United States Environmental Protection Agency
Region 9 Laboratory

1337 S. 46th Street Building 201
Richmond, CA 94804

Date: **6/11/2012**

Subject: **Analytical Testing Results - Project R33911**
SDG: 12145B

From: **Brenda Bettencourt, Director**
EPA Region 9 Laboratory
MTS-2

To: **Richard Fetzer**
US EPA Region 3, Eastern Response Branch
3HS31

Attached are the results from the analysis of samples from the **Dimock Residential Groundwater** project. These data have been reviewed in accordance with EPA Region 9 Laboratory policy.

A full documentation package for these data, including raw data and sample custody documentation, is on file at the EPA Region 9 Laboratory. If you would like to request additional review and/or validation of the data, please contact Eugenia McNaughton at the Region 9 Quality Assurance Office.

If you have any questions, please ask for Richard Bauer, the Lab Project Manager at (510)412-2300.

Analyses included in this report:

Dissolved Hydrocarbon Gases by GC

United States Environmental Protection Agency
Region 9 Laboratory
1337 S. 46th Street, Building 201, Richmond, CA 94804
Phone:(510) 412-2300 Fax:(510) 412-2302

Project Manager: Richard Fetzer	**US EPA Region 3, Eastern Response Branch**	**SDG:** 12145B
Project Number: R33911	**100 Gypsum Road**	**Reported:** 06/11/12 16:04
Project: Dimock Residential Groundwater	**Stroudsburg PA, 18360**	

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Collected	Date Received
HW62	1205066-01	Water	05/22/12 15:59	05/24/12 09:50
TB55	1205066-02	Water	05/22/12 11:05	05/24/12 09:50
FB23	1205066-03	Water	05/23/12 13:25	05/24/12 09:50
HW63	1205066-04	Water	05/23/12 13:09	05/24/12 09:50
HW63z	1205066-05	Water	05/23/12 13:10	05/24/12 09:50
TB56	1205066-06	Water	05/23/12 09:55	05/24/12 09:50
FB22	1205066-07	Water	05/22/12 11:58	05/24/12 09:50
HW64	1205066-08	Water	05/22/12 11:10	05/24/12 09:50
HW64-P	1205066-09	Water	05/22/12 11:40	05/24/12 09:50
TB54	1205066-10	Water	05/22/12 08:10	05/24/12 09:50

SDG ID 12145B

Work Order(s)

1205066

United States Environmental Protection Agency
Region 9 Laboratory

1337 S. 46th Street, Building 201, Richmond, CA 94804
Phone:(510) 412-2300 Fax:(510) 412-2302

Project Manager: Richard Fetzer	**US EPA Region 3, Eastern Response Branch**	**SDG:** 12145B
Project Number: R33911	**100 Gypsum Road**	**Reported:** 06/11/12 16:04
Project: Dimock Residential Groundwater	**Stroudsburg PA, 18360**	

Sample Results

Analyte	Reanalysis / Extract	Result	Qualifiers / Comments	Quantitation Limit	Units	Batch	Prepared	Analyzed	Method
Lab ID: 1205066-01									**Water - Sampled: 05/22/12 15:59**
Sample ID: HW62									**Dissolved Gases by RSK-175**
Methane		ND	U	1.2	ug/L	B2E0164	05/29/12	05/29/12	RSK-175/SOP325
Ethane		ND	U	1.2	"	"	"	"	RSK-175/SOP325
Ethene		ND	U	1.1	"	"	"	"	RSK-175/SOP325
Surrogate: Acetylene			90 %	*66.4-153%*		"	"	"	
Lab ID: 1205066-02									**Water - Sampled: 05/22/12 11:05**
Sample ID: TB55									**Dissolved Gases by RSK-175**
Methane	RE1	ND	U	1.2	ug/L	B2F0005	05/29/12	06/01/12	RSK-175/SOP325
Ethane	RE1	ND	U	1.2	"	"	"	"	RSK-175/SOP325
Ethene	RE1	ND	U	1.1	"	"	"	"	RSK-175/SOP325
Surrogate: Acetylene	*RE1*		113 %	*66.4-153%*		"	"	"	
Lab ID: 1205066-03									**Water - Sampled: 05/23/12 13:25**
Sample ID: FB23									**Dissolved Gases by RSK-175**
Methane	RE1	ND	U	1.2	ug/L	B2F0005	05/29/12	06/01/12	RSK-175/SOP325
Ethane	RE1	ND	U	1.2	"	"	"	"	RSK-175/SOP325
Ethene	RE1	ND	U	1.1	"	"	"	"	RSK-175/SOP325
Surrogate: Acetylene	*RE1*		114 %	*66.4-153%*		"	"	"	
Lab ID: 1205066-04									**Water - Sampled: 05/23/12 13:09**
Sample ID: HW63									**Dissolved Gases by RSK-175**
Methane	RE1	2,600		24	ug/L	B2E0168	05/30/12	05/31/12	RSK-175/SOP325
Ethane		4.2		1.2	"	B2E0164	05/29/12	05/30/12	RSK-175/SOP325
Ethene		ND	U	1.1	"	"	"	"	RSK-175/SOP325
Surrogate: Acetylene			112 %	*66.4-153%*		"	"	"	
Surrogate: Acetylene	*RE1*		115 %	*66.4-153%*		*B2E0168*	*05/30/12*	*05/31/12*	
Lab ID: 1205066-05									**Water - Sampled: 05/23/12 13:10**
Sample ID: HW63z									**Dissolved Gases by RSK-175**
Methane	RE1	2,300		21	ug/L	B2E0168	05/30/12	05/31/12	RSK-175/SOP325
Ethane		3.9		1.2	"	B2E0164	05/29/12	05/30/12	RSK-175/SOP325
Ethene		ND	U	1.1	"	"	"	"	RSK-175/SOP325
Surrogate: Acetylene			114 %	*66.4-153%*		"	"	"	
Surrogate: Acetylene	*RE1*		115 %	*66.4-153%*		*B2E0168*	*05/30/12*	*05/31/12*	
Lab ID: 1205066-06									**Water - Sampled: 05/23/12 09:55**
Sample ID: TB56									**Dissolved Gases by RSK-175**
Methane	RE1	ND	U	1.2	ug/L	B2F0005	05/29/12	06/01/12	RSK-175/SOP325
Ethane	RE1	ND	U	1.2	"	"	"	"	RSK-175/SOP325
Ethene	RE1	ND	U	1.1	"	"	"	"	RSK-175/SOP325

United States Environmental Protection Agency
Region 9 Laboratory

1337 S. 46th Street, Building 201, Richmond, CA 94804
Phone:(510) 412-2300 Fax:(510) 412-2302

Project Manager: Richard Fetzer	**US EPA Region 3, Eastern Response Branch**	**SDG:** 12145B
Project Number: R33911	**100 Gypsum Road**	**Reported:** 06/11/12 16:04
Project: Dimock Residential Groundwater	**Stroudsburg PA, 18360**	

Sample Results

Analyte	Reanalysis / Extract	Result	Qualifiers / Comments	Quantitation Limit	Units	Batch	Prepared	Analyzed	Method
Lab ID: 1205066-06									**Water - Sampled: 05/23/12 09:55**
Sample ID: TB56									**Dissolved Gases by RSK-175**
Surrogate: Acetylene	*RE1*		115 %	*66.4-153%*		*B2F0005*	*05/29/12*	*06/01/12*	
Lab ID: 1205066-07									**Water - Sampled: 05/22/12 11:58**
Sample ID: FB22									**Dissolved Gases by RSK-175**
Methane	RE1	ND	U	1.2	ug/L	B2F0005	05/29/12	06/01/12	RSK-175/SOP325
Ethane	RE1	ND	U	1.2	"	"	"	"	RSK-175/SOP325
Ethene	RE1	ND	U	1.1	"	"	"	"	RSK-175/SOP325
Surrogate: Acetylene	*RE1*		114 %	*66.4-153%*		"	"	"	
Lab ID: 1205066-08									**Water - Sampled: 05/22/12 11:10**
Sample ID: HW64									**Dissolved Gases by RSK-175**
Methane	RE1	ND	U	1.2	ug/L	B2E0168	05/29/12	05/30/12	RSK-175/SOP325
Ethane	RE1	ND	U	1.2	"	"	"	"	RSK-175/SOP325
Ethene	RE1	ND	U	1.1	"	"	"	"	RSK-175/SOP325
Surrogate: Acetylene	*RE1*		95 %	*66.4-153%*		"	"	"	
Lab ID: 1205066-09									**Water - Sampled: 05/22/12 11:40**
Sample ID: HW64-P									**Dissolved Gases by RSK-175**
Methane	RE1	ND	U	1.2	ug/L	B2E0168	05/29/12	05/30/12	RSK-175/SOP325
Ethane	RE1	ND	U	1.2	"	"	"	"	RSK-175/SOP325
Ethene	RE1	ND	U	1.1	"	"	"	"	RSK-175/SOP325
Surrogate: Acetylene	*RE1*		112 %	*66.4-153%*		"	"	"	
Lab ID: 1205066-10									**Water - Sampled: 05/22/12 08:10**
Sample ID: TB54									**Dissolved Gases by RSK-175**
Methane	RE1	ND	U	1.2	ug/L	B2F0005	05/29/12	06/01/12	RSK-175/SOP325
Ethane	RE1	ND	U	1.2	"	"	"	"	RSK-175/SOP325
Ethene	RE1	ND	U	1.1	"	"	"	"	RSK-175/SOP325
Surrogate: Acetylene	*RE1*		116 %	*66.4-153%*		"	"	"	

United States Environmental Protection Agency
Region 9 Laboratory
1337 S. 46th Street, Building 201, Richmond, CA 94804
Phone:(510) 412-2300 Fax:(510) 412-2302

Project Manager: Richard Fetzer	**US EPA Region 3, Eastern Response Branch**	**SDG:** 12145B
Project Number: R33911	**100 Gypsum Road**	**Reported:** 06/11/12 16:04
Project: Dimock Residential Groundwater	**Stroudsburg PA, 18360**	

Quality Control

Analyte	Result	Qualifiers / Comments	Quantitation Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B2E0164 - RSK175 - Dissolved HC Gases										**Prepared & Analyzed: 05/29/12**
										Dissolved Gases by RSK-175 - Quality Control
Blank (B2E0164-BLK1)										
Methane	ND	U	1.2	ug/L						
Ethane	ND	U	1.2	"						
Ethene	ND	U	1.1	"						
Surrogate: Acetylene	*71.3*			"	*66.5*		107	*66.4-153*		
LCS (B2E0164-BS1)										
Methane	41.7		1.2	ug/L	44.1		95	70-130		200
Ethane	82.9		1.2	"	83.2		100	77-137		200
Ethene	77.2		1.1	"	78.3		99	78-138		200
Surrogate: Acetylene	*71.1*			"	*72.0*		99	*66.4-153*		
Matrix Spike (B2E0164-MS2)		**Source: 1205066-01**								
Methane	45		1.2	ug/L	44.1	ND	102	70-130		20
Ethane	88.1		1.2	"	83.2	ND	106	70-130		20
Ethene	81.7		1.1	"	78.3	ND	104	70-130		20
Surrogate: Acetylene	*74.9*			"	*72.0*		104	*66.4-153*		
Matrix Spike Dup (B2E0164-MSD2)		**Source: 1205066-01**								
Methane	47		1.2	ug/L	44.1	ND	107	70-130	4	20
Ethane	91.8		1.2	"	83.2	ND	110	70-130	4	20
Ethene	84.9		1.1	"	78.3	ND	108	70-130	4	20
Surrogate: Acetylene	*76.7*			"	*72.0*		106	*66.4-153*		
Batch B2E0168 - RSK175 - Dissolved HC Gases										**Prepared & Analyzed: 05/30/12**
										Dissolved Gases by RSK-175 - Quality Control
Blank (B2E0168-BLK1)										
Methane	ND	U	1.2	ug/L						
Ethane	ND	U	1.2	"						
Ethene	ND	U	1.1	"						
Surrogate: Acetylene	*61.1*			"	*66.5*		92	*66.4-153*		
LCS (B2E0168-BS1)										
Methane	41.5		1.2	ug/L	44.1		94	70-130		200
Ethane	82.9		1.2	"	83.2		100	77-137		200
Ethene	77.3		1.1	"	78.3		99	78-138		200
Surrogate: Acetylene	*72.1*			"	*72.0*		100	*66.4-153*		
Batch B2F0005 - RSK175 - Dissolved HC Gases										**Prepared & Analyzed: 06/01/12**
										Dissolved Gases by RSK-175 - Quality Control
Blank (B2F0005-BLK1)										

United States Environmental Protection Agency
Region 9 Laboratory
1337 S. 46th Street, Building 201, Richmond, CA 94804
Phone:(510) 412-2300 Fax:(510) 412-2302

Project Manager: Richard Fetzer	**US EPA Region 3, Eastern Response Branch**	**SDG:** 12145B
Project Number: R33911	**100 Gypsum Road**	**Reported:** 06/11/12 16:04
Project: Dimock Residential Groundwater	**Stroudsburg PA, 18360**	

Quality Control

Analyte	Result	Qualifiers / Comments	Quantitation Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B2F0005 - RSK175 - Dissolved HC Gases										**Prepared & Analyzed: 06/01/12**
										Dissolved Gases by RSK-175 - Quality Control
Blank (B2F0005-BLK1)										
Methane	ND	U	1.2	ug/L						
Ethane	ND	U	1.2	"						
Ethene	ND	U	1.1	"						
Surrogate: Acetylene	*70.5*			"	*66.5*		106	*66.4-153*		
LCS (B2F0005-BS1)										
Methane	40.1		1.2	ug/L	44.1		91	70-130		200
Ethane	79.9		1.2	"	83.2		96	77-137		200
Ethene	74.6		1.1	"	78.3		95	78-138		200
Surrogate: Acetylene	*68.4*			"	*72.0*		95	*66.4-153*		

United States Environmental Protection Agency
Region 9 Laboratory
1337 S. 46th Street, Building 201, Richmond, CA 94804
Phone:(510) 412-2300 Fax:(510) 412-2302

Project Manager: Richard Fetzer	**US EPA Region 3, Eastern Response Branch**	**SDG:** 12145B
Project Number: R33911	**100 Gypsum Road**	**Reported:** 06/11/12 16:04
Project: Dimock Residential Groundwater	**Stroudsburg PA, 18360**	

Qualifiers and Comments

U Not Detected

NR Not Reported

RE1, RE2, etc: Result is from a sample re-analysis.

ICF International / Laboratory Data Consultants
Environmental Services Assistance Team, Region 9
1337 South 46th Street, Building 201, Richmond, CA 94804-4698
Phone: (510) 412-2300 Fax: (510) 412-2304

DATE: June 7, 2012

TO: Richard Bauer, Chemistry TOM, EPA Region 9, Laboratory Section, MTS-2

FROM: Ziyad Rajabi, Organic Group Leader

SUBJECT: Analytical Results for TDF 01001084

As assigned under EPA Contract No. EP-W-06-041, TDF 01001084, ESAT completed analysis of ten water samples for the Dimock Residential Groundwater Site project, Case R33911, SDG 12145B, Work Order 1205066 for dissolved gasses following EPA Region 9 Laboratory SOP 325 based on method RSK-175. The draft analytical report and raw data package are attached.

Work is in progress on the remaining tasks assigned under this TDF.If you have any questions regarding this information please contact me at extension 22390.

G:\USER\ESAT\# LAB DATA Deliverables\R33911\12145B-DissGasses-14896.docx

EPA Region 9 Laboratory

DATA PACKAGE

Analysis:	**Dissolved Gasses**
Project Number:	**R33911**
SDG Number:	**12145B**
Work Order:	**1205066**
ESAT DCN:	**14896**

Contents

- **Review Forms**
- **Tracking Forms**
- ***Sample Preparation***
- **Data**
  -Initial Calibration Data
  -Sample Data
- ***Miscellaneous Data***
- **Standard Records**
- ***Canister Certification Data***

Sections in italics are included as applicable

G:\USER\ESAT\# LAB DATA Deliverables\R33911\12145B-DissGasses-14896.docx

REVIEW FORMS

General Project Management and ESAT Contractor Oversight Review

Project Number: R33911 SDG: 12145B

Analysis: dissolved gasses Number of Pages: 183

Reviewer: Baur

- ☑ Review project notes and requirements (including TDF) and verify that correct analytical procedures and any special instructions were followed. Note any significant deviations or omissions in report narrative or return to contractor for correction.
- ☑ Review project memo field for each work order and include information pertinent to data users in report narrative. (Information important only to chemist reviewing the raw data package should be included in data package, but not in the report narrative).
- ☑ Review chain of custody documentation and verify that information in report corresponds correctly. Verify that any sample shipping or handling issues are properly documented and reported.
- ☑ Review analytical report and QC report and verify that qualifier flags for holding times, sample handling, surrogates, blanks, blank spikes, matrix QC, and calibration range have been appropriately applied.
- ☑ Review LIMS Data Entry table for unaddressed outliers.
- ☑ Verify that all major sections of data package are present.

Comments:

TBs, FBs reanalyzed. Carryover contam. on initial run. Clean on 2nd run.

Reviewer Signature [signature] Date 6/11/12

G:\USER\ESAT\# LAB DATA Deliverables\R33911\12145B-DissGasses-14896.docx

: 00003

ESAT Region 9 | **ICF International**
Case: R33911 | **Analysis:** Dissolved Gasses | **TDF:** 01001084 | **Matrix:** water
DCN: 14896 | **Site:** Dimock Residential Groundwater Site | **SDG:** 12145B

ESAT REGION 9 DATA PACKAGE TECHNICAL REVIEW GUIDE

Reviewer:	Package Prep (P): NGL	Technical (T): SL	Final (F):
	Date: 6/5/2012	Date: 6/5/12	Date: 6/5/12

P T F N/A (indicates that the item is present and reviewed for accuracy and completeness)

Report Section

- ☑ ☑ ☑ ESAT Cover Memo (original)
- ☑ ☑ ☑ TDF included and requirements met (e.g. project analytes, project QLs, special procedures)
- ☑ ☑ ☑ Draft LIMS Report

Data Package Cover

- ☑ ☑ ☑ Case, SDG, Work Order(s), TDF#-DCN [First numbered page in the data package]

Review Forms

- ☑ ☑ ☑ EPA Review Form and Technical Review Guide included and complete.
- ☑ ☑ ☐ ☑ LIMS memo field; include as applicable.
- ☑ ☑ ☐ ☑ Discrepancy form(s) include as applicable
- ☑ ☑ ☑ ☐ Daily folder review forms are complete and reviewed; QC outliers noted
- ☑ ☑ ☑ ☐ Analysis matrix listing all analytical runs is included, as applicable

SL 6/6/12

Tracking Forms

- ☑ ☑ ☑ Work Orders and Chains of Custody forms included and reviewed.
- ☑ ☑ ☑ Preparation and analyses performed within holding times. Qualify and/or explain deviations in memo field
- ☑ ☑ ☑ ☐ Cooler temperatures recorded on COC are within specification. Qualify and/or explain deviations in memo field

Sample Preparation

- ☑ ☑ ☑ ☐ Bench sheets and extraction logs, where applicable
- ☐ ☐ ☐ ☑ Sample cleanup data and records (e.g. GPC logs)
- ☐ ☐ ☐ ☑ Homogenization and Moisture data

Initial Calibration Data

Group ICAL data by instrument and analysis date:

- ☑ ☑ ☐ ☐ All ICALs associated with samples are present, reviewed, and pass SOP criteria. (If failure, discrepancy form must be included)
- ☑ ☑ ☐ ☐ Check for misidentification (e.g. isomers such as dichlorobenzene)

Sample Data

Group data for the following areas in sections by method, instrument, and analysis date.

Continuing Calibrations

- ☑ ☑ ☐ ☐ All CCALs associated with samples are present and meet SOP criteria. If not, discrepancy form included.
- ☑ ☑ ☐ Average RRFs from associated ICAL are correctly transposed to CCAL summary form
- ☑ ☑ ☐ CCAL RRFs and %Ds calculated correctly. Check at least 1 surrogate & 1 target analyte
- ☑ ☑ ☐ Check %Ds and RRFs against SOP criteria

ESAT Region 9 **ICF International**
Case: R33911 **Analysis:** Dissolved Gasses **TDF:** 01001084 **Matrix:** water
DCN: 14896 **Site:** Dimock Residential Groundwater Site **SDG:** 12145B

P T F N/A (indicates that the item is present and reviewed for accuracy and completeness)

Quantitation Limit Standards
☑ ☑ ☐ ☐ Percent recoveries of 60-140% met; outliers noted and flagged

Laboratory Control Samples
☑ ☑ ☑ Percent recoveries met. If not, discrepancy form included unless not required because: _____

Method Blanks
☑ ☑ ☑ Present and no target analyte results > ½ QL; if not, flag data as appropriate

MS/MSD or Duplicate Data
☑ ☑ ☑ ☐ Percent recoveries and RPDs were met; outliers are noted and flagged. Note significant deviations in LIMS memo field

Sample Data
☑ ☑ ☑ ☐ Bench sheet(s) and injection or run logs present for all samples
☐ ☐ ☐ ☑ Internal standards meet SOP criteria
☑ ☑ ☑ ☐ System Monitoring Compound/Surrogate recoveries met; outliers are noted and flagged
☑ ☑ ☐ All non-detects are reported as ND on the quantitation report and explained for QC samples
☑ ☑ ☐ Quantitation results are correctly calculated. Check at least one surrogate or one target analyte
☐ ☐ ☑ Mass spectral data are present for all target analytes
☐ ☐ ☐ ☑ Check for manual integrations (m) identified on quantitation reports. Verify presence of manual integration data, initialed and dated by a supervisor
☑ ☑ ☐ ☐ Compound concentrations exceeding the upper range of the instrument are reported from the dilution run
☑ ☑ Check for carry-over contamination
☑ ☑ ☐ ☐ Dilutions and reruns appropriate.
☐ ☐ ☑ TICs properly identified; TIC report and data present; proper TIC name used (Organics)
☑ ☑ ☑ ☐ QC outliers are appropriately flagged in LIMS

Miscellaneous Data
☑ ☑ ☑ ☐ Storage blank data present
☐ ☐ ☐ ☑ Other data, as applicable _____

Standards Records
☑ ☑ ☑ ☐ Standards records from LIMS (and logbook pages as needed)

Canister Certification Data (TO 15 only)
☐ ☐ ☐ ☑ Data and supporting QC present

For ESAT Files: ESAT Review form (original) and Cover Memo (copy)

WORK ORDER NOTES - 1205066

1205066 - US EPA Region 3, Eastern Response
Dimock Residential Groundwater

Dissolved Gases: Samples 1205066-02, 03, 06, 07, 08, 09, and 10 were reanalyzed due to instrument contamina (CH4 at low level). Results for these samples were reported from the reanalyses. SL 06/07/12.

U.S. EPA Region 9 Laboratory

Discrepancy #: D12-020

Form Initiator: Nick Kish **Entry Date:** 5/17/2012

Case:	**Project:**	**SDG:**
All Cases	NA	NA

SOP:	**Analysis:**	**Rev.:**	**Analyst:**	**Date:**
325	RSK-175	2	All Analysts	
SOP:	**Prep:**	**Rev.:**	**Analyst:**	**Date:**

Discrepancy Type (check all that apply):

LCS:

- ☐ High
- ☐ Low
- ☐ Frequency

MS/MSD:

- ☐ High
- ☐ Low
- ☐ RPD
- ☐ Frequency

Holding Time:

- ☐ Prep/extract
- ☐ Analysis

Blank:

- ☐ MB
- ☐ IB
- ☐ CB
- ☐ Frequency

Surrogate:

- ☐ High
- ☐ Low
- ☐ Frequency

Calibration:

- ☐ ICAL
- ☐ SVC
- ☐ CCAL
- ☐ QLS
- ☐ Frequency

Other:

- ☑ Other (describe)

Extension of ICAL range.

U.S. EPA Region 9 Laboratory
Discrepancy #: D12-020

Describe Discrepancy:

The dilution process for this analysis introduces significant error and should be avoided when possible. The extension of the methane calibration range to 440 ug/L will reduce the need for dilutions. The concentration range for all analytes will be extended.

Calibration per SOP 325 R2 was completed on 5/08/2012. An extension of the calibration was completed on 5/15/2012 after the analysis of samples. An MDL analyzed on 5/10/2012 was quantitated versus the extended calibration and will be submitted in support of this deviation.

Describe Corrective Actions:

All QC (batch and sequence) will be completed per SOP 352 R2 (note that MS/MSD spike levels may result in methane spikes being flagged as Q10 - added concentration is insignificant compared to native concentration). Additionally, concentration levels for the CCV and BS will not change.

Future ICALs will include the additional point as part of the sequence. ESAT will investigate the purchase of a higher concentration standard and determine if the linear range can be extended further (to prevent dilutions) and recommends updating the SOP after that determination is complete.

Approvals:

Supervisor (EPA or ESAT): Jerry Vail	Date: 5/17/2012
EPA Team Leader or ESAT QA/QC: Kathleen OBrien	Date: 5/17/2012
EPA Lab QAO: Richard Bauer	Date: 5/17/2012
Check if Corrective Action Form Generated: [ ]	Form #:

QAO Comments:

Organics Daily Folder Preparation/Technical Review Guide

Analysis Method	RSK-175	Analyst Initial	NGK	Reviewer Initial	KU	Batch/ Sequence	N/A
Instrument ID	AG6890-6	Date Analyzed	5/08/12, 5/15/12	Date	5/18/12	Chemstation Last Update	5/16/12 13:16:50
Cases				SDGs	ICAL		

Review each item listed below. As problems are discovered list them in the non-conformance section of the form and provide and explanation in the discussion part of the table.

NA	A	PR	Item Description
	X	✓	Runlog (Present, legible, peer reviewed) Sequence, injection log
X			Tune/ Degradation Standard
	X	✓	Initial Calibration (SOP criteria for number of levels, concentration, and %RSD). Manual calculation. Include summary for daily review. Curve in LIMS different from ChemStation in
X			Continuing Calibration Verification (frequency, recovery, and %D). Manual calculation. 3rd & 4th Sesh
	X	✓	QLS (level, frequency, and recovery) (include Chemstation summary) CAL 1 appears linear.
X			Method / Extraction / Storage Blanks (frequency and contamination levels)
~~X~~ SV, 6/4/12.	/	✓	Surrogate Recoveries Acetylene good cal, good SCV
✓	~~X~~		IS Areas (SOP criteria met)
X			LCS (level, frequency, and recovery) (include Chemstation summary)
X			MS/MSD
X			Samples (within calibration range, results calculated correctly)
X			Manual Integration Verified
	X	✓	Standard Prep Log (all pages present, legible, peer reviewed, legible)
X			Sample Prep/Extraction (all pages present, legible, peer reviewed)
	X	✓	Others: SCV, CAL 8 analyzed on 5/15/12

NA = not applicable A = Analyst check PR = Peer Review Check

Non-conformance Report

QC	File ID	Result	QC Limit	High Bias	Low Bias	Flag ND	Flag Hits	Discussion

C:\Users\nkish\Desktop\RSK175 daily review.docx

: 00008

Organics Daily Folder Preparation/Technical Review Guide

Analysis Method	RSK-175	**Analyst Initial**	NCK	**Reviewer Initial**	[illegible]	**Batch/ Sequence**	B2E0164/2050087
Instrument ID	AG6890-6	**Date Analyzed**	5/29/2012	**Date**	5/30/12	**Chemstation Last Update**	5/16/12 13:16:50
Cases	R12S87, R33911			**SDGs**	12137A, 12139A, 12145B		

Review each item listed below. As problems are discovered list them in the non-conformance section of the form and provide and explanation in the discussion part of the table.

NA	A	PR	Item Description
	X	✓	Runlog (Present, legible, peer reviewed)
X			Tune/ Degradation Standard
	X	✓	Initial Calibration (SOP criteria for number of levels, concentration, and %RSD). Manual calculation. Include summary for daily review.
	X	✓	Continuing Calibration Verification (frequency, recovery, and %D). Manual calculation.
	X	✓	QLS (level, frequency, and recovery) (include Chemstation summary)
	X	✓	Method / Extraction / Storage Blanks (frequency and contamination levels)
	X	✓	Surrogate Recoveries
X			IS Areas (SOP criteria met)
	X	✓	LCS (level, frequency, and recovery) (include Chemstation summary)
	X	✓	MS/MSD
	X	✓	Samples (within calibration range, results calculated correctly)
X			Manual Integration Verified
	X	✓	Standard Prep Log (all pages present, legible, peer reviewed, legible)
	X	✓	Sample Prep/Extraction (all pages present, legible, peer reviewed)
			Others:

NA = not applicable A = Analyst check PR = Peer Review Check

Non-conformance Report

QC	File ID	Result	QC Limit	High Bias	Low Bias	Flag ND	Flag Hits	Discussion

C:\Users\nkish\Desktop\RSK175 daily review.docx

Organics Daily Folder Preparation/Technical Review Guide

Analysis Method	RSK-175	**Analyst Initial**	NKK	**Reviewer Initial**	ZK	**Batch/ Sequence**	B2E0168/2050090
Instrument ID	AG6890-6	**Date Analyzed**	5/30/2012	**Date**	5-31-12	**Chemstation Last Update**	5/16/12 13:16:50
Cases	R12S87, R33911			**SDGs**	12139A, 12139A, 12145B		

Review each item listed below. As problems are discovered list them in the non-conformance section of the form and provide and explanation in the discussion part of the table.

NA	A	PR	Item Description
	X	/	Runlog (Present, legible, peer reviewed)
X			Tune/ Degradation Standard
	X	/	Initial Calibration (SOP criteria for number of levels, concentration, and %RSD). Manual calculation. Include summary for daily review.
	X	/	Continuing Calibration Verification (frequency, recovery, and %D). Manual calculation.
	X	/	QLS (level, frequency, and recovery) (include Chemstation summary)
	X	/	Method / Extraction / Storage Blanks (frequency and contamination levels)
	X	/	Surrogate Recoveries
X			IS Areas (SOP criteria met)
	X	/	LCS (level, frequency, and recovery) (include Chemstation summary)
	X	/	MS/MSD
	X	/	Samples (within calibration range, results calculated correctly)
X			Manual Integration Verified
	X	/	Standard Prep Log (all pages present, legible, peer reviewed, legible)
	X	/	Sample Prep/Extraction (all pages present, legible, peer reviewed)
			Others:

NA = not applicable A = Analyst check PR = Peer Review Check

Non-conformance Report

QC	File ID	Result	QC Limit	High Bias	Low Bias	Flag ND	Flag Hits	Discussion

C:\Users\nkish\Desktop\RSK175 daily review.docx

Organics Daily Folder Preparation/Technical Review Guide

Analysis Method	RSK-175	**Analyst Initial**	NGK	**Reviewer Initial**		**Batch/ Sequence**	B2F0005/2060005
Instrument ID	AG6890-6	**Date Analyzed**	6/1/2012	**Date**	6/14/12	**Chemstation Last Update**	5/16/12 13:16:50
Cases	R12S87, R33911			**SDGs**	12139A, 12145B		

Review each item listed below. As problems are discovered list them in the non-conformance section of the form and provide and explanation in the discussion part of the table.

NA	A	PR	Item Description
	X	✓	Runlog (Present, legible, peer reviewed)
X			Tune/ Degradation Standard
	X	✓	Initial Calibration (SOP criteria for number of levels, concentration, and %RSD). Manual calculation. Include summary for daily review.
	X	✓	Continuing Calibration Verification (frequency, recovery, and %D). Manual calculation.
	X	✓	QLS (level, frequency, and recovery) (include Chemstation summary)
	X	✓	Method / Extraction / Storage Blanks (frequency and contamination levels)
	X	✓	Surrogate Recoveries
X			IS Areas (SOP criteria met)
	X	✓	LCS (level, frequency, and recovery) (include Chemstation summary)
	X	✓	MS/MSD
	X	✓	Samples (within calibration range, results calculated correctly)
X			Manual Integration Verified
	X	✓	Standard Prep Log (all pages present, legible, peer reviewed, legible)
	X	✓	Sample Prep/Extraction (all pages present, legible, peer reviewed)
			Others:

NA = not applicable A = Analyst check PR = Peer Review Check

Non-conformance Report

QC	File ID	Result	QC Limit	High Bias	Low Bias	Flag ND	Flag Hits	Discussion

C:\Users\nkish\Desktop\RSK175 daily review.docx

USEPA Region 9 Laboratory
Organic Analysis Summary

Case: R33911
SDG: 12145B
Analysis: RSK-175

Analyst: NGK
Reviewed By: SL

Sample ID	Sample Runs		
[redacted]	AG6890N-6	AG6890N-6	AG6890N-6
[redacted]	5/29/2012	5/30/2012	6/1/2012
[redacted]	B2E0164	B2E0168	B2F0005
1205066-01	RPT		
B2E0164-MS (1205066-01MS2)	RPT		
B2E0164-MSD (1205066-01MSD2)	RPT		
1205066-02	NU		RE1 RPT
1205066-03	NU		RE1 RPT
1205066-04	CH4 OC RPT C2H4, C2H6	RE1 0.8mL RPT CH4	
1205066-05	CH4 OC RPT C2H4, C2H6	RE1 0.9mL RPT CH4	
1205066-06	NU		RE1 RPT
1205066-07	NU		RE1 RPT
1205066-08	NU	RE1 RPT	
1205066-09	NU	RE1 RPT	
1205066-10	NU		RE1 RPT
B2E0164-BS1	RPT		
B2E0164-BLK1	RPT		
B2E0168-BS1		RPT	
B2E0168-BLK1		RPT	
B2F0005-BS1			RPT
B2F0005-BLK1			RPT

Definitions

RPT	Report
NU	Not Used
OC	Over calibration
OTT	Out of tune time
nX	Dilution, where n is dilution factor

ICF INTERNATIONAL

ICF Consulting / Laboratory Data Consultants

ESAT REGION 9 REVIEW FORM

TDF(S): 01001084

DCN: 14885

Activity Codes(s): 13

~~preliminary~~ sheet ow

EPA Task Order Manager: Richard Bauer

Work Order: 1205066

Case (Project): R33911

SDG(s): 12145B

Due Date: 06/11/12

Date Sent: 05 / 31 / 12

Description: Analysis of ten water samples for Dissolved Gasses for the Dimock Residential Groundwater Site project

Data Package Prepared By:

LIMS Status Updated

Print name	Signature	Date
Nicholas Kish	Nicholas Kish	12/31/12 [✓]

Originals require Technical & Final review; Preliminary & Revised deliverables require Final review.

TECHNICAL/PEER REVIEW BY:
(Comments and corrections on reverse)

Print name	Approved	Date
		[ ]

FINAL REVIEW BY:
(Comments and corrections on reverse)

Print name	Approved	Date
Ziyad Rajabi	Ziyad Rajabi	05/31/12 [ ]

G:\USER\ESAT\# LAB DATA Deliverables\R33911\12145B-DissGasses-14885.docx

SAMPLE TRACKING FORMS

DIM0116981

DIM0116958

WORK ORDER

Printed: 5/29/2012 11:18:05AM

1205066

EPA Region 9 Laboratory

Client: US EPA Region 3, Eastern Response Branch
Project: Dimock Residential Groundwater
Project Number: R33911

Report To:
US EPA Region 3, Eastern Response Branch
Richard Fetzer
100 Gypsum Road
Stroudsburg, PA 18360
Phone: (215) 341-6307
Fax: XX

Project Contact
US EPA Region 3, Eastern Response Branch
Richard Fetzer
100 Gypsum Road
Stroudsburg, PA 18360
Phone :(215) 341-6307
Fax: XX

Shipping Containers	Description	Temp C	Custody Seals?	Containers Intact?	Labels COC Agree?	Preservation Confirmed?	Received on Ice?	Comments
Cooler 275	Cooler 3 of 3	3	Yes	Yes	Yes	No	Yes	
Cooler 281	Cooler 1 of 3	3	Yes	Yes	Yes	No	Yes	
Cooler 282	Cooler 2 of 3	4	Yes	Yes	Yes	No	Yes	

Date Due:	06/15/12 15:00 (21 day TAT)	SDG:	12145B
Received By:	Chris Cagurangan	Date Received:	05/24/12 09:50
Logged In By:	Chris Cagurangan	Date Logged In:	05/24/12 10:31

Analysis	Hold Time Expires	Comments
1205066-01 HW62 [Water] Sampled 05/22/12 15:59 Pacific		**LAB QC**
Dissolved HC Gases	06/05/12	5 day prelim results
TPH - Purgeable	06/05/12	
1205066-02 TB55 [Water] Sampled 05/22/12 11:05 Pacific		
Dissolved HC Gases	06/05/12	5 day prelim results
TPH - Purgeable	06/05/12	
1205066-03 FB23 [Water] Sampled 05/23/12 13:25 Pacific		
Dissolved HC Gases	06/06/12	5 day prelim results
TPH - Purgeable	06/06/12	
1205066-04 HW63 [Water] Sampled 05/23/12 13:09 Pacific		
TPH - Purgeable	06/06/12	
Dissolved HC Gases	06/06/12	5 day prelim results
1205066-05 HW63z [Water] Sampled 05/23/12 13:10 Pacific		
TPH - Purgeable	06/06/12	
Dissolved HC Gases	06/06/12	5 day prelim results

WORK ORDER

Printed: 5/29/2012 11:18:05AM

1205066

EPA Region 9 Laboratory

Client: US EPA Region 3, Eastern Response Branch **Project Number:** R33911
Project: Dimock Residential Groundwater

Analysis	Hold Time Expires	Comments

Analysis	Expires	Comments
1205066-06 TB56 [Water] Sampled 05/23/12 09:55 Pacific		
TPH - Purgeable	06/06/12	
Dissolved HC Gases	06/06/12	5 day prelim results
1205066-07 FB22 [Water] Sampled 05/22/12 11:58 Pacific		
TPH - Purgeable	06/05/12	
Dissolved HC Gases	06/05/12	5 day prelim results
1205066-08 HW64 [Water] Sampled 05/22/12 11:10 Pacific		
TPH - Purgeable	06/05/12	
Dissolved HC Gases	06/05/12	5 day prelim results
1205066-09 HW64-P [Water] Sampled 05/22/12 11:40 Pacific		
TPH - Purgeable	06/05/12	
Dissolved HC Gases	06/05/12	5 day prelim results
1205066-10 TB54 [Water] Sampled 05/22/12 08:10 Pacific		
TPH - Purgeable	06/05/12	
Dissolved HC Gases	06/05/12	5 day prelim results

Reviewed By

Date

USEPA CLP Generic COC (LAB COPY)
DateShipped: 5/23/2012
CarrierName: FedEx
AirbillNo: 7984-2846-8010

CHAIN OF CUSTODY RECORD

Case #: CT6031
Cooler #: 281

No: 3-052312-114224-0252
Lab: EPA R9 Laboratory
Lab Contact:
Lab Phone: 510.412.2389

Sample #	Matrix/Sampler	Coll. Method	Analysis/Turnaround	Tag/Preservative/Bottles	Station Location	Collected	For Lab Use Only
HW62	Drinking Water/ Mike Ferrier	Grab	RSK-175(7), RSK-175(7), GRO(7), GRO(7), RSK-175(7), RSK-175(7), RSK-175(7), RSK-175(7), GRO(7), GRO(7), GRO(7), GRO(7)	23315 (HCl / 40mlGlassVial), 23316 (HCl / 40mlGlassVial), 23334 (HCl / 40mlGlassVial), 23335 (HCl / 40mlGlassVial), 23344 (HCl / 40mlGlassVial), 23345 (HCl / 40mlGlassVial), 23346 (HCl / 40mlGlassVial), 23347 (HCl / 40mlGlassVial), 23354 (HCl / 40mlGlassVial), 23355 (HCl / 40mlGlassVial), 23356 (HCl / 40mlGlassVial), 23357 (HCl / 40mlGlassVial) (12)	HW62	05/22/2012 15:59	
TB55	Aqueous/ Gene Nance	Grab	RSK-175(7), RSK-175(7), GRO(7), GRO(7)	23361 (HCl / 40mlGlassVial), 23362 (HCl / 40mlGlassVial), 23363 (HCl / 40mlGlassVial), 23364 (HCl / 40mlGlassVial) (4)	TB55	05/22/2012 11:05	

Sample(s) to be used for Lab QC: HW62

Temp blank @ 3°C upon receipt
custody seals intact CB 05/24/12

Shipment for Case Complete? N
Samples Transferred From Chain of Custody #

Analysis Key: RSK-175=11-Dissolved Gases_Meth,Ethe,Etha, GRO=11-Gasoline Range Organics

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
16	[illegible]	5/23/12									
									[signature]	05/24/12	0950

00015

USEPA CLP Generic COC (LAB COPY)
DateShipped: 5/23/2012
CarrierName: FedEx
AirbillNo: 7936-0070-3435

CHAIN OF CUSTODY RECORD

Case #: CT6031
Cooler #: 282

No: 3-052312-162422-0255
Lab: EPA R9 Laboratory
Lab Contact:
Lab Phone: 510.412.2389

Sample #	Matrix/Sampler	Coll. Method	Analysis/Turnaround	Tag/Preservative/Bottles	Station Location	Collected	For Lab Use Only
FB23	Aqueous/ Joel Munson	Grab	RSK-175(7), RSK-175(7), GRO(7), GRO(7)	23467 (HCl / 40mlGlassVial), 23468 (HCl / 40mlGlassVial), 23486 (HCl / 40mlGlassVial), 23487 (HCl / 40mlGlassVial) (4)	FB23	05/23/2012 13:25	
HW63	Drinking Water/ Mike Ferrier	Grab	RSK-175(7), RSK-175(7), GRO(7), GRO(7)	23415 (HCl / 40mlGlassVial), 23416 (HCl / 40mlGlassVial), 23433 (HCl / 40mlGlassVial), 23434 (HCl / 40mlGlassVial) (4)	HW63	05/23/2012 13:09	
HW63z	Drinking Water/ Mike Ferrier	Grab	RSK-175(7), RSK-175(7), GRO(7), GRO(7)	23441 (HCl / 40mlGlassVial), 23442 (HCl / 40mlGlassVial), 23459 (HCl / 40mlGlassVial), 23460 (HCl / 40mlGlassVial) (4)	HW63	05/23/2012 13:10	
TB56	Aqueous/ Gene Nance	Grab	RSK-175(7), RSK-175(7), GRO(7), GRO(7)	23493 (HCl / 40mlGlassVial), 23494 (HCl / 40mlGlassVial), 23495 (HCl / 40mlGlassVial), 23496 (HCl / 40mlGlassVial) (4)	TB56	05/23/2012 09:55	

Special Instructions: Temp blank @ 4°C upon receipt custody seals intact. CW 05/24/12

Shipment for Case Complete? Y
Samples Transferred From Chain of Custody #

Analysis Key: RSK-175=11-Dissolved Gases_Meth,Ethe,Etha, GRO=11-Gasoline Range Organics

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
16	DMann	5/23/12									
									[signature]	05/24/12	0950

00017

USEPA CLP Generic COC (LAB COPY)
DateShipped: 5/23/2012
CarrierName: FedEx
AirbillNo: 7935-9774-1105

CHAIN OF CUSTODY RECORD

Case #: CT6031

No: 3-052312-112400-0251
Lab: EPA R9 Laboratory
Lab Contact:
Lab Phone: 510.412.2389

Sample #	Matrix/Sampler	Coll. Method	Analysis/Turnaround	Tag/Preservative/Bottles	Station Location	Collected	For Lab Use Only
FB22	Aqueous/ Mike Ferrier	Grab	RSK-175(7), RSK-175(7), GRO(7), GRO(7)	23215 (HCl / 40mlGlassVial), 23216 (HCl / 40mlGlassVial), 23234 (HCl / 40mlGlassVial), 23235 (HCl / 40mlGlassVial) (4)	FB22	05/22/2012 11:58	
HW64	Drinking Water/ Mike Ferrier	Grab	RSK-175(7), RSK-175(7), GRO(7), GRO(7)	23169 (HCl / 40mlGlassVial), 23170 (HCl / 40mlGlassVial), 23188 (HCl / 40mlGlassVial), 23189 (HCl / 40mlGlassVial) (4)	HW64	05/22/2012 11:10	
HW64-P	Drinking Water/ Mike Ferrier	Grab	RSK-175(7), RSK-175(7), GRO(7), GRO(7)	23195 (HCl / 40mlGlassVial), 23196 (HCl / 40mlGlassVial), 23206 (HCl / 40mlGlassVial), 23207 (HCl / 40mlGlassVial) (4)	HW64-P	05/22/2012 11:40	
TB54	Aqueous/ Gene Nance	Grab	RSK-175(7), RSK-175(7), GRO(7), GRO(7)	23161 (HCl / 40mlGlassVial), 23162 (HCl / 40mlGlassVial), 23163 (HCl / 40mlGlassVial), 23164 (HCl / 40mlGlassVial) (4)	TB54	05/22/2012 08:10	

Special Instructions: Temp blank @ 3°C upon receipt
Custody seals intact CRL 05/24/12

Shipment for Case Complete? N
Samples Transferred From Chain of Custody #

Analysis Key: RSK-175=11-Dissolved Gases_Meth,Ethe,Etha, GRO=11-Gasoline Range Organics

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
16	[illegible]	5/23/12									
									[signature]	05/24/12	0950

Sample Preparation

: 00019

DIM0116958

DIM0116987

PREPARATION BENCH SHEET

B2E0164

EPA Region 9 Laboratory

Project: R12S87 - McCormick and Baxter May 2012 GW Monitoring

Matrix: Water **Analysis:Dissolved HC Gases** **Prepared using: Volatiles - RSK175**

Lab Number	SampleName	Prepared	Initial (mL)	Final (mL)	Spike ID	Source ID	ul Spike	ul Surrogate	Prepared By	pH	Weight 1
1205045-05RE2 F	20DSW1C010	05/25/12 13:58	0.1	16.1				100	NGK	<2	
1205053-01 F	20MW19D038	05/29/12 08:18	1.6	16.1				100	NGK	<2	
1205053-02 F	20MW9B033	05/29/12 08:18	1.6	16.1				100	NGK	<2	
1205053-03 F	20MW8C032	05/29/12 08:18	1.6	16.1				100	NGK	<2	
1205053-04 H	20OFS4A1035	05/29/12 08:18	16.1	16.1				100	NGK	<2	
1205053-05 F	20OFS4C037	05/29/12 08:18	16.1	16.1				100	NGK	<2	
1205053-06 A	20MBTB057	05/29/12 08:18	16.1	16.1				100	NGK	<2	
1205061-01 D	20MW10B039	05/29/12 08:18	16.1	16.1				100	NGK	<2	
1205061-02 F	20MW18D031	05/29/12 08:18	1.6	16.1				100	NGK	<2	
1205061-03 F	20MW16C013	05/29/12 08:18	1.6	16.1				100	NGK	<2	
1205061-04 F	20MW15C029	05/29/12 08:18	1.6	16.1				100	NGK	<2	
1205061-05 F	20DSW7C012	05/29/12 08:18	1.6	16.1				100	NGK	<2	
1205061-06 A	20MW15C030	05/29/12 08:18	1.6	16.1				100	NGK	<2	
1205061-07 A	20MBTB056	05/29/12 08:18	16.1	16.1				100	NGK	<2	
1205066-01 L	HW62	05/29/12 08:18	16.1	16.1				100	NGK	<2	
1205066-02 D	TB55	05/29/12 08:18	16.1	16.1				100	NGK	<2	
1205066-03 D	FB23	05/29/12 08:18	16.1	16.1				100	NGK	<2	
1205066-04 D	HW63	05/29/12 08:18	16.1	16.1				100	NGK	<2	
1205066-05 D	HW63z	05/29/12 08:18	16.1	16.1				100	NGK	<2	
1205066-06 D	TB56	05/29/12 08:18	16.1	16.1				100	NGK	<2	

SL, 6/5/12

Preparation Reviewed By

: 00020

PREPARATION BENCH SHEET

B2E0164

EPA Region 9 Laboratory

Project: R33911 - Dimock Residential Groundwater

Matrix: Water **Analysis:Dissolved HC Gases** **Prepared using: Volatiles - RSK175**

Lab Number	SampleName	Prepared	Initial (mL)	Final (mL)	Spike ID	Source ID	ul Spike	ul Surrogate	Prepared By	pH	Weight 1
1205066-07 D	FB22	05/29/12 08:18	16.1	16.1				100	NGK	<2	
1205066-08 D	HW64	05/29/12 08:18	16.1	16.1				100	NGK	<2	
1205066-09 D	HW64-P	05/29/12 08:18	16.1	16.1				100	NGK	<2	
1205066-10 D	TB54	05/29/12 08:18	16.1	16.1				100	NGK	<2	
B2E0164-BLK1	Blank	05/29/12 08:18	16.1	16.1				100	NGK	<2	
B2E0164-BS1	LCS	05/29/12 08:18	16.1	16.1	0L07008		100	100	NGK	<2	
B2E0164-MS1	Matrix Spike	05/29/12 08:18	0.1	16.1	0L07008	205045-05RE	100	100	NGK	<2	
B2E0164-MS2	Matrix Spike	05/29/12 08:18	16.1	16.1	0L07008	1205066-01	100	100	NGK	<2	
B2E0164-MSD1	Matrix Spike Dup	05/29/12 08:18	0.1	16.1	0L07008	205045-05RE	100	100	NGK	<2	
B2E0164-MSD2	Matrix Spike Dup	05/29/12 08:18	16.1	16.1	0L07008	1205066-01	100	100	NGK	<2	

Reagents

Reagent # **Description**

SL 6/5/12

Preparation Reviewed By

PREPARATION BENCH SHEET

B2E0168

EPA Region 9 Laboratory

Project: R12S87 - McCormick and Baxter May 2012 GW Monitoring

Matrix: Water **Analysis:Dissolved HC Gases** **Prepared using: Volatiles - RSK175**

Lab Number	SampleName	Prepared	Initial (mL)	Final (mL)	Spike ID	Source ID	ul Spike	ul Surrogate	Prepared By	pH	Weight 1
1205053-01RE1 F	20MW19D038	05/30/12 08:21	0.1	16.1				100	NGK	<2	
1205053-02RE1 F	20MW9B033	05/30/12 08:21	0.23	16.1				100	NGK	<2	
1205053-03RE1 F	20MW8C032	05/30/12 08:21	0.3	16.1				100	NGK	<2	
1205061-02RE1 F	20MW18D031	05/30/12 08:21	0.13	16.1				100	NGK	<2	
1205061-04RE1 F	20MW15C029	05/29/12 08:18	1.6	16.1				100	NGK	<2	
1205061-05RE1 F	20DSW7C012	05/30/12 08:21	0.26	16.1				100	NGK	<2	
1205066-04RE1 D	HW63	05/30/12 08:21	0.8	16.1				100	NGK	<2	
1205066-05RE1 D	HW63z	05/30/12 08:21	0.9	16.1				100	NGK	<2	
1205066-08RE1 D	HW64	05/29/12 08:18	16.1	16.1				100	NGK	<2	
1205066-09RE1 D	HW64-P	05/29/12 08:18	16.1	16.1				100	NGK	<2	
B2E0168-BLK1	Blank	05/30/12 08:21	16.1	16.1				100	NGK	<2	
B2E0168-BS1	LCS	05/30/12 08:21	16.1	16.1	0L07008		100	100	NGK	<2	
B2E0168-MS1	Matrix Spike	05/30/12 08:21	16.1	16.1	0L07008	205061-04RE	100	100	NGK	<2	
B2E0168-MSD1	Matrix Spike Dup	05/30/12 08:21	16.1	16.1	0L07008	205061-04RE	100	100	NGK	<2	

From B2E0164 on 5/30/2012 by NGK

Reagents

Reagent #	Description

SL, 6/5/12

Preparation Reviewed By

: 00021

PREPARATION BENCH SHEET

B2F0005

EPA Region 9 Laboratory

Project: R12S87 - McCormick and Baxter May 2012 GW Monitoring

Matrix: Water **Analysis:Dissolved HC Gases** **Prepared using: Volatiles - RSK175**

Lab Number	SampleName	Prepared	Initial (mL)	Final (mL)	Spike ID	Source ID	ul Spike	ul Surrogate	Prepared By	pH	Weight 1
1205061-04RE2 F	20MW15C029	06/01/12 14:26	0.4	16.1				100	NGK		
1205066-02RE1 D	TB55	05/29/12 08:18	16.1	16.1				100	NGK		
1205066-03RE1 D	FB23	05/29/12 08:18	16.1	16.1				100	NGK		
1205066-06RE1 D	TB56	05/29/12 08:18	16.1	16.1				100	NGK		
1205066-07RE1 D	FB22	05/29/12 08:18	16.1	16.1				100	NGK		
1205066-10RE1 D	TB54	05/29/12 08:18	16.1	16.1				100	NGK		
B2F0005-BLK1	Blank	06/01/12 14:26	16.1	16.1				100	NGK		
B2F0005-BS1	LCS	06/01/12 14:26	16.1	16.1	0L07008		100	100	NGK		
B2F0005-MS1	Matrix Spike	06/01/12 14:26	0.4	16.1	0L07008	205061-04RE	100	100	NGK		
B2F0005-MSD1	Matrix Spike Dup	06/01/12 14:26	0.4	16.1	0L07008	205061-04RE	100	100	NGK		

From B2E0168 on 6/1/2012 by NGK

Reagents

Reagent # **Description**

SL, 6/5/12

Preparation Reviewed By

INITIAL CALIBRATION

DIM0116992

RESPONSE FACTOR REPORT AG6890N-6

Method Path: C:\MSDCHEM\1\METHODS
Method File: 0515126RSK
Title:
Last Update: Wed May 16 13:16:50 2012
Response Via: Initial Calibration

Calibration Files:
1 = 0508126R008.D 2 = 0508126R007.D 3 = 0508126R006.D 4 = 0508126R005.D
5 = 0508126R004.D 6 = 0508126R003.D 7 = 0508126R002.D 8= 0515126R19.D

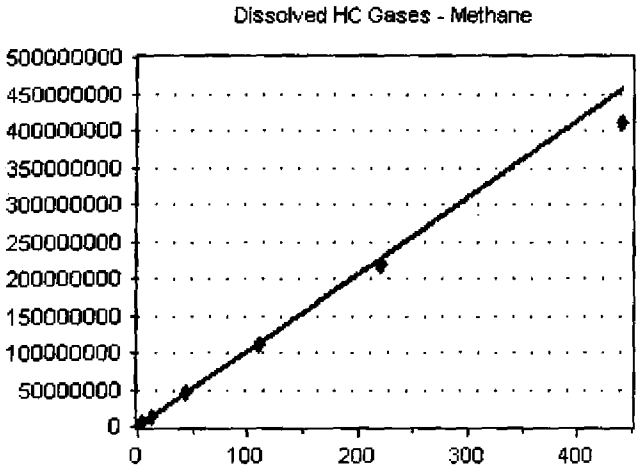
Compound		1	2	3	4	5	6	7	8	AVG.	%RSD
1) TM Methane											
	ug/L		1.231	4.102	13.230	44.099	110.248	220.497	440.994		
	RF		1.150E+06	1.024E+06	1.069E+06	1.057E+06	1.007E+06	9.926E+05	9.325E+05	1.033E+06	6.61%
2) S Acetylene											
	ug/L	1.007	2.014	6.713	21.650	72.166	180.415	360.831	721.662		
	RF	343218.997	3.405E+05	3.347E+05	3.698E+05	3.702E+05	3.564E+05	3.506E+05	3.313E+05	3.496E+05	4.27%
3) TM Ethene											
	ug/L	1.091	2.182	7.273	23.455	78.183	195.458	390.916	781.832		
	RF	8.726E+05	8.821E+05	8.681E+05	9.594E+05	9.587E+05	9.180E+05	9.064E+05	8.512E+05	9.020E+05	4.55%
4) TM Ethane											
	ug/L	1.162	2.324	7.746	24.981	83.269	208.172	416.343	832.686		
	RF	9.536E+05	9.697E+05	9.557E+05	1.052E+06	1.050E+06	1.001E+06	9.878E+05	9.285E+05	9.872E+05	4.56%

EPA Region 9 Laboratory

Instrument:	AG6890-6	Calibration Date:	05/08/12 15:00 By NGK
Calibration ID:	1205004	Last Edit Date:	05/17/12 08:31 By NGK

Dissolved HC Gases

Methane

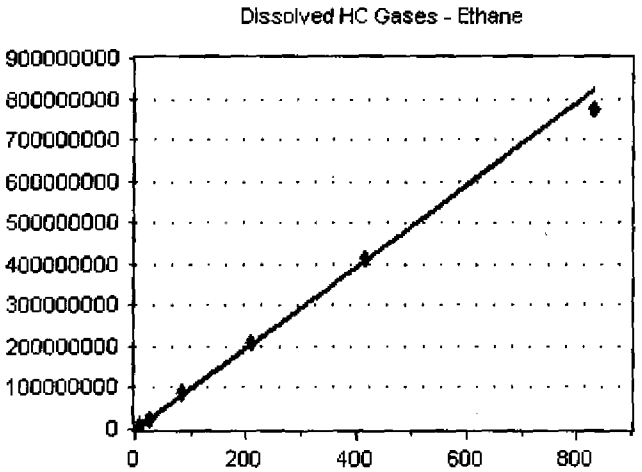


Average RF

RF RSD: 6.615554

[Conc] = 1034395 * [Response]

Ethane

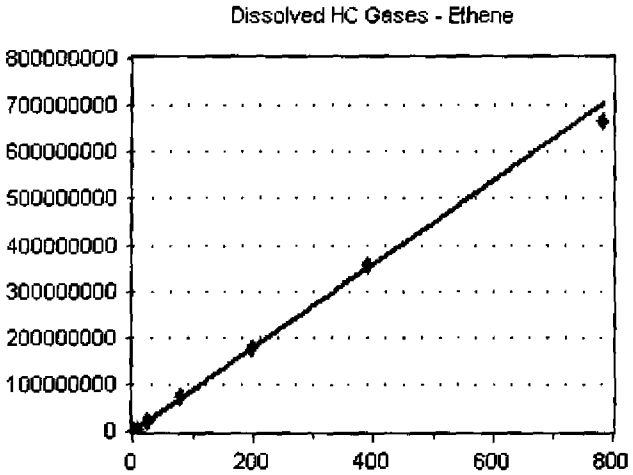


Average RF

RF RSD: 4.515546

[Conc] = 988051.9 * [Response]

Ethene



Average RF

RF RSD: 4.484269

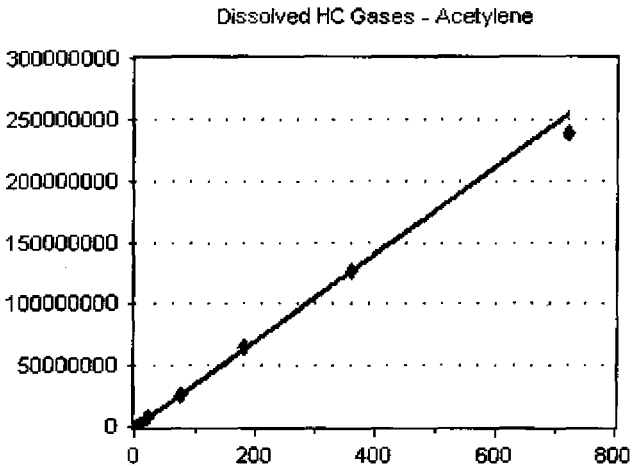
[Conc] = 901236.1 * [Response]

EPA Region 9 Laboratory

Instrument:	AG6890-6	Calibration Date:	05/08/12 15:00 By NGK
Calibration ID:	1205004	Last Edit Date:	05/17/12 08:31 By NGK

Dissolved HC Gases

Acetylene



Average RF

RF RSD: 4.786033

[Conc] = 352876.5 * [Response]

ANALYSIS SEQUENCE

2050025

Instrument: AG6890-6

Calibration ID: 1205004

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Client
2050025-IBL1	QC		1				
2050025-CAL7	QC		2		2E08021		
2050025-CAL6	QC		3		2E08020		
2050025-CAL5	QC		4		2E08019		
2050025-CAL4	QC		5		2E08016		
2050025-CAL3	QC		6		2E08024		
2050025-CAL2	QC		7		2E08023		
2050025-CAL1	QC		8		2E08022		
2050025-SCV1	QC		9		2E08025		
2050025-IBL2	QC		10				

Samples Loaded By Date Data Processed By Date

Injection Log

Directory: D:\MSDCHEM\1\2012\DATA\050812RSK

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	0508126r001.d	1.	2050025-IBL1		Unrecognized:Un
2	2	0508126r002.d	1.	2050025-CAL7	2E08021	Unrecognized:Un
3	3	0508126r003.d	1.	2050025-CAL6	2E08020	Unrecognized:Un
4	4	0508126r004.d	1.	2050025-CAL5	2E08019	Unrecognized:Un
5	5	0508126r005.d	1.	2050025-CAL4	2E08016	Unrecognized:Un
6	6	0508126r006.d	1.	2050025-CAL3	2E08024	Unrecognized:Un
7	7	0508126r007.d	1.	2050025-CAL2	2E08023	Unrecognized:Un
8	8	0508126r008.d	1.	2050025-CAL1	2E08022	Unrecognized:Un
9	9	0508126r009.d	1.	2050025-SCV1	2E08025	Unrecognized:Un
10	10	0508126r010.d	1.	2050025-IBL2		Unrecognized:Un

DIM0116958

DIM0116997

Response Factor Report AG6890N-6

Method Path : D:\MSDCHEM\1\2012\METHOD\
Method File : 0508126RSK.M
Title :
Last Update : Wed May 09 14:07:29 2012 → use file update may 16 13:16:50 2012 RD 5/18/12
Response Via : Initial Calibration

Calibration Files
1 =0508126R008.D 2 =0508126R007.D 3 =0508126R006.D
4 =0508126R005.D 5 =0508126R004.D 6 =0508126R003.D

	Compound	1	2	3	4	5	6	Avg	%RSD
1) TM	Methane		1.150	1.024	1.069	1.057	1.007	1.050 E6	5.42
2) S	Acetylene	3.432	3.405	3.347	3.698	3.702	3.564	3.522 E5	3.98
3) TM	Ethene	8.726	8.821	8.681	9.594	9.587	9.180	9.093 E5	4.21
4) TM	Ethane	0.954	0.970	0.956	1.052	1.050	1.001	0.996 E6	4.15
5) Qual	Propane							0.000	-1.00
6) Qual	Butane							0.000	-1.00

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

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\050812RSK\
Data File : 0508126R001.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 08 May 2012 3:00 pm
Operator : ngk
Sample : 2050025-IBL1
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 09 14:09:28 2012
Quant Method : D:\MSDCHEM\1\2012\METHOD\0508126RSK.M
Quant Title :
QLast Update : Wed May 09 14:07:29 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 600 uL
Signal Phase : ShinCarbon ST
Signal Info : 1m x 0.75mm

Compound	R.T.	Response	Conc	Units
System Monitoring Compounds				
2) S Acetylene	7.939	22452563	63.748	ug/L
Spiked Amount 66.330 Range 66 - 153 Recovery = 96.11%				
Target Compounds				
1) TM Methane	0.000	0	N.D.	ug/L
3) TM Ethene	0.000	0	N.D.	ug/L
4) TM Ethane	0.000	0	N.D.	ug/L
5) Qual Propane	0.000	0	N.D.	
6) Qual Butane	0.000	0	N.D.	

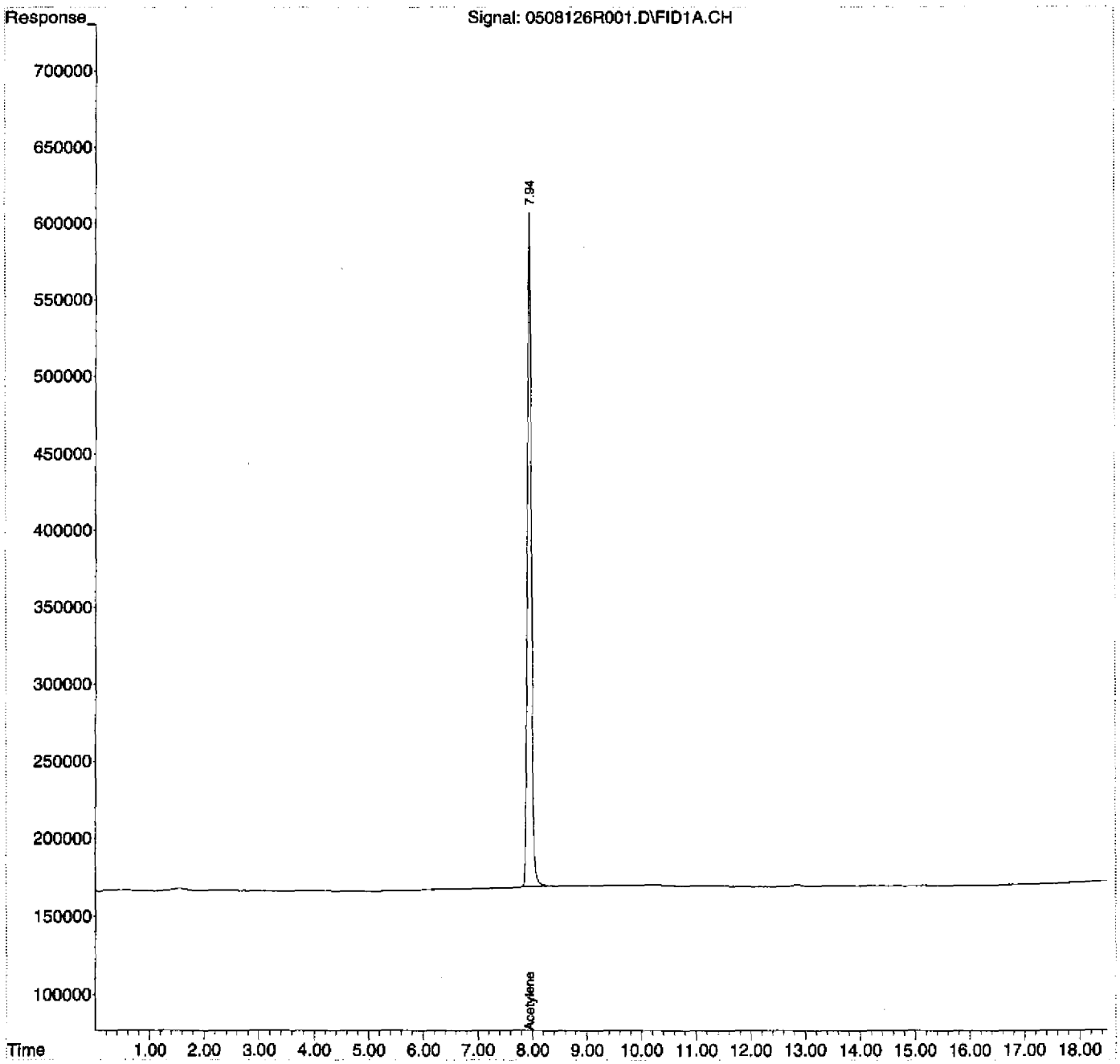
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\050812RSK\
Data File : 0508126R001.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 08 May 2012 3:00 pm
Operator : ngk
Sample : 2050025-IBL1
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 09 14:09:28 2012
Quant Method : D:\MSDCHEM\1\2012\METHOD\0508126RSK.M
Quant Title :
QLast Update : Wed May 09 14:07:29 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 600 uL
Signal Phase : ShinCarbon ST
Signal Info : 1m x 0.75mm



Quantitation Report (QT Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\050812RSK\
Data File : 0508126R001.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 08 May 2012 3:00 pm
Operator : ngk
Sample : 2050025-IBL1
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 09 14:09:47 2012
Quant Method : D:\MSDCHEM\1\2012\METHOD\0508126RSK.M
Quant Title :
QLast Update : Wed May 09 14:07:29 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 600 uL
Signal Phase : ShinCarbon ST
Signal Info : 1m x 0.75mm

Compound	R.T.	Response	Conc	Units
System Monitoring Compounds				
2) S Acetylene	7.939	22452563	63.748	ug/L
Spiked Amount 66.330 Range 66 - 153 Recovery = 96.11%				
Target Compounds				
1) TM Methane	1.548	224272	<MDL	ug/L m
3) TM Ethene	0.000	0	N.D.	ug/L
4) TM Ethane	0.000	0	N.D.	ug/L
5) Qual Propane	0.000	0	N.D.	
6) Qual Butane	0.000	0	N.D.	

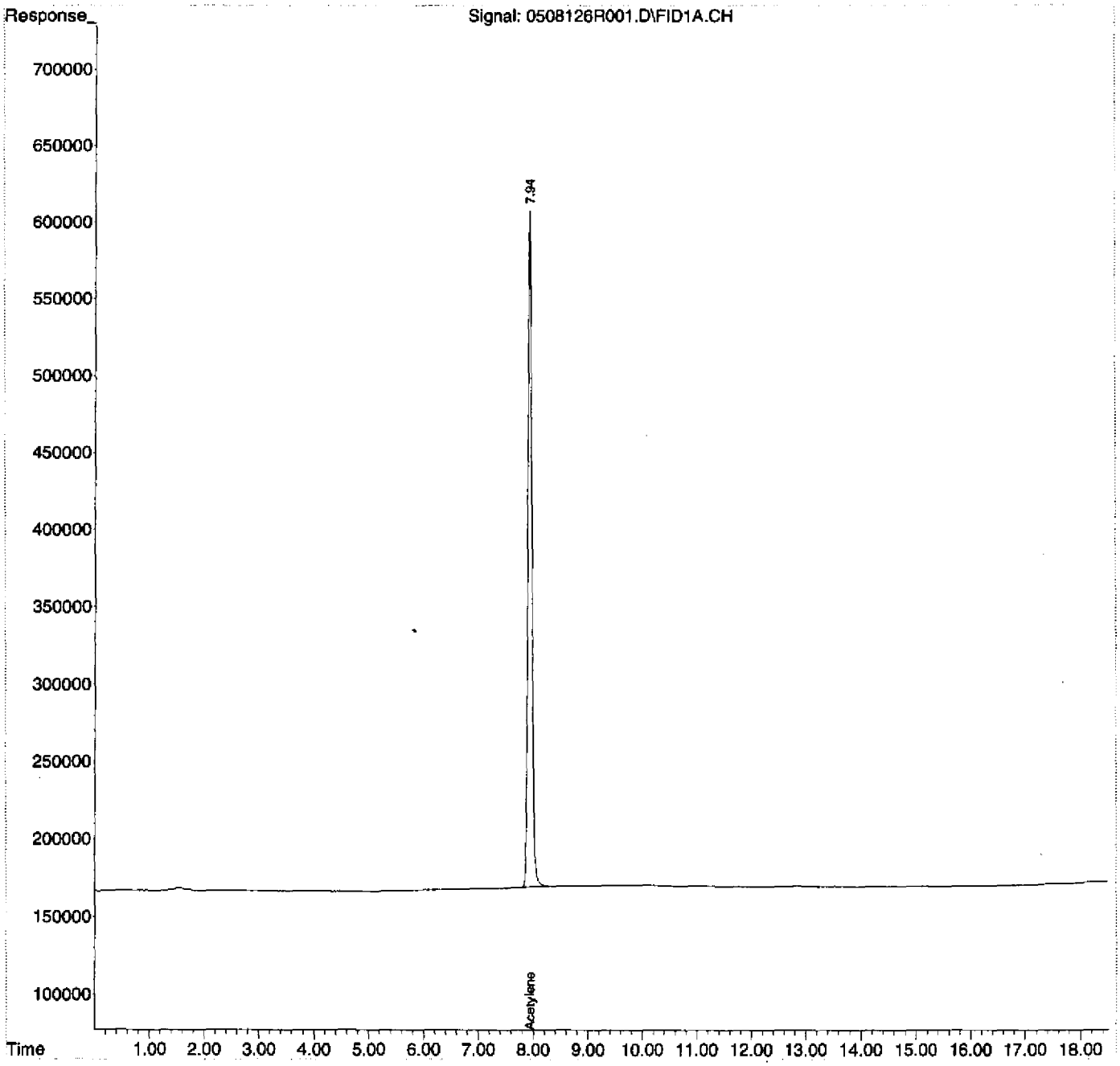
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\050812RSK\
Data File : 0508126R001.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 08 May 2012 3:00 pm
Operator : ngk
Sample : 2050025-IBL1
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 09 14:09:47 2012
Quant Method : D:\MSDCHEM\1\2012\METHOD\0508126RSK.M
Quant Title :
QLast Update : Wed May 09 14:07:29 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 600 uL
Signal Phase : ShinCarbon ST
Signal Info : 1m x 0.75mm



Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\050812RSK\
Data File : 0508126R002.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 08 May 2012 3:28 pm
Operator : ngk
Sample : 2050025-CAL7
Misc : 2E08021
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 09 14:01:49 2012
Quant Method : D:\MSDCHEM\1\2012\METHOD\0126126RSK.M
Quant Title :
QLast Update : Wed May 09 14:01:20 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 600 uL
Signal Phase : ShinCarbon ST
Signal Info : 1m x 0.75mm

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
2) S Acetylene	7.932	126491308	362.072 ug/L
Spiked Amount 66.330 Range 66 - 153		Recovery = 545.86%#	
Target Compounds			
1) TM Methane	1.532	218864838	212.677 ug/L
3) TM Ethene	8.359	354337888	395.719 ug/L
4) TM Ethane	9.000	411258994	421.332 ug/L
5) Qual Propane	0.000	0	N.D.
6) Qual Butane	0.000	0	N.D.

(f)=RT Delta > 1/2 Window (m)=manual int.

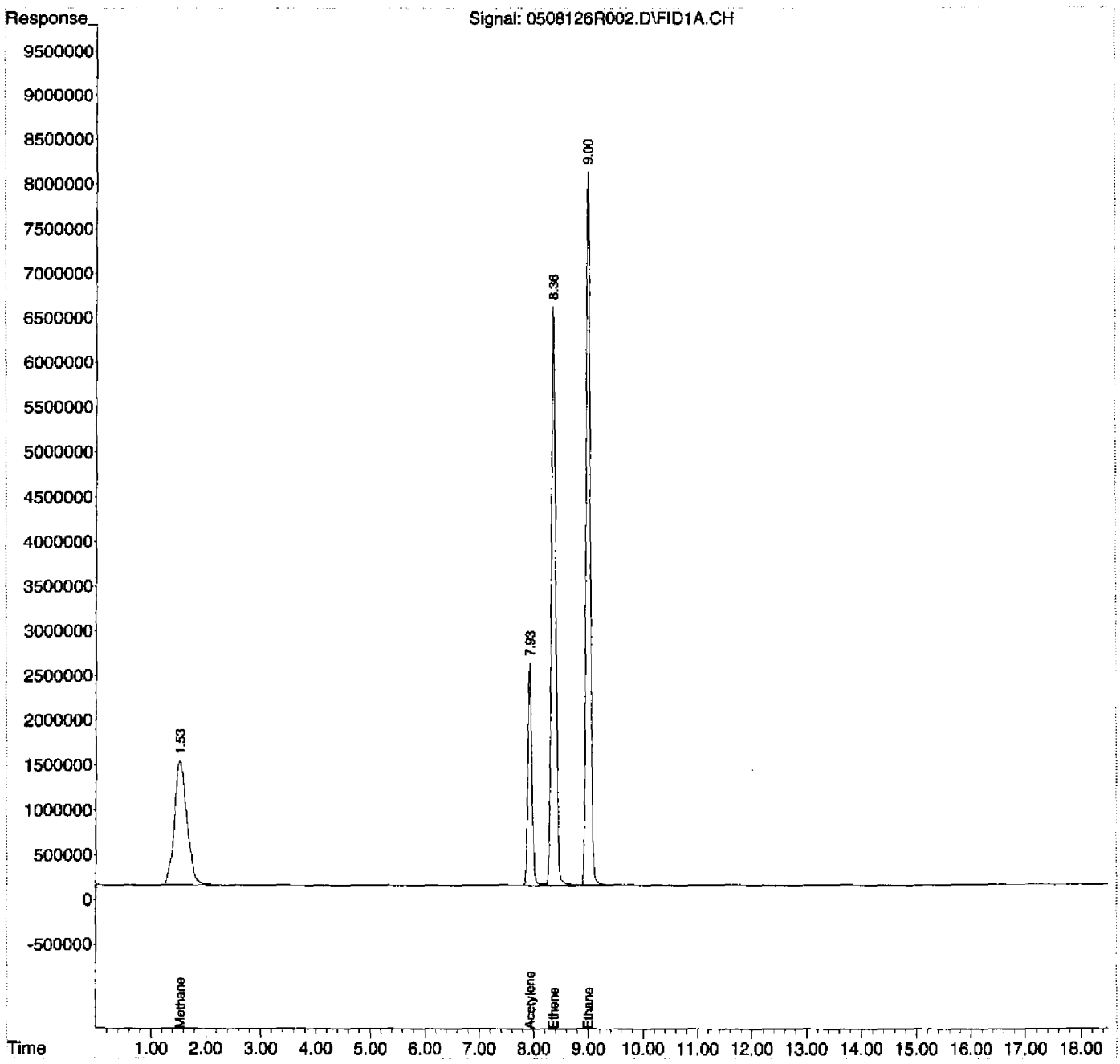
#3) 354337888 / 390.72 = 906,420 cf
KO 5/18/12

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\050812RSK\
Data File : 0508126R002.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 08 May 2012 3:28 pm
Operator : ngk
Sample : 2050025-CAL7
Misc : 2E08021
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 09 14:01:49 2012
Quant Method : D:\MSDCHEM\1\2012\METHOD\0126126RSK.M
Quant Title :
QLast Update : Wed May 09 14:01:20 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 600 uL
Signal Phase : ShinCarbon ST
Signal Info : 1m x 0.75mm



Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\050812RSK\
Data File : 0508126R003.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 08 May 2012 4:02 pm
Operator : ngk
Sample : 2050025-CAL6
Misc : 2E08020
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 09 14:02:35 2012
Quant Method : D:\MSDCHEM\1\2012\METHOD\0126126RSK.M
Quant Title :
QLast Update : Wed May 09 14:02:23 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 600 uL
Signal Phase : ShinCarbon ST
Signal Info : 1m x 0.75mm

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
2) S Acetylene	7.940	64301446	184.470 ug/L
Spiked Amount 66.330 Range 66 - 153		Recovery =	278.11%#
Target Compounds			
1) TM Methane	1.532	111054425	107.639 ug/L
3) TM Ethene	8.366	179425929	200.044 ug/L
4) TM Ethane	9.005	208286988	212.876 ug/L
5) Qual Propane	0.000	0	N.D.
6) Qual Butane	0.000	0	N.D.

(f)=RT Delta > 1/2 Window (m)=manual int.

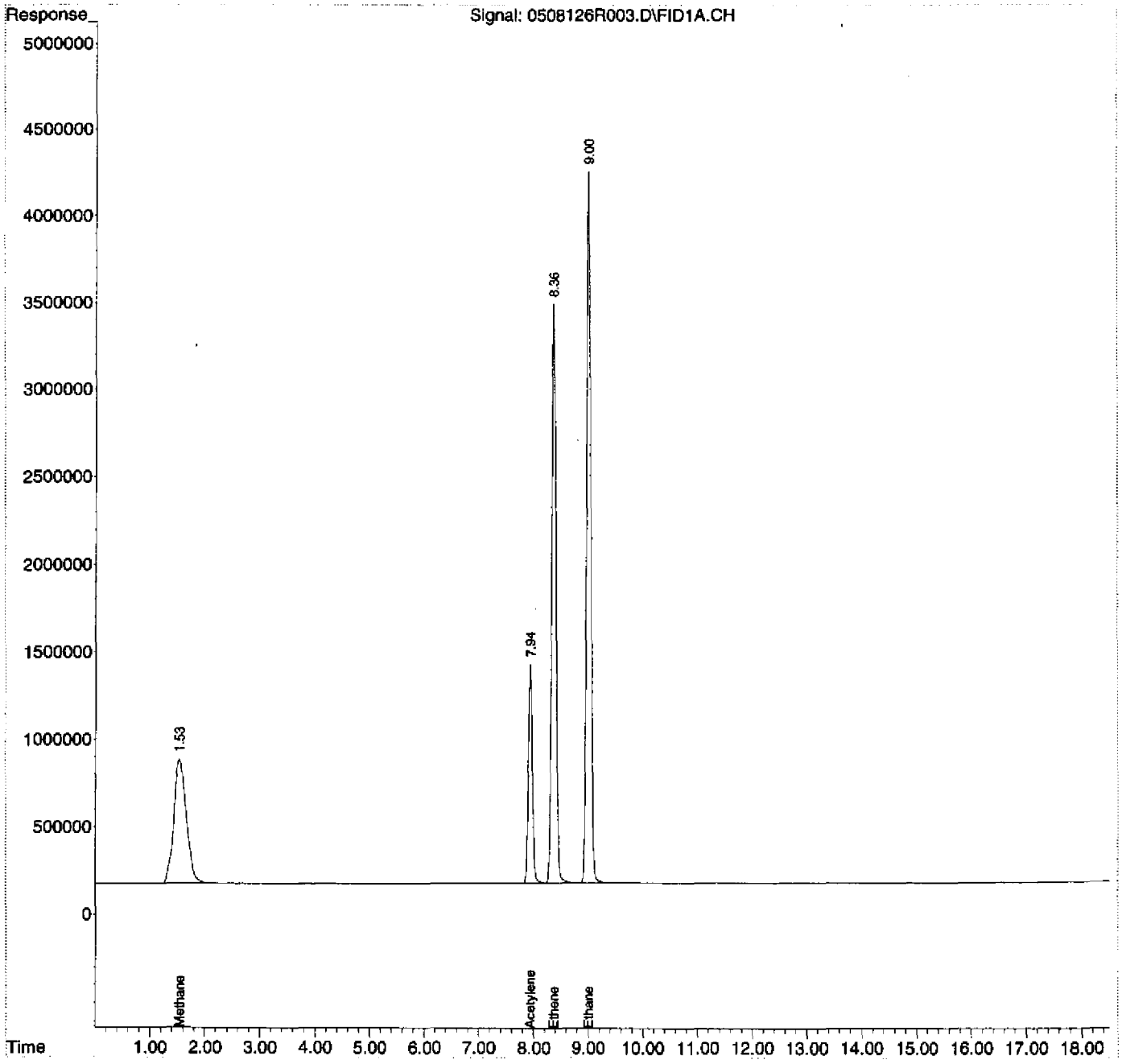
#4) 208256988 / 208.172 = 1,000.466 CF
KW 5/18/12

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\050812RSK\
Data File : 0508126R003.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 08 May 2012 4:02 pm
Operator : ngk
Sample : 2050025-CAL6
Misc : 2E08020
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 09 14:02:35 2012
Quant Method : D:\MSDCHEM\1\2012\METHOD\0126126RSK.M
Quant Title :
QLast Update : Wed May 09 14:02:23 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 600 uL
Signal Phase : ShinCarbon ST
Signal Info : 1m x 0.75mm



Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\050812RSK\
Data File : 0508126R004.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 08 May 2012 4:30 pm
Operator : ngk
Sample : 2050025-CAL5
Misc : 2E08019
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 09 14:03:28 2012
Quant Method : D:\MSDCHEM\1\2012\METHOD\0126126RSK.M
Quant Title :
QLast Update : Wed May 09 14:02:53 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 600 uL
Signal Phase : ShinCarbon ST
Signal Info : 1m x 0.75mm

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
2) S Acetylene	7.946	26714279	77.059 ug/L
Spiked Amount 66.330 Range 66 - 153		Recovery =	116.18%
Target Compounds			
1) TM Methane	1.532	46602864	45.318 ug/L
3) TM Ethene	8.369	74951316	83.883 ug/L
4) TM Ethane	9.010	87415163	89.637 ug/L
5) Qual Propane	0.000	0	N.D.
6) Qual Butane	0.000	0	N.D.

(f)=RT Delta > 1/2 Window (m)=manual int.

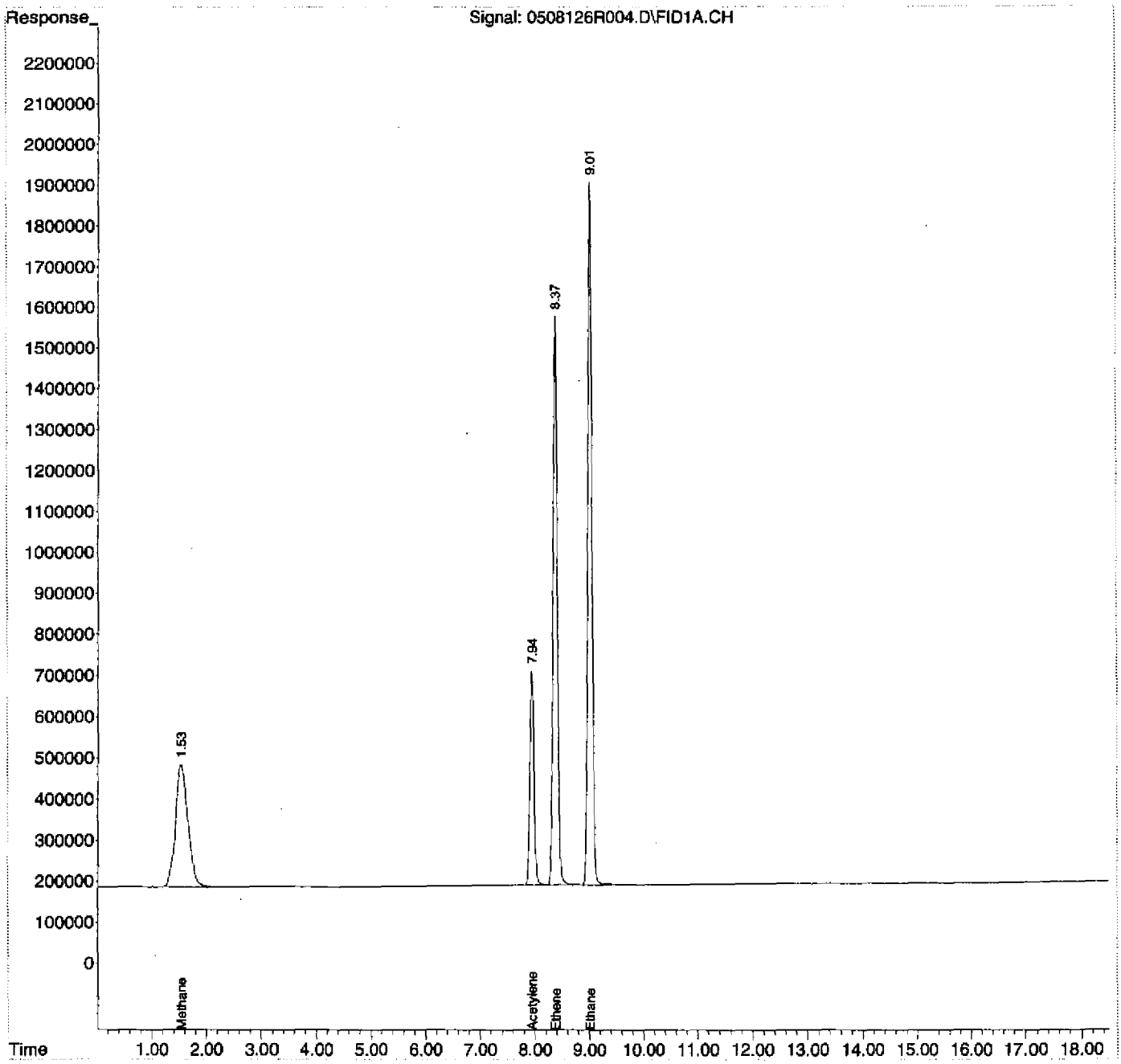
#2) 26714279 / 72.17 = 370158 CF
KW 5/18/12

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\050812RSK\
Data File : 0508126R004.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 08 May 2012 4:30 pm
Operator : ngk
Sample : 2050025-CAL5
Misc : 2E08019
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 09 14:03:28 2012
Quant Method : D:\MSDCHEM\1\2012\METHOD\0126126RSK.M
Quant Title :
QLast Update : Wed May 09 14:02:53 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 600 uL
Signal Phase : ShinCarbon ST
Signal Info : 1m x 0.75mm



Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\050812RSK\
Data File : 0508126R005.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 08 May 2012 5:06 pm
Operator : ngk
Sample : 2050025-CAL4
Misc : 2E08016
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 09 14:00:33 2012
Quant Method : D:\MSDCHEM\1\2012\METHOD\0126126RSK.M
Quant Title :
QLast Update : Fri Jan 27 11:26:56 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 600 uL
Signal Phase : ShinCarbon ST
Signal Info : 1m x 0.75mm

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
2) S Acetylene	7.949	8007162	22.909 ug/L
Spiked Amount 66.330 Range 66 - 153		Recovery =	34.54%#
Target Compounds			
1) TM Methane	1.533	14146794	13.896 ug/L
3) TM Ethene	8.372	22501962	25.342 ug/L
4) TM Ethane	9.010	26286987	27.196 ug/L
5) Qual Propane	0.000	0	N.D.
6) Qual Butane	0.000	0	N.D.

(f)=RT Delta > 1/2 Window (m)=manual int.

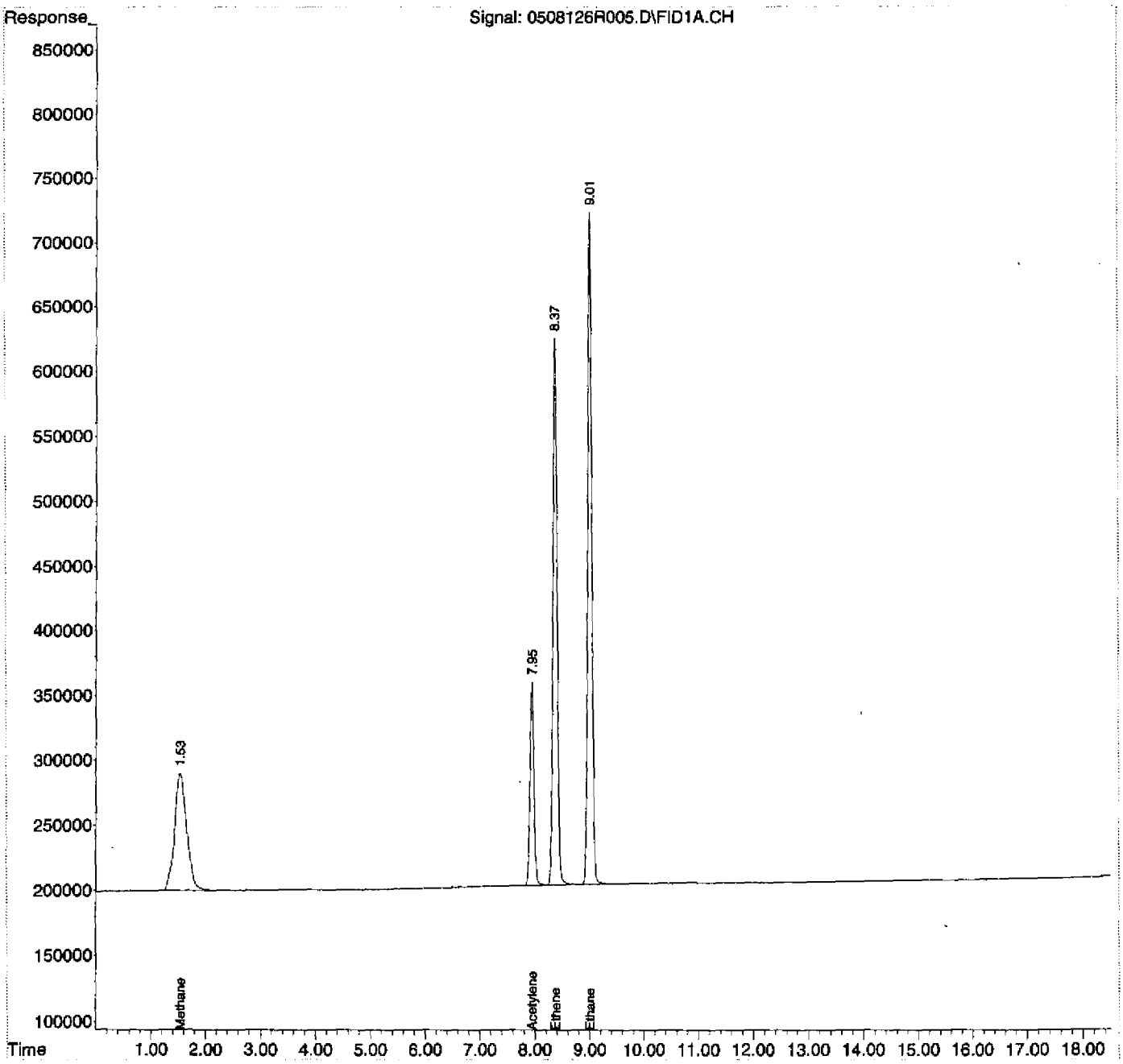
#1) 14146794 / 13.23 = 1069297 RF
KDS 18/12

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\050812RSK\
Data File : 0508126R005.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 08 May 2012 5:06 pm
Operator : ngk
Sample : 2050025-CAL4
Misc : 2E08016
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 09 14:00:33 2012
Quant Method : D:\MSDCHEM\1\2012\METHOD\0126126RSK.M
Quant Title :
QLast Update : Fri Jan 27 11:26:56 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 600 uL
Signal Phase : ShinCarbon ST
Signal Info : 1m x 0.75mm



Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\050812RSK\
Data File : 0508126R006.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 08 May 2012 5:34 pm
Operator : ngk
Sample : 2050025-CAL3
Misc : 2E08024
ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 09 14:04:20 2012
Quant Method : D:\MSDCHEM\1\2012\METHOD\0126126RSK.M
Quant Title :
QLast Update : Wed May 09 14:03:49 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 600 uL
Signal Phase : ShinCarbon ST
Signal Info : 1m x 0.75mm

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
2) S Acetylene	7.952	2246989	6.453 ug/L
Spiked Amount 66.330 Range 66 - 153		Recovery =	9.73%#
Target Compounds			
1) TM Methane	1.531	4200908	4.046 ug/L
3) TM Ethene	8.373	6313850	7.016 ug/L
4) TM Ethane	9.014	7402773	7.530 ug/L
5) Qual Propane	0.000	0	N.D.
6) Qual Butane	0.000	0	N.D.

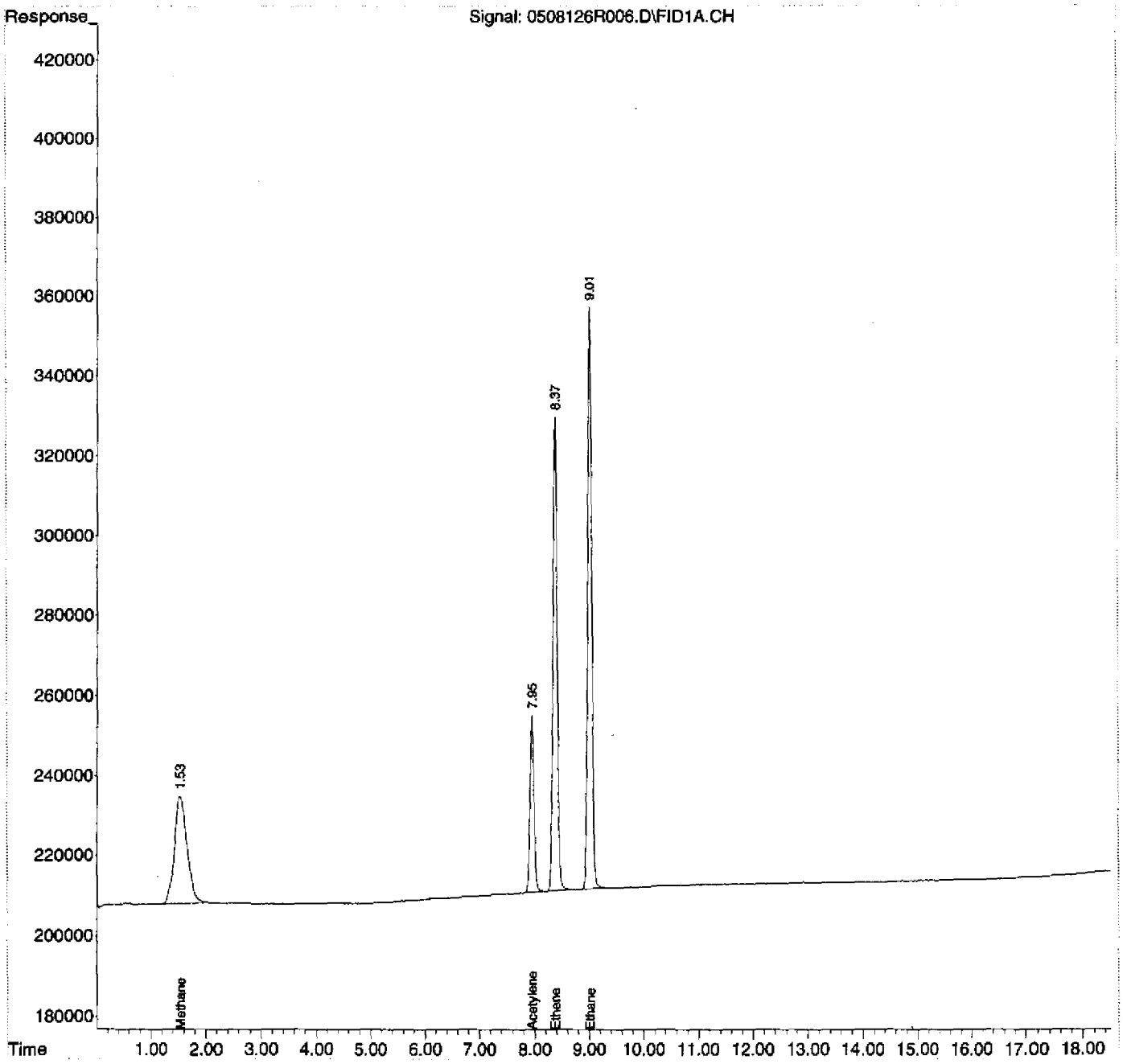
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\050812RSK\
Data File : 0508126R006.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 08 May 2012 5:34 pm
Operator : ngk
Sample : 2050025-CAL3
Misc : 2E08024
ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 09 14:04:20 2012
Quant Method : D:\MSDCHEM\1\2012\METHOD\0126126RSK.M
Quant Title :
QLast Update : Wed May 09 14:03:49 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 600 uL
Signal Phase : ShinCarbon ST
Signal Info : 1m x 0.75mm



Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\050812RSK\
Data File : 0508126R007.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 08 May 2012 6:10 pm
Operator : ngk
Sample : 2050025-CAL2
Misc : 2E08023
ALS Vial : 7 Sample Multiplier: 1

Quant Time: May 09 14:05:35 2012
Quant Method : D:\MSDCHEM\1\2012\METHOD\0126126RSK.M
Quant Title :
QLast Update : Wed May 09 14:04:43 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 600 uL
Signal Phase : ShinCarbon ST
Signal Info : 1m x 0.75mm

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
2) S Acetylene	7.953	685840	1.972 ug/L
Spiked Amount 66.330 Range 66 - 153		Recovery =	2.97%#
Target Compounds			
1) TM Methane	1.532	1415437	1.359 ug/L
3) TM Ethene	8.374	1924731	2.139 ug/L
4) TM Ethane	9.011	2253582	2.292 ug/L
5) Qual Propane	0.000	0	N.D.
6) Qual Butane	0.000	0	N.D.

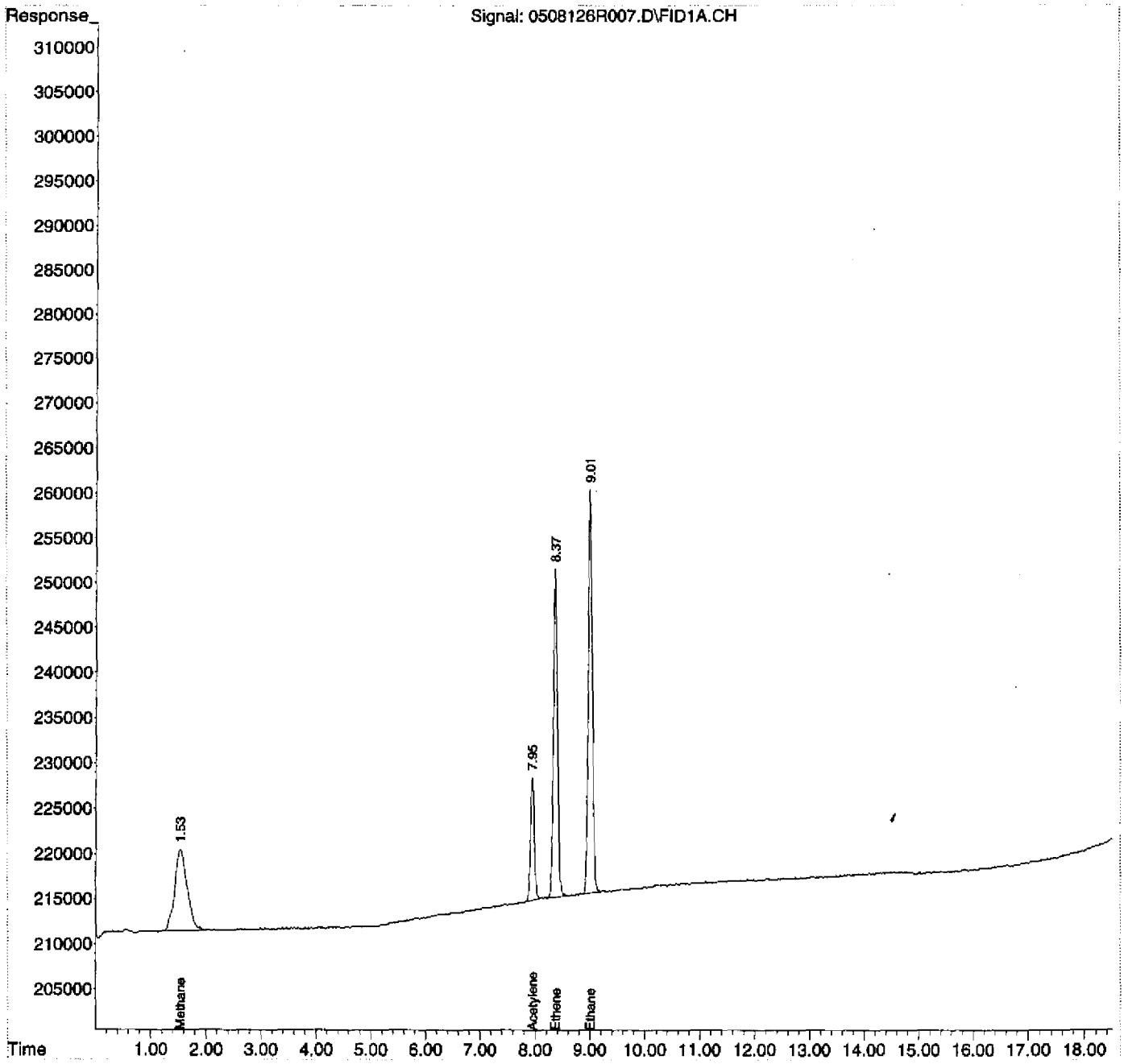
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\050812RSK\
Data File : 0508126R007.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 08 May 2012 6:10 pm
Operator : ngk
Sample : 2050025-CAL2
Misc : 2E08023
ALS Vial : 7 Sample Multiplier: 1

Quant Time: May 09 14:05:35 2012
Quant Method : D:\MSDCHEM\1\2012\METHOD\0126126RSK.M
Quant Title :
QLast Update : Wed May 09 14:04:43 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 600 uL
Signal Phase : ShinCarbon ST
Signal Info : 1m x 0.75mm



Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\050812RSK\
Data File : 0508126R008.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 08 May 2012 6:38 pm
Operator : ngk
Sample : 2050025-CAL1
Misc : 2E08022
ALS Vial : 8 Sample Multiplier: 1

Quant Time: May 09 14:06:25 2012
Quant Method : D:\MSDCHEM\1\2012\METHOD\0126126RSK.M
Quant Title :
QLast Update : Wed May 09 14:06:10 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 600 uL
Signal Phase : ShinCarbon ST
Signal Info : 1m x 0.75mm

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
2) S Acetylene	7.956	345622	0.990 ug/L
Spiked Amount 66.330 Range 66 - 153		Recovery =	1.49%#
Target Compounds			
1) TM Methane	1.540	835645	0.796 ug/L
3) TM Ethene	8.375	951979	1.055 ug/L
4) TM Ethane	9.013	1108083	1.123 ug/L
5) Qual Propane	0.000	0	N.D.
6) Qual Butane	0.000	0	N.D.

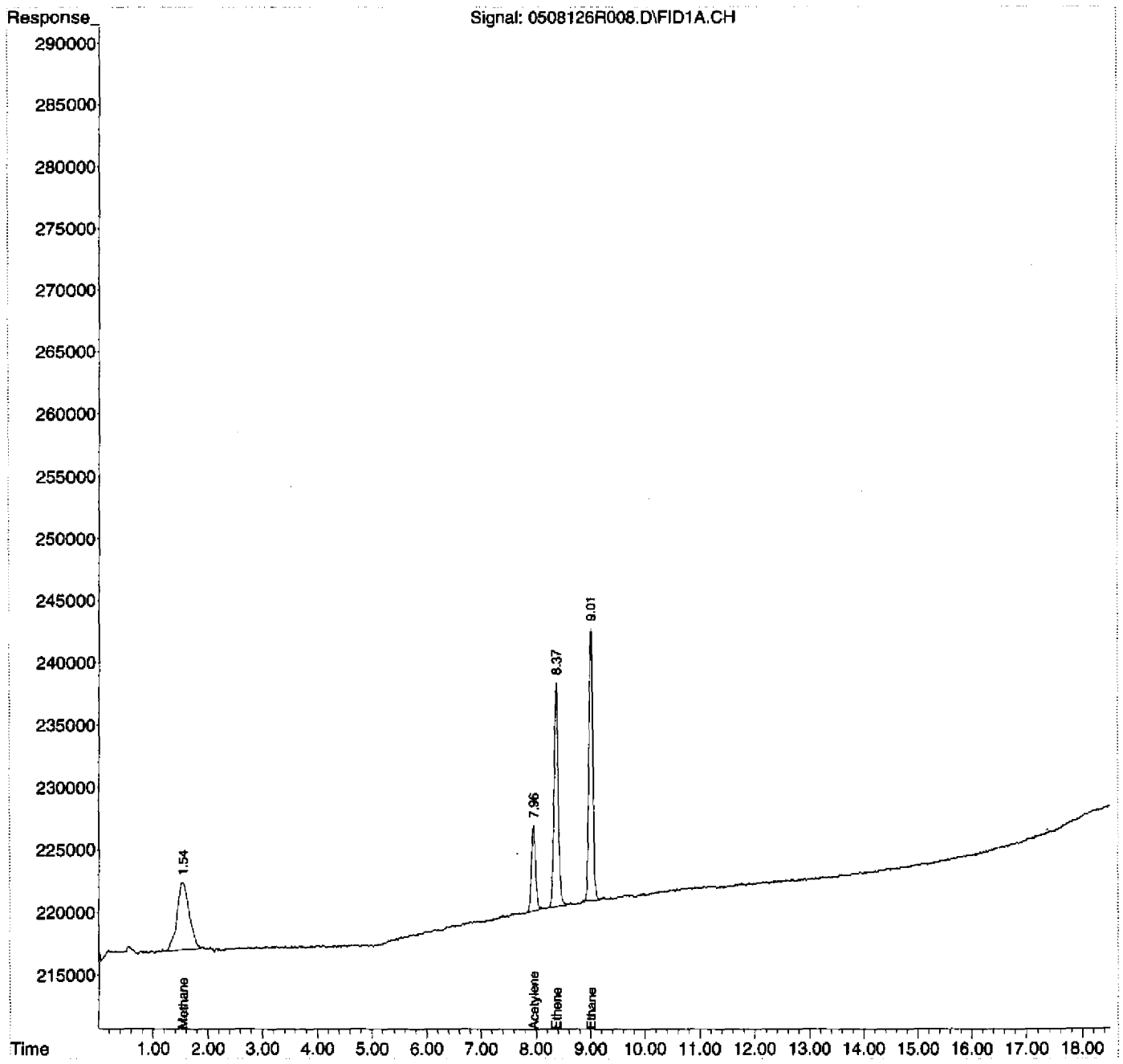
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\050812RSK\
Data File : 0508126R008.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 08 May 2012 6:38 pm
Operator : ngk
Sample : 2050025-CAL1
Misc : 2E08022
ALS Vial : 8 Sample Multiplier: 1

Quant Time: May 09 14:06:25 2012
Quant Method : D:\MSDCHEM\1\2012\METHOD\0126126RSK.M
Quant Title :
QLast Update : Wed May 09 14:06:10 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 600 uL
Signal Phase : ShinCarbon ST
Signal Info : 1m x 0.75mm



SECOND SOURCE CALIBRATION VERIFICATION REPORT

Instrument Name: AG6890N-6
File Name: 0508126R009.D
Date Acquired: 5/8/2012
Operator: ngk

Second Source Std: 1H18014

Analyte	Spike ug/L	Calculated ug/L	QC Limits	%R	Status
Methane	13.117	15.360	70 -130	117.1%	pass
Acetylene	21.104	25.648	70 -130	121.5%	pass
Ethene	22.727	27.017	70 -130	118.9%	pass
Ethane	24.351	29.391	70 -130	120.7%	pass

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\050812RSK\
Data File : 0508126R009.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 08 May 2012 7:15 pm
Operator : ngk
Sample : 2050025-SCV1
Misc : 2E08025
ALS Vial : 9 Sample Multiplier: 1

Quant Time: May 17 11:10:32 2012
Quant Method : D:\MSDCHEM\1\2012\METHOD\0515126RSK.M
Quant Title :
QLast Update : Wed May 16 13:16:50 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 600 uL
Signal Phase : ShinCarbon ST
Signal Info : 1m x 0.75mm

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
2) S Acetylene	7.949	8966402	25.648 ug/L
Spiked Amount 66.330 Range 66 - 153		Recovery =	38.67%#
Target Compounds			
1) TM Methane	1.531	15870318	15.360 ug/L
3) TM Ethene	8.372	24370912	27.017 ug/L
4) TM Ethane	9.010	29015768	29.391 ug/L
5) Qual Propane	0.000	0	N.D.
6) Qual Butane	0.000	0	N.D.

(f)=RT Delta > 1/2 Window (m)=manual int.

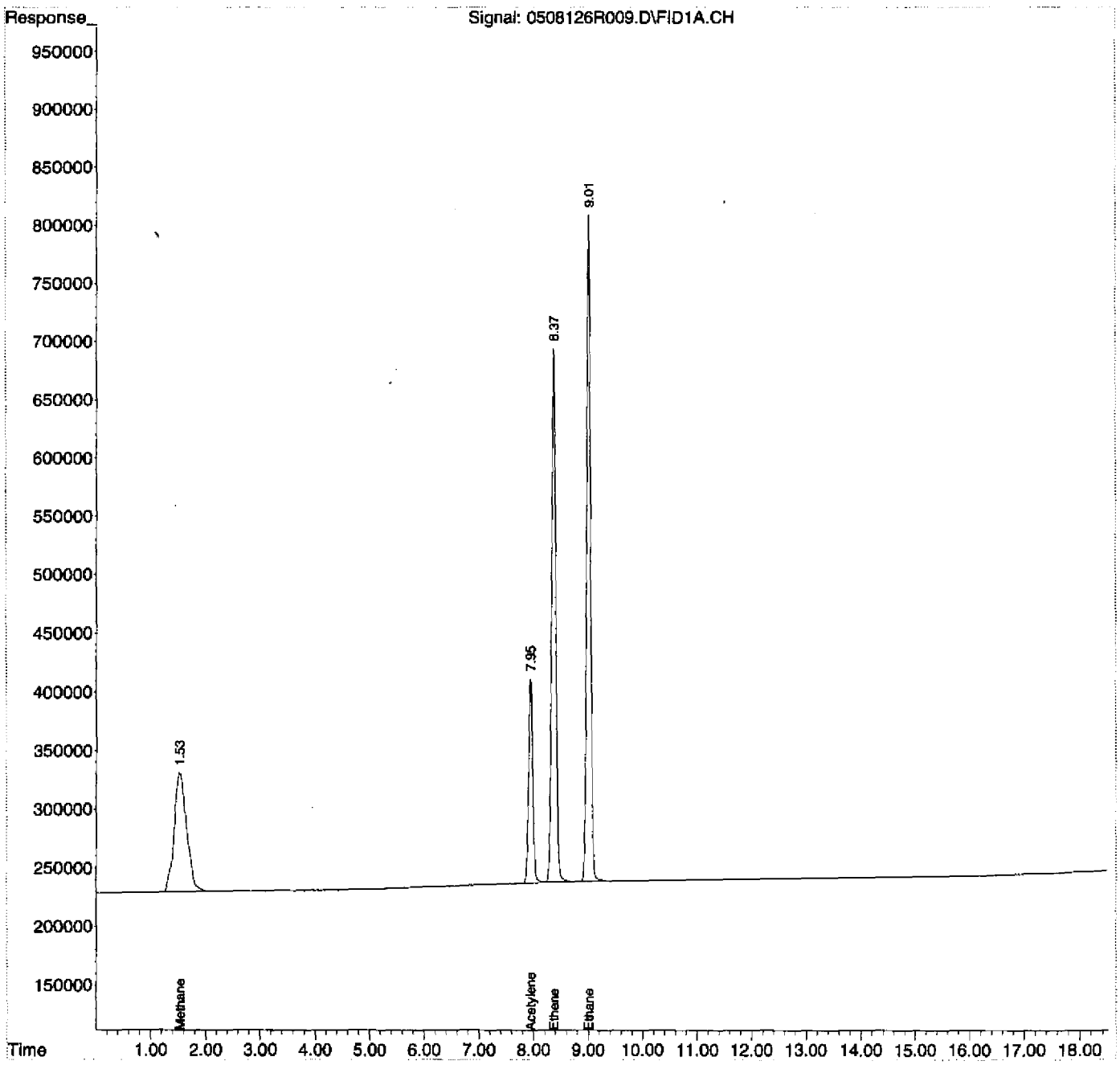
3) 24370912 / 902000 = 27.0187
KO 5/18/12

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\050812RSK\
Data File : 0508126R009.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 08 May 2012 7:15 pm
Operator : ngk
Sample : 2050025-SCV1
Misc : 2E08025
ALS Vial : 9 Sample Multiplier: 1

Quant Time: May 17 11:10:32 2012
Quant Method : D:\MSDCHEM\1\2012\METHOD\0515126RSK.M
Quant Title :
QLast Update : Wed May 16 13:16:50 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 600 uL
Signal Phase : ShinCarbon ST
Signal Info : 1m x 0.75mm



Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\050812RSK\
Data File : 0508126R010.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 08 May 2012 7:42 pm
Operator : ngk
Sample : 2050025-IBL2
Misc :
ALS Vial : 10 Sample Multiplier: 1

Quant Time: May 09 14:08:26 2012
Quant Method : D:\MSDCHEM\1\2012\METHOD\0508126RSK.M
Quant Title :
QLast Update : Wed May 09 14:07:29 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 600 uL
Signal Phase : ShinCarbon ST
Signal Info : 1m x 0.75mm

Compound	R.T.	Response	Conc	Units
System Monitoring Compounds				
2) S Acetylene	7.946	26911492	76.408	ug/L
Spiked Amount 66.330 Range 66 - 153		Recovery =	115.19%	
Target Compounds				
1) TM Methane	0.000	0	N.D.	ug/L
3) TM Ethene	0.000	0	N.D.	ug/L
4) TM Ethane	0.000	0	N.D.	ug/L
5) Qual Propane	0.000	0	N.D.	
6) Qual Butane	0.000	0	N.D.	

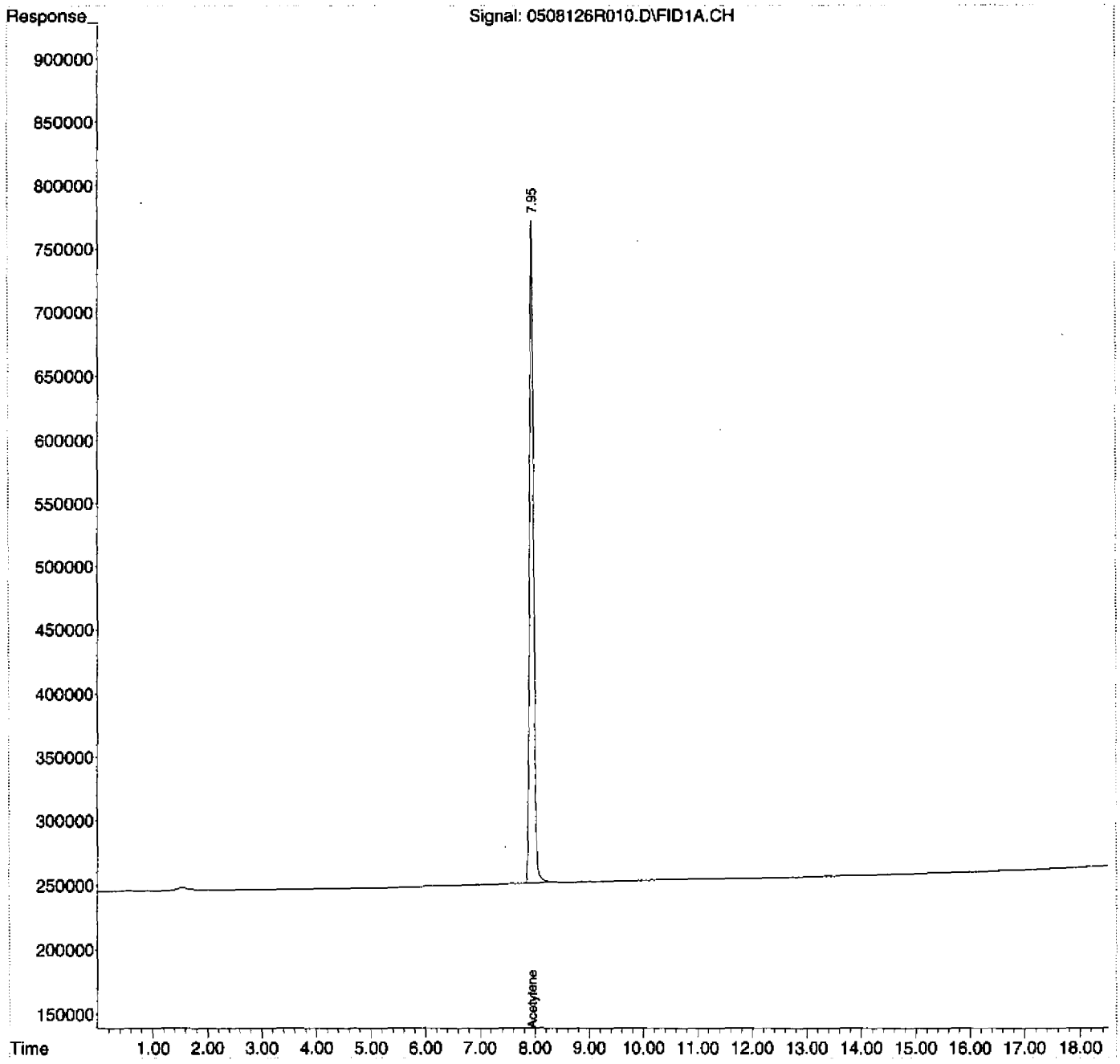
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\050812RSK\
Data File : 0508126R010.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 08 May 2012 7:42 pm
Operator : ngk
Sample : 2050025-IBL2
Misc :
ALS Vial : 10 Sample Multiplier: 1

Quant Time: May 09 14:08:26 2012
Quant Method : D:\MSDCHEM\1\2012\METHOD\0508126RSK.M
Quant Title :
QLast Update : Wed May 09 14:07:29 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 600 uL
Signal Phase : ShinCarbon ST
Signal Info : 1m x 0.75mm



Quantitation Report (QT Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\050812RSK\
Data File : 0508126R010.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 08 May 2012 7:42 pm
Operator : ngk
Sample : 2050025-IBL2
Misc :
ALS Vial : 10 Sample Multiplier: 1

Quant Time: May 09 14:08:41 2012
Quant Method : D:\MSDCHEM\1\2012\METHOD\0508126RSK.M
Quant Title :
QLast Update : Wed May 09 14:07:29 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 600 uL
Signal Phase : ShinCarbon ST
Signal Info : 1m x 0.75mm

Compound	R.T.	Response	Conc	Units
System Monitoring Compounds				
2) S Acetylene	7.946	26911492	76.408	ug/L
Spiked Amount 66.330 Range 66 - 153		Recovery = 115.19%		
Target Compounds				
1) TM Methane	1.553	314101	<MDL	ug/L m
3) TM Ethene	0.000	0	N.D.	ug/L
4) TM Ethane	0.000	0	N.D.	ug/L
5) Qual Propane	0.000	0	N.D.	
6) Qual Butane	0.000	0	N.D.	

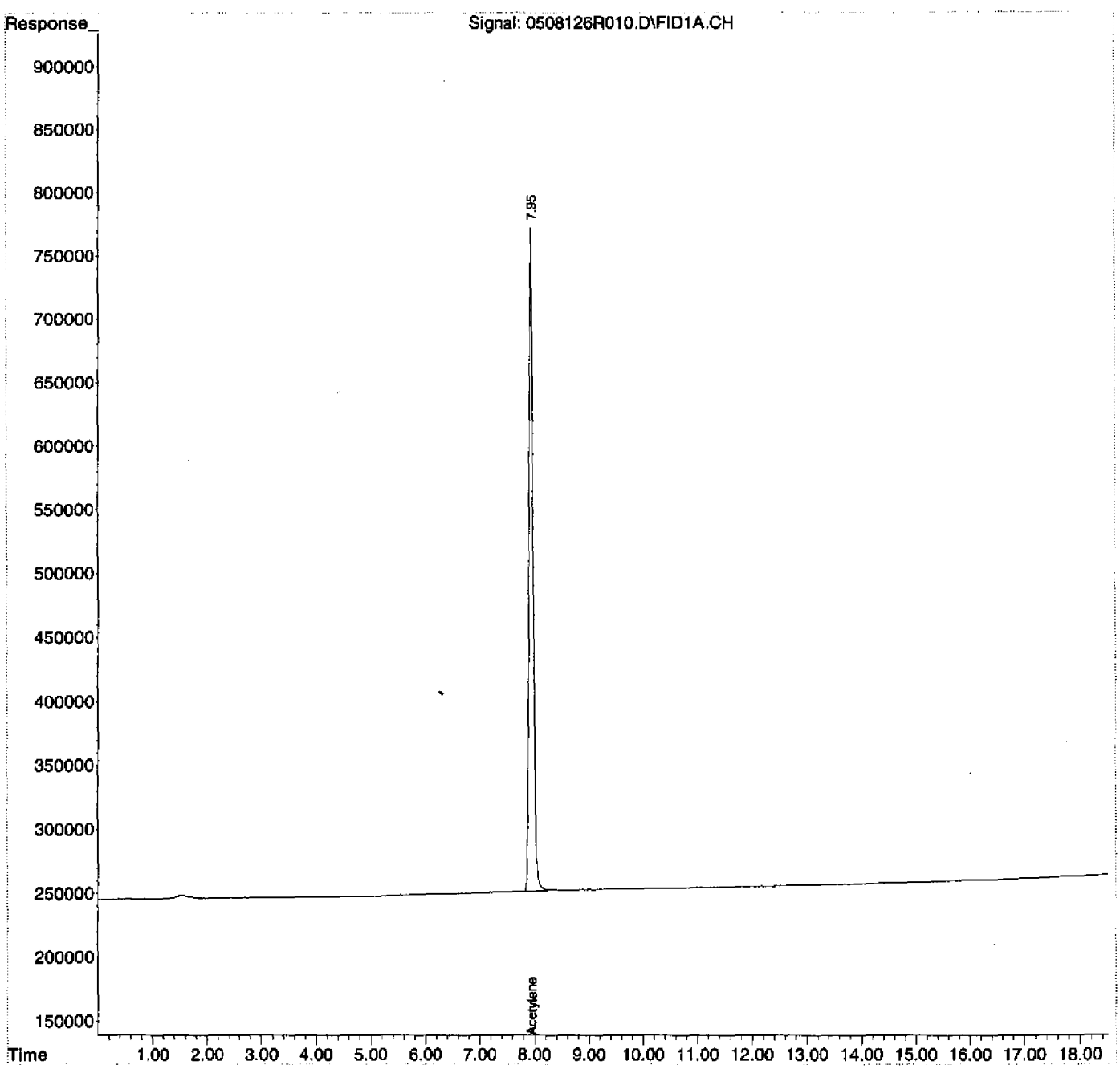
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\050812RSK\
Data File : 0508126R010.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 08 May 2012 7:42 pm
Operator : ngk
Sample : 2050025-IBL2
Misc :
ALS Vial : 10 Sample Multiplier: 1

Quant Time: May 09 14:08:41 2012
Quant Method : D:\MSDCHEM\1\2012\METHOD\0508126RSK.M
Quant Title :
QLast Update : Wed May 09 14:07:29 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 600 uL
Signal Phase : ShinCarbon ST
Signal Info : 1m x 0.75mm



Injection Log

Directory: D:\MSDCHEM\1\2012\DATA\051512RSK

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	0515126r01.d	1.	2050048-IBL1		Unrecognized:Un
2	2	0515126r02.d	1.	2050048-CCV1	2E15020	Unrecognized:Un
3	3	0515126r03.d	1.	2050048-LCV1	2E15021	Unrecognized:Un
4	4	0515126r04.d	1.	2050048-LCV2	2E15022	Unrecognized:Un
5	5	0515126r05.d	1.	B2E0100-BS1	LCS	Unrecognized:Un
6	6	0515126r06.d	1.	B2E0100-BLK1	MB	Unrecognized:Un
7	7	0515126r07.d	1.	1205022-01	RMW-14-35-0512	Unrecognized:Un
8	8	0515126r08.d	1.	1205029-03	RMW-10-79-0512	Unrecognized:Un
9	9	0515126r09.d	1.	1205022-02	RMW-18-35-0512	Unrecognized:Un
10	10	0515126r10.d	1.	1205022-03	RMW-18-79-0512	Unrecognized:Un
11	11	0515126r11.d	1.	1205017-01	RMW-19-15-0512	Unrecognized:Un
12	12	0515126r12.d	1.	1205017-02	RMW-19-35-0512	Unrecognized:Un
13	13	0515126r13.d	1.	1205017-03	RMW-19-80-0512	Unrecognized:Un
14	14	0515126r14.d	1.	1205022-04	RMW-95-35-0512	Unrecognized:Un
15	15	0515126r15.d	1.	1205029-01	RMW-05-35-0512	Unrecognized:Un
16	16	0515126r16.d	1.	1205029-02	RMW-05-74-0512	Unrecognized:Un
17	17	0515126r17.d	1.	2050048-IBL2	IB	15 May 2012 22:16
18	18	0515126r18.d	1.	2050048-IBL3	IB	15 May 2012 22:43
19	19	0515126r19.d	1.	CAL8		15 May 2012 23:20

ANALYSIS SEQUENCE

2050048

Instrument: AG6890-6

Calibration ID: 1205004

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Client
2050048-IBL1	QC		1				
2050048-LCV1	QC		2		2E15021		
2050048-LCV2	QC		3		2E15022		
2050048-CCV1	QC		4		2E15020		
B2E0100-BS1	QC		5				
B2E0100-BLK1	QC		6				
1205017-01	Dissolved HC Gases	B	7				California Site Cleanup Section 2
1205017-02	Dissolved HC Gases	B	8				California Site Cleanup Section 2
1205017-03	Dissolved HC Gases	B	9				California Site Cleanup Section 2
1205022-01	Dissolved HC Gases	B	10				California Site Cleanup Section 2
1205022-02	Dissolved HC Gases	B	11				California Site Cleanup Section 2
1205022-03	Dissolved HC Gases	B	12				California Site Cleanup Section 2
1205022-04	Dissolved HC Gases	B	13				California Site Cleanup Section 2
1205029-01	Dissolved HC Gases	B	14				California Site Cleanup Section 2
1205029-02	Dissolved HC Gases	C	15				California Site Cleanup Section 2
1205029-03	Dissolved HC Gases	B	16				California Site Cleanup Section 2
2050048-IBL2	QC		17				
2050048-CAL1	QC		18		2E16025		

↳ 8th point on curve.
KO 5/18/12

Samples Loaded By Date

Data Processed By Date

: 00055

DIM0116958

DIM0117025

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\051512RSK\
Data File : 0515126R19.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 15 May 2012 11:20 pm
Operator : ngk
Sample : CAL8
Misc :
ALS Vial : 19 Sample Multiplier: 1

Quant Time: May 16 13:17:28 2012
Quant Method : D:\MSDCHEM\1\2012\METHOD\0508126RSK.M
Quant Title :
QLast Update : Wed May 16 13:16:50 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 600 uL
Signal Phase : ShinCarbon ST
Signal Info : 1m x 0.75mm

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
2) S Acetylene	7.920	239082230	683.884 ug/L
Spiked Amount 66.330 Range 66 - 153		Recovery	= 1031.03%#
Target Compounds			
1) TM Methane	1.528	411224813	398.010 ug/L
3) TM Ethene	8.348	665460950	737.722 ug/L
4) TM Ethane	8.990	773130660	783.127 ug/L
5) Qual Propane	12.920	267799	440.000
6) Qual Butane	0.000	0	N.D.

(f)=RT Delta > 1/2 Window (m)=manual int.

#1) 411224813 / 440.99 = 932500 KC 5/18/12

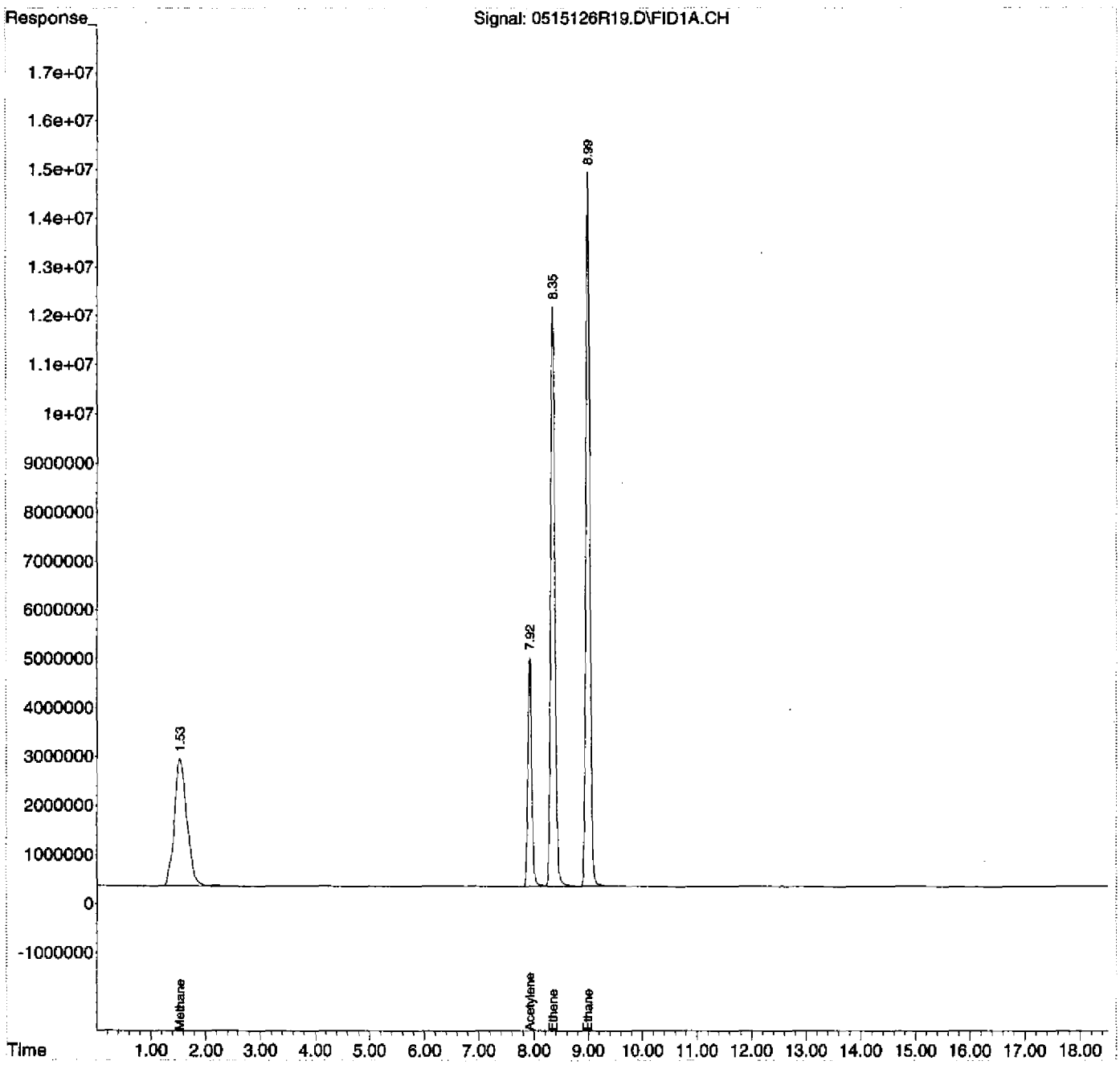
DIM0116958 DIM0117026

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\051512RSK\
Data File : 0515126R19.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 15 May 2012 11:20 pm
Operator : ngk
Sample : CAL8
Misc :
ALS Vial : 19 Sample Multiplier: 1

Quant Time: May 16 13:17:28 2012
Quant Method : D:\MSDCHEM\1\2012\METHOD\0508126RSK.M
Quant Title :
QLast Update : Wed May 16 13:16:50 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 600 uL
Signal Phase : ShinCarbon ST
Signal Info : 1m x 0.75mm



SDG: 12145 B
Instrument: AG 6890-6
Analysis Date: 5/29/2012

SAMPLE DATA

Injection Log

Directory: D:\MSDCHEM\1\2012\DATA\052912RSK

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	0529126r01.d	1.	2050087-IBL1		29 May 2012 11:01
2	2	0529126r02.d	1.	2050087-CCV1	2E29003	29 May 2012 11:28
3	3	0529126r03.d	1.	2050087-LCV1	2E29004	29 May 2012 12:03
4	4	0529126r04.d	1.	2050087-LCV2	2E29005	29 May 2012 12:31
5	5	0529126r05.d	1.	B2E0164-BS1	LCS	Unrecognized:Un
6	6	0529126r06.d	1.	B2E0164-BLK1	MB	Unrecognized:Un
7	7	0529126r07.d	1.	B2E0164-BLK2	SB 5/21/12	Unrecognized:Un
8	8	0529126r08.d	1.	1205045-05RE2	20DSW1C010 0.1mL	Unrecognized:Un
9	9	0529126r09.d	1.	B2E0164-MS1	1205045-05RE2MS 0...	Unrecognized:Un
10	10	0529126r10.d	1.	B2E0164-MSD1	1205045-05RE2MSD ...	Unrecognized:Un
11	11	0529126r11.d	1.	1205053-06	20MBTB057	Unrecognized:Un
12	12	0529126r12.d	1.	1205061-07	20MBTB056	Unrecognized:Un
13	13	0529126r13.d	1.	1205053-04	20OFS4A1035	Unrecognized:Un
14	14	0529126r14.d	1.	1205053-05	20OFS4C037	Unrecognized:Un
15	15	0529126r15.d	1.	1205061-01	20MW10B039	Unrecognized:Un
16	16	0529126r16.d	1.	1205053-02	20MW9B033 1.6mL	Unrecognized:Un
17	17	0529126r17.d	1.	1205061-03	20MW16C013 1.6mL	Unrecognized:Un
18	18	0529126r18.d	1.	1205061-04	20MW15C029 1.6mL	Unrecognized:Un
19	19	0529126r19.d	1.	1205061-05	20DSW7C012 1.6mL	Unrecognized:Un
20	20	0529126r20.d	1.	1205061-06	20MW15C030 1.6mL	Unrecognized:Un
21	21	0529126r21.d	1.	1205061-02	20MW18D031 1.6mL	Unrecognized:Un
22	22	0529126r22.d	1.	1205053-03	20MW8C032 1.6mL	Unrecognized:Un
23	23	0529126r23.d	1.	1205053-01	20MW19D038 1.6mL	29 May 2012 22:33
24	24	0529126r24.d	1.	2050087-IBL2	IB	29 May 2012 23:01
25	25	0529126r25.d	1.	1205066-01	HW62	29 May 2012 23:37
26	26	0529126r26.d	1.	B2E0164-MS2	HW62MS	30 May 2012 00:04
27	27	0529126r27.d	1.	B2E0164-MSD2	HW62MSD	30 May 2012 00:40
28	28	0529126r28.d	1.	1205066-02	TB55	Unrecognized:Un
29	29	0529126r29.d	1.	1205066-03	FB23	Unrecognized:Un
30	30	0529126r30.d	1.	1205066-06	TB56	Unrecognized:Un
31	31	0529126r31.d	1.	1205066-07	FB22	Unrecognized:Un
32	32	0529126r32.d	1.	1205066-10	TB54	Unrecognized:Un
33	1	0529126r33.d	1.	1205066-04	HW63	Unrecognized:Un
34	2	0529126r34.d	1.	1205066-05	HW63z	Unrecognized:Un
35	3	0529126r35.d	1.	1205066-08	HW64	Unrecognized:Un
36	4	0529126r36.d	1.	1205066-09	HW64-P	Unrecognized:Un

ANALYSIS SEQUENCE

2050087

Instrument: AG6890-6

Calibration ID: 1205004

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Client
2050087-IBL1	QC		1				
2050087-CCV1	QC		2		2E29003		
2050087-LCV1	QC		3		2E29004		
2050087-LCV2	QC		4		2E29005		
B2E0164-BLK1	QC		5				
B2E0164-BS1	QC		6				
1205045-05RE2	Dissolved HC Gases	F	7				California Site Cleanup Section 1
B2E0164-MS1	QC		8				
B2E0164-MSD1	QC		9				
1205053-06	Dissolved HC Gases	A	10				California Site Cleanup Section 1
1205061-07	Dissolved HC Gases	A	11				California Site Cleanup Section 1
1205053-04	Dissolved HC Gases	H	12				California Site Cleanup Section 1
1205053-05	Dissolved HC Gases	F	13				California Site Cleanup Section 1
1205061-01	Dissolved HC Gases	D	14				California Site Cleanup Section 1
1205053-02	Dissolved HC Gases	F	15				California Site Cleanup Section 1
1205061-03	Dissolved HC Gases	F	16				California Site Cleanup Section 1
1205061-04	Dissolved HC Gases	F	17				California Site Cleanup Section 1
1205061-05	Dissolved HC Gases	F	18				California Site Cleanup Section 1
1205061-06	Dissolved HC Gases	A	19				California Site Cleanup Section 1
1205061-02	Dissolved HC Gases	F	20				California Site Cleanup Section 1
1205053-03	Dissolved HC Gases	F	21				California Site Cleanup Section 1
1205053-01	Dissolved HC Gases	F	22				California Site Cleanup Section 1
2050087-IBL2	QC		23				
1205066-01	Dissolved HC Gases	L	24				US EPA Region 3, Eastern Response Bra
B2E0164-MS2	QC		25				
B2E0164-MSD2	QC		26				
1205066-02	Dissolved HC Gases	D	27				US EPA Region 3, Eastern Response Bra
1205066-03	Dissolved HC Gases	D	28				US EPA Region 3, Eastern Response Bra
1205066-06	Dissolved HC Gases	D	29				US EPA Region 3, Eastern Response Bra
1205066-07	Dissolved HC Gases	D	30				US EPA Region 3, Eastern Response Bra
1205066-10	Dissolved HC Gases	D	31				US EPA Region 3, Eastern Response Bra
1205066-04	Dissolved HC Gases	D	32				US EPA Region 3, Eastern Response Bra
1205066-05	Dissolved HC Gases	D	33				US EPA Region 3, Eastern Response Bra

NGK 5/29/12
Samples Loaded By Date

NGK 5/30/12
Data Processed By Date

ANALYSIS SEQUENCE

2050087

Instrument: AG6890-6

Calibration ID: 1205004

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Client
1205066-08	Dissolved HC Gases	D	34				US EPA Region 3, Eastern Response Bra
1205066-09	Dissolved HC Gases	D	35				US EPA Region 3, Eastern Response Bra

NGC 5/27/12
Samples Loaded By Date

NGC 5/30/12
Data Processed By Date

: 00060

DIM0116958

DIM0117031

GC QA-QC Check Report

Daily Calibration File : D:\MSDCHEM\1\DATA\2010\120810RSK\120810A02.D
Time Acquired : 08 Dec 2010 11:12 am

File	Sample	Surrogate Recovery %
0529126R06.D	B2E0164-BLK1	108
0529126R07.D	B2E0164-BLK2	91
0529126R08.D	1205045-05RE2	90
0529126R09.D	B2E0164-MS1	115
0529126R10.D	B2E0164-MSD1	111
0529126R11.D	1205053-06	102
0529126R12.D	1205061-07	113
0529126R13.D	1205053-04	99
0529126R14.D	1205053-05	106
0529126R15.D	1205061-01	106
0529126R16.D	1205053-02	94
0529126R17.D	1205061-03	107
0529126R18.D	1205061-04	113
0529126R19.D	1205061-05	112
0529126R20.D	1205061-06	116
0529126R21.D	1205061-02	114
0529126R22.D	1205053-03	115
0529126R23.D	1205053-01	113
0529126R24.D	2050087-IBL2	109
0529126R25.D	1205066-01	90
0529126R26.D	B2E0164-MS2	113
0529126R27.D	B2E0164-MSD2	116
0529126R28.D	1205066-02	91
0529126R29.D	1205066-03	105
0529126R30.D	1205066-06	114
0529126R31.D	1205066-07	114
0529126R32.D	1205066-10	118
0529126R33.D	1205066-04	112
0529126R34.D	1205066-05	114

0529126R35.D 1205066-08 116

0529126R36.D 1205066-09 117

(fails) - fails 24hr time check * - fails criteria

Created: Wed May 30 11:20:15 2012 AG6890N-6

RESPONSE FACTOR REPORT AG6890N-6

Method Path: C:\MSDCHEM\1\METHODS
Method File: 0515126RSK
Title:
Last Update: Wed May 16 13:16:50 2012
Response Via: Initial Calibration

Calibration Files:
1 = 0508126R008.D 2 = 0508126R007.D 3 = 0508126R006.D 4 = 0508126R005.D
5 = 0508126R004.D 6 = 0508126R003.D 7 = 0508126R002.D 8= 0515126R19.D

Compound	1	2	3	4	5	6	7	8	AVG.	%RSD
1) TM Methane										
ug/L		1.231	4.102	13.230	44.099	110.248	220.497	440.994		
RF		1.150E+06	1.024E+06	1.069E+06	1.057E+06	1.007E+06	9.926E+05	9.325E+05	1.033E+06	6.61%
2) S Acetylene										
ug/L	1.007	2.014	6.713	21.650	72.166	180.415	360.831	721.662		
RF	343218.997	3.405E+05	3.347E+05	3.698E+05	3.702E+05	3.564E+05	3.506E+05	3.313E+05	3.496E+05	4.27%
3) TM Ethene										
ug/L	1.091	2.182	7.273	23.455	78.183	195.458	390.916	781.832		
RF	8.726E+05	8.821E+05	8.681E+05	9.594E+05	9.587E+05	9.180E+05	9.064E+05	8.512E+05	9.020E+05	4.55%
4) TM Ethane										
ug/L	1.162	2.324	7.746	24.981	83.269	208.172	416.343	832.686		
RF	9.536E+05	9.697E+05	9.557E+05	1.052E+06	1.050E+06	1.001E+06	9.878E+05	9.285E+05	9.872E+05	4.56%

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\052912RSK\
Data File : 0529126R01.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 29 May 2012 11:01 am
Operator : ngk
Sample : 2050087-IBL1
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 29 11:47:28 2012
Quant Method : D:\MSDCHEM\1\2012\METHOD\0515126RSK.M
Quant Title :
QLast Update : Wed May 16 13:16:50 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 600 uL
Signal Phase : ShinCarbon ST
Signal Info : 1m x 0.75mm

Compound	R.T.	Response	Conc	Units
System Monitoring Compounds				
2) S Acetylene	7.950	23964502	68.549	ug/L
Spiked Amount 66.330 Range 66 - 153 Recovery = 103.35%				
Target Compounds				
1) TM Methane	1.523	347738	<MDL	ug/L
3) TM Ethene	0.000	0	N.D.	ug/L
4) TM Ethane	0.000	0	N.D.	ug/L
5) Qual Propane	0.000	0	N.D.	
6) Qual Butane	0.000	0	N.D.	

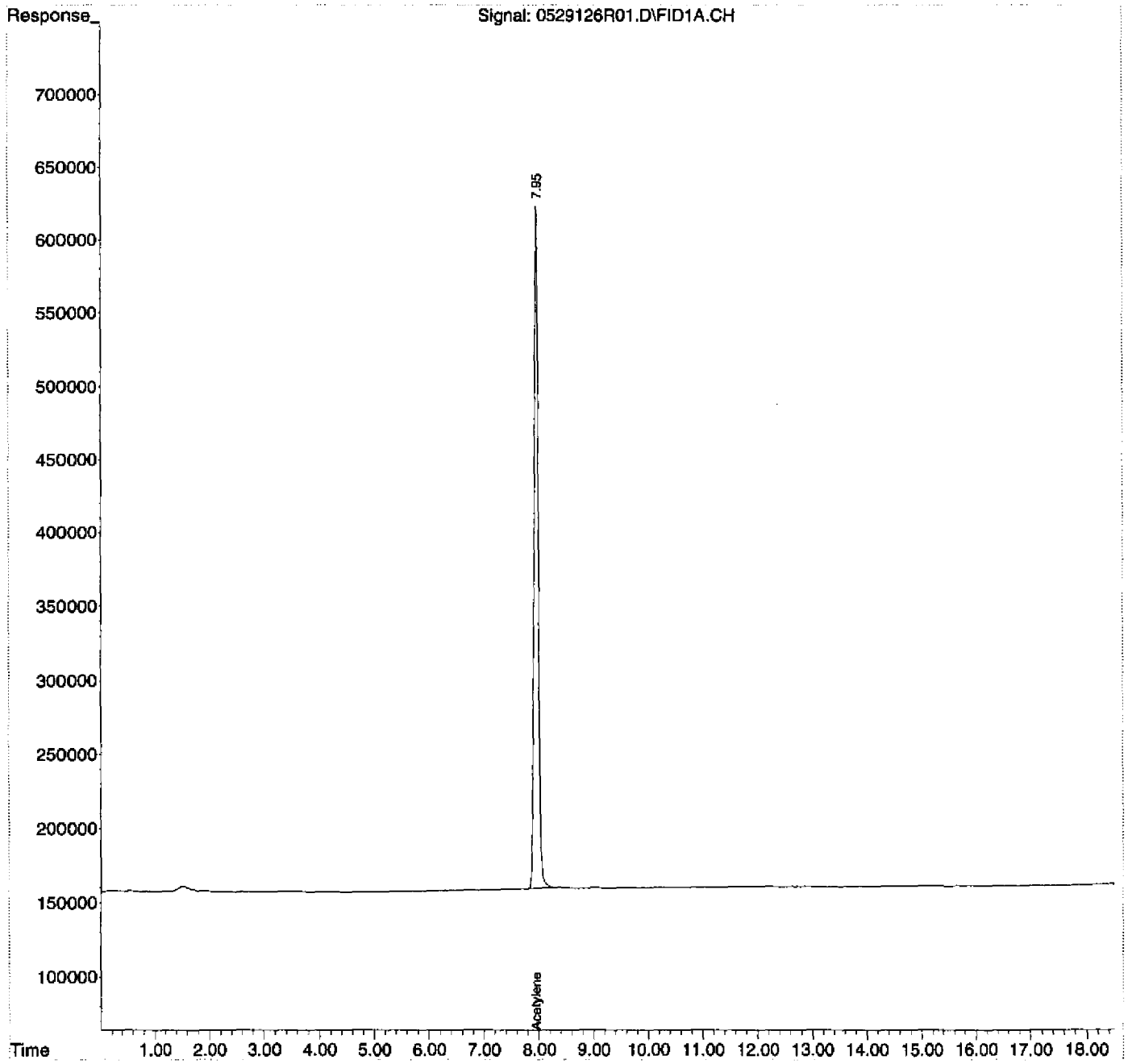
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\052912RSK\
Data File : 0529126R01.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 29 May 2012 11:01 am
Operator : ngk
Sample : 2050087-IBL1
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 29 11:47:28 2012
Quant Method : D:\MSDCHEM\1\2012\METHOD\0515126RSK.M
Quant Title :
QLast Update : Wed May 16 13:16:50 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 600 uL
Signal Phase : ShinCarbon ST
Signal Info : 1m x 0.75mm



Evaluate Continuing Calibration Report

Data Path : D:\MSDCHEM\1\2012\DATA\052912RSK\
Data File : 0529126R02.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 29 May 2012 11:28 am
Operator : ngk
Sample : 2050087-CCV1
Misc : 2E29003
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 29 11:47:46 2012
Quant Method : D:\MSDCHEM\1\2012\METHOD\0515126RSK.M
Quant Title :
QLast Update : Wed May 16 13:16:50 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 600 uL
Signal Phase : ShinCarbon ST
Signal Info : 1m x 0.75mm

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
1 TM	Methane	1.033	1.008 E6	2.4	94	0.00
2 S	Acetylene	349.595	349.039 E3	0.2	94	0.00
3 TM	Ethene	902.048	913.797 E3	-1.3	95	0.00
4 TM	Ethane	987.235	1006.438 E3	-1.9	96	0.00

Evaluate Continuing Calibration Report - Not Founds

5 Qual	Propane	608.635	0.000	100.0#	0#	-12.89#
6 Qual	Butane	0.000	0.000	0.0	0#	-17.72#

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\052912RSK\
Data File : 0529126R02.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 29 May 2012 11:28 am
Operator : ngk
Sample : 2050087-CCV1
Misc : 2E29003
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 29 11:47:46 2012
Quant Method : D:\MSDCHEM\1\2012\METHOD\0515126RSK.M
Quant Title :
QLast Update : Wed May 16 13:16:50 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 600 uL
Signal Phase : ShinCarbon ST
Signal Info : 1m x 0.75mm

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
2) S Acetylene	7.955	7556691	21.616 ug/L
Spiked Amount 66.330 Range 66 - 153		Recovery =	32.59%#
Target Compounds			
1) TM Methane	1.530	13339326	12.911 ug/L
3) TM Ethene	8.374	21433103	23.760 ug/L
4) TM Ethane	9.016	25141817	25.467 ug/L
5) Qual Propane	0.000	0	N.D.
6) Qual Butane	0.000	0	N.D.

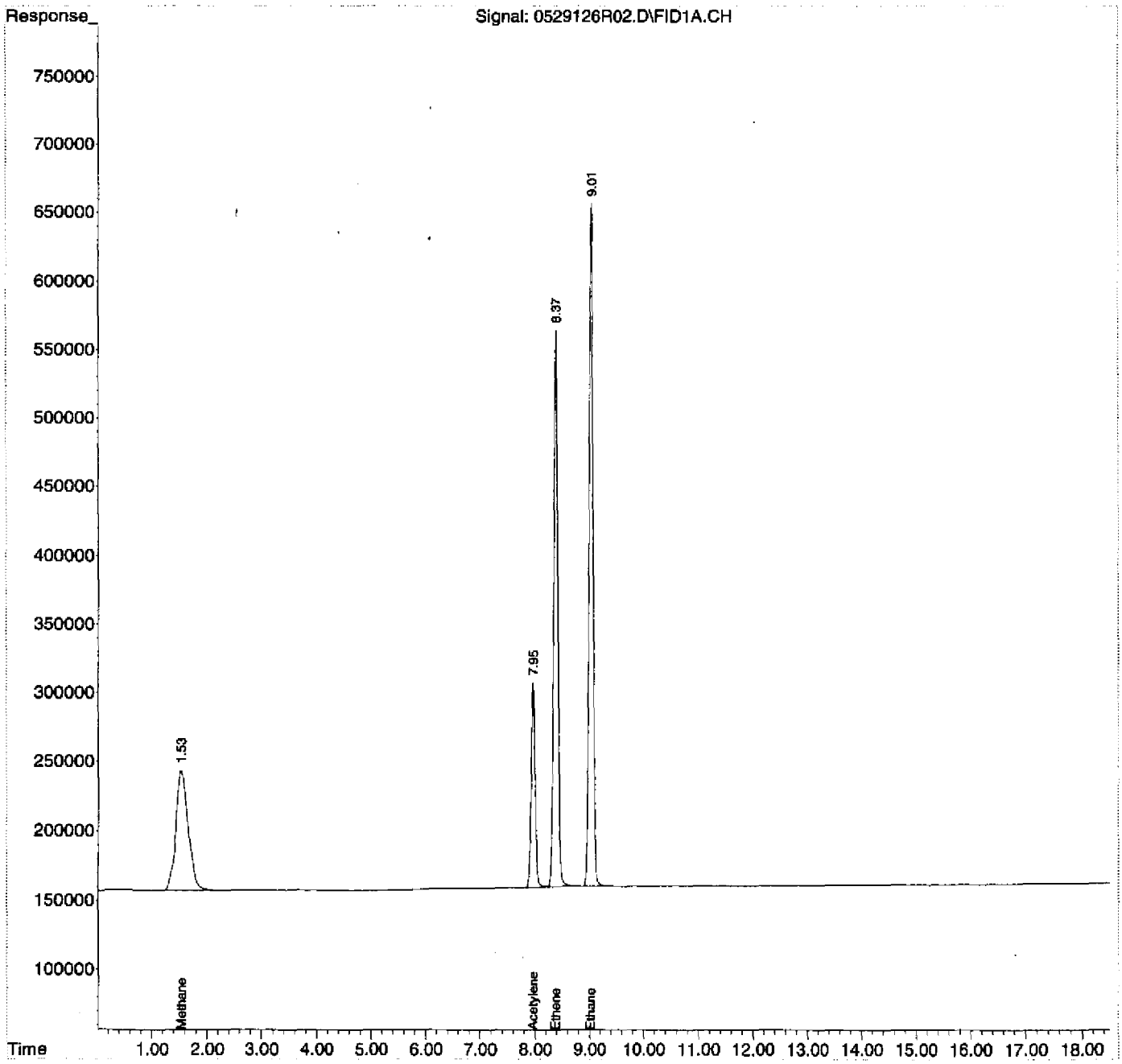
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\052912RSK\
Data File : 0529126R02.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 29 May 2012 11:28 am
Operator : ngk
Sample : 2050087-CCV1
Misc : 2E29003
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 29 11:47:46 2012
Quant Method : D:\MSDCHEM\1\2012\METHOD\0515126RSK.M
Quant Title :
QLast Update : Wed May 16 13:16:50 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 600 uL
Signal Phase : ShinCarbon ST
Signal Info : 1m x 0.75mm



RSK-175 HC LCV REPORT

Instrument Name: AG6890N-6
File Name LCV1: 0529126R03.D
File Name LCV2: 0529126R04.D
Date Acquired: 05/29/12
Operator: ngk

Analyte	Spike ug/L	Calculated ug/L	QC Limits	%R	Status
Methane	1.231	1.258	60 - 140	102.2%	pass
Acetylene	2.014	1.695	60 - 140	84.2%	NA
Ethene	1.091	0.884	60 - 140	81.0%	pass
Ethane	1.162	0.969	60 - 140	83.4%	pass

Ethene & ethane recovery calculated from LCV1 results
Methane recovery calculated from LCV2 results

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\052912RSK\
Data File : 0529126R03.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 29 May 2012 12:03 pm
Operator : ngk
Sample : 2050087-LCV1
Misc : 2E29004
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 29 12:26:19 2012
Quant Method : D:\MSDCHEM\1\2012\METHOD\0515126RSK.M
Quant Title :
QLast Update : Wed May 16 13:16:50 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 600 uL
Signal Phase : ShinCarbon ST
Signal Info : 1m x 0.75mm

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
2) S Acetylene	7.961	278926	0.798 ug/L
Spiked Amount 66.330 Range 66 - 153		Recovery =	1.20%#
Target Compounds			
1) TM Methane	1.536	719789	0.697 ug/L
3) TM Ethene	8.377	797359	0.884 ug/L
4) TM Ethane	9.016	956470	0.969 ug/L
5) Qual Propane	0.000	0	N.D.
6) Qual Butane	0.000	0	N.D.

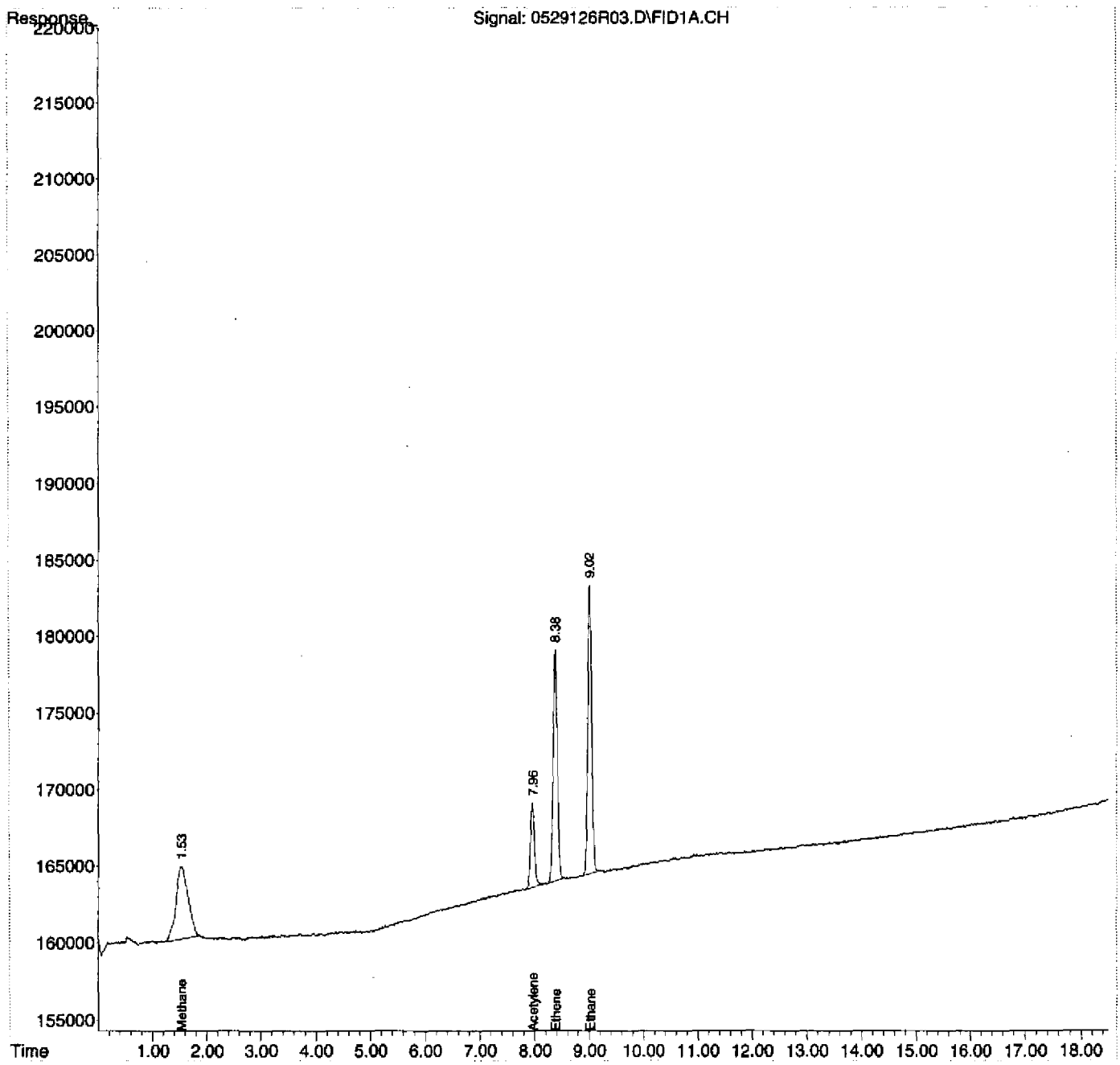
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\052912RSK\
Data File : 0529126R03.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 29 May 2012 12:03 pm
Operator : ngk
Sample : 2050087-LCV1
Misc : 2E29004
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 29 12:26:19 2012
Quant Method : D:\MSDCHEM\1\2012\METHOD\0515126RSK.M
Quant Title :
QLast Update : Wed May 16 13:16:50 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 600 uL
Signal Phase : ShinCarbon ST
Signal Info : 1m x 0.75mm



Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\052912RSK\
Data File : 0529126R04.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 29 May 2012 12:31 pm
Operator : ngk
Sample : 2050087-LCV2
Misc : 2E29005
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 29 12:51:06 2012
Quant Method : D:\MSDCHEM\1\2012\METHOD\0515126RSK.M
Quant Title :
QLast Update : Wed May 16 13:16:50 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 600 uL
Signal Phase : ShinCarbon ST
Signal Info : 1m x 0.75mm

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
2) S Acetylene	7.959	592535	1.695 ug/L
Spiked Amount 66.330 Range 66 - 153		Recovery =	2.56%#
Target Compounds			
1) TM Methane	1.537	1299280	1.258 ug/L
3) TM Ethene	8.375	1699759	1.884 ug/L
4) TM Ethane	9.014	2024851	2.051 ug/L
5) Qual Propane	0.000	0	N.D.
6) Qual Butane	0.000	0	N.D.

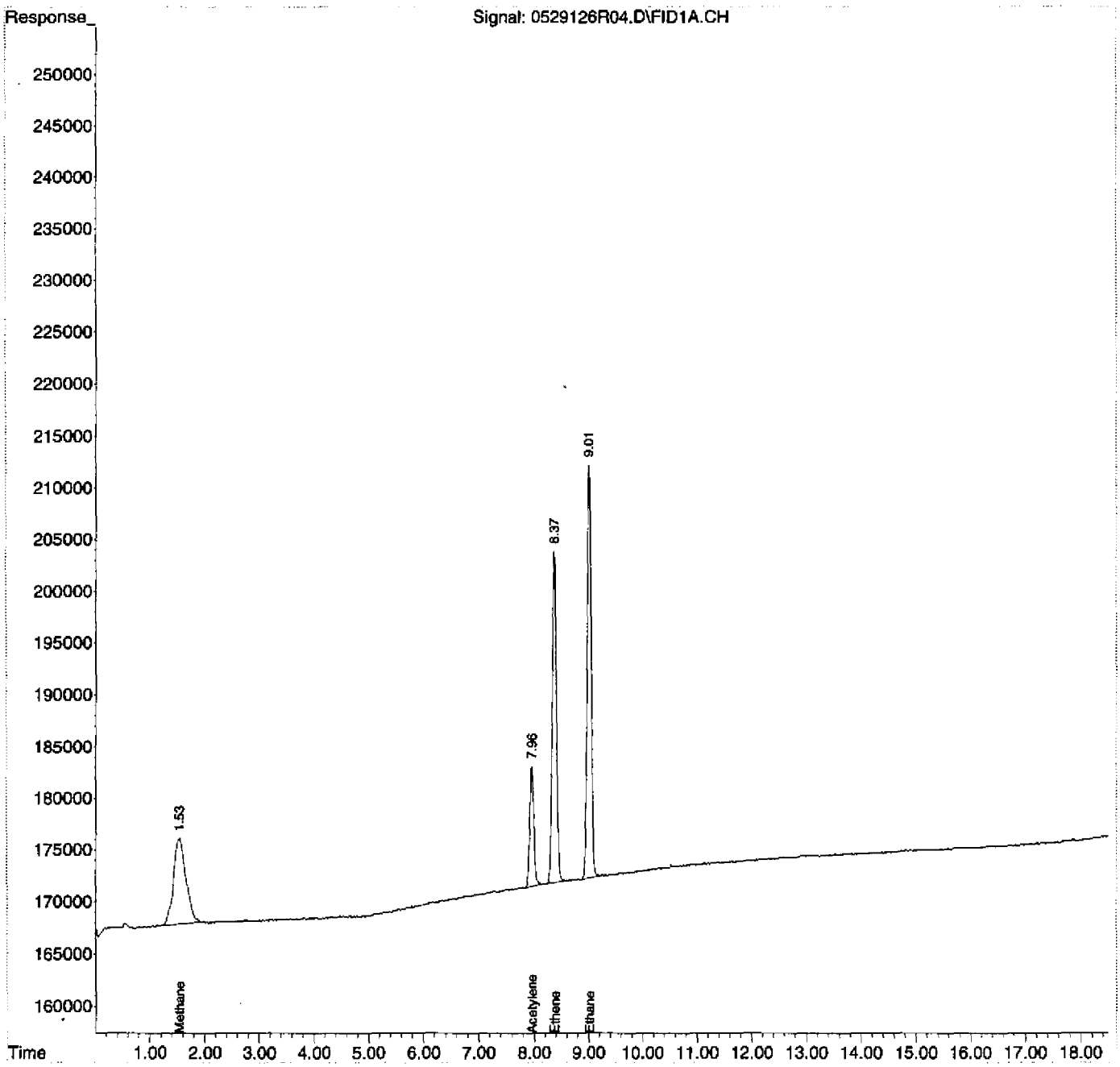
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\052912RSK\
Data File : 0529126R04.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 29 May 2012 12:31 pm
Operator : ngk
Sample : 2050087-LCV2
Misc : 2E29005
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 29 12:51:06 2012
Quant Method : D:\MSDCHEM\1\2012\METHOD\0515126RSK.M
Quant Title :
QLast Update : Wed May 16 13:16:50 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 600 uL
Signal Phase : ShinCarbon ST
Signal Info : 1m x 0.75mm



RSK-175 LCS SUMMARY REPORT

Instrument Name: AG6890N-6
File Name: 0529126R05.D
Date Acquired: 5/29/2012
Operator: ngk

Analyte	Spike ug/L	Calculated ug/L	QC Limits	%R	Status
Methane	44.099	41.706	70-130	94.6%	pass
Acetylene	72.166	71.106	66.4-153	98.5%	pass
Ethene	78.183	77.214	78-138	98.8%	pass
Ethane	83.269	82.908	77-137	99.6%	pass

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\052912RSK\
Data File : 0529126R05.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 29 May 2012 1:07 pm
Operator : ngk
Sample : B2E0164-BS1
Misc : LCS
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 29 13:26:03 2012
Quant Method : D:\MSDCHEM\1\2012\METHOD\0515126RSK.M
Quant Title :
QLast Update : Wed May 16 13:16:50 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 600 uL
Signal Phase : ShinCarbon ST
Signal Info : 1m x 0.75mm

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
2) S Acetylene	7.949	24858131	71.106 ug/L
Spiked Amount 66.330 Range 66 - 153		Recovery =	107.20%
Target Compounds			
1) TM Methane	1.529	43090728	41.706 ug/L
3) TM Ethene	8.371	69650751	77.214 ug/L
4) TM Ethane	9.011	81849833	82.908 ug/L
5) Qual Propane	0.000	0	N.D.
6) Qual Butane	0.000	0	N.D.

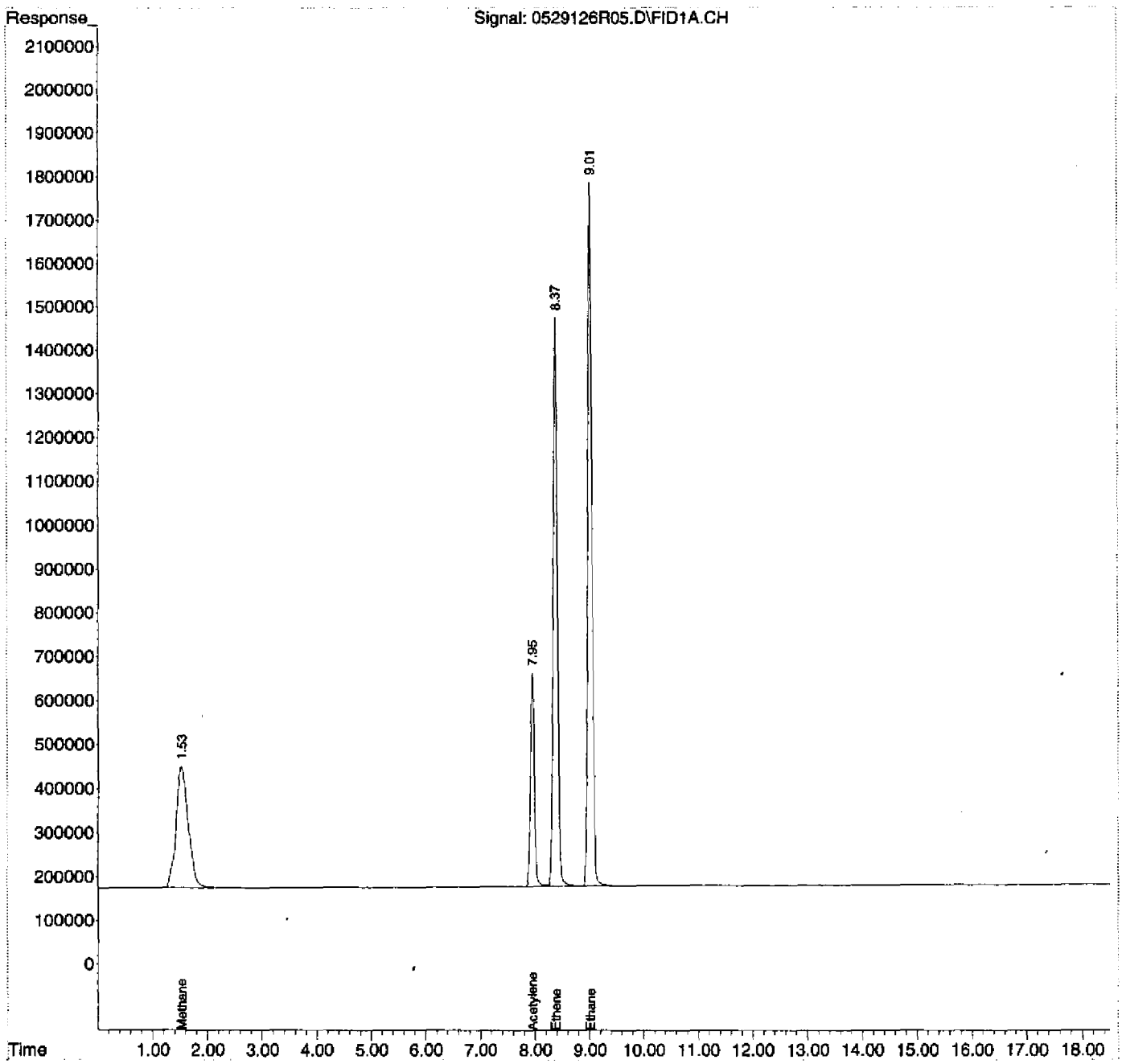
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\052912RSK\
Data File : 0529126R05.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 29 May 2012 1:07 pm
Operator : ngk
Sample : B2E0164-BS1
Misc : LCS
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 29 13:26:03 2012
Quant Method : D:\MSDCHEM\1\2012\METHOD\0515126RSK.M
Quant Title :
QLast Update : Wed May 16 13:16:50 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 600 uL
Signal Phase : ShinCarbon ST
Signal Info : 1m x 0.75mm



Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\052912RSK\
Data File : 0529126R06.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 29 May 2012 1:34 pm
Operator : ngk
Sample : B2E0164-BLK1
Misc : MB
ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 30 07:40:36 2012
Quant Method : D:\MSDCHEM\1\2012\METHOD\0515126RSK.M
Quant Title :
QLast Update : Wed May 16 13:16:50 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 600 uL
Signal Phase : ShinCarbon ST
Signal Info : 1m x 0.75mm

Compound	R.T.	Response	Conc	Units
System Monitoring Compounds				
2) S Acetylene	7.950	24929603	71.310	ug/L
Spiked Amount 66.330 Range 66 - 153 Recovery = 107.51%				
Target Compounds				
1) TM Methane	0.000	0	N.D.	ug/L
3) TM Ethene	0.000	0	N.D.	ug/L
4) TM Ethane	0.000	0	N.D.	ug/L
5) Qual Propane	0.000	0	N.D.	
6) Qual Butane	0.000	0	N.D.	

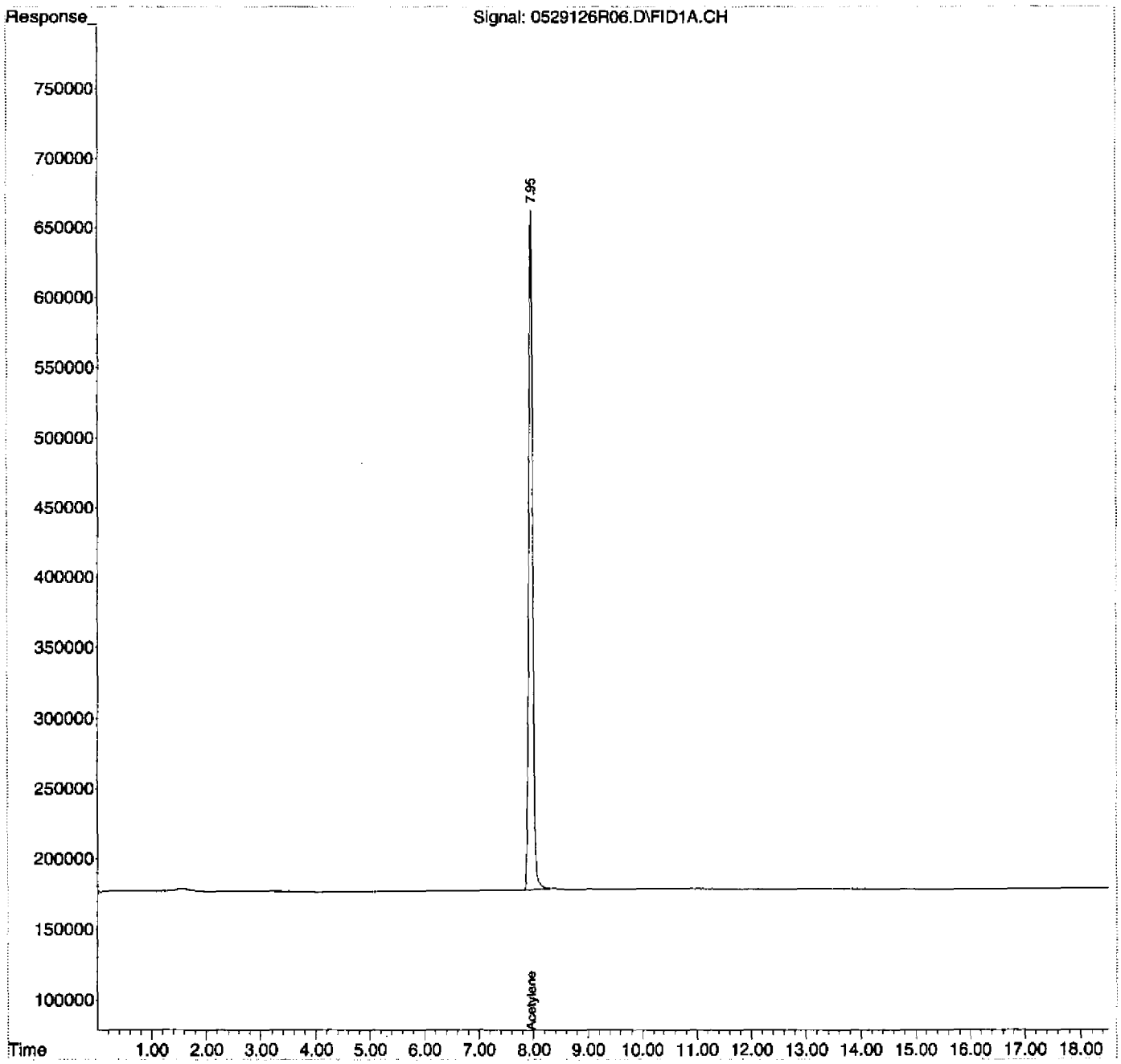
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\052912RSK\
Data File : 0529126R06.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 29 May 2012 1:34 pm
Operator : ngk
Sample : B2E0164-BLK1
Misc : MB
ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 30 07:40:36 2012
Quant Method : D:\MSDCHEM\1\2012\METHOD\0515126RSK.M
Quant Title :
QLast Update : Wed May 16 13:16:50 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 600 uL
Signal Phase : ShinCarbon ST
Signal Info : 1m x 0.75mm



Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\052912RSK\
Data File : 0529126R24.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 29 May 2012 11:01 pm
Operator : ngk
Sample : 2050087-IBL2
Misc : IB
ALS Vial : 24 Sample Multiplier: 1

Quant Time: May 30 07:42:22 2012
Quant Method : D:\MSDCHEM\1\2012\METHOD\0515126RSK.M
Quant Title :
QLast Update : Wed May 16 13:16:50 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 600 uL
Signal Phase : ShinCarbon ST
Signal Info : 1m x 0.75mm

Compound	R.T.	Response	Conc	Units
System Monitoring Compounds				
2) S Acetylene	7.955	25382780	72.606	ug/L
Spiked Amount 66.330 Range 66 - 153		Recovery =	109.46%	
Target Compounds				
1) TM Methane	0.000	0	N.D.	ug/L
3) TM Ethene	8.174f	123433	<MDL	ug/L
4) TM Ethane	0.000	0	N.D.	ug/L
5) Qual Propane	0.000	0	N.D.	
6) Qual Butane	0.000	0	N.D.	

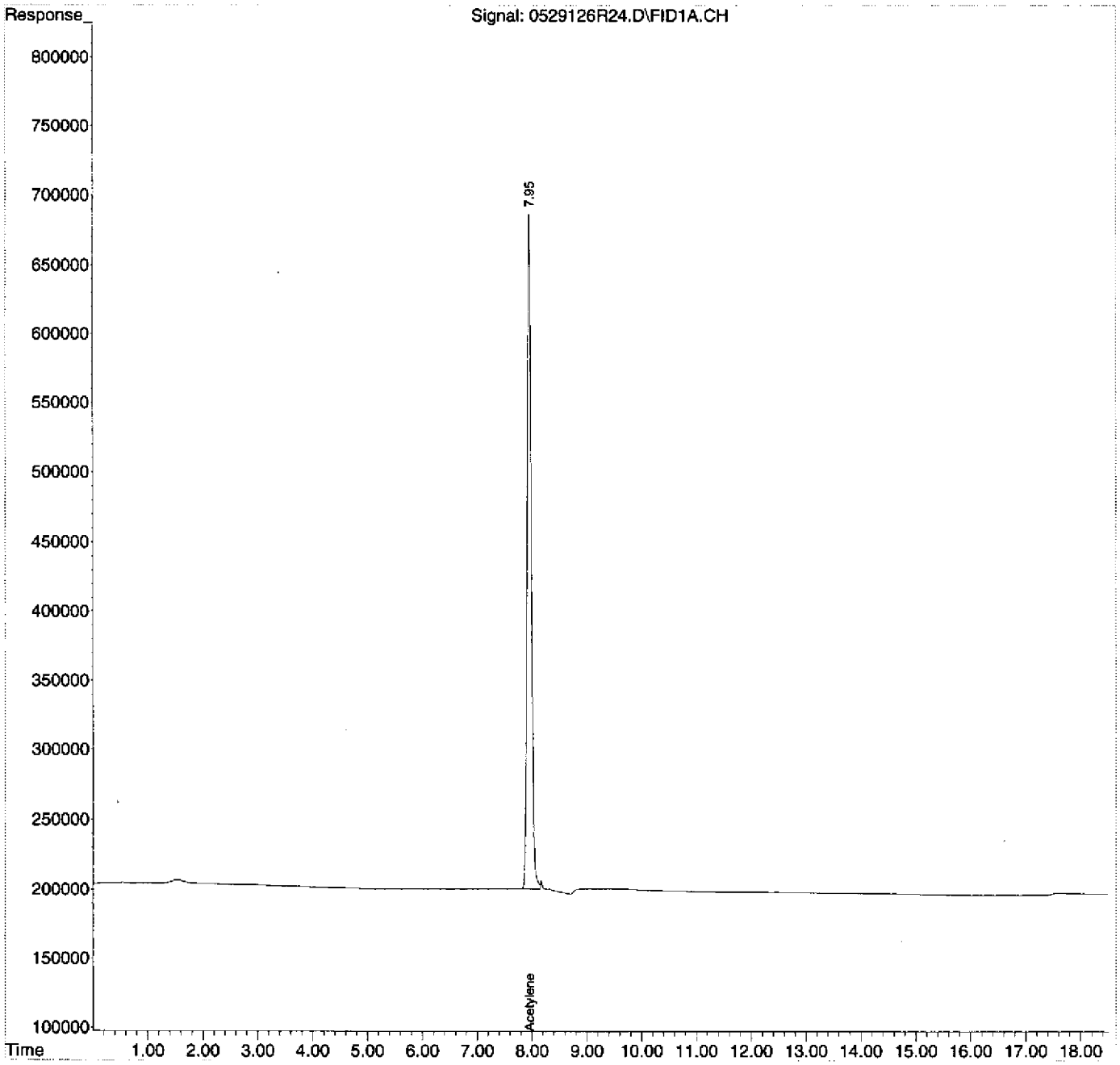
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\052912RSK\
Data File : 0529126R24.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 29 May 2012 11:01 pm
Operator : ngk
Sample : 2050087-IBL2
Misc : IB
ALS Vial : 24 Sample Multiplier: 1

Quant Time: May 30 07:42:22 2012
Quant Method : D:\MSDCHEM\1\2012\METHOD\0515126RSK.M
Quant Title :
QLast Update : Wed May 16 13:16:50 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 600 uL
Signal Phase : ShinCarbon ST
Signal Info : 1m x 0.75mm



Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\052912RSK\
Data File : 0529126R25.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 29 May 2012 11:37 pm
Operator : ngk
Sample : 1205066-01
Misc : HW62
ALS Vial : 25 Sample Multiplier: 1

Quant Time: May 30 07:42:27 2012
Quant Method : D:\MSDCHEM\1\2012\METHOD\0515126RSK.M
Quant Title :
QLast Update : Wed May 16 13:16:50 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 600 uL
Signal Phase : ShinCarbon ST
Signal Info : 1m x 0.75mm

Compound	R.T.	Response	Conc	Units
System Monitoring Compounds				
2) S Acetylene	7.907	20899365	59.782	ug/L
Spiked Amount 66.330 Range 66 - 153 Recovery = 90.13%				
Target Compounds				
1) TM Methane	0.000	0	N.D.	ug/L
3) TM Ethene	0.000	0	N.D.	ug/L
4) TM Ethane	0.000	0	N.D.	ug/L
5) Qual Propane	0.000	0	N.D.	
6) Qual Butane	0.000	0	N.D.	

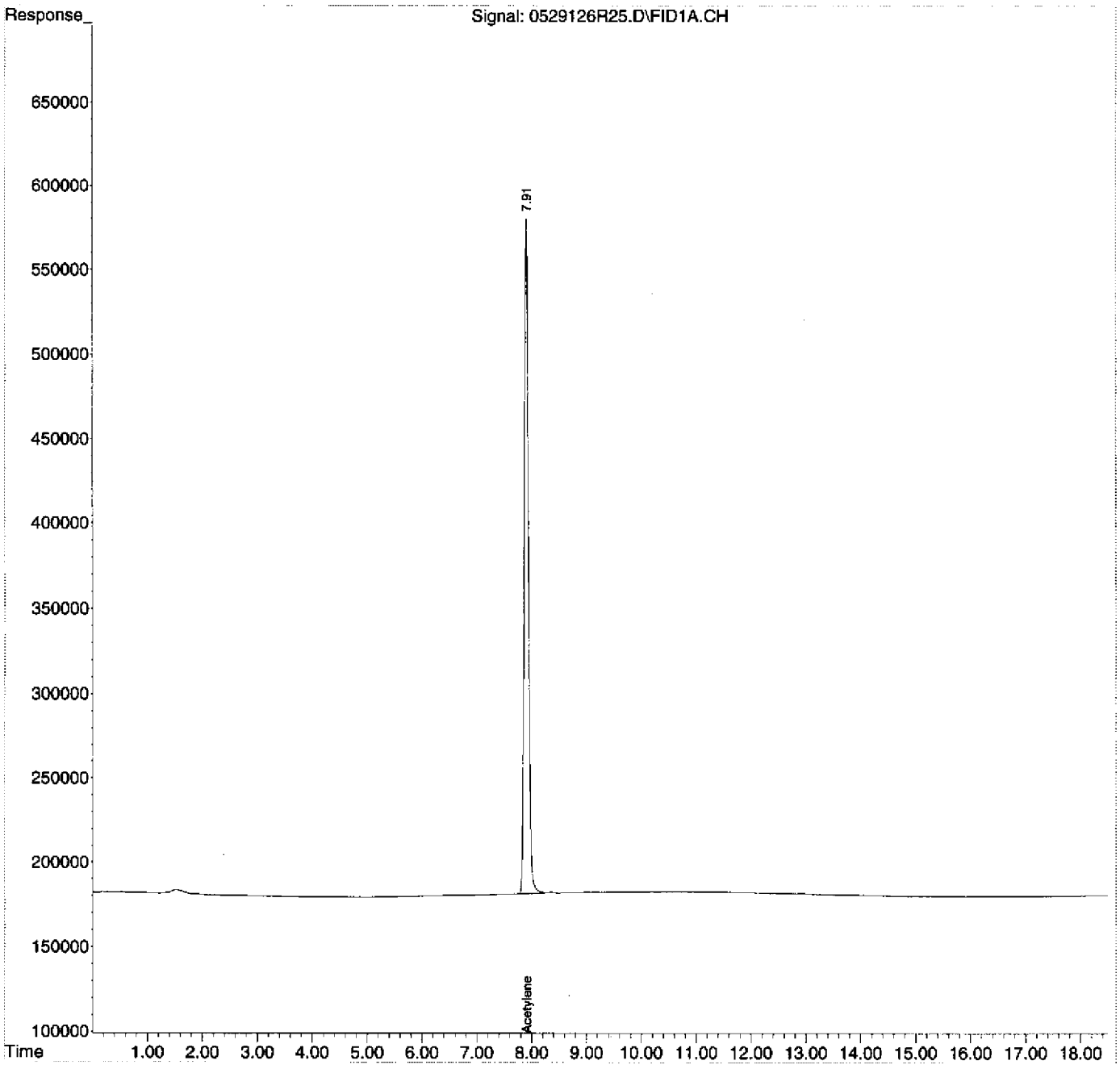
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\052912RSK\
Data File : 0529126R25.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 29 May 2012 11:37 pm
Operator : ngk
Sample : 1205066-01
Misc : HW62
ALS Vial : 25 Sample Multiplier: 1

Quant Time: May 30 07:42:27 2012
Quant Method : D:\MSDCHEM\1\2012\METHOD\0515126RSK.M
Quant Title :
QLast Update : Wed May 16 13:16:50 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 600 uL
Signal Phase : ShinCarbon ST
Signal Info : 1m x 0.75mm



RSK-175 MS/MSD REPORT

Instrument Name: AG6890N-6
Date Acquired: 5/29/2012
Operator: ngk
Matrix Spike Sample: 1205066-01

Analyte	Spike ug/L	MSS ug/L	MS ug/L	MS %R	MSD ug/L	MSD %R	RPD	Status
Methane	44.099	N.D.	45.05	102.2%	46.993	106.6%	4.22	~~NA~~ pass
Acetylene	72.166	59.782	74.912	103.8%	76.68	106.3%	NA	NA
Ethene	78.183	N.D.	81.696	104.5%	84.881	108.6%	3.82	pass
Ethane	83.269	N.D.	88.103	105.8%	91.76	110.2%	4.07	pass

SL, 6/4/12

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\052912RSK\
Data File : 0529126R26.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 30 May 2012 12:04 am
Operator : ngk
Sample : B2E0164-MS2
Misc : HW62MS
ALS Vial : 26 Sample Multiplier: 1

Quant Time: May 30 07:42:32 2012
Quant Method : D:\MSDCHEM\1\2012\METHOD\0515126RSK.M
Quant Title :
QLast Update : Wed May 16 13:16:50 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 600 uL
Signal Phase : ShinCarbon ST
Signal Info : 1m x 0.75mm

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
2) S Acetylene	7.918	26188994	74.912 ug/L
Spiked Amount 66.330 Range 66 - 153		Recovery =	112.94%
Target Compounds			
1) TM Methane	1.523	46545432	45.050 ug/L
3) TM Ethene	8.361	73693621	81.696 ug/L
4) TM Ethane	9.001	86978627	88.103 ug/L
5) Qual Propane	0.000	0	N.D.
6) Qual Butane	0.000	0	N.D.

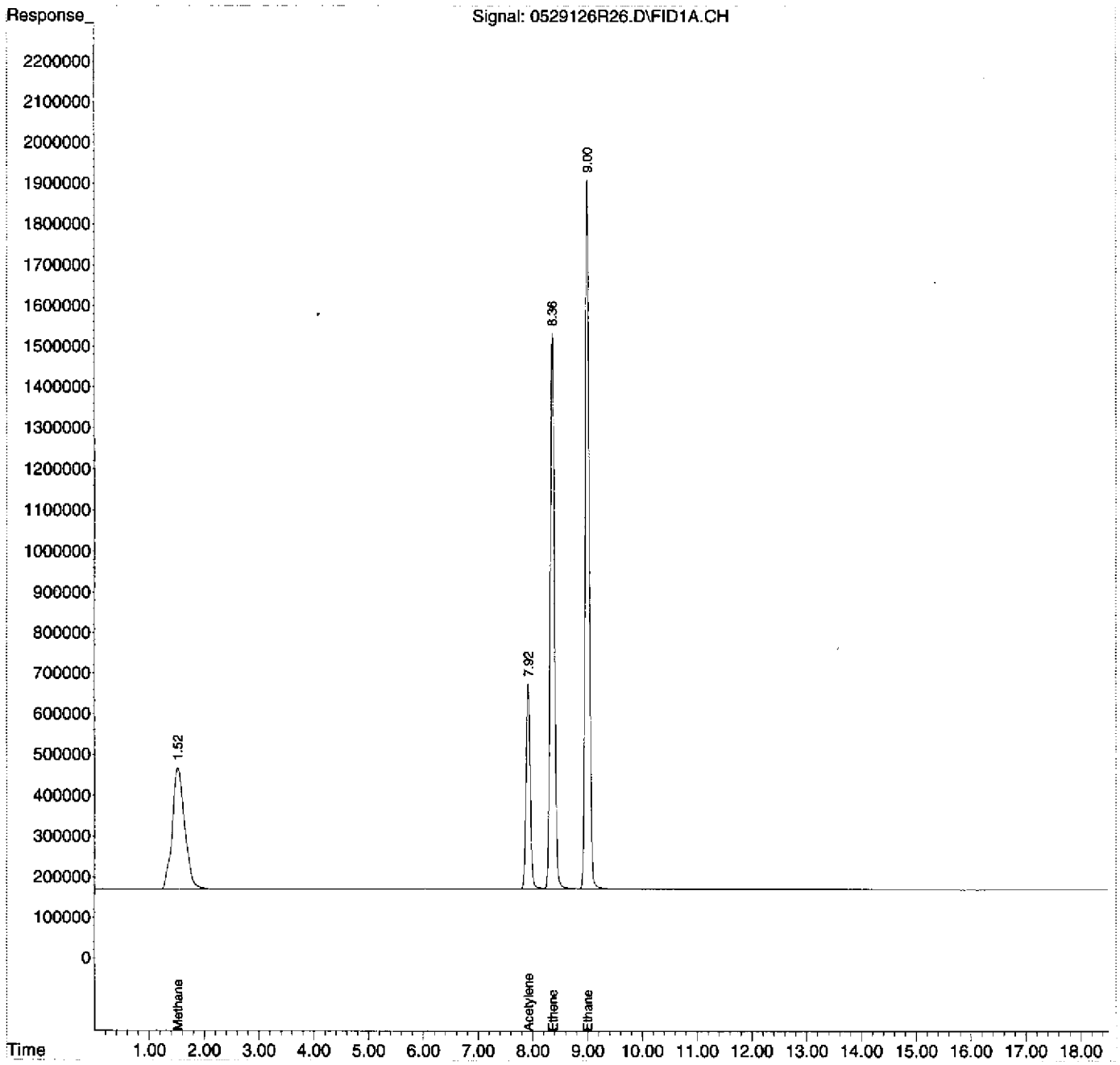
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\052912RSK\
Data File : 0529126R26.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 30 May 2012 12:04 am
Operator : ngk
Sample : B2E0164-MS2
Misc : HW62MS
ALS Vial : 26 Sample Multiplier: 1

Quant Time: May 30 07:42:32 2012
Quant Method : D:\MSDCHEM\1\2012\METHOD\0515126RSK.M
Quant Title :
QLast Update : Wed May 16 13:16:50 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 600 uL
Signal Phase : ShinCarbon ST
Signal Info : 1m x 0.75mm



Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\052912RSK\
Data File : 0529126R27.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 30 May 2012 12:40 am
Operator : ngk
Sample : B2E0164-MSD2
Misc : HW62MSD
ALS Vial : 27 Sample Multiplier: 1

Quant Time: May 30 07:42:38 2012
Quant Method : D:\MSDCHEM\1\2012\METHOD\0515126RSK.M
Quant Title :
QLast Update : Wed May 16 13:16:50 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 600 uL
Signal Phase : ShinCarbon ST
Signal Info : 1m x 0.75mm

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
2) S Acetylene	7.925	26807041	76.680 ug/L
Spiked Amount 66.330 Range 66 - 153		Recovery =	115.60%
Target Compounds			
1) TM Methane	1.527	48553544	46.993 ug/L
3) TM Ethene	8.364	76566711	84.881 ug/L
4) TM Ethane	9.009	90588966	91.760 ug/L
5) Qual Propane	0.000	0	N.D.
6) Qual Butane	0.000	0	N.D.

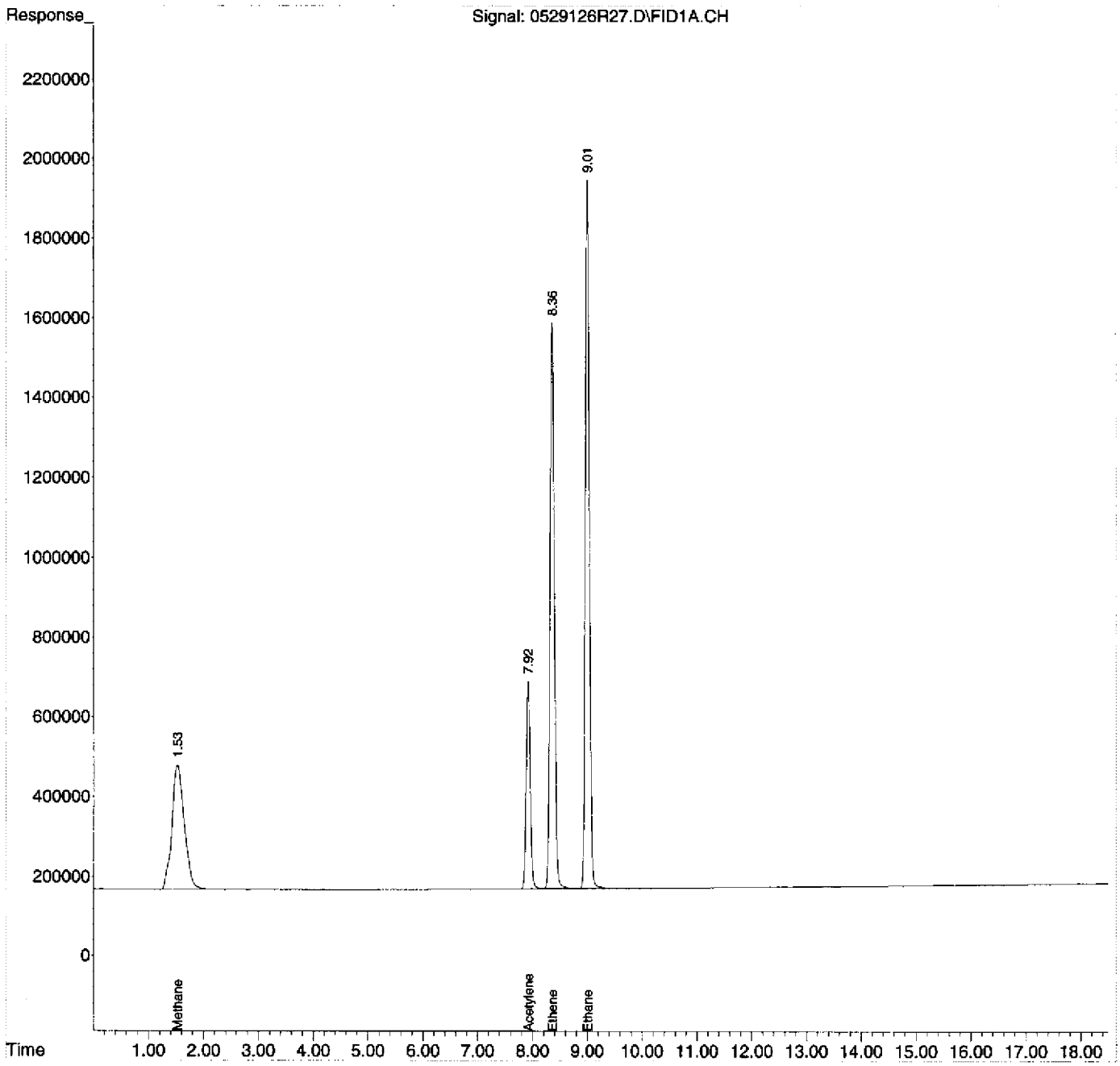
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\052912RSK\
Data File : 0529126R27.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 30 May 2012 12:40 am
Operator : ngk
Sample : B2E0164-MSD2
Misc : HW62MSD
ALS Vial : 27 Sample Multiplier: 1

Quant Time: May 30 07:42:38 2012
Quant Method : D:\MSDCHEM\1\2012\METHOD\0515126RSK.M
Quant Title :
QLast Update : Wed May 16 13:16:50 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 600 uL
Signal Phase : ShinCarbon ST
Signal Info : 1m x 0.75mm



Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\052912RSK\
Data File : 0529126R28.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 30 May 2012 1:07 am
Operator : ngk
Sample : 1205066-02
Misc : TB55
ALS Vial : 28 Sample Multiplier: 1

Quant Time: May 30 07:42:45 2012
Quant Method : D:\MSDCHEM\1\2012\METHOD\0515126RSK.M
Quant Title :
QLast Update : Wed May 16 13:16:50 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 600 uL
Signal Phase : ShinCarbon ST
Signal Info : 1m x 0.75mm

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
2) S Acetylene	7.934	21164045	60.539 ug/L
Spiked Amount 66.330 Range 66 - 153 Recovery = 91.27%			
Target Compounds			
1) TM Methane	1.542	672449	0.651 ug/L
3) TM Ethene	0.000	0	N.D. ug/L
4) TM Ethane	0.000	0	N.D. ug/L
5) Qual Propane	0.000	0	N.D.
6) Qual Butane	0.000	0	N.D.

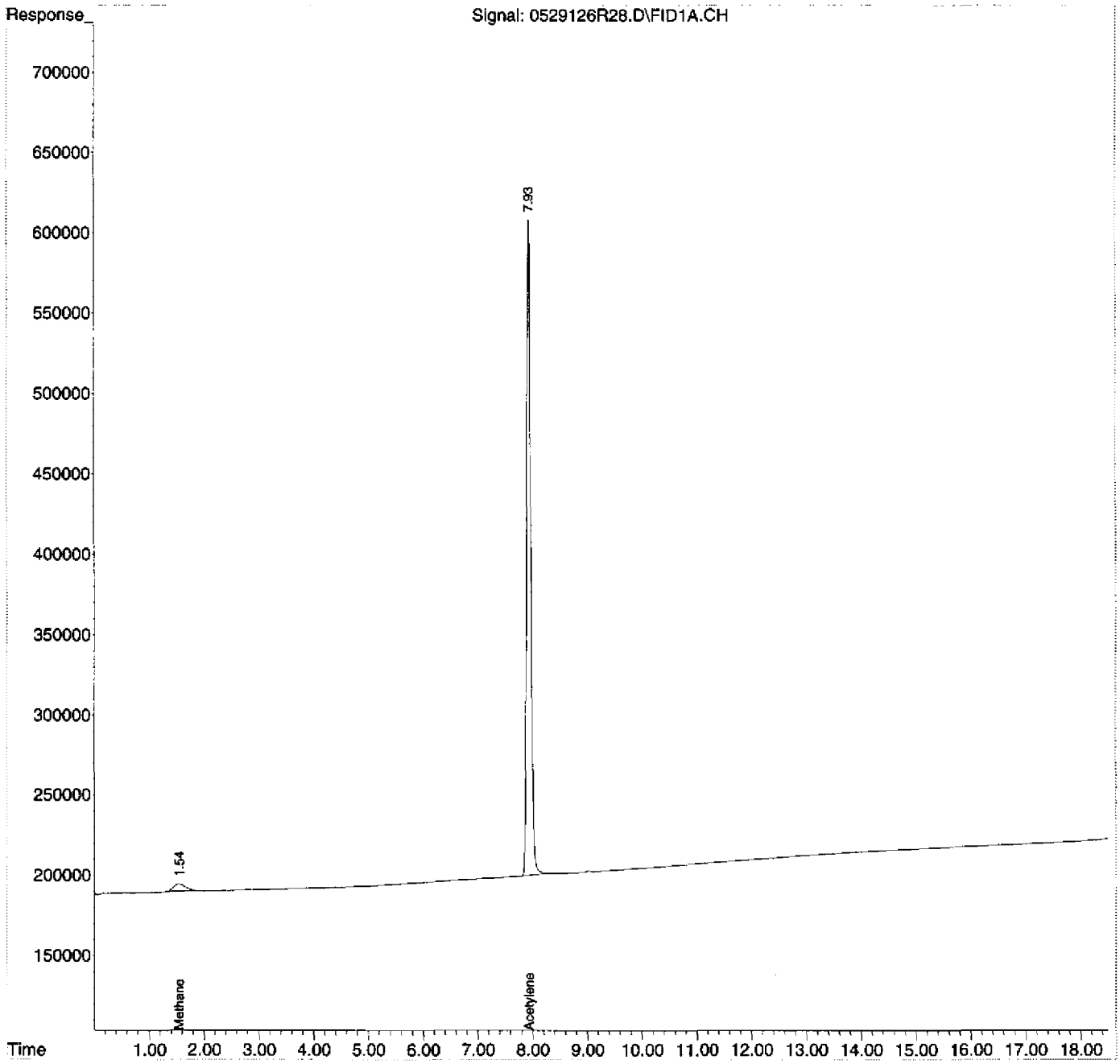
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\052912RSK\
Data File : 0529126R28.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 30 May 2012 1:07 am
Operator : ngk
Sample : 1205066-02
Misc : TB55
ALS Vial : 28 Sample Multiplier: 1

Quant Time: May 30 07:42:45 2012
Quant Method : D:\MSDCHEM\1\2012\METHOD\0515126RSK.M
Quant Title :
QLast Update : Wed May 16 13:16:50 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 600 uL
Signal Phase : ShinCarbon ST
Signal Info : 1m x 0.75mm



Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\052912RSK\
Data File : 0529126R29.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 30 May 2012 1:42 am
Operator : ngk
Sample : 1205066-03
Misc : FB23
ALS Vial : 29 Sample Multiplier: 1

Quant Time: May 30 07:42:51 2012
Quant Method : D:\MSDCHEM\1\2012\METHOD\0515126RSK.M
Quant Title :
QLast Update : Wed May 16 13:16:50 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 600 uL
Signal Phase : ShinCarbon ST
Signal Info : 1m x 0.75mm

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
2) S Acetylene	7.938	24449599	69.937 ug/L
Spiked Amount 66.330 Range 66 - 153		Recovery =	105.44%
Target Compounds			
1) TM Methane	1.553	626194	0.606 ug/L
3) TM Ethene	0.000	0	N.D. ug/L
4) TM Ethane	0.000	0	N.D. ug/L
5) Qual Propane	0.000	0	N.D.
6) Qual Butane	0.000	0	N.D.

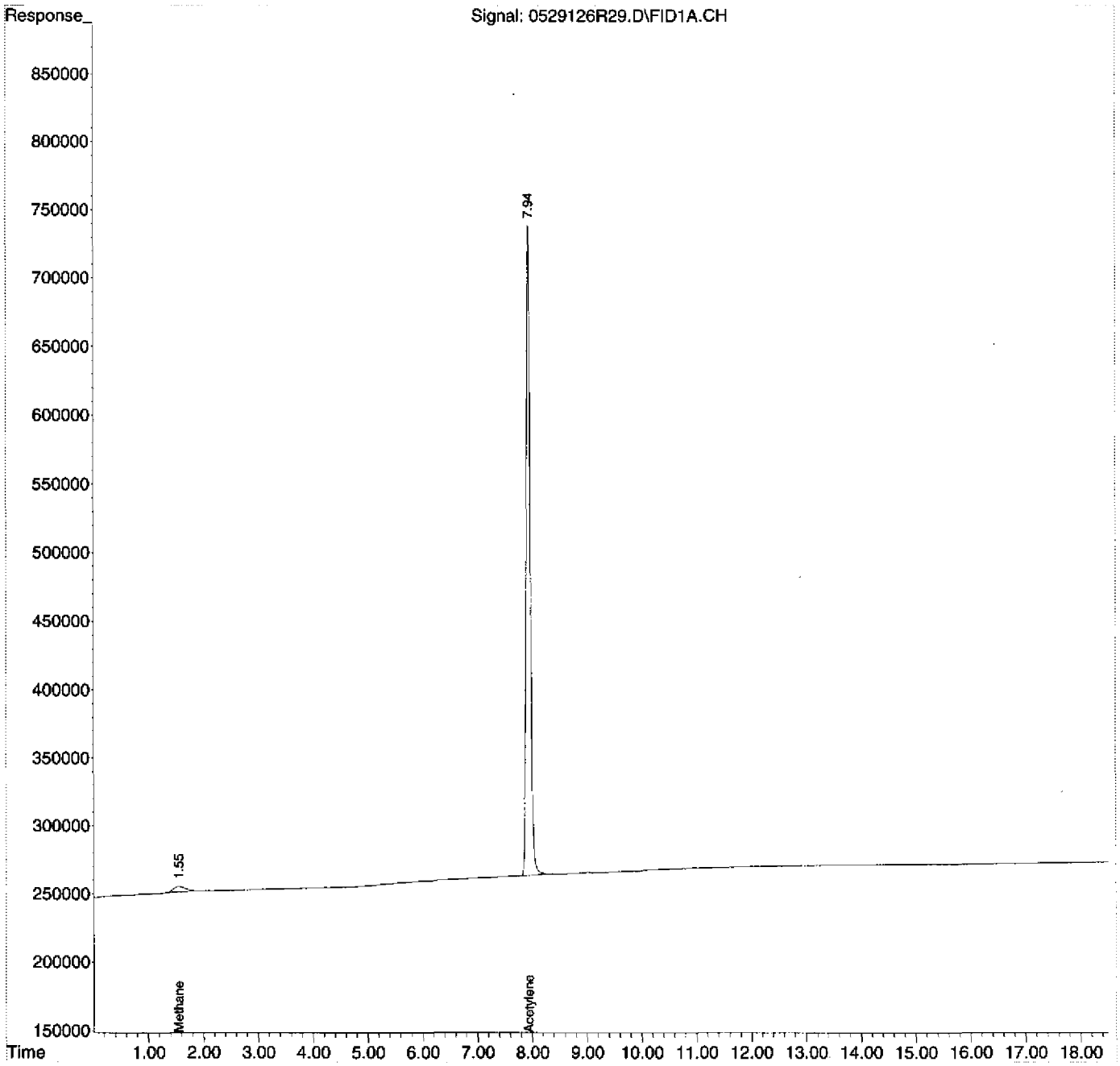
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\052912RSK\
Data File : 0529126R29.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 30 May 2012 1:42 am
Operator : ngk
Sample : 1205066-03
Misc : FB23
ALS Vial : 29 Sample Multiplier: 1

Quant Time: May 30 07:42:51 2012
Quant Method : D:\MSDCHEM\1\2012\METHOD\0515126RSK.M
Quant Title :
QLast Update : Wed May 16 13:16:50 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 600 uL
Signal Phase : ShinCarbon ST
Signal Info : 1m x 0.75mm



Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\052912RSK\
Data File : 0529126R30.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 30 May 2012 2:09 am
Operator : ngk
Sample : 1205066-06
Misc : TB56
ALS Vial : 30 Sample Multiplier: 1

Quant Time: May 30 07:42:57 2012
Quant Method : D:\MSDCHEM\1\2012\METHOD\0515126RSK.M
Quant Title :
QLast Update : Wed May 16 13:16:50 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 600 uL
Signal Phase : ShinCarbon ST
Signal Info : 1m x 0.75mm

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
2) S Acetylene	7.940	26503040	75.811 ug/L
Spiked Amount 66.330 Range 66 - 153		Recovery =	114.29%
Target Compounds			
1) TM Methane	1.545	636096	0.616 ug/L
3) TM Ethene	0.000	0	N.D. ug/L
4) TM Ethane	0.000	0	N.D. ug/L
5) Qual Propane	0.000	0	N.D.
6) Qual Butane	0.000	0	N.D.

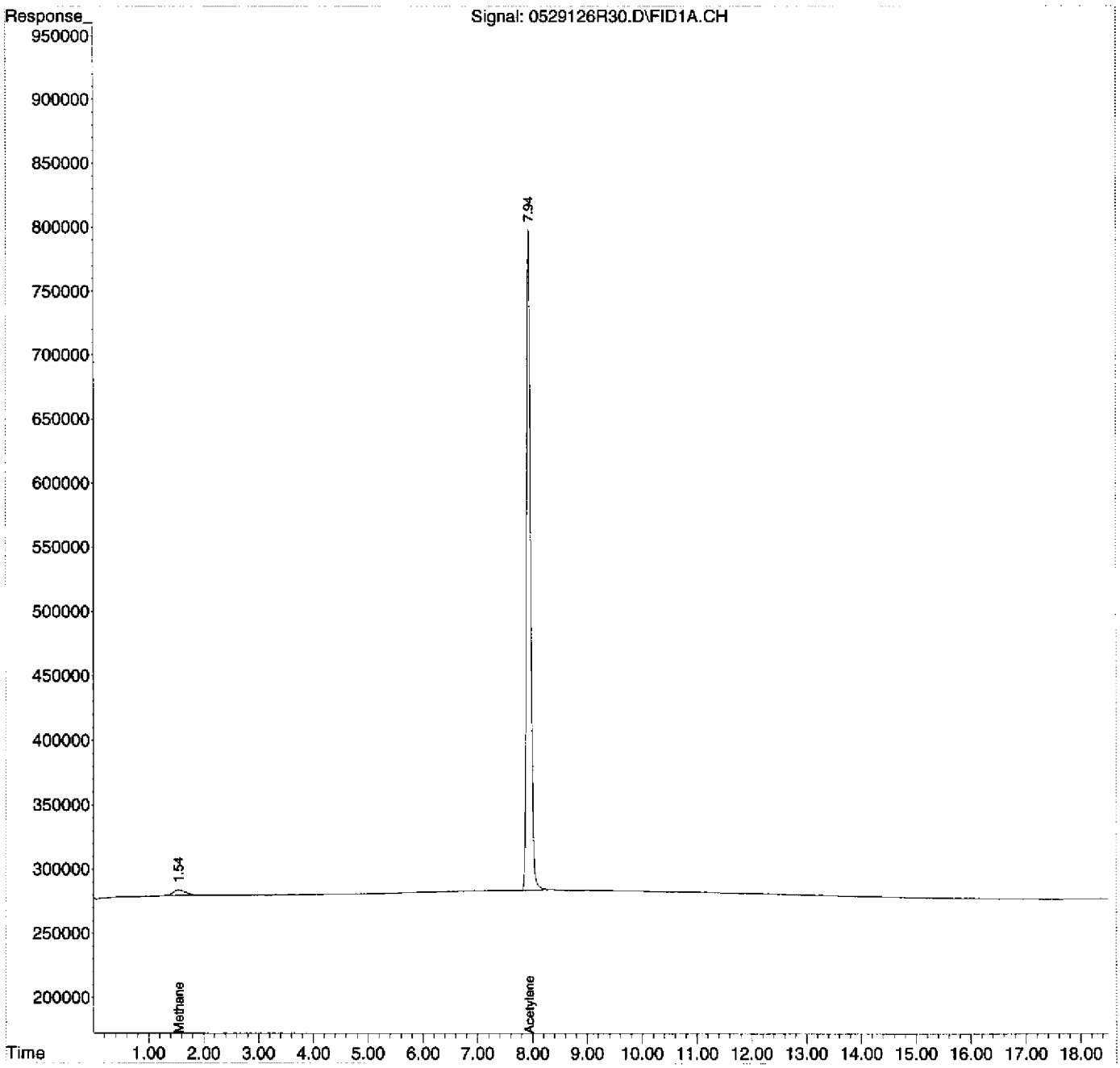
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\052912RSK\
Data File : 0529126R30.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 30 May 2012 2:09 am
Operator : ngk
Sample : 1205066-06
Misc : TB56
ALS Vial : 30 Sample Multiplier: 1

Quant Time: May 30 07:42:57 2012
Quant Method : D:\MSDCHEM\1\2012\METHOD\0515126RSK.M
Quant Title :
QLast Update : Wed May 16 13:16:50 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 600 uL
Signal Phase : ShinCarbon ST
Signal Info : 1m x 0.75mm



Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\052912RSK\
Data File : 0529126R31.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 30 May 2012 2:45 am
Operator : ngk
Sample : 1205066-07
Misc : FB22
ALS Vial : 31 Sample Multiplier: 1

Quant Time: May 30 07:43:03 2012
Quant Method : D:\MSDCHEM\1\2012\METHOD\0515126RSK.M
Quant Title :
QLast Update : Wed May 16 13:16:50 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 600 uL
Signal Phase : ShinCarbon ST
Signal Info : 1m x 0.75mm

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
2) S Acetylene	7.941	26409091	75.542 ug/L
Spiked Amount 66.330 Range 66 - 153		Recovery =	113.89%
Target Compounds			
1) TM Methane	1.544	600388	0.581 ug/L
3) TM Ethene	0.000	0	N.D. ug/L
4) TM Ethane	0.000	0	N.D. ug/L
5) Qual Propane	0.000	0	N.D.
6) Qual Butane	0.000	0	N.D.

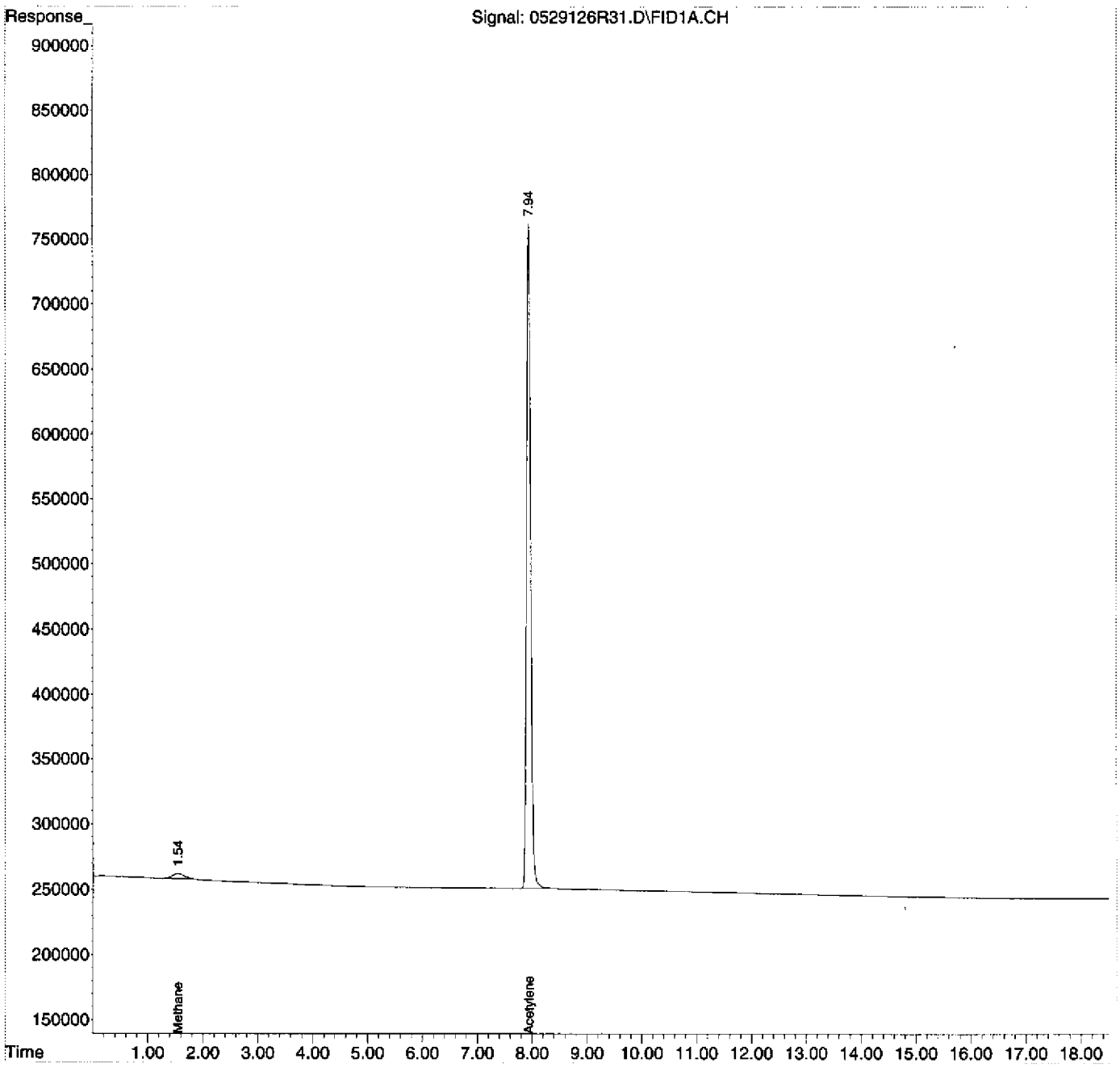
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\052912RSK\
Data File : 0529126R31.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 30 May 2012 2:45 am
Operator : ngk
Sample : 1205066-07
Misc : FB22
ALS Vial : 31 Sample Multiplier: 1

Quant Time: May 30 07:43:03 2012
Quant Method : D:\MSDCHEM\1\2012\METHOD\0515126RSK.M
Quant Title :
QLast Update : Wed May 16 13:16:50 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 600 uL
Signal Phase : ShinCarbon ST
Signal Info : 1m x 0.75mm



Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\052912RSK\
Data File : 0529126R32.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 30 May 2012 3:12 am
Operator : ngk
Sample : 1205066-10
Misc : TB54
ALS Vial : 32 Sample Multiplier: 1

Quant Time: May 30 07:43:09 2012
Quant Method : D:\MSDCHEM\1\2012\METHOD\0515126RSK.M
Quant Title :
QLast Update : Wed May 16 13:16:50 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 600 uL
Signal Phase : ShinCarbon ST
Signal Info : 1m x 0.75mm

Compound	R.T.	Response	Conc	Units
System Monitoring Compounds				
2) S Acetylene	7.942	27290631	78.064	ug/L
Spiked Amount 66.330 Range 66 - 153		Recovery =	117.69%	
Target Compounds				
1) TM Methane	1.554	679343	0.658	ug/L
3) TM Ethene	0.000	0	N.D.	ug/L
4) TM Ethane	0.000	0	N.D.	ug/L
5) Qual Propane	0.000	0	N.D.	
6) Qual Butane	0.000	0	N.D.	

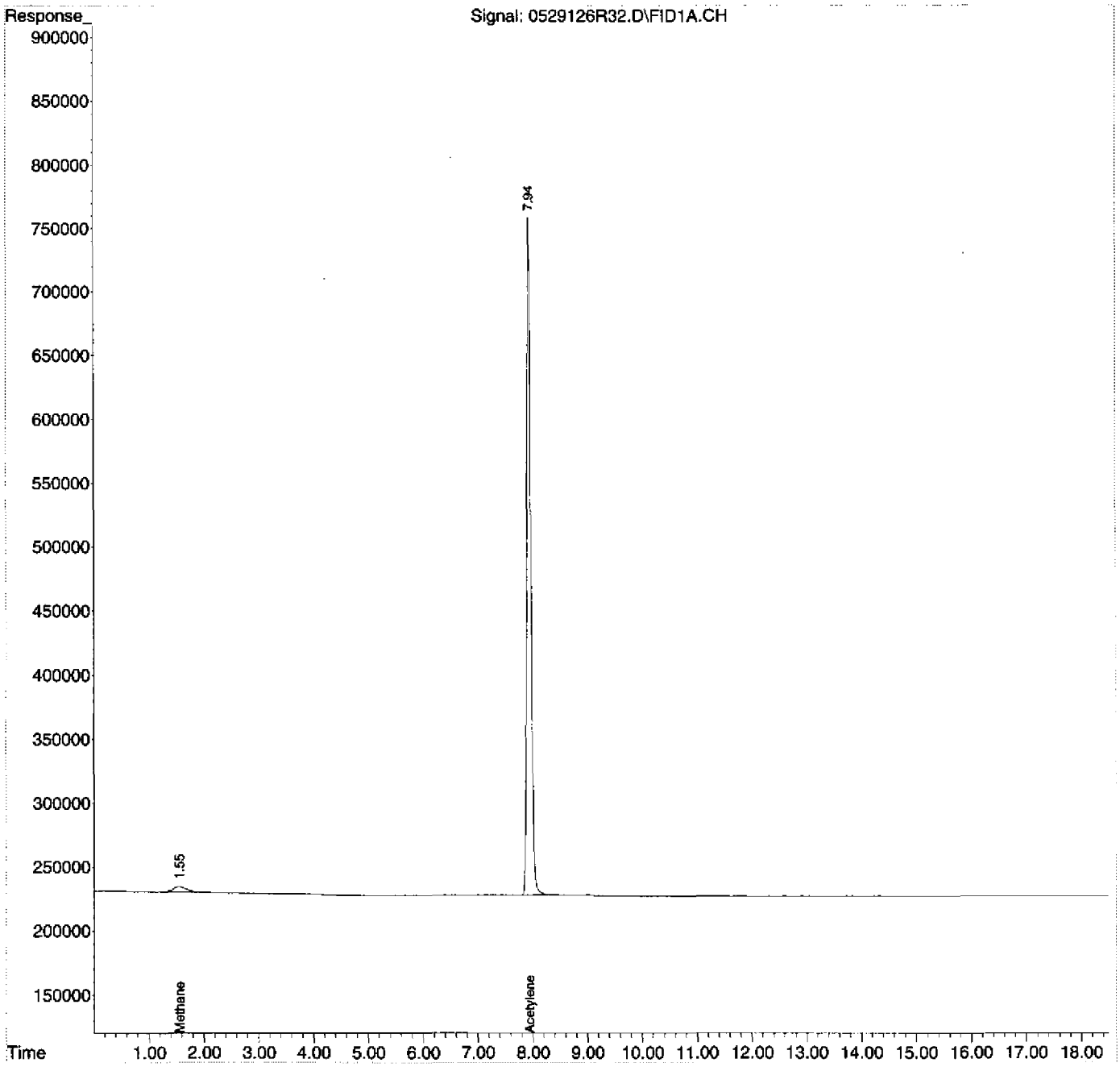
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\052912RSK\
Data File : 0529126R32.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 30 May 2012 3:12 am
Operator : ngk
Sample : 1205066-10
Misc : TB54
ALS Vial : 32 Sample Multiplier: 1

Quant Time: May 30 07:43:09 2012
Quant Method : D:\MSDCHEM\1\2012\METHOD\0515126RSK.M
Quant Title :
QLast Update : Wed May 16 13:16:50 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 600 uL
Signal Phase : ShinCarbon ST
Signal Info : 1m x 0.75mm



Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\052912RSK\
Data File : 0529126R33.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 30 May 2012 3:48 am
Operator : ngk
Sample : 1205066-04
Misc : HW63
ALS Vial : 1 Sample Multiplier: 1

~~HW~~
OC #1.
SL, 6/5/12

Quant Time: May 30 07:43:15 2012
Quant Method : D:\MSDCHEM\1\2012\METHOD\0515126RSK.M
Quant Title :
QLast Update : Wed May 16 13:16:50 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 600 uL
Signal Phase : ShinCarbon ST
Signal Info : 1m x 0.75mm

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
2) S Acetylene	7.940	26069167	74.570 ug/L
Spiked Amount 66.330 Range 66 - 153		Recovery =	112.42%
Target Compounds			
1) TM Methane	1.517	2129837514	2061.393 ug/L
3) TM Ethene	0.000	0	N.D. ug/L
4) TM Ethane	9.014	4110952	4.164 ug/L
5) Qual Propane	0.000	0	N.D.
6) Qual Butane	0.000	0	N.D.

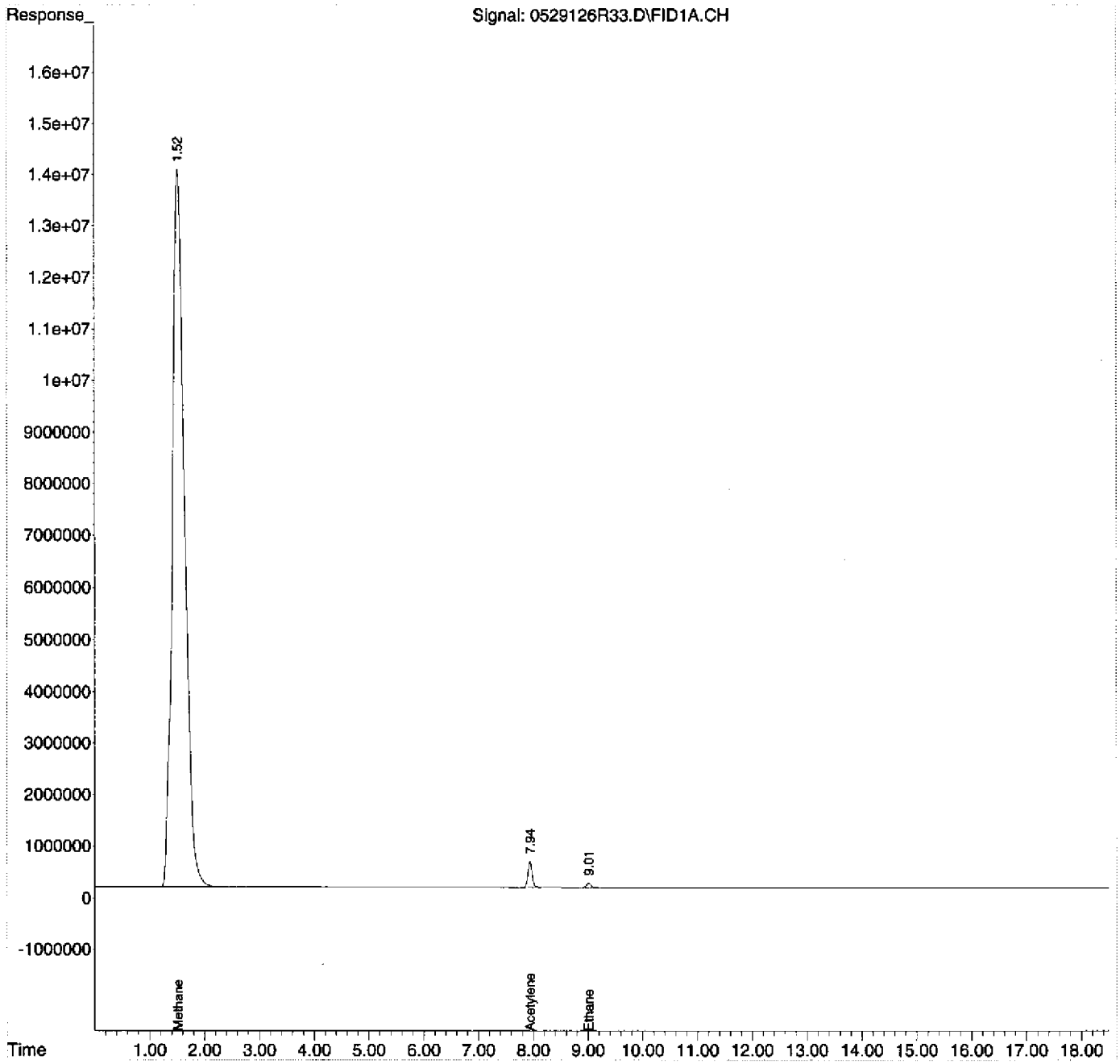
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\052912RSK\
Data File : 0529126R33.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 30 May 2012 3:48 am
Operator : ngk
Sample : 1205066-04
Misc : HW63
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 30 07:43:15 2012
Quant Method : D:\MSDCHEM\1\2012\METHOD\0515126RSK.M
Quant Title :
QLast Update : Wed May 16 13:16:50 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 600 uL
Signal Phase : ShinCarbon ST
Signal Info : 1m x 0.75mm



Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\052912RSK\
Data File : 0529126R34.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 30 May 2012 4:15 am
Operator : ngk
Sample : 1205066-05
Misc : HW63z
ALS Vial : 2 Sample Multiplier: 1

NW
OC #1
SL 6/1/12

Quant Time: May 30 07:43:21 2012
Quant Method : D:\MSDCHEM\1\2012\METHOD\0515126RSK.M
Quant Title :
QLast Update : Wed May 16 13:16:50 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 600 uL
Signal Phase : ShinCarbon ST
Signal Info : 1m x 0.75mm

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
2) S Acetylene	7.941	26386827	75.478 ug/L
Spiked Amount 66.330 Range 66 - 153		Recovery =	113.79%
Target Compounds			
1) TM Methane	1.521	1863657023	1803.766 ug/L
3) TM Ethene	0.000	0	N.D. ug/L
4) TM Ethane	9.015	3819739	3.869 ug/L
5) Qual Propane	0.000	0	N.D.
6) Qual Butane	0.000	0	N.D.

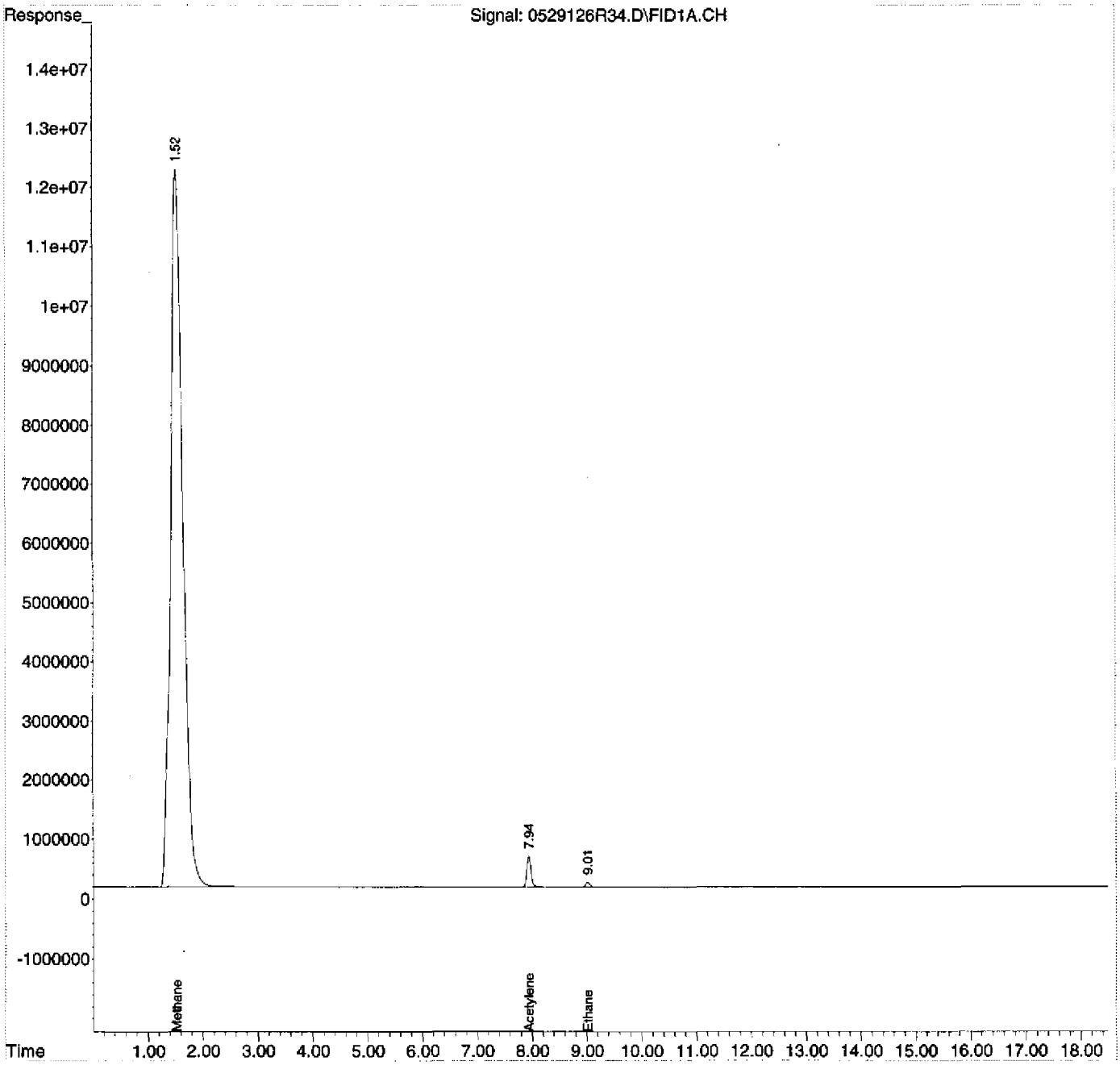
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\052912RSK\
Data File : 0529126R34.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 30 May 2012 4:15 am
Operator : ngk
Sample : 1205066-05
Misc : HW63z
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 30 07:43:21 2012
Quant Method : D:\MSDCHEM\1\2012\METHOD\0515126RSK.M
Quant Title :
QLast Update : Wed May 16 13:16:50 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 600 uL
Signal Phase : ShinCarbon ST
Signal Info : 1m x 0.75mm



Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\052912RSK\
Data File : 0529126R35.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 30 May 2012 4:50 am
Operator : ngk
Sample : 1205066-08
Misc : HW64
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 30 07:43:26 2012
Quant Method : D:\MSDCHEM\1\2012\METHOD\0515126RSK.M
Quant Title :
QLast Update : Wed May 16 13:16:50 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 600 uL
Signal Phase : ShinCarbon ST
Signal Info : 1m x 0.75mm

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
2) S Acetylene	7.942	26800878	76.663 ug/L
Spiked Amount 66.330 Range 66 - 153		Recovery =	115.58%
Target Compounds			
1) TM Methane	1.536	1476878	1.429 ug/L
3) TM Ethene	0.000	0	N.D. ug/L
4) TM Ethane	0.000	0	N.D. ug/L
5) Qual Propane	0.000	0	N.D.
6) Qual Butane	0.000	0	N.D.

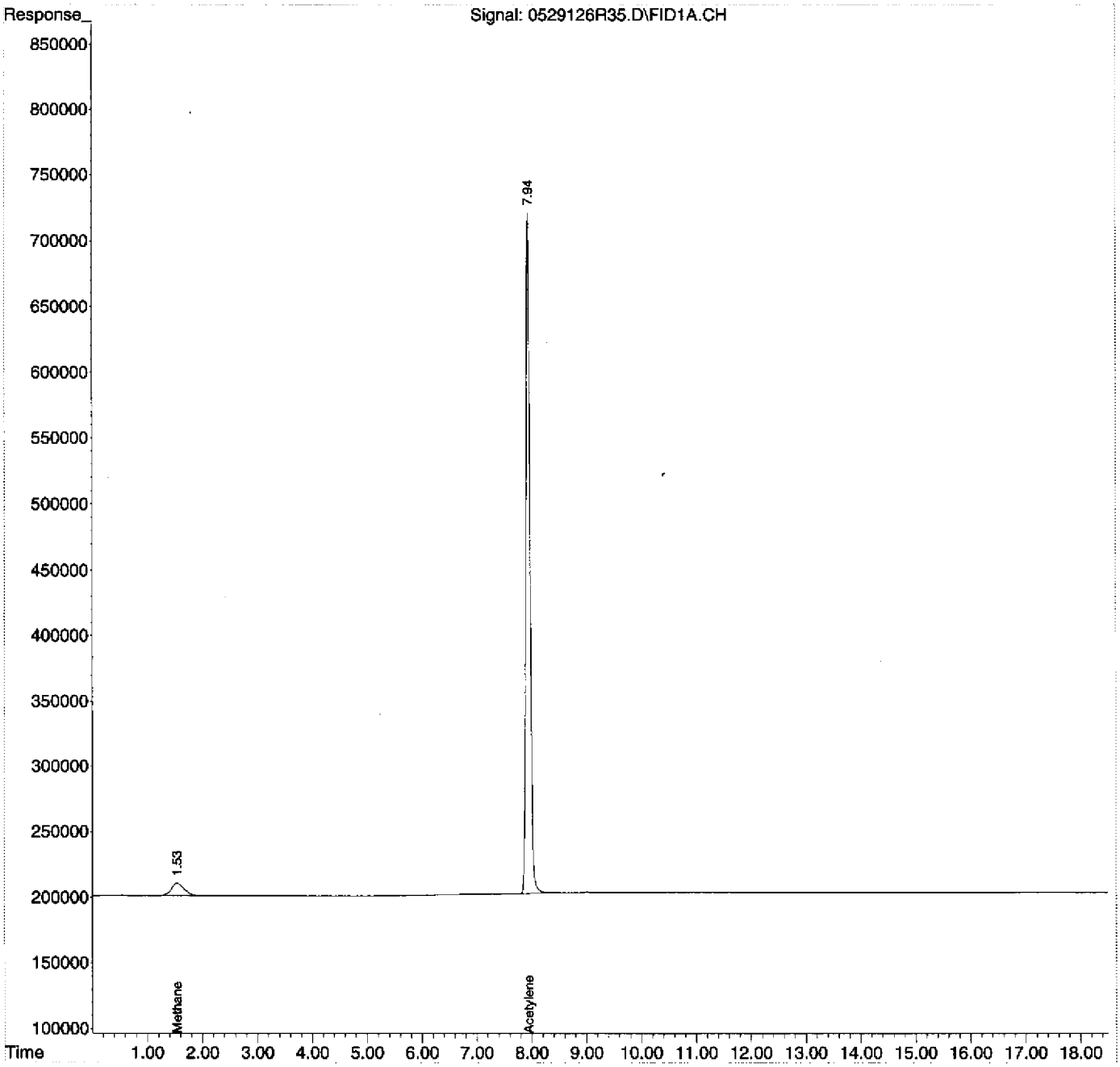
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\052912RSK\
Data File : 0529126R35.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 30 May 2012 4:50 am
Operator : ngk
Sample : 1205066-08
Misc : HW64
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 30 07:43:26 2012
Quant Method : D:\MSDCHEM\1\2012\METHOD\0515126RSK.M
Quant Title :
QLast Update : Wed May 16 13:16:50 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 600 uL
Signal Phase : ShinCarbon ST
Signal Info : 1m x 0.75mm



Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\052912RSK\
Data File : 0529126R36.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 30 May 2012 5:17 am
Operator : ngk
Sample : 1205066-09
Misc : HW64-P
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 30 07:43:31 2012
Quant Method : D:\MSDCHEM\1\2012\METHOD\0515126RSK.M
Quant Title :
QLast Update : Wed May 16 13:16:50 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 600 uL
Signal Phase : ShinCarbon ST
Signal Info : 1m x 0.75mm

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
2) S Acetylene	7.944	27056121	77.393 ug/L
Spiked Amount 66.330 Range 66 - 153		Recovery =	116.68%
Target Compounds			
1) TM Methane	1.550	990788	0.959 ug/L
3) TM Ethene	0.000	0	N.D. ug/L
4) TM Ethane	0.000	0	N.D. ug/L
5) Qual Propane	0.000	0	N.D.
6) Qual Butane	0.000	0	N.D.

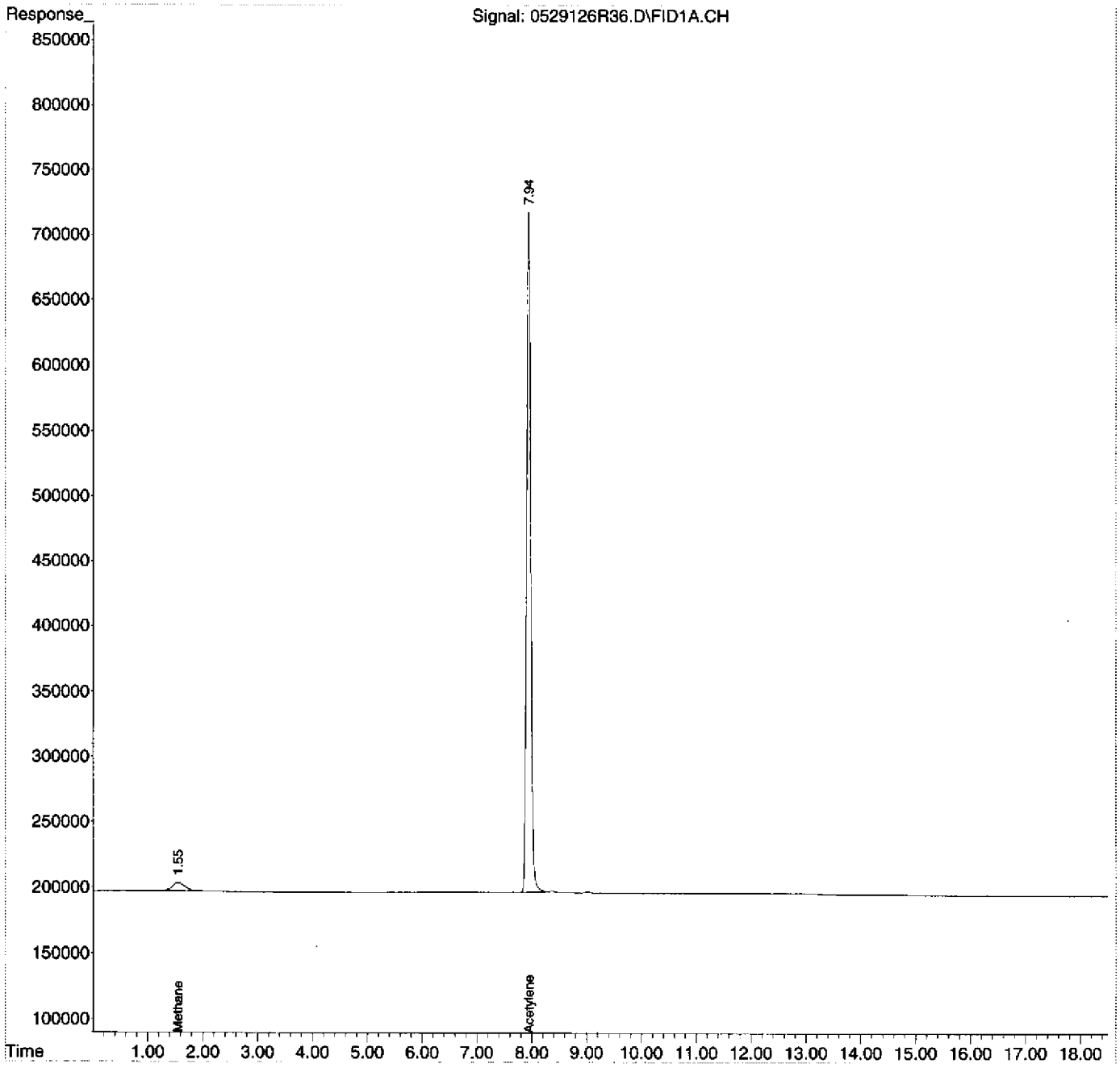
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\052912RSK\
Data File : 0529126R36.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 30 May 2012 5:17 am
Operator : ngk
Sample : 1205066-09
Misc : HW64-P
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 30 07:43:31 2012
Quant Method : D:\MSDCHEM\1\2012\METHOD\0515126RSK.M
Quant Title :
QLast Update : Wed May 16 13:16:50 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 600 uL
Signal Phase : ShinCarbon ST
Signal Info : 1m x 0.75mm



SDG: 12145B
Instrument: AG 6890-6
Analysis Date: 5/30/2012

SAMPLE DATA

Injection Log

Directory: D:\MSDCHEM\1\2012\DATA\053012ARSK

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	0530126r01.d	1.	2050090-IBL1	IB	Unrecognized:Un
2	2	0530126r02.d	1.	2050090-CCV1	2E29003	Unrecognized:Un
3	3	0530126r03.d	1.	2050090-LCV1	2E29004	Unrecognized:Un
4	4	0530126r04.d	1.	2050090-LCV2	2E29005	Unrecognized:Un
5	5	0530126r05.d	1.	B2E0168-BS1	LCS	Unrecognized:Un
6	6	0530126r06.d	1.	B2E0168-BLK1	MB	Unrecognized:Un
7	7	0530126r07.d	1.	1205066-08RE1	HW64	Unrecognized:Un
8	8	0530126r08.d	1.	1205066-09RE1	HW64-P	Unrecognized:Un
9	9	0530126r09.d	1.	1205061-04RE1	20MW15C029	Unrecognized:Un
10	10	0530126r10.d	1.	B2E0168-MS1	1205061-04MS	Unrecognized:Un
11	11	0530126r11.d	1.	B2E0168-MS1	1205061-04MSD	Unrecognized:Un
12	12	0530126r12.d	1.	1205053-01RE1	20MW19D038 0.1mL	Unrecognized:Un
13	13	0530126r13.d	1.	1205053-02RE1	20MW9B033 0.23mL	30 May 2012 22:31
14	14	0530126r14.d	1.	1205053-03RE1	20MW8C032 0.3mL	30 May 2012 22:58
15	15	0530126r15.d	1.	1205061-02RE1	20MW18D031 0.13mL	30 May 2012 23:33
16	16	0530126r16.d	1.	1205061-05RE1	20DSW7C012 0.26mL	31 May 2012 00:00
17	17	0530126r17.d	1.	1205066-04RE1	HW63 0.8mL	31 May 2012 00:35
18	18	0530126r18.d	1.	1205066-05RE1	HW63z 0.9mL	Unrecognized:Un

ANALYSIS SEQUENCE

2050090

Instrument: AG6890-6

Calibration ID: 1205004

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Client
2050090-IBL1	QC		1				
2050090-CCV1	QC		2		2E30003		
2050090-LCV1	QC		3		2E30004		
2050090-LCV2	QC		4		2E30005		
B2E0168-BS1	QC		5				
B2E0168-BLK1	QC		6				
1205066-08RE1	Dissolved HC Gases	D	7				US EPA Region 3, Eastern Response Bra
1205066-09RE1	Dissolved HC Gases	D	8				US EPA Region 3, Eastern Response Bra
1205061-04RE1	Dissolved HC Gases	F	9				California Site Cleanup Section 1
B2E0168-MS1	QC		10				
B2E0168-MSD1	QC		11				
1205053-01RE1	Dissolved HC Gases	F	12				California Site Cleanup Section 1
1205053-02RE1	Dissolved HC Gases	F	13				California Site Cleanup Section 1
1205053-03RE1	Dissolved HC Gases	F	14				California Site Cleanup Section 1
1205061-02RE1	Dissolved HC Gases	F	15				California Site Cleanup Section 1
1205061-05RE1	Dissolved HC Gases	F	16				California Site Cleanup Section 1
1205066-04RE1	Dissolved HC Gases	D	17				US EPA Region 3, Eastern Response Bra
1205066-05RE1	Dissolved HC Gases	D	18				US EPA Region 3, Eastern Response Bra

NGK 5/30/12
Samples Loaded By Date

NGK 5/31/12
Data Processed By Date

GC QA-QC Check Report

Daily Calibration File : D:\MSDCHEM\1\DATA\2010\120810RSK\120810A02.D
Time Acquired : 08 Dec 2010 11:12 am

File	Sample	Surrogate Recovery %
0530126R06.D	B2E0168-BLK1	92
0530126R07.D	1205066-08RE1	95
0530126R08.D	1205066-09RE1	112
0530126R09.D	1205061-04RE1	106
0530126R12.D	1205053-01RE1	90
0530126R13.D	1205053-02RE1	110
0530126R14.D	1205053-03RE1	116
0530126R15.D	1205061-02RE1	112
0530126R16.D	1205061-05RE1	117
0530126R17.D	1205066-04RE1	115
0530126R18.D	1205066-05RE1	115

(fails) - fails 24hr time check * - fails criteria

Created: Thu May 31 08:06:43 2012 AG6890N-6

RESPONSE FACTOR REPORT AG6890N-6

Method Path: C:\MSDCHEM\1\METHODS
Method File: 0515126RSK
Title:
Last Update: Wed May 16 13:16:50 2012
Response Via: Initial Calibration

Calibration Files:
1 = 0508126R008.D 2 = 0508126R007.D 3 = 0508126R006.D 4 = 0508126R005.D
5 = 0508126R004.D 6 = 0508126R003.D 7 = 0508126R002.D 8= 0515126R19.D

Compound	1	2	3	4	5	6	7	8	AVG.	%RSD
1) TM Methane										
ug/L		1.231	4.102	13.230	44.099	110.248	220.497	440.994		
RF		1.150E+06	1.024E+06	1.069E+06	1.057E+06	1.007E+06	9.926E+05	9.325E+05	1.033E+06	6.61%
2) S Acetylene										
ug/L	1.007	2.014	6.713	21.650	72.166	180.415	360.831	721.662		
RF	343218.997	3.405E+05	3.347E+05	3.698E+05	3.702E+05	3.564E+05	3.506E+05	3.313E+05	3.496E+05	4.27%
3) TM Ethene										
ug/L	1.091	2.182	7.273	23.455	78.183	195.458	390.916	781.832		
RF	8.726E+05	8.821E+05	8.681E+05	9.594E+05	9.587E+05	9.180E+05	9.064E+05	8.512E+05	9.020E+05	4.55%
4) TM Ethane										
ug/L	1.162	2.324	7.746	24.981	83.269	208.172	416.343	832.686		
RF	9.536E+05	9.697E+05	9.557E+05	1.052E+06	1.050E+06	1.001E+06	9.878E+05	9.285E+05	9.872E+05	4.56%

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\053012ARSK\
Data File : 0530126R01.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 30 May 2012 4:06 pm
Operator : ngk
Sample : 2050090-IBL1
Misc : IB
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 31 07:32:19 2012
Quant Method : D:\MSDCHEM\1\2012\METHOD\0515126RSK.M
Quant Title :
QLast Update : Wed May 16 13:16:50 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 600 uL
Signal Phase : ShinCarbon ST
Signal Info : 1m x 0.75mm

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
2) S Acetylene	7.942	25174476	72.010 ug/L
Spiked Amount 66.330 Range 66 - 153		Recovery =	108.56%
Target Compounds			
1) TM Methane	1.542	771730	0.747 ug/L
3) TM Ethene	0.000	0	N.D. ug/L
4) TM Ethane	0.000	0	N.D. ug/L
5) Qual Propane	0.000	0	N.D.
6) Qual Butane	0.000	0	N.D.

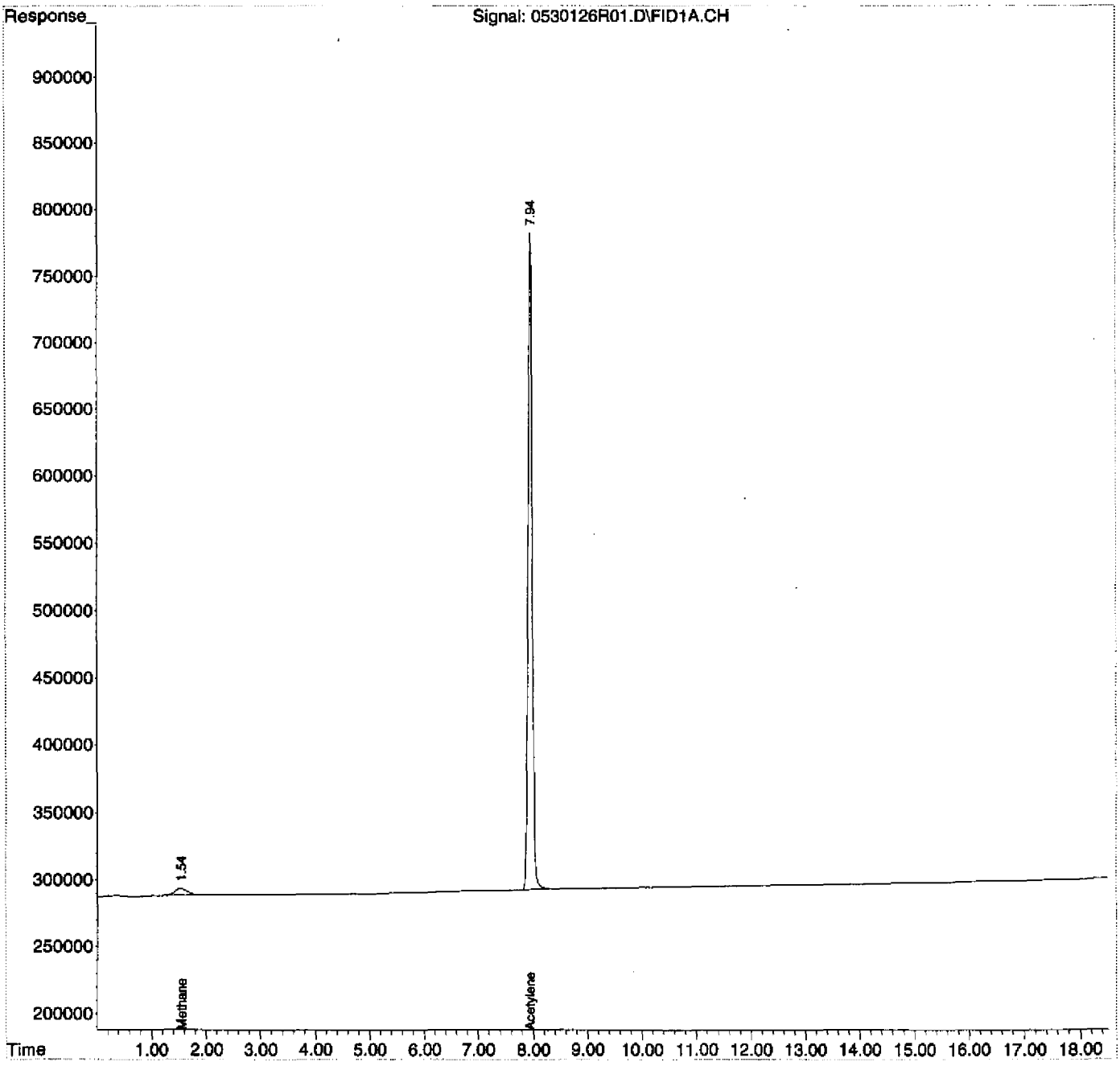
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\053012ARSK\
Data File : 0530126R01.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 30 May 2012 4:06 pm
Operator : ngk
Sample : 2050090-IBL1
Misc : IB
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 31 07:32:19 2012
Quant Method : D:\MSDCHEM\1\2012\METHOD\0515126RSK.M
Quant Title :
QLast Update : Wed May 16 13:16:50 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 600 uL
Signal Phase : ShinCarbon ST
Signal Info : 1m x 0.75mm



Evaluate Continuing Calibration Report

Data Path : D:\MSDCHEM\1\2012\DATA\053012ARSK\
Data File : 0530126R02.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 30 May 2012 4:35 pm
Operator : ngk
Sample : 2050090-CCV1
Misc : 2E29003
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 31 07:32:26 2012
Quant Method : D:\MSDCHEM\1\2012\METHOD\0515126RSK.M
Quant Title :
QLast Update : Wed May 16 13:16:50 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 600 uL
Signal Phase : ShinCarbon ST
Signal Info : 1m x 0.75mm

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
1	TM	Methane	1.033	0.925 E6	10.5	86	0.00
2	S	Acetylene	349.595	353.734 E3	-1.2	96	0.00
3	TM	Ethene	902.048	856.732 E3	5.0	89	0.00
4	TM	Ethane	987.235	924.112 E3	6.4	88	0.00

Evaluate Continuing Calibration Report - Not Founds

5	Qual	Propane	608.635	0.000	100.0#	0#	-12.89#
6	Qual	Butane	0.000	0.000	0.0	0#	-17.72#

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\053012ARSK\
Data File : 0530126R02.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 30 May 2012 4:35 pm
Operator : ngk
Sample : 2050090-CCV1
Misc : 2E29003
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 31 07:32:26 2012
Quant Method : D:\MSDCHEM\1\2012\METHOD\0515126RSK.M
Quant Title :
QLast Update : Wed May 16 13:16:50 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 600 uL
Signal Phase : ShinCarbon ST
Signal Info : 1m x 0.75mm

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
2) S Acetylene	7.948	7658342	21.906 ug/L
Spiked Amount 66.330 Range 66 - 153		Recovery =	33.03%#
Target Compounds			
1) TM Methane	1.533	12231635	11.839 ug/L
3) TM Ethene	8.372	20094646	22.277 ug/L
4) TM Ethane	9.013	23085234	23.384 ug/L
5) Qual Propane	0.000	0	N.D.
6) Qual Butane	0.000	0	N.D.

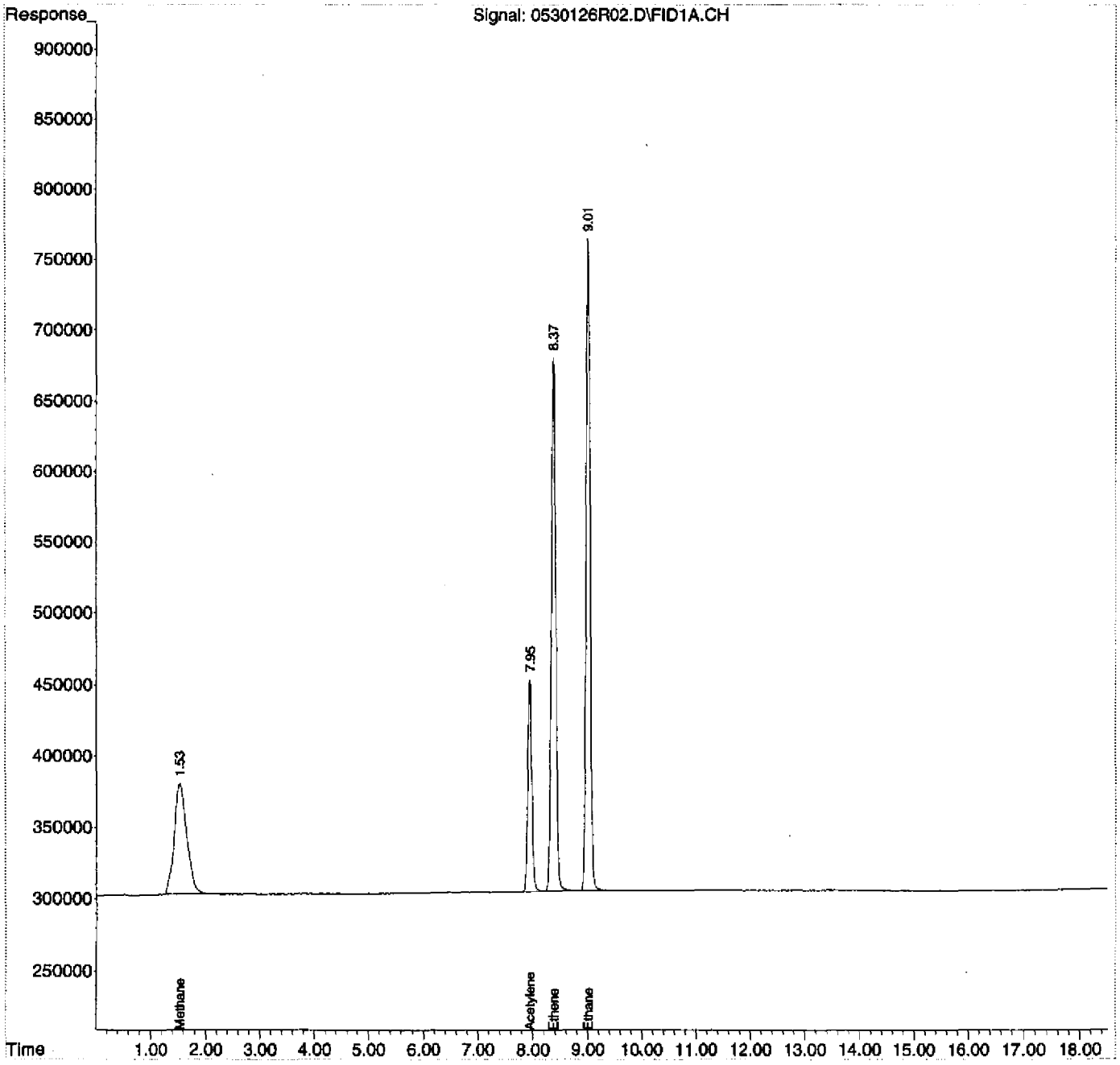
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\053012ARSK\
Data File : 0530126R02.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 30 May 2012 4:35 pm
Operator : ngk
Sample : 2050090-CCV1
Misc : 2E29003
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 31 07:32:26 2012
Quant Method : D:\MSDCHEM\1\2012\METHOD\0515126RSK.M
Quant Title :
QLast Update : Wed May 16 13:16:50 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 600 uL
Signal Phase : ShinCarbon ST
Signal Info : 1m x 0.75mm



RSK-175 HC LCV REPORT

Instrument Name: AG6890N-6
File Name LCV1: 0530126R03.D
File Name LCV2: 0530126R04.D
Date Acquired: 05/30/12
Operator: ngk

Analyte	Spike ug/L	Calculated ug/L	QC Limits	%R	Status
Methane	1.231	1.281	60 - 140	104.1%	pass
Acetylene	2.014	1.711	60 - 140	85.0%	NA
Ethene	1.091	0.891	60 - 140	81.7%	pass
Ethane	1.162	0.951	60 - 140	81.8%	pass

Ethene & ethane recovery calculated from LCV1 results
Methane recovery calculated from LCV2 results

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\053012ARSK\
Data File : 0530126R03.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 30 May 2012 5:11 pm
Operator : ngk
Sample : 2050090-LCV1
Misc : 2E29004
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 31 07:32:32 2012
Quant Method : D:\MSDCHEM\1\2012\METHOD\0515126RSK.M
Quant Title :
QLast Update : Wed May 16 13:16:50 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 600 uL
Signal Phase : ShinCarbon ST
Signal Info : 1m x 0.75mm

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
2) S Acetylene	7.953	296916	0.849 ug/L
Spiked Amount 66.330 Range 66 - 153		Recovery =	1.28%#
Target Compounds			
1) TM Methane	1.525	775813	0.751 ug/L
3) TM Ethene	8.375	803277	0.891 ug/L
4) TM Ethane	9.013	938376	0.951 ug/L
5) Qual Propane	0.000	0	N.D.
6) Qual Butane	0.000	0	N.D.

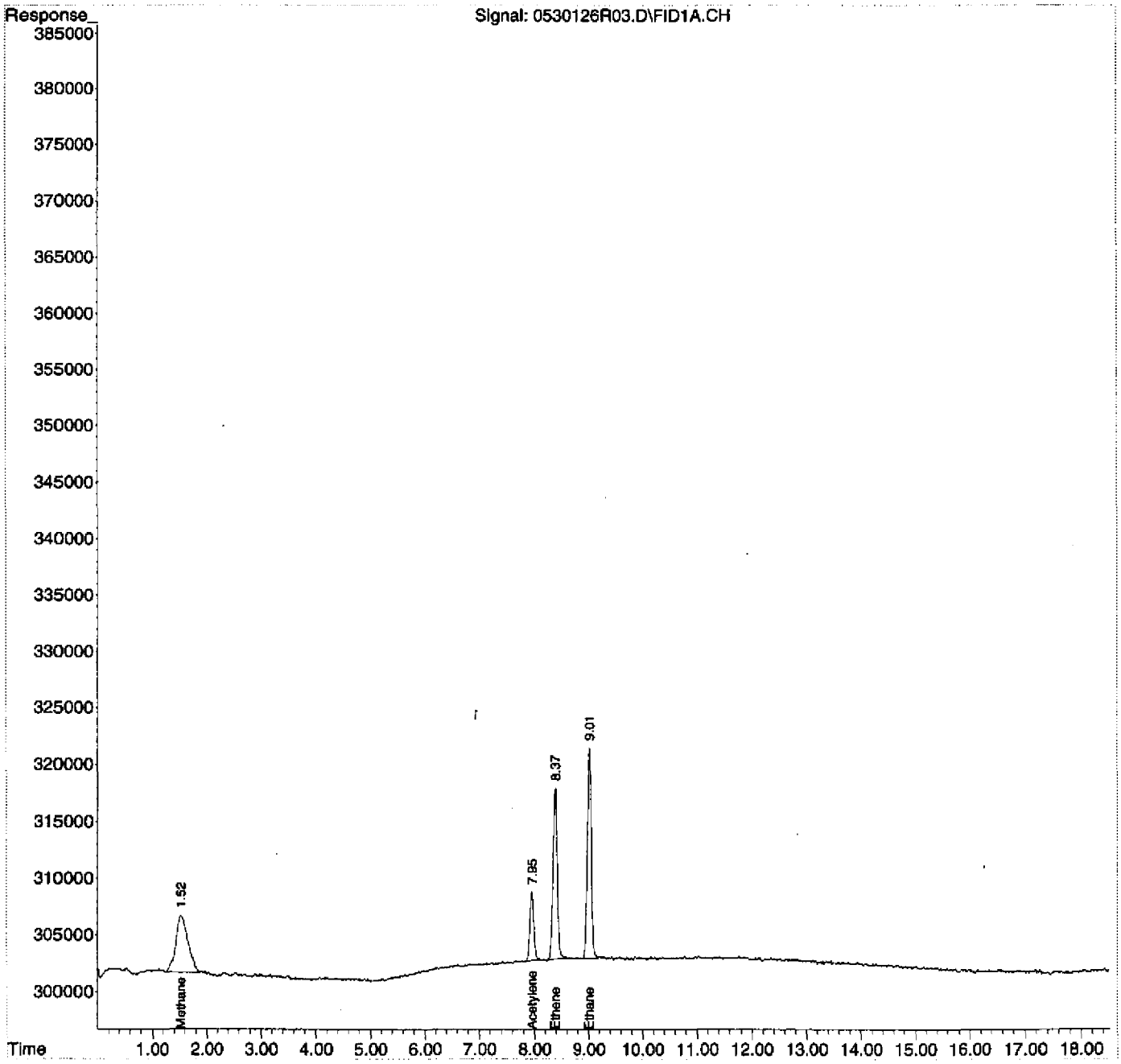
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\053012ARSK\
Data File : 0530126R03.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 30 May 2012 5:11 pm
Operator : ngk
Sample : 2050090-LCV1
Misc : 2E29004
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 31 07:32:32 2012
Quant Method : D:\MSDCHEM\1\2012\METHOD\0515126RSK.M
Quant Title :
QLast Update : Wed May 16 13:16:50 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 600 uL
Signal Phase : ShinCarbon ST
Signal Info : 1m x 0.75mm



Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\053012ARSK\
Data File : 0530126R04.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 30 May 2012 5:44 pm
Operator : ngk
Sample : 2050090-LCV2
Misc : 2E29005
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 31 07:32:38 2012
Quant Method : D:\MSDCHEM\1\2012\METHOD\0515126RSK.M
Quant Title :
QLast Update : Wed May 16 13:16:50 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 600 uL
Signal Phase : ShinCarbon ST
Signal Info : 1m x 0.75mm

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
2) S Acetylene	7.952	598063	1.711 ug/L
Spiked Amount 66.330 Range 66 - 153		Recovery =	2.58%#
Target Compounds			
1) TM Methane	1.526	1323028	1.281 ug/L
3) TM Ethene	8.374	1623562	1.800 ug/L
4) TM Ethane	9.014	1907756	1.932 ug/L
5) Qual Propane	0.000	0	N.D.
6) Qual Butane	0.000	0	N.D.

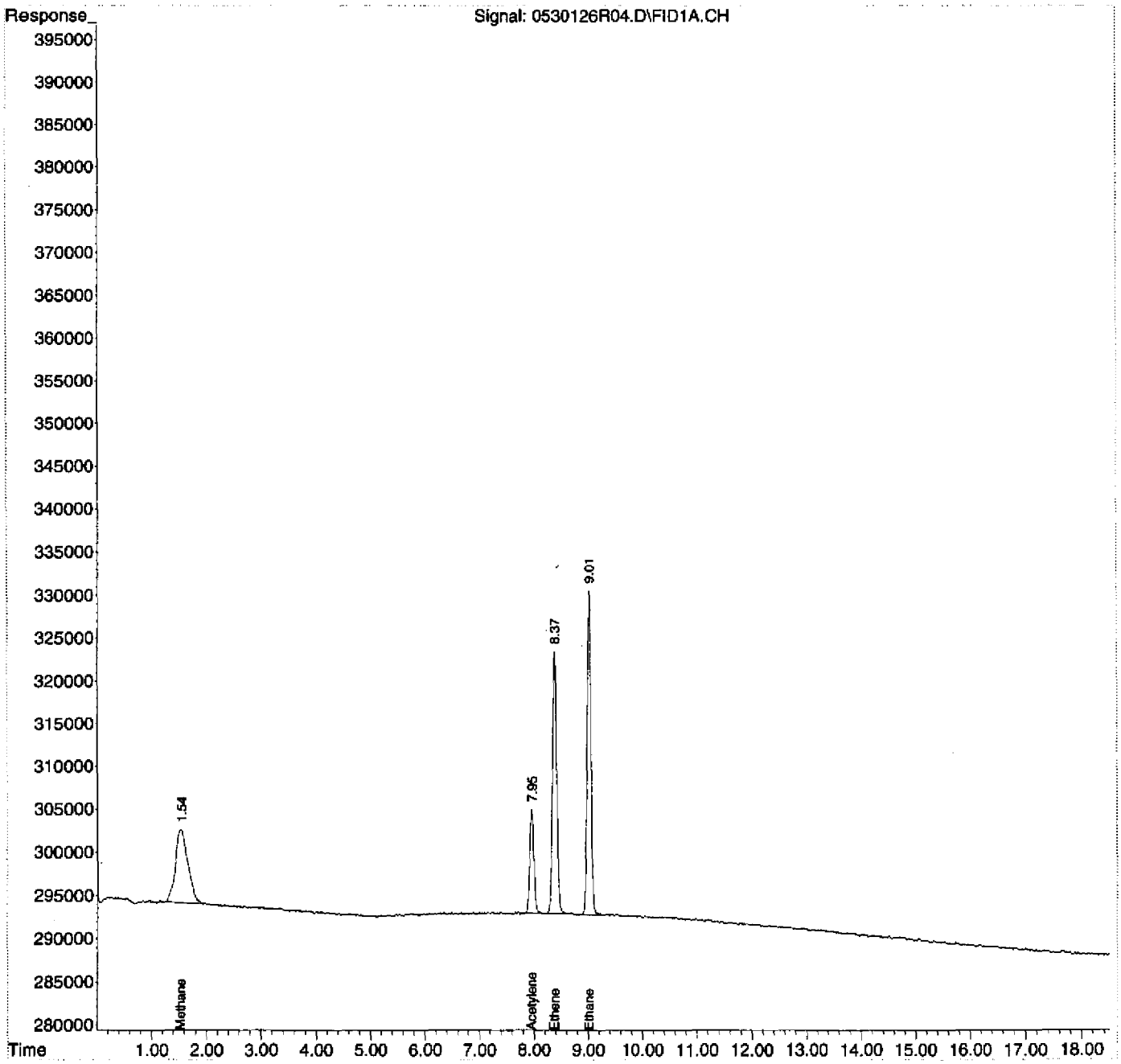
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\053012ARSK\
Data File : 0530126R04.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 30 May 2012 5:44 pm
Operator : ngk
Sample : 2050090-LCV2
Misc : 2E29005
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 31 07:32:38 2012
Quant Method : D:\MSDCHEM\1\2012\METHOD\0515126RSK.M
Quant Title :
QLast Update : Wed May 16 13:16:50 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 600 uL
Signal Phase : ShinCarbon ST
Signal Info : 1m x 0.75mm



RSK-175 LCS SUMMARY REPORT

Instrument Name: AG6890N-6
File Name: 0530126R05.D
Date Acquired: 5/30/2012
Operator: ngk

Analyte	Spike ug/L	Calculated ug/L	QC Limits	%R	Status
Methane	44.099	41.532	70-130	94.2%	pass
Acetylene	72.166	72.092	66.4-153	99.9%	pass
Ethene	78.183	77.315	78-138	98.9%	pass
Ethane	83.269	82.879	77-137	99.5%	pass

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\053012ARSK\
Data File : 0530126R05.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 30 May 2012 6:18 pm
Operator : ngk
Sample : B2E0168-BS1
Misc : LCS
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 31 07:32:44 2012
Quant Method : D:\MSDCHEM\1\2012\METHOD\0515126RSK.M
Quant Title :
QLast Update : Wed May 16 13:16:50 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 600 uL
Signal Phase : ShinCarbon ST
Signal Info : 1m x 0.75mm

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
2) S Acetylene	7.944	25203115	72.092 ug/L
Spiked Amount 66.330 Range 66 - 153		Recovery =	108.69%
Target Compounds			
1) TM Methane	1.533	42910860	41.532 ug/L
3) TM Ethene	8.370	69741912	77.315 ug/L
4) TM Ethane	9.012	81821469	82.879 ug/L
5) Qual Propane	0.000	0	N.D.
6) Qual Butane	0.000	0	N.D.

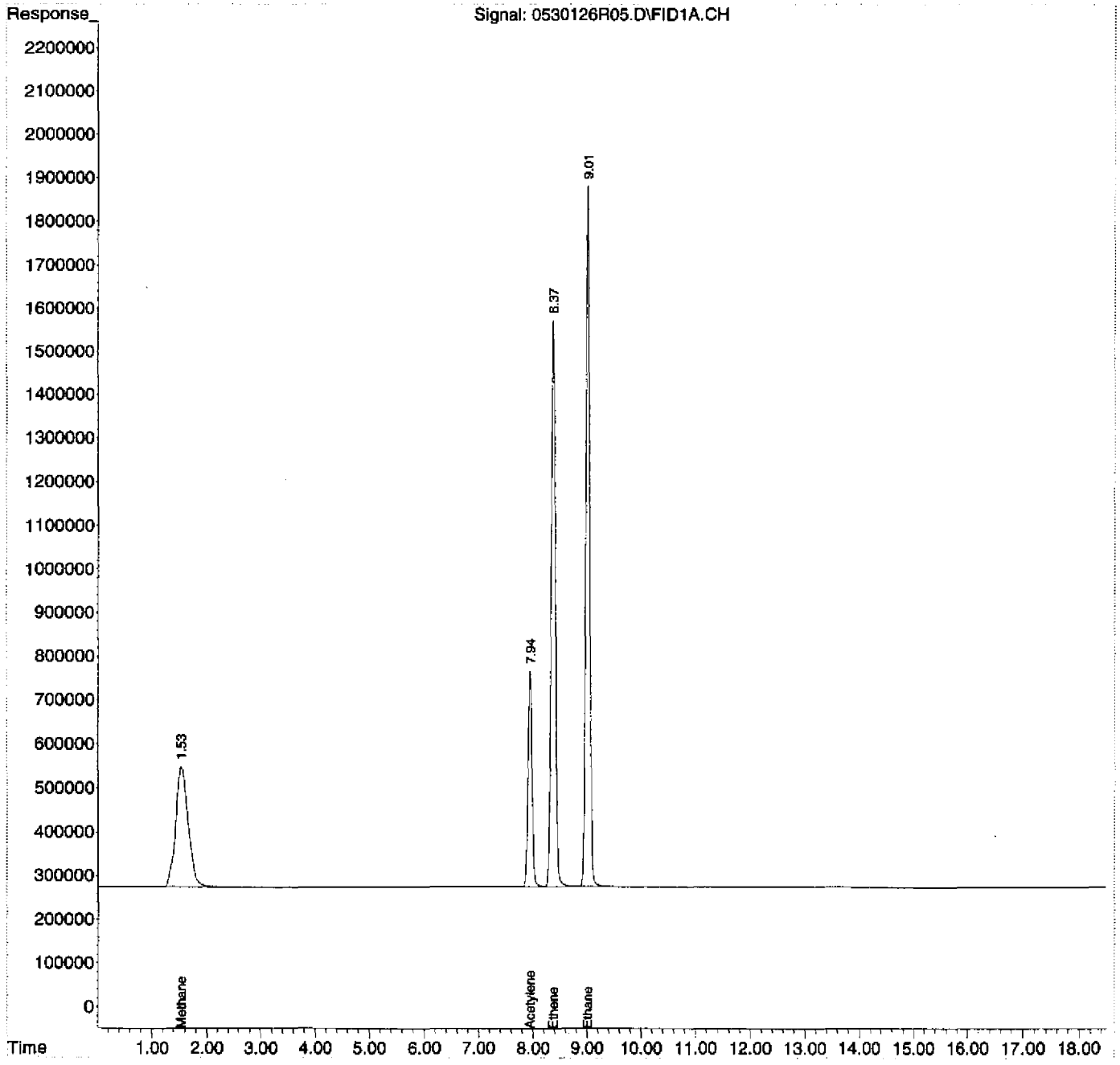
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\053012ARSK\
Data File : 0530126R05.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 30 May 2012 6:18 pm
Operator : ngk
Sample : B2E0168-BS1
Misc : LCS
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 31 07:32:44 2012
Quant Method : D:\MSDCHEM\1\2012\METHOD\0515126RSK.M
Quant Title :
QLast Update : Wed May 16 13:16:50 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 600 uL
Signal Phase : ShinCarbon ST
Signal Info : 1m x 0.75mm



Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\053012ARSK\
Data File : 0530126R06.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 30 May 2012 6:46 pm
Operator : ngk
Sample : B2E0168-BLK1
Misc : MB
ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 31 07:32:50 2012
Quant Method : D:\MSDCHEM\1\2012\METHOD\0515126RSK.M
Quant Title :
QLast Update : Wed May 16 13:16:50 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 600 uL
Signal Phase : ShinCarbon ST
Signal Info : 1m x 0.75mm

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
2) S Acetylene	7.947	21373295	61.137 ug/L
Spiked Amount 66.330 Range 66 - 153		Recovery =	92.17%
Target Compounds			
1) TM Methane	0.000	0	N.D. ug/L
3) TM Ethene	0.000	0	N.D. ug/L
4) TM Ethane	0.000	0	N.D. ug/L
5) Qual Propane	0.000	0	N.D.
6) Qual Butane	0.000	0	N.D.

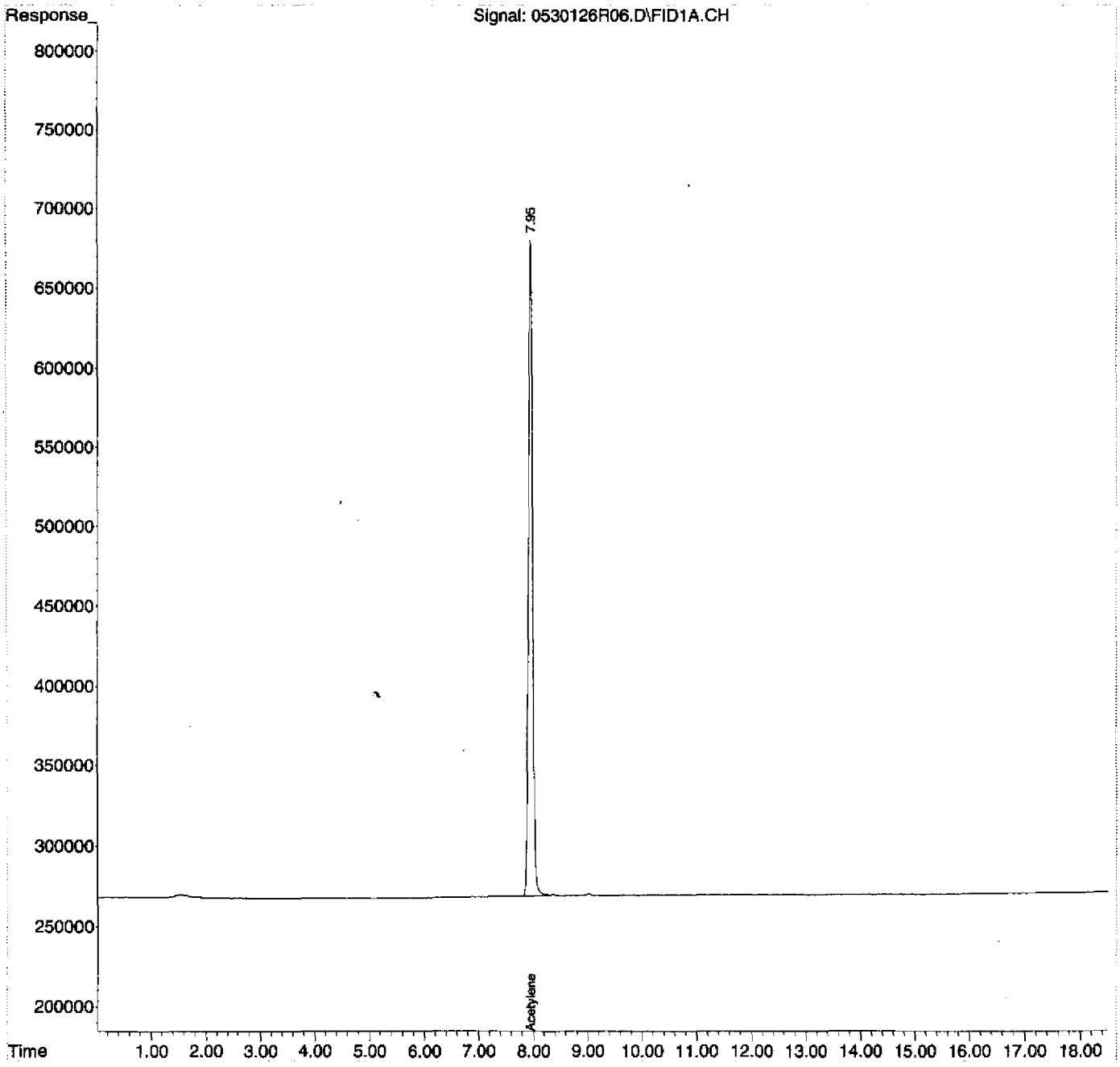
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\053012ARSK\
Data File : 0530126R06.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 30 May 2012 6:46 pm
Operator : ngk
Sample : B2E0168-BLK1
Misc : MB
ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 31 07:32:50 2012
Quant Method : D:\MSDCHEM\1\2012\METHOD\0515126RSK.M
Quant Title :
QLast Update : Wed May 16 13:16:50 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 600 uL
Signal Phase : ShinCarbon ST
Signal Info : 1m x 0.75mm



Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\053012ARSK\
Data File : 0530126R07.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 30 May 2012 7:22 pm
Operator : ngk
Sample : 1205066-08RE1
Misc : HW64
ALS Vial : 7 Sample Multiplier: 1

Quant Time: May 31 07:32:55 2012
Quant Method : D:\MSDCHEM\1\2012\METHOD\0515126RSK.M
Quant Title :
QLast Update : Wed May 16 13:16:50 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 600 uL
Signal Phase : ShinCarbon ST
Signal Info : 1m x 0.75mm

Compound	R.T.	Response	Conc	Units
System Monitoring Compounds				
2) S Acetylene	7.945	22043805	63.055	ug/L
Spiked Amount 66.330 Range 66 - 153 Recovery = 95.06%				
Target Compounds				
1) TM Methane	0.000	0	N.D.	ug/L
3) TM Ethene	0.000	0	N.D.	ug/L
4) TM Ethane	0.000	0	N.D.	ug/L
5) Qual Propane	0.000	0	N.D.	
6) Qual Butane	0.000	0	N.D.	

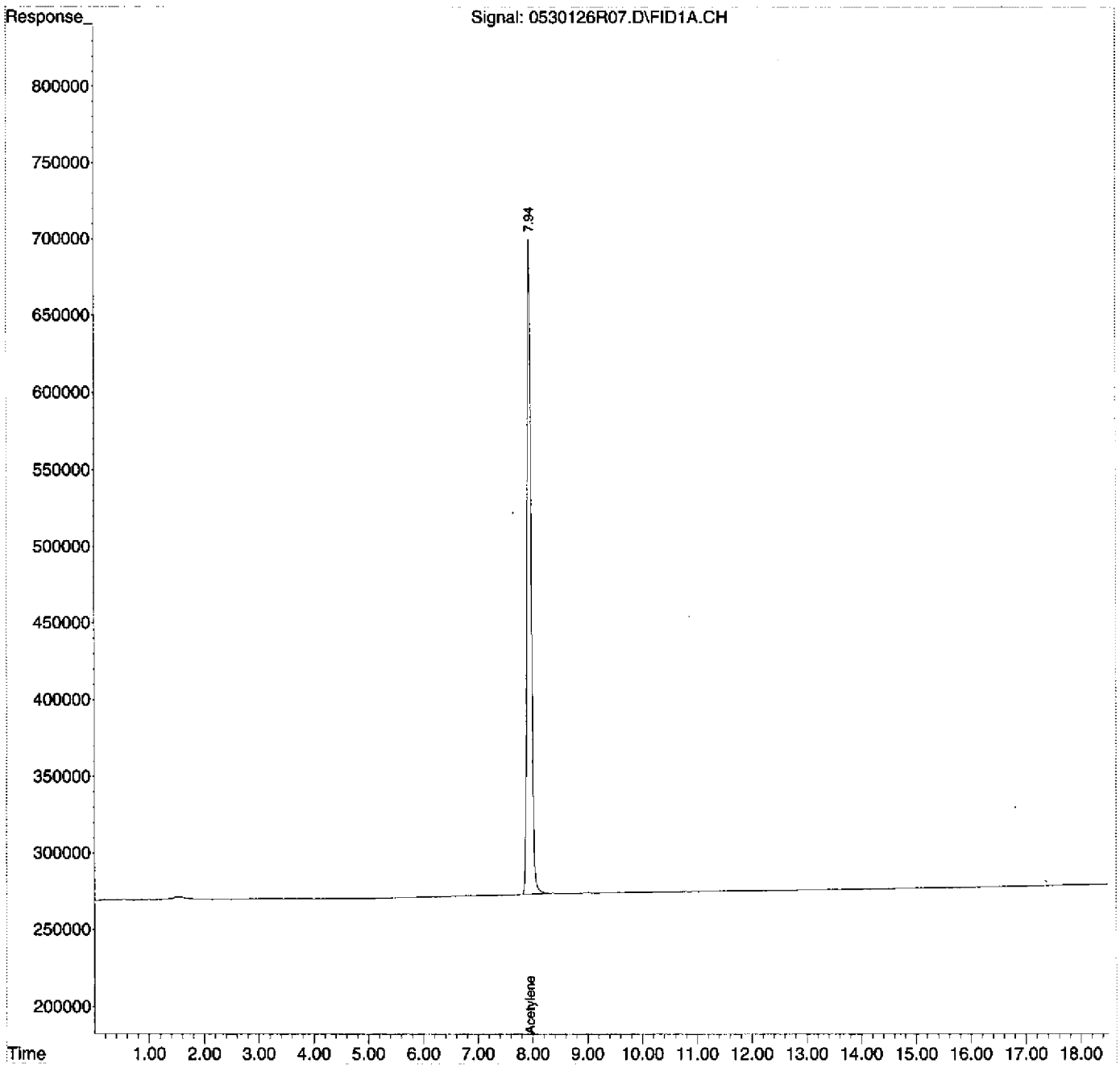
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\053012ARSK\
Data File : 0530126R07.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 30 May 2012 7:22 pm
Operator : ngk
Sample : 1205066-08RE1
Misc : HW64
ALS Vial : 7 Sample Multiplier: 1

Quant Time: May 31 07:32:55 2012
Quant Method : D:\MSDCHEM\1\2012\METHOD\0515126RSK.M
Quant Title :
QLast Update : Wed May 16 13:16:50 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 600 uL
Signal Phase : ShinCarbon ST
Signal Info : 1m x 0.75mm



Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\053012ARSK\
Data File : 0530126R08.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 30 May 2012 7:50 pm
Operator : ngk
Sample : 1205066-09RE1
Misc : HW64-P
ALS Vial : 8 Sample Multiplier: 1

Quant Time: May 31 07:33:01 2012
Quant Method : D:\MSDCHEM\1\2012\METHOD\0515126RSK.M
Quant Title :
QLast Update : Wed May 16 13:16:50 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 600 uL
Signal Phase : ShinCarbon ST
Signal Info : 1m x 0.75mm

Compound	R.T.	Response	Conc	Units
System Monitoring Compounds				
2) S Acetylene	7.945	25909323	74.112	ug/L
Spiked Amount 66.330 Range 66 - 153		Recovery =	111.73%	
Target Compounds				
1) TM Methane	0.000	0	N.D.	ug/L
3) TM Ethene	0.000	0	N.D.	ug/L
4) TM Ethane	0.000	0	N.D.	ug/L
5) Qual Propane	0.000	0	N.D.	
6) Qual Butane	0.000	0	N.D.	

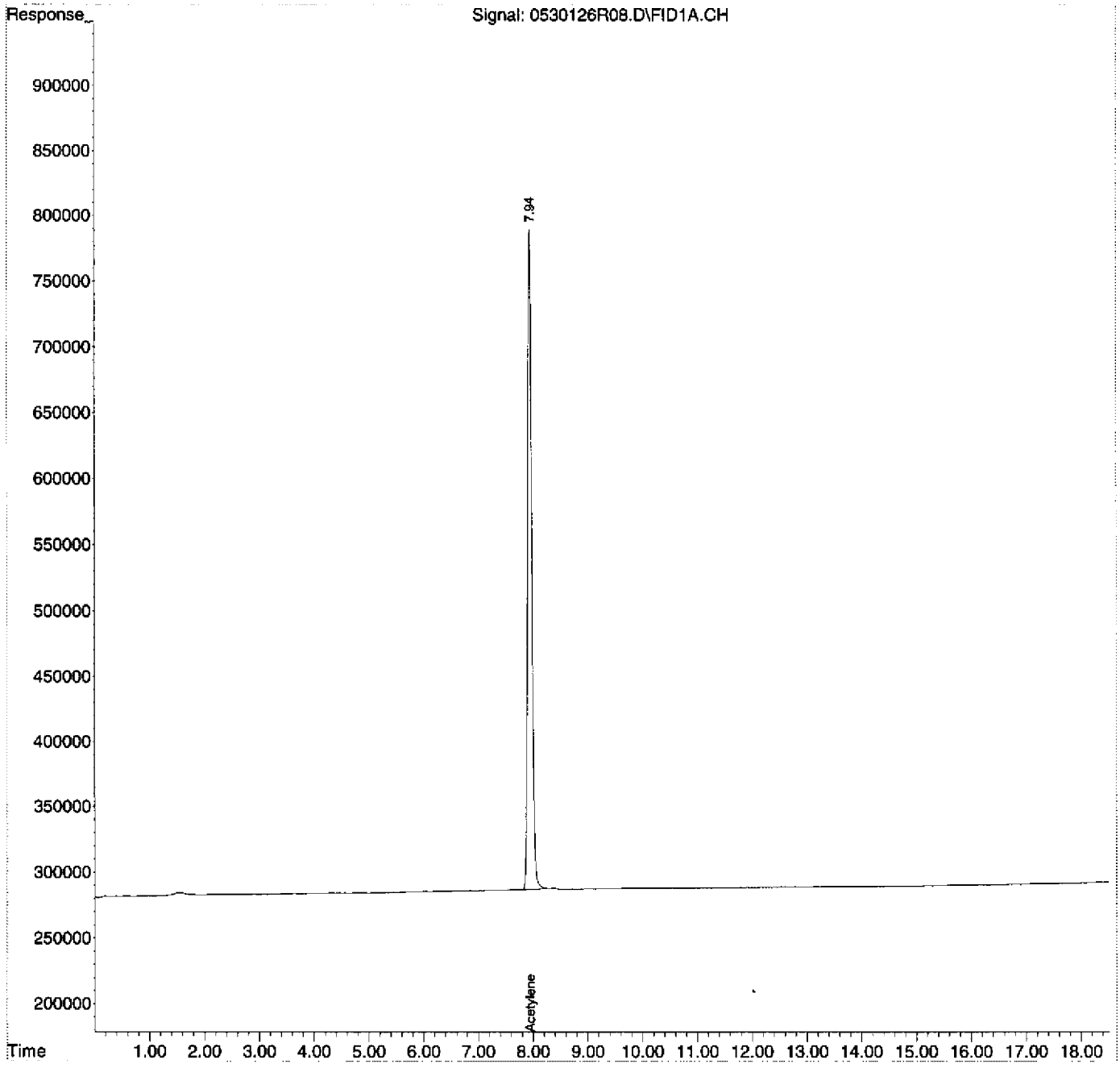
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\053012ARSK\
Data File : 0530126R08.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 30 May 2012 7:50 pm
Operator : ngk
Sample : 1205066-09RE1
Misc : HW64-P
ALS Vial : 8 Sample Multiplier: 1

Quant Time: May 31 07:33:01 2012
Quant Method : D:\MSDCHEM\1\2012\METHOD\0515126RSK.M
Quant Title :
QLast Update : Wed May 16 13:16:50 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 600 uL
Signal Phase : ShinCarbon ST
Signal Info : 1m x 0.75mm



Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\053012ARSK\
Data File : 0530126R17.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 31 May 2012 12:35 am
Operator : ngk
Sample : 1205066-04RE1
Misc : HW63 0.8mL
ALS Vial : 17 Sample Multiplier: 1

Quant Time: May 31 07:33:53 2012
Quant Method : D:\MSDCHEM\1\2012\METHOD\0515126RSK.M
Quant Title :
QLast Update : Wed May 16 13:16:50 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 600 uL
Signal Phase : ShinCarbon ST
Signal Info : 1m x 0.75mm

Compound	R.T.	Response	Conc	Units
System Monitoring Compounds				
2) S Acetylene	7.947	26737716	76.482	ug/L
Spiked Amount 66.330 Range 66 - 153		Recovery =	115.31%	
Target Compounds				
1) TM Methane	1.532	132160286	127.913	ug/L
3) TM Ethene	0.000	0	N.D.	ug/L
4) TM Ethane	9.015	280241	<MDL	ug/L
5) Qual Propane	0.000	0	N.D.	
6) Qual Butane	0.000	0	N.D.	

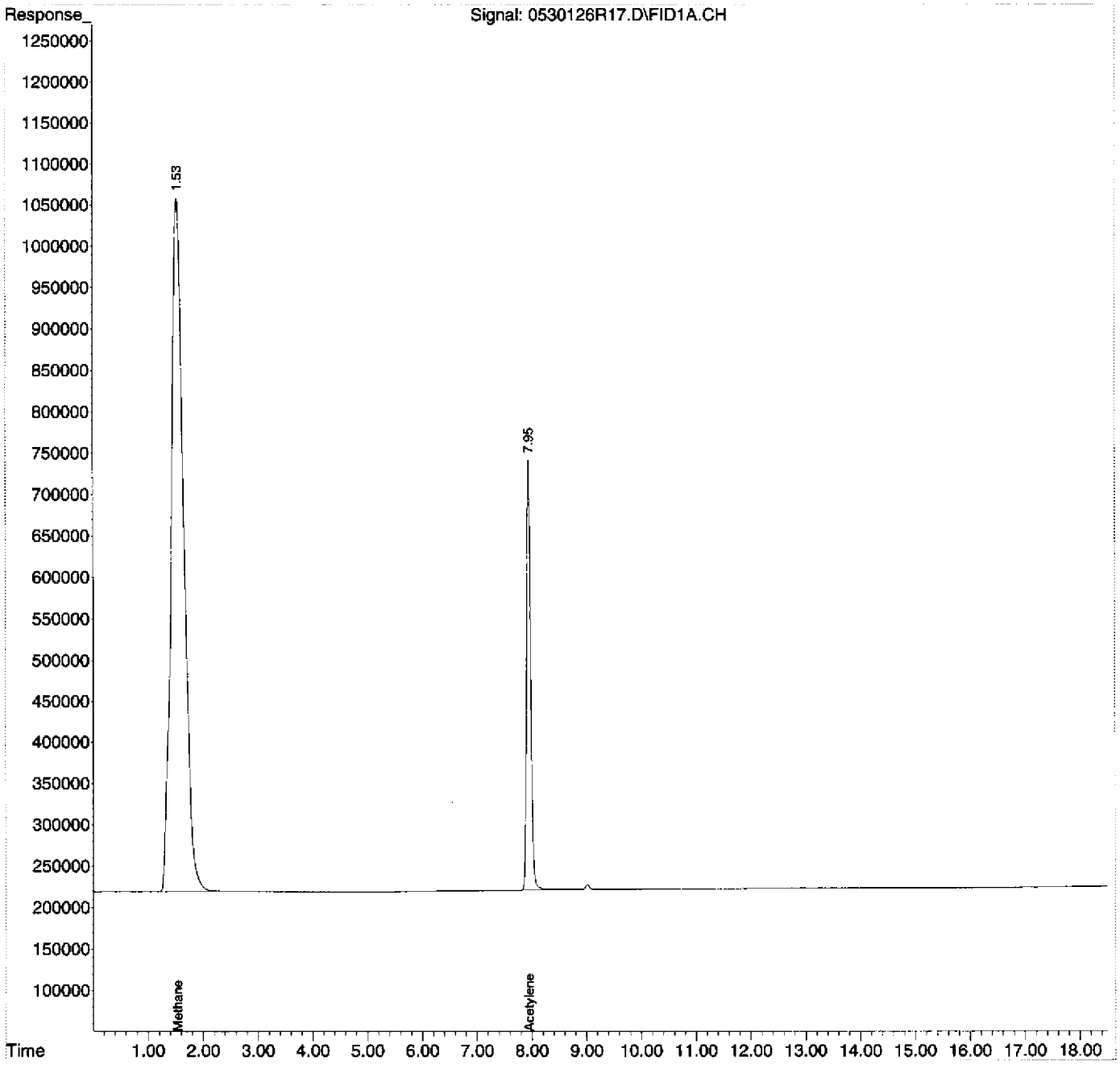
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\053012ARSK\
Data File : 0530126R17.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 31 May 2012 12:35 am
Operator : ngk
Sample : 1205066-04RE1
Misc : HW63 0.8mL
ALS Vial : 17 Sample Multiplier: 1

Quant Time: May 31 07:33:53 2012
Quant Method : D:\MSDCHEM\1\2012\METHOD\0515126RSK.M
Quant Title :
QLast Update : Wed May 16 13:16:50 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 600 uL
Signal Phase : ShinCarbon ST
Signal Info : 1m x 0.75mm



Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\053012ARSK\
Data File : 0530126R18.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 31 May 2012 1:02 am
Operator : ngk
Sample : 1205066-05RE1
Misc : HW63z 0.9mL
ALS Vial : 18 Sample Multiplier: 1

Quant Time: May 31 07:33:59 2012
Quant Method : D:\MSDCHEM\1\2012\METHOD\0515126RSK.M
Quant Title :
QLast Update : Wed May 16 13:16:50 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 600 uL
Signal Phase : ShinCarbon ST
Signal Info : 1m x 0.75mm

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
2) S Acetylene	7.948	26743055	76.497 ug/L
Spiked Amount 66.330 Range 66 - 153		Recovery =	115.33%
Target Compounds			
1) TM Methane	1.532	130748100	126.546 ug/L
3) TM Ethene	0.000	0	N.D. ug/L
4) TM Ethane	9.018	289827	<MDL ug/L
5) Qual Propane	0.000	0	N.D.
6) Qual Butane	0.000	0	N.D.

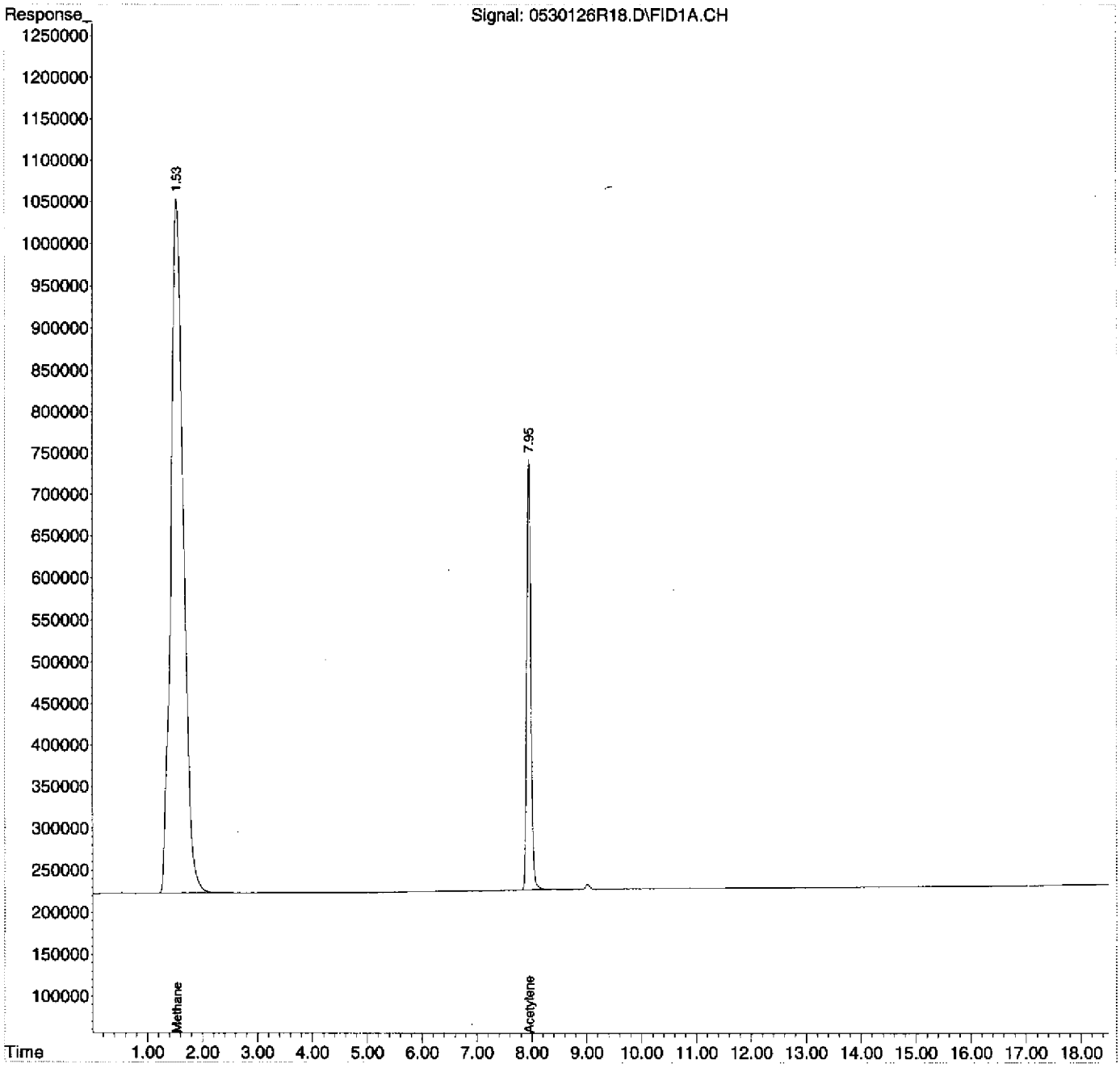
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\053012ARSK\
Data File : 0530126R18.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 31 May 2012 1:02 am
Operator : ngk
Sample : 1205066-05RE1
Misc : HW63z 0.9mL
ALS Vial : 18 Sample Multiplier: 1

Quant Time: May 31 07:33:59 2012
Quant Method : D:\MSDCHEM\1\2012\METHOD\0515126RSK.M
Quant Title :
QLast Update : Wed May 16 13:16:50 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 600 uL
Signal Phase : ShinCarbon ST
Signal Info : 1m x 0.75mm



SDG: 12145B
Instrument: AG 6890-6
Analysis Date: 6/1/2012

SAMPLE DATA

Injection Log

Directory: D:\MSDCHEM\1\2012\DATA\060112RSK

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	0601126r01.d	1.	2060005-IBL1	IB	Unrecognized:Un
2	2	0601126r02.d	1.	2060005-CCV1	2E29003	Unrecognized:Un
3	3	0601126r03.d	1.	2060005-LCV1	2E29004	Unrecognized:Un
4	4	0601126r04.d	1.	2060005-LCV2	2E29005	Unrecognized:Un
5	5	0601126r05.d	1.	B2F0005-BS1	LCS	Unrecognized:Un
6	6	0601126r06.d	1.	B2F0005-BLK1	MB	Unrecognized:Un
7	7	0601126r07.d	1.	1205061-04RE2	20MW15C029 0.4mL	Unrecognized:Un
8	8	0601126r08.d	1.	B2F0005-MS1	1205061-04RE2MS 0...	Unrecognized:Un
9	9	0601126r09.d	1.	B2F0005-MSD1	1205061-04RE2MSD ...	Unrecognized:Un
10	10	0601126r10.d	1.	1205066-02RE1	TB55	Unrecognized:Un
11	11	0601126r11.d	1.	1205066-03RE1	FB23	Unrecognized:Un
12	12	0601126r12.d	1.	1205066-06RE1	TB56	Unrecognized:Un
13	13	0601126r13.d	1.	1205066-07RE1	FB22	Unrecognized:Un
14	14	0601126r14.d	1.	1205066-10RE1	TB54	Unrecognized:Un

ANALYSIS SEQUENCE

2060005

Instrument: AG6890-6

Calibration ID: 1205004

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Client
2060005-IBL1	QC		1				
2060005-CCV1	QC		2		2F01013		
2060005-LCV1	QC		3		2F01014		
2060005-LCV2	QC		4		2F01015		
B2F0005-BS1	QC		5				
B2F0005-BLK1	QC		6				
1205061-04RE2	Dissolved HC Gases	F	7				California Site Cleanup Section 1
B2F0005-MS1	QC		8				
B2F0005-MSD1	QC		9				
1205066-02RE1	Dissolved HC Gases	D	10				US EPA Region 3, Eastern Response Bra
1205066-03RE1	Dissolved HC Gases	D	11				US EPA Region 3, Eastern Response Bra
1205066-06RE1	Dissolved HC Gases	D	12				US EPA Region 3, Eastern Response Bra
1205066-07RE1	Dissolved HC Gases	D	13				US EPA Region 3, Eastern Response Bra
1205066-10RE1	Dissolved HC Gases	D	14				US EPA Region 3, Eastern Response Bra

NGK 6/1/2012
Samples Loaded By Date

NGK 6/5/2012
Data Processed By Date

GC QA-QC Check Report

Daily Calibration File : D:\MSDCHEM\1\DATA\2010\120810RSK\120810A02.D
Time Acquired : 08 Dec 2010 11:12 am

File	Sample	Surrogate Recovery %
0601126R06.D	B2F0005-BLK1	106
0601126R07.D	1205061-04RE2	106
0601126R10.D	1205066-02RE1	114
0601126R11.D	1205066-03RE1	115
0601126R12.D	1205066-06RE1	116
0601126R13.D	1205066-07RE1	114
0601126R14.D	1205066-10RE1	117

(fails) - fails 24hr time check * - fails criteria

Created: Tue Jun 05 10:12:59 2012 AG6890N-6

RESPONSE FACTOR REPORT AG6890N-6

Method Path: C:\MSDCHEM\1\METHODS
Method File: 0515126RSK
Title:
Last Update: Wed May 16 13:16:50 2012
Response Via: Initial Calibration

Calibration Files:
1 = 0508126R008.D 2 = 0508126R007.D 3 = 0508126R006.D 4 = 0508126R005.D
5 = 0508126R004.D 6 = 0508126R003.D 7 = 0508126R002.D 8= 0515126R19.D

Compound	1	2	3	4	5	6	7	8	AVG.	%RSD
1) TM Methane										
ug/L		1.231	4.102	13.230	44.099	110.248	220.497	440.994		
RF		1.150E+06	1.024E+06	1.069E+06	1.057E+06	1.007E+06	9.926E+05	9.325E+05	1.033E+06	6.61%
2) S Acetylene										
ug/L	1.007	2.014	6.713	21.650	72.166	180.415	360.831	721.662		
RF	343218.997	3.405E+05	3.347E+05	3.698E+05	3.702E+05	3.564E+05	3.506E+05	3.313E+05	3.496E+05	4.27%
3) TM Ethene										
ug/L	1.091	2.182	7.273	23.455	78.183	195.458	390.916	781.832		
RF	8.726E+05	8.821E+05	8.681E+05	9.594E+05	9.587E+05	9.180E+05	9.064E+05	8.512E+05	9.020E+05	4.55%
4) TM Ethane										
ug/L	1.162	2.324	7.746	24.981	83.269	208.172	416.343	832.686		
RF	9.536E+05	9.697E+05	9.557E+05	1.052E+06	1.050E+06	1.001E+06	9.878E+05	9.285E+05	9.872E+05	4.56%

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\060112RSK\
Data File : 0601126R01.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 01 Jun 2012 3:28 pm
Operator : ngk
Sample : 2060005-IBL1
Misc : IB
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jun 05 08:05:23 2012
Quant Method : D:\MSDCHEM\1\2012\METHOD\0515126RSK.M
Quant Title :
QLast Update : Wed May 16 13:16:50 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 600 uL
Signal Phase : ShinCarbon ST
Signal Info : 1m x 0.75mm

Compound	R.T.	Response	Conc	Units
System Monitoring Compounds				
2) S Acetylene	7.950	24352610	69.660	ug/L
Spiked Amount 66.330 Range 66 - 153 Recovery = 105.02%				
Target Compounds				
1) TM Methane	0.000	0	N.D.	ug/L
3) TM Ethene	0.000	0	N.D.	ug/L
4) TM Ethane	0.000	0	N.D.	ug/L
5) Qual Propane	0.000	0	N.D.	
6) Qual Butane	0.000	0	N.D.	

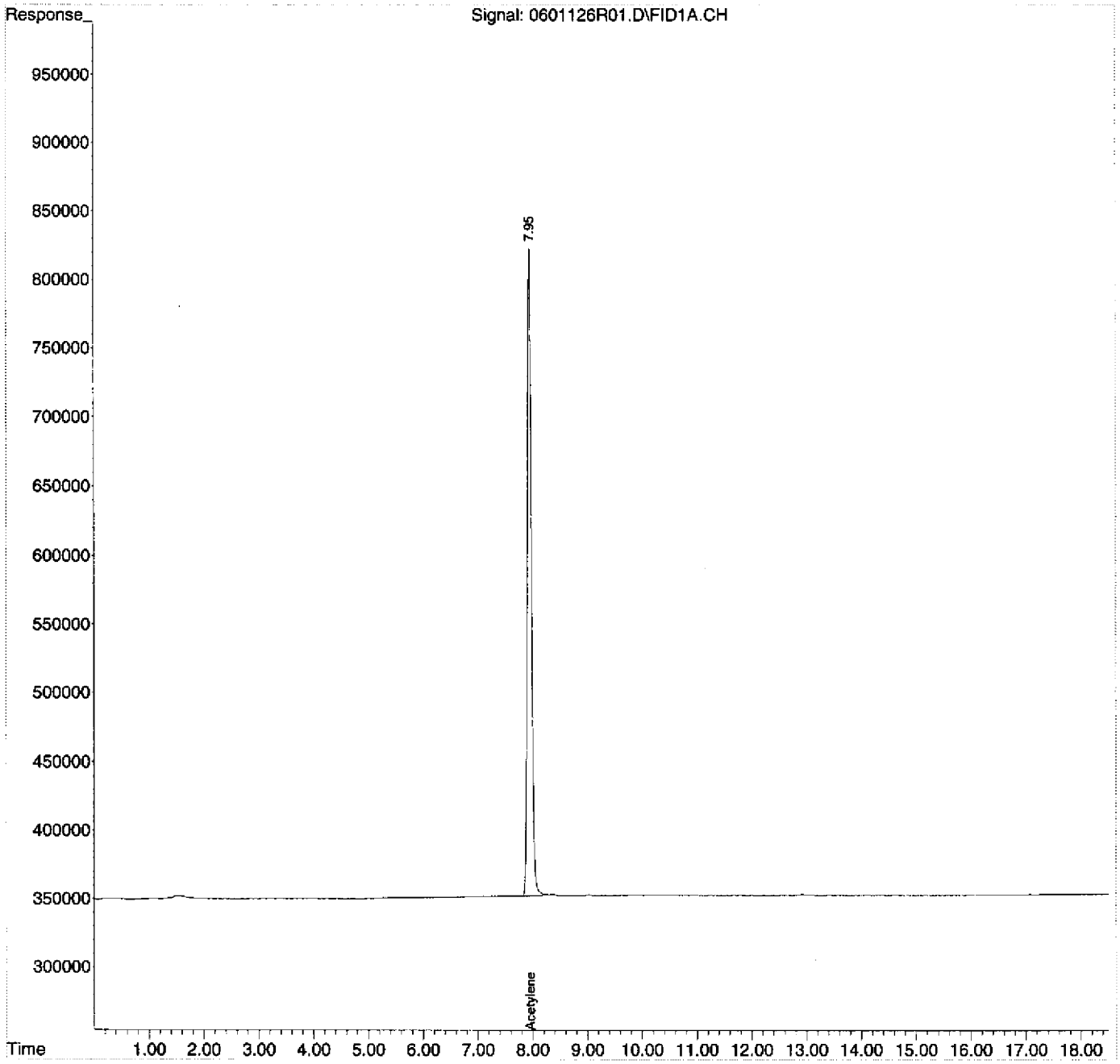
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\060112RSK\
Data File : 0601126R01.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 01 Jun 2012 3:28 pm
Operator : ngk
Sample : 2060005-IBL1
Misc : IB
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jun 05 08:05:23 2012
Quant Method : D:\MSDCHEM\1\2012\METHOD\0515126RSK.M
Quant Title :
QLast Update : Wed May 16 13:16:50 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 600 uL
Signal Phase : ShinCarbon ST
Signal Info : 1m x 0.75mm



Evaluate Continuing Calibration Report

Data Path : D:\MSDCHEM\1\2012\DATA\060112RSK\
Data File : 0601126R02.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 01 Jun 2012 3:54 pm
Operator : ngk
Sample : 2060005-CCV1
Misc : 2E29003
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 01 16:47:17 2012
Quant Method : D:\MSDCHEM\1\2012\METHOD\0515126RSK.M
Quant Title :
QLast Update : Wed May 16 13:16:50 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 600 uL
Signal Phase : ShinCarbon ST
Signal Info : 1m x 0.75mm

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
1 TM	Methane	1.033	0.943 E6	8.7	88	0.00
2 S	Acetylene	349.595	327.388 E3	6.4	89	0.00
3 TM	Ethene	902.048	855.659 E3	5.1	89	0.00
4 TM	Ethane	987.235	943.706 E3	4.4	90	0.01

Evaluate Continuing Calibration Report - Not Founds

5 QualPropane	608.635	0.000	100.0#	0#	-12.89#
6 QualButane	0.000	0.000	0.0	0#	-17.72#

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\060112RSK\
Data File : 0601126R02.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 01 Jun 2012 3:54 pm
Operator : ngk
Sample : 2060005-CCV1
Misc : 2E29003
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 01 16:47:17 2012
Quant Method : D:\MSDCHEM\1\2012\METHOD\0515126RSK.M
Quant Title :
QLast Update : Wed May 16 13:16:50 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 600 uL
Signal Phase : ShinCarbon ST
Signal Info : 1m x 0.75mm

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
2) S Acetylene	7.956	7087944	20.275 ug/L
Spiked Amount 66.330 Range 66 - 153		Recovery =	30.57%#
Target Compounds			
1) TM Methane	1.538	12477278	12.076 ug/L
3) TM Ethene	8.377	20069486	22.249 ug/L
4) TM Ethane	9.021	23574727	23.880 ug/L
5) Qual Propane	0.000	0	N.D.
6) Qual Butane	0.000	0	N.D.

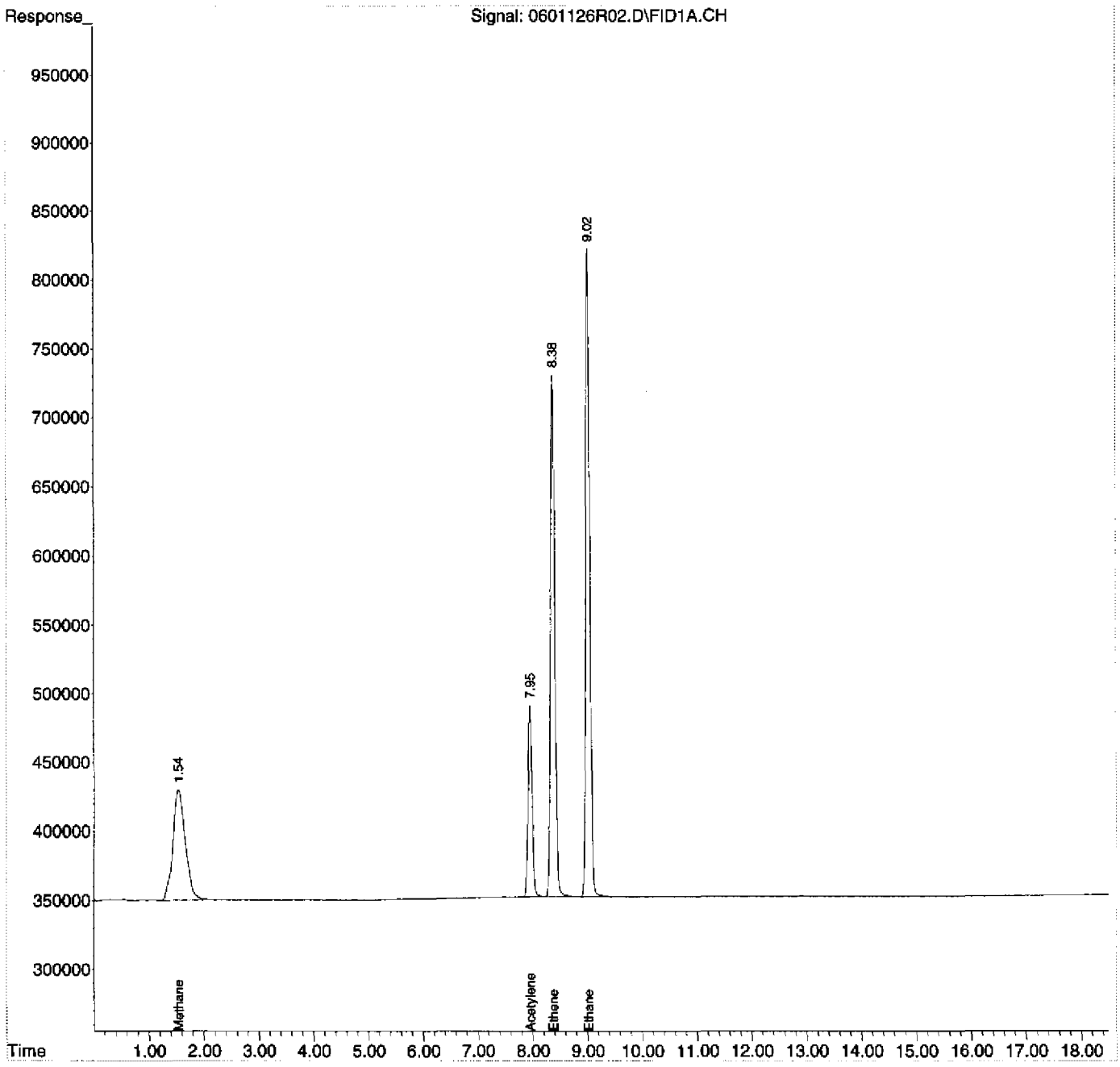
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\060112RSK\
Data File : 0601126R02.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 01 Jun 2012 3:54 pm
Operator : ngk
Sample : 2060005-CCV1
Misc : 2E29003
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 01 16:47:17 2012
Quant Method : D:\MSDCHEM\1\2012\METHOD\0515126RSK.M
Quant Title :
QLast Update : Wed May 16 13:16:50 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 600 uL
Signal Phase : ShinCarbon ST
Signal Info : 1m x 0.75mm



RSK-175 HC LCV REPORT

Instrument Name: AG6890N-6
File Name LCV1: 0601126R03.D
File Name LCV2: 0601126R04.D
Date Acquired: 06/01/12
Operator: ngk

Analyte	Spike ug/L	Calculated ug/L	QC Limits	%R	Status
Methane	1.231	1.205	60 - 140	97.9%	pass
Acetylene	2.014	1.564	60 - 140	77.7%	NA
Ethene	1.091	0.837	60 - 140	76.7%	pass
Ethane	1.162	0.933	60 - 140	80.3%	pass

Ethene & ethane recovery calculated from LCV1 results
Methane recovery calculated from LCV2 results

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\060112RSK\
Data File : 0601126R03.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 01 Jun 2012 4:21 pm
Operator : ngk
Sample : 2060005-LCV1
Misc : 2E29004
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 01 16:47:55 2012
Quant Method : D:\MSDCHEM\1\2012\METHOD\0515126RSK.M
Quant Title :
QLast Update : Wed May 16 13:16:50 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 600 uL
Signal Phase : ShinCarbon ST
Signal Info : 1m x 0.75mm

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
2) S Acetylene	7.963	263782	0.755 ug/L
Spiked Amount 66.330 Range 66 - 153		Recovery =	1.14%#
Target Compounds			
1) TM Methane	1.545	698050	0.676 ug/L
3) TM Ethene	8.379	754905	0.837 ug/L
4) TM Ethane	9.023	921125	0.933 ug/L
5) Qual Propane	0.000	0	N.D.
6) Qual Butane	0.000	0	N.D.

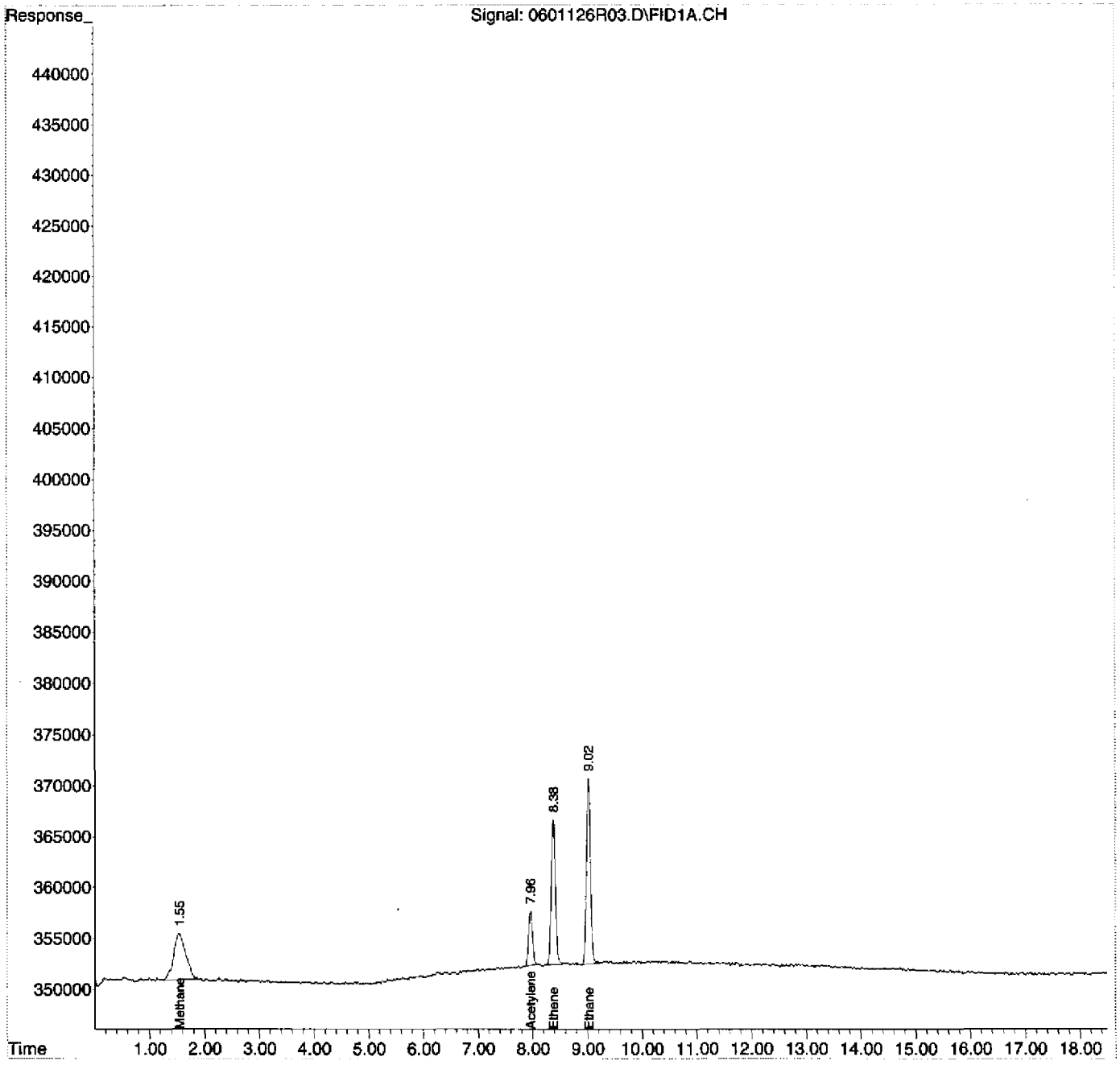
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\060112RSK\
Data File : 0601126R03.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 01 Jun 2012 4:21 pm
Operator : ngk
Sample : 2060005-LCV1
Misc : 2E29004
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 01 16:47:55 2012
Quant Method : D:\MSDCHEM\1\2012\METHOD\0515126RSK.M
Quant Title :
QLast Update : Wed May 16 13:16:50 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 600 uL
Signal Phase : ShinCarbon ST
Signal Info : 1m x 0.75mm



Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\060112RSK\
Data File : 0601126R04.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 01 Jun 2012 4:48 pm
Operator : ngk
Sample : 2060005-LCV2
Misc : 2E29005
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jun 05 07:47:47 2012
Quant Method : D:\MSDCHEM\1\2012\METHOD\0515126RSK.M
Quant Title :
QLast Update : Wed May 16 13:16:50 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 600 uL
Signal Phase : ShinCarbon ST
Signal Info : 1m x 0.75mm

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
2) S Acetylene	7.961	546790	1.564 ug/L
Spiked Amount 66.330 Range 66 - 153		Recovery =	2.36%#
Target Compounds			
1) TM Methane	1.543	1244754	1.205 ug/L
3) TM Ethene	8.379	1605590	1.780 ug/L
4) TM Ethane	9.023	1905258	1.930 ug/L
5) Qual Propane	0.000	0	N.D.
6) Qual Butane	0.000	0	N.D.

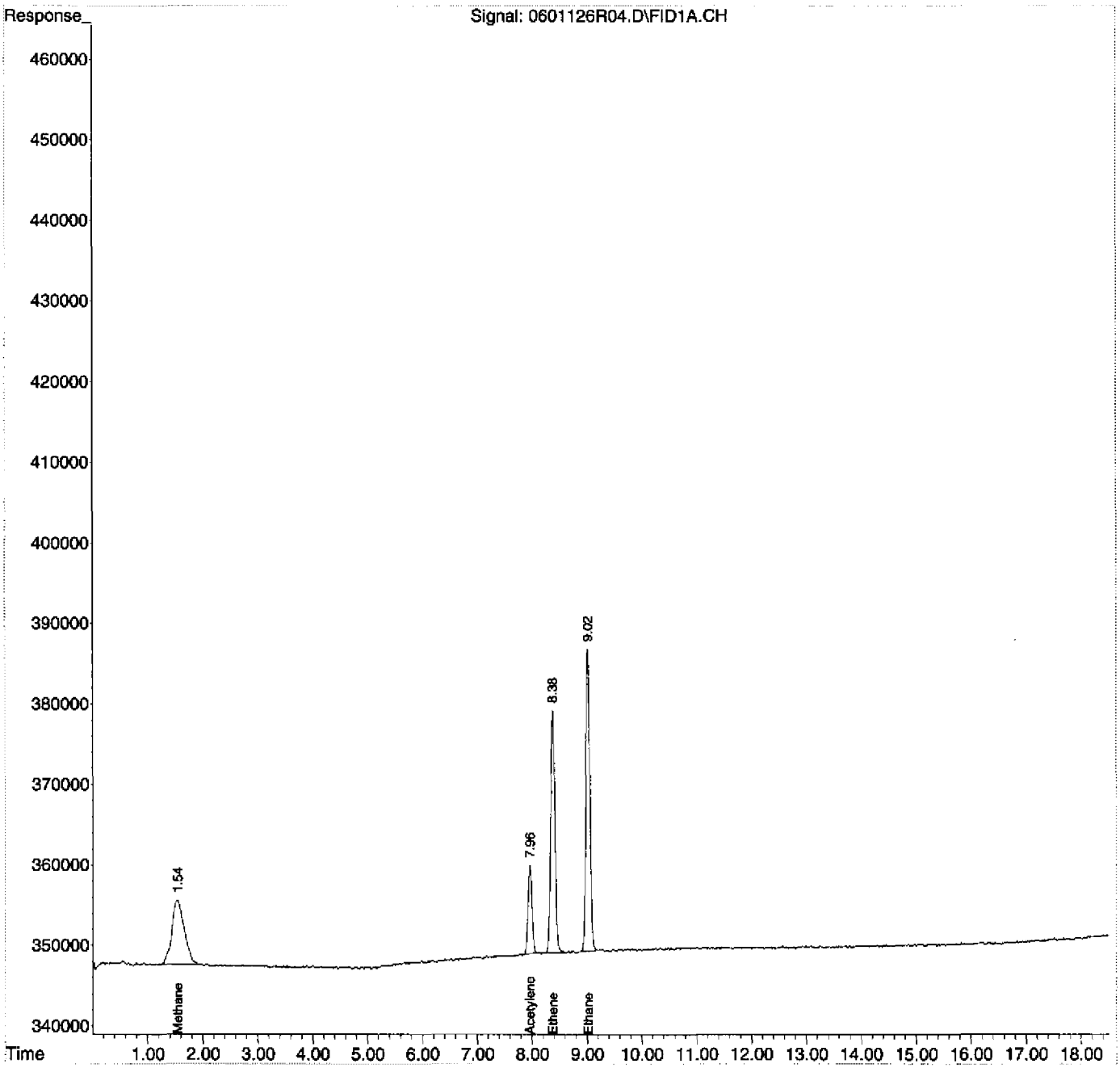
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\060112RSK\
Data File : 0601126R04.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 01 Jun 2012 4:48 pm
Operator : ngk
Sample : 2060005-LCV2
Misc : 2E29005
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jun 05 07:47:47 2012
Quant Method : D:\MSDCHEM\1\2012\METHOD\0515126RSK.M
Quant Title :
QLast Update : Wed May 16 13:16:50 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 600 uL
Signal Phase : ShinCarbon ST
Signal Info : 1m x 0.75mm



RSK-175 LCS SUMMARY REPORT

Instrument Name: AG6890N-6
File Name: 0601126R05.D
Date Acquired: 6/1/2012
Operator: ngk

Analyte	Spike ug/L	Calculated ug/L	QC Limits	%R	Status
Methane	44.099	40.135	70-130	91.0%	pass
Acetylene	72.166	68.438	66.4-153	94.8%	pass
Ethene	78.183	74.613	78-138	95.4%	pass
Ethane	83.269	79.907	77-137	96.0%	pass

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\060112RSK\
Data File : 0601126R05.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 01 Jun 2012 5:14 pm
Operator : ngk
Sample : B2F0005-BS1
Misc : LCS
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jun 05 07:47:54 2012
Quant Method : D:\MSDCHEM\1\2012\METHOD\0515126RSK.M
Quant Title :
QLast Update : Wed May 16 13:16:50 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 600 uL
Signal Phase : ShinCarbon ST
Signal Info : 1m x 0.75mm

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
2) S Acetylene	7.953	23925673	68.438 ug/L
Spiked Amount 66.330 Range 66 - 153		Recovery =	103.18%
Target Compounds			
1) TM Methane	1.536	41467418	40.135 ug/L
3) TM Ethene	8.374	67304675	74.613 ug/L
4) TM Ethane	9.019	78886739	79.907 ug/L
5) Qual Propane	0.000	0	N.D.
6) Qual Butane	0.000	0	N.D.

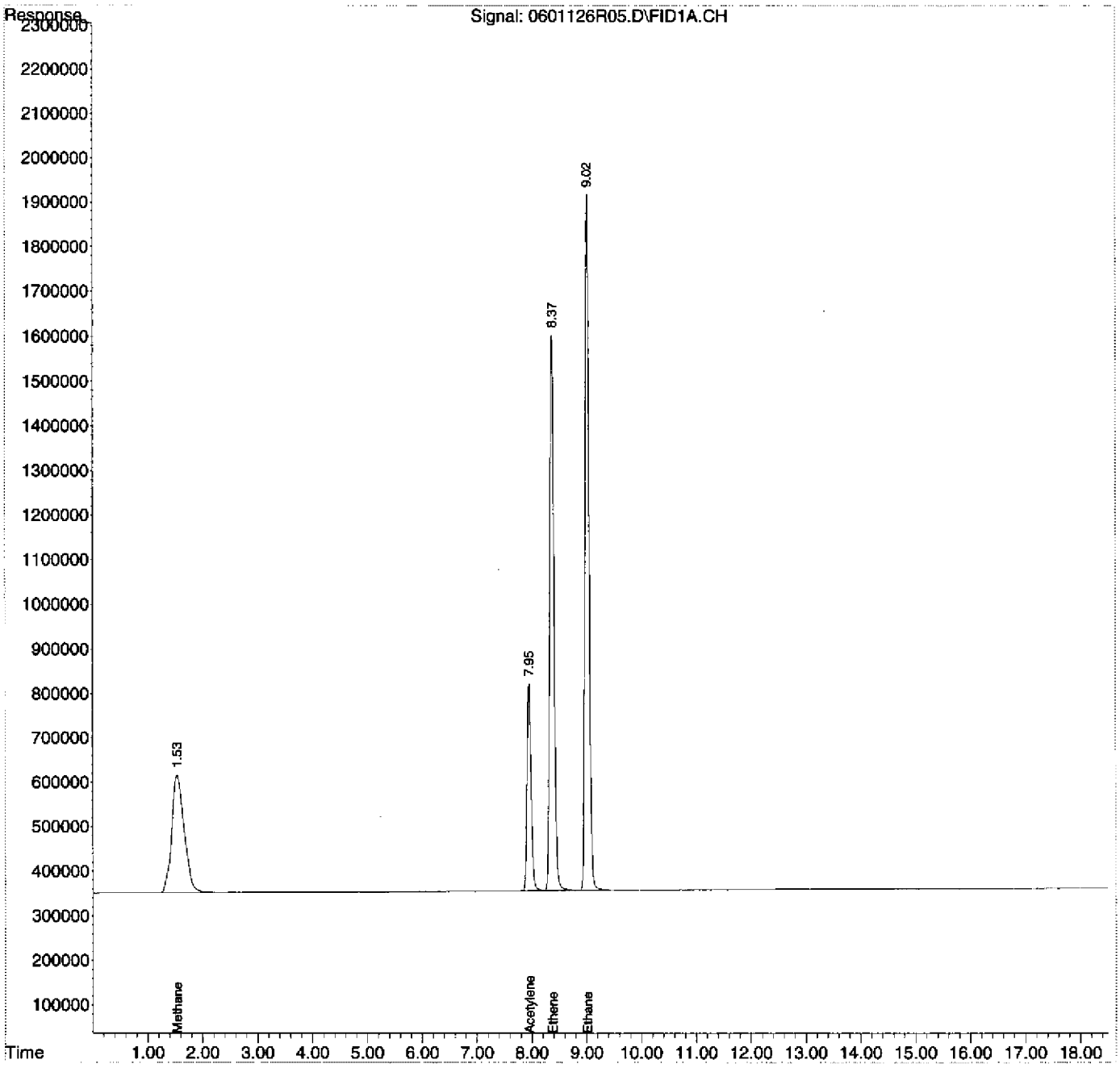
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\060112RSK\
Data File : 0601126R05.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 01 Jun 2012 5:14 pm
Operator : ngk
Sample : B2F0005-BS1
Misc : LCS
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jun 05 07:47:54 2012
Quant Method : D:\MSDCHEM\1\2012\METHOD\0515126RSK.M
Quant Title :
QLast Update : Wed May 16 13:16:50 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 600 uL
Signal Phase : ShinCarbon ST
Signal Info : 1m x 0.75mm



Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\060112RSK\
Data File : 0601126R06.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 01 Jun 2012 5:41 pm
Operator : ngk
Sample : B2F0005-BLK1
Misc : MB
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 05 07:48:00 2012
Quant Method : D:\MSDCHEM\1\2012\METHOD\0515126RSK.M
Quant Title :
QLast Update : Wed May 16 13:16:50 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 600 uL
Signal Phase : ShinCarbon ST
Signal Info : 1m x 0.75mm

Compound	R.T.	Response	Conc	Units
System Monitoring Compounds				
2) S Acetylene	7.953	24635929	70.470	ug/L
Spiked Amount 66.330 Range 66 - 153 Recovery = 106.24%				
Target Compounds				
1) TM Methane	0.000	0	N.D.	ug/L
3) TM Ethene	0.000	0	N.D.	ug/L
4) TM Ethane	0.000	0	N.D.	ug/L
5) Qual Propane	0.000	0	N.D.	
6) Qual Butane	0.000	0	N.D.	

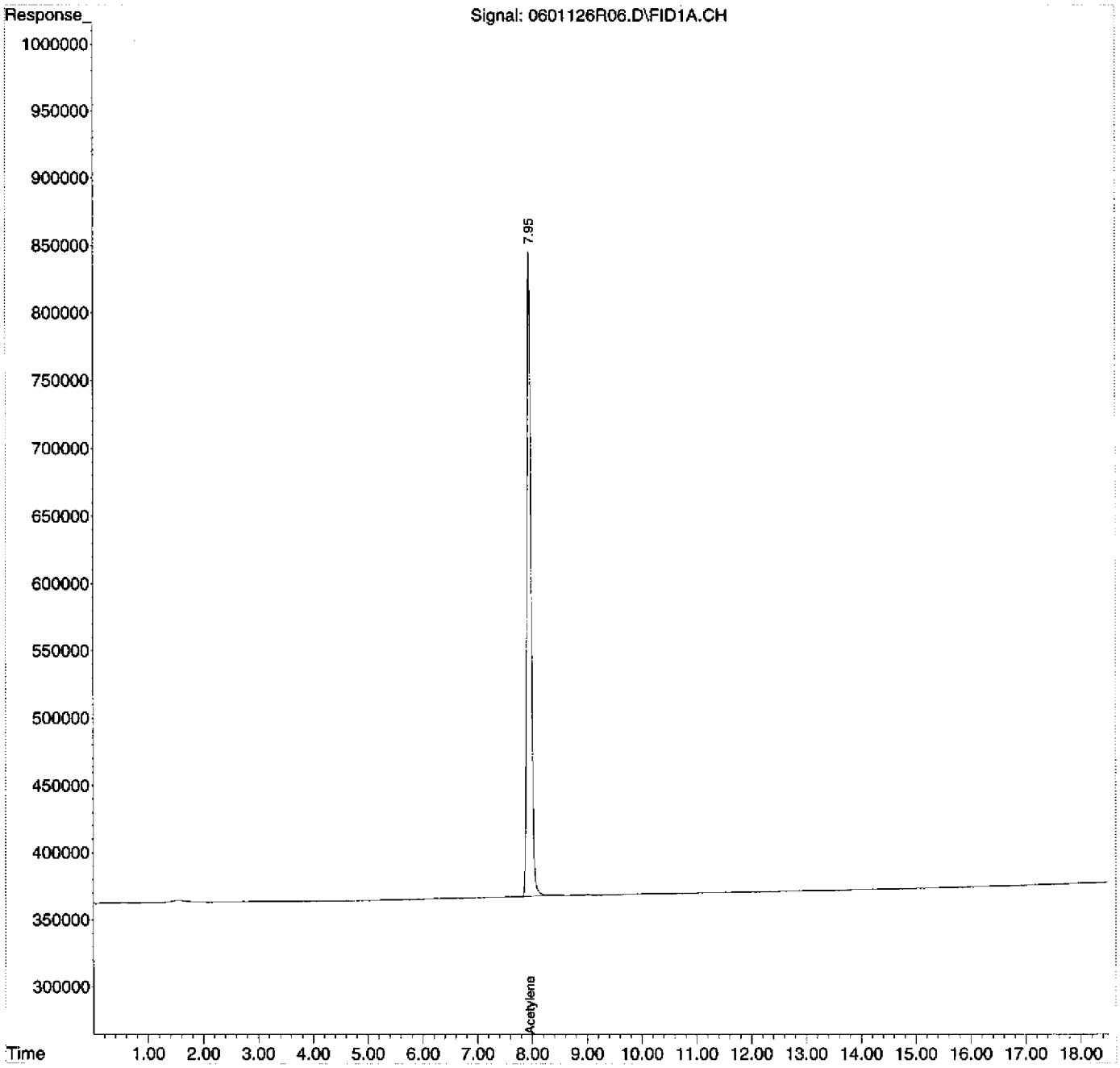
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\060112RSK\
Data File : 0601126R06.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 01 Jun 2012 5:41 pm
Operator : ngk
Sample : B2F0005-BLK1
Misc : MB
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 05 07:48:00 2012
Quant Method : D:\MSDCHEM\1\2012\METHOD\0515126RSK.M
Quant Title :
QLast Update : Wed May 16 13:16:50 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 600 uL
Signal Phase : ShinCarbon ST
Signal Info : 1m x 0.75mm



Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\060112RSK\
Data File : 0601126R10.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 01 Jun 2012 7:27 pm
Operator : ngk
Sample : 1205066-02RE1
Misc : TB55
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jun 05 07:48:23 2012
Quant Method : D:\MSDCHEM\1\2012\METHOD\0515126RSK.M
Quant Title :
QLast Update : Wed May 16 13:16:50 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 600 uL
Signal Phase : ShinCarbon ST
Signal Info : 1m x 0.75mm

Compound	R.T.	Response	Conc	Units
System Monitoring Compounds				
2) S Acetylene	7.954	26363180	75.411	ug/L
Spiked Amount 66.330 Range 66 - 153 Recovery = 113.69%				
Target Compounds				
1) TM Methane	0.000	0	N.D.	ug/L
3) TM Ethene	0.000	0	N.D.	ug/L
4) TM Ethane	0.000	0	N.D.	ug/L
5) Qual Propane	0.000	0	N.D.	
6) Qual Butane	0.000	0	N.D.	

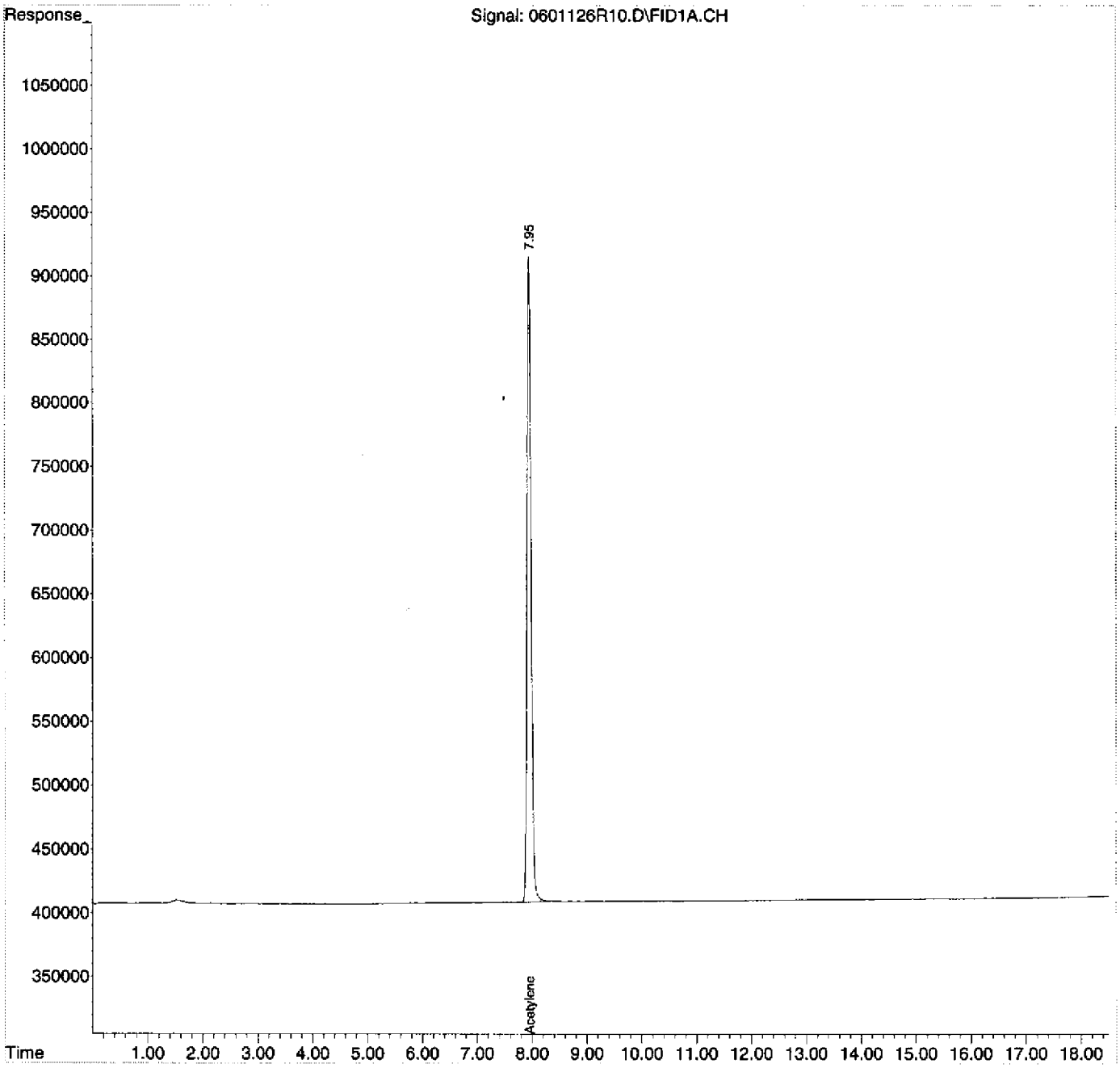
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\060112RSK\
Data File : 0601126R10.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 01 Jun 2012 7:27 pm
Operator : ngk
Sample : 1205066-02RE1
Misc : TB55
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jun 05 07:48:23 2012
Quant Method : D:\MSDCHEM\1\2012\METHOD\0515126RSK.M
Quant Title :
QLast Update : Wed May 16 13:16:50 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 600 uL
Signal Phase : ShinCarbon ST
Signal Info : 1m x 0.75mm



Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\060112RSK\
Data File : 0601126R11.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 01 Jun 2012 7:54 pm
Operator : ngk
Sample : 1205066-03RE1
Misc : FB23
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jun 05 07:48:29 2012
Quant Method : D:\MSDCHEM\1\2012\METHOD\0515126RSK.M
Quant Title :
QLast Update : Wed May 16 13:16:50 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 600 uL
Signal Phase : ShinCarbon ST
Signal Info : 1m x 0.75mm

Compound	R.T.	Response	Conc	Units
System Monitoring Compounds				
2) S Acetylene	7.955	26575490	76.018	ug/L
Spiked Amount 66.330 Range 66 - 153 Recovery = 114.61%				
Target Compounds				
1) TM Methane	0.000	0	N.D.	ug/L
3) TM Ethene	0.000	0	N.D.	ug/L
4) TM Ethane	0.000	0	N.D.	ug/L
5) Qual Propane	0.000	0	N.D.	
6) Qual Butane	0.000	0	N.D.	

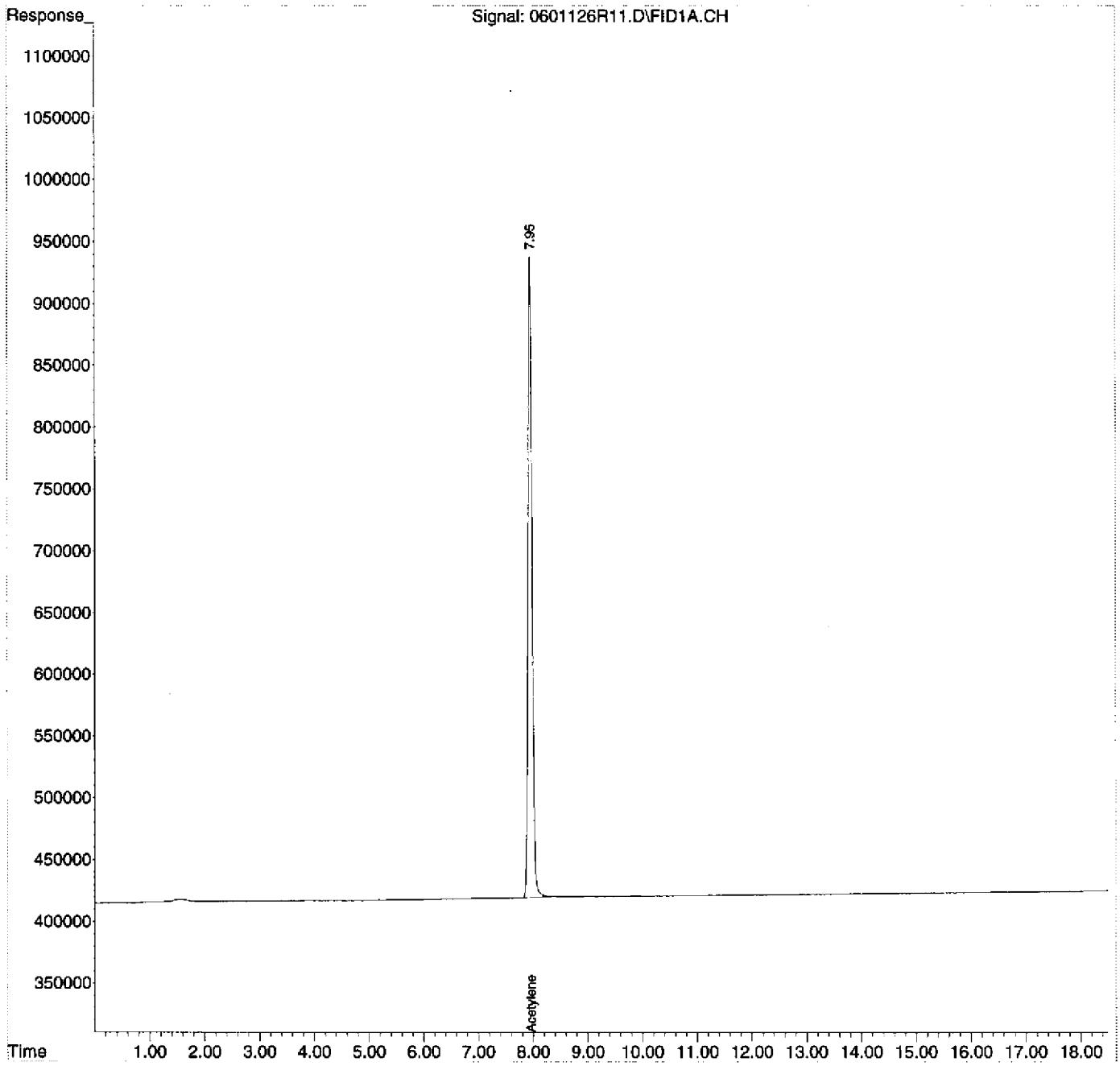
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\060112RSK\
Data File : 0601126R11.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 01 Jun 2012 7:54 pm
Operator : ngk
Sample : 1205066-03RE1
Misc : FB23
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jun 05 07:48:29 2012
Quant Method : D:\MSDCHEM\1\2012\METHOD\0515126RSK.M
Quant Title :
QLast Update : Wed May 16 13:16:50 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 600 uL
Signal Phase : ShinCarbon ST
Signal Info : 1m x 0.75mm



Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\060112RSK\
Data File : 0601126R12.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 01 Jun 2012 8:20 pm
Operator : ngk
Sample : 1205066-06RE1
Misc : TB56
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jun 05 07:48:35 2012
Quant Method : D:\MSDCHEM\1\2012\METHOD\0515126RSK.M
Quant Title :
QLast Update : Wed May 16 13:16:50 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 600 uL
Signal Phase : ShinCarbon ST
Signal Info : 1m x 0.75mm

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
2) S Acetylene	7.954	26804912	76.674 ug/L
Spiked Amount 66.330 Range 66 - 153		Recovery =	115.59%
Target Compounds			
1) TM Methane	0.000	0	N.D. ug/L
3) TM Ethene	0.000	0	N.D. ug/L
4) TM Ethane	0.000	0	N.D. ug/L
5) Qual Propane	0.000	0	N.D.
6) Qual Butane	0.000	0	N.D.

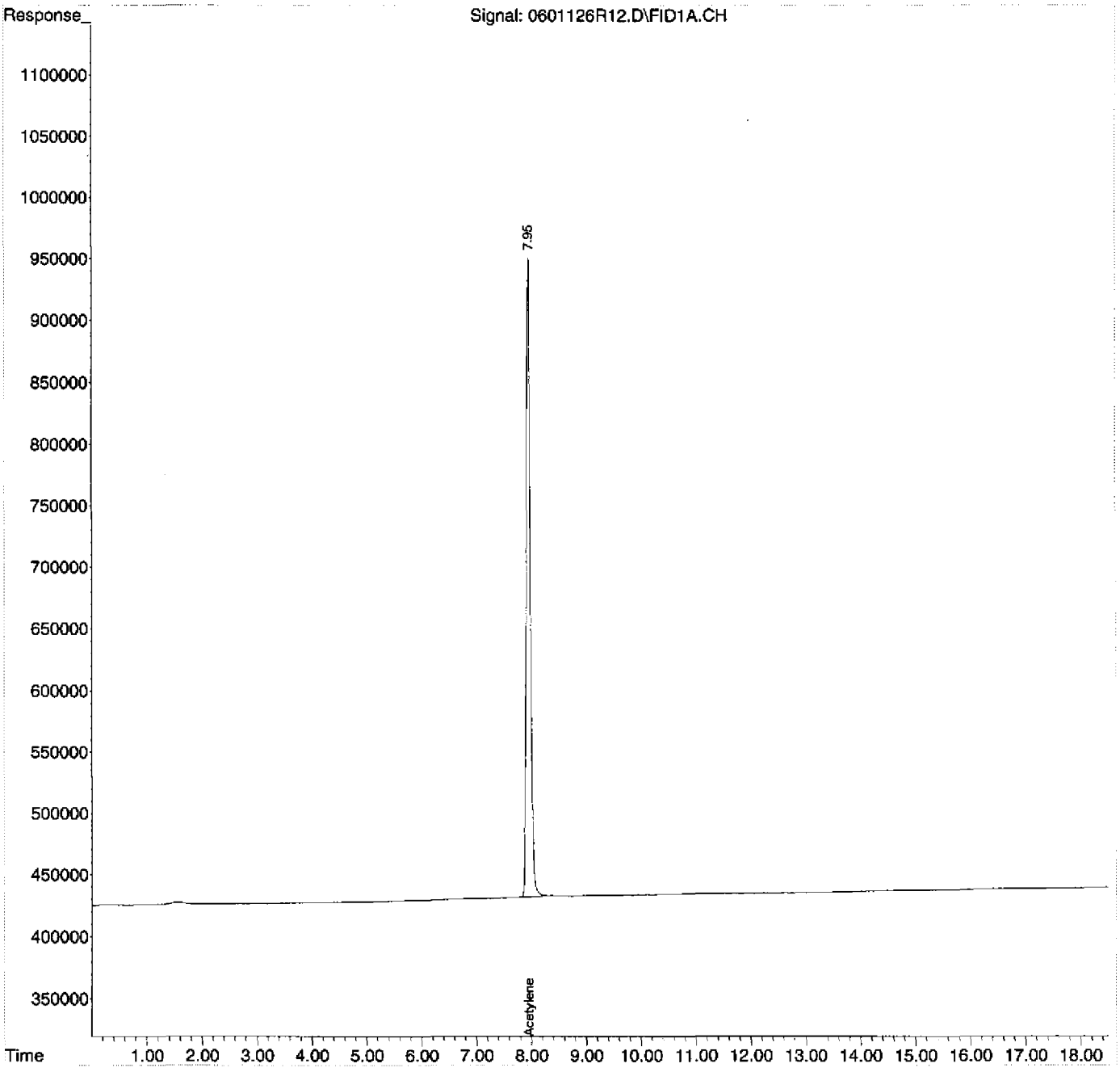
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\060112RSK\
Data File : 0601126R12.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 01 Jun 2012 8:20 pm
Operator : ngk
Sample : 1205066-06RE1
Misc : TB56
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jun 05 07:48:35 2012
Quant Method : D:\MSDCHEM\1\2012\METHOD\0515126RSK.M
Quant Title :
QLast Update : Wed May 16 13:16:50 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 600 uL
Signal Phase : ShinCarbon ST
Signal Info : 1m x 0.75mm



Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\060112RSK\
Data File : 0601126R13.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 01 Jun 2012 8:47 pm
Operator : ngk
Sample : 1205066-07RE1
Misc : FB22
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jun 05 07:48:40 2012
Quant Method : D:\MSDCHEM\1\2012\METHOD\0515126RSK.M
Quant Title :
QLast Update : Wed May 16 13:16:50 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 600 uL
Signal Phase : ShinCarbon ST
Signal Info : 1m x 0.75mm

Compound	R.T.	Response	Conc	Units
System Monitoring Compounds				
2) S Acetylene	7.954	26464932	75.702	ug/L
Spiked Amount 66.330 Range 66 - 153		Recovery = 114.13%		
Target Compounds				
1) TM Methane	0.000	0	N.D.	ug/L
3) TM Ethene	0.000	0	N.D.	ug/L
4) TM Ethane	0.000	0	N.D.	ug/L
5) Qual Propane	0.000	0	N.D.	
6) Qual Butane	0.000	0	N.D.	

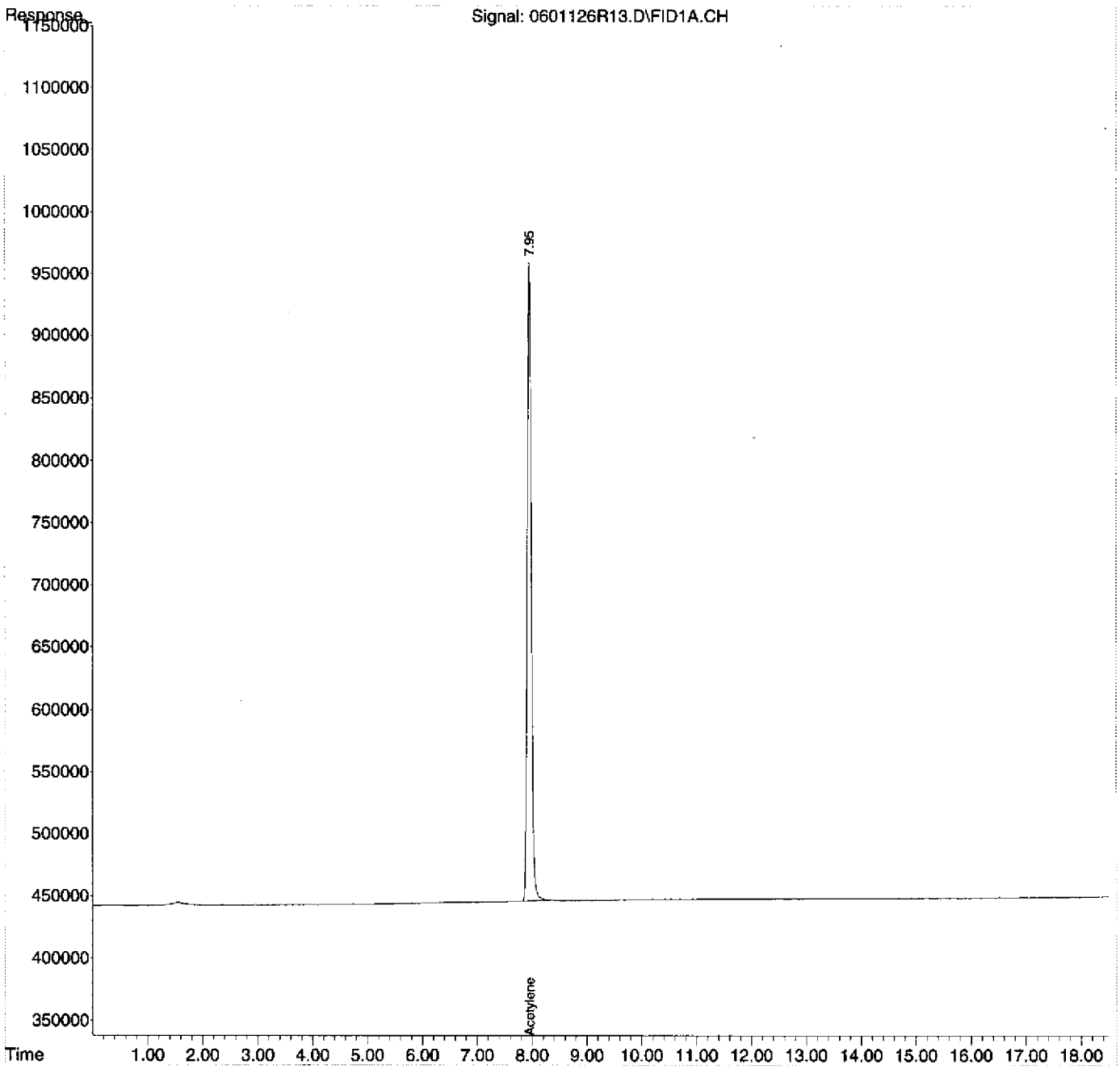
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\060112RSK\
Data File : 0601126R13.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 01 Jun 2012 8:47 pm
Operator : ngk
Sample : 1205066-07RE1
Misc : FB22
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jun 05 07:48:40 2012
Quant Method : D:\MSDCHEM\1\2012\METHOD\0515126RSK.M
Quant Title :
QLast Update : Wed May 16 13:16:50 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 600 uL
Signal Phase : ShinCarbon ST
Signal Info : 1m x 0.75mm



Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\060112RSK\
Data File : 0601126R14.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 01 Jun 2012 9:13 pm
Operator : ngk
Sample : 1205066-10RE1
Misc : TB54
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jun 05 07:48:46 2012
Quant Method : D:\MSDCHEM\1\2012\METHOD\0515126RSK.M
Quant Title :
QLast Update : Wed May 16 13:16:50 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 600 uL
Signal Phase : ShinCarbon ST
Signal Info : 1m x 0.75mm

Compound	R.T.	Response	Conc	Units
System Monitoring Compounds				
2) S Acetylene	7.955	27052672	77.383	ug/L
Spiked Amount 66.330 Range 66 - 153 Recovery = 116.66%				
Target Compounds				
1) TM Methane	0.000	0	N.D.	ug/L
3) TM Ethene	0.000	0	N.D.	ug/L
4) TM Ethane	0.000	0	N.D.	ug/L
5) Qual Propane	0.000	0	N.D.	
6) Qual Butane	0.000	0	N.D.	

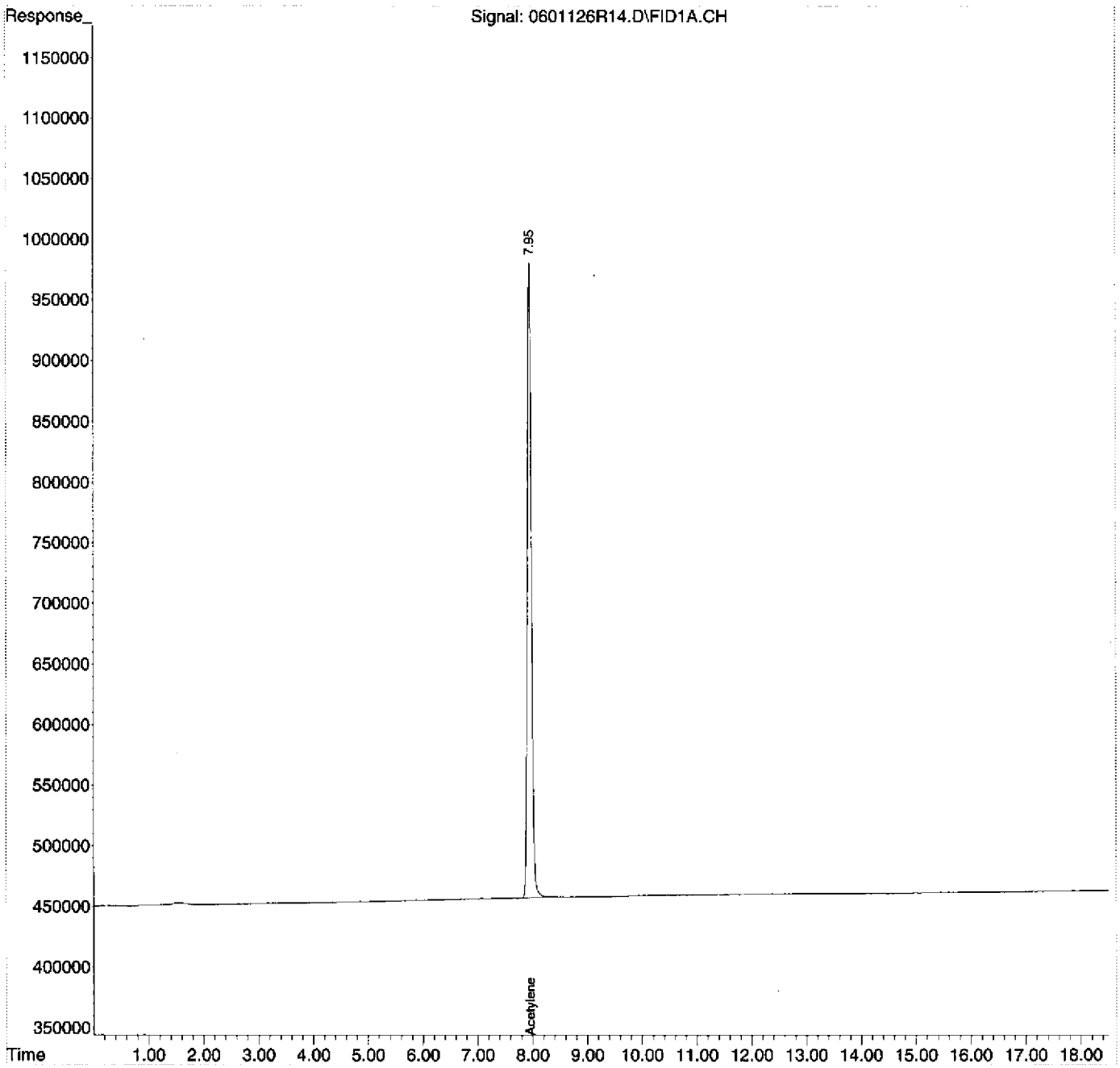
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\060112RSK\
Data File : 0601126R14.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 01 Jun 2012 9:13 pm
Operator : ngk
Sample : 1205066-10RE1
Misc : TB54
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jun 05 07:48:46 2012
Quant Method : D:\MSDCHEM\1\2012\METHOD\0515126RSK.M
Quant Title :
QLast Update : Wed May 16 13:16:50 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 600 uL
Signal Phase : ShinCarbon ST
Signal Info : 1m x 0.75mm



MISCELLANEOUS DATA

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\052912RSK\
Data File : 0529126R07.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 29 May 2012 2:10 pm
Operator : ngk
Sample : B2E0164-BLK2
Misc : SB 5/21/12
ALS Vial : 7 Sample Multiplier: 1

Quant Time: May 30 07:40:42 2012
Quant Method : D:\MSDCHEM\1\2012\METHOD\0515126RSK.M
Quant Title :
QLast Update : Wed May 16 13:16:50 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 600 uL
Signal Phase : ShinCarbon ST
Signal Info : 1m x 0.75mm

Compound	R.T.	Response	Conc	Units
System Monitoring Compounds				
2) S Acetylene	7.950	21206537	60.660	ug/L
Spiked Amount 66.330 Range 66 - 153 Recovery = 91.45%				
Target Compounds				
1) TM Methane	0.000	0	N.D.	ug/L
3) TM Ethene	0.000	0	N.D.	ug/L
4) TM Ethane	0.000	0	N.D.	ug/L
5) Qual Propane	0.000	0	N.D.	
6) Qual Butane	0.000	0	N.D.	

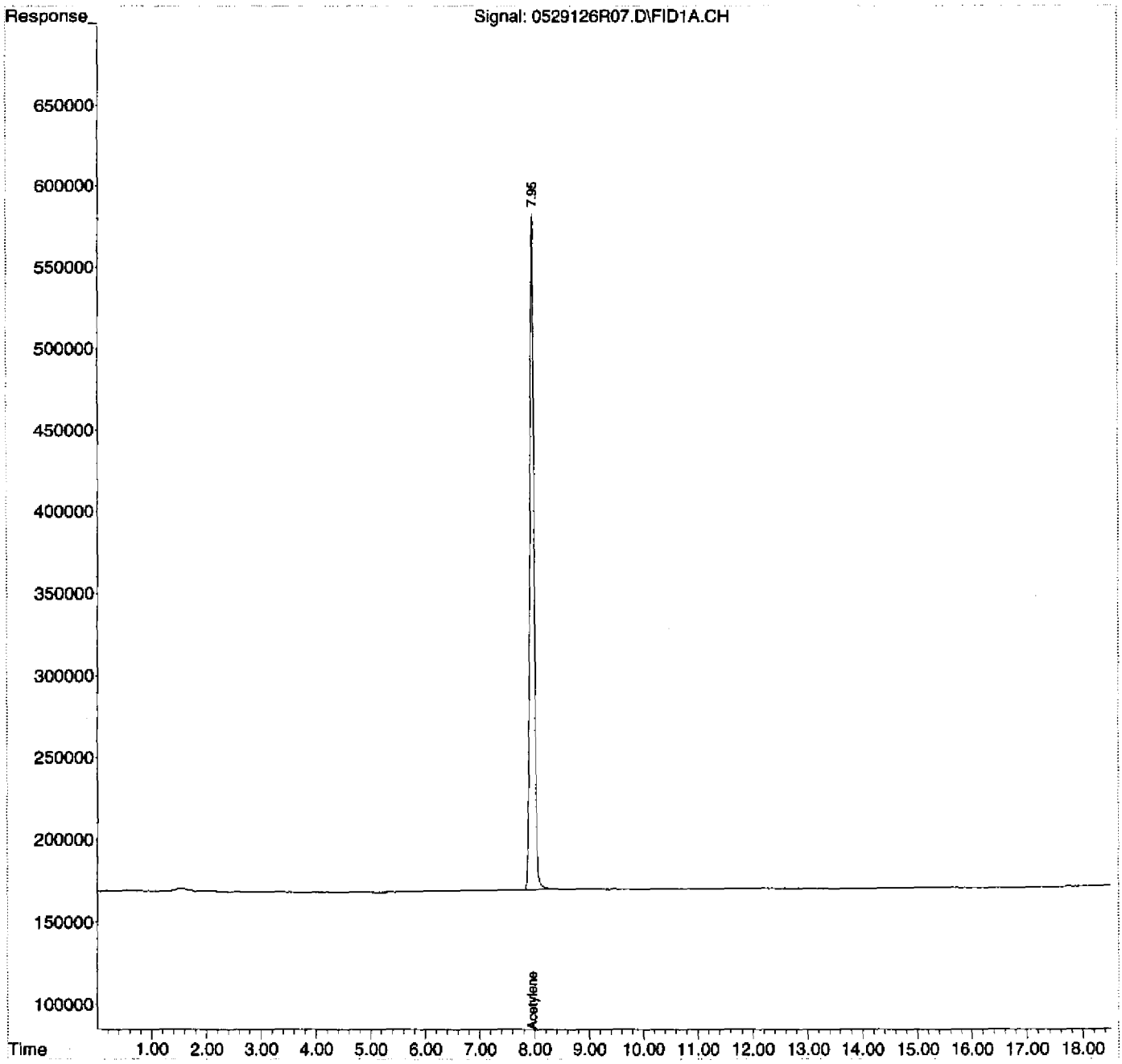
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\052912RSK\
Data File : 0529126R07.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 29 May 2012 2:10 pm
Operator : ngk
Sample : B2E0164-BLK2
Misc : SB 5/21/12
ALS Vial : 7 Sample Multiplier: 1

Quant Time: May 30 07:40:42 2012
Quant Method : D:\MSDCHEM\1\2012\METHOD\0515126RSK.M
Quant Title :
QLast Update : Wed May 16 13:16:50 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 600 uL
Signal Phase : ShinCarbon ST
Signal Info : 1m x 0.75mm



Standard Records

:00160

DIM0117138

DIM0116958

Analytical Standard Record

EPA Region 9 Laboratory

0L07008

Description:	RSK-175 HC Calibration Mix, Stock	**Expires:**	09/02/12
Standard Type:	Reference Material	**Prepared:**	09/02/10
Solvent:	Nitrogen	**Prepared By:**	** Vendor **
Final Volume (mls):	48000	**Department:**	Volatiles
Vials:	1	**Last Edit:**	12/07/10 10:27 by EM
Vendor:	Matheson	**Lot Numb**	109-06-03881

Vendor: Matheson Tri-Gas GMT 10402TC, Lot # 109-06-03881, bar code AU003098

Analyte	CAS Number	Concentration (ppm)	SRM Control Limits
Methane	74-82-8	7.1	0-200
Ethene	74-85-1	12.6	0-200
Ethane	74-84-0	13.4	0-200
Carbon dioxide	124-38-9	19.6	0-200
Acetylene	74-86-2	11.6	0-200

Analytical Standard Record

EPA Region 9 Laboratory

2E08016

Description:	RSK-175 ICAL Level 4	**Expires:**	05/10/12
Standard Type:	Other Solution	**Prepared:**	05/08/12
Solvent:	N2	**Prepared By:**	Nick Kish
Final Volume (mls):	16.1	**Department:**	Volatiles
Vials:	1	**Last Edit:**	05/08/12 14:32 by NGK
Vendor:	*Prepared*	**Lot Numb**	N/A

Analyte	CAS Number	Concentration (ppm)
Methane	74-82-8	0.0132
Ethene	74-85-1	0.0235
Ethane	74-84-0	0.025
Carbon dioxide	124-38-9	0.0365
Acetylene	74-86-2	0.0216

Parent Standards used in this standard:

Standard	Description	Prepared	Prepared By	Expires	Last Edit	(mls)
0L07008	RSK-175 HC Calibration Mix, Sto	09/02/10	** Vendor **	09/02/12	12/07/10 10:27 by EM	0.03

Analytical Standard Record

EPA Region 9 Laboratory

2E08018

Description:	RSK-175 HC PDS	**Expires:**	05/10/12
Standard Type:	Reference Material	**Prepared:**	05/08/12
Solvent:	N2	**Prepared By:**	Nick Kish
Final Volume (mls):	21.5	**Department:**	Volatiles
Vials:	1	**Last Edit:**	05/08/12 14:31 by NGK
Vendor:	*Prepared*	**Lot Numb**	N/A

Analyte	CAS Number	Concentration (ppm)	SRM Control Limits
Methane	74-82-8	0.33	0-200
Ethene	74-85-1	0.586	0-200
Ethane	74-84-0	0.623	0-200
Carbon dioxide	124-38-9	0.912	0-200
Acetylene	74-86-2	0.54	0-200

Parent Standards used in this standard:

Standard	Description	Prepared	Prepared By	Expires	Last Edit	(mls)
0L07008	RSK-175 HC Calibration Mix, Sto	09/02/10	** Vendor **	09/02/12	12/07/10 10:27 by EM	1

Analytical Standard Record

EPA Region 9 Laboratory

2E08019

Description:	RSK-175 ICAL Level 5	**Expires:**	05/10/12
Standard Type:	Other Solution	**Prepared:**	05/08/12
Solvent:	N2	**Prepared By:**	Nick Kish
Final Volume (mls):	16.1	**Department:**	Volatiles
Vials:	1	**Last Edit:**	05/08/12 14:32 by NGK
Vendor:	*Prepared*	**Lot Numb**	N/A

Analyte	CAS Number	Concentration (ppm)
Methane	74-82-8	0.0441
Ethene	74-85-1	0.0783
Ethane	74-84-0	0.0832
Carbon dioxide	124-38-9	0.122
Acetylene	74-86-2	0.072

Parent Standards used in this standard:

Standard	Description	Prepared	Prepared By	Expires	Last Edit	(mls)
0L07008	RSK-175 HC Calibration Mix, Sto	09/02/10	** Vendor **	09/02/12	12/07/10 10:27 by EM	0.1

Analytical Standard Record

EPA Region 9 Laboratory

2E08020

Description:	RSK-175 ICAL Level 6	**Expires:**	05/10/12
Standard Type:	Other Solution	**Prepared:**	05/08/12
Solvent:	N2	**Prepared By:**	Nick Kish
Final Volume (mls):	16.1	**Department:**	Volatiles
Vials:	1	**Last Edit:**	05/08/12 14:33 by NGK
Vendor:	*Prepared*	**Lot Numb**	N/A

Analyte	CAS Number	Concentration (ppm)
Methane	74-82-8	0.11
Ethene	74-85-1	0.196
Ethane	74-84-0	0.208
Carbon dioxide	124-38-9	0.304
Acetylene	74-86-2	0.18

Parent Standards used in this standard:

Standard	Description	Prepared	Prepared By	Expires	Last Edit	(mls)
0L07008	RSK-175 HC Calibration Mix, Sto	09/02/10	** Vendor **	09/02/12	12/07/10 10:27 by EM	0.25

Analytical Standard Record

EPA Region 9 Laboratory

2E08021

Description:	RSK-175 ICAL Level 7	**Expires:**	05/10/12
Standard Type:	Other Solution	**Prepared:**	05/08/12
Solvent:	N2	**Prepared By:**	Nick Kish
Final Volume (mls):	16.1	**Department:**	Volatiles
Vials:	1	**Last Edit:**	05/08/12 14:33 by NGK
Vendor:	*Prepared*	**Lot Numb**	N/A

Analyte	CAS Number	Concentration (ppm)
Methane	74-82-8	0.22
Ethene	74-85-1	0.391
Ethane	74-84-0	0.416
Carbon dioxide	124-38-9	0.609
Acetylene	74-86-2	0.36

Parent Standards used in this standard:

Standard	Description	Prepared	Prepared By	Expires	Last Edit	(mls)
0L07008	RSK-175 HC Calibration Mix, Sto	09/02/10	** Vendor **	09/02/12	12/07/10 10:27 by EM	0.5

Analytical Standard Record

EPA Region 9 Laboratory

2E08022

Description:	RSK-175 ICAL Level 1	**Expires:**	05/10/12
Standard Type:	Other Solution	**Prepared:**	05/08/12
Solvent:	N2	**Prepared By:**	Nick Kish
Final Volume (mls):	16.1	**Department:**	Volatiles
Vials:	1	**Last Edit:**	05/08/12 14:34 by NGK
Vendor:	*Prepared*	**Lot Numb**	N/A

Analyte	CAS Number	Concentration (ppm)
Methane	74-82-8	0.000615
Ethene	74-85-1	0.00109
Ethane	74-84-0	0.00116
Carbon dioxide	124-38-9	0.0017
Acetylene	74-86-2	0.00101

Parent Standards used in this standard:

Standard	Description	Prepared	Prepared By	Expires	Last Edit	(mls)
2E08018	RSK-175 HC PDS	05/08/12	Nick Kish	05/10/12	05/08/12 14:31 by NGK	0.03

Analytical Standard Record

EPA Region 9 Laboratory

2E08023

Description:	RSK-175 ICAL Level 2	**Expires:**	05/10/12
Standard Type:	Other Solution	**Prepared:**	05/08/12
Solvent:	N2	**Prepared By:**	Nick Kish
Final Volume (mls):	16.1	**Department:**	Volatiles
Vials:	1	**Last Edit:**	05/09/12 14:57 by NGK
Vendor:	*Prepared*	**Lot Numb**	N/A

Analyte	CAS Number	Concentration (ppm)
Methane	74-82-8	0.00123
Ethene	74-85-1	0.00218
Ethane	74-84-0	0.00232
Carbon dioxide	124-38-9	0.0034
Acetylene	74-86-2	0.00201

Parent Standards used in this standard:

Standard	Description	Prepared	Prepared By	Expires	Last Edit	(mls)
2E08018	RSK-175 HC PDS	05/08/12	Nick Kish	05/10/12	05/08/12 14:31 by NGK	0.06

Analytical Standard Record

EPA Region 9 Laboratory

2E08024

Description:	RSK-175 ICAL Level 3	**Expires:**	05/10/12
Standard Type:	Other Solution	**Prepared:**	05/08/12
Solvent:	N2	**Prepared By:**	Nick Kish
Final Volume (mls):	16.1	**Department:**	Volatiles
Vials:	1	**Last Edit:**	05/08/12 14:36 by NGK
Vendor:	*Prepared*	**Lot Numb**	N/A

Analyte	CAS Number	Concentration (ppm)
Methane	74-82-8	0.0041
Ethene	74-85-1	0.00728
Ethane	74-84-0	0.00774
Carbon dioxide	124-38-9	0.0113
Acetylene	74-86-2	0.00671

Parent Standards used in this standard:

Standard	Description	Prepared	Prepared By	Expires	Last Edit	(mls)
2E08018	RSK-175 HC PDS	05/08/12	Nick Kish	05/10/12	05/08/12 14:31 by NGK	0.2

Analytical Standard Record

EPA Region 9 Laboratory

2E08025

Description:	RSK-175 ICAL SCV	**Expires:**	05/10/12
Standard Type:	Other Solution	**Prepared:**	05/08/12
Solvent:	N2	**Prepared By:**	Nick Kish
Final Volume (mls):	16.1	**Department:**	Volatiles
Vials:	1	**Last Edit:**	05/08/12 14:37 by NGK
Vendor:	*Prepared*	**Lot Numb**	N/A

Analyte	CAS Number	Concentration (ppm)
Methane	74-82-8	0.0134
Ethene	74-85-1	0.0233
Ethane	74-84-0	0.025
Carbon dioxide	124-38-9	0.0365
Acetylene	74-86-2	0.0216

Parent Standards used in this standard:

Standard	Description	Prepared	Prepared By	Expires	Last Edit	(mls)
1H18014	RSK-175 HYDROCARBON SCV	08/18/11	Tatyana Dadiomov	10/24/12	01/27/12 10:56 by RFH	0.03

Analytical Standard Record

EPA Region 9 Laboratory

2E16025

Description:	RSK-175 ICAL Level 8	**Expires:**	05/17/12
Standard Type:	Other Solution	**Prepared:**	05/15/12
Solvent:	N2	**Prepared By:**	Nick Kish
Final Volume (mls):	16.1	**Department:**	Volatiles
Vials:	1	**Last Edit:**	05/16/12 14:16 by NGK
Vendor:	*Prepared*	**Lot Numb**	N/A

Analyte	CAS Number	Concentration (ppm)
Methane	74-82-8	0.441
Ethene	74-85-1	0.783
Ethane	74-84-0	0.832
Carbon dioxide	124-38-9	1.22
Acetylene	74-86-2	0.72

Parent Standards used in this standard:

Standard	Description	Prepared	Prepared By	Expires	Last Edit	(mls)
0L07008	RSK-175 HC Calibration Mix, Sto	09/02/10	** Vendor **	09/02/12	12/07/10 10:27 by EM	1

DIM0116958

DIM0117149

Analytical Standard Record

EPA Region 9 Laboratory

2E29002

Description:	RSK175 PDS 052912	**Expires:**	05/30/12
Standard Type:	Reference Material	**Prepared:**	05/29/12
Solvent:	He	**Prepared By:**	Nick Kish
Final Volume (mls):	21.5	**Department:**	Volatiles
Vials:	1	**Last Edit:**	05/29/12 08:26 by NGK
Vendor:	*Prepared*	**Lot Numb**	N/A

Analyte	CAS Number	Concentration (ppm)	SRM Control Limits
Methane	74-82-8	0.33	0-200
Ethene	74-85-1	0.586	0-200
Ethane	74-84-0	0.623	0-200
Carbon dioxide	124-38-9	0.912	0-200
Acetylene	74-86-2	0.54	0-200

Parent Standards used in this standard:

Standard	Description	Prepared	Prepared By	Expires	Last Edit	(mls)
0L07008	RSK-175 HC Calibration Mix, Sto	09/02/10	** Vendor **	09/02/12	12/07/10 10:27 by EM	1

DIM0116958 DIM0117150

Analytical Standard Record

EPA Region 9 Laboratory

2E29005

Description:	RSK 175 LCV1 052912	**Expires:**	05/30/12
Standard Type:	Other Solution	**Prepared:**	05/29/12
Solvent:	Water	**Prepared By:**	Nick Kish
Final Volume (mls):	16.1	**Department:**	Volatiles
Vials:	1	**Last Edit:**	05/29/12 08:26 by NGK
Vendor:	*Prepared*	**Lot Numb**	N/A

Analyte	CAS Number	Concentration (ppm)
Methane	74-82-8	0.00123
Ethene	74-85-1	0.00218
Ethane	74-84-0	0.00232
Carbon dioxide	124-38-9	0.0034
Acetylene	74-86-2	0.00201

Parent Standards used in this standard:

Standard	Description	Prepared	Prepared By	Expires	Last Edit	(mls)
2E29002	RSK175 PDS 052912	05/29/12	Nick Kish	05/30/12	05/29/12 08:26 by NGK	0.06

Analytical Standard Record

EPA Region 9 Laboratory

2E29004

Description:	RSK 175 LCV1 052912	**Expires:**	05/30/12
Standard Type:	Other Solution	**Prepared:**	05/29/12
Solvent:	Water	**Prepared By:**	Nick Kish
Final Volume (mls):	16.1	**Department:**	Volatiles
Vials:	1	**Last Edit:**	05/29/12 08:26 by NGK
Vendor:	*Prepared*	**Lot Numb**	N/A

Analyte	CAS Number	Concentration (ppm)
Methane	74-82-8	0.000615
Ethene	74-85-1	0.00109
Ethane	74-84-0	0.00116
Carbon dioxide	124-38-9	0.0017
Acetylene	74-86-2	0.00101

Parent Standards used in this standard:

Standard	Description	Prepared	Prepared By	Expires	Last Edit	(mls)
2E29002	RSK175 PDS 052912	05/29/12	Nick Kish	05/30/12	05/29/12 08:26 by NGK	0.03

Analytical Standard Record

EPA Region 9 Laboratory

2E29003

Description:	RSK 175 CCV 052912	**Expires:**	05/30/12
Standard Type:	Other Solution	**Prepared:**	05/29/12
Solvent:	Water	**Prepared By:**	Nick Kish
Final Volume (mls):	16.1	**Department:**	Volatiles
Vials:	1	**Last Edit:**	05/29/12 08:27 by NGK
Vendor:	*Prepared*	**Lot Numb**	N/A

Analyte	CAS Number	Concentration (ppm)
Methane	74-82-8	0.0132
Ethene	74-85-1	0.0235
Ethane	74-84-0	0.025
Carbon dioxide	124-38-9	0.0365
Acetylene	74-86-2	0.0216

Parent Standards used in this standard:

Standard	Description	Prepared	Prepared By	Expires	Last Edit	(mls)
0L07008	RSK-175 HC Calibration Mix, Sto	09/02/10	** Vendor **	09/02/12	12/07/10 10:27 by EM	0.03

DIM0116958

DIM0117153

Analytical Standard Record

EPA Region 9 Laboratory

2E30002

Description:	RSK175 PDS 053012	**Expires:**	05/31/12
Standard Type:	Reference Material	**Prepared:**	05/30/12
Solvent:	He	**Prepared By:**	Nick Kish
Final Volume (mls):	21.5	**Department:**	Volatiles
Vials:	1	**Last Edit:**	05/30/12 08:28 by NGK
Vendor:	*Prepared*	**Lot Numb**	N/A

Analyte	CAS Number	Concentration (ppm)	SRM Control Limits
Methane	74-82-8	0.33	0-200
Ethene	74-85-1	0.586	0-200
Ethane	74-84-0	0.623	0-200
Carbon dioxide	124-38-9	0.912	0-200
Acetylene	74-86-2	0.54	0-200

Parent Standards used in this standard:

Standard	Description	Prepared	Prepared By	Expires	Last Edit	(mls)
0L07008	RSK-175 HC Calibration Mix, Sto	09/02/10	** Vendor **	09/02/12	12/07/10 10:27 by EM	1

Analytical Standard Record

EPA Region 9 Laboratory

2E30005

Description:	RSK 175 LCV2 053012	**Expires:**	05/31/12
Standard Type:	Other Solution	**Prepared:**	05/30/12
Solvent:	Water	**Prepared By:**	Nick Kish
Final Volume (mls):	16.1	**Department:**	Volatiles
Vials:	1	**Last Edit:**	05/30/12 08:28 by NGK
Vendor:	*Prepared*	**Lot Numb**	N/A

Analyte	CAS Number	Concentration (ppm)
Methane	74-82-8	0.00123
Ethene	74-85-1	0.00218
Ethane	74-84-0	0.00232
Carbon dioxide	124-38-9	0.0034
Acetylene	74-86-2	0.00201

Parent Standards used in this standard:

Standard	Description	Prepared	Prepared By	Expires	Last Edit	(mls)
2E30002	RSK175 PDS 053012	05/30/12	Nick Kish	05/31/12	05/30/12 08:28 by NGK	0.06

Analytical Standard Record

EPA Region 9 Laboratory

2E30004

Description:	RSK 175 LCV1 053012	**Expires:**	05/31/12
Standard Type:	Other Solution	**Prepared:**	05/30/12
Solvent:	Water	**Prepared By:**	Nick Kish
Final Volume (mls):	16.1	**Department:**	Volatiles
Vials:	1	**Last Edit:**	05/30/12 08:28 by NGK
Vendor:	*Prepared*	**Lot Numb**	N/A

Analyte	CAS Number	Concentration (ppm)
Methane	74-82-8	0.000615
Ethene	74-85-1	0.00109
Ethane	74-84-0	0.00116
Carbon dioxide	124-38-9	0.0017
Acetylene	74-86-2	0.00101

Parent Standards used in this standard:

Standard	Description	Prepared	Prepared By	Expires	Last Edit	(mls)
2E30002	RSK175 PDS 053012	05/30/12	Nick Kish	05/31/12	05/30/12 08:28 by NGK	0.03

Analytical Standard Record

EPA Region 9 Laboratory

2E30003

Description:	RSK 175 CCV 053012	**Expires:**	05/31/12
Standard Type:	Other Solution	**Prepared:**	05/30/12
Solvent:	Water	**Prepared By:**	Nick Kish
Final Volume (mls):	16.1	**Department:**	Volatiles
Vials:	1	**Last Edit:**	05/30/12 08:27 by NGK
Vendor:	*Prepared*	**Lot Numb**	N/A

Analyte	CAS Number	Concentration (ppm)
Methane	74-82-8	0.0132
Ethene	74-85-1	0.0235
Ethane	74-84-0	0.025
Carbon dioxide	124-38-9	0.0365
Acetylene	74-86-2	0.0216

Parent Standards used in this standard:

Standard	Description	Prepared	Prepared By	Expires	Last Edit	(mls)
0L07008	RSK-175 HC Calibration Mix, Sto	09/02/10	** Vendor **	09/02/12	12/07/10 10:27 by EM	0.03

DIM0116958

DIM0117157

Analytical Standard Record

EPA Region 9 Laboratory

2F01015

Description:	RSK 175 LCV2 060212	**Expires:**	06/02/12
Standard Type:	Other Solution	**Prepared:**	06/01/12
Solvent:	Water	**Prepared By:**	Nick Kish
Final Volume (mls):	16.1	**Department:**	Volatiles
Vials:	1	**Last Edit:**	06/01/12 14:32 by NGK
Vendor:	*Prepared*	**Lot Numb**	N/A

Analyte	CAS Number	Concentration (ppm)
Methane	74-82-8	0.00123
Ethene	74-85-1	0.00218
Ethane	74-84-0	0.00232
Carbon dioxide	124-38-9	0.0034
Acetylene	74-86-2	0.00201

Parent Standards used in this standard:

Standard	Description	Prepared	Prepared By	Expires	Last Edit	(mls)
2F01012	RSK175 PDS 060112	06/01/12	Nick Kish	06/02/12	06/01/12 14:31 by NGK	0.06

Analytical Standard Record

EPA Region 9 Laboratory

2F01012

Description:	RSK175 PDS 060112	**Expires:**	06/02/12
Standard Type:	Reference Material	**Prepared:**	06/01/12
Solvent:	He	**Prepared By:**	Nick Kish
Final Volume (mls):	21.5	**Department:**	Volatiles
Vials:	1	**Last Edit:**	06/01/12 14:31 by NGK
Vendor:	*Prepared*	**Lot Numb**	N/A

Analyte	CAS Number	Concentration (ppm)	SRM Control Limits
Methane	74-82-8	0.33	0-200
Ethene	74-85-1	0.586	0-200
Ethane	74-84-0	0.623	0-200
Carbon dioxide	124-38-9	0.912	0-200
Acetylene	74-86-2	0.54	0-200

Parent Standards used in this standard:

Standard	Description	Prepared	Prepared By	Expires	Last Edit	(mls)
0L07008	RSK-175 HC Calibration Mix, Sto	09/02/10	** Vendor **	09/02/12	12/07/10 10:27 by EM	1

Analytical Standard Record

EPA Region 9 Laboratory

2F01013

Description:	RSK 175 CCV 060112	**Expires:**	06/02/12
Standard Type:	Other Solution	**Prepared:**	06/01/12
Solvent:	Water	**Prepared By:**	Nick Kish
Final Volume (mls):	16.1	**Department:**	Volatiles
Vials:	1	**Last Edit:**	06/01/12 14:31 by NGK
Vendor:	*Prepared*	**Lot Numb**	N/A

Analyte	CAS Number	Concentration (ppm)
Methane	74-82-8	0.0132
Ethene	74-85-1	0.0235
Ethane	74-84-0	0.025
Carbon dioxide	124-38-9	0.0365
Acetylene	74-86-2	0.0216

Parent Standards used in this standard:

Standard	Description	Prepared	Prepared By	Expires	Last Edit	(mls)
0L07008	RSK-175 HC Calibration Mix, Sto	09/02/10	** Vendor **	09/02/12	12/07/10 10:27 by EM	0.03

Analytical Standard Record

EPA Region 9 Laboratory

2F01014

Description:	RSK 175 LCV1 060212	**Expires:**	06/02/12
Standard Type:	Other Solution	**Prepared:**	06/01/12
Solvent:	Water	**Prepared By:**	Nick Kish
Final Volume (mls):	16.1	**Department:**	Volatiles
Vials:	1	**Last Edit:**	06/01/12 14:32 by NGK
Vendor:	*Prepared*	**Lot Numb**	N/A

Analyte	CAS Number	Concentration (ppm)
Methane	74-82-8	0.000615
Ethene	74-85-1	0.00109
Ethane	74-84-0	0.00116
Carbon dioxide	124-38-9	0.0017
Acetylene	74-86-2	0.00101

Parent Standards used in this standard:

Standard	Description	Prepared	Prepared By	Expires	Last Edit	(mls)
2F01012	RSK175 PDS 060112	06/01/12	Nick Kish	06/02/12	06/01/12 14:31 by NGK	0.03