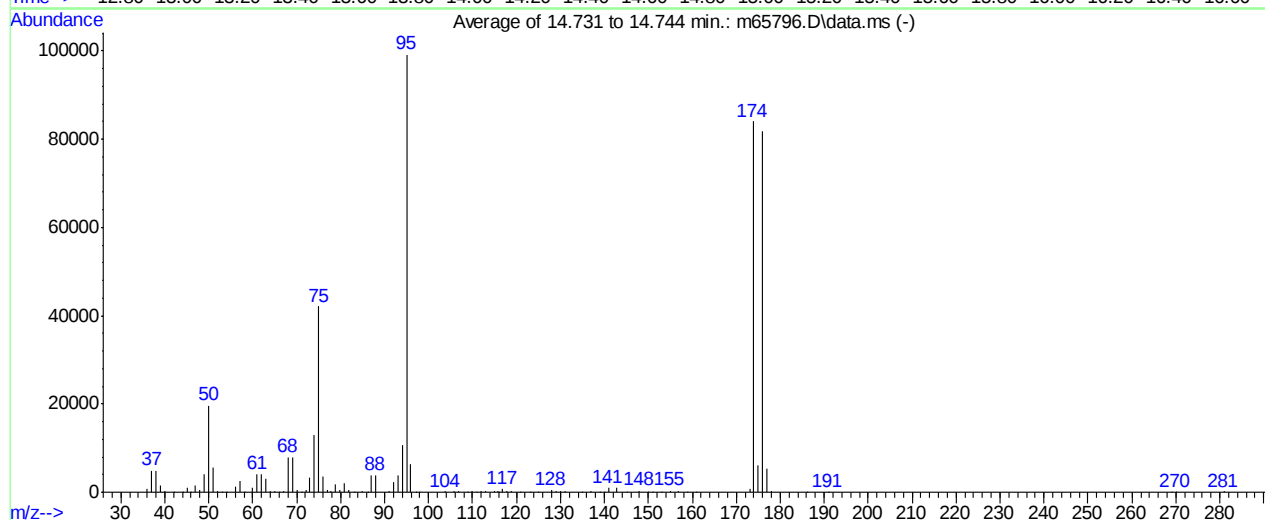
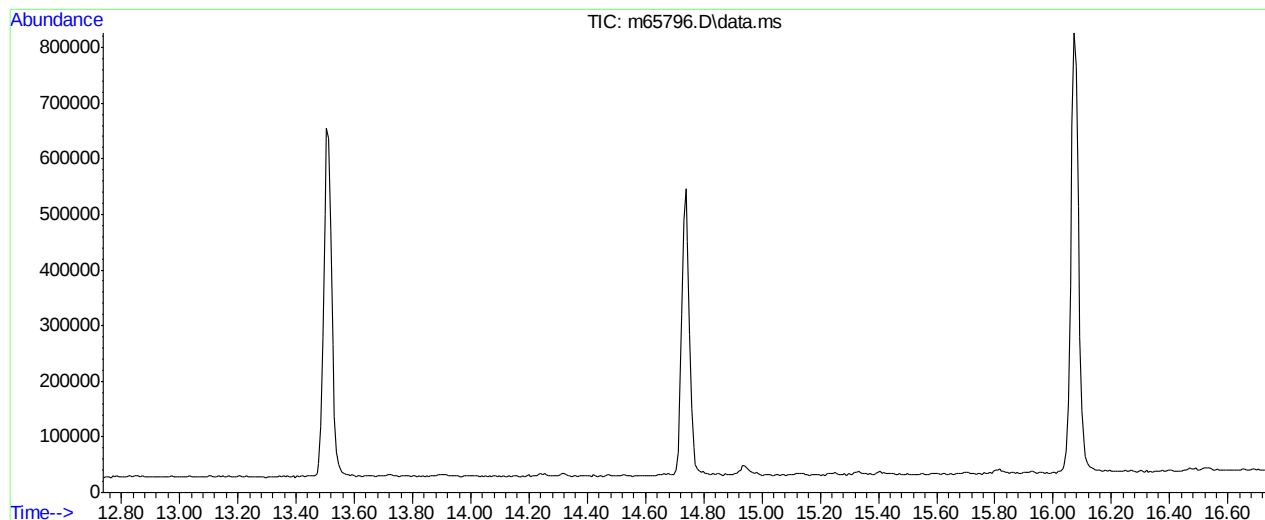
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
139.00	63	151.00	58	175.90	80931	269.90	65
140.05	114	152.10	50	176.90	5198		
140.85	686	154.90	296	177.80	137		
141.85	145	156.90	246	178.10	55		
142.90	843	160.85	122	181.00	57		
144.90	56	162.90	105	186.00	54		
145.90	106	167.10	57	190.80	59		
146.95	293	169.00	53	191.00	60		
147.85	246	173.05	771	207.00	71		
149.05	10	173.90	84835	252.80	54		
149.80	118	174.90	6214	253.10	74		

BFB

Data File : C:\msdchem\1\data\M140529S\m65796.D
Acq On : 29 May 2014 4:41 pm
Sample : bfb
Misc : MS31905,MSM2318,5,,5,1
MS Integration Params: RTEINT.P

Vial: 17
Operator: krystend
Inst : GCMS M
Multiplr: 1.00

Method : C:\msdchem\1\methods\M140529S.M (RTE Integrator)
Title : SW-846 Method 8260



Spectrum Information: Average of 14.731 to 14.744 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	19.8	19655	PASS
75	95	30	60	42.4	42083	PASS
95	95	100	100	100.0	99204	PASS
96	95	5	9	6.3	6275	PASS
173	174	0.00	2	0.9	727	PASS
174	95	50	150	84.8	84093	PASS
175	174	5	9	7.2	6089	PASS
176	174	95	101	97.2	81712	PASS
177	176	5	9	6.6	5403	PASS

m65796.D M140529S.M Thu May 29 17:11:00 2014

Average of 14.731 to 14.744 min.: m65796.D\data.ms

blank

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.00	778	49.00	4180	62.05	4037	73.00	3373
37.05	4886	50.00	19655	63.00	3175	73.95	13027
38.05	4768	51.00	5574	64.05	354	75.00	42083
39.00	1554	52.00	341	65.00	139	76.00	3639
40.00	314	53.00	49	66.00	128	76.95	486
42.00	131	54.05	15	67.00	161	77.85	198
44.00	25	56.00	1309	68.00	8004	78.90	1816
45.00	977	57.00	2486	69.00	7933	79.90	634
46.00	57	58.00	109	70.05	518	80.90	2061
47.00	1519	60.00	948	71.20	129	81.90	395
47.90	621	61.00	4122	72.05	487	83.00	22

Average of 14.731 to 14.744 min.: m65796.D\data.ms

blank

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
84.95	308	98.00	41	116.00	132	134.95	99
86.20	68	103.85	222	116.85	671	136.95	220
86.95	3825	105.90	198	117.85	339	138.95	123
87.95	3909	106.95	201	118.90	389	140.00	50
91.00	327	108.95	112	120.90	59	140.95	965
91.95	2363	110.00	141	123.05	113	142.90	924
93.00	3753	111.00	63	125.00	55	145.05	108
94.00	10703	112.00	146	127.95	394	147.90	276
95.00	99204	112.95	266	128.90	246	149.90	129
95.95	6275	114.95	148	129.95	325	151.00	55
97.05	87	115.80	213	130.95	232	153.00	54

Average of 14.731 to 14.744 min.: m65796.D\data.ms

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Modified:subtracted

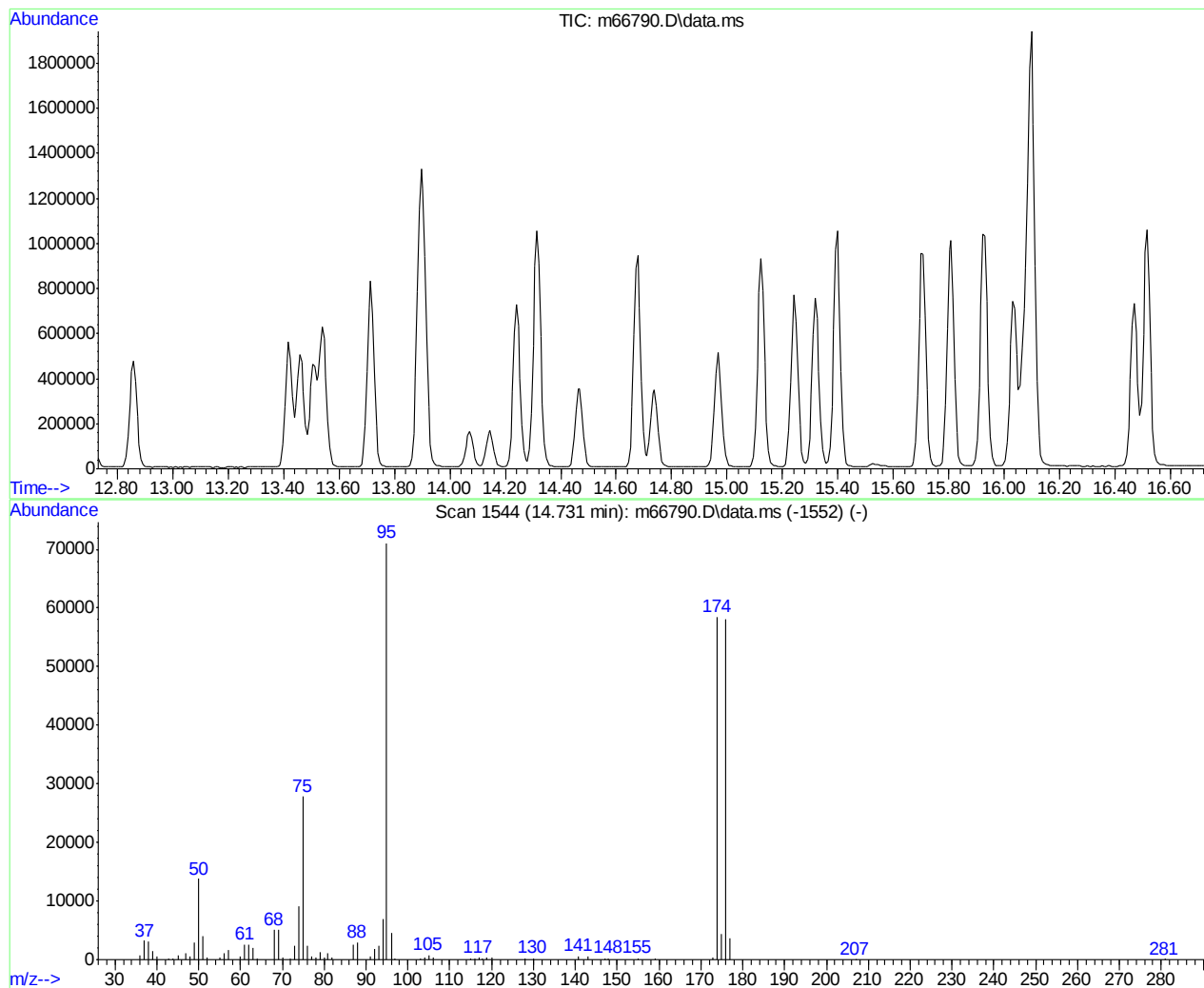
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
154.95	330	190.95	110				
156.90	192	269.00	29				
158.80	111	270.00	62				
160.80	61	280.95	179				
173.05	727						
173.90	84093						
174.90	6089						
175.90	81712						
176.90	5403						
177.85	249						
186.20	51						

BFB

Data File : C:\msdchem\1\data\M140715S\m66790.D
Acq On : 15 Jul 2014 9:04 pm
Sample : bfb
Misc : MS32287,MSM2361,5,,5,1
MS Integration Params: RTEINT.P

Vial: 26
Operator: krystend
Inst : GCMS M
Multiplr: 1.00

Method : C:\msdchem\1\methods\M140529D0DS.M (RTE Integrator)
Title : SW-846 Method 8260



Spectrum Information: Scan 1544

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	19.4	13794	PASS
75	95	30	60	39.2	27839	PASS
95	95	100	100	100.0	71087	PASS
96	95	5	9	6.4	4515	PASS
173	174	0.00	2	0.7	424	PASS
174	95	50	150	82.3	58498	PASS
175	174	5	9	7.6	4442	PASS
176	174	95	101	99.2	58055	PASS
177	176	5	9	6.3	3670	PASS

Scan 1544 (14.731 min): m66790.D\data.ms (-1552)

bfb

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.00	739	50.00	13794	68.00	5033	80.00	295
37.00	3194	51.00	4041	69.00	5091	80.90	1126
38.00	3113	51.90	330	70.00	401	81.90	358
39.00	1435	55.00	368	72.00	272	87.00	2628
40.00	557	56.00	1066	73.00	2318	87.90	2926
42.90	168	57.00	1577	74.00	9070	90.90	546
43.95	112	59.90	633	74.95	27839	92.00	1811
45.00	665	61.00	2634	76.00	2359	93.00	2403
46.90	1173	62.00	2541	77.00	570	94.00	7004
48.00	492	63.00	2003	78.00	333	94.95	71087
49.00	2986	63.90	245	78.90	1221	96.00	4515

Scan 1544 (14.731 min): m66790.D\data.ms (-1552)

bfb

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
96.90	153	128.00	236	175.90	58055		
103.00	208	129.90	273	176.90	3670		
103.90	293	140.80	643	207.00	48		
105.00	766	142.90	508	280.90	172		
106.00	301	147.00	165				
115.00	203	147.90	253				
115.90	162	155.00	247				
116.90	347	159.00	157				
117.80	211	172.90	424				
118.90	281	173.90	58498				
120.00	326	174.90	4442				

7.5.3

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\M140529S\
 Data File : m65786A.D
 Acq On : 29 May 2014 11:40 am
 Operator : krystend
 Sample : IC2333-0.5
 Misc : MS31905,MSM2333,5,,,5,1
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: May 29 15:25:45 2014
 Quant Method : C:\msdchem\1\methods\M140529S.M
 Quant Title : SW-846 Method 8260
 QLast Update : Thu May 29 15:24:19 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	6.849	65	107679	500.00	ug/kg	0.00
4) pentafluorobenzene	9.349	168	285965	50.00	ug/kg	0.00
43) 1,4-difluorobenzene	10.231	114	427623	50.00	ug/kg	0.00
66) chlorobenzene-d5	13.505	82	186392	50.00	ug/kg	0.00
80) 1,4-dichlorobenzene-d4	16.071	152	234889	50.00	ug/kg	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	0.000	113	0d	0.00	ug/kg	
Spiked Amount 50.000	Range 70 - 130		Recovery =	0.00%		
60) toluene-d8 (s)	0.000	98	0d	0.00	ug/kg	
Spiked Amount 50.000	Range 70 - 130		Recovery =	0.00%		
82) bromofluorobenzene (s)	0.000	95	0d	0.00	ug/kg	
Spiked Amount 50.000	Range 70 - 130		Recovery =	0.00%		
Target Compounds						
47) benzene	10.029	78	9236	0.75	ug/kg	99
51) trichloroethene	10.655	95	3384m	0.92	ug/kg	
67) tetrachloroethene	12.851	166	2365	0.60	ug/kg	92

(#) = qualifier out of range (m) = manual integration (+) = signals summed

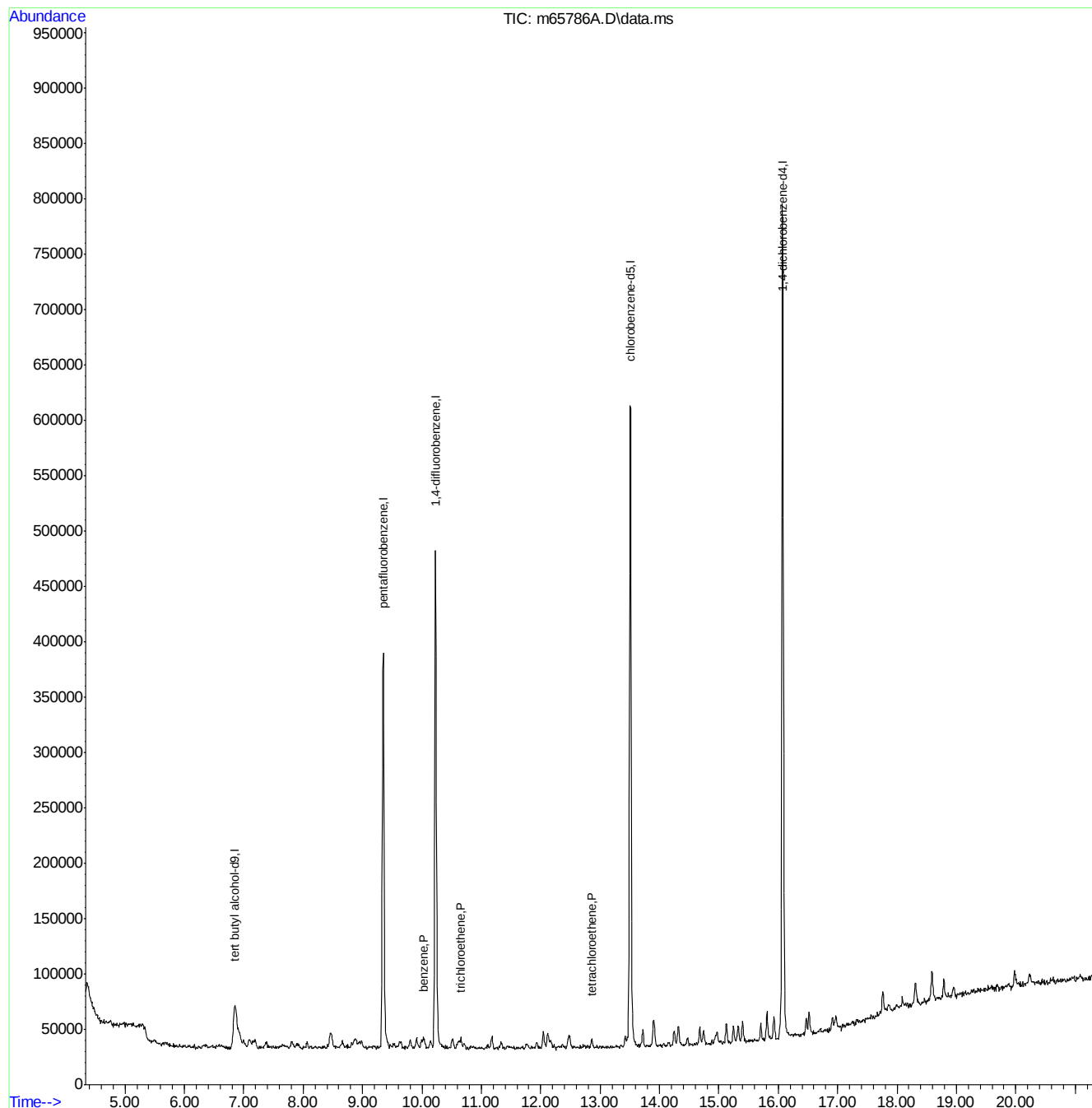
7.6.1

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\M140529S\
Data File : m65786A.D
Acq On : 29 May 2014 11:40 am
Operator : krystend
Sample : IC2333-0.5
Misc : MS31905,MSM2333,5,,,5,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: May 29 15:25:45 2014
Quant Method : C:\msdchem\1\methods\M140529S.M
Quant Title : SW-846 Method 8260
QLast Update : Thu May 29 15:24:19 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\M140529S\
 Data File : m65787A.D
 Acq On : 29 May 2014 12:10 pm
 Operator : krystend
 Sample : IC2333-2
 Misc : MS31905,MSM2333,5,,,5,1
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: May 29 16:50:55 2014
 Quant Method : C:\msdchem\1\methods\M140529S.M
 Quant Title : SW-846 Method 8260
 QLast Update : Thu May 29 15:26:00 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	6.849	65	109678	500.00	ug/kg	0.00
4) pentafluorobenzene	9.349	168	268738	50.00	ug/kg	0.00
43) 1,4-difluorobenzene	10.231	114	413634	50.00	ug/kg	0.00
66) chlorobenzene-d5	13.505	82	176391	50.00	ug/kg	0.00
80) 1,4-dichlorobenzene-d4	16.072	152	227847	50.00	ug/kg	0.00

System Monitoring Compounds						
40) dibromofluoromethane (s)	8.985	113	8682	3.71	ug/kg	0.00
Spiked Amount	50.000	Range	70 - 130	Recovery	=	7.42%#
60) toluene-d8 (s)	12.043	98	27618	3.45	ug/kg	0.00
Spiked Amount	50.000	Range	70 - 130	Recovery	=	6.90%#
82) bromofluorobenzene (s)	14.738	95	12283	3.40	ug/kg	0.00
Spiked Amount	50.000	Range	70 - 130	Recovery	=	6.80%#

Target Compounds						Qvalue
2) tertiary butyl alcohol	6.944	59	9653	26.82	ug/kg	97
3) Ethanol	5.684	45	7768	176.54	ug/kg	95
5) dichlorodifluoromethane	4.445	85	9152	2.59	ug/kg	98
6) chloromethane	4.694	50	12782	2.20	ug/kg	89
7) vinyl chloride	4.963	62	10410	2.20	ug/kg	97
8) bromomethane	5.495	96	6129	2.00	ug/kg	84
9) chloroethane	5.650	64	6042	2.62	ug/kg	94
10) ethyl ether	6.580	59	5792	2.51	ug/kg	96
11) acetonitrile	6.600	41	3805	8.06	ug/kg	100
12) trichlorofluoromethane	6.324	101	12192	1.99	ug/kg	94
13) freon-113	7.159	101	9360	2.36	ug/kg	90
15) 1,1-dichloroethene	6.930	96	7962	2.51	ug/kg	93
18) methylene chloride	7.085	84	9167m	2.75	ug/kg	
19) methyl tert butyl ether	7.907	73	19653	2.67	ug/kg	90
21) allyl chloride	7.186	41	17695	2.60	ug/kg	97
22) trans-1,2-dichloroethene	7.806	96	8751	2.55	ug/kg	91
23) iodomethane	6.984	142	15188	2.24	ug/kg	98
24) carbon disulfide	7.375	76	26835	2.41	ug/kg	96
27) chloroprene	8.439	53	14107	2.66	ug/kg	95
28) di-isopropyl ether	8.480	45	29616	2.32	ug/kg	97
31) Hexane	8.453	41	17050	2.49	ug/kg	96
32) 1,1-dichloroethane	8.062	63	14753	2.37	ug/kg	96
33) tert-butyl ethyl ether	8.884	59	23184	2.28	ug/kg	100
35) 2,2-dichloropropane	8.944	77	13464	2.63	ug/kg	97
36) cis-1,2-dichloroethene	8.648	96	7723	2.21	ug/kg	93
38) bromochloromethane	8.816	128	4382	2.45	ug/kg	88
39) chloroform	8.857	83	12022	2.22	ug/kg	97
42) 1,1,1-trichloroethane	9.632	97	13972	2.47	ug/kg	93
44) Cyclohexane	9.908	56	18618	2.47	ug/kg	96
45) carbon tetrachloride	9.995	117	13050	2.34	ug/kg	95
46) 1,1-dichloropropene	9.807	75	9992	2.28	ug/kg	95
47) benzene	10.029	78	27568	1.85	ug/kg	95
48) 1,2-dichloroethane	9.524	62	7825	2.15	ug/kg	100
49) tert-amyl methyl ether	10.144	73	16337	2.13	ug/kg	96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\M140529S\
 Data File : m65787A.D
 Acq On : 29 May 2014 12:10 pm
 Operator : krystend
 Sample : IC2333-2
 Misc : MS31905,MSM2333,5,,,5,1
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: May 29 16:50:55 2014
 Quant Method : C:\msdchem\1\methods\M140529S.M
 Quant Title : SW-846 Method 8260
 QLast Update : Thu May 29 15:26:00 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
50) heptane	10.507	43	16620	2.23	ug/kg	96
51) trichloroethene	10.655	95	8319	1.65	ug/kg	95
52) 1,2-dichloropropane	10.622	63	8241	2.46	ug/kg	95
53) dibromomethane	10.602	93	4921	2.93	ug/kg	83
54) bromodichloromethane	10.709	83	9172	2.50	ug/kg	90
55) Methylcyclohexane	11.181	83	14881	2.29	ug/kg	93
56) 2-chloroethyl vinyl ether	11.100	63	2898	2.32	ug/kg#	46
57) methyl methacrylate	10.824	69	3739	2.65	ug/kg	86
59) cis-1,3-dichloropropene	11.336	75	10295	2.31	ug/kg	92
61) 4-methyl-2-pentanone	11.430	43	9479	3.14	ug/kg#	85
62) toluene	12.117	92	19112	2.49	ug/kg	97
63) trans-1,3-dichloropropene	11.760	75	8298	2.33	ug/kg	89
64) 1,1,2-trichloroethane	11.929	83	4546	2.52	ug/kg	97
65) ethyl methacrylate	12.137	69	7623	2.48	ug/kg	94
67) tetrachloroethene	12.858	166	8654	2.11	ug/kg	94
68) 1,3-dichloropropane	12.171	76	8022	2.29	ug/kg	88
69) dibromochloromethane	12.461	129	7441	2.35	ug/kg	95
70) 1,2-dibromoethane	12.710	107	6038	2.53	ug/kg	86
71) 2-hexanone	12.313	43	11377	4.30	ug/kg#	62
72) chlorobenzene	13.545	112	22274	2.35	ug/kg	96
73) 1,1,1,2-tetrachloroethane	13.465	131	8790	2.26	ug/kg	96
74) ethylbenzene	13.721	91	37258	2.38	ug/kg	97
75) m,p-xylene	13.902	106	30574	4.75	ug/kg	99
76) o-xylene	14.320	106	15001	2.32	ug/kg	88
77) styrene	14.246	104	26088	2.51	ug/kg	95
78) bromoform	14.071	173	4603	2.29	ug/kg	93
79) trans-1,4-dichloro-2-b...	14.475	53	2833	2.67	ug/kg	99
81) isopropylbenzene	14.677	105	38625	2.07	ug/kg	98
83) bromobenzene	14.973	156	9824	2.17	ug/kg	88
84) 1,1,2,2-tetrachloroethane	14.320	83	7792	2.39	ug/kg	97
85) 1,2,3-trichloropropane	14.468	75	8222	2.16	ug/kg	95
86) n-propylbenzene	15.122	91	47306	2.20	ug/kg	97
87) 2-chlorotoluene	15.243	91	27893	2.26	ug/kg	95
88) 4-chlorotoluene	15.324	91	28417	2.25	ug/kg	92
89) 1,3,5-trimethylbenzene	15.398	105	37243	2.18	ug/kg	100
90) tert-butylbenzene	15.708	91	17703	1.99	ug/kg	99
91) 1,2,4-trimethylbenzene	15.809	105	36087	2.15	ug/kg	97
92) sec-butylbenzene	15.930	105	47258	2.11	ug/kg	100
93) 1,3-dichlorobenzene	16.038	146	21745	2.21	ug/kg	90
94) p-isopropyltoluene	16.098	119	46215	2.24	ug/kg	99
95) 1,4-dichlorobenzene	16.105	146	23559	2.34	ug/kg	94
96) 1,2-dichlorobenzene	16.469	146	21052	2.23	ug/kg	96
97) n-butylbenzene	16.516	91	40054	2.23	ug/kg	100
98) 1,2-dibromo-3-chloropr...	16.954	75	2863	3.51	ug/kg	90
99) 1,3,5-trichlorobenzene	17.762	180	18301	2.26	ug/kg	100
100) 1,2,4-trichlorobenzene	18.308	180	17227	2.29	ug/kg	91
101) hexachlorobutadiene	18.598	225	8659	2.26	ug/kg	98
102) naphthalene	18.584	128	40986	2.31	ug/kg	100
103) 1,2,3-trichlorobenzene	18.793	180	15825	2.28	ug/kg	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\M140529S\
Data File : m65787A.D
Acq On : 29 May 2014 12:10 pm
Operator : krystend
Sample : IC2333-2
Misc : MS31905,MSM2333,5,,,5,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: May 29 16:50:55 2014
Quant Method : C:\msdchem\1\methods\M140529S.M
Quant Title : SW-846 Method 8260
QLast Update : Thu May 29 15:26:00 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
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(#) = qualifier out of range (m) = manual integration (+) = signals summed

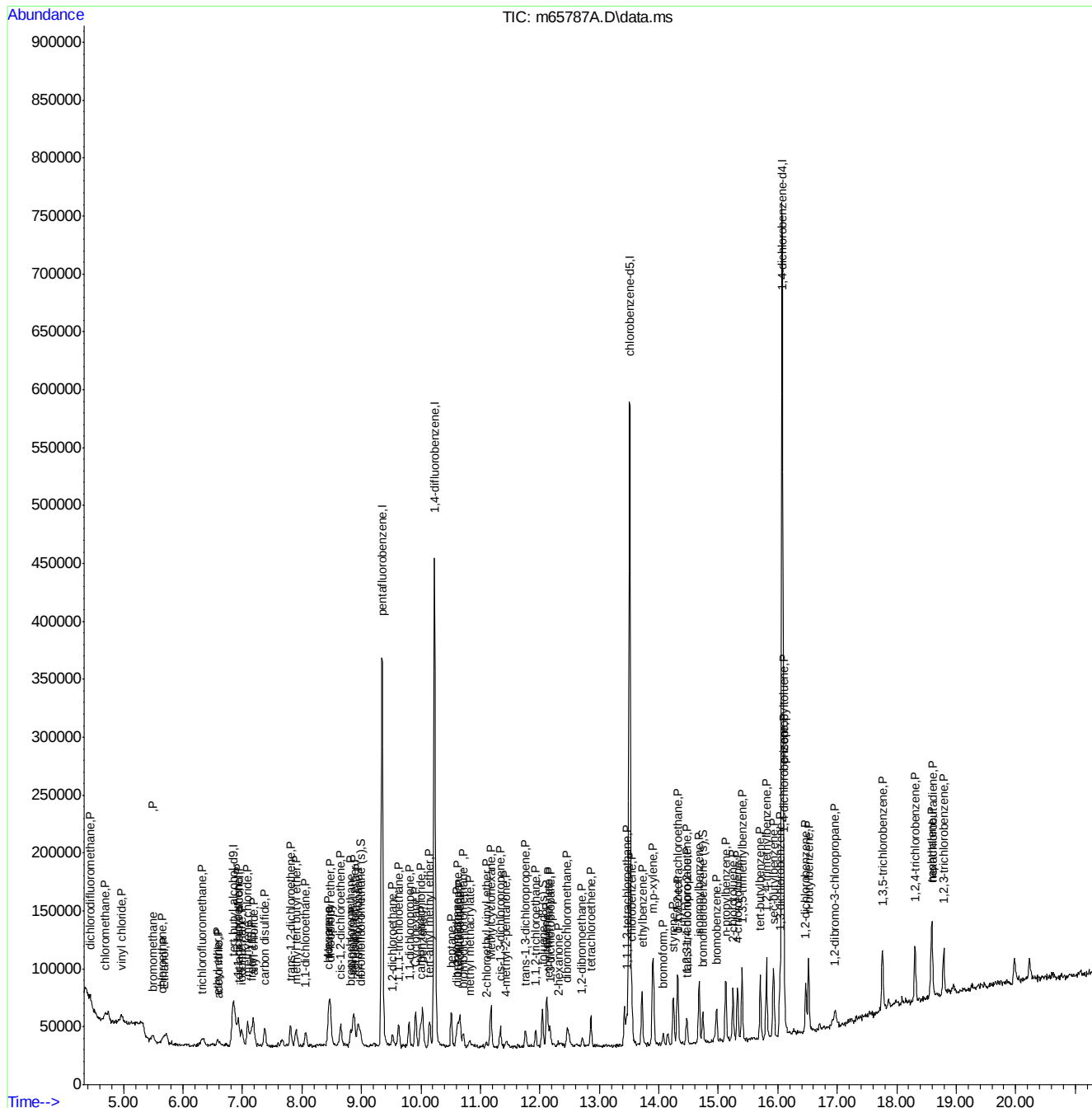
7.6.2

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\M140529S\
Data File : m65787A.D
Acq On : 29 May 2014 12:10 pm
Operator : krystend
Sample : IC2333-2
Misc : MS31905,MSM2333,5,,,5,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: May 29 16:50:55 2014
Quant Method : C:\msdchem\1\methods\M140529S.M
Quant Title : SW-846 Method 8260
QLast Update : Thu May 29 15:26:00 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\M140529S\
 Data File : m65788A.D
 Acq On : 29 May 2014 12:40 pm
 Operator : krystend
 Sample : IC2333-5
 Misc : MS31905,MSM2333,5,,,5,1
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 03 11:44:46 2014
 Quant Method : C:\msdchem\1\methods\M140529S.M
 Quant Title : SW-846 Method 8260
 QLast Update : Thu May 29 15:28:18 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	6.849	65	115260	500.00	ug/kg	0.00
4) pentafluorobenzene	9.349	168	280518	50.00	ug/kg	0.00
43) 1,4-difluorobenzene	10.231	114	426439	50.00	ug/kg	0.00
66) chlorobenzene-d5	13.505	82	188145	50.00	ug/kg	0.00
80) 1,4-dichlorobenzene-d4	16.072	152	229701	50.00	ug/kg	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	8.985	113	17718	5.40	ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	10.80%#		
60) toluene-d8 (s)	12.043	98	61846	5.83	ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	11.66%#		
82) bromofluorobenzene (s)	14.738	95	25986	5.61	ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	11.22%#		
Target Compounds						
						Qvalue
2) tertiary butyl alcohol	6.937	59	22079	49.87	ug/kg	87
3) Ethanol	5.684	45	24988	574.05	ug/kg	99
5) dichlorodifluoromethane	4.451	85	17731	4.19	ug/kg	99
6) chloromethane	4.701	50	29998	4.71	ug/kg	98
7) vinyl chloride	4.970	62	23673	4.56	ug/kg	100
8) bromomethane	5.509	96	15299	4.78	ug/kg	84
9) chloroethane	5.664	64	12835	4.62	ug/kg	95
10) ethyl ether	6.580	59	13401	4.93	ug/kg	96
11) acetonitrile	6.371	41	4818m	3.89	ug/kg	
12) trichlorofluoromethane	6.344	101	28972	4.54	ug/kg	92
13) freon-113	7.166	101	22736	5.04	ug/kg	96
14) acrolein	6.432	56	9160	32.33	ug/kg	47
15) 1,1-dichloroethene	6.937	96	20242	5.42	ug/kg	94
16) acetone	6.573	58	4375	11.62	ug/kg#	52
17) Methyl Acetate	7.193	43	13587	6.16	ug/kg	91
18) methylene chloride	7.092	84	20416	4.26	ug/kg	99
19) methyl tert butyl ether	7.900	73	43058	4.80	ug/kg	99
20) acrylonitrile	7.079	53	5864	6.07	ug/kg	96
21) allyl chloride	7.186	41	38114	4.67	ug/kg	95
22) trans-1,2-dichloroethene	7.806	96	20458	5.02	ug/kg	92
23) iodomethane	6.998	142	38749	5.17	ug/kg	99
24) carbon disulfide	7.375	76	64288	5.02	ug/kg	98
25) propionitrile	8.432	54	2158m	5.07	ug/kg	
26) vinyl acetate	8.217	43	26132	4.46	ug/kg	85
27) chloroprene	8.439	53	37482	5.81	ug/kg	100
28) di-isopropyl ether	8.480	45	73157	5.08	ug/kg	98
29) methacrylonitrile	8.621	41	8729	4.91	ug/kg	92
30) 2-butanone	8.608	72	2498m	6.56	ug/kg	
31) Hexane	8.459	41	38181	4.76	ug/kg	97
32) 1,1-dichloroethane	8.069	63	34614	4.88	ug/kg	98
33) tert-butyl ethyl ether	8.884	59	56903	5.01	ug/kg	95
34) isobutyl alcohol	8.884	43	21423	46.31	ug/kg#	64
35) 2,2-dichloropropane	8.944	77	30203	4.89	ug/kg	96
36) cis-1,2-dichloroethene	8.655	96	21551	5.61	ug/kg	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\M140529S\
 Data File : m65788A.D
 Acq On : 29 May 2014 12:40 pm
 Operator : krystend
 Sample : IC2333-5
 Misc : MS31905,MSM2333,5,,,5,1
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 03 11:44:46 2014
 Quant Method : C:\msdchem\1\methods\M140529S.M
 Quant Title : SW-846 Method 8260
 QLast Update : Thu May 29 15:28:18 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
37) ethyl acetate	8.884	43	21423	9.26	ug/kg	92
38) bromochloromethane	8.823	128	10738	5.17	ug/kg	97
39) chloroform	8.857	83	30143	5.05	ug/kg	90
41) Tetrahydrofuran	9.194	42	6220	6.85	ug/kg	99
42) 1,1,1-trichloroethane	9.625	97	34982	5.31	ug/kg	97
44) Cyclohexane	9.908	56	43246	4.98	ug/kg	93
45) carbon tetrachloride	9.995	117	31502	5.05	ug/kg	96
46) 1,1-dichloropropene	9.800	75	24369	5.04	ug/kg	93
47) benzene	10.029	78	66184	4.43	ug/kg	97
48) 1,2-dichloroethane	9.524	62	19706	5.06	ug/kg	97
49) tert-amyl methyl ether	10.150	73	40683	4.98	ug/kg	98
50) heptane	10.507	43	42760	5.27	ug/kg	96
51) trichloroethene	10.656	95	19633	4.00	ug/kg	96
52) 1,2-dichloropropane	10.622	63	19432	5.04	ug/kg	97
53) dibromomethane	10.595	93	10038	4.70	ug/kg	97
54) bromodichloromethane	10.716	83	20311	4.77	ug/kg	95
55) Methylcyclohexane	11.181	83	36605	5.09	ug/kg	96
56) 2-chloroethyl vinyl ether	11.093	63	6592	4.74	ug/kg#	76
57) methyl methacrylate	10.810	69	9428	5.57	ug/kg	91
58) 1,4-dioxane	10.817	88	949m	32.40	ug/kg	
59) cis-1,3-dichloropropene	11.336	75	24512	4.95	ug/kg	100
61) 4-methyl-2-pentanone	11.430	43	17750	4.44	ug/kg#	77
62) toluene	12.117	92	44482	5.01	ug/kg	95
63) trans-1,3-dichloropropene	11.760	75	19940	5.02	ug/kg	89
64) 1,1,2-trichloroethane	11.929	83	11186	5.33	ug/kg	97
65) ethyl methacrylate	12.131	69	17460	4.92	ug/kg	96
67) tetrachloroethene	12.858	166	21045	4.72	ug/kg	94
68) 1,3-dichloropropane	12.171	76	19616	4.90	ug/kg	99
69) dibromochloromethane	12.461	129	17685	4.82	ug/kg	95
70) 1,2-dibromoethane	12.710	107	14091	4.88	ug/kg	91
71) 2-hexanone	12.299	43	15999	3.60	ug/kg	89
72) chlorobenzene	13.545	112	53618	4.88	ug/kg	98
73) 1,1,1,2-tetrachloroethane	13.465	131	21294	4.82	ug/kg	92
74) ethylbenzene	13.714	91	89826	4.91	ug/kg	99
75) m,p-xylene	13.902	106	73461	9.78	ug/kg	98
76) o-xylene	14.313	106	36425	4.89	ug/kg	98
77) styrene	14.246	104	61997	4.96	ug/kg	99
78) bromoform	14.071	173	10705	4.66	ug/kg	94
79) trans-1,4-dichloro-2-b...	14.468	53	6722	5.09	ug/kg#	75
81) isopropylbenzene	14.677	105	97850	5.11	ug/kg	95
83) bromobenzene	14.974	156	25131	5.29	ug/kg	95
84) 1,1,2,2-tetrachloroethane	14.320	83	17420	4.83	ug/kg	97
85) 1,2,3-trichloropropane	14.468	75	20589	5.16	ug/kg	94
86) n-propylbenzene	15.122	91	114364	5.03	ug/kg	100
87) 2-chlorotoluene	15.243	91	66773	5.04	ug/kg	99
88) 4-chlorotoluene	15.324	91	68116	5.04	ug/kg	99
89) 1,3,5-trimethylbenzene	15.398	105	89998	5.00	ug/kg	97
90) tert-butylbenzene	15.708	91	45746	5.12	ug/kg	98
91) 1,2,4-trimethylbenzene	15.809	105	88727	5.05	ug/kg	97
92) sec-butylbenzene	15.930	105	114594	4.94	ug/kg	100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\M140529S\
Data File : m65788A.D
Acq On : 29 May 2014 12:40 pm
Operator : krystend
Sample : IC2333-5
Misc : MS31905,MSM2333,5,,,5,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 03 11:44:46 2014
Quant Method : C:\msdchem\1\methods\M140529S.M
Quant Title : SW-846 Method 8260
QLast Update : Thu May 29 15:28:18 2014
Response via : Initial Calibration

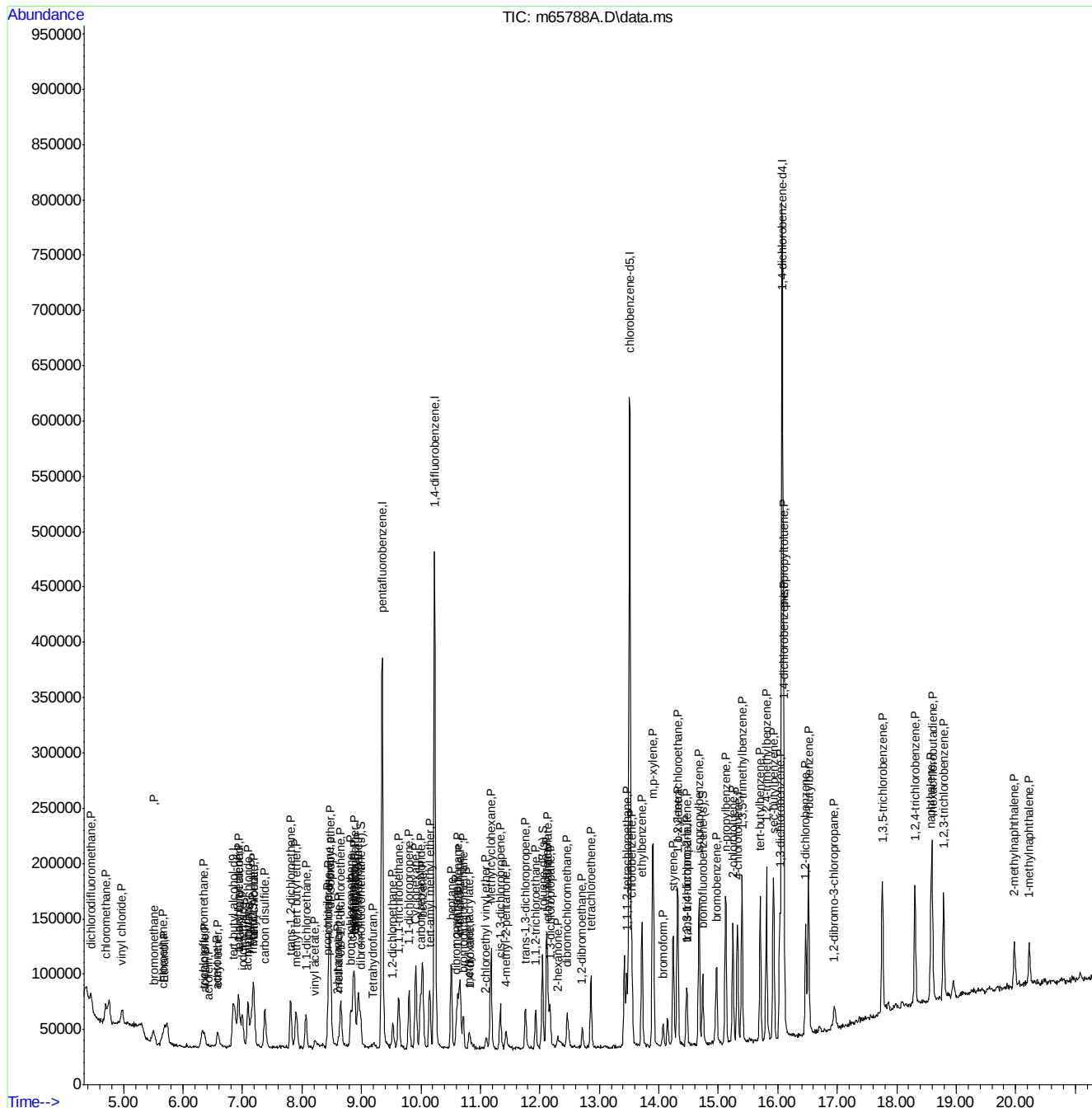
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
93)	1,3-dichlorobenzene	16.038	146	52469	5.03	ug/kg	94
94)	p-isopropyltoluene	16.099	119	106769	4.85	ug/kg	99
95)	1,4-dichlorobenzene	16.105	146	54752	4.97	ug/kg	98
96)	1,2-dichlorobenzene	16.469	146	49286	4.90	ug/kg	96
97)	n-butylbenzene	16.516	91	95690	5.00	ug/kg	94
98)	1,2-dibromo-3-chloropr...	16.947	75	6056	5.35	ug/kg	85
99)	1,3,5-trichlorobenzene	17.762	180	41994	4.83	ug/kg	98
100)	1,2,4-trichlorobenzene	18.308	180	39410	4.85	ug/kg	98
101)	hexachlorobutadiene	18.598	225	20889	5.07	ug/kg	97
102)	naphthalene	18.577	128	92408	4.80	ug/kg	100
103)	1,2,3-trichlorobenzene	18.786	180	36403	4.86	ug/kg	100
104)	2-methylnaphthalene	19.979	142	29595	2.62	ug/kg	93
105)	1-methylnaphthalene	20.228	TIC	94006	2.95	ug/kg	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\M140529S\
Data File : m65788A.D
Acq On : 29 May 2014 12:40 pm
Operator : krystend
Sample : IC2333-5
Misc : MS31905,MSM2333,5,,,5,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 03 11:44:46 2014
Quant Method : C:\msdchem\1\methods\M140529S.M
Quant Title : SW-846 Method 8260
QLast Update : Thu May 29 15:28:18 2014
Response via : Initial Calibration



M140529D0DS.M Wed Jun 11 11:21:42 2014

Page: 4

7.6.3

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\M140529S\
 Data File : m65789A.D
 Acq On : 29 May 2014 1:09 pm
 Operator : krystend
 Sample : IC2333-10
 Misc : MS31905,MSM2333,5,,,5,1
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jun 03 11:44:14 2014
 Quant Method : C:\msdchem\1\methods\M140529S.M
 Quant Title : SW-846 Method 8260
 QLast Update : Thu May 29 15:30:27 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	6.850	65	113562	500.00	ug/kg	0.00
4) pentafluorobenzene	9.349	168	281084	50.00	ug/kg	0.00
43) 1,4-difluorobenzene	10.231	114	423025	50.00	ug/kg	0.00
66) chlorobenzene-d5	13.512	82	181159	50.00	ug/kg	0.00
80) 1,4-dichlorobenzene-d4	16.072	152	227021	50.00	ug/kg	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	8.985	113	35276	10.79	ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	21.58%#		
60) toluene-d8 (s)	12.043	98	121369	11.31	ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	22.62%#		
82) bromofluorobenzene (s)	14.738	95	48116	10.44	ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	20.88%#		
Target Compounds						
					Qvalue	
2) tertiary butyl alcohol	6.937	59	44136	101.27	ug/kg	98
3) Ethanol	5.711	45	44003	977.73	ug/kg#	38
5) dichlorodifluoromethane	4.451	85	32352	8.06	ug/kg	93
6) chloromethane	4.707	50	54727	8.74	ug/kg	97
7) vinyl chloride	4.970	62	44424	8.80	ug/kg	99
8) bromomethane	5.509	96	30195	9.55	ug/kg	91
9) chloroethane	5.671	64	23416	8.63	ug/kg	94
10) ethyl ether	6.580	59	26439	9.75	ug/kg	96
11) acetonitrile	6.371	41	10593m	9.57	ug/kg	
12) trichlorofluoromethane	6.338	101	58366	9.41	ug/kg	92
13) freon-113	7.166	101	43939	9.70	ug/kg	95
14) acrolein	6.371	56	15468	47.52	ug/kg	91
15) 1,1-dichloroethene	6.937	96	36638	9.53	ug/kg	97
16) acetone	6.573	58	7264	11.58	ug/kg	94
17) Methyl Acetate	7.166	43	25245	10.24	ug/kg	95
18) methylene chloride	7.092	84	38897	8.52	ug/kg	91
19) methyl tert butyl ether	7.900	73	82618	9.32	ug/kg	99
20) acrylonitrile	7.045	53	10495	9.80	ug/kg	92
21) allyl chloride	7.186	41	76795	9.60	ug/kg	99
22) trans-1,2-dichloroethene	7.806	96	40152	9.82	ug/kg	95
23) iodomethane	6.998	142	75552	9.94	ug/kg	99
24) carbon disulfide	7.375	76	124271	9.67	ug/kg	98
25) propionitrile	8.197	54	3656	7.80	ug/kg	100
26) vinyl acetate	8.204	43	53954	9.71	ug/kg	95
27) chloroprene	8.439	53	62048	9.10	ug/kg	100
28) di-isopropyl ether	8.480	45	139741	9.64	ug/kg	99
29) methacrylonitrile	8.614	41	18041	10.22	ug/kg	96
30) 2-butanone	8.534	72	4460m	10.11	ug/kg	
31) Hexane	8.466	41	74252	9.39	ug/kg	98
32) 1,1-dichloroethane	8.069	63	69777	9.90	ug/kg	98
33) tert-butyl ethyl ether	8.884	59	110387	9.69	ug/kg	99
34) isobutyl alcohol	8.877	43	42289	63.97	ug/kg#	72
35) 2,2-dichloropropane	8.945	77	57355	9.33	ug/kg	97
36) cis-1,2-dichloroethene	8.655	96	39270	9.81	ug/kg	97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\M140529S\
Data File : m65789A.D
Acq On : 29 May 2014 1:09 pm
Operator : krystend
Sample : IC2333-10
Misc : MS31905,MSM2333,5,,,5,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jun 03 11:44:14 2014
Quant Method : C:\msdchem\1\methods\M140529S.M
Quant Title : SW-846 Method 8260
QLast Update : Thu May 29 15:30:27 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
37) ethyl acetate	8.877	43	42268	12.79	ug/kg	94
38) bromochloromethane	8.823	128	20294	9.64	ug/kg	94
39) chloroform	8.857	83	61834	10.31	ug/kg	99
41) Tetrahydrofuran	9.201	42	9267	8.59	ug/kg	98
42) 1,1,1-trichloroethane	9.625	97	62050	9.20	ug/kg	95
44) Cyclohexane	9.915	56	83284	9.68	ug/kg	100
45) carbon tetrachloride	9.995	117	62221	10.03	ug/kg	100
46) 1,1-dichloropropene	9.800	75	48591	10.11	ug/kg	98
47) benzene	10.029	78	133263	9.25	ug/kg	100
48) 1,2-dichloroethane	9.524	62	38934	10.04	ug/kg	98
49) tert-amyl methyl ether	10.144	73	80372	9.93	ug/kg	98
50) heptane	10.507	43	82901	10.11	ug/kg	98
51) trichloroethene	10.656	95	40320	8.72	ug/kg	94
52) 1,2-dichloropropane	10.622	63	36819	9.61	ug/kg	99
53) dibromomethane	10.602	93	19389	9.34	ug/kg	97
54) bromodichloromethane	10.710	83	40584	9.76	ug/kg	100
55) Methylcyclohexane	11.181	83	69224	9.65	ug/kg	98
56) 2-chloroethyl vinyl ether	11.087	63	12351	9.11	ug/kg	96
57) methyl methacrylate	10.811	69	17156	9.85	ug/kg	97
58) 1,4-dioxane	10.811	88	1393m	41.76	ug/kg	
59) cis-1,3-dichloropropene	11.336	75	47836	9.77	ug/kg	96
61) 4-methyl-2-pentanone	11.424	43	36624	9.59	ug/kg	95
62) toluene	12.117	92	86480	9.81	ug/kg	97
63) trans-1,3-dichloropropene	11.760	75	39530	10.02	ug/kg	93
64) 1,1,2-trichloroethane	11.929	83	20317	9.54	ug/kg	95
65) ethyl methacrylate	12.131	69	33590	9.60	ug/kg	95
67) tetrachloroethene	12.858	166	41837	9.89	ug/kg	97
68) 1,3-dichloropropane	12.165	76	39178	10.23	ug/kg	97
69) dibromochloromethane	12.461	129	34974	10.01	ug/kg	98
70) 1,2-dibromoethane	12.717	107	26532	9.63	ug/kg	96
71) 2-hexanone	12.293	43	29146	7.51	ug/kg	85
72) chlorobenzene	13.546	112	107504	10.24	ug/kg	100
73) 1,1,1,2-tetrachloroethane	13.458	131	41416	9.85	ug/kg	97
74) ethylbenzene	13.714	91	176160	10.06	ug/kg	99
75) m,p-xylene	13.903	106	144266	20.10	ug/kg	100
76) o-xylene	14.313	106	72034	10.12	ug/kg	96
77) styrene	14.239	104	118262	9.86	ug/kg	100
78) bromoform	14.071	173	21443	9.92	ug/kg	99
79) trans-1,4-dichloro-2-b...	14.468	53	15914	12.44	ug/kg#	86
81) isopropylbenzene	14.677	105	192498	10.10	ug/kg	98
83) bromobenzene	14.974	156	46278	9.67	ug/kg	96
84) 1,1,2,2-tetrachloroethane	14.320	83	33192	9.42	ug/kg	98
85) 1,2,3-trichloropropane	14.468	75	38099	9.56	ug/kg	98
86) n-propylbenzene	15.122	91	222747	9.89	ug/kg	100
87) 2-chlorotoluene	15.243	91	129400	9.85	ug/kg	100
88) 4-chlorotoluene	15.324	91	132659	9.90	ug/kg	98
89) 1,3,5-trimethylbenzene	15.398	105	175553	9.86	ug/kg	98
90) tert-butylbenzene	15.708	91	87019	9.77	ug/kg	95
91) 1,2,4-trimethylbenzene	15.809	105	172645	9.91	ug/kg	99
92) sec-butylbenzene	15.930	105	226853	9.94	ug/kg	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\M140529S\
Data File : m65789A.D
Acq On : 29 May 2014 1:09 pm
Operator : krystend
Sample : IC2333-10
Misc : MS31905,MSM2333,5,,,5,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jun 03 11:44:14 2014
Quant Method : C:\msdchem\1\methods\M140529S.M
Quant Title : SW-846 Method 8260
QLast Update : Thu May 29 15:30:27 2014
Response via : Initial Calibration

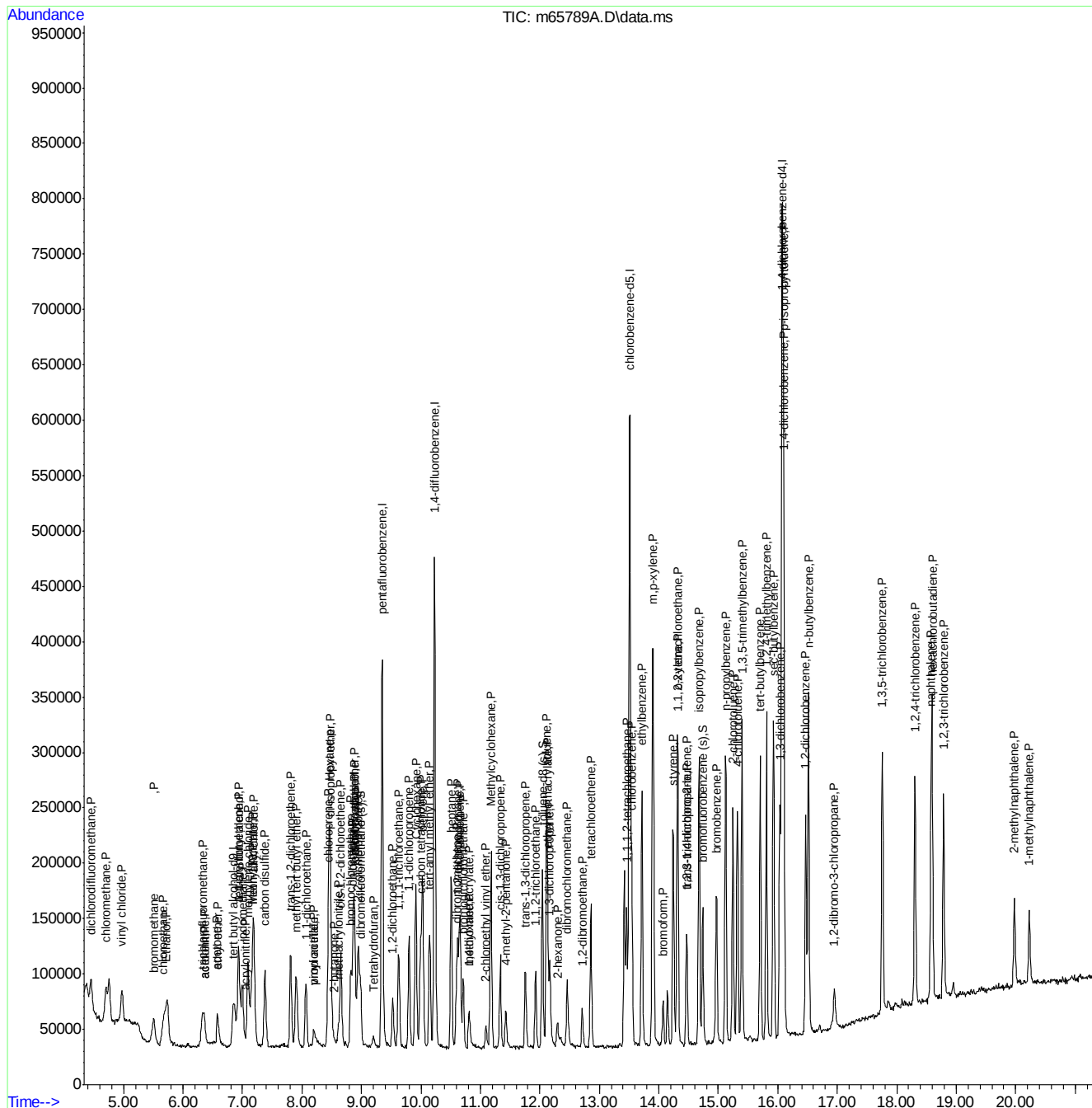
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
93)	1,3-dichlorobenzene	16.038	146	102515	9.92	ug/kg	99
94)	p-isopropyltoluene	16.099	119	212382	9.85	ug/kg	99
95)	1,4-dichlorobenzene	16.105	146	105978	9.76	ug/kg	99
96)	1,2-dichlorobenzene	16.469	146	97919	9.92	ug/kg	99
97)	n-butylbenzene	16.516	91	184015	9.72	ug/kg	100
98)	1,2-dibromo-3-chloropr...	16.947	75	9828	8.58	ug/kg	96
99)	1,3,5-trichlorobenzene	17.756	180	83304	9.80	ug/kg	99
100)	1,2,4-trichlorobenzene	18.308	180	76985	9.68	ug/kg	98
101)	hexachlorobutadiene	18.598	225	38953	9.53	ug/kg	96
102)	naphthalene	18.578	128	182116	9.70	ug/kg	100
103)	1,2,3-trichlorobenzene	18.786	180	69971	9.54	ug/kg	97
104)	2-methylnaphthalene	19.979	142	56454	4.93	ug/kg	98
105)	1-methylnaphthalene	20.228	TIC	161639	4.71	ug/kg	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\M140529S\
 Data File : m65789A.D
 Acq On : 29 May 2014 1:09 pm
 Operator : krystend
 Sample : IC2333-10
 Misc : MS31905,MSM2333,5,,5,1
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jun 03 11:44:14 2014
 Quant Method : C:\msdchem\1\methods\M140529S.M
 Quant Title : SW-846 Method 8260
 QLast Update : Thu May 29 15:30:27 2014
 Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\M140529S\
 Data File : m65790A.D
 Acq On : 29 May 2014 1:39 pm
 Operator : krystend
 Sample : IC2333-20
 Misc : MS31905,MSM2333,5,,,5,1
 ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jun 03 11:42:32 2014
 Quant Method : C:\msdchem\1\methods\M140529S.M
 Quant Title : SW-846 Method 8260
 QLast Update : Thu May 29 15:32:12 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	6.843	65	107379	500.00	ug/kg	-0.01
4) pentafluorobenzene	9.349	168	296672	50.00	ug/kg	0.00
43) 1,4-difluorobenzene	10.231	114	450523	50.00	ug/kg	0.00
66) chlorobenzene-d5	13.505	82	189723	50.00	ug/kg	0.00
80) 1,4-dichlorobenzene-d4	16.072	152	236753	50.00	ug/kg	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	8.985	113	67601	19.69	ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	39.38%#		
60) toluene-d8 (s)	12.043	98	252825	21.97	ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	43.94%#		
82) bromofluorobenzene (s)	14.738	95	101506	21.39	ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	42.78%#		
Target Compounds						
					Qvalue	
2) tertiary butyl alcohol	6.944	59	73084	176.78	ug/kg	93
3) Ethanol	5.684	45	92791	2192.71	ug/kg	95
5) dichlorodifluoromethane	4.451	85	69125	17.15	ug/kg	96
6) chloromethane	4.701	50	112598	17.59	ug/kg	97
7) vinyl chloride	4.970	62	89271	17.27	ug/kg	97
8) bromomethane	5.502	96	59243	17.96	ug/kg	99
9) chloroethane	5.671	64	46137	16.68	ug/kg	100
10) ethyl ether	6.573	59	47705	16.78	ug/kg	98
11) acetonitrile	6.378	41	19880m	18.28	ug/kg	
12) trichlorofluoromethane	6.338	101	118262	18.34	ug/kg	100
13) freon-113	7.159	101	90117	18.99	ug/kg	99
14) acrolein	6.344	56	25306	74.90	ug/kg	97
15) 1,1-dichloroethene	6.930	96	73710	18.38	ug/kg	97
16) acetone	6.486	58	12975	18.62	ug/kg#	55
17) Methyl Acetate	7.146	43	38463	14.66	ug/kg	97
18) methylene chloride	7.092	84	78414	16.90	ug/kg	97
19) methyl tert butyl ether	7.900	73	170547	18.54	ug/kg	100
20) acrylonitrile	7.025	53	19015	16.93	ug/kg	98
21) allyl chloride	7.186	41	159212	19.04	ug/kg	100
22) trans-1,2-dichloroethene	7.806	96	79063	18.40	ug/kg	98
23) iodomethane	6.991	142	156882	19.59	ug/kg	99
24) carbon disulfide	7.375	76	256424	19.06	ug/kg	100
25) propionitrile	8.170	54	7104	15.49	ug/kg	100
26) vinyl acetate	8.183	43	118072	20.33	ug/kg	100
27) chloroprene	8.439	53	122974	17.49	ug/kg	98
28) di-isopropyl ether	8.480	45	293194	19.33	ug/kg	100
29) methacrylonitrile	8.608	41	32401	17.26	ug/kg	97
30) 2-butanone	8.507	72	9163	19.61	ug/kg#	64
31) Hexane	8.460	41	155593	18.93	ug/kg	100
32) 1,1-dichloroethane	8.062	63	142678	19.22	ug/kg	98
33) tert-butyl ethyl ether	8.884	59	231291	19.38	ug/kg	99
34) isobutyl alcohol	8.877	43	56289	73.80	ug/kg	82
35) 2,2-dichloropropane	8.945	77	119797	18.78	ug/kg	98
36) cis-1,2-dichloroethene	8.648	96	82568	19.63	ug/kg	95

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\M140529S\
Data File : m65790A.D
Acq On : 29 May 2014 1:39 pm
Operator : krystend
Sample : IC2333-20
Misc : MS31905,MSM2333,5,,,5,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jun 03 11:42:32 2014
Quant Method : C:\msdchem\1\methods\M140529S.M
Quant Title : SW-846 Method 8260
QLast Update : Thu May 29 15:32:12 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
37) ethyl acetate	8.877	43	56246	14.75	ug/kg	94
38) bromochloromethane	8.823	128	42589	19.35	ug/kg	96
39) chloroform	8.857	83	126939	19.90	ug/kg	97
41) Tetrahydrofuran	9.201	42	19176	17.68	ug/kg	97
42) 1,1,1-trichloroethane	9.625	97	130147	18.66	ug/kg	97
44) Cyclohexane	9.915	56	171219	18.84	ug/kg	97
45) carbon tetrachloride	9.995	117	127658	19.30	ug/kg	99
46) 1,1-dichloropropene	9.800	75	100484	19.57	ug/kg	99
47) benzene	10.029	78	275219	18.21	ug/kg	99
48) 1,2-dichloroethane	9.524	62	80062	19.37	ug/kg	97
49) tert-amyl methyl ether	10.144	73	168672	19.60	ug/kg	98
50) heptane	10.507	43	167764	19.16	ug/kg	99
51) trichloroethene	10.656	95	82959m	17.29	ug/kg	
52) 1,2-dichloropropane	10.622	63	76277	18.87	ug/kg	100
53) dibromomethane	10.595	93	38623	17.77	ug/kg	97
54) bromodichloromethane	10.709	83	85786	19.49	ug/kg	98
55) Methylcyclohexane	11.174	83	145537	19.21	ug/kg	98
56) 2-chloroethyl vinyl ether	11.087	63	23154	16.40	ug/kg	97
57) methyl methacrylate	10.811	69	28926	15.65	ug/kg	92
58) 1,4-dioxane	10.811	88	3158	94.06	ug/kg	97
59) cis-1,3-dichloropropene	11.336	75	100643	19.42	ug/kg	97
61) 4-methyl-2-pentanone	11.424	43	65426	16.25	ug/kg	99
62) toluene	12.117	92	176686	18.92	ug/kg	100
63) trans-1,3-dichloropropene	11.754	75	80579	19.17	ug/kg	100
64) 1,1,2-trichloroethane	11.929	83	40203	17.94	ug/kg	98
65) ethyl methacrylate	12.131	69	67546	18.30	ug/kg	98
67) tetrachloroethene	12.858	166	85284	19.29	ug/kg	98
68) 1,3-dichloropropane	12.165	76	78515	19.46	ug/kg	97
69) dibromochloromethane	12.461	129	70331	19.22	ug/kg	99
70) 1,2-dibromoethane	12.710	107	55093	19.27	ug/kg	94
71) 2-hexanone	12.286	43	57494	15.09	ug/kg	99
72) chlorobenzene	13.546	112	220698	19.96	ug/kg	99
73) 1,1,1,2-tetrachloroethane	13.465	131	86896	19.81	ug/kg	98
74) ethylbenzene	13.714	91	362688	19.75	ug/kg	99
75) m,p-xylene	13.896	106	300265	39.89	ug/kg	96
76) o-xylene	14.313	106	150684	20.15	ug/kg	98
77) styrene	14.239	104	241052	19.25	ug/kg	99
78) bromoform	14.071	173	44772	19.81	ug/kg	95
79) trans-1,4-dichloro-2-b...	14.468	53	24384	17.16	ug/kg	87
81) isopropylbenzene	14.677	105	397821	19.97	ug/kg	97
83) bromobenzene	14.974	156	97150	19.62	ug/kg	94
84) 1,1,2,2-tetrachloroethane	14.320	83	64850	17.90	ug/kg	97
85) 1,2,3-trichloropropane	14.468	75	77131	18.76	ug/kg	98
86) n-propylbenzene	15.122	91	458723	19.58	ug/kg	99
87) 2-chlorotoluene	15.243	91	263241	19.29	ug/kg	97
88) 4-chlorotoluene	15.317	91	276338	19.82	ug/kg	98
89) 1,3,5-trimethylbenzene	15.398	105	364107	19.68	ug/kg	99
90) tert-butylbenzene	15.708	91	184262	19.95	ug/kg	99
91) 1,2,4-trimethylbenzene	15.809	105	361847	19.97	ug/kg	100
92) sec-butylbenzene	15.930	105	476741	20.06	ug/kg	100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\M140529S\
Data File : m65790A.D
Acq On : 29 May 2014 1:39 pm
Operator : krystend
Sample : IC2333-20
Misc : MS31905,MSM2333,5,,,5,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jun 03 11:42:32 2014
Quant Method : C:\msdchem\1\methods\M140529S.M
Quant Title : SW-846 Method 8260
QLast Update : Thu May 29 15:32:12 2014
Response via : Initial Calibration

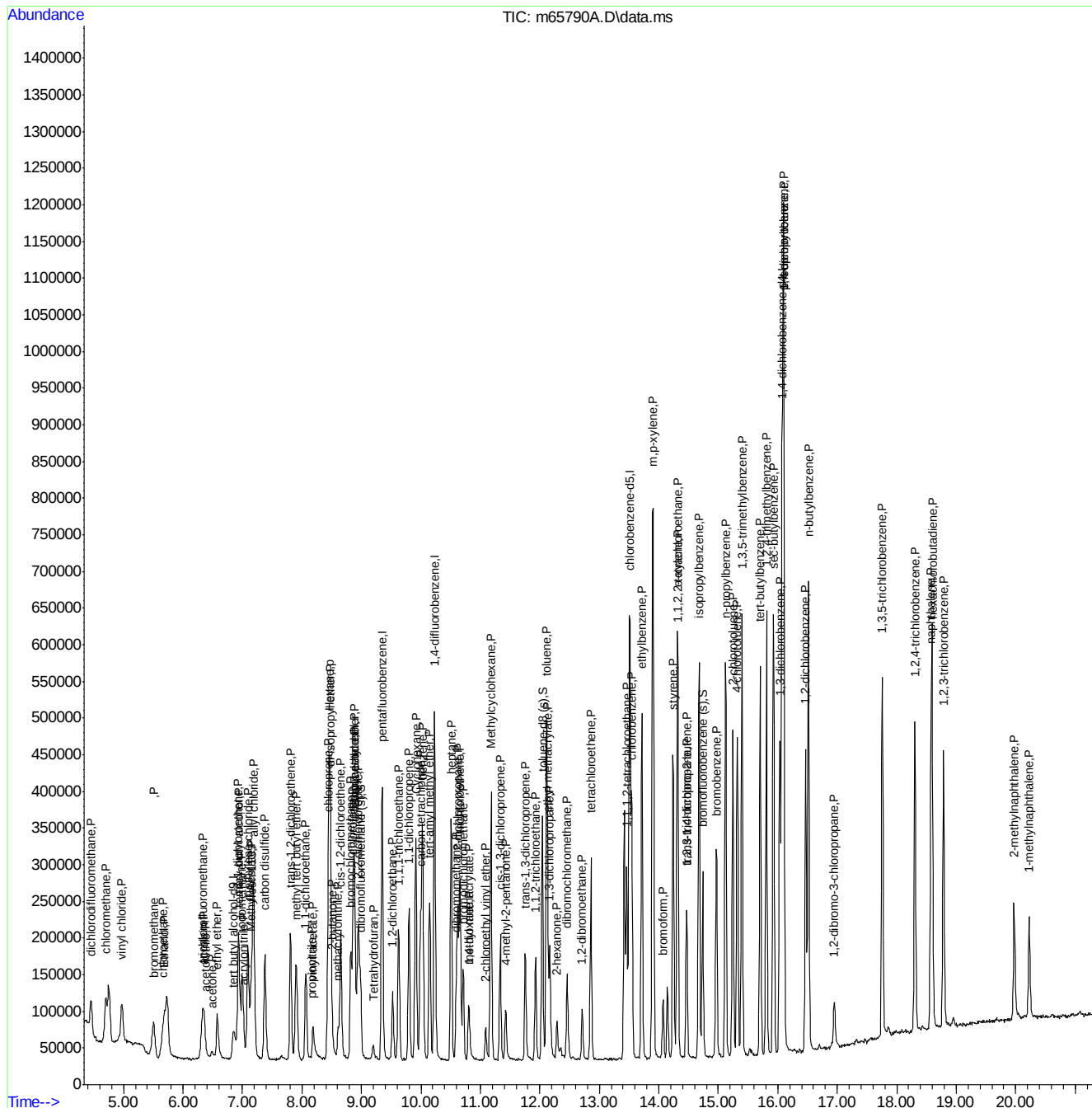
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
93)	1,3-dichlorobenzene	16.038	146	211005	19.61	ug/kg	97
94)	p-isopropyltoluene	16.099	119	438443	19.58	ug/kg	98
95)	1,4-dichlorobenzene	16.099	146	215573	19.15	ug/kg	98
96)	1,2-dichlorobenzene	16.469	146	204812	19.93	ug/kg	99
97)	n-butylbenzene	16.516	91	388788	19.84	ug/kg	97
98)	1,2-dibromo-3-chloropr...	16.947	75	18537	16.09	ug/kg	89
99)	1,3,5-trichlorobenzene	17.756	180	173708	19.69	ug/kg	99
100)	1,2,4-trichlorobenzene	18.308	180	159959	19.44	ug/kg	99
101)	hexachlorobutadiene	18.598	225	81395	19.31	ug/kg	99
102)	naphthalene	18.578	128	362349	18.65	ug/kg	100
103)	1,2,3-trichlorobenzene	18.786	180	145246	19.21	ug/kg	99
104)	2-methylnaphthalene	19.972	142	112653	9.48	ug/kg	98
105)	1-methylnaphthalene	20.228	TIC	313048	8.92	ug/kg	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\M140529S\
Data File : m65790A.D
Acq On : 29 May 2014 1:39 pm
Operator : krystend
Sample : IC2333-20
Misc : MS31905,MSM2333,5,,,5,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jun 03 11:42:32 2014
Quant Method : C:\msdchem\1\methods\M140529S.M
Quant Title : SW-846 Method 8260
QLast Update : Thu May 29 15:32:12 2014
Response via : Initial Calibration



M140529D0DS.M Wed Jun 11 11:22:20 2014

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7.6.5

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\M140529S\
 Data File : m65791A.D
 Acq On : 29 May 2014 2:09 pm
 Operator : krystend
 Sample : ICC2333-50
 Misc : MS31905,MSM2333,5,,,5,1
 ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jun 03 11:39:53 2014
 Quant Method : C:\msdchem\1\methods\M140529S.M
 Quant Title : SW-846 Method 8260
 QLast Update : Thu May 29 15:15:52 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	6.856	65	113537	500.00	ug/kg	0.00
4) pentafluorobenzene	9.349	168	283846	50.00	ug/kg	0.00
43) 1,4-difluorobenzene	10.231	114	438004	50.00	ug/kg	0.00
66) chlorobenzene-d5	13.505	82	180221m	50.00	ug/kg	0.00
80) 1,4-dichlorobenzene-d4	16.071	152	224981	50.00	ug/kg	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	8.985	113	135961	44.38	ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	88.76%		
60) toluene-d8 (s)	12.043	98	466506	44.20	ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	88.40%		
82) bromofluorobenzene (s)	14.738	95	195944	44.31	ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	88.62%		
Target Compounds						
						Qvalue
2) tertiary butyl alcohol	6.937	59	186301	488.24	ug/kg	98
3) Ethanol	5.704	45	227754	4870.12	ug/kg	99
5) dichlorodifluoromethane	4.451	85	186800	40.40	ug/kg	95
6) chloromethane	4.707	50	307462	39.67	ug/kg	98
7) vinyl chloride	4.977	62	250408	42.78	ug/kg	99
8) bromomethane	5.509	96	162110	43.07	ug/kg	100
9) chloroethane	5.671	64	121563	42.33	ug/kg	94
10) ethyl ether	6.573	59	122014	45.97	ug/kg	93
11) acetonitrile	6.351	41	35596m	75.53	ug/kg	
12) trichlorofluoromethane	6.337	101	323969	47.81	ug/kg	96
13) freon-113	7.166	101	209190	49.96	ug/kg	94
14) acrolein	6.324	56	71663	404.32	ug/kg	100
15) 1,1-dichloroethene	6.937	96	167510	46.18	ug/kg	95
16) acetone	6.472	58	26223m	74.06	ug/kg	
17) Methyl Acetate	7.132	43	111547	48.01	ug/kg	99
18) methylene chloride	7.092	84	176314	47.46	ug/kg	94
19) methyl tert butyl ether	7.900	73	388005	44.15	ug/kg	99
20) acrylonitrile	7.004	53	48858	40.92	ug/kg	96
21) allyl chloride	7.186	41	359271	47.88	ug/kg	98
22) trans-1,2-dichloroethene	7.806	96	181525	53.39	ug/kg	98
23) iodomethane	6.998	142	357983	49.64	ug/kg	97
24) carbon disulfide	7.375	76	588129	49.22	ug/kg	100
25) propionitrile	8.156	54	21536	45.29	ug/kg	100
26) vinyl acetate	8.176	43	296658	44.38	ug/kg	100
27) chloroprene	8.439	53	280507	47.86	ug/kg	99
28) di-isopropyl ether	8.480	45	674089	46.47	ug/kg	98
29) methacrylonitrile	8.601	41	89918m	47.99	ug/kg	
30) 2-butanone	8.500	72	19254	55.19	ug/kg#	62
32) 1,1-dichloroethane	8.062	63	328303	47.51	ug/kg	99
33) tert-butyl ethyl ether	8.884	59	538117	46.53	ug/kg	99
34) isobutyl alcohol	8.877	43	117018	232.50	ug/kg	98
35) 2,2-dichloropropane	8.944	77	270060	46.22	ug/kg	97
36) cis-1,2-dichloroethene	8.655	96	184562	45.74	ug/kg	98
37) ethyl acetate	8.877	43	117025	45.70	ug/kg	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\M140529S\
 Data File : m65791A.D
 Acq On : 29 May 2014 2:09 pm
 Operator : krystend
 Sample : ICC2333-50
 Misc : MS31905,MSM2333,5,,,5,1
 ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jun 03 11:39:53 2014
 Quant Method : C:\msdchem\1\methods\M140529S.M
 Quant Title : SW-846 Method 8260
 QLast Update : Thu May 29 15:15:52 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
38) bromochloromethane	8.823	128	94432	47.94	ug/kg	94
39) chloroform	8.857	83	285994	46.07	ug/kg	96
41) Tetrahydrofuran	9.194	42	45967	44.56	ug/kg	97
42) 1,1,1-trichloroethane	9.625	97	298255	48.66	ug/kg	98
44) Cyclohexane	9.914	56	398602	51.50	ug/kg	99
45) carbon tetrachloride	9.995	117	294668	52.23	ug/kg	93
46) 1,1-dichloropropene	9.800	75	231835	50.77	ug/kg	97
47) benzene	10.029	78	628435	45.27	ug/kg	100
48) 1,2-dichloroethane	9.524	62	192765	46.76	ug/kg	97
49) tert-amyl methyl ether	10.143	73	406792	48.37	ug/kg	99
50) heptane	10.507	43	394151	50.71	ug/kg	99
51) trichloroethene	10.655	95	188796	44.19	ug/kg	97
52) 1,2-dichloropropane	10.622	63	177584	47.74	ug/kg	99
53) dibromomethane	10.595	93	88953	48.68	ug/kg	96
54) bromodichloromethane	10.709	83	194396	44.54	ug/kg	94
55) Methylcyclohexane	11.181	83	344703	50.80	ug/kg	97
56) 2-chloroethyl vinyl ether	11.087	63	66127	49.90	ug/kg	97
57) methyl methacrylate	10.804	69	74805	42.08	ug/kg	92
58) 1,4-dioxane	10.810	88	7521	250.69	ug/kg	98
59) cis-1,3-dichloropropene	11.329	75	235801	47.27	ug/kg	99
61) 4-methyl-2-pentanone	11.423	43	159951	48.42	ug/kg	97
62) toluene	12.111	92	405717	48.89	ug/kg	100
63) trans-1,3-dichloropropene	11.753	75	188218	46.44	ug/kg	99
64) 1,1,2-trichloroethane	11.929	83	95391	45.83	ug/kg	96
65) ethyl methacrylate	12.124	69	162519	46.92	ug/kg	98
67) tetrachloroethene	12.858	166	197716	54.20	ug/kg	98
68) 1,3-dichloropropane	12.164	76	185515	49.76	ug/kg	100
69) dibromochloromethane	12.461	129	167714	51.13	ug/kg	99
70) 1,2-dibromoethane	12.710	107	126685	50.63	ug/kg	94
71) 2-hexanone	12.286	43	140319	60.78	ug/kg	98
72) chlorobenzene	13.545	112	501727	51.98	ug/kg	96
73) 1,1,1,2-tetrachloroethane	13.458	131	206434	55.83	ug/kg	99
74) ethylbenzene	13.714	91	830311	51.95	ug/kg	99
75) m,p-xylene	13.896	106	682575	104.98	ug/kg	100
76) o-xylene	14.313	106	342581	52.04	ug/kg	100
77) styrene	14.239	104	549784	53.84	ug/kg	95
78) bromoform	14.071	173	106369	48.60	ug/kg	99
79) trans-1,4-dichloro-2-b...	14.461	53	56144	48.69	ug/kg	89
81) isopropylbenzene	14.677	105	921215	48.72	ug/kg	100
83) bromobenzene	14.967	156	223047	48.44	ug/kg	96
84) 1,1,2,2-tetrachloroethane	14.320	83	161047	46.13	ug/kg	99
85) 1,2,3-trichloropropane	14.468	75	187861	49.31	ug/kg	98
86) n-propylbenzene	15.122	91	1061027	48.58	ug/kg	100
87) 2-chlorotoluene	15.243	91	609631	45.98	ug/kg	99
88) 4-chlorotoluene	15.317	91	623222	47.80	ug/kg	99
89) 1,3,5-trimethylbenzene	15.398	105	844822	51.78	ug/kg	99
90) tert-butylbenzene	15.708	91	438813	49.18	ug/kg	95
91) 1,2,4-trimethylbenzene	15.809	105	828563	51.05	ug/kg	100
92) sec-butylbenzene	15.930	105	1103566	50.23	ug/kg	99
93) 1,3-dichlorobenzene	16.038	146	485892	49.31	ug/kg	96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\M140529S\
Data File : m65791A.D
Acq On : 29 May 2014 2:09 pm
Operator : krystend
Sample : ICC2333-50
Misc : MS31905,MSM2333,5,,,5,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jun 03 11:39:53 2014
Quant Method : C:\msdchem\1\methods\M140529S.M
Quant Title : SW-846 Method 8260
QLast Update : Thu May 29 15:15:52 2014
Response via : Initial Calibration

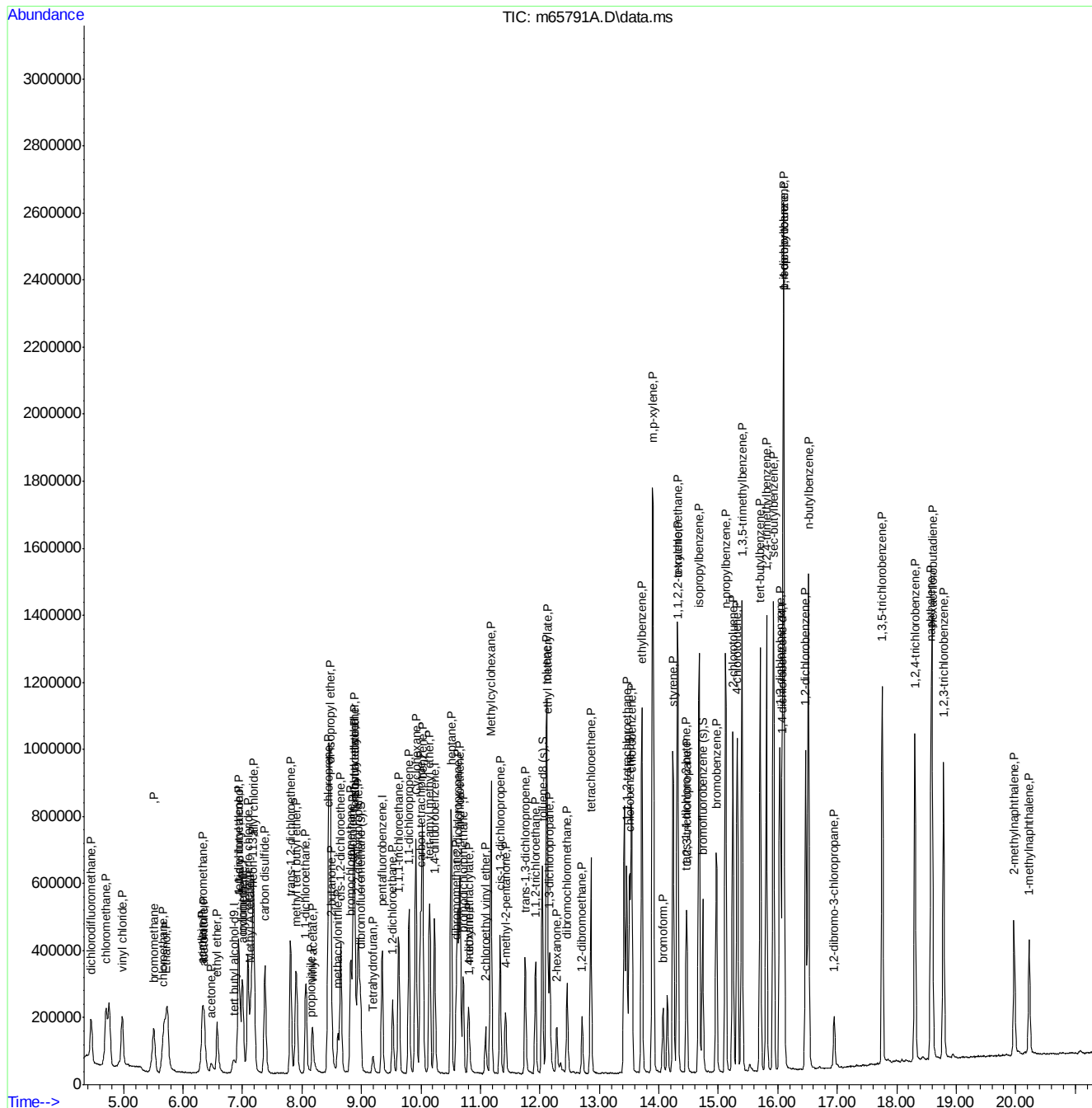
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
94) p-isopropyltoluene	16.098	119	1017298	52.36	ug/kg	98
95) 1,4-dichlorobenzene	16.098	146	496795	51.57	ug/kg	98
96) 1,2-dichlorobenzene	16.469	146	465547	48.20	ug/kg	99
97) n-butylbenzene	16.516	91	886868	50.28	ug/kg	96
98) 1,2-dibromo-3-chloropr...	16.947	75	40280	47.53	ug/kg	97
99) 1,3,5-trichlorobenzene	17.756	180	400601	50.23	ug/kg	99
100) 1,2,4-trichlorobenzene	18.308	180	370745	50.04	ug/kg	100
101) hexachlorobutadiene	18.598	225	189561	49.98	ug/kg	96
102) naphthalene	18.577	128	874255	50.77	ug/kg	100
103) 1,2,3-trichlorobenzene	18.786	180	342790	50.30	ug/kg	99
104) 2-methylnaphthalene	19.972	142	276980	25.53	ug/kg	90
105) 1-methylnaphthalene	20.228	TIC	779818	23.50	ug/kg	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\M140529S\
Data File : m65791A.D
Acq On : 29 May 2014 2:09 pm
Operator : krystend
Sample : ICC2333-50
Misc : MS31905,MSM2333,5,,,5,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jun 03 11:39:53 2014
Quant Method : C:\msdchem\1\methods\M140529S.M
Quant Title : SW-846 Method 8260
QLast Update : Thu May 29 15:15:52 2014
Response via : Initial Calibration



M140529D0DS.M Wed Jun 11 11:22:35 2014

Page: 4

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\M140529S\
 Data File : m65792A.D
 Acq On : 29 May 2014 2:38 pm
 Operator : krystend
 Sample : IC2333-100
 Misc : MS31905,MSM2333,5,,,5,1
 ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jun 03 11:40:37 2014
 Quant Method : C:\msdchem\1\methods\M140529S.M
 Quant Title : SW-846 Method 8260
 QLast Update : Thu May 29 15:33:42 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	6.849	65	117301	500.00	ug/kg	0.00
4) pentafluorobenzene	9.349	168	267398	50.00	ug/kg	0.00
43) 1,4-difluorobenzene	10.231	114	414251	50.00	ug/kg	0.00
66) chlorobenzene-d5	13.505	82	170287m	50.00	ug/kg	0.00
80) 1,4-dichlorobenzene-d4	16.071	152	210732	50.00	ug/kg	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	8.978	113	254421	83.99	ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	167.98%#		
60) toluene-d8 (s)	12.036	98	873508	82.58	ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	165.16%#		
82) bromofluorobenzene (s)	14.738	95	370256	88.15	ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	176.30%#		
Target Compounds						
						Qvalue
2) tertiary butyl alcohol	6.937	59	329950	747.97	ug/kg	99
3) Ethanol	5.664	45	425136	9022.58	ug/kg	98
5) dichlorodifluoromethane	4.445	85	279902	79.31	ug/kg	99
6) chloromethane	4.700	50	469027	83.30	ug/kg	99
7) vinyl chloride	4.970	62	376447	83.07	ug/kg	99
8) bromomethane	5.495	96	244094	83.81	ug/kg	99
9) chloroethane	5.664	64	181183	75.18	ug/kg	98
10) ethyl ether	6.566	59	187455	75.58	ug/kg	99
11) acetonitrile	6.331	41	59726m	67.53	ug/kg	99
12) trichlorofluoromethane	6.337	101	483142	84.54	ug/kg	99
13) freon-113	7.159	101	325152	76.78	ug/kg	99
14) acrolein	6.317	56	98160	343.91	ug/kg	100
15) 1,1-dichloroethene	6.930	96	255233	71.76	ug/kg	96
16) acetone	6.459	58	55712	90.26	ug/kg	99
17) Methyl Acetate	7.126	43	193063	87.49	ug/kg	98
18) methylene chloride	7.085	84	269434m	66.49	ug/kg	99
19) methyl tert butyl ether	7.900	73	642119	78.61	ug/kg	99
20) acrylonitrile	6.991	53	90070	92.53	ug/kg	93
21) allyl chloride	7.179	41	545019	73.02	ug/kg	99
22) trans-1,2-dichloroethene	7.799	96	271700	71.29	ug/kg	98
23) iodomethane	6.991	142	547603	76.17	ug/kg	100
24) carbon disulfide	7.375	76	887445	73.87	ug/kg	99
25) propionitrile	8.082	54	35424	90.84	ug/kg	100
26) vinyl acetate	8.170	43	514632	97.91	ug/kg	100
27) chloroprene	8.439	53	423386	68.52	ug/kg	98
28) di-isopropyl ether	8.480	45	1072788	79.01	ug/kg	93
29) methacrylonitrile	8.594	41	144441	88.41	ug/kg	94
30) 2-butanone	8.486	72	36620	87.39	ug/kg#	27
31) Hexane	8.453	41	557889	76.12	ug/kg	98
32) 1,1-dichloroethane	8.062	63	501371	75.53	ug/kg	99
33) tert-butyl ethyl ether	8.884	59	860158	80.47	ug/kg	99
34) isobutyl alcohol	8.884	43	182425	283.96	ug/kg	96
35) 2,2-dichloropropane	8.944	77	423091	74.49	ug/kg	98
36) cis-1,2-dichloroethene	8.648	96	287019	75.99	ug/kg	96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\M140529S\
 Data File : m65792A.D
 Acq On : 29 May 2014 2:38 pm
 Operator : krystend
 Sample : IC2333-100
 Misc : MS31905,MSM2333,5,,,5,1
 ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jun 03 11:40:37 2014
 Quant Method : C:\msdchem\1\methods\M140529S.M
 Quant Title : SW-846 Method 8260
 QLast Update : Thu May 29 15:33:42 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
37) ethyl acetate	8.884	43	182425	56.81	ug/kg	97
38) bromochloromethane	8.816	128	152207	77.21	ug/kg	97
39) chloroform	8.857	83	445421	77.55	ug/kg	99
41) Tetrahydrofuran	9.194	42	81063	85.38	ug/kg	99
42) 1,1,1-trichloroethane	9.625	97	457234	73.73	ug/kg	98
44) Cyclohexane	9.914	56	605505	73.32	ug/kg	97
45) carbon tetrachloride	9.995	117	454171	75.22	ug/kg	97
46) 1,1-dichloropropene	9.800	75	354543	75.43	ug/kg	99
47) benzene	10.029	78	965292	70.50	ug/kg	99
48) 1,2-dichloroethane	9.524	62	306880	81.24	ug/kg	98
49) tert-amyl methyl ether	10.143	73	658897	83.61	ug/kg	99
50) heptane	10.507	43	606146	75.93	ug/kg	98
51) trichloroethene	10.655	95	302821m	70.23	ug/kg	
52) 1,2-dichloropropane	10.622	63	277018	75.39	ug/kg	98
53) dibromomethane	10.595	93	144270	73.82	ug/kg	99
54) bromodichloromethane	10.709	83	310454	77.10	ug/kg	98
55) Methylcyclohexane	11.181	83	524899	75.95	ug/kg	100
56) 2-chloroethyl vinyl ether	11.087	63	96371	77.01	ug/kg	99
57) methyl methacrylate	10.797	69	128906	79.29	ug/kg	98
58) 1,4-dioxane	10.804	88	14580	479.42	ug/kg	100
59) cis-1,3-dichloropropene	11.329	75	374953	79.14	ug/kg	100
61) 4-methyl-2-pentanone	11.417	43	285307	80.07	ug/kg	99
62) toluene	12.111	92	631049	74.28	ug/kg	100
63) trans-1,3-dichloropropene	11.753	75	303684	79.23	ug/kg	96
64) 1,1,2-trichloroethane	11.929	83	156402	77.49	ug/kg	99
65) ethyl methacrylate	12.124	69	273448	81.98	ug/kg	98
67) tetrachloroethene	12.858	166	305757	77.51	ug/kg	100
68) 1,3-dichloropropane	12.164	76	301892	83.82	ug/kg	100
69) dibromochloromethane	12.454	129	272705	83.69	ug/kg	100
70) 1,2-dibromoethane	12.710	107	210507	82.62	ug/kg	98
71) 2-hexanone	12.279	43	257444	79.15	ug/kg	99
72) chlorobenzene	13.539	112	779566	78.58	ug/kg	98
73) 1,1,1,2-tetrachloroethane	13.458	131	328018	83.46	ug/kg	100
74) ethylbenzene	13.714	91	1273324	77.45	ug/kg	98
75) m,p-xylene	13.896	106	1042444	154.38	ug/kg	99
76) o-xylene	14.313	106	530633	78.94	ug/kg	99
77) styrene	14.239	104	853181	76.50	ug/kg	100
78) bromoform	14.071	173	173764	85.83	ug/kg	97
79) trans-1,4-dichloro-2-b...	14.461	53	93626	75.54	ug/kg	94
81) isopropylbenzene	14.677	105	1418454	80.01	ug/kg	99
83) bromobenzene	14.967	156	351239	80.00	ug/kg	97
84) 1,1,2,2-tetrachloroethane	14.320	83	267872	84.86	ug/kg	99
85) 1,2,3-trichloropropane	14.468	75	316921	87.70	ug/kg	100
86) n-propylbenzene	15.122	91	1612058	77.63	ug/kg	100
87) 2-chlorotoluene	15.243	91	935900	77.61	ug/kg	100
88) 4-chlorotoluene	15.317	91	967112	78.09	ug/kg	99
89) 1,3,5-trimethylbenzene	15.398	105	1318447	80.33	ug/kg	100
90) tert-butylbenzene	15.708	91	691535	84.17	ug/kg	99
91) 1,2,4-trimethylbenzene	15.809	105	1294105	80.26	ug/kg	99
92) sec-butylbenzene	15.930	105	1723897	81.45	ug/kg	100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\M140529S\
Data File : m65792A.D
Acq On : 29 May 2014 2:38 pm
Operator : krystend
Sample : IC2333-100
Misc : MS31905,MSM2333,5,,,5,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jun 03 11:40:37 2014
Quant Method : C:\msdchem\1\methods\M140529S.M
Quant Title : SW-846 Method 8260
QLast Update : Thu May 29 15:33:42 2014
Response via : Initial Calibration

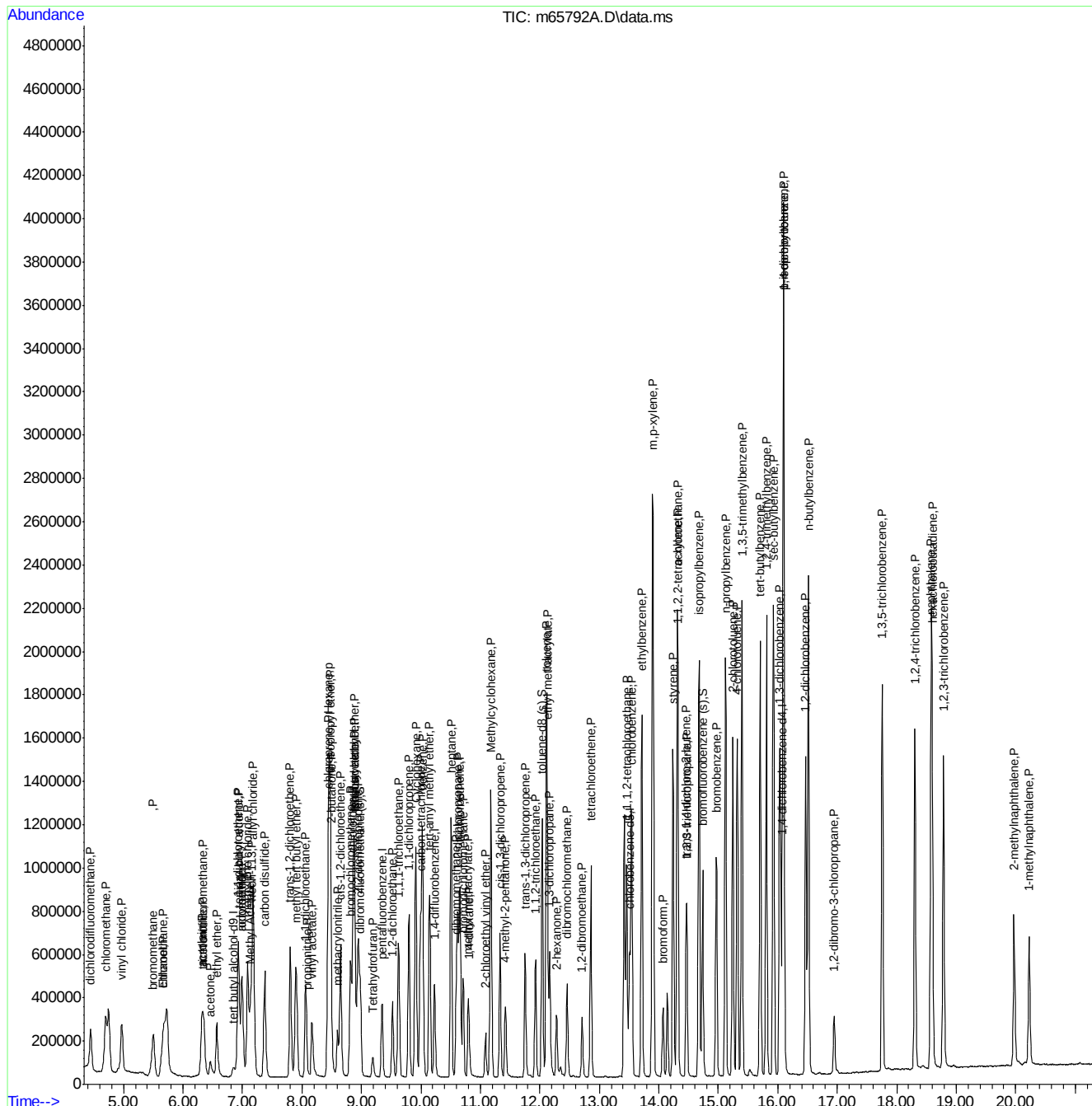
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
93) 1,3-dichlorobenzene	16.031	146	748639	78.49	ug/kg	97
94) p-isopropyltoluene	16.098	119	1584976	79.85	ug/kg	100
95) 1,4-dichlorobenzene	16.098	146	763694	76.86	ug/kg	99
96) 1,2-dichlorobenzene	16.469	146	738543	80.80	ug/kg	99
97) n-butylbenzene	16.516	91	1379514	79.21	ug/kg	99
98) 1,2-dibromo-3-chloropr...	16.947	75	69940	70.98	ug/kg	96
99) 1,3,5-trichlorobenzene	17.756	180	634636	81.08	ug/kg	99
100) 1,2,4-trichlorobenzene	18.308	180	595056	81.72	ug/kg	99
101) hexachlorobutadiene	18.598	225	300101	80.56	ug/kg	99
102) naphthalene	18.577	128	1483996	86.97	ug/kg	100
103) 1,2,3-trichlorobenzene	18.786	180	554666	83.09	ug/kg	99
104) 2-methylnaphthalene	19.972	142	473764	45.40	ug/kg	100
105) 1-methylnaphthalene	20.228	TIC	1423986	46.85	ug/kg	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\M140529S\
Data File : m65792A.D
Acq On : 29 May 2014 2:38 pm
Operator : krystend
Sample : IC2333-100
Misc : MS31905,MSM2333,5,,,5,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jun 03 11:40:37 2014
Quant Method : C:\msdchem\1\methods\M140529S.M
Quant Title : SW-846 Method 8260
QLast Update : Thu May 29 15:33:42 2014
Response via : Initial Calibration



M140529D0DS.M Wed Jun 11 11:22:50 2014

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7.6.7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\M140529S\
 Data File : m65793A.D
 Acq On : 29 May 2014 3:07 pm
 Operator : krystend
 Sample : IC2333-200
 Misc : MS31905,MSM2333,5,,,5,1
 ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jun 03 11:41:22 2014
 Quant Method : C:\msdchem\1\methods\M140529S.M
 Quant Title : SW-846 Method 8260
 QLast Update : Thu May 29 15:33:42 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	6.850	65	114714	500.00	ug/kg	0.00
4) pentafluorobenzene	9.349	168	280874	50.00	ug/kg	0.00
43) 1,4-difluorobenzene	10.231	114	444979	50.00	ug/kg	0.00
66) chlorobenzene-d5	13.505	82	178210m	50.00	ug/kg	0.00
80) 1,4-dichlorobenzene-d4	16.072	152	219876	50.00	ug/kg	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	8.985	113	485898	152.70	ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	305.40%#		
60) toluene-d8 (s)	12.037	98	1696693	149.32	ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	298.64%#		
82) bromofluorobenzene (s)	14.738	95	686939	156.74	ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	313.48%#		
Target Compounds						
					Qvalue	
2) tertiary butyl alcohol	6.937	59	729071	1690.02	ug/kg	99
3) Ethanol	5.691	45	939646	20391.64	ug/kg	97
5) dichlorodifluoromethane	4.445	85	660352	178.13	ug/kg	98
6) chloromethane	4.701	50	1096979	185.49	ug/kg	98
7) vinyl chloride	4.970	62	877827	184.41	ug/kg	97
8) bromomethane	5.502	96	577743	188.85	ug/kg	98
9) chloroethane	5.677	64	430144	169.92	ug/kg	97
10) ethyl ether	6.567	59	435763	167.28	ug/kg	96
11) acetonitrile	6.324	41	118690m	127.75	ug/kg	
12) trichlorofluoromethane	6.344	101	1154229	192.28	ug/kg	100
13) freon-113	7.166	101	735321	165.31	ug/kg	100
14) acrolein	6.311	56	259374	865.14	ug/kg	98
15) 1,1-dichloroethene	6.930	96	582186	155.83	ug/kg	96
16) acetone	6.452	58	110617	170.62	ug/kg#	82
17) Methyl Acetate	7.119	43	446665	192.70	ug/kg	99
18) methylene chloride	7.085	84	620375	145.74	ug/kg	99
19) methyl tert butyl ether	7.900	73	1457090	169.82	ug/kg	99
20) acrylonitrile	6.984	53	201725	197.28	ug/kg	97
21) allyl chloride	7.180	41	1257505	160.40	ug/kg	99
22) trans-1,2-dichloroethene	7.799	96	625312	156.19	ug/kg	98
23) iodomethane	6.991	142	1263073	167.26	ug/kg	98
24) carbon disulfide	7.375	76	2045706	162.12	ug/kg	99
25) propionitrile	8.076	54	79975	195.24	ug/kg	100
26) vinyl acetate	8.163	43	1189996	215.53	ug/kg	99
27) chloroprene	8.439	53	970832	149.59	ug/kg	99
28) di-isopropyl ether	8.480	45	2431394	170.48	ug/kg	90
29) methacrylonitrile	8.594	41	337067	196.42	ug/kg	97
30) 2-butanone	8.486	72	80767	183.49	ug/kg#	42
31) Hexane	8.453	41	1262311	163.96	ug/kg	98
32) 1,1-dichloroethane	8.062	63	1149598	164.86	ug/kg	99
33) tert-butyl ethyl ether	8.884	59	1967497	175.23	ug/kg	99
34) isobutyl alcohol	8.884	43	430589	638.09	ug/kg	90
35) 2,2-dichloropropane	8.945	77	940650	157.66	ug/kg	100
36) cis-1,2-dichloroethene	8.648	96	663335	167.20	ug/kg	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\M140529S\
 Data File : m65793A.D
 Acq On : 29 May 2014 3:07 pm
 Operator : krystend
 Sample : IC2333-200
 Misc : MS31905,MSM2333,5,,,5,1
 ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jun 03 11:41:22 2014
 Quant Method : C:\msdchem\1\methods\M140529S.M
 Quant Title : SW-846 Method 8260
 QLast Update : Thu May 29 15:33:42 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
37) ethyl acetate	8.884	43	430553	127.64	ug/kg	99
38) bromochloromethane	8.817	128	347532	167.84	ug/kg	97
39) chloroform	8.857	83	1017474	168.64	ug/kg	99
41) Tetrahydrofuran	9.187	42	185095	185.60	ug/kg	98
42) 1,1,1-trichloroethane	9.625	97	1043167	160.14	ug/kg	99
44) Cyclohexane	9.915	56	1374642	154.96	ug/kg	98
45) carbon tetrachloride	9.995	117	1030235	158.84	ug/kg	97
46) 1,1-dichloropropene	9.800	75	814476	161.32	ug/kg	98
47) benzene	10.029	78	2246296	152.74	ug/kg	99
48) 1,2-dichloroethane	9.524	62	711209	175.28	ug/kg	99
49) tert-amyl methyl ether	10.144	73	1490609	176.08	ug/kg	100
50) heptane	10.507	43	1375203	160.36	ug/kg	100
51) trichloroethene	10.656	95	742760m	160.37	ug/kg	
52) 1,2-dichloropropane	10.622	63	642101	162.67	ug/kg	99
53) dibromomethane	10.595	93	330990	157.67	ug/kg	98
54) bromodichloromethane	10.709	83	725445	167.71	ug/kg	99
55) Methylcyclohexane	11.181	83	1196576	161.19	ug/kg	98
56) 2-chloroethyl vinyl ether	11.080	63	240671	179.05	ug/kg	99
57) methyl methacrylate	10.797	69	299565	171.54	ug/kg	99
58) 1,4-dioxane	10.797	88	30661	938.57	ug/kg	81
59) cis-1,3-dichloropropene	11.329	75	877853	172.49	ug/kg	100
61) 4-methyl-2-pentanone	11.417	43	627220	163.88	ug/kg	98
62) toluene	12.111	92	1457946	159.76	ug/kg	99
63) trans-1,3-dichloropropene	11.754	75	699248	169.83	ug/kg	97
64) 1,1,2-trichloroethane	11.929	83	357783	165.02	ug/kg	99
65) ethyl methacrylate	12.124	69	579949	161.86	ug/kg	99
67) tetrachloroethene	12.858	166	703924	170.51	ug/kg	99
68) 1,3-dichloropropane	12.165	76	697355	185.01	ug/kg	100
69) dibromochloromethane	12.454	129	631739	185.26	ug/kg	99
70) 1,2-dibromoethane	12.710	107	476759	178.80	ug/kg	98
71) 2-hexanone	12.279	43	541248	159.00	ug/kg	97
72) chlorobenzene	13.539	112	1795027	172.88	ug/kg	98
73) 1,1,1,2-tetrachloroethane	13.465	131	746604	181.53	ug/kg	99
74) ethylbenzene	13.714	91	2890028	167.97	ug/kg	99
75) m,p-xylene	13.896	106	2367150	334.97	ug/kg	100
76) o-xylene	14.313	106	1197220	170.20	ug/kg	98
77) styrene	14.239	104	1846789	158.23	ug/kg	100
78) bromoform	14.071	173	398572	188.13	ug/kg	98
79) trans-1,4-dichloro-2-b...	14.462	53	209827	161.77	ug/kg	97
81) isopropylbenzene	14.677	105	3260165	176.24	ug/kg	99
83) bromobenzene	14.967	156	788704	172.17	ug/kg	97
84) 1,1,2,2-tetrachloroethane	14.320	83	597699	181.47	ug/kg	99
85) 1,2,3-trichloropropane	14.468	75	702389	186.29	ug/kg	100
86) n-propylbenzene	15.122	91	3607080	166.48	ug/kg	99
87) 2-chlorotoluene	15.243	91	2115195	168.10	ug/kg	98
88) 4-chlorotoluene	15.317	91	2154421	166.72	ug/kg	99
89) 1,3,5-trimethylbenzene	15.398	105	3004083	175.42	ug/kg	100
90) tert-butylbenzene	15.708	91	1607046	187.47	ug/kg	100
91) 1,2,4-trimethylbenzene	15.809	105	2902092	172.50	ug/kg	100
92) sec-butylbenzene	15.930	105	3945405	178.65	ug/kg	100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\M140529S\
 Data File : m65793A.D
 Acq On : 29 May 2014 3:07 pm
 Operator : krystend
 Sample : IC2333-200
 Misc : MS31905,MSM2333,5,,,5,1
 ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jun 03 11:41:22 2014
 Quant Method : C:\msdchem\1\methods\M140529S.M
 Quant Title : SW-846 Method 8260
 QLast Update : Thu May 29 15:33:42 2014
 Response via : Initial Calibration

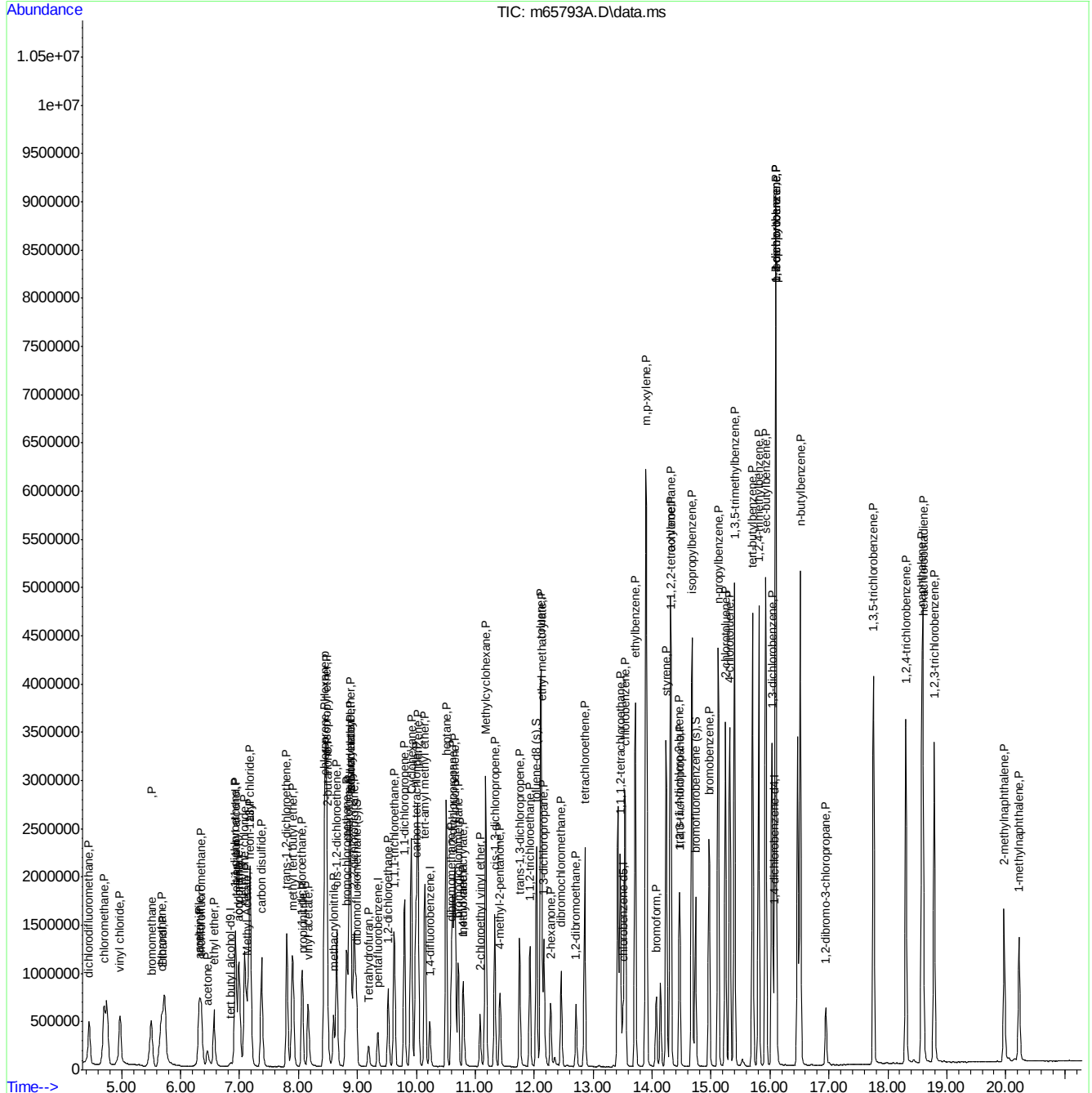
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
93) 1,3-dichlorobenzene	16.038	146	1686510	169.46	ug/kg	98
94) p-isopropyltoluene	16.099	119	3582255	172.97	ug/kg	99
95) 1,4-dichlorobenzene	16.099	146	1704173	164.39	ug/kg	100
96) 1,2-dichlorobenzene	16.099	146	1722725	180.63	ug/kg	98
97) n-butylbenzene	16.516	91	3064964	168.67	ug/kg	99
98) 1,2-dibromo-3-chloropr...	16.947	75	150786	146.66	ug/kg	91
99) 1,3,5-trichlorobenzene	17.756	180	1432848	175.45	ug/kg	99
100) 1,2,4-trichlorobenzene	18.308	180	1340842	176.48	ug/kg	99
101) hexachlorobutadiene	18.598	225	681731	175.39	ug/kg	99
102) naphthalene	18.578	128	3302998	185.52	ug/kg	100
103) 1,2,3-trichlorobenzene	18.786	180	1249460	179.38	ug/kg	100
104) 2-methylnaphthalene	19.972	142	1055007	96.88	ug/kg	100
105) 1-methylnaphthalene	20.228	TIC	2973071	93.74	ug/kg	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\M140529S\
Data File : m65793A.D
Acq On : 29 May 2014 3:07 pm
Operator : krystend
Sample : IC2333-200
Misc : MS31905,MSM2333,5,,,5,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jun 03 11:41:22 2014
Quant Method : C:\msdchem\1\methods\M140529S.M
Quant Title : SW-846 Method 8260
QLast Update : Thu May 29 15:33:42 2014
Response via : Initial Calibration



M140529D0DS.M Wed Jun 11 11:23:08 2014

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8.9.7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\M140529S\
 Data File : m65794A.D
 Acq On : 29 May 2014 3:37 pm
 Operator : krystend
 Sample : IC2333-400
 Misc : MS31905,MSM2333,5,,,5,1
 ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jun 03 11:42:06 2014
 Quant Method : C:\msdchem\1\methods\M140529S.M
 Quant Title : SW-846 Method 8260
 QLast Update : Thu May 29 15:48:40 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	6.863	65	129795	500.00	ug/kg	0.00
4) pentafluorobenzene	9.349	168	303731	50.00	ug/kg	0.00
43) 1,4-difluorobenzene	10.231	114	483618	50.00	ug/kg	0.00
66) chlorobenzene-d5	13.505	82	196847m	50.00	ug/kg	0.00
80) 1,4-dichlorobenzene-d4	16.072	152	235833	50.00	ug/kg	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	8.985	113	1036621	350.21	ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	700.42%#		
60) toluene-d8 (s)	12.036	98	3692452	342.31	ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	684.62%#		
82) bromofluorobenzene (s)	14.738	95	1498441	361.92	ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	723.84%#		
Target Compounds						
					Qvalue	
2) tertiary butyl alcohol	6.944	59	1785788	4047.98	ug/kg	99
3) Ethanol	5.704	45	2287095	44361.59	ug/kg	96
5) dichlorodifluoromethane	4.451	85	1379456	360.39	ug/kg	100
6) chloromethane	4.714	50	2319001	375.45	ug/kg	97
7) vinyl chloride	4.977	62	1749326	352.28	ug/kg	99
8) bromomethane	5.509	96	1225031	382.18	ug/kg	100
9) chloroethane	5.677	64	919905	376.58	ug/kg	98
10) ethyl ether	6.567	59	1014172	397.78	ug/kg	98
11) acetonitrile	6.324	41	301781m	489.74	ug/kg	
12) trichlorofluoromethane	6.351	101	2490204	394.50	ug/kg	99
13) freon-113	7.166	101	1631889	370.46	ug/kg	99
14) acrolein	6.311	56	685367	2284.18	ug/kg	98
15) 1,1-dichloroethene	6.930	96	1294925	345.36	ug/kg	96
16) acetone	6.452	58	268666	414.45	ug/kg#	82
17) Methyl Acetate	7.112	43	1093130	448.18	ug/kg	99
18) methylene chloride	7.085	84	1387477	330.34	ug/kg	99
19) methyl tert butyl ether	7.900	73	3348462	380.73	ug/kg	100
20) acrylonitrile	6.984	53	490745	450.45	ug/kg	96
21) allyl chloride	7.186	41	2823459	373.30	ug/kg	97
22) trans-1,2-dichloroethene	7.799	96	1413285	351.90	ug/kg	98
23) iodomethane	6.991	142	2811777	365.31	ug/kg	99
24) carbon disulfide	7.375	76	4521077	365.57	ug/kg	100
25) propionitrile	8.069	54	195710	465.66	ug/kg	100
26) vinyl acetate	8.163	43	2887865	479.16	ug/kg	100
27) chloroprene	8.439	53	2217894	357.94	ug/kg	97
28) di-isopropyl ether	8.480	45	5591636	382.07	ug/kg	86
29) methacrylonitrile	8.594	41	829658	457.29	ug/kg	96
30) 2-butanone	8.480	72	207438	451.50	ug/kg#	33
31) Hexane	8.459	41	2883734	368.44	ug/kg	98
32) 1,1-dichloroethane	8.062	63	2618715	369.48	ug/kg	99
33) tert-butyl ethyl ether	8.884	59	4536937	391.52	ug/kg	100
34) isobutyl alcohol	8.891	43	941575	1487.11	ug/kg	96
35) 2,2-dichloropropane	8.951	77	2078943	361.12	ug/kg	98
36) cis-1,2-dichloroethene	8.648	96	1514741	374.70	ug/kg	100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\M140529S\
 Data File : m65794A.D
 Acq On : 29 May 2014 3:37 pm
 Operator : krystend
 Sample : IC2333-400
 Misc : MS31905,MSM2333,5,,,5,1
 ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jun 03 11:42:06 2014
 Quant Method : C:\msdchem\1\methods\M140529S.M
 Quant Title : SW-846 Method 8260
 QLast Update : Thu May 29 15:48:40 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
37) ethyl acetate	8.891	43	941490	297.47	ug/kg	95
38) bromochloromethane	8.823	128	804960	380.63	ug/kg	95
39) chloroform	8.857	83	2331936	378.02	ug/kg	99
41) Tetrahydrofuran	9.187	42	448887	459.15	ug/kg	99
42) 1,1,1-trichloroethane	9.625	97	2347972	356.87	ug/kg	99
44) Cyclohexane	9.915	56	3090387	357.54	ug/kg	99
45) carbon tetrachloride	9.995	117	2334465	354.11	ug/kg	98
46) 1,1-dichloropropene	9.800	75	1890168	367.52	ug/kg	99
47) benzene	10.029	78	5214189	349.42	ug/kg	99
48) 1,2-dichloroethane	9.524	62	1669130	396.11	ug/kg	98
49) tert-amyl methyl ether	10.144	73	3462471	392.22	ug/kg	99
50) heptane	10.507	43	3171036	363.00	ug/kg	100
51) trichloroethene	10.656	95	1875165m	397.14	ug/kg	
52) 1,2-dichloropropane	10.622	63	1516514	376.80	ug/kg	99
53) dibromomethane	10.595	93	786977	369.96	ug/kg	98
54) bromodichloromethane	10.709	83	1709793	385.18	ug/kg	98
55) Methylcyclohexane	11.181	83	2709250	358.03	ug/kg	99
56) 2-chloroethyl vinyl ether	11.080	63	606549	436.04	ug/kg	98
57) methyl methacrylate	10.797	69	742069	426.60	ug/kg	99
58) 1,4-dioxane	10.810	88	77721	2227.14	ug/kg	96
59) cis-1,3-dichloropropene	11.329	75	2111623	401.63	ug/kg	100
61) 4-methyl-2-pentanone	11.417	43	1547465	422.11	ug/kg	98
62) toluene	12.111	92	3457990	373.08	ug/kg	99
63) trans-1,3-dichloropropene	11.754	75	1688033	397.59	ug/kg	95
64) 1,1,2-trichloroethane	11.929	83	869433	391.34	ug/kg	99
65) ethyl methacrylate	12.124	69	1428962	387.48	ug/kg	97
67) tetrachloroethene	12.858	166	1682946	385.34	ug/kg	99
68) 1,3-dichloropropane	12.164	76	1685280	416.78	ug/kg	100
69) dibromochloromethane	12.461	129	1536102	419.92	ug/kg	99
70) 1,2-dibromoethane	12.710	107	1160766	408.46	ug/kg	97
71) 2-hexanone	12.279	43	1361459	440.89	ug/kg	99
72) chlorobenzene	13.539	112	4295495	392.21	ug/kg	99
73) 1,1,1,2-tetrachloroethane	13.465	131	1744792	396.63	ug/kg	99
74) ethylbenzene	13.714	91	6826981	378.19	ug/kg	98
75) m,p-xylene	13.896	106	5637197	760.91	ug/kg	99
76) o-xylene	14.313	106	2824615	381.22	ug/kg	99
77) styrene	14.239	104	4410813	375.92	ug/kg	99
78) bromoform	14.071	173	973463	426.03	ug/kg	100
79) trans-1,4-dichloro-2-b...	14.462	53	502033	371.91	ug/kg	91
81) isopropylbenzene	14.677	105	7631119	402.96	ug/kg	99
83) bromobenzene	14.967	156	1875485	401.15	ug/kg	98
84) 1,1,2,2-tetrachloroethane	14.320	83	1425633	418.13	ug/kg	99
85) 1,2,3-trichloropropane	14.462	75	1688570	429.28	ug/kg	99
86) n-propylbenzene	15.122	91	8498493	387.35	ug/kg	100
87) 2-chlorotoluene	15.243	91	4974654	389.96	ug/kg	100
88) 4-chlorotoluene	15.317	91	5110398	390.19	ug/kg	99
89) 1,3,5-trimethylbenzene	15.398	105	7162169	408.59	ug/kg	100
90) tert-butylbenzene	15.708	91	3798658	426.62	ug/kg	99
91) 1,2,4-trimethylbenzene	15.809	105	6916531	402.56	ug/kg	100
92) sec-butylbenzene	15.930	105	9339839	411.49	ug/kg	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\M140529S\
Data File : m65794A.D
Acq On : 29 May 2014 3:37 pm
Operator : krystend
Sample : IC2333-400
Misc : MS31905,MSM2333,5,,,5,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jun 03 11:42:06 2014
Quant Method : C:\msdchem\1\methods\M140529S.M
Quant Title : SW-846 Method 8260
QLast Update : Thu May 29 15:48:40 2014
Response via : Initial Calibration

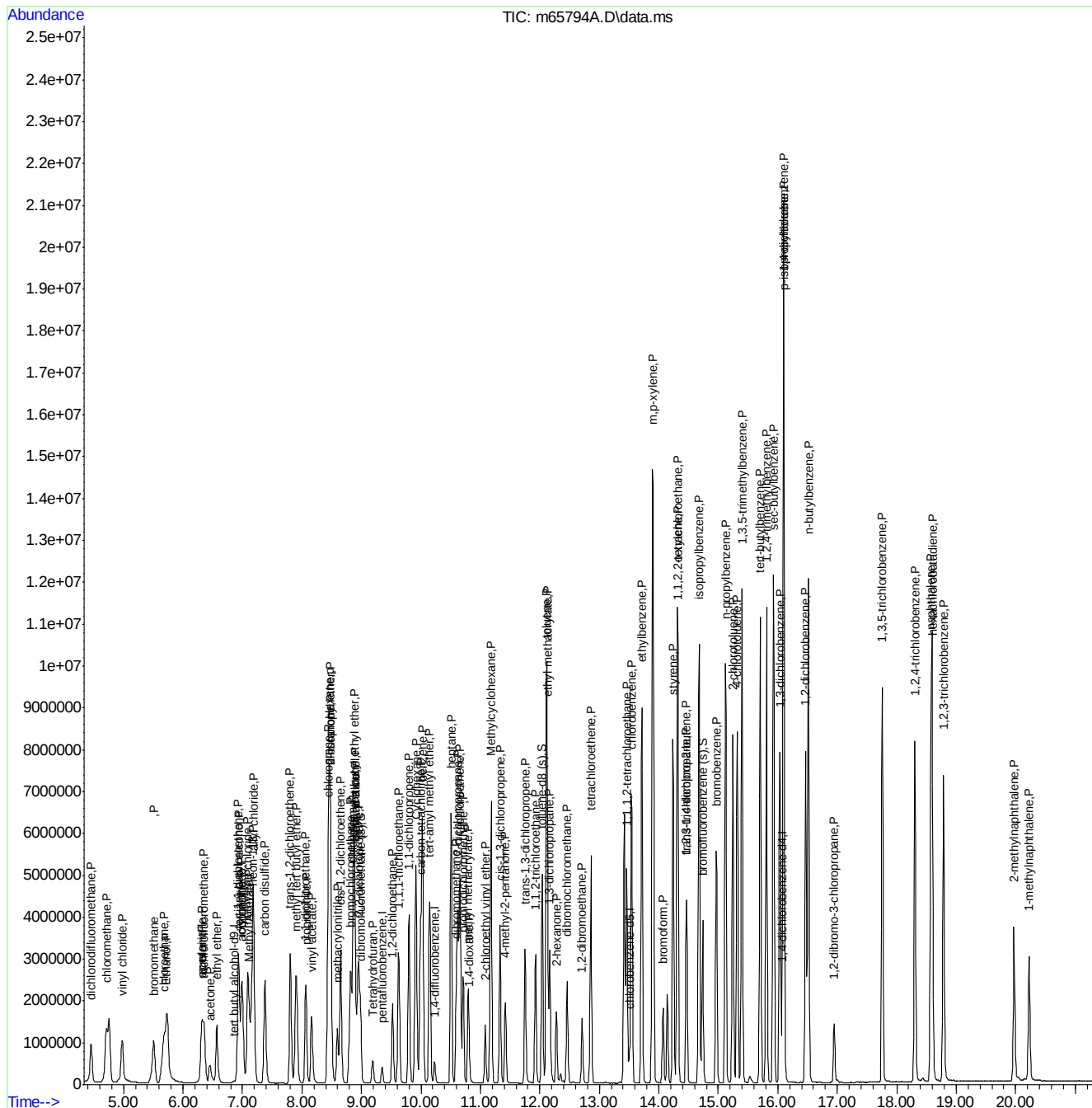
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
93)	1,3-dichlorobenzene	16.038	146	3974901	393.02	ug/kg	98
94)	p-isopropyltoluene	16.098	119	8502463	402.10	ug/kg	100
95)	1,4-dichlorobenzene	16.105	146	4023437	384.32	ug/kg	99
96)	1,2-dichlorobenzene	16.469	146	3867552m	394.35	ug/kg	
97)	n-butylbenzene	16.516	91	7187604	389.04	ug/kg	100
98)	1,2-dibromo-3-chloropr...	16.947	75	356474	380.34	ug/kg	92
99)	1,3,5-trichlorobenzene	17.756	180	3321356	396.85	ug/kg	99
100)	1,2,4-trichlorobenzene	18.308	180	3051340	391.24	ug/kg	99
101)	hexachlorobutadiene	18.598	225	1558801	391.66	ug/kg	100
102)	naphthalene	18.577	128	7552090	407.27	ug/kg	100
103)	1,2,3-trichlorobenzene	18.786	180	2805014	390.65	ug/kg	100
104)	2-methylnaphthalene	19.972	142	2430346	212.45	ug/kg	99
105)	1-methylnaphthalene	20.228	TIC	6754480	202.81	ug/kg	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\M140529S\
Data File : m65794A.D
Acq On : 29 May 2014 3:37 pm
Operator : krystend
Sample : IC2333-400
Misc : MS31905,MSM2333,5,,,5,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jun 03 11:42:06 2014
Quant Method : C:\msdchem\1\methods\M140529S.M
Quant Title : SW-846 Method 8260
QLast Update : Thu May 29 15:48:40 2014
Response via : Initial Calibration



M140529D0DS.M Wed Jun 11 11:23:23 2014

Page: 4

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\M140529S\
 Data File : m65798A.D
 Acq On : 29 May 2014 5:39 pm
 Operator : krystend
 Sample : ICV2333-50
 Misc : MS31905,MSM2333,5,,,5,1
 ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jun 11 15:08:05 2014
 Quant Method : C:\msdchem\1\methods\M140529D0DS.M
 Quant Title : SW-846 Method 8260
 QLast Update : Wed Jun 11 13:34:57 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	6.856	65	113584	500.00	ug/kg	0.00
4) pentafluorobenzene	9.349	168	274421	50.00	ug/kg	0.00
43) 1,4-difluorobenzene	10.231	114	424965	50.00	ug/kg	0.00
66) chlorobenzene-d5	13.505	82	187607	50.00	ug/kg	0.00
80) 1,4-dichlorobenzene-d4	16.072	152	225773	50.00	ug/kg	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	8.978	113	124033	44.65	ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	89.30%		
60) toluene-d8 (s)	12.043	98	475597	59.51	ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	119.02%		
82) bromofluorobenzene (s)	14.738	95	179584	45.31	ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	90.62%		
Target Compounds						
						Qvalue
2) tertiary butyl alcohol	6.930	59	187991	468.97	ug/kg	94
3) Ethanol	5.704	45	207878	4545.62	ug/kg	99
5) dichlorodifluoromethane	4.451	85	162887	51.14	ug/kg	99
6) chloromethane	4.701	50	281671	50.86	ug/kg	98
7) vinyl chloride	4.970	62	216955	49.09	ug/kg	99
8) bromomethane	5.502	96	134409	46.67	ug/kg	100
9) chloroethane	5.664	64	113604	51.91	ug/kg	92
10) ethyl ether	6.567	59	115789	48.58	ug/kg	97
11) acetonitrile	6.371	41	26723	40.60	ug/kg#	50
12) trichlorofluoromethane	6.344	101	245182	43.06	ug/kg	96
13) freon-113	7.159	101	203698	50.38	ug/kg	97
14) acrolein	6.324	56	53479	239.65	ug/kg	99
15) 1,1-dichloroethene	6.930	96	168085	57.32	ug/kg	98
16) acetone	6.472	58	24526	41.62	ug/kg#	80
17) Methyl Acetate	7.132	43	114722	51.18	ug/kg	99
18) methylene chloride	7.085	84	176326	56.11	ug/kg	99
19) methyl tert butyl ether	7.900	73	379618	48.06	ug/kg	99
20) acrylonitrile	7.004	53	47250	47.15	ug/kg	100
21) allyl chloride	7.186	41	335912	53.24	ug/kg	98
22) trans-1,2-dichloroethene	7.806	96	180882	56.76	ug/kg	96
23) iodomethane	6.991	142	321415	46.72	ug/kg	99
24) carbon disulfide	7.375	76	538317	47.35	ug/kg	99
25) propionitrile	8.156	54	19679m	50.64	ug/kg	
26) vinyl acetate	8.170	43	293065	52.34	ug/kg	100
27) chloroprene	8.439	53	274467	54.37	ug/kg	99
28) di-isopropyl ether	8.480	45	656858	49.96	ug/kg	99
29) methacrylonitrile	8.601	41	84296	50.39	ug/kg	94
30) 2-butanone	8.500	72	18434m	43.61	ug/kg	
31) Hexane	8.460	41	346069	49.43	ug/kg	98
32) 1,1-dichloroethane	8.062	63	320713	50.57	ug/kg	99
33) tert-butyl ethyl ether	8.884	59	519134	49.72	ug/kg	99
34) isobutyl alcohol	8.877	43	113442	247.04	ug/kg	99
35) 2,2-dichloropropane	8.945	77	271641	52.96	ug/kg	100
36) cis-1,2-dichloroethene	8.648	96	182493	50.36	ug/kg	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\M140529S\
 Data File : m65798A.D
 Acq On : 29 May 2014 5:39 pm
 Operator : krystend
 Sample : ICV2333-50
 Misc : MS31905,MSM2333,5,,,5,1
 ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jun 11 15:08:05 2014
 Quant Method : C:\msdchem\1\methods\M140529D0DS.M
 Quant Title : SW-846 Method 8260
 QLast Update : Wed Jun 11 13:34:57 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
37) ethyl acetate	8.877	43	113399	49.39	ug/kg	96
38) bromochloromethane	8.817	128	92731	48.83	ug/kg	98
39) chloroform	8.857	83	275090	49.70	ug/kg	98
41) Tetrahydrofuran	9.194	42	43676	45.99	ug/kg	96
42) 1,1,1-trichloroethane	9.625	97	286597	48.87	ug/kg	99
44) Cyclohexane	9.915	56	382177	49.37	ug/kg	99
45) carbon tetrachloride	9.995	117	282525	49.48	ug/kg	96
46) 1,1-dichloropropene	9.800	75	226360	50.60	ug/kg	97
47) benzene	10.029	78	618970	54.04	ug/kg	99
48) 1,2-dichloroethane	9.524	62	183470	49.61	ug/kg	99
49) tert-amyl methyl ether	10.144	73	390756	50.50	ug/kg	98
50) heptane	10.507	43	366292	48.28	ug/kg	99
51) trichloroethene	10.656	95	182926	47.85	ug/kg	99
52) 1,2-dichloropropane	10.622	63	167604	47.74	ug/kg	99
53) dibromomethane	10.595	93	84161	49.91	ug/kg	99
54) bromodichloromethane	10.709	83	196034	50.49	ug/kg	99
55) Methylcyclohexane	11.174	83	329644	50.23	ug/kg	96
56) 2-chloroethyl vinyl ether	11.087	63	48273	39.05	ug/kg	99
57) methyl methacrylate	10.804	69	70309	44.21	ug/kg	95
58) 1,4-dioxane	10.811	88	8022	257.43	ug/kg	92
59) cis-1,3-dichloropropene	11.329	75	226113	48.92	ug/kg	99
61) 4-methyl-2-pentanone	11.424	43	153988	47.43	ug/kg	97
62) toluene	12.111	92	401890	49.76	ug/kg	100
63) trans-1,3-dichloropropene	11.754	75	196416	52.69	ug/kg	99
64) 1,1,2-trichloroethane	11.929	83	90963	46.72	ug/kg	99
65) ethyl methacrylate	12.124	69	153826	47.66	ug/kg	98
67) tetrachloroethene	12.858	166	191088	46.10	ug/kg	99
68) 1,3-dichloropropane	12.165	76	178597	46.10	ug/kg	100
69) dibromochloromethane	12.461	129	167619	47.78	ug/kg	100
70) 1,2-dibromoethane	12.710	107	121847	44.87	ug/kg	96
71) 2-hexanone	12.279	43	125259	41.95	ug/kg	96
72) chlorobenzene	13.539	112	493351	47.38	ug/kg	97
73) 1,1,1,2-tetrachloroethane	13.458	131	200479	47.87	ug/kg	100
74) ethylbenzene	13.714	91	827848	48.45	ug/kg	98
75) m,p-xylene	13.896	106	676217	96.36	ug/kg	97
76) o-xylene	14.313	106	338734	48.25	ug/kg	99
77) styrene	14.239	104	543500	47.53	ug/kg	99
78) bromoform	14.071	173	102042	46.48	ug/kg	98
79) trans-1,4-dichloro-2-b...	14.462	53	54982	46.59	ug/kg	96
81) isopropylbenzene	14.677	105	945266	52.09	ug/kg	99
83) bromobenzene	14.967	156	219071	48.93	ug/kg	97
84) 1,1,2,2-tetrachloroethane	14.320	83	163410	49.78	ug/kg	99
85) 1,2,3-trichloropropane	14.468	75	184967	48.67	ug/kg	97
86) n-propylbenzene	15.122	91	1009470	48.25	ug/kg	100
87) 2-chlorotoluene	15.243	91	604522	49.66	ug/kg	100
88) 4-chlorotoluene	15.317	91	623261	49.86	ug/kg	99
89) 1,3,5-trimethylbenzene	15.398	105	813650	48.36	ug/kg	100
90) tert-butylbenzene	15.708	91	428362	49.84	ug/kg	98
91) 1,2,4-trimethylbenzene	15.809	105	796752	48.40	ug/kg	99
92) sec-butylbenzene	15.930	105	1100073	50.44	ug/kg	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\M140529S\
 Data File : m65798A.D
 Acq On : 29 May 2014 5:39 pm
 Operator : krystend
 Sample : ICV2333-50
 Misc : MS31905,MSM2333,5,,,5,1
 ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jun 11 15:08:05 2014
 Quant Method : C:\msdchem\1\methods\M140529D0DS.M
 Quant Title : SW-846 Method 8260
 QLast Update : Wed Jun 11 13:34:57 2014
 Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
93)	1,3-dichlorobenzene	16.038	146	488168	50.53	ug/kg	99
94)	p-isopropyltoluene	16.099	119	997147	49.23	ug/kg	99
95)	1,4-dichlorobenzene	16.099	146	493921	49.52	ug/kg	99
96)	1,2-dichlorobenzene	16.469	146	476710	50.86	ug/kg	99
97)	n-butylbenzene	16.516	91	867618	49.22	ug/kg	98
98)	1,2-dibromo-3-chloropr...	16.947	75	38517	48.42	ug/kg	98
99)	1,3,5-trichlorobenzene	17.756	180	381057	47.61	ug/kg	99
100)	1,2,4-trichlorobenzene	18.308	180	373527	50.16	ug/kg	99
101)	hexachlorobutadiene	18.598	225	184796	48.63	ug/kg	99
102)	naphthalene	18.578	128	903339	50.77	ug/kg	100
103)	1,2,3-trichlorobenzene	18.786	180	346873	50.61	ug/kg	99
104)	2-methylnaphthalene	19.972	142	291057	26.34	ug/kg	99
105)	1-methylnaphthalene	20.228	TIC	790720	24.75	ug/kg	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

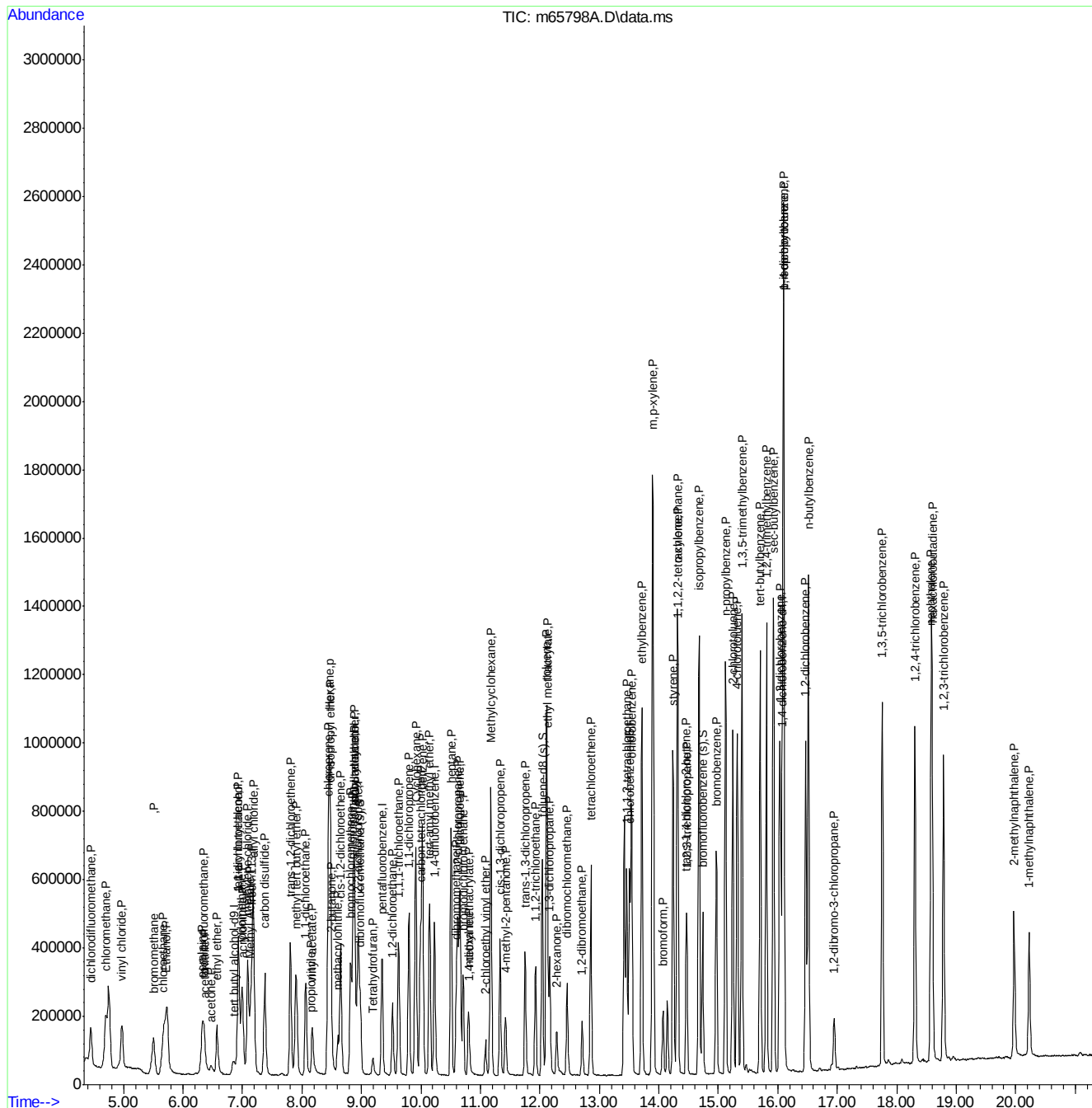
7.6.10

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\M140529S\
Data File : m65798A.D
Acq On : 29 May 2014 5:39 pm
Operator : krystend
Sample : ICV2333-50
Misc : MS31905,MSM2333,5,,,5,1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jun 11 15:08:05 2014
Quant Method : C:\msdchem\1\methods\M140529D0DS.M
Quant Title : SW-846 Method 8260
QLast Update : Wed Jun 11 13:34:57 2014
Response via : Initial Calibration



M140529D0DS.M Wed Jun 11 15:09:19 2014

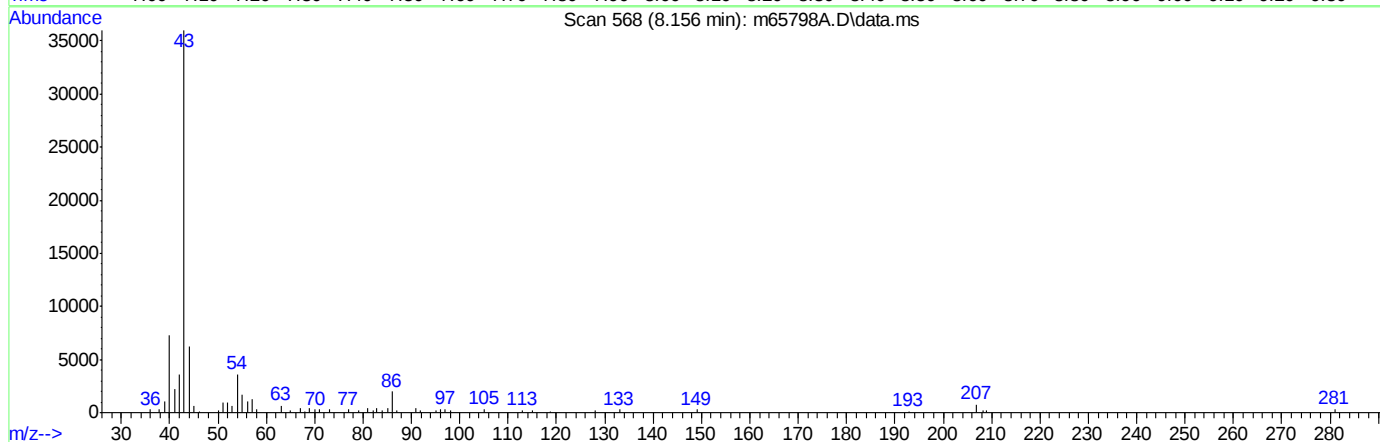
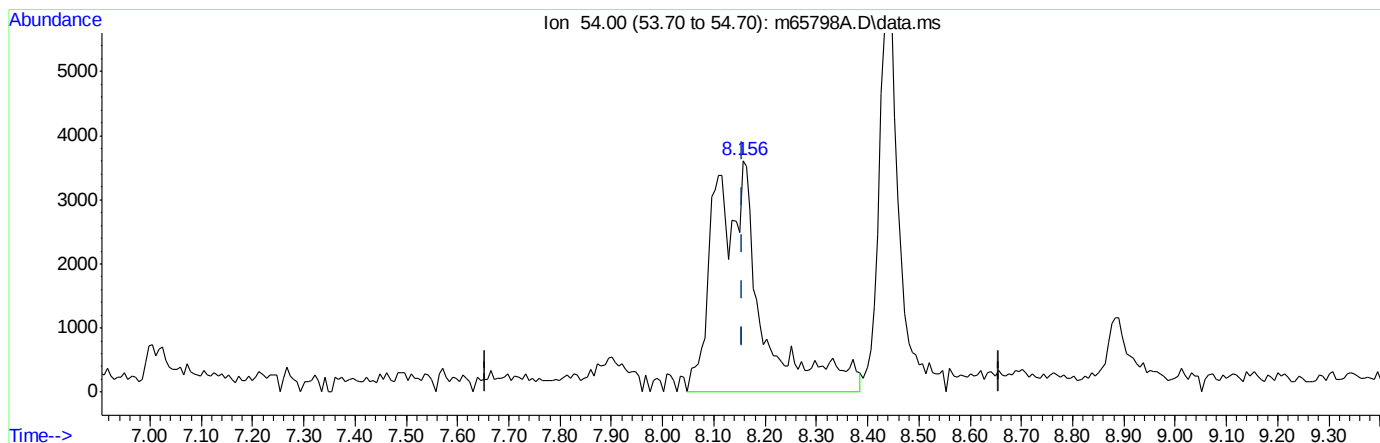
Page: 4

7.6.10

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\M140529S\
Data File : m65798A.D
Acq On : 29 May 2014 5:39 pm
Operator : krystend
Sample : ICV2318-50
Misc : MS31905,MSM2318,5,,,5,1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jun 09 15:39:46 2014
Quant Method : C:\msdchem\1\methods\M140529D0DS.M
Quant Title : SW-846 Method 8260
QLast Update : Mon Jun 09 15:38:38 2014
Response via : Initial Calibration



TIC: m65798A.D\data.ms

(25) propionitrile (P)

8.156min (+0.000) 60.03ug/kg

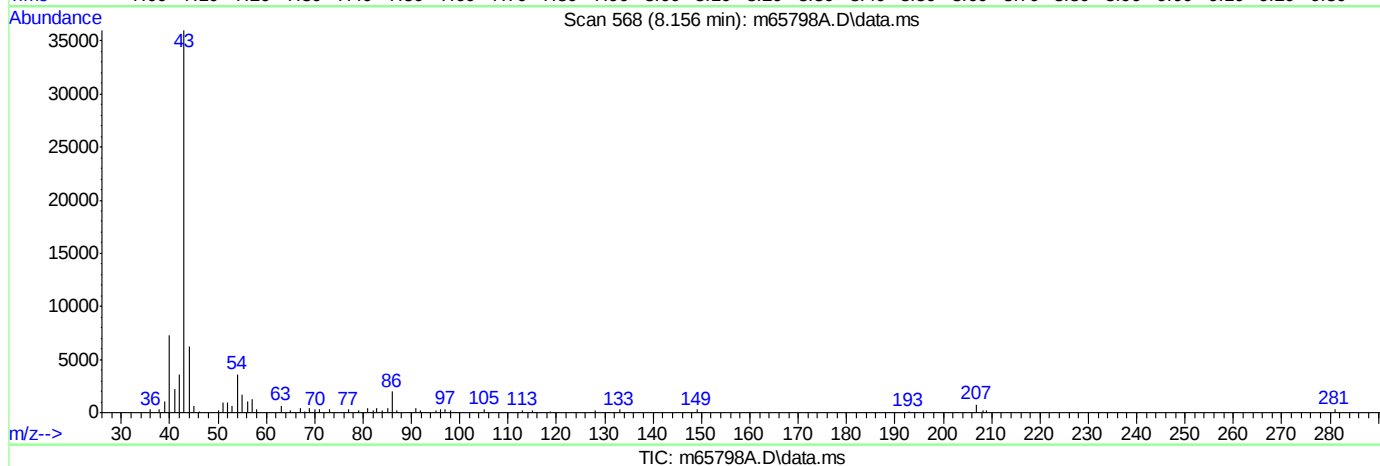
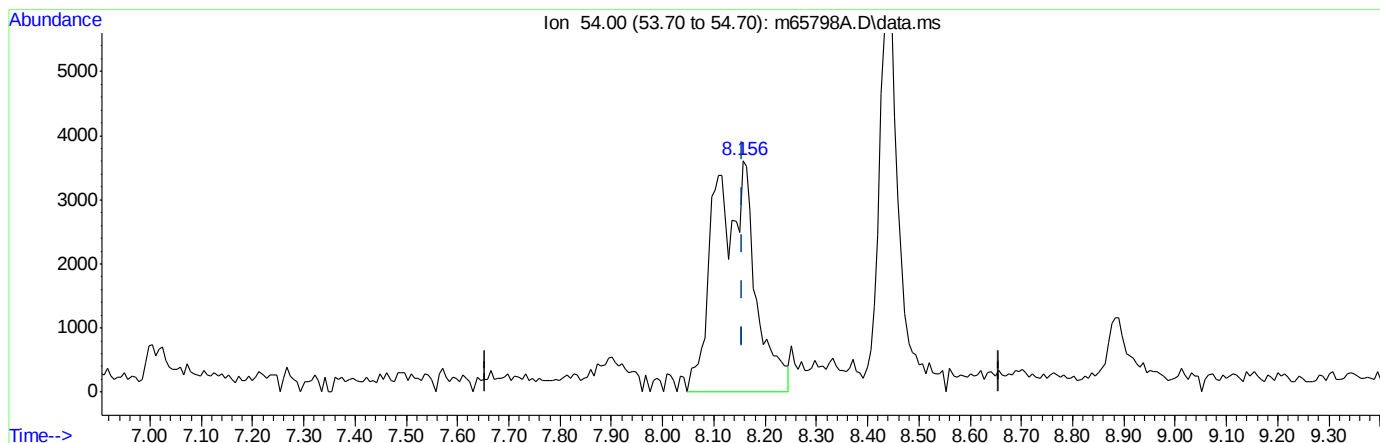
response 23329

Ion	Exp%	Act%
54.00	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\M140529S\
Data File : m65798A.D
Acq On : 29 May 2014 5:39 pm
Operator : krystend
Sample : ICV2318-50
Misc : MS31905,MSM2318,5,,,5,1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jun 09 15:39:46 2014
Quant Method : C:\msdchem\1\methods\M140529D0DS.M
Quant Title : SW-846 Method 8260
QLast Update : Mon Jun 09 15:38:38 2014
Response via : Initial Calibration



(25) propionitrile (P)

8.156min (+0.000) 51.06ug/kg m

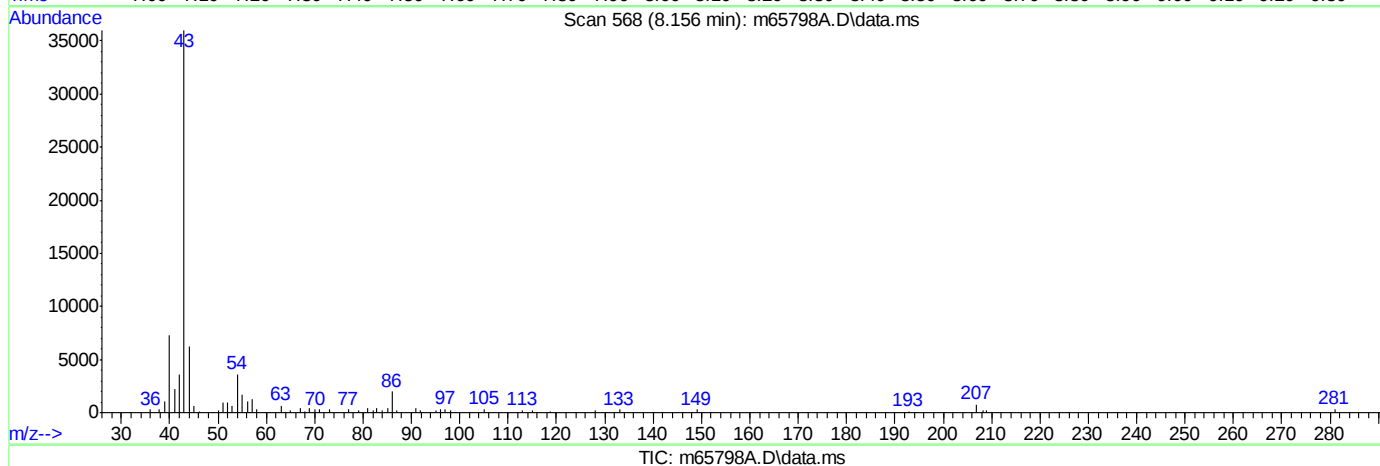
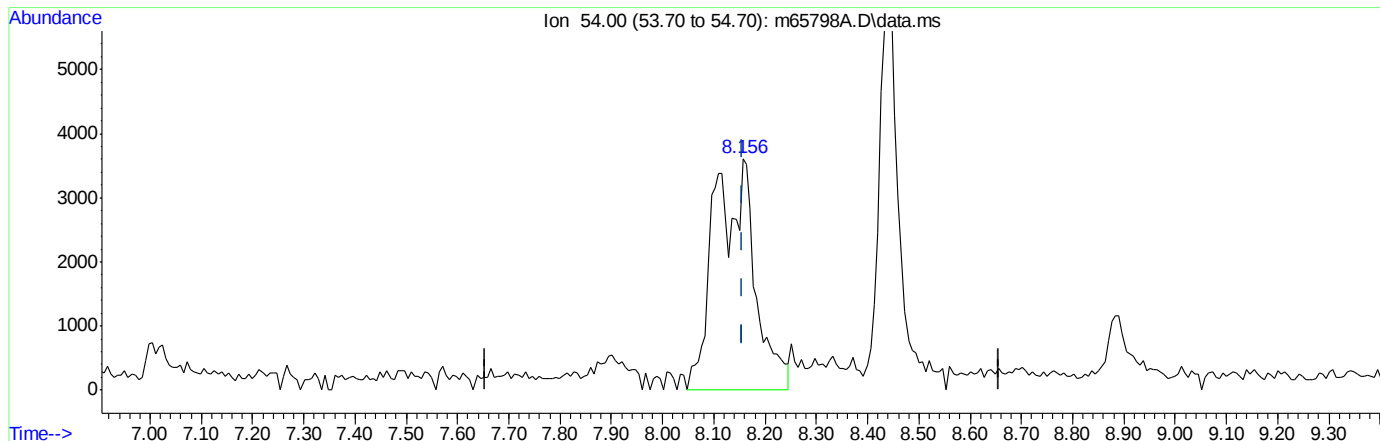
response 19843

Ion	Exp%	Act%
54.00	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\M140529S\
Data File : m65798A.D
Acq On : 29 May 2014 5:39 pm
Operator : krystend
Sample : ICV2318-50
Misc : MS31905,MSM2318,5,,,5,1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jun 09 15:41:22 2014
Quant Method : C:\msdchem\1\methods\M140529D0DS.M
Quant Title : SW-846 Method 8260
QLast Update : Mon Jun 09 15:38:38 2014
Response via : Initial Calibration



(25) propionitrile (P)

8.156min (+0.000) 51.06ug/kg m

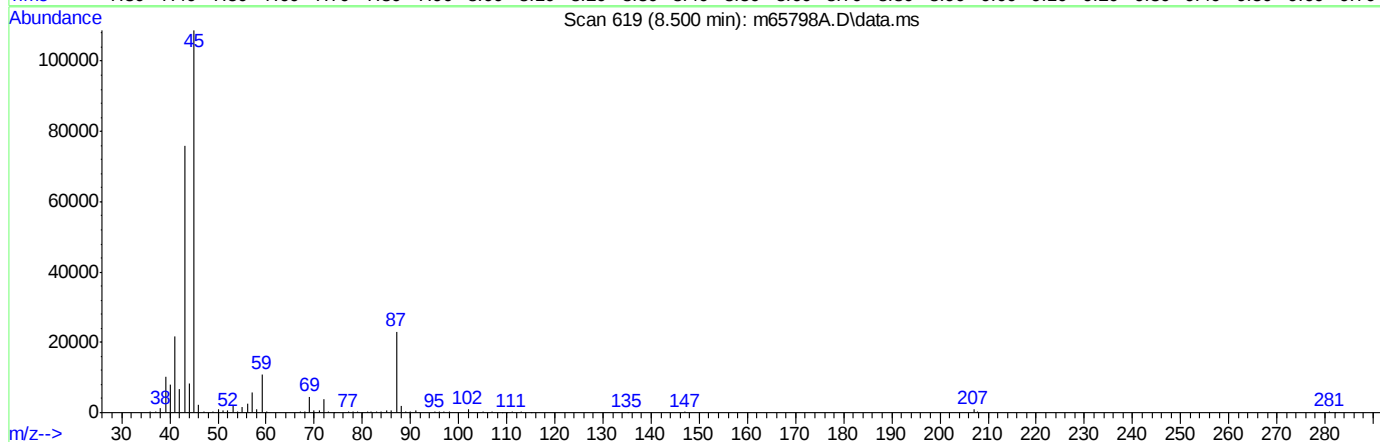
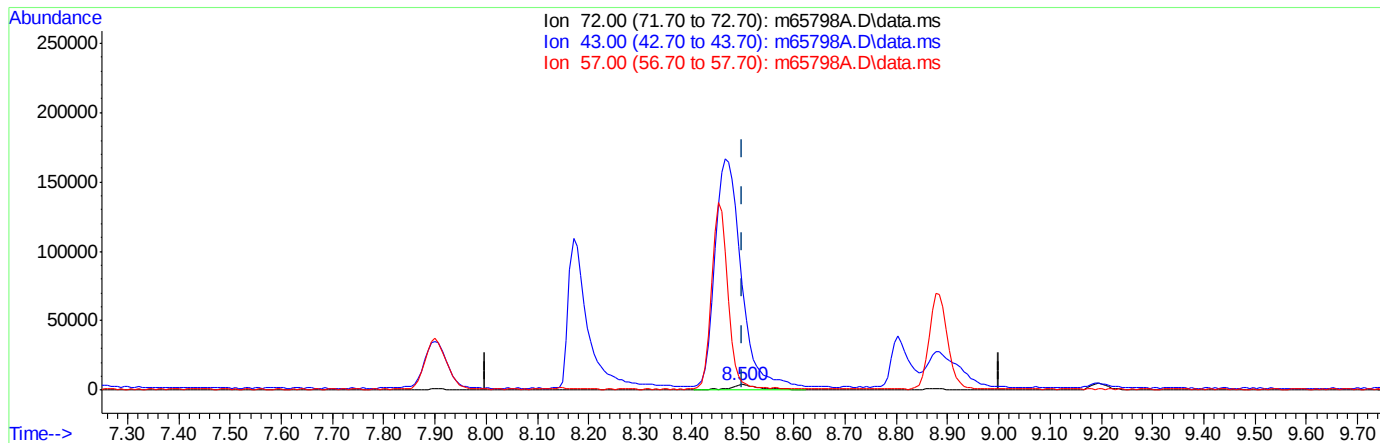
response 19843

Ion	Exp%	Act%
54.00	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\M140529S\
Data File : m65798A.D
Acq On : 29 May 2014 5:39 pm
Operator : krystend
Sample : ICV2318-50
Misc : MS31905,MSM2318,5,,,5,1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jun 09 15:41:22 2014
Quant Method : C:\msdchem\1\methods\M140529D0DS.M
Quant Title : SW-846 Method 8260
QLast Update : Mon Jun 09 15:38:38 2014
Response via : Initial Calibration



TIC: m65798A.D\data.ms

(30) 2-butanone (P)

8.500min (-0.000) 38.57ug/kg

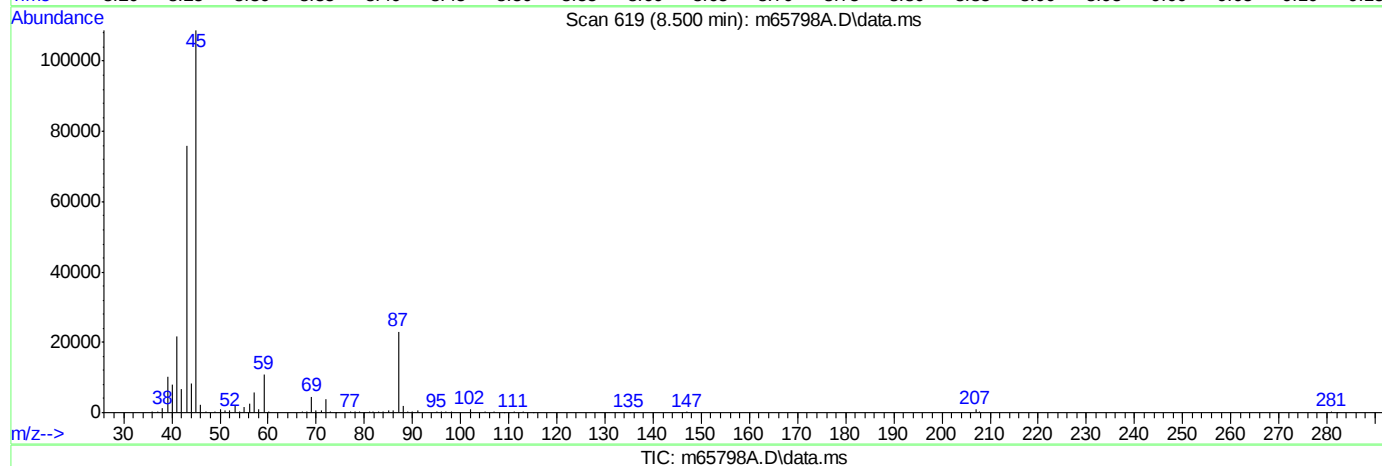
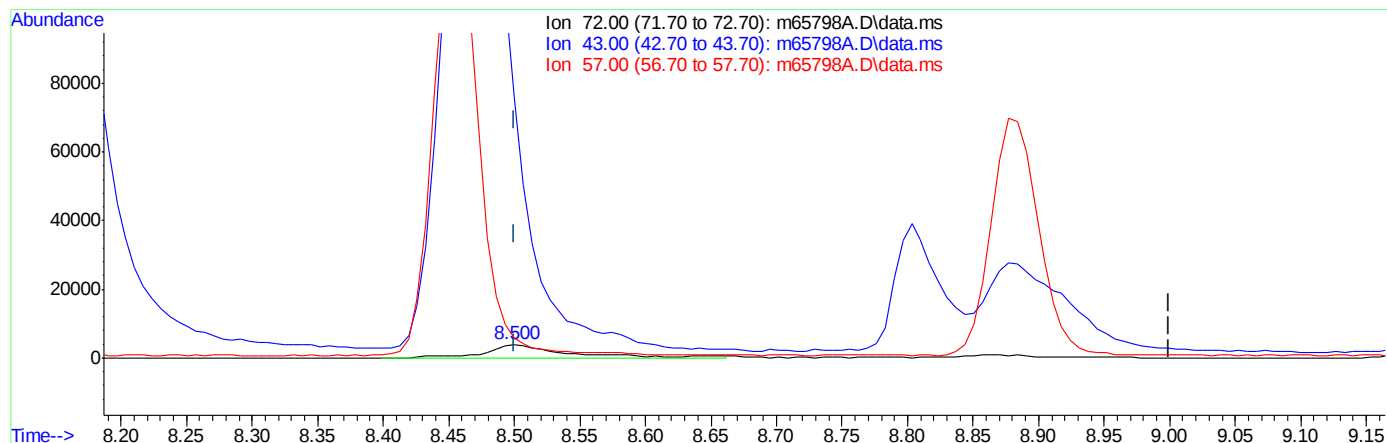
response 16304

Ion	Exp%	Act%
72.00	100	100
43.00	1666.90	1838.52#
57.00	127.50	126.72
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\M140529S\
Data File : m65798A.D
Acq On : 29 May 2014 5:39 pm
Operator : krystend
Sample : ICV2318-50
Misc : MS31905,MSM2318,5,,,5,1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jun 09 15:41:22 2014
Quant Method : C:\msdchem\1\methods\M140529D0DS.M
Quant Title : SW-846 Method 8260
QLast Update : Mon Jun 09 15:38:38 2014
Response via : Initial Calibration



(30) 2-butanone (P)

8.500min (-0.000) 41.77ug/kg m

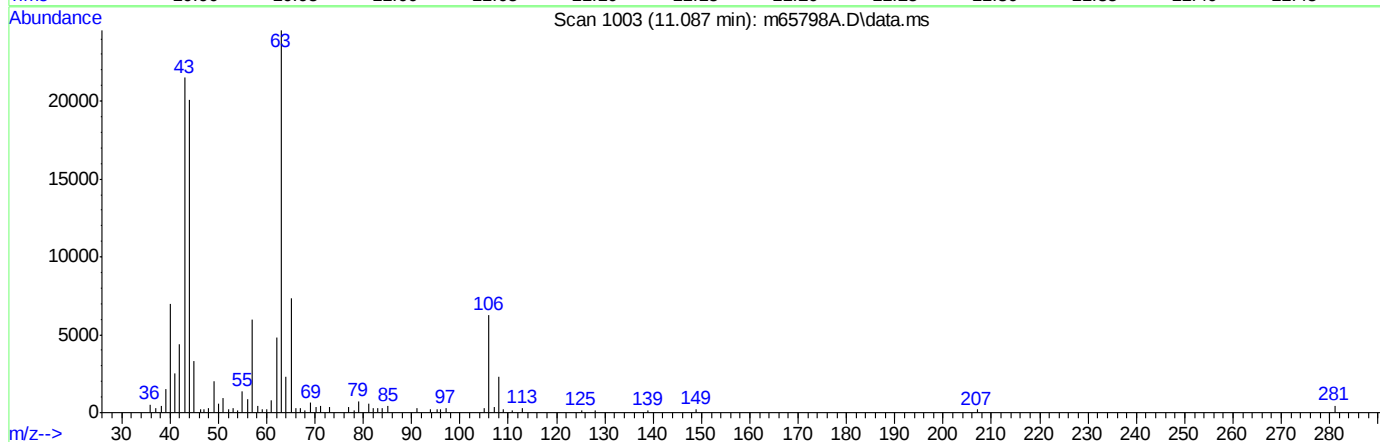
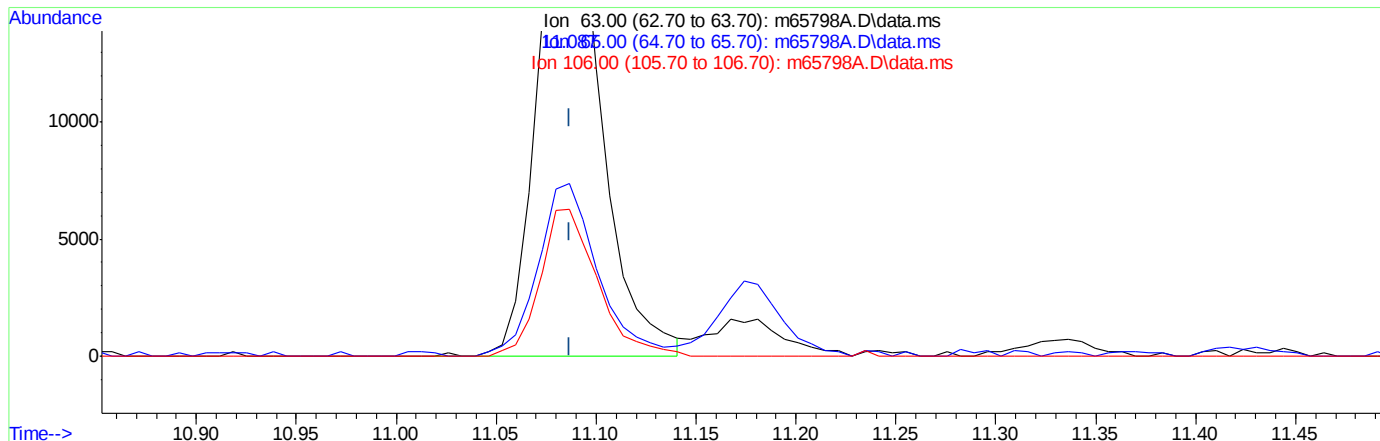
response 17659

Ion	Exp%	Act%
72.00	100	100
43.00	1666.90	1913.79#
57.00	127.50	147.87
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\M140529S\
Data File : m65798A.D
Acq On : 29 May 2014 5:39 pm
Operator : krystend
Sample : ICV2318-50
Misc : MS31905,MSM2318,5,,,5,1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jun 09 15:41:22 2014
Quant Method : C:\msdchem\1\methods\M140529D0DS.M
Quant Title : SW-846 Method 8260
QLast Update : Mon Jun 09 15:38:38 2014
Response via : Initial Calibration



TIC: m65798A.D\data.ms

(56) 2-chloroethyl vinyl ether (P)

11.087min (-0.000) 39.05ug/kg

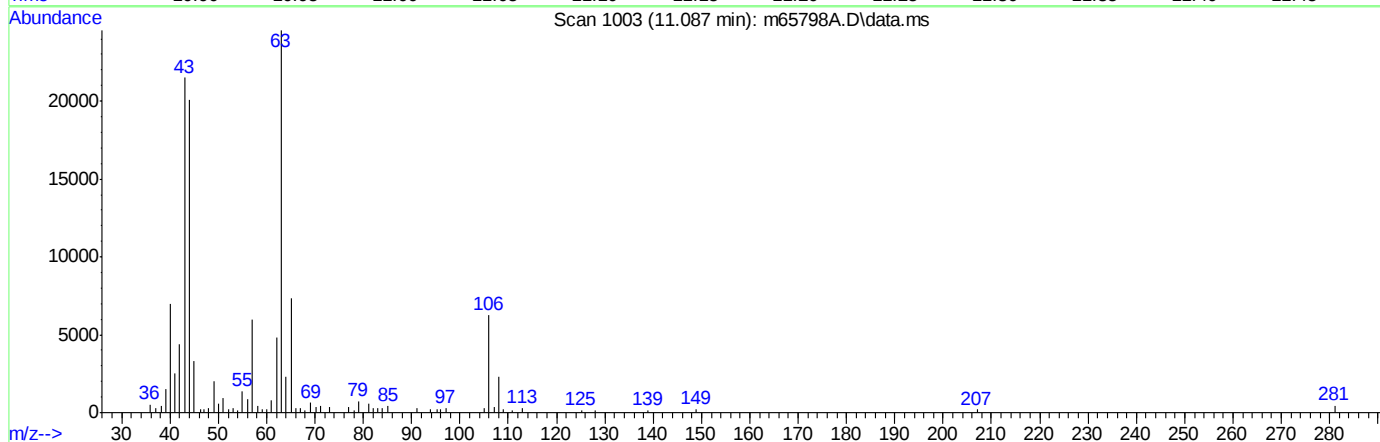
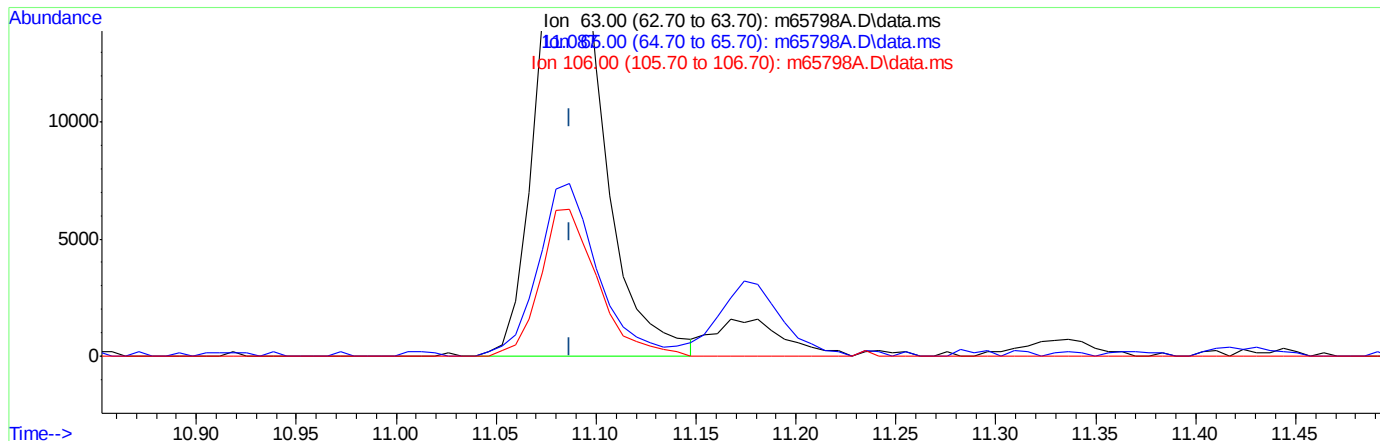
response 48273

Ion	Exp%	Act%
63.00	100	100
65.00	31.50	32.30
106.00	25.20	25.86
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\M140529S\
Data File : m65798A.D
Acq On : 29 May 2014 5:39 pm
Operator : krystend
Sample : ICV2318-50
Misc : MS31905,MSM2318,5,,,5,1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jun 09 15:41:22 2014
Quant Method : C:\msdchem\1\methods\M140529D0DS.M
Quant Title : SW-846 Method 8260
QLast Update : Mon Jun 09 15:38:38 2014
Response via : Initial Calibration



TIC: m65798A.D\data.ms

(56) 2-chloroethyl vinyl ether (P)

11.087min (-0.000) 39.23ug/kg m

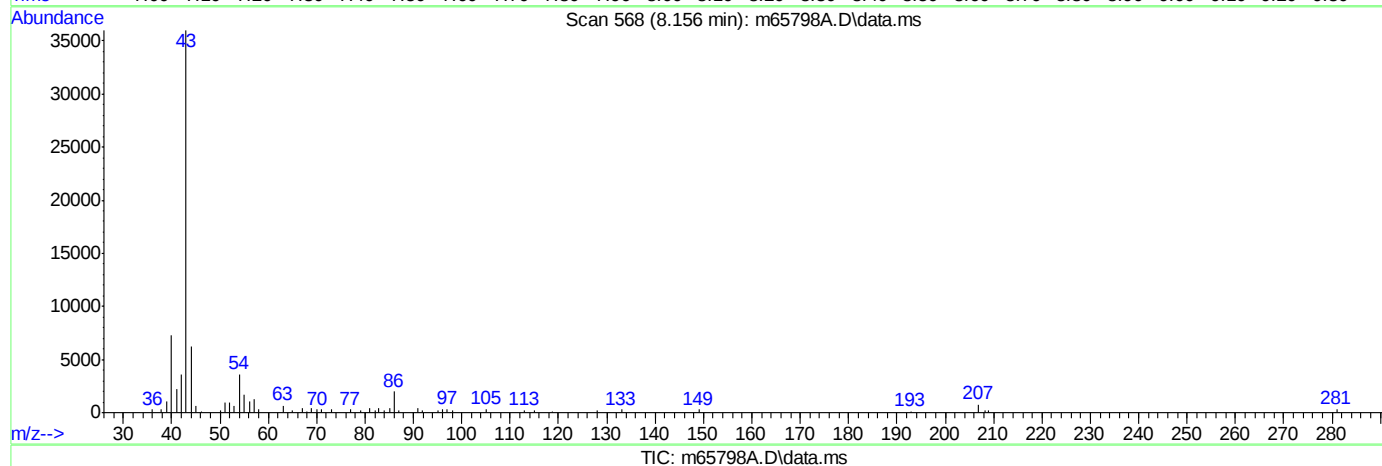
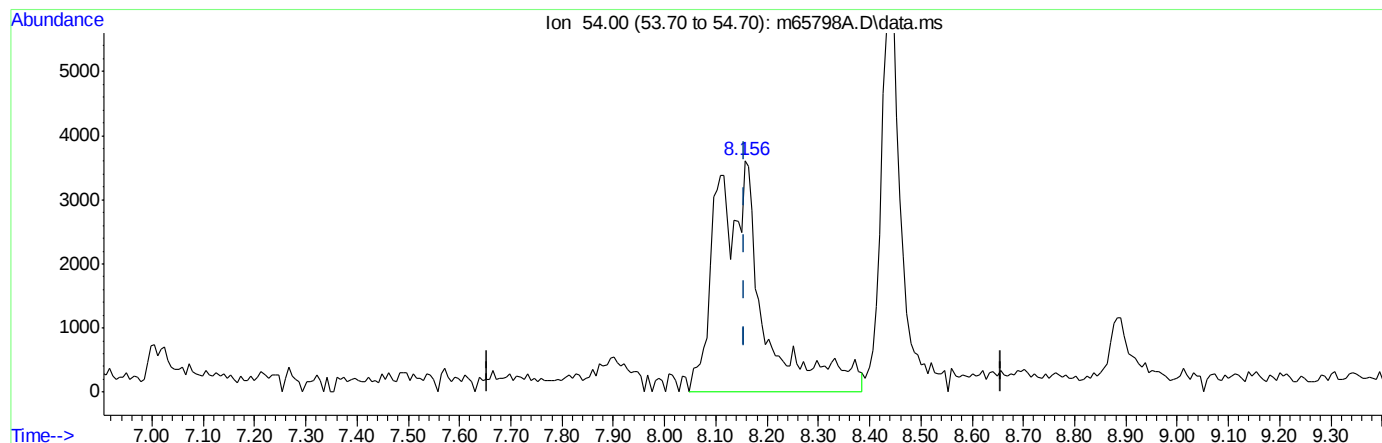
response 48498

Ion	Exp%	Act%
63.00	100	100
65.00	31.50	32.15
106.00	25.20	25.74
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\M140529S\
Data File : m65798A.D
Acq On : 29 May 2014 5:39 pm
Operator : krystend
Sample : ICV2318-50
Misc : MS31905,MSM2318,5,,,5,1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jun 09 16:03:06 2014
Quant Method : C:\msdchem\1\methods\M140529D0DS.M
Quant Title : SW-846 Method 8260
QLast Update : Mon Jun 09 16:02:18 2014
Response via : Initial Calibration



(25) propionitrile (P)

8.156min (+0.000) 60.03ug/kg

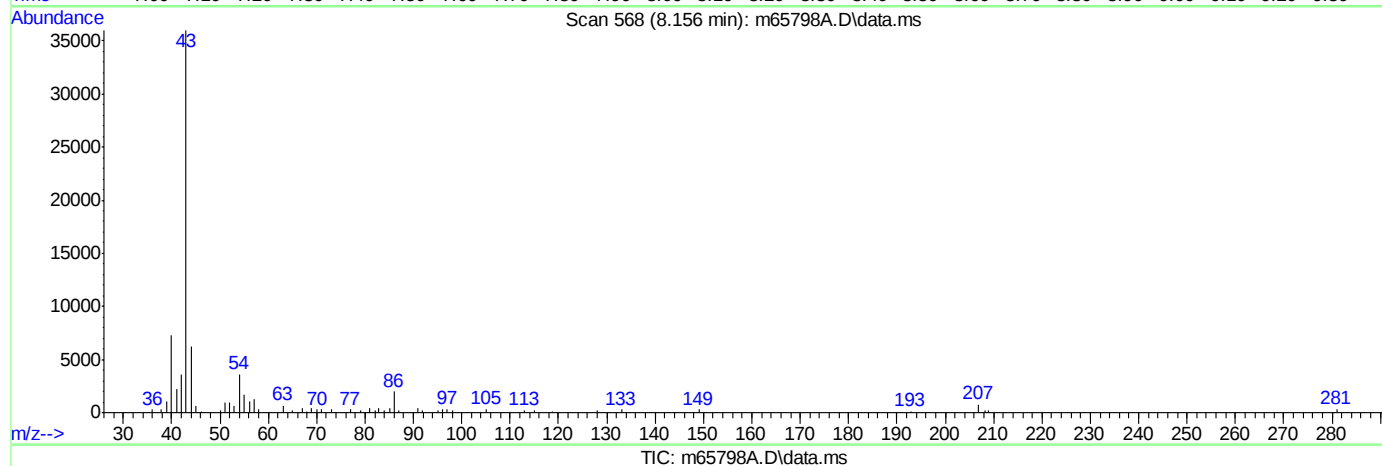
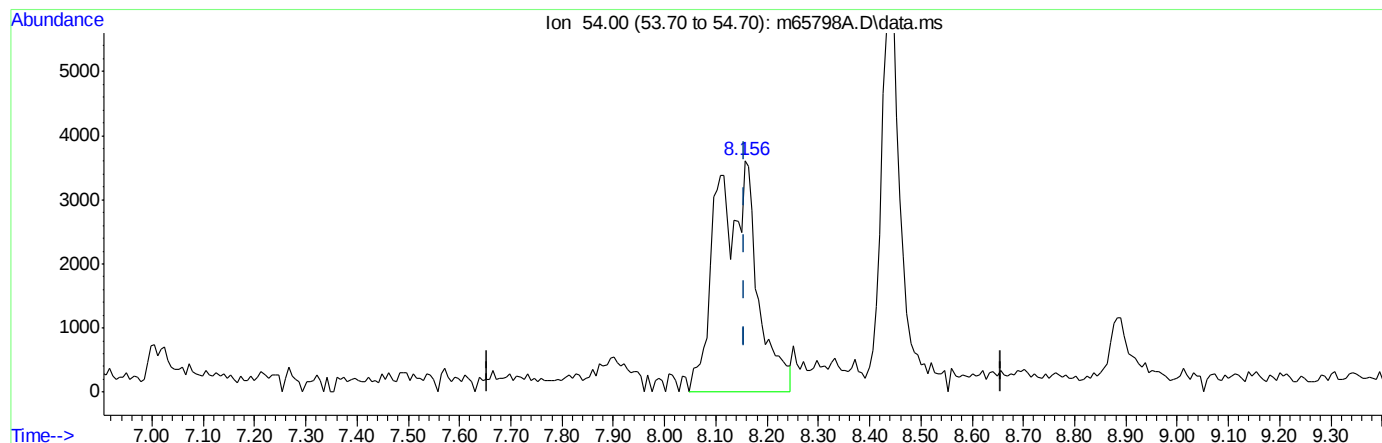
response 23329

Ion	Exp%	Act%
54.00	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\M140529S\
Data File : m65798A.D
Acq On : 29 May 2014 5:39 pm
Operator : krystend
Sample : ICV2318-50
Misc : MS31905,MSM2318,5,,,5,1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jun 09 16:03:06 2014
Quant Method : C:\msdchem\1\methods\M140529D0DS.M
Quant Title : SW-846 Method 8260
QLast Update : Mon Jun 09 16:02:18 2014
Response via : Initial Calibration



(25) propionitrile (P)

8.156min (+0.000) 51.06ug/kg m

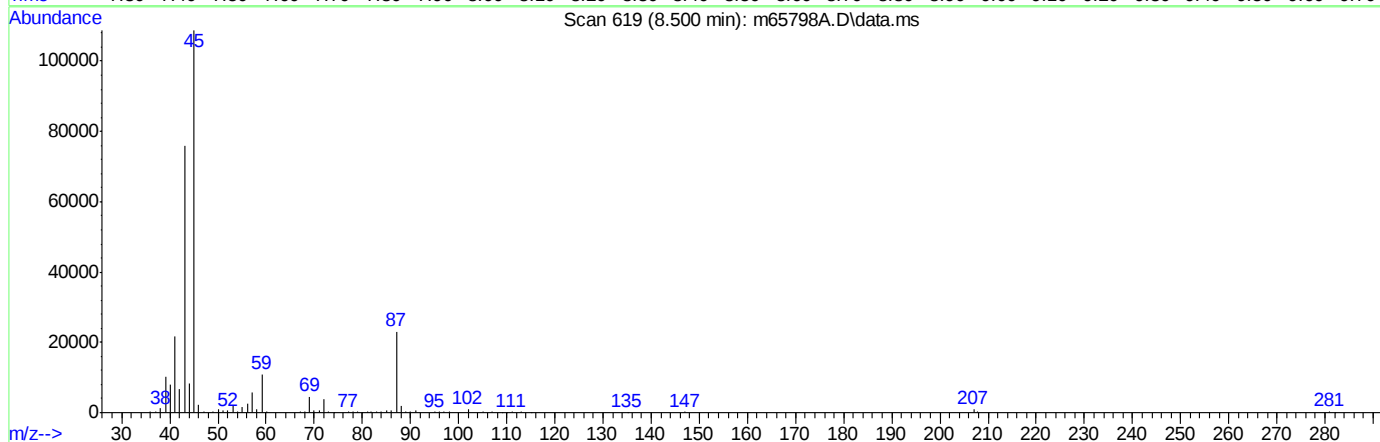
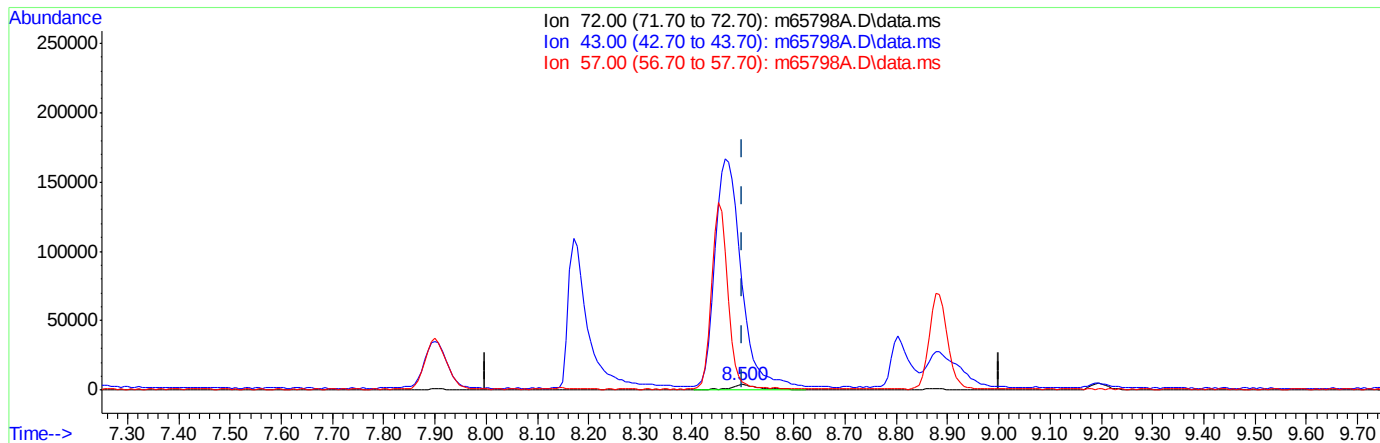
response 19843

Ion	Exp%	Act%
54.00	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\M140529S\
Data File : m65798A.D
Acq On : 29 May 2014 5:39 pm
Operator : krystend
Sample : ICV2318-50
Misc : MS31905,MSM2318,5,,,5,1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jun 09 16:03:06 2014
Quant Method : C:\msdchem\1\methods\M140529D0DS.M
Quant Title : SW-846 Method 8260
QLast Update : Mon Jun 09 16:02:18 2014
Response via : Initial Calibration



TIC: m65798A.D\data.ms

(30) 2-butanone (P)

8.500min (-0.000) 38.57ug/kg

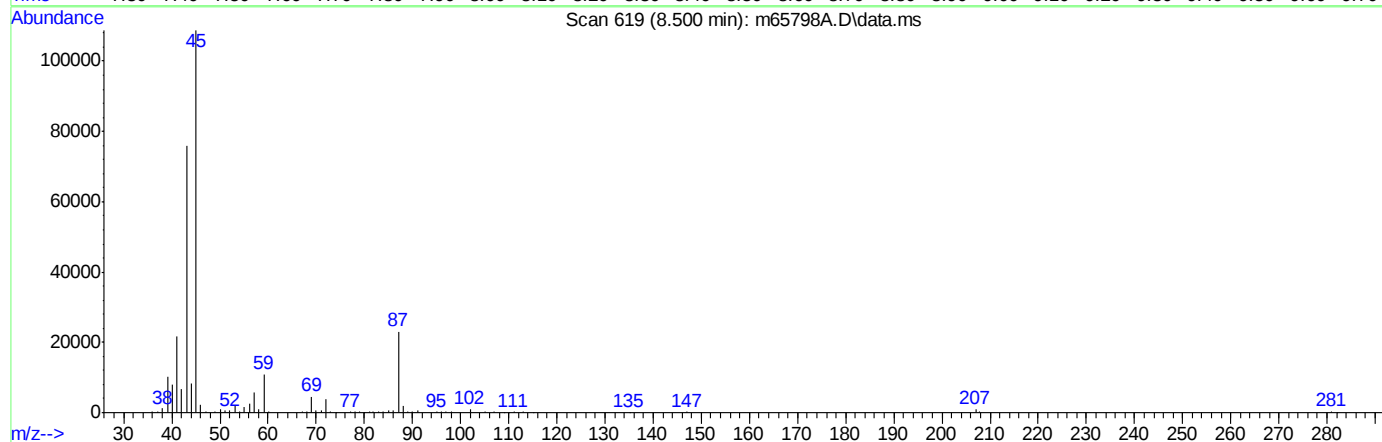
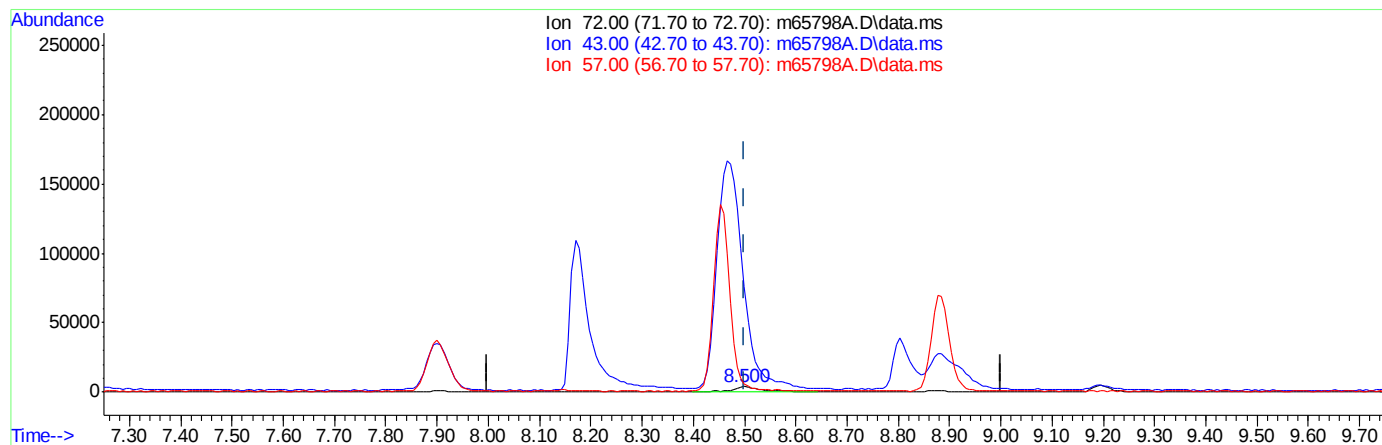
response 16304

Ion	Exp%	Act%
72.00	100	100
43.00	1666.90	1838.52#
57.00	127.50	126.72
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\M140529S\
Data File : m65798A.D
Acq On : 29 May 2014 5:39 pm
Operator : krystend
Sample : ICV2318-50
Misc : MS31905,MSM2318,5,,,5,1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jun 09 16:03:06 2014
Quant Method : C:\msdchem\1\methods\M140529D0DS.M
Quant Title : SW-846 Method 8260
QLast Update : Mon Jun 09 16:02:18 2014
Response via : Initial Calibration



TIC: m65798A.D\data.ms

(30) 2-butanone (P)

8.500min (-0.000) 40.14ug/kg m

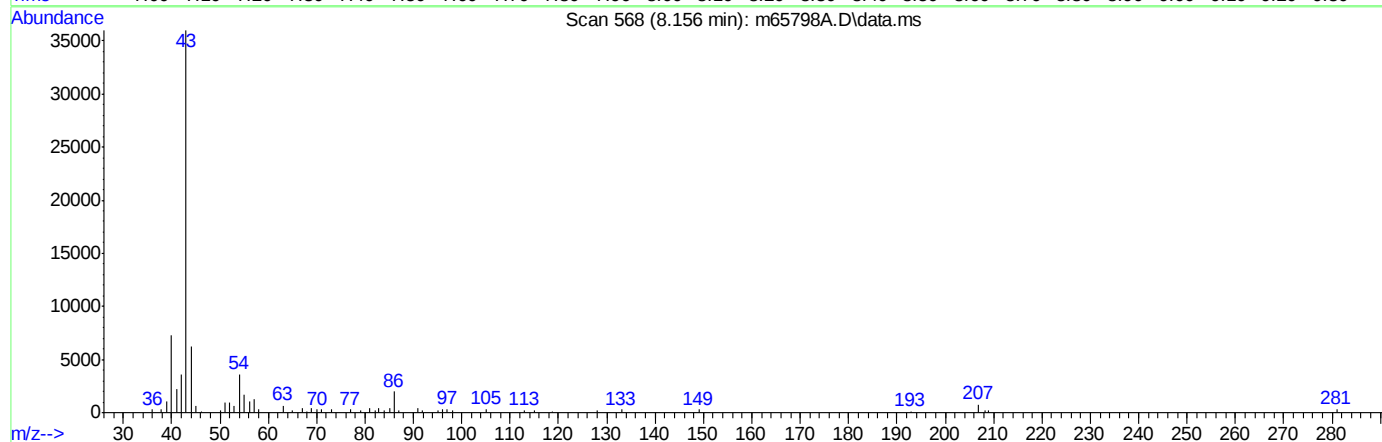
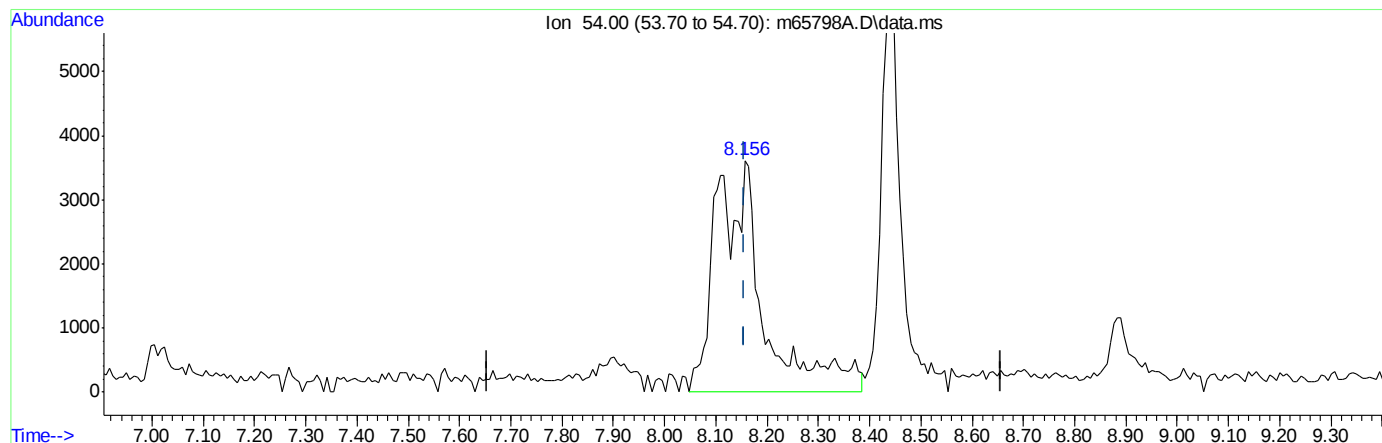
response 16969

Ion	Exp%	Act%
72.00	100	100
43.00	1666.90	1913.79#
57.00	127.50	147.87
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\M140529S\
Data File : m65798A.D
Acq On : 29 May 2014 5:39 pm
Operator : krystend
Sample : ICV2333-50
Misc : MS31905,MSM2333,5,,,5,1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jun 11 15:07:23 2014
Quant Method : C:\msdchem\1\methods\M140529D0DS.M
Quant Title : SW-846 Method 8260
QLast Update : Wed Jun 11 13:34:57 2014
Response via : Initial Calibration



TIC: m65798A.D\data.ms

(25) propionitrile (P)

8.156min (+0.000) 60.03ug/kg

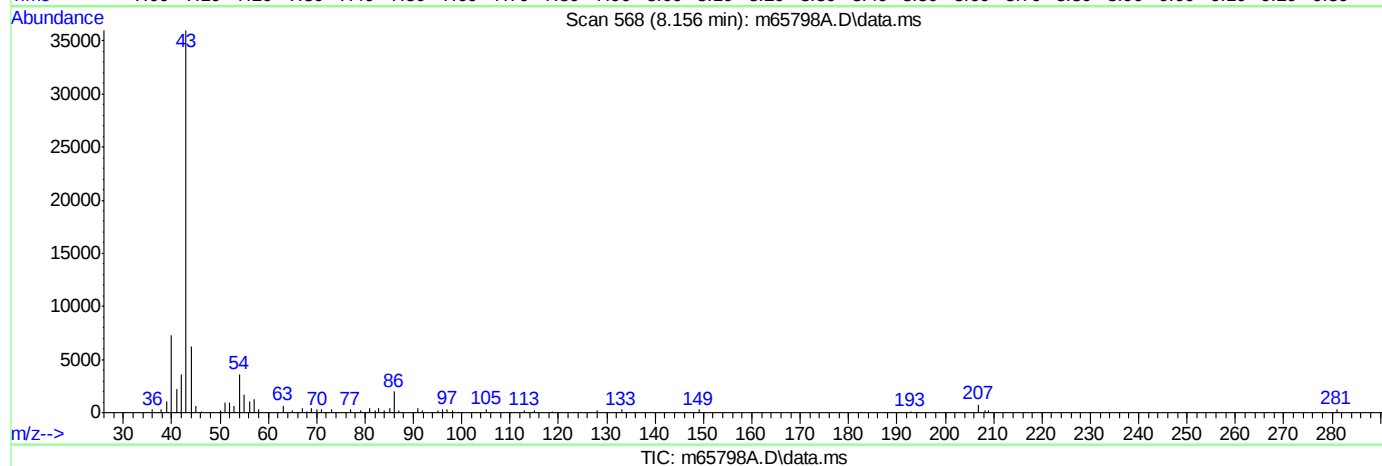
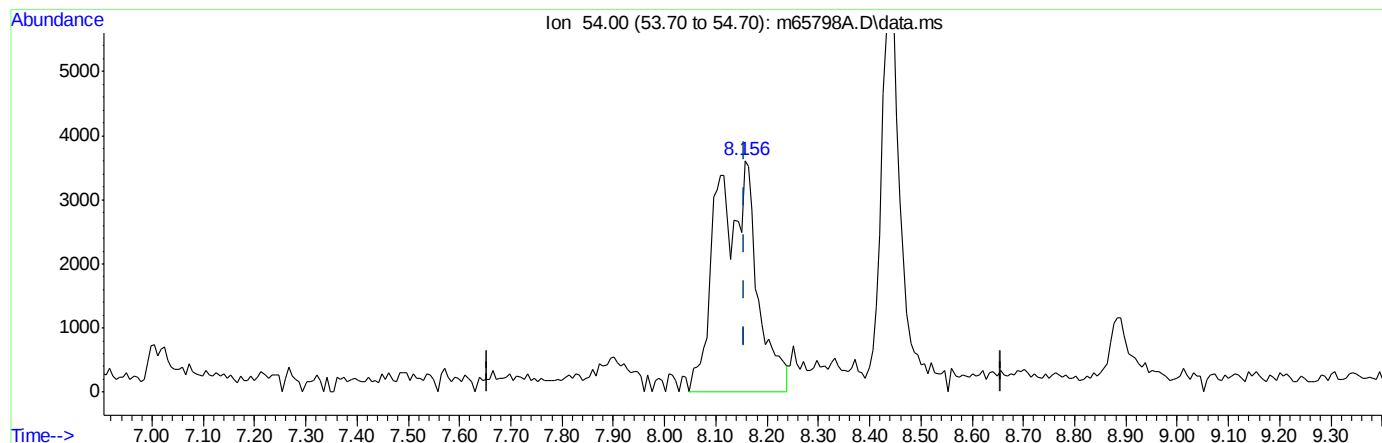
response 23329

Ion	Exp%	Act%
54.00	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\M140529S\
Data File : m65798A.D
Acq On : 29 May 2014 5:39 pm
Operator : krystend
Sample : ICV2333-50
Misc : MS31905,MSM2333,5,,,5,1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jun 11 15:07:23 2014
Quant Method : C:\msdchem\1\methods\M140529D0DS.M
Quant Title : SW-846 Method 8260
QLast Update : Wed Jun 11 13:34:57 2014
Response via : Initial Calibration



(25) propionitrile (P)

8.156min (+0.000) 50.64ug/kg m

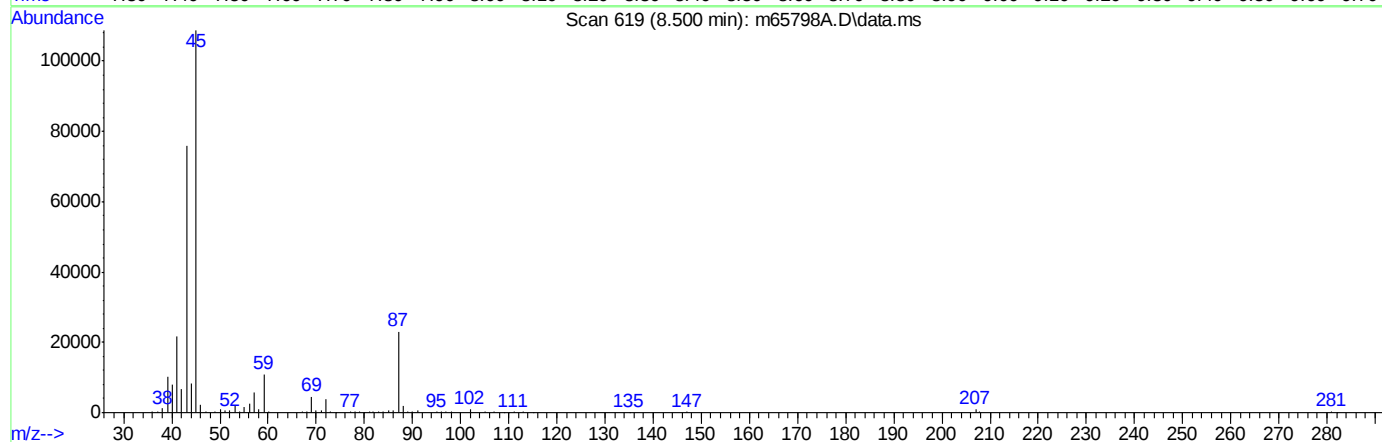
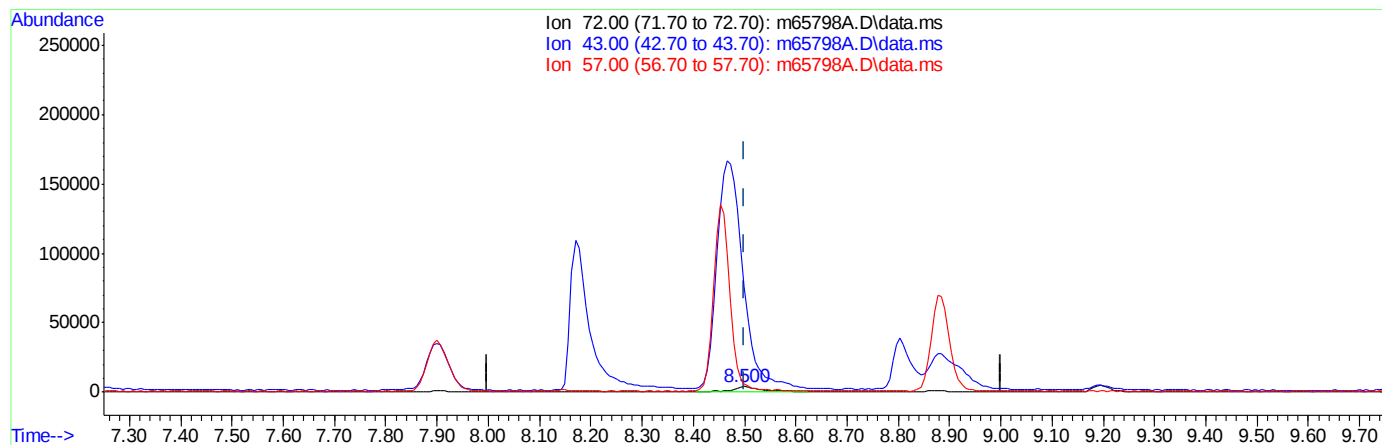
response 19679

Ion	Exp%	Act%
54.00	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\M140529S\
Data File : m65798A.D
Acq On : 29 May 2014 5:39 pm
Operator : krystend
Sample : ICV2333-50
Misc : MS31905,MSM2333,5,,,5,1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jun 11 15:07:23 2014
Quant Method : C:\msdchem\1\methods\M140529D0DS.M
Quant Title : SW-846 Method 8260
QLast Update : Wed Jun 11 13:34:57 2014
Response via : Initial Calibration



TIC: m65798A.D\data.ms

(30) 2-butanone (P)

8.500min (-0.000) 38.57ug/kg

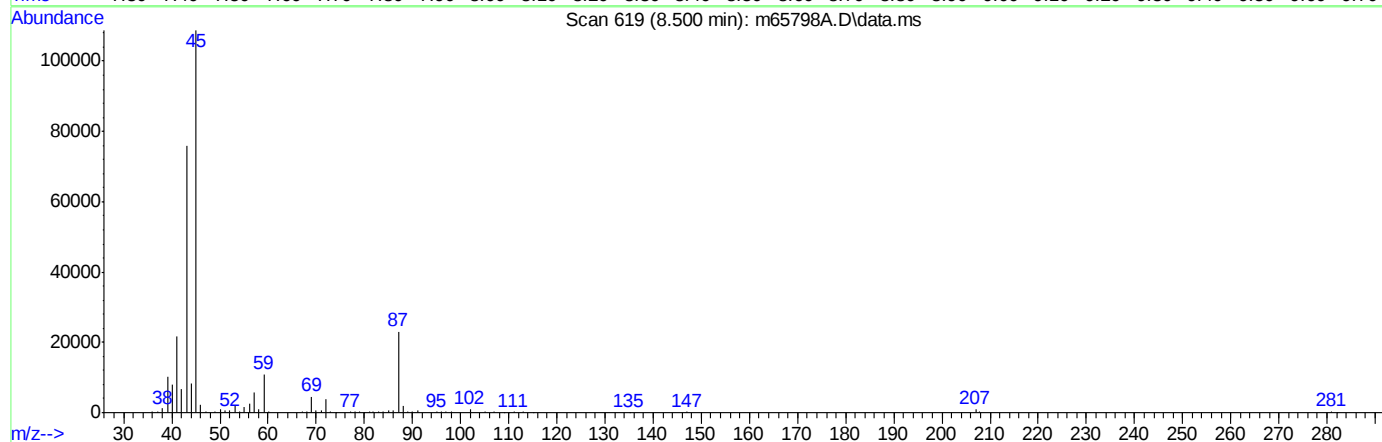
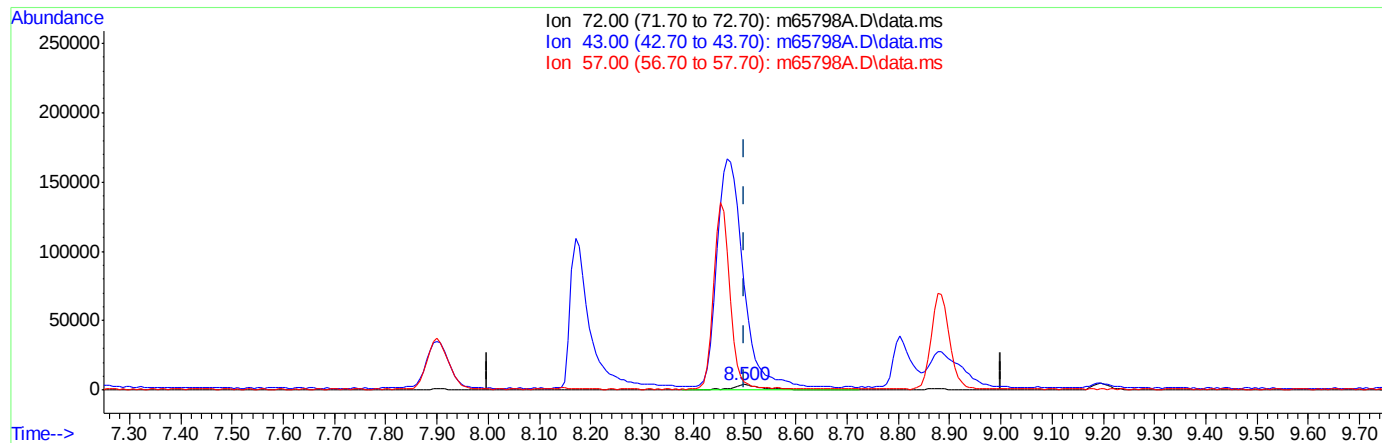
response 16304

Ion	Exp%	Act%
72.00	100	100
43.00	1666.90	1838.52#
57.00	127.50	126.72
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\M140529S\
Data File : m65798A.D
Acq On : 29 May 2014 5:39 pm
Operator : krystend
Sample : ICV2333-50
Misc : MS31905,MSM2333,5,,,5,1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jun 11 15:07:23 2014
Quant Method : C:\msdchem\1\methods\M140529D0DS.M
Quant Title : SW-846 Method 8260
QLast Update : Wed Jun 11 13:34:57 2014
Response via : Initial Calibration



TIC: m65798A.D\data.ms

(30) 2-butanone (P)

8.500min (-0.000) 43.61ug/kg m

response 18434

Ion	Exp%	Act%
72.00	100	100
43.00	1666.90	1913.79#
57.00	127.50	147.87
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\M140715S\
 Data File : m66790.D
 Acq On : 15 Jul 2014 9:04 pm
 Operator : krystend
 Sample : cc2333-50
 Misc : MS32287,MSM2361,5,,,5,1
 ALS Vial : 26 Sample Multiplier: 1

Quant Time: Jul 16 10:02:26 2014
 Quant Method : C:\msdchem\1\methods\M140529D0DS.M
 Quant Title : SW-846 Method 8260
 QLast Update : Wed Jun 11 13:34:57 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	6.856	65	69873	500.00	ug/kg	0.00
4) pentafluorobenzene	9.349	168	199121	50.00	ug/kg	0.00
43) 1,4-difluorobenzene	10.231	114	320492	50.00	ug/kg	0.00
66) chlorobenzene-d5	13.505	82	138637	50.00	ug/kg	0.00
80) 1,4-dichlorobenzene-d4	16.072	152	178447	50.00	ug/kg	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	8.978	113	94109	46.69	ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	93.38%		
60) toluene-d8 (s)	12.036	98	356411	59.10	ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	118.20%		
82) bromofluorobenzene (s)	14.738	95	134236	42.85	ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	85.70%		
Target Compounds						
					Qvalue	
2) tertiary butyl alcohol	6.937	59	131722	534.17	ug/kg	90
3) Ethanol	5.671	45	174458	6201.30	ug/kg	98
5) dichlorodifluoromethane	4.445	85	174205	75.89	ug/kg	100
6) chloromethane	4.701	50	263755	65.64	ug/kg	98
7) vinyl chloride	4.970	62	191944m	59.85	ug/kg	
8) bromomethane	5.502	96	126705	60.63	ug/kg	100
9) chloroethane	5.664	64	87698	55.22	ug/kg	96
10) ethyl ether	6.567	59	89032	51.48	ug/kg	98
11) acetonitrile	6.351	41	16555	34.68	ug/kg#	32
12) trichlorofluoromethane	6.337	101	222378	53.83	ug/kg	100
13) freon-113	7.159	101	154612	52.70	ug/kg	96
14) acrolein	6.317	56	49048	305.44	ug/kg	100
15) 1,1-dichloroethene	6.930	96	121299	57.00	ug/kg	100
16) acetone	6.472	58	16192	37.87	ug/kg#	77
17) Methyl Acetate	7.132	43	76955	47.31	ug/kg	98
18) methylene chloride	7.085	84	135114	59.33	ug/kg	99
19) methyl tert butyl ether	7.900	73	287432	50.15	ug/kg	98
20) acrylonitrile	6.998	53	38552	53.02	ug/kg	99
21) allyl chloride	7.186	41	259439	56.67	ug/kg	96
22) trans-1,2-dichloroethene	7.799	96	134626	58.26	ug/kg	98
23) iodomethane	6.991	142	279196	55.94	ug/kg	97
24) carbon disulfide	7.375	76	418125	50.68	ug/kg	100
25) propionitrile	8.109	54	14559	51.63	ug/kg	100
26) vinyl acetate	8.170	43	309533	76.19	ug/kg	100
27) chloroprene	8.439	53	194058	52.91	ug/kg	96
28) di-isopropyl ether	8.480	45	539521	56.55	ug/kg	96
29) methacrylonitrile	8.601	41	62754	51.70	ug/kg	96
30) 2-butanone	8.500	72	11663	38.02	ug/kg#	76
31) Hexane	8.459	41	239426	47.13	ug/kg	99
32) 1,1-dichloroethane	8.062	63	240771	52.32	ug/kg	99
33) tert-butyl ethyl ether	8.877	59	400946	52.92	ug/kg	98
34) isobutyl alcohol	8.877	43	81167	243.15	ug/kg	94
35) 2,2-dichloropropane	8.944	77	189063	50.80	ug/kg	97
36) cis-1,2-dichloroethene	8.648	96	145761	55.44	ug/kg	96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\M140715S\
 Data File : m66790.D
 Acq On : 15 Jul 2014 9:04 pm
 Operator : krystend
 Sample : cc2333-50
 Misc : MS32287,MSM2361,5,,,5,1
 ALS Vial : 26 Sample Multiplier: 1

Quant Time: Jul 16 10:02:26 2014
 Quant Method : C:\msdchem\1\methods\M140529D0DS.M
 Quant Title : SW-846 Method 8260
 QLast Update : Wed Jun 11 13:34:57 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
37) ethyl acetate	8.877	43	81167	48.64	ug/kg	94
38) bromochloromethane	8.816	128	77138	55.98	ug/kg	96
39) chloroform	8.857	83	216995	54.03	ug/kg	98
41) Tetrahydrofuran	9.194	42	36414	52.85	ug/kg	100
42) 1,1,1-trichloroethane	9.625	97	222817	52.36	ug/kg	96
44) Cyclohexane	9.915	56	294549	50.46	ug/kg	100
45) carbon tetrachloride	9.995	117	219204	50.90	ug/kg	98
46) 1,1-dichloropropene	9.800	75	165836	49.16	ug/kg	98
47) benzene	10.029	78	477019	55.27	ug/kg	99
48) 1,2-dichloroethane	9.524	62	138726	49.74	ug/kg	98
49) tert-amyl methyl ether	10.144	73	302907	51.90	ug/kg	100
50) heptane	10.507	43	267183	46.69	ug/kg	98
51) trichloroethene	10.656	95	141356	49.03	ug/kg	98
52) 1,2-dichloropropane	10.622	63	138230	52.20	ug/kg	99
53) dibromomethane	10.595	93	68621	54.05	ug/kg	97
54) bromodichloromethane	10.709	83	152516	52.09	ug/kg	98
55) Methylcyclohexane	11.174	83	245181	49.54	ug/kg	98
56) 2-chloroethyl vinyl ether	11.087	63	37397	40.12	ug/kg	98
57) methyl methacrylate	10.797	69	55338	46.14	ug/kg	100
58) 1,4-dioxane	10.804	88	5411	230.24	ug/kg	78
59) cis-1,3-dichloropropene	11.329	75	175246	50.27	ug/kg	96
61) 4-methyl-2-pentanone	11.423	43	124215	50.73	ug/kg	95
62) toluene	12.111	92	316436	51.95	ug/kg	100
63) trans-1,3-dichloropropene	11.754	75	138605	49.30	ug/kg	92
64) 1,1,2-trichloroethane	11.929	83	75235	51.24	ug/kg	95
65) ethyl methacrylate	12.124	69	120744	49.60	ug/kg	97
67) tetrachloroethene	12.858	166	152940	49.92	ug/kg	98
68) 1,3-dichloropropane	12.164	76	142539	49.79	ug/kg	99
69) dibromochloromethane	12.461	129	140233	54.09	ug/kg	100
70) 1,2-dibromoethane	12.710	107	100618	50.14	ug/kg	99
71) 2-hexanone	12.286	43	91175	41.32	ug/kg	99
72) chlorobenzene	13.539	112	401106	52.13	ug/kg	98
73) 1,1,1,2-tetrachloroethane	13.458	131	167457	54.11	ug/kg	99
74) ethylbenzene	13.714	91	640973	50.76	ug/kg	99
75) m,p-xylene	13.896	106	523589	100.96	ug/kg	98
76) o-xylene	14.313	106	269678	51.98	ug/kg	99
77) styrene	14.239	104	426608	50.49	ug/kg	97
78) bromoform	14.071	173	89928	55.43	ug/kg	98
79) trans-1,4-dichloro-2-b...	14.462	53	38682	44.28	ug/kg#	81
81) isopropylbenzene	14.677	105	717468	50.02	ug/kg	100
83) bromobenzene	14.967	156	178688	50.49	ug/kg	93
84) 1,1,2,2-tetrachloroethane	14.320	83	127621	49.19	ug/kg	99
85) 1,2,3-trichloropropane	14.468	75	140155	46.66	ug/kg	99
86) n-propylbenzene	15.122	91	787990	47.65	ug/kg	99
87) 2-chlorotoluene	15.243	91	459545	47.76	ug/kg	96
88) 4-chlorotoluene	15.317	91	466100	47.18	ug/kg	97
89) 1,3,5-trimethylbenzene	15.398	105	647632	48.70	ug/kg	100
90) tert-butylbenzene	15.701	91	321149	47.27	ug/kg	97
91) 1,2,4-trimethylbenzene	15.809	105	628235	48.29	ug/kg	100
92) sec-butylbenzene	15.923	105	854378	49.57	ug/kg	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\M140715\
 Data File : m66790.D
 Acq On : 15 Jul 2014 9:04 pm
 Operator : krystend
 Sample : cc2333-50
 Misc : MS32287,MSM2361,5,,,5,1
 ALS Vial : 26 Sample Multiplier: 1

Quant Time: Jul 16 10:02:26 2014
 Quant Method : C:\msdchem\1\methods\M140529D0DS.M
 Quant Title : SW-846 Method 8260
 QLast Update : Wed Jun 11 13:34:57 2014
 Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
93)	1,3-dichlorobenzene	16.031	146	380081	49.78	ug/kg	99
94)	p-isopropyltoluene	16.098	119	770000	48.09	ug/kg	98
95)	1,4-dichlorobenzene	16.098	146	387468	49.15	ug/kg	97
96)	1,2-dichlorobenzene	16.469	146	378041	51.03	ug/kg	98
97)	n-butylbenzene	16.516	91	642111	46.09	ug/kg	100
98)	1,2-dibromo-3-chloropr...	16.947	75	27972	44.71	ug/kg#	75
99)	1,3,5-trichlorobenzene	17.756	180	290805	45.97	ug/kg	99
100)	1,2,4-trichlorobenzene	18.301	180	269261	45.75	ug/kg	100
101)	hexachlorobutadiene	18.598	225	136999	45.61	ug/kg	98
102)	naphthalene	18.577	128	694843	49.41	ug/kg	100
103)	1,2,3-trichlorobenzene	18.786	180	259091	47.83	ug/kg	97
104)	2-methylnaphthalene	19.972	142	202337	23.17	ug/kg	99
105)	1-methylnaphthalene	20.228	TIC	577836	22.88	ug/kg	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

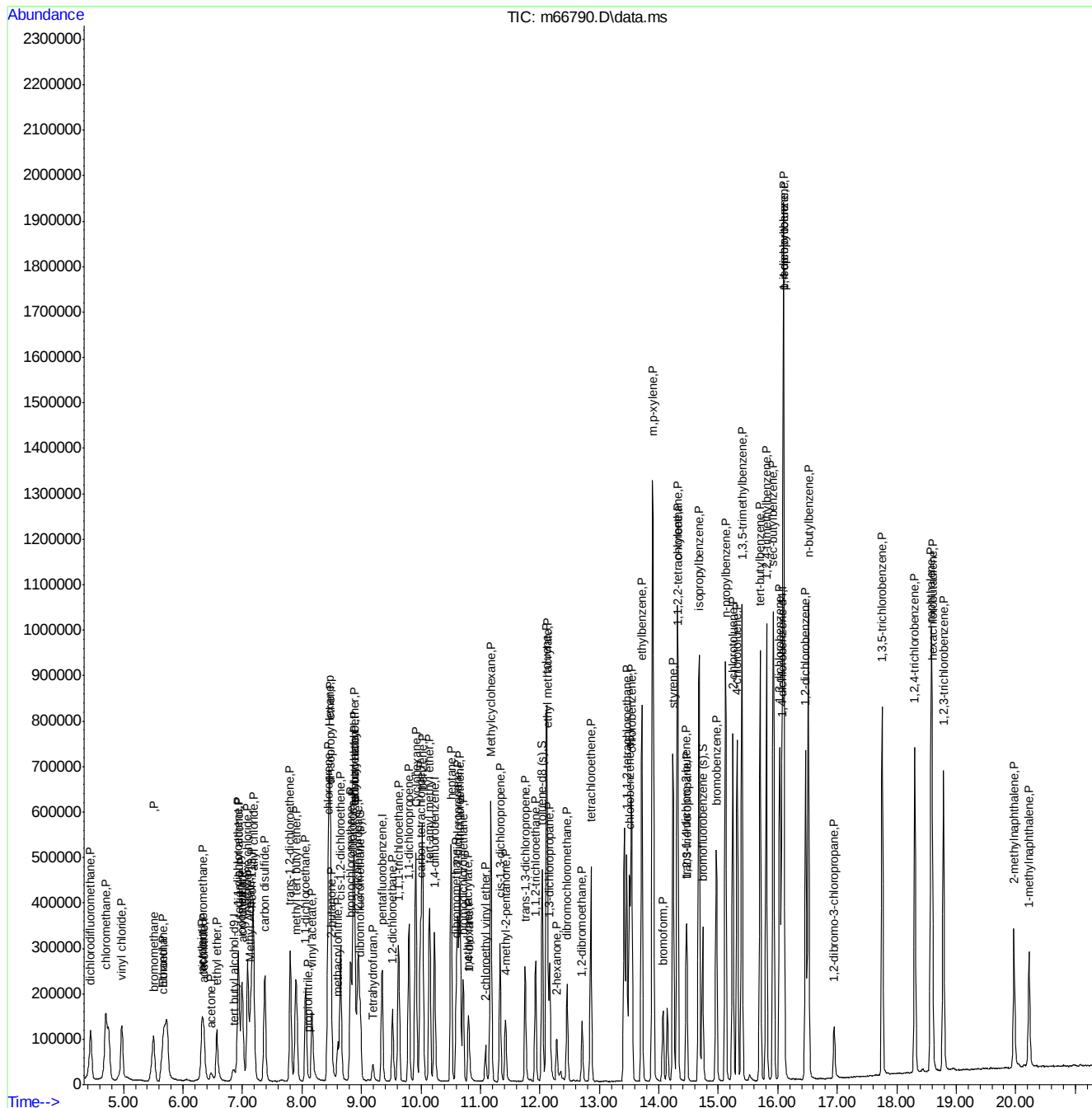
7.6.11

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\M140715S\
Data File : m66790.D
Acq On : 15 Jul 2014 9:04 pm
Operator : krystend
Sample : cc2333-50
Misc : MS32287,MSM2361,5,,,5,1
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Jul 16 10:02:26 2014
Quant Method : C:\msdchem\1\methods\M140529D0DS.M
Quant Title : SW-846 Method 8260
QLast Update : Wed Jun 11 13:34:57 2014
Response via : Initial Calibration



M140529D0DS.M Wed Jul 16 12:41:35 2014

Page: 4

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\M140715S\
 Data File : m66814.D
 Acq On : 16 Jul 2014 8:51 am
 Operator : krystend
 Sample : ecc2333-50
 Misc : MS32289,MSM2361,5,,,5,1
 ALS Vial : 50 Sample Multiplier: 1

Quant Time: Jul 16 09:55:37 2014
 Quant Method : C:\msdchem\1\methods\M140529D0DS.M
 Quant Title : SW-846 Method 8260
 QLast Update : Wed Jun 11 13:34:57 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	6.856	65	71616	500.00	ug/kg	0.00
4) pentafluorobenzene	9.349	168	199477	50.00	ug/kg	0.00
43) 1,4-difluorobenzene	10.231	114	324646	50.00	ug/kg	0.00
66) chlorobenzene-d5	13.505	82	141059	50.00	ug/kg	0.00
80) 1,4-dichlorobenzene-d4	16.072	152	179254	50.00	ug/kg	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	8.985	113	95048	47.08	ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	94.16%		
60) toluene-d8 (s)	12.043	98	358766	58.70	ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	117.40%		
82) bromofluorobenzene (s)	14.738	95	134927	42.88	ug/kg	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	85.76%		
Target Compounds						
						Qvalue
2) tertiary butyl alcohol	6.944	59	137076	542.35	ug/kg	98
3) Ethanol	5.677	45	185129	6420.46	ug/kg	98
5) dichlorodifluoromethane	4.445	85	155170	67.36	ug/kg	100
6) chloromethane	4.701	50	243479	60.49	ug/kg	99
7) vinyl chloride	4.970	62	175256	54.55	ug/kg	99
8) bromomethane	5.502	96	111292	53.16	ug/kg	98
9) chloroethane	5.671	64	76612	48.16	ug/kg	100
10) ethyl ether	6.567	59	94899	54.77	ug/kg	99
11) acetone	6.344	41	17252	36.07	ug/kg#	38
12) trichlorofluoromethane	6.331	101	199492	48.20	ug/kg	100
13) freon-113	7.159	101	160521	54.62	ug/kg	98
14) acrolein	6.317	56	41742	258.29	ug/kg	91
15) 1,1-dichloroethene	6.930	96	126530	59.39	ug/kg	100
16) acetone	6.486	58	10051	23.47	ug/kg	89
17) Methyl Acetate	7.132	43	90834	55.75	ug/kg	98
18) methylene chloride	7.085	84	141680	62.17	ug/kg	96
19) methyl tert butyl ether	7.900	73	298823	52.05	ug/kg	99
20) acrylonitrile	7.004	53	40110	55.07	ug/kg	97
21) allyl chloride	7.186	41	281483	61.38	ug/kg	98
22) trans-1,2-dichloroethene	7.806	96	140755	60.86	ug/kg	97
23) iodomethane	6.991	142	290166	58.03	ug/kg	100
24) carbon disulfide	7.375	76	431844	52.25	ug/kg	98
25) propionitrile	8.156	54	15379	54.44	ug/kg	100
26) vinyl acetate	8.170	43	287252	70.58	ug/kg	99
27) chloroprene	8.439	53	207435	56.63	ug/kg	97
28) di-isopropyl ether	8.480	45	585197	61.23	ug/kg	94
29) methacrylonitrile	8.601	41	69700	57.32	ug/kg	99
30) 2-butanone	8.507	72	9864	32.10	ug/kg	98
31) Hexane	8.460	41	259953	51.07	ug/kg	97
32) 1,1-dichloroethane	8.062	63	256164	55.56	ug/kg	99
33) tert-butyl ethyl ether	8.884	59	425128	56.01	ug/kg	99
34) isobutyl alcohol	8.877	43	90604	274.62	ug/kg	92
35) 2,2-dichloropropane	8.945	77	184353	49.45	ug/kg	98
36) cis-1,2-dichloroethene	8.648	96	151210	57.41	ug/kg	97

Quantitation Report (QT Reviewed)

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 ALS Vial : 50 Sample Multiplier: 1

Quant Time: Jul 16 09:55:37 2014
 Quant Method : C:\msdchem\1\methods\M140529D0DS.M
 Quant Title : SW-846 Method 8260
 QLast Update : Wed Jun 11 13:34:57 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
37) ethyl acetate	8.877	43	90548	54.89	ug/kg	94
38) bromochloromethane	8.823	128	79983	57.94	ug/kg	98
39) chloroform	8.857	83	229543	57.05	ug/kg	99
41) Tetrahydrofuran	9.194	42	38758	56.15	ug/kg	99
42) 1,1,1-trichloroethane	9.625	97	232977	54.65	ug/kg	97
44) Cyclohexane	9.915	56	305557	51.67	ug/kg	98
45) carbon tetrachloride	9.995	117	229509	52.62	ug/kg	99
46) 1,1-dichloropropene	9.800	75	168808	49.40	ug/kg	97
47) benzene	10.029	78	496960	56.91	ug/kg	100
48) 1,2-dichloroethane	9.524	62	148669	52.62	ug/kg	99
49) tert-amyl methyl ether	10.144	73	313139	52.97	ug/kg	97
50) heptane	10.507	43	283224	48.86	ug/kg	96
51) trichloroethene	10.656	95	146322	50.10	ug/kg	94
52) 1,2-dichloropropane	10.622	63	146513	54.62	ug/kg	99
53) dibromomethane	10.595	93	72072	56.08	ug/kg	95
54) bromodichloromethane	10.710	83	161316	54.39	ug/kg	98
55) Methylcyclohexane	11.181	83	251544	50.18	ug/kg	98
56) 2-chloroethyl vinyl ether	11.087	63	32970	34.91	ug/kg	99
57) methyl methacrylate	10.804	69	57780	47.56	ug/kg	99
58) 1,4-dioxane	10.804	88	5681	238.64	ug/kg	88
59) cis-1,3-dichloropropene	11.329	75	176329	49.93	ug/kg	98
61) 4-methyl-2-pentanone	11.424	43	135793	54.75	ug/kg	94
62) toluene	12.111	92	326606	52.94	ug/kg	99
63) trans-1,3-dichloropropene	11.754	75	136380	47.89	ug/kg	91
64) 1,1,2-trichloroethane	11.929	83	80151	53.89	ug/kg	99
65) ethyl methacrylate	12.124	69	124113	50.33	ug/kg	98
67) tetrachloroethene	12.858	166	152540	48.94	ug/kg	98
68) 1,3-dichloropropane	12.165	76	150660	51.72	ug/kg	100
69) dibromochloromethane	12.461	129	146202	55.43	ug/kg	99
70) 1,2-dibromoethane	12.710	107	105971	51.90	ug/kg	99
71) 2-hexanone	12.286	43	85482	38.07	ug/kg	99
72) chlorobenzene	13.539	112	403973	51.60	ug/kg	100
73) 1,1,1,2-tetrachloroethane	13.458	131	177658	56.42	ug/kg	99
74) ethylbenzene	13.714	91	646324	50.31	ug/kg	98
75) m,p-xylene	13.896	106	530876	100.61	ug/kg	96
76) o-xylene	14.313	106	275115	52.12	ug/kg	96
77) styrene	14.239	104	428017	49.78	ug/kg	96
78) bromoform	14.071	173	92174	55.84	ug/kg	95
79) trans-1,4-dichloro-2-b...	14.462	53	36991	41.52	ug/kg#	82
81) isopropylbenzene	14.677	105	721850	50.10	ug/kg	99
83) bromobenzene	14.967	156	179852	50.59	ug/kg	94
84) 1,1,2,2-tetrachloroethane	14.320	83	134713	51.69	ug/kg	99
85) 1,2,3-trichloropropane	14.468	75	140163	46.46	ug/kg	100
86) n-propylbenzene	15.122	91	771899	46.47	ug/kg	98
87) 2-chlorotoluene	15.243	91	458085	47.39	ug/kg	94
88) 4-chlorotoluene	15.317	91	450311	45.37	ug/kg	99
89) 1,3,5-trimethylbenzene	15.398	105	629435	47.12	ug/kg	99
90) tert-butylbenzene	15.708	91	326926	47.91	ug/kg	93
91) 1,2,4-trimethylbenzene	15.809	105	612942	46.90	ug/kg	100
92) sec-butylbenzene	15.930	105	840552	48.55	ug/kg	100

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Data Path : C:\msdchem\1\data\M140715\
Data File : m66814.D
Acq On : 16 Jul 2014 8:51 am
Operator : krystend
Sample : ecc2333-50
Misc : MS32289,MSM2361,5,,,5,1
ALS Vial : 50 Sample Multiplier: 1

Quant Time: Jul 16 09:55:37 2014
Quant Method : C:\msdchem\1\methods\M140529D0DS.M
Quant Title : SW-846 Method 8260
QLast Update : Wed Jun 11 13:34:57 2014
Response via : Initial Calibration

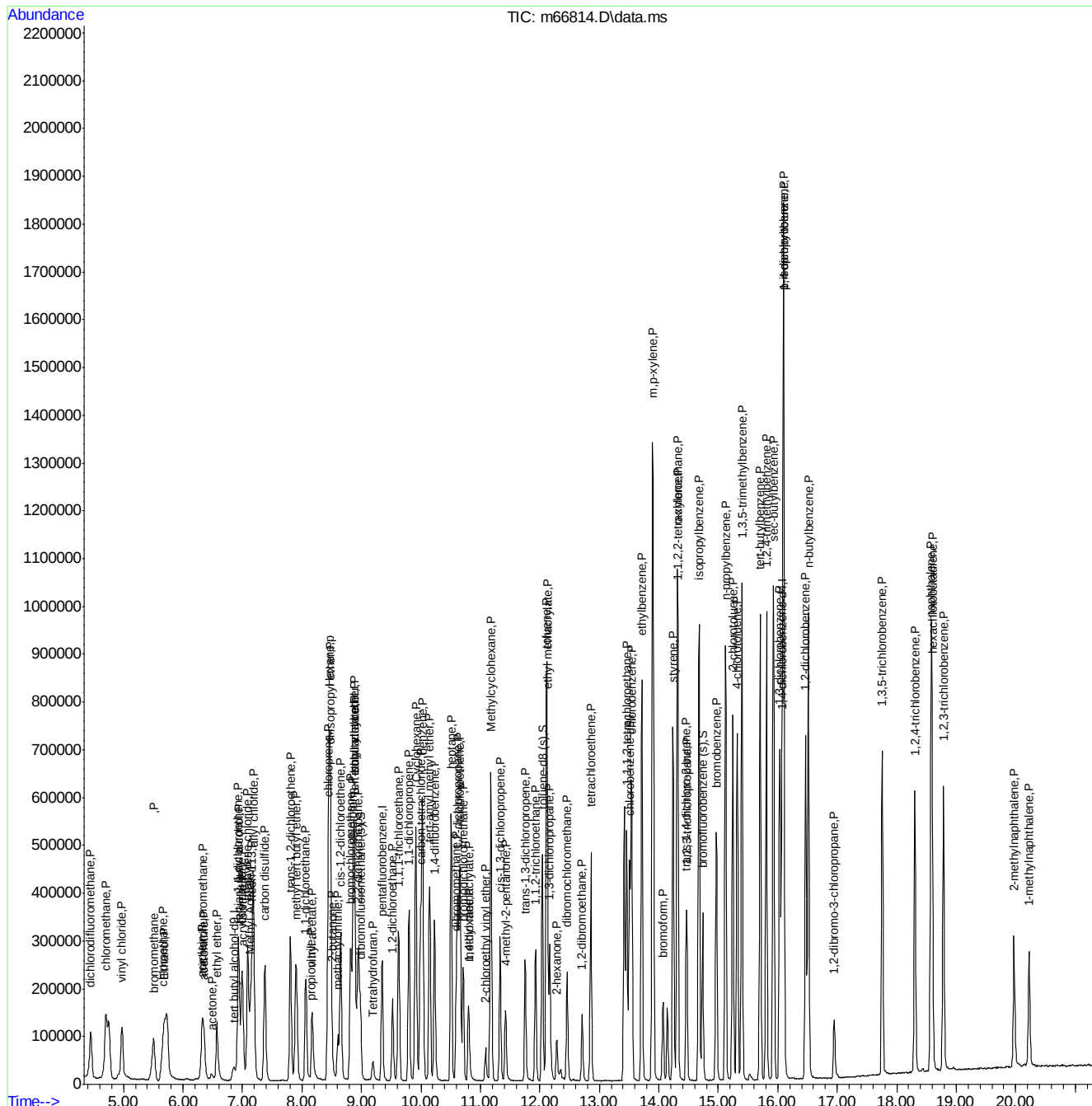
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
93)	1,3-dichlorobenzene	16.031	146	362110	47.21	ug/kg	99
94)	p-isopropyltoluene	16.099	119	731335	45.47	ug/kg	98
95)	1,4-dichlorobenzene	16.099	146	365745	46.19	ug/kg	98
96)	1,2-dichlorobenzene	16.469	146	368890	49.57	ug/kg	99
97)	n-butylbenzene	16.516	91	588892	42.08	ug/kg	100
98)	1,2-dibromo-3-chloropr...	16.947	75	30257	47.94	ug/kg	84
99)	1,3,5-trichlorobenzene	17.756	180	241592	38.02	ug/kg	99
100)	1,2,4-trichlorobenzene	18.308	180	224592	37.99	ug/kg	99
101)	hexachlorobutadiene	18.598	225	126836	42.04	ug/kg	99
102)	naphthalene	18.578	128	681366	48.23	ug/kg	100
103)	1,2,3-trichlorobenzene	18.786	180	232433	42.71	ug/kg	99
104)	2-methylnaphthalene	19.972	142	182626	20.82	ug/kg	99
105)	1-methylnaphthalene	20.228	TIC	574982	22.67	ug/kg	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\M140715S\
Data File : m66814.D
Acq On : 16 Jul 2014 8:51 am
Operator : krystend
Sample : ecc2333-50
Misc : MS32289,MSM2361,5,,,5,1
ALS Vial : 50 Sample Multiplier: 1

Quant Time: Jul 16 09:55:37 2014
Quant Method : C:\msdchem\1\methods\M140529D0DS.M
Quant Title : SW-846 Method 8260
QLast Update : Wed Jun 11 13:34:57 2014
Response via : Initial Calibration



7.6.12



VOLATILE ORGANICS BY GC/MS ANALYSIS LOG

Standards Data

Daily Saved File

Lot #	Description	Conc
MS9758	8260 CC(1)	200ug/ml
736	CCgas(2)200	
741	BS(2)200	
751	BSgas(1)200	
681	ISV	250
719	SS	200

Tune file 1: M65779
Tune file 2: M65796
Initial Cal: 5-29-14
ID File: M140529 S.M
ICAL Verified: KD
Sequence verified: 6K

Date: 5-29-14

Batch ID: MSM2318 + MSM2333

Analysts KD (DOD)

Signature: *[Signature]*

pH paper LOT#202513 exp: 1/15/2016

Data File	Sample ID	Bot No.	Work Group	Test	ALS #	*MTX	Samp Amt.	% Sol	Dil. Fact.	pH	Comments
M65777-79	blk	NA	NA	NA	1-3	NA	NA	NA	NA	NA	bfb 8:09
80	blk	↓	↓		1						-
81	test 0.5	1, 2	MS9758/736		2						OK
82	5	↓	↓		3						(no propionitrile)
83	400	1	MS9758		4						↓
84	Blank	NA	NA		5						-
85	↓	↓	↓		6						-
86	IC2318-0.5	1, 2	MS9758/736	8260 LOW	7						VVV
87	-2			SOIL CURVE	8						VVV
88	-5				9						VVV
89	-10				10						VVV
90	-20				11						VVV
91	ICC2318-50				12						VVV
92	IC2318-100				13						VVV
93	-200				14						VVV
94	-400	↓	↓		15						VVV
95	blank	NA	NA	NA	16						ICC table ✓ IS+SS
96	↓	↓	↓		17						(bfb!) V MS9699
97	ICV2318-50	2, 1	MS9741/751		18						VV
98	↓	↓	↓		19						VV (DOD) 5:39
✓ 99	blank	NA	NA		20						-
M65800	mb	↓	↓		21	↓	↓				VV MCI = 2.35
01 ✓	MC30886-1A	1	MS31929	RCP	22	SSTB	5				VV
02 ✓	-4	2			23	50	4.300				VV
03 ✓	-9	3			24		4.980				VV
04 ✓	-12	2			25		4.150				VV
05 ✓	-13	3			26		4.120				VV
06 ✓	-14	2			27		4.540				VV
07 ✓	-18	3			28		4.560				VV
08 ✓	-19	3			29		4.930				VV
✓ 09	-20	2	↓		30	↓	5.110	↓	↓	↓	VV

MTX = Matrix: Designate W for water, S for soil, O for oil.

Sample amount is reported in grams (wet) for soil and oil, mls for water.

MS001-05 Date: 07/22/13

Review: *[Signature]*

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Standards Data

Lot #	Description	Conc
MS9758	8260CC	200ug/ml
775	CCgas	200
741	BS	200
751	BSgas	200
782	ISFSS	250

Daily Saved File

Tune file 1: M66177
Tune file 2: NA
Initial Cal: 5-29-14
ID File: M140529S.M (DOD)
ICAL Verified: KD
Sequence verified: R

Date: 6/11/14

Batch ID: MSM2333

Analysts KD

Signature: *[Signature]*

*Note: If sample matrix is soil - method SW846 5035 used for preparation. SW846 5030 is purge and trap method for soil and water

pH paper LOT#202513 exp: 1/15/2016

Data File	Sample ID	Bot No.	Work Group	Test	ALS #	*MTX	Samp Amt.	% Sol	Dil. Fact.	pH	Comments
M66177	CC2333-50	1,2	MS9758/775	NA	1	NA	NA	NA	NA	NA	VV
78	BS	3,2	MS9741/751		2						VV
79	BSO	↓	↓		3						-
80	ibik	NA	NA		4						-
81	mb	↓	↓		5						VV mcl=2.2
82	MC31075-1	5	MS32030	TCL	6	SO	6.630				VV
83	↓ -IMS	1	↓		7		5.091				VV
84	↓ -IMSD	1	↓		8		5.042				VV
85	CC2333-50	1,2	MS9758/775	NA	9	NA	NA				VV

6/11/14 (KD)

MTX = Matrix: Designate W for water, S for soil, O for oil.

Sample amount is reported in grams (wet) for soil and oil, mls for water.

MS001-05 Date: 07/22/13

Review: *[Signature]*

VOLATILE ORGANICS BY GC/MS ANALYSIS LOG

Standards Data

Daily Saved File

Lot #	Description	Conc
MS9791	8260CC	200ug/mL
784	CCgas	200
818	BS	200
812	BSgas	200
782	IS-55	250

Tune file 1: M66790
Tune file 2: NA
Initial Cal: 5-29-14
ID File: M1405296.M
ICAL Verified: KD
Sequence verified: 1

Date: 7/15/14

Batch ID: MSM2361

Analysts KD

Signature: *Kristen Dufresne*

*Note: If sample matrix is soil - method SW846 5035 used for preparation. SW846 5030 is purge and trap method for soil and water

pH paper LOT#202513 exp: 1/15/2016

Data File	Sample ID	Bot No.	Work Group	Test	ALS #	*MTX	Samp Amt.	% Sol	Dil. Fact.	pH	Comments
M66790	CCR333-50	1,2	MS9791/784	NA	26	NA	NA	NA	NA	NA	✓✓
91	CCR333-50	↓	MS9818/812		27						-
92	BS	2,1	MS9818/812		28						✓✓
93	BSD	↓	↓		29						-
94	iblk	NA	NA		30						-
95	mb	↓	↓		31						✓✓
96	RLV-5	1,2	MS9791/784	↓	32	↓	↓				14 diox detected
97	MC31912-10	6	MS32287	RCP	33	SO	7.210				✓✓
98	MC31981-14A	2	MS32289	↓	34	SSTB	5				RR hits!
99	6 -3	3		↓	35	SO	4.540				✓✓
M66800	MC31954-1	2		Std+mtbe	36		6.91				✓✓
01	-1MS	1			37		4.990				✓✓
02	-1MSD	1			38		4.788				✓✓
03	-2	3			39		7.3				✓✓
04	-3	2			40		7.34				✓✓
05	↓ -4	2		↓	41		8.68				✓✓
06	MC32033-1	2		SL(DOD)	42		5.995				✓✓
07	-2	3			43		6.012				✓✓
08	-3	3			44		6.32				✓✓
09	-4	2			45		6.003				✓✓
10	-5	3			46		6.036				✓✓
11	-6	2			47		6.197				✓✓
12	-7	3			48		5.822				✓✓
13	↓ -8	2	↓	↓	49	↓	6.201				✓✓
14	CCR333-50	1,2	MS9791/784	NA	50	NA	NA				✓✓ (acetone ↓) acetone + butanone detected
15	RLV-10	↓	↓	↓	1	↓	↓				↓
7/15/14 (KD)											

MTX = Matrix: Designate W for water, S for soil, O for oil.

Sample amount is reported in grams (wet) for soil and oil, mLs for water.

MS001-05 Date: 07/22/13

Review: *[Signature]*

General Chemistry

QC Data Summaries

∞

Includes the following where applicable:

- Percent Solids Raw Data Summary

Percent Solids Raw Data Summary

Page 1 of 2

Job Number: MC32033
Account: EAENYS EA Engineering
Project: NFARS, Niagara Falls, NY

Sample: MC32033-1 **Analyzed:** 14-JUL-14 by HS **Method:** SM21 2540 B MOD.
ClientID: DS003-SB-A1-4

Wet Weight (Total)	31.788	g
Tare Weight	25.695	g
Dry Weight (Total)	30.333	g
Solids, Percent	76.1	%

Sample: MC32033-2 **Analyzed:** 14-JUL-14 by HS **Method:** SM21 2540 B MOD.
ClientID: DS003-SB-A1-6

Wet Weight (Total)	36.54	g
Tare Weight	29.092	g
Dry Weight (Total)	34.877	g
Solids, Percent	77.7	%

Sample: MC32033-3 **Analyzed:** 14-JUL-14 by HS **Method:** SM21 2540 B MOD.
ClientID: DS003-SB-B1-4

Wet Weight (Total)	36.036	g
Tare Weight	27.452	g
Dry Weight (Total)	34.615	g
Solids, Percent	83.4	%

Sample: MC32033-4 **Analyzed:** 14-JUL-14 by HS **Method:** SM21 2540 B MOD.
ClientID: DS003-SB-B1-6

Wet Weight (Total)	30.182	g
Tare Weight	22.772	g
Dry Weight (Total)	28.388	g
Solids, Percent	75.8	%

Sample: MC32033-5 **Analyzed:** 14-JUL-14 by HS **Method:** SM21 2540 B MOD.
ClientID: DS003-SB-B3-4

Wet Weight (Total)	36.102	g
Tare Weight	26.091	g
Dry Weight (Total)	34.347	g
Solids, Percent	82.5	%

Sample: MC32033-6 **Analyzed:** 14-JUL-14 by HS **Method:** SM21 2540 B MOD.
ClientID: DS003-SB-B3-6

Wet Weight (Total)	28.848	g
Tare Weight	22.511	g
Dry Weight (Total)	27.494	g
Solids, Percent	78.6	%

8.1
8

Percent Solids Raw Data Summary

Job Number: MC32033
Account: EAENYS EA Engineering
Project: NFARS, Niagara Falls, NY

Sample: MC32033-7 Analyzed: 14-JUL-14 by HS Method: SM21 2540 B MOD.
ClientID: DS003-SB-B2-5

Wet Weight (Total)	23.416	g
Tare Weight	16.989	g
Dry Weight (Total)	21.876	g
Solids, Percent	76	%

Sample: MC32033-8 Analyzed: 14-JUL-14 by HS Method: SM21 2540 B MOD.
ClientID: DS003-SB-B2-6

Wet Weight (Total)	33.62	g
Tare Weight	24.752	g
Dry Weight (Total)	31.758	g
Solids, Percent	79	%

8.1
8

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Appendix C

Erosion & Sediment Control Plan

Stormwater Pollution Prevention/Erosion & Sediment Control Plan for

Remedial Action at Site 12
FA8903-09-D-8588 Task Order 0006

29 December 2014

1.0	GENERAL INFORMATION: This Stormwater Pollution Prevention/ Erosion & Sediment Control (E&SC) Plan has been prepared for the 914 MSG/CEV at Niagara Falls ARS under the authorization of the U.S. Air Force (USAF) Civil Engineer Center (AFCEC). This plan presents a summary of protocols and operational procedures to prevent and/or mitigate a potential spill/release during implementation of environmental investigations and remedial actions being performed at the Niagara Falls ARS, New York. These protocols and procedures outline the action(s) to be taken prior to conducting work and in response to a spill or otherwise unplanned release of waste or substance. This plan also addresses erosion and sediment control/stormwater pollution prevention measures to be implemented through the duration of this project. EA Science and Technology is responsible for design/layout and field implementation of E&SC measures.
2.0	PROJECT DESCRIPTION: The remedial action involves the excavation and offsite disposal of approximately 15 cubic yards (CY) and site restoration at DS003–Site 12 (Figure 1). Site restoration consists of replacement of impacted soil with certified clean backfill (which may include reuse soil from the initial excavation). Soil sampling will also be conducted as part of this remedial action. In addition to disturbance of soil at the area of excavation, additional potential soil disturbance activities include the management of soil spoils and site surface impacts, such as ruts, from mobilization of excavation equipment in unpaved areas. There will be a staging area for vehicles/equipment and support equipment for the remedial action. This staging area will be located on the northeast corner of the concrete apron adjacent to the Site 12 contingent on approval by Airfield Management and 914 MSG/CE.
3.0	SITE SOIL: Site soil consists primarily of silt and clay of the Odessa series, described as gently sloping and poorly drained. The thickness of overburden ranges from approximately 5 to 12 ft, with the water table located at approximately 4–7 ft below ground surface (bgs).
4.0	TOPOGRAPHY AND SURFACE WATER DRAINAGE: Topography at NFARS slopes gradually from approximately 600 feet above mean sea level (ft amsl) along the northern site boundary to 585 ft amsl along the southern site boundary. Cayuga Creek, which is the only major surface water body on the installation, has an approximate bed elevation of 572 ft amsl at its lowest point. The creek enters NFARS at the northeastern boundary and flows along the eastern and southern boundaries before exiting the installation and discharging to Little River, a tributary to Niagara River. An unnamed tributary, and several onsite and offsite drainage ditches flow generally south through the northwestern corner of the installation, to join Cayuga Creek near the eastern portion of the airfield.
5.0	STAGING OF EQUIPMENT: Remedial action activities are being conducted during the Spring of 2015. During excavation activities, equipment will be stored onsite. Additionally, vehicle traffic and operations on the site will comply with the NFARS Foreign Object Damage (FOD) prevention program and all

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	vehicles will be inspected and cleaned prior to entering and exiting the airfield. A designated decontamination area in the northeast corner of the concrete apron will be set up during remedial action activities for decontamination of equipment used during soil excavation and offsite disposal. This area will consist of poly sheeting and a 250-gallon polyethylene bulk tank used to collect decontamination fluids generated during cleaning of the excavation equipment (i.e., excavation bucket). All investigative derived waste (IDW) generated during remedial action activities (i.e. decontamination fluids) will be containerized and drummed in Department of Transportation-approved 55-gal drums and stored at the proposed staging area in a temporary storage unit (Figure 1) prior to characterization and disposal at an appropriate offsite disposal facility. Waste details, such as date of accumulation and contents, will be tracked during field activities and recorded on individual drums and in the project field logbook. A description of contents, date generated and associated site identification where IDW were generated will be clearly labeled on the drums in permanent ink.
6.0	STORMWATER MANAGEMENT:
	Stormwater water at each of the sites is currently managed through an existing stormwater management system and infrastructure. Field investigation activities will be conducted in a manner that minimizes the potential risk of a discharge of IDW or other materials to nearby storm drains, water ways and drainage ditches. This will include the use of temporary silt fence and oil absorbent booms as needed.
7.0	POLLUTION PREVENTION:
	Litter and used disposable personal protective equipment will be managed through good housekeeping procedures and promptly placed in garbage bags for off-site disposal as it is generated. Construction chemicals other than vehicle fuel are anticipated to be required for the remedial action. Vehicle fuels will only be stored in project vehicles. Pollution prevention may include the following: a) IDW drums being stored within a temporary storage unit or outside on spill pallets (if used will be covered and inspected weekly) at the parking lot in the vicinity of the Site 10 treatment system. b) Installation of rubberized drive on-mats or plywood during mobilization of excavation equipment and trucks to grassy areas to limit impacts to site soils. c) Installation of silt fence or absorbent booms around stormwater catch basins d) Dry sweep equipment and roads when necessary to remove sediment solids from tracking on the roads e) Prevent the release of foreign object debris (FOD) basewide, especially on the airfield.

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8.0	TEMPORARY E&S CONTROL MEASURES:
	Temporary E&S control measures that may be implemented during field investigation activities include but are not limited to the following: Erosion control to protect soil and stabilize disturbed soil: seed, hydroseed, matings of natural materials, geotextiles, or plastic cover will be used to cover the soil surface to protect exposed soil from erosion and to minimize disturbance. Protection of storm drains and drainage ditches: protect storm drain inlets that may receive surface water runoff; use a gravel bag barrier, block and gravel filter, or filter fabric fence. Material handling and waste management: a) contain decontamination fluids in liquid-tight containers and place on a secondary containment structure or in storage area. b) follow all federal, state, and local regulations that apply to the use, handling, or disposal of hazardous materials c) designate a waste storage area with material and equipment available to contain and clean up any spills that may occur. This storage area is located in the northeastern corner of the concrete apron and will contain oil and water absorbent pads and brooms and shovels to clean up any spills. These items will also be on-site with the excavation equipment. Construction material management: Use plastic sheeting or tarps to keep materials (sand, compost, clay, bentonite, cement, etc.) covered during periods of rain. Control of vehicle/equipment fueling to contractor's staging area: Vehicle fueling will be conducted in areas where materials and equipment are available to contain and clean up any spills that may occur. Spill prevention and control: Check equipment, hydraulic lines, and containers for leaks and corrosion within the staging area prior to mobilizing to a work zone; maintain a spill-kit
9.0	INCIDENT RESPONSE:
	The following actions will be taken in the event of an unplanned release of hazardous materials, contaminated soil and/or water during construction activities and/or investigative waste containment/disposal : • Stop work immediately and notify the EA Project Manager and the 914 MSG/CEV point of contact. Do not leave the area unattended. If gasoline or other flammable liquids are spilled on the ground the Fire Department and 914 MSG/CEV point of contact needs to be notified immediately. The Fire Department and 914 MSG/CEV point of contact also need to be notified of any releases to a storm drain. Refer to the attached NFARS HAZMAT Quick Reference Guide for additional guidance for responding to a spill incident. • Assess the situation. What and how material is involved? Has the release stopped / under control or is it continuing? Was the release contained on an impervious surface or was there contact with soil, grass, ground water or surface water? Provide the Project Manager with details of the situation. • Site employees are to remediate the release situation and to take whatever control measures are possible such as placing spill containment barriers, shutting off power,

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	covering storm drains, blocking off entrances to the area, etc. Use absorbent materials to contain the spill, and to prevent it from going into drains or off paved areas. Place contaminated absorbent/adsorbent materials in a 55-gal drum for disposal. A release will need to be contained and cleaned up. Management will allocate or obtain resources as needed for cleanup.
10.0	INSPECTION AND MAINTENANCE PROGRAM FOR E&S CONTROL MEASURES
	Inspections of control measure will occur regularly, while installed, during field activities and will be documented on the attached inspection form. Maintenance will be conducted weekly to ensure that pollution prevention and E&S measures are operating correctly. The degree of maintenance will depend on activities to be conducted and the amount of disturbance at each work zone. IDW drums will be stored in the temporary storage unit and inspected for leaks throughout field activities until they are removed for disposal at an off-site facility. Excavation equipment will be inspected and maintained on a regular basis to ensure that equipment is functioning properly and to ensure that there is no leakage from excavation equipment (i.e. fuel tanks, hoses/lines, storage tubs/tanks). The decontamination area will be inspected prior to and following use, to ensure that there are no leaks of decontamination fluids. In the event of a leak or release, spill control and countermeasures will be implemented in accordance this plan. Following completion of remedial action activities, each site will be restored to the surface conditions that existed before any work was started. In the event that vehicles and/or excavation equipment will be taken to off road areas, any disturbed areas and/or damage including ruts and exposed soil will be backfilled with top-soil and seeded. Permanent restoration and re-vegetation of the site that may be implemented to incorporate long-term erosion and sedimentation control measures including mulching, placement of matting or netting, and/or stabilization of soil with sod.

