United States Environmental Protection Agency
Region 9 Laboratory

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

Date: 2/13/2012

Subject: Analytical Testing Results - Project R33911
SDG: 12034C

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

DIM0278627

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:** 12034C
Project Number: R33911	**100 Gypsum Road**	**Reported:** 02/13/12 14:59
Project: Dimock Residential Groundwater	**Stroudsburg PA, 18360**	

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Collected	Date Received
HW42	1202011-01	Water	02/02/12 10:28	02/03/12 10:00
HW46	1202011-02	Water	02/02/12 11:39	02/03/12 10:00
HW46-P	1202011-03	Water	02/02/12 11:24	02/03/12 10:00
TB15	1202011-04	Water	02/02/12 07:50	02/03/12 10:00
FB08	1202011-05	Water	02/01/12 14:45	02/03/12 10:00
HW34a	1202011-06	Water	02/01/12 15:47	02/03/12 10:00
HW34a-P	1202011-07	Water	02/01/12 15:55	02/03/12 10:00
TB14	1202011-08	Water	02/01/12 10:10	02/03/12 10:00
FB09	1202011-09	Water	02/02/12 10:15	02/03/12 10:00
HW42z	1202011-10	Water	02/02/12 10:29	02/03/12 10:00
TB16	1202011-11	Water	02/02/12 07:57	02/03/12 10:00

SDG ID 12034C

Small amounts of methane were detected in the method blanks, field blanks and trip blanks. The highest level for a blank in this delivery group (received 2/3/12) was 6.2 ug/L in sample 1202011-11 (TB16). Reported methane values less than or equal to 31 ug/L in field samples are flagged as estimates due to possible contamination.

Work Order(s)

1202011

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:** 12034C
Project Number: R33911	**100 Gypsum Road**	**Reported:** 02/13/12 14:59
Project: Dimock Residential Groundwater	**Stroudsburg PA, 18360**	

Sample Results

Analyte	Reanalysis / Extract	Result	Qualifiers / Comments	Quantitation Limit	Units	Batch	Prepared	Analyzed	Method
Lab ID: 1202011-01									**Water - Sampled: 02/02/12 10:28**
Sample ID: HW42									**Dissolved Gases by RSK-175**
Methane		2.2	B1, J	1.2	ug/L	B2B0015	02/03/12	02/06/12	RSK-175/SOP325
Ethane		ND	U	1.2	"	"	"	"	RSK-175/SOP325
Ethene		ND	U	1.1	"	"	"	"	RSK-175/SOP325
Surrogate: Acetylene			111 %	*66.4-153%*		"	"	"	
Lab ID: 1202011-02									**Water - Sampled: 02/02/12 11:39**
Sample ID: HW46									**Dissolved Gases by RSK-175**
Methane		1.5	B1, J	1.2	ug/L	B2B0015	02/03/12	02/06/12	RSK-175/SOP325
Ethane		ND	U	1.2	"	"	"	"	RSK-175/SOP325
Ethene		ND	U	1.1	"	"	"	"	RSK-175/SOP325
Surrogate: Acetylene			110 %	*66.4-153%*		"	"	"	
Lab ID: 1202011-03									**Water - Sampled: 02/02/12 11:24**
Sample ID: HW46-P									**Dissolved Gases by RSK-175**
Methane		1.5	B1, J	1.2	ug/L	B2B0015	02/03/12	02/06/12	RSK-175/SOP325
Ethane		ND	U	1.2	"	"	"	"	RSK-175/SOP325
Ethene		ND	U	1.1	"	"	"	"	RSK-175/SOP325
Surrogate: Acetylene			113 %	*66.4-153%*		"	"	"	
Lab ID: 1202011-04									**Water - Sampled: 02/02/12 07:50**
Sample ID: TB15									**Dissolved Gases by RSK-175**
Methane		1.5	B1, J	1.2	ug/L	B2B0015	02/03/12	02/06/12	RSK-175/SOP325
Ethane		ND	U	1.2	"	"	"	"	RSK-175/SOP325
Ethene		ND	U	1.1	"	"	"	"	RSK-175/SOP325
Surrogate: Acetylene			112 %	*66.4-153%*		"	"	"	
Lab ID: 1202011-05									**Water - Sampled: 02/01/12 14:45**
Sample ID: FB08									**Dissolved Gases by RSK-175**
Methane		1.3	B1, J	1.2	ug/L	B2B0015	02/03/12	02/06/12	RSK-175/SOP325
Ethane		ND	U	1.2	"	"	"	"	RSK-175/SOP325
Ethene		ND	U	1.1	"	"	"	"	RSK-175/SOP325
Surrogate: Acetylene			108 %	*66.4-153%*		"	"	"	
Lab ID: 1202011-06									**Water - Sampled: 02/01/12 15:47**
Sample ID: HW34a									**Dissolved Gases by RSK-175**
Methane	RE2	26,000		240	ug/L	B2B0024	02/06/12	02/07/12	RSK-175/SOP325
Ethane		55		1.2	"	B2B0015	02/03/12	02/06/12	RSK-175/SOP325
Ethene		ND	U	1.1	"	"	"	"	RSK-175/SOP325
Surrogate: Acetylene			113 %	*66.4-153%*		"	"	"	
Surrogate: Acetylene	*RE2*		118 %	*66.4-153%*		*B2B0024*	*02/06/12*	*02/07/12*	

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Project Manager: Richard Fetzer	**US EPA Region 3, Eastern Response Branch**	**SDG:** 12034C
Project Number: R33911	**100 Gypsum Road**	**Reported:** 02/13/12 14:59
Project: Dimock Residential Groundwater	**Stroudsburg PA, 18360**	

Sample Results

Analyte	Reanalysis / Extract	Result	Qualifiers / Comments	Quantitation Limit	Units	Batch	Prepared	Analyzed	Method
Lab ID: 1202011-07									**Water - Sampled: 02/01/12 15:55**
Sample ID: HW34a-P									**Dissolved Gases by RSK-175**
Methane	RE2	470		3.9	ug/L	B2B0024	02/06/12	02/07/12	RSK-175/SOP325
Ethane		1.6		1.2	"	B2B0015	02/03/12	02/06/12	RSK-175/SOP325
Ethene		ND	U	1.1	"	"	"	"	RSK-175/SOP325
Surrogate: Acetylene			109 %	*66.4-153%*		"	"	"	
Surrogate: Acetylene	*RE2*		120 %	*66.4-153%*		*B2B0024*	*02/06/12*	*02/07/12*	
Lab ID: 1202011-08									**Water - Sampled: 02/01/12 10:10**
Sample ID: TB14									**Dissolved Gases by RSK-175**
Methane		1.4	B1, J	1.2	ug/L	B2B0015	02/03/12	02/06/12	RSK-175/SOP325
Ethane		ND	U	1.2	"	"	"	"	RSK-175/SOP325
Ethene		ND	U	1.1	"	"	"	"	RSK-175/SOP325
Surrogate: Acetylene			110 %	*66.4-153%*		"	"	"	
Lab ID: 1202011-09									**Water - Sampled: 02/02/12 10:15**
Sample ID: FB09									**Dissolved Gases by RSK-175**
Methane		1.3	B1, J	1.2	ug/L	B2B0015	02/03/12	02/06/12	RSK-175/SOP325
Ethane		ND	U	1.2	"	"	"	"	RSK-175/SOP325
Ethene		ND	U	1.1	"	"	"	"	RSK-175/SOP325
Surrogate: Acetylene			110 %	*66.4-153%*		"	"	"	
Lab ID: 1202011-10									**Water - Sampled: 02/02/12 10:29**
Sample ID: HW42z									**Dissolved Gases by RSK-175**
Methane		18	B1, J	1.2	ug/L	B2B0015	02/03/12	02/06/12	RSK-175/SOP325
Ethane		ND	U	1.2	"	"	"	"	RSK-175/SOP325
Ethene		ND	U	1.1	"	"	"	"	RSK-175/SOP325
Surrogate: Acetylene			115 %	*66.4-153%*		"	"	"	
Lab ID: 1202011-11									**Water - Sampled: 02/02/12 07:57**
Sample ID: TB16									**Dissolved Gases by RSK-175**
Methane		6.2		1.2	ug/L	B2B0015	02/03/12	02/07/12	RSK-175/SOP325
Ethane		ND	U	1.2	"	"	"	"	RSK-175/SOP325
Ethene		ND	U	1.1	"	"	"	"	RSK-175/SOP325
Surrogate: Acetylene			109 %	*66.4-153%*		"	"	"	

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Project Number: R33911	**100 Gypsum Road**	**Reported:** 02/13/12 14:59
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 B2B0015 - RSK175 - Dissolved HC Gases								**Prepared: 02/03/12 Analyzed: 02/06/12**		
								Dissolved Gases by RSK-175 - Quality Control		
Blank (B2B0015-BLK1)										
Methane	0.7	C1, J	1.2	ug/L						
Ethane	ND	U	1.2	"						
Ethene	ND	U	1.1	"						
Surrogate: Acetylene	*75.7*			"	*66.5*		114	*66.4-153*		
LCS (B2B0015-BS1)										
Methane	37.7		1.2	ug/L	44.1		85	70-130		200
Ethane	74.4		1.2	"	83.2		89	77-137		200
Ethene	72		1.1	"	78.3		92	78-138		200
Surrogate: Acetylene	*74.4*			"	*72.0*		103	*66.4-153*		
Matrix Spike (B2B0015-MS1)		**Source: 1202011-07**								
Methane	Not Reported	C2, Q10	1.2	ug/L	44.1	362	84	70-130		20
Ethane	78.6		1.2	"	83.2	1.58	93	70-130		20
Ethene	72.5		1.1	"	78.3	ND	93	70-130		20
Surrogate: Acetylene	*68.9*			"	*72.0*		96	*66.4-153*		
Matrix Spike Dup (B2B0015-MSD1)		**Source: 1202011-07**								
Methane	Not Reported	C2, Q10	1.2	ug/L	44.1	362	**NR**	70-130	**32**	20
Ethane	78.5		1.2	"	83.2	1.58	92	70-130	0.2	20
Ethene	73.3		1.1	"	78.3	ND	94	70-130	1	20
Surrogate: Acetylene	*71.2*			"	*72.0*		99	*66.4-153*		
Batch B2B0024 - RSK175 - Dissolved HC Gases								**Prepared: 02/06/12 Analyzed: 02/07/12**		
								Dissolved Gases by RSK-175 - Quality Control		
Blank (B2B0024-BLK1)										
Methane	0.7	C1, J	1.2	ug/L						
Ethane	ND	U	1.2	"						
Ethene	ND	U	1.1	"						
Surrogate: Acetylene	*72.2*			"	*66.5*		109	*66.4-153*		
LCS (B2B0024-BS1)										
Methane	33.9		1.2	ug/L	44.1		77	70-130		200
Ethane	70		1.2	"	83.2		84	77-137		200
Ethene	64.6		1.1	"	78.3		83	78-138		200
Surrogate: Acetylene	*57.6*			"	*72.0*		80	*66.4-153*		

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Project Number: R33911	**100 Gypsum Road**	**Reported:** 02/13/12 14:59
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Qualifiers and Comments

Q10 The analyte concentration in the unfortified sample is significantly greater than the concentration spiked into the matrix spike and matrix spike duplicate. The reported spike recovery is not a meaningful measure of the dataset's analytical accuracy.

NR Not Reported

J The reported result for this analyte should be considered an estimated value.

C2 The reported concentration for this analyte is above the calibration range of the instrument.

C1 The reported concentration for this analyte is below the quantitation limit.

B1 The concentration of this analyte found in this sample was less than five times the concentration found in the associated method blank.

U Not Detected

NR Not Reported

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

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Date: 2/13/2012

Subject: Analytical Testing Results - Project R33911
SDG: 12037A

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

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Project Manager: Richard Fetzer	**US EPA Region 3, Eastern Response Branch**	**SDG:** 12037A
Project Number: R33911	**100 Gypsum Road**	**Reported:** 02/13/12 15:17
Project: Dimock Residential Groundwater	**Stroudsburg PA, 18360**	

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Collected	Date Received
HW40	1202013-01	Water	02/02/12 15:39	02/04/12 15:35
HW40-P	1202013-02	Water	02/02/12 15:44	02/04/12 15:35
HW41	1202013-03	Water	02/02/12 16:12	02/04/12 15:35
HW41-P	1202013-04	Water	02/02/12 15:54	02/04/12 15:35
TB18	1202013-05	Water	02/02/12 08:05	02/04/12 15:35
HW28a	1202013-06	Water	02/03/12 11:49	02/04/12 15:35
HW28a-P	1202013-07	Water	02/03/12 11:52	02/04/12 15:35
HW39	1202013-08	Water	02/03/12 10:42	02/04/12 15:35
HW39-P	1202013-09	Water	02/03/12 11:13	02/04/12 15:35
TB19	1202013-10	Water	02/03/12 07:20	02/04/12 15:35
TB17	1202013-11	Water	02/02/12 08:00	02/04/12 15:35
TB20	1202013-12	Water	02/03/12 07:25	02/04/12 15:35
FB10	1202014-01	Water	02/03/12 14:09	02/06/12 09:15
HW09	1202014-02	Water	02/03/12 15:20	02/06/12 09:15
HW09-P	1202014-03	Water	02/03/12 15:16	02/06/12 09:15
HW28b-P	1202014-04	Water	02/03/12 14:27	02/06/12 09:15
TB22	1202014-05	Water	02/03/12 11:17	02/06/12 09:15
TB21	1202014-06	Water	02/03/12 07:56	02/06/12 09:15

SDG ID 12037A

Small amounts of methane were detected in the method blanks, field blanks and trip blanks. The highest level for a blank in this delivery group (received 2/4/12) was 3.2 ug/L in sample 1202013-05 (TB18). Reported methane values less than or equal to 16 ug/L in field samples are flagged as estimates due to possible contamination.

Work Order(s)

1202013

1202014

United States Environmental Protection Agency

Region 9 Laboratory

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Project Manager: Richard Fetzer	**US EPA Region 3, Eastern Response Branch**	**SDG:** 12037A
Project Number: R33911	**100 Gypsum Road**	**Reported:** 02/13/12 15:17
Project: Dimock Residential Groundwater	**Stroudsburg PA, 18360**	

Sample Results

Analyte	Reanalysis / Extract	Result	Qualifiers / Comments	Quantitation Limit	Units	Batch	Prepared	Analyzed	Method
Lab ID: 1202013-01									**Water - Sampled: 02/02/12 15:39**
Sample ID: HW40									**Dissolved Gases by RSK-175**
Methane		1.4	B1, J	1.2	ug/L	B2B0024	02/06/12	02/07/12	RSK-175/SOP325
Ethane		ND	U	1.2	"	"	"	"	RSK-175/SOP325
Ethene		ND	U	1.1	"	"	"	"	RSK-175/SOP325
Surrogate: Acetylene			112 %	*66.4-153%*		"	"	"	
Lab ID: 1202013-02									**Water - Sampled: 02/02/12 15:44**
Sample ID: HW40-P									**Dissolved Gases by RSK-175**
Methane		1.0	B1, C1, J	1.2	ug/L	B2B0024	02/06/12	02/07/12	RSK-175/SOP325
Ethane		ND	U	1.2	"	"	"	"	RSK-175/SOP325
Ethene		ND	U	1.1	"	"	"	"	RSK-175/SOP325
Surrogate: Acetylene			111 %	*66.4-153%*		"	"	"	
Lab ID: 1202013-03									**Water - Sampled: 02/02/12 16:12**
Sample ID: HW41									**Dissolved Gases by RSK-175**
Methane		4.0	B1, J	1.2	ug/L	B2B0024	02/06/12	02/07/12	RSK-175/SOP325
Ethane		ND	U	1.2	"	"	"	"	RSK-175/SOP325
Ethene		ND	U	1.1	"	"	"	"	RSK-175/SOP325
Surrogate: Acetylene			113 %	*66.4-153%*		"	"	"	
Lab ID: 1202013-04									**Water - Sampled: 02/02/12 15:54**
Sample ID: HW41-P									**Dissolved Gases by RSK-175**
Methane		3.8	B1, J	1.2	ug/L	B2B0024	02/06/12	02/07/12	RSK-175/SOP325
Ethane		ND	U	1.2	"	"	"	"	RSK-175/SOP325
Ethene		ND	U	1.1	"	"	"	"	RSK-175/SOP325
Surrogate: Acetylene			114 %	*66.4-153%*		"	"	"	
Lab ID: 1202013-05									**Water - Sampled: 02/02/12 08:05**
Sample ID: TB18									**Dissolved Gases by RSK-175**
Methane		3.2	B1, J	1.2	ug/L	B2B0024	02/06/12	02/08/12	RSK-175/SOP325
Ethane		ND	U	1.2	"	"	"	"	RSK-175/SOP325
Ethene		ND	U	1.1	"	"	"	"	RSK-175/SOP325
Surrogate: Acetylene			117 %	*66.4-153%*		"	"	"	
Lab ID: 1202013-06									**Water - Sampled: 02/03/12 11:49**
Sample ID: HW28a									**Dissolved Gases by RSK-175**
Methane		1.0	B1, C1, J	1.2	ug/L	B2B0024	02/06/12	02/07/12	RSK-175/SOP325
Ethane		ND	U	1.2	"	"	"	"	RSK-175/SOP325
Ethene		ND	U	1.1	"	"	"	"	RSK-175/SOP325
Surrogate: Acetylene			115 %	*66.4-153%*		"	"	"	
Lab ID: 1202013-07									**Water - Sampled: 02/03/12 11:52**

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Project Manager: Richard Fetzer	**US EPA Region 3, Eastern Response Branch**	**SDG:** 12037A
Project Number: R33911	**100 Gypsum Road**	**Reported:** 02/13/12 15:17
Project: Dimock Residential Groundwater	**Stroudsburg PA, 18360**	

Sample Results

Analyte	Reanalysis / Extract	Result	Qualifiers / Comments	Quantitation Limit	Units	Batch	Prepared	Analyzed	Method
Lab ID: 1202013-07									**Water - Sampled: 02/03/12 11:52**
Sample ID: HW28a-P									**Dissolved Gases by RSK-175**
Methane		1.0	B1, C1, J	1.2	ug/L	B2B0024	02/06/12	02/07/12	RSK-175/SOP325
Ethane		ND	U	1.2	"	"	"	"	RSK-175/SOP325
Ethene		ND	U	1.1	"	"	"	"	RSK-175/SOP325
Surrogate: Acetylene			113 %	*66.4-153%*		"	"	"	
Lab ID: 1202013-08									**Water - Sampled: 02/03/12 10:42**
Sample ID: HW39									**Dissolved Gases by RSK-175**
Methane	RE2	8,100		97	ug/L	B2B0024	02/06/12	02/08/12	RSK-175/SOP325
Ethane		5.3		1.2	"	"	"	02/07/12	RSK-175/SOP325
Ethene		ND	U	1.1	"	"	"	"	RSK-175/SOP325
Surrogate: Acetylene			115 %	*66.4-153%*		"	"	"	
Surrogate: Acetylene	*RE2*		116 %	*66.4-153%*		"	"	*02/08/12*	
Lab ID: 1202013-09									**Water - Sampled: 02/03/12 11:13**
Sample ID: HW39-P									**Dissolved Gases by RSK-175**
Methane		27		1.2	ug/L	B2B0024	02/06/12	02/07/12	RSK-175/SOP325
Ethane		ND	U	1.2	"	"	"	"	RSK-175/SOP325
Ethene		ND	U	1.1	"	"	"	"	RSK-175/SOP325
Surrogate: Acetylene			116 %	*66.4-153%*		"	"	"	
Lab ID: 1202013-10									**Water - Sampled: 02/03/12 07:20**
Sample ID: TB19									**Dissolved Gases by RSK-175**
Methane		2.4	B1, J	1.2	ug/L	B2B0024	02/06/12	02/08/12	RSK-175/SOP325
Ethane		ND	U	1.2	"	"	"	"	RSK-175/SOP325
Ethene		ND	U	1.1	"	"	"	"	RSK-175/SOP325
Surrogate: Acetylene			116 %	*66.4-153%*		"	"	"	
Lab ID: 1202013-11									**Water - Sampled: 02/02/12 08:00**
Sample ID: TB17									**Dissolved Gases by RSK-175**
Methane		1.6	B1, J	1.2	ug/L	B2B0024	02/06/12	02/08/12	RSK-175/SOP325
Ethane		ND	U	1.2	"	"	"	"	RSK-175/SOP325
Ethene		ND	U	1.1	"	"	"	"	RSK-175/SOP325
Surrogate: Acetylene			116 %	*66.4-153%*		"	"	"	
Lab ID: 1202013-12									**Water - Sampled: 02/03/12 07:25**
Sample ID: TB20									**Dissolved Gases by RSK-175**
Methane		1.3	B1, J	1.2	ug/L	B2B0024	02/06/12	02/08/12	RSK-175/SOP325
Ethane		ND	U	1.2	"	"	"	"	RSK-175/SOP325
Ethene		ND	U	1.1	"	"	"	"	RSK-175/SOP325
Surrogate: Acetylene			115 %	*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:** 12037A
Project Number: R33911	**100 Gypsum Road**	**Reported:** 02/13/12 15:17
Project: Dimock Residential Groundwater	**Stroudsburg PA, 18360**	

Sample Results

Analyte	Reanalysis / Extract	Result	Qualifiers / Comments	Quantitation Limit	Units	Batch	Prepared	Analyzed	Method
Lab ID: 1202014-01									**Water - Sampled: 02/03/12 14:09**
Sample ID: FB10									**Dissolved Gases by RSK-175**
Methane		1.3	B1, J	1.2	ug/L	B2B0024	02/06/12	02/08/12	RSK-175/SOP325
Ethane		ND	U	1.2	"	"	"	"	RSK-175/SOP325
Ethene		ND	U	1.1	"	"	"	"	RSK-175/SOP325
Surrogate: Acetylene			102 %	*66.4-153%*		"	"	"	
Lab ID: 1202014-02									**Water - Sampled: 02/03/12 15:20**
Sample ID: HW09									**Dissolved Gases by RSK-175**
Methane		4.3	B1, J	1.2	ug/L	B2B0024	02/06/12	02/07/12	RSK-175/SOP325
Ethane		ND	U	1.2	"	"	"	"	RSK-175/SOP325
Ethene		ND	U	1.1	"	"	"	"	RSK-175/SOP325
Surrogate: Acetylene			113 %	*66.4-153%*		"	"	"	
Lab ID: 1202014-03									**Water - Sampled: 02/03/12 15:16**
Sample ID: HW09-P									**Dissolved Gases by RSK-175**
Methane		1.8	B1, J	1.2	ug/L	B2B0024	02/06/12	02/07/12	RSK-175/SOP325
Ethane		ND	U	1.2	"	"	"	"	RSK-175/SOP325
Ethene		ND	U	1.1	"	"	"	"	RSK-175/SOP325
Surrogate: Acetylene			116 %	*66.4-153%*		"	"	"	
Lab ID: 1202014-04									**Water - Sampled: 02/03/12 14:27**
Sample ID: HW28b-P									**Dissolved Gases by RSK-175**
Methane		0.9	B1, C1, J	1.2	ug/L	B2B0024	02/06/12	02/08/12	RSK-175/SOP325
Ethane		ND	U	1.2	"	"	"	"	RSK-175/SOP325
Ethene		ND	U	1.1	"	"	"	"	RSK-175/SOP325
Surrogate: Acetylene			117 %	*66.4-153%*		"	"	"	
Lab ID: 1202014-05									**Water - Sampled: 02/03/12 11:17**
Sample ID: TB22									**Dissolved Gases by RSK-175**
Methane		1.0	B1, C1, J	1.2	ug/L	B2B0024	02/06/12	02/08/12	RSK-175/SOP325
Ethane		ND	U	1.2	"	"	"	"	RSK-175/SOP325
Ethene		ND	U	1.1	"	"	"	"	RSK-175/SOP325
Surrogate: Acetylene			112 %	*66.4-153%*		"	"	"	
Lab ID: 1202014-06									**Water - Sampled: 02/03/12 07:56**
Sample ID: TB21									**Dissolved Gases by RSK-175**
Methane		1.0	B1, C1, J	1.2	ug/L	B2B0024	02/06/12	02/08/12	RSK-175/SOP325
Ethane		ND	U	1.2	"	"	"	"	RSK-175/SOP325
Ethene		ND	U	1.1	"	"	"	"	RSK-175/SOP325
Surrogate: Acetylene			112 %	*66.4-153%*		"	"	"	

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Project Manager: Richard Fetzer	**US EPA Region 3, Eastern Response Branch**	**SDG:** 12037A
Project Number: R33911	**100 Gypsum Road**	**Reported:** 02/13/12 15:17
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 B2B0024 - RSK175 - Dissolved HC Gases									**Prepared: 02/06/12 Analyzed: 02/07/12**	
									Dissolved Gases by RSK-175 - Quality Control	
Blank (B2B0024-BLK1)										
Methane	0.7	C1, J	1.2	ug/L						
Ethane	ND	U	1.2	"						
Ethene	ND	U	1.1	"						
Surrogate: Acetylene	*72.2*			"	*66.5*		109	*66.4-153*		
LCS (B2B0024-BS1)										
Methane	33.9		1.2	ug/L	44.1		77	70-130		200
Ethane	70		1.2	"	83.2		84	77-137		200
Ethene	64.6		1.1	"	78.3		83	78-138		200
Surrogate: Acetylene	*57.6*			"	*72.0*		80	*66.4-153*		
Matrix Spike (B2B0024-MS1)		**Source: 1202013-08**								
Methane	Not Reported	C2, Q10	1.2	ug/L	44.1	6,720	**NR**	70-130		20
Ethane	90.9		1.2	"	83.2	5.34	103	70-130		20
Ethene	79.6		1.1	"	78.3	ND	102	70-130		20
Surrogate: Acetylene	*71.2*			"	*72.0*		99	*66.4-153*		
Matrix Spike Dup (B2B0024-MSD1)		**Source: 1202013-08**								
Methane	Not Reported	C2, Q10	1.2	ug/L	44.1	6,720	**NR**	70-130	**34**	20
Ethane	89.1		1.2	"	83.2	5.34	101	70-130	2	20
Ethene	79.1		1.1	"	78.3	ND	101	70-130	0.7	20
Surrogate: Acetylene	*70.0*			"	*72.0*		97	*66.4-153*		
Batch B2B0041 - RSK175 - Dissolved HC Gases									**Prepared & Analyzed: 02/09/12**	
									Dissolved Gases by RSK-175 - Quality Control	
Blank (B2B0041-BLK1)										
Methane	0.7	C1, J	1.2	ug/L						
Ethane	ND	U	1.2	"						
Ethene	ND	U	1.1	"						
Surrogate: Acetylene	*73.5*			"	*66.5*		111	*66.4-153*		
LCS (B2B0041-BS1)										
Methane	44.9		1.2	ug/L	44.1		102	70-130		200
Ethane	88.6		1.2	"	83.2		106	77-137		200
Ethene	83.2		1.1	"	78.3		106	78-138		200
Surrogate: Acetylene	*76.2*			"	*72.0*		106	*66.4-153*		

United States Environmental Protection Agency
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Project Manager: Richard Fetzer	**US EPA Region 3, Eastern Response Branch**	**SDG:** 12037A
Project Number: R33911	**100 Gypsum Road**	**Reported:** 02/13/12 15:17
Project: Dimock Residential Groundwater	**Stroudsburg PA, 18360**	

Qualifiers and Comments

Q10 The analyte concentration in the unfortified sample is significantly greater than the concentration spiked into the matrix spike and matrix spike duplicate. The reported spike recovery is not a meaningful measure of the dataset's analytical accuracy.

NR Not Reported

J The reported result for this analyte should be considered an estimated value.

C2 The reported concentration for this analyte is above the calibration range of the instrument.

C1 The reported concentration for this analyte is below the quantitation limit.

B1 The concentration of this analyte found in this sample was less than five times the concentration found in the associated method blank.

U Not Detected

NR Not Reported

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

United States Environmental Protection Agency
Region 9 Laboratory

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

Date: 2/13/2012

Subject: Analytical Testing Results - Project R33911
SDG: 12038C

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:** 12038C
Project Number: R33911	**100 Gypsum Road**	**Reported:** 02/13/12 15:51
Project: Dimock Residential Groundwater	**Stroudsburg PA, 18360**	

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Collected	Date Received
EB02	1202017-01	Water	02/05/12 15:00	02/07/12 11:10
HW45	1202017-02	Water	02/06/12 10:28	02/07/12 11:10
HW45-P	1202017-03	Water	02/06/12 11:06	02/07/12 11:10
TB24	1202017-04	Water	02/06/12 07:10	02/07/12 11:10
HW43	1202017-05	Water	02/06/12 12:06	02/07/12 11:10
HW43-P	1202017-06	Water	02/06/12 12:19	02/07/12 11:10
TB23	1202017-07	Water	02/06/12 07:05	02/07/12 11:10

SDG ID 12038C

Small amounts of methane were detected in the method blanks, field blanks and trip blanks. Reported methane values less than or equal to 5 ug/L are flagged as estimates due to possible contamination.

Work Order(s)

1202017

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:** 12038C
Project Number: R33911	**100 Gypsum Road**	**Reported:** 02/13/12 15:51
Project: Dimock Residential Groundwater	**Stroudsburg PA, 18360**	

Sample Results

Analyte	Reanalysis / Extract	Result	Qualifiers / Comments	Quantitation Limit	Units	Batch	Prepared	Analyzed	Method
Lab ID: 1202017-01									**Water - Sampled: 02/05/12 15:00**
Sample ID: EB02									**Dissolved Gases by RSK-175**
Methane		0.9	B1, C1, J	1.2	ug/L	B2B0032	02/08/12	02/09/12	RSK-175/SOP325
Ethane		ND	U	1.2	"	"	"	"	RSK-175/SOP325
Ethene		ND	U	1.1	"	"	"	"	RSK-175/SOP325
Surrogate: Acetylene			118 %	*66.4-153%*		"	"	"	
Lab ID: 1202017-02									**Water - Sampled: 02/06/12 10:28**
Sample ID: HW45									**Dissolved Gases by RSK-175**
Methane		1.0	B1, C1, J	1.2	ug/L	B2B0032	02/08/12	02/08/12	RSK-175/SOP325
Ethane		ND	U	1.2	"	"	"	"	RSK-175/SOP325
Ethene		ND	U	1.1	"	"	"	"	RSK-175/SOP325
Surrogate: Acetylene			116 %	*66.4-153%*		"	"	"	
Lab ID: 1202017-03									**Water - Sampled: 02/06/12 11:06**
Sample ID: HW45-P									**Dissolved Gases by RSK-175**
Methane		0.9	B1, C1, J	1.2	ug/L	B2B0032	02/08/12	02/08/12	RSK-175/SOP325
Ethane		ND	U	1.2	"	"	"	"	RSK-175/SOP325
Ethene		ND	U	1.1	"	"	"	"	RSK-175/SOP325
Surrogate: Acetylene			116 %	*66.4-153%*		"	"	"	
Lab ID: 1202017-04									**Water - Sampled: 02/06/12 07:10**
Sample ID: TB24									**Dissolved Gases by RSK-175**
Methane		0.8	B1, C1, J	1.2	ug/L	B2B0032	02/08/12	02/09/12	RSK-175/SOP325
Ethane		ND	U	1.2	"	"	"	"	RSK-175/SOP325
Ethene		ND	U	1.1	"	"	"	"	RSK-175/SOP325
Surrogate: Acetylene			115 %	*66.4-153%*		"	"	"	
Lab ID: 1202017-05									**Water - Sampled: 02/06/12 12:06**
Sample ID: HW43									**Dissolved Gases by RSK-175**
Methane		0.9	B1, C1, J	1.2	ug/L	B2B0032	02/08/12	02/08/12	RSK-175/SOP325
Ethane		ND	U	1.2	"	"	"	"	RSK-175/SOP325
Ethene		ND	U	1.1	"	"	"	"	RSK-175/SOP325
Surrogate: Acetylene			117 %	*66.4-153%*		"	"	"	
Lab ID: 1202017-06									**Water - Sampled: 02/06/12 12:19**
Sample ID: HW43-P									**Dissolved Gases by RSK-175**
Methane		0.9	B1, C1, J	1.2	ug/L	B2B0032	02/08/12	02/08/12	RSK-175/SOP325
Ethane		ND	U	1.2	"	"	"	"	RSK-175/SOP325
Ethene		ND	U	1.1	"	"	"	"	RSK-175/SOP325
Surrogate: Acetylene			117 %	*66.4-153%*		"	"	"	
Lab ID: 1202017-07									**Water - Sampled: 02/06/12 07:05**

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:** 12038C
Project Number: R3391I	**100 Gypsum Road**	**Reported:** 02/13/12 15:51
Project: Dimock Residential Groundwater	**Stroudsburg PA, 18360**	

Sample Results

Analyte	Reanalysis / Extract	Result	Qualifiers / Comments	Quantitation Limit	Units	Batch	Prepared	Analyzed	Method
Lab ID: 1202017-07									**Water - Sampled: 02/06/12 07:05**
Sample ID: TB23									**Dissolved Gases by RSK-175**
Methane		0.9	B1, C1, J	1.2	ug/L	B2B0032	02/08/12	02/09/12	RSK-175/SOP325
Ethane		ND	U	1.2	"	"	"	"	RSK-175/SOP325
Ethene		ND	U	1.1	"	"	"	"	RSK-175/SOP325
Surrogate: Acetylene			111 %	*66.4-153%*		"	"	"	

Quality Control

Analyte	Result	Qualifiers / Comments	Quantitation Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B2B0032 - RSK175 - Dissolved HC Gases										**Prepared & Analyzed: 02/08/12**
										Dissolved Gases by RSK-175 - Quality Control
Blank (B2B0032-BLK1)										
Methane	0.9	C1, J	1.2	ug/L						
Ethane	ND	U	1.2	"						
Ethene	ND	U	1.1	"						
Surrogate: Acetylene	*78.5*			"	*66.5*		118	*66.4-153*		
LCS (B2B0032-BS1)										
Methane	47.7		1.2	ug/L	44.1		108	70-130		200
Ethane	93.9		1.2	"	83.2		113	77-137		200
Ethene	88		1.1	"	78.3		112	78-138		200
Surrogate: Acetylene	*79.2*			"	*72.0*		110	*66.4-153*		
Matrix Spike (B2B0032-MS1)		**Source: 1202017-02**								
Methane	43.2		1.2	ug/L	44.1	0.966	96	70-130		20
Ethane	84.7		1.2	"	83.2	ND	102	70-130		20
Ethene	80.2		1.1	"	78.3	ND	102	70-130		20
Surrogate: Acetylene	*76.2*			"	*72.0*		106	*66.4-153*		
Matrix Spike Dup (B2B0032-MSD1)		**Source: 1202017-02**								
Methane	45.5		1.2	ug/L	44.1	0.966	101	70-130	5	20
Ethane	89.4		1.2	"	83.2	ND	107	70-130	5	20
Ethene	84		1.1	"	78.3	ND	107	70-130	5	20
Surrogate: Acetylene	*77.4*			"	*72.0*		107	*66.4-153*		

United States Environmental Protection Agency
Region 9 Laboratory
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Phone:(510) 412-2300 Fax:(510) 412-2302

Project Manager: Richard Fetzer	**US EPA Region 3, Eastern Response Branch**	**SDG:** 12038C
Project Number: R33911	**100 Gypsum Road**	**Reported:** 02/13/12 15:51
Project: Dimock Residential Groundwater	**Stroudsburg PA, 18360**	

Qualifiers and Comments

J The reported result for this analyte should be considered an estimated value.

C1 The reported concentration for this analyte is below the quantitation limit.

B1 The concentration of this analyte found in this sample was less than five times the concentration found in the associated method blank.

U Not Detected

NR Not Reported

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

00018

ICF INTERNATIONAL

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: February ~~14~~ 13, 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 36 water samples for the Dimock Residential Groundwater Site project, Case R33911, SDGs 12034C, 12037A, and 12038C, Work Orders 1202011, 1202013, 1202014 and 1202017 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.

If you have any questions regarding this information please contact me at extension 22390.

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EPA Region 9 Laboratory

DATA PACKAGE

Analysis:	**Dissolved Gasses**
Project Number:	**R33911**
SDG Number:	**12034C, 12037A, and 12038C**
Work Order:	**1202011, 1202013, 1202014, and 1202017**
ESAT DCN:	**14503**

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

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REVIEW FORMS

General Project Management and ESAT Contractor Oversight Review

Project Number: R33911

SDG: 12034C, 12037A, and 12038C

Analysis: dissolved gasses

Number of Pages: 296

Reviewer: Bauer

- ☑ 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: _____

Reviewer Signature _____ Date _____

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ESAT Region 9 **ICF International**
Case: R33911 **Analysis:** Dissolved Gasses **TDF:** 01001084 **Matrix:** water
DCN: 14503 **Site:** Dimock Residential Groundwater Site **SDG:** 12034C, 12037A, and 12038C

ESAT REGION 9 DATA PACKAGE TECHNICAL REVIEW GUIDE

Reviewer:	Package Prep (P): RA	Technical (T):	Final (F):
	Date: 2/10/12	Date: 2/10/12	Date: 2/13/12

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

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: 14503 **Site:** Dimock Residential Groundwater Site **SDG:** 12034C, 12037A, and 12038C

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

Quantitation Limit Standards

P	T	F	N/A	
✓	✓	¤	¤	Percent recoveries of 60-140% met; outliers noted and flagged

Laboratory Control Samples

P	T	F	N/A	
✓	¤	✓		Percent recoveries met. If not, discrepancy form included unless not required because: _____

Method Blanks

P	T	F	N/A	
✓	¤	✓		Present and no target analyte results > ½ QL; if not, flag data as appropriate

MS/MSD or Duplicate Data

P	T	F	N/A	
✓	¤	✓	¤	Percent recoveries and RPDs were met; outliers are noted and flagged. Note significant deviations in LIMS memo field

Sample Data

P	T	F	N/A	
✓	¤	✓	¤	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

P	T	F	N/A	
¤	¤	¤	✓	Storage blank data present
¤	¤	¤	✓	Other data, as applicable _____

Standards Records

P	T	F	N/A	
✓	✓	✓	¤	Standards records from LIMS (and logbook pages as needed)

Canister Certification Data (TO 15 only)

P	T	F	N/A	
¤	¤	¤	✓	Data and supporting QC present

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

WORK ORDER NOTES - 1202011

1202011 - US EPA Region 3, Eastern Response
Dimock Residential Groundwater

RSK-175: Small amount of methane contamination in the method blanks, < QL.

RSK-175: Methane result for sample 1202011-10 was flagged B since the concentration of this analyte in the sample was less than five time the concentration found in the associated trip blank.

MS/MSD Methane not reported because the analyte concentration in the unfortified sample is significantly greater the concentration spiked into the matrix spike and matrix spike duplicate. The reported spike recovery is not a meaningful measure of the dataset's analytical accuracy. RH 2/10/12

WORK ORDER NOTES - 1202013

1202013 - US EPA Region 3, Eastern Response
Dimock Residential Groundwater

[redacted]

TPH DRO:MS/MSD were not extracted due to insufficient amount of samples. TD 02/10/12

RSK-175: Small amount of methane contamination in the method blanks, < QL.

RSK-175: Methane result for samples 1202013-03 & 04 was flagged B since the concentration of this analyte in the sample was less than five time the concentration found in the associated trip blank.

MS/MSD Methane not reported because the analyte concentration in the unfortified sample is significantly greater the concentration spiked into the matrix spike and matrix spike duplicate. The reported spike recovery is not a meaningful measure of the dataset's analytical accuracy. RH 2/10/12

WORK ORDER NOTES - 1202014

1202014 - US EPA Region 3, Eastern Response
Dimock Residential Groundwater

TPH DRO:MS/MSD were not extracted due to insufficient amount of samples. TD 02/10/12

RSK-175: Methane result for sample 1202014-02 was flagged B since the concentration of this analyte in the sample was less than five time the concentration found in the associated trip blank.

RSK-175: Small amount of methane contamination in the method blanks, < QL. RH 2/10/12

WORK ORDER NOTES - 1202017

1202017 - USEPA Region 8 - Eastern Regional
Direct - Confidential Ground Water

RSK-175: Small amount of methane contamination in the method blanks, < QL. RH 2/10/12

Organics Daily Folder Preparation/Technical Review Guide

Analysis Method	**RSK-175**	**Analyst Initial**	RH	**Reviewer Initial**	[illegible]	**Batch/ Sequence**	**2010040**
Instrument ID	**AG6890N-6**	**Date Analyzed**	1/26/12	**Date**	01/27/12	**Chemstation Last Update**	**1/27/12 11:26:56**
Cases	**ICAL**			**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
	✓	✓	Runlog (Present, legible, peer reviewed)
✓			Tune/ Degradation Standard
	✓	✓	Initial Calibration (SOP criteria for number of levels, concentration, and %RSD). Manual calculation. Include summary for daily review.
✓			Continuing Calibration Verification (frequency, recovery, and %D). Manual calculation.
✓			QLS (level, frequency, and recovery) (include Chemstation summary)
✓			Method / Extraction / Storage Blanks (frequency and contamination levels)
✓			Surrogate Recoveries
✓			IS Areas (SOP criteria met)
✓			LCS (level, frequency, and recovery) (include Chemstation summary)
✓			MS/MSD
✓			Samples (within calibration range, results calculated correctly)
✓			Manual Integration Verified
	✓	✓	Standard Prep Log (all pages present, legible, peer reviewed, legible)
✓			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
								Propane and Butane are not calibrated. They are added simply as presumptive retention time markers for informational purposes only.

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Organics Daily Folder Preparation/Technical Review Guide

Analysis Method	Dissolved Gasses	Analyst Initial	RH	Reviewer Initial	[illegible]	Batch/ Sequence	2020016/B2B0015
Instrument ID	AG6890N-6	Date Analyzed	2/6/12	Date	2/7/12	Chemstation Last Update	1/27/12 1:26:56
Cases	R33911			SDGs	12033A 12034C		

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
	✓	✓	Runlog (Present, legible, peer reviewed)
✓			Tune/ Degradation Standard
	✓	✓	Initial Calibration (SOP criteria for number of levels, concentration, and %RSD). Manual calculation. Include summary for daily review.
	✓	✓	Continuing Calibration Verification (frequency, recovery, and %D). Manual calculation.
	✓	✓	QLS (level, frequency, and recovery) (include Chemstation summary)
	✓	✓	Method / Extraction / Storage Blanks (frequency and contamination levels)
	✓	✓	Surrogate Recoveries
✓			IS Areas (SOP criteria met)
	✓	✓	LCS (level, frequency, and recovery) (include Chemstation summary)
	✓	✓	MS/MSD
	✓	✓	Samples (within calibration range, results calculated correctly)
✓			Manual Integration Verified
✓			Standard Prep Log (all pages present, legible, peer reviewed, legible)
	✓		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
BLK1	0206126R04	.716	≤ 0.615					Methane hit ≤ QL but ≥ ½ QL
MS/MSD	0206126R18/19							Methane fails recovery and RPD

Organics Daily Folder Preparation/Technical Review Guide

Analysis Method	Dissolved Gasses	Analyst Initial	RIT	Reviewer Initial	SL	Batch/ Sequence	2020021/B2B0024
Instrument ID	AG6890N-6	Date Analyzed	2/8/12	Date	2/9/12	Chemstation Last Update	1/27/12 1:26:56
Cases	R33911		SL, 2/9/12	SDGs	12034C 12037A		

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
	/	/	Runlog (Present, legible, peer reviewed)
/			Tune/ Degradation Standard
	/	/	Initial Calibration (SOP criteria for number of levels, concentration, and %RSD). Manual calculation. Include summary for daily review.
	/	/	Continuing Calibration Verification (frequency, recovery, and %D). Manual calculation.
	/	/	QLS (level, frequency, and recovery) (include Chemstation summary)
	/	/	Method / Extraction / Storage Blanks (frequency and contamination levels)
/	/	/	Surrogate Recoveries
/			IS Areas (SOP criteria met)
	/	/	LCS (level, frequency, and recovery) (include Chemstation summary)
	/	/	MS/MSD
	/	/	Samples (within calibration range, results calculated correctly)
/			Manual Integration Verified
/			Standard Prep Log (all pages present, legible, peer reviewed, legible)
	/	/	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
BLK1	0207126R04	.698	≤ 0.615					Methane hit ≤ QL but ≥ ½ QL
MS/MSD	0207126R06 /07							Methane fails recovery and RPD Large hit in the spiked sample
								Check 1202013-09 for
								carry-over. SL 2/9/12.

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Organics Daily Folder Preparation/Technical Review Guide

Analysis Method	Dissolved Gasses	Analyst Initial	RH	Reviewer Initial	SL	Batch/ Sequence	2020026/B2B0032
Instrument ID	AG6890N-6	Date Analyzed	2/9/12	Date	2/9/12	Chemstation Last Update	1/27/12 1:26:56
Cases	R33911		RH 2/9/12	SDGs	12030A, 12033A, 12038C, 12039A		

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
	✓	✓	Runlog (Present, legible, peer reviewed)
✓			Tune/ Degradation Standard
	✓	✓	Initial Calibration (SOP criteria for number of levels, concentration, and %RSD). Manual calculation. Include summary for daily review.
	✓	✓	Continuing Calibration Verification (frequency, recovery, and %D). Manual calculation.
	✓	✓	QLS (level, frequency, and recovery) (include Chemstation summary)
	✓	✓	Method / Extraction / Storage Blanks (frequency and contamination levels)
	✓	✓	Surrogate Recoveries
✓			IS Areas (SOP criteria met)
	✓	✓	LCS (level, frequency, and recovery) (include Chemstation summary)
	✓	✓	MS/MSD
	✓	✓	Samples (within calibration range, results calculated correctly)
✓			Manual Integration Verified
✓			Standard Prep Log (all pages present, legible, peer reviewed, legible)
	✓	✓	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
BLK1	0208126R04	.921	≤ 0.615					Methane hit ≤ QL but ≥ ½ QL
								Check for carry-over:
								1202005-11RE1 & 1202020-12.
								SL 2/9/12.

USEPA Region 9 Laboratory
Organic Analysis Summary

Case: R33911
SDG: 12034C
Analysis: Dissolved Gasses

Analyst: RH
Reviewer:

Sample ID	Sample Runs		
Instrument:	AG6890N-6	AG6890N-6	AG6890N-6
Analysis Date:	2/6/2012	2/7/2012	
Sequence:	2020016	2020021	
1202011-01	RPT		
1202011-02	RPT		
1202011-03	RPT		
1202011-04	RPT		
1202011-05	RPT		
1202011-06	C1 OC		
1202011-06RE1 0.08 ML	NU NO SURROGATE		
1202011-06RE2 0.08 ML		RPT C1	
1202011-07	C1 OC		
1202011-07RE1 5.0 ML	NU NO SURROGATE		
1202011-07RE2 5.0 ML		RPT C1	
1202011-08	RPT		
1202011-09	RPT		
1202011-10	RPT		
1202011-11	RPT		
B2B0015-BLK1	RPT		
B2B0015-BS1	RPT		
B2B0015-MS1 11-07	RPT		
B2B0015-MSD1 11-07	RPT		
B2B0024-BLK1		RPT	
B2B0024-BS1		RPT	

Definitions

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

USEPA Region 9 Laboratory
Organic Analysis Summary

Case: R33911
SDG: 12037A
Analysis: Dissolved Gasses

Analyst: RH
Reviewer: [illegible]

Sample ID	Sample Runs		
Instrument:	AG6890N-6	AG6890N-6	AG6890N-6
Analysis Date:	2/1 ~~2/6/2012~~ 2/7/12	2/9/2012	
Sequence:	2/10/12 2020016 21	2020032	
1202013-01	RPT		
1202013-02	RPT		
1202013-03	RPT		
1202013-04	RPT		
1202013-05	RPT		
1202013-06	RPT		
1202013-07	RPT		
1202013-08	C1 OC		
1202013-08RE1 0.5ML	C1 OC		
1202013-08RE2 0.2ML	RPT C1		
1202013-09	RPT		
1202013-09RE1		NU CONFIRMS NO CARRY OVER	
1202013-10	RPT		
1202013-11	RPT		
1202013-12	RPT		
1202014-01	RPT		
1202014-02	RPT		
1202014-03	RPT		
1202014-04	RPT		
1202014-05	RPT		
1202014-06	RPT		
B2B0024-BLK1	RPT		
B2B0024-BS1	RPT		
B2B0024-MS1 13-08	RPT C1 OC		
B2B0024-MSD1 13-08	RPT C1 OC		

Definitions

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

USEPA Region 9 Laboratory
Organic Analysis Summary

Case: R33911
SDG: 12038C
Analysis: Dissolved Gasses

Analyst: RH
Reviewer:

Sample ID	Sample Runs		
Instrument:	AG6890N-6	AG6890N-6	AG6890N-6
Analysis Date:	2/8/2012	2/9/2012	
Sequence:	2020026	2020032	
1202017-01	RPT		
1202017-02	RPT		
1202017-03	RPT		
1202017-04	RPT		
1202017-05	RPT		
1202017-06	RPT		
1202017-07	RPT		
B2B0032-BLK1	RPT		
B2B0032-BS1	RPT		
B2B0032-MS1 17-02	RPT		
B2B0032-MSD1 17-02	RPT		

Definitions

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

00035

SAMPLE TRACKING FORMS

:00016

DIM0278627

DIM0278662

WORK ORDER

Printed: 2/3/2012 12:12:37PM

1202011

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
1Cooler	Default Cooler	2	Yes	Yes	Yes	No	Yes	
2Cooler	Default Cooler	2	Yes	Yes	Yes	No	Yes	
3Cooler	Default Cooler	2	Yes	Yes	Yes	No	Yes	
4Cooler	Default Cooler	1	Yes	Yes	Yes	No	Yes	

Date Due:	02/25/12 15:00 (21 day TAT)	SDG:	12034C
Received By:	Jack Berges	Date Received:	02/03/12 10:00
Logged In By:	Garrett Peterson	Date Logged In:	02/03/12 11:07

Analysis	Hold Time Expires	Comments
1202011-01 HW42 [Water] Sampled 02/02/12 10:28 Pacific		
Dissolved HC Gases	02/16/12	5 day prelim results
TPH - Extractable	02/09/12	
TPH - Purgeable	02/16/12	
1202011-02 HW46 [Water] Sampled 02/02/12 11:39 Pacific		
TPH - Purgeable	02/16/12	
Dissolved HC Gases	02/16/12	5 day prelim results
TPH - Extractable	02/09/12	
1202011-03 HW46-P [Water] Sampled 02/02/12 11:24 Pacific		
TPH - Extractable	02/09/12	
TPH - Purgeable	02/16/12	
Dissolved HC Gases	02/16/12	5 day prelim results
1202011-04 TB15 [Water] Sampled 02/02/12 07:50 Pacific		
TPH - Purgeable	02/16/12	
Dissolved HC Gases	02/16/12	5 day prelim results

WORK ORDER

Printed: 2/3/2012 12:12:37PM

1202011

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
1202011-05 FB08 [Water] Sampled 02/01/12 14:45 Pacific		
TPH - Purgeable	02/15/12	
Dissolved HC Gases	02/15/12	5 day prelim results
TPH - Extractable	02/08/12	
1202011-06 HW34a [Water] Sampled 02/01/12 15:47 Pacific		
TPH - Purgeable	02/15/12	
TPH - Extractable	02/08/12	
Dissolved HC Gases	02/15/12	5 day prelim results
1202011-07 HW34a-P [Water] Sampled 02/01/12 15:55 Pacific		**Extra volume for lab QC**
TPH - Purgeable	02/15/12	
Dissolved HC Gases	02/15/12	5 day prelim results
TPH - Extractable	02/08/12	
1202011-08 TB14 [Water] Sampled 02/01/12 10:10 Pacific		
TPH - Purgeable	02/15/12	
Dissolved HC Gases	02/15/12	5 day prelim results
1202011-09 FB09 [Water] Sampled 02/02/12 10:15 Pacific		
TPH - Extractable	02/09/12	
TPH - Purgeable	02/16/12	
Dissolved HC Gases	02/16/12	5 day prelim results
1202011-10 HW42z [Water] Sampled 02/02/12 10:29 Pacific		
TPH - Extractable	02/09/12	
TPH - Purgeable	02/16/12	
Dissolved HC Gases	02/16/12	5 day prelim results
1202011-11 TB16 [Water] Sampled 02/02/12 07:57 Pacific		
Dissolved HC Gases	02/16/12	5 day prelim results
TPH - Purgeable	02/16/12	

Reviewed By

Date

USEPA CLP Generic COC (LAB COPY)
DateShipped: 2/2/2012
CarrierName: FedEx
AirbillNo: 7931 8684 8023

CHAIN OF CUSTODY RECORD

Case #: CT5865

No: 3-020212-155835-0089
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
HW42	Drinking Water/ Bryan Berna	Grab	DRO(7), DRO(7)	2762 (-NA- / 1000mlAmber), 2763 (-NA- / 1000mlAmber) (2)	HW42	02/02/2012 10:28	
HW46	Drinking Water/ Mike Ferrier	Grab	RSK-175(7), RSK-175(7), GRO(7), GRO(7)	2880 (HCl / 40mlGlassVial), 2881 (HCl / 40mlGlassVial), 2902 (HCl / 40mlGlassVial), 2903 (HCl / 40mlGlassVial) (4)	HW46	02/02/2012 11:39	
HW46-P	Drinking Water/ David Johnson	Grab	RSK-175(7), RSK-175(7), DRO(7), DRO(7), GRO(7), GRO(7)	2916 (HCl / 40mlGlassVial), 2917 (HCl / 40mlGlassVial), 2934 (-NA- / 1000mlAmber), 2935 (-NA- / 1000mlAmber), 2938 (HCl / 40mlGlassVial), 2939 (HCl / 40mlGlassVial) (6)	HW46	02/02/2012 11:24	
TB15	Aqueous/ Kim Whitlock	Grab	RSK-175(7), RSK-175(7), GRO(7), GRO(7)	2813 (HCl / 40mlGlassVial), 2814 (HCl / 40mlGlassVial), 2815 (HCl / 40mlGlassVial), 2816 (HCl / 40mlGlassVial) (4)	TB15	02/02/2012 07:50	

00038

Special Instructions: COOLER @ 2°C, SEALS INTACT, ON ICE 2/3/12

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

Analysis Key: DRO=11-Diesel Range Organics, 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]	2/2/12	[illegible] @ LAB	2/3/12	1000						

COOLER #1

00019

DIM0278627

DIM0278665

USEPA CLP Generic COC (LAB COPY)

CHAIN OF CUSTODY RECORD

No: 3-020212-102538-0077

DateShipped: 2/2/2012
CarrierName: FedEx
AirbillNo: 7931 8426 1205

Case #: CT5865

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
FB08	Aqueous/ David Johnson	Grab	RSK-175(7), RSK-175(7), GRO(7), GRO(7)	2604 (HCl / 40mlGlassVial), 2605 (HCl / 40mlGlassVial), 2626 (HCl / 40mlGlassVial), 2627 (HCl / 40mlGlassVial) (4)	FB08	02/01/2012 14:45	
HW34a	Drinking Water/ Tom Sedlacek	Grab	RSK-175(7), RSK-175(7), GRO(7), GRO(7)	2640 (HCl / 40mlGlassVial), 2641 (HCl / 40mlGlassVial), 2662 (HCl / 40mlGlassVial), 2663 (HCl / 40mlGlassVial) (4)	HW34a	02/01/2012 15:47	

COOLER @ 2°C, SEALS INTACT, ON ICE

Sample(s) to be used for Lab QC: HW34a-P

Shipment for Case Complete? N

Samples Transferred From Chain of Custody #

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

00039

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
8	[signature]	2/2/12	[signature] RPA Lab	2/3/12	1000						

00020

COOLER # 2

USEPA CLP Generic COC (LAB COPY)

DateShipped: 2/2/2012
CarrierName: FedEx
AirbillNo: 7931 8426 1205

CHAIN OF CUSTODY RECORD

Case #: CT5865

No: 3-020212-102536-0077

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
HW34a-P	Drinking Water/ Dan Jacobsen	Grab	RSK-175(7), RSK-175(7), DRO(7), DRO(7), GRO(7), GRO(7), DRO(7), DRO(7), DRO(7), DRO(7), RSK-175(7), RSK-175(7), RSK-175(7), RSK-175(7), GRO(7), GRO(7), GRO(7), GRO(7)	2679 (HCl / 40mlGlassVial), 2680 (HCl / 40mlGlassVial), 2697 (-NA- / 1000mlAmber), 2698 (-NA- / 1000mlAmber), 2701 (HCl / 40mlGlassVial), 2702 (HCl / 40mlGlassVial), 2715 (-NA- / 1000mlAmber), 2716 (-NA- / 1000mlAmber), 2717 (-NA- / 1000mlAmber), 2718 (-NA- / 1000mlAmber), 2725 (HCl / 40mlGlassVial), 2726 (HCl / 40mlGlassVial), 2727 (HCl / 40mlGlassVial), 2728 (HCl / 40mlGlassVial), 2729 (HCl / 40mlGlassVial), 2730 (HCl / 40mlGlassVial), 2731 (HCl / 40mlGlassVial), 2732 (HCl / 40mlGlassVial) (18)	HW34a	02/01/2012 15:55	
TB14	Aqueous/ Kim Whitlock	Grab	RSK-175(7), RSK-175(7), GRO(7), GRO(7)	2486 (HCl / 40mlGlassVial), 2487 (HCl / 40mlGlassVial), 2488 (HCl / 40mlGlassVial), 2489 (HCl / 40mlGlassVial) (4)	TB14	02/01/2012 10:10	

Sample(s) to be used for Lab QC: HW34a-P

COOLER @ 2.0°C, SEALS INTACT, OTICE 2/3/12

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, DRO=11-Diesel Range Organics

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
22	[signature]	2/2/12	[signature]	2/3/12	1000						

COOLER #2

00046

00021

DIM0278627

DIM0278667

USEPA CLP Generic COC (LAB COPY)
DateShipped: 2/2/2012
CarrierName: FedEx
AirbillNo: 7980 1706 1646

CHAIN OF CUSTODY RECORD

Case #: CT5865

No: 3-020212-152058-0085
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
FB09	Aqueous/ Dan Jacobsen	Grab	RSK-175(7), RSK-175(7), DRO(7), DRO(7), GRO(7), GRO(7)	2780 (HCl / 40mlGlassVial), 2781 (HCl / 40mlGlassVial), 2798 (-NA- / 1000mlAmber), 2799 (-NA- / 1000mlAmber), 2802 (HCl / 40mlGlassVial), 2803 (HCl / 40mlGlassVial) (6)	FB09	02/02/2012 10:15	
HW42	Drinking Water/ Bryan Berna	Grab	RSK-175(7), RSK-175(7), GRO(7), GRO(7)	2744 (HCl / 40mlGlassVial), 2745 (HCl / 40mlGlassVial), 2766 (HCl / 40mlGlassVial), 2767 (HCl / 40mlGlassVial) (4)	HW42	02/02/2012 10:28	
HW42z	Drinking Water/ Bryan Berna	Grab	RSK-175(7), RSK-175(7), DRO(7), DRO(7), GRO(7), GRO(7)	2844 (HCl / 40mlGlassVial), 2845 (HCl / 40mlGlassVial), 2862 (-NA- / 1000mlAmber), 2863 (-NA- / 1000mlAmber), 2866 (HCl / 40mlGlassVial), 2867 (HCl / 40mlGlassVial) (6)	HW42	02/02/2012 10:29	
HW46	Drinking Water/ Mike Ferrier	Grab	DRO(7), DRO(7)	2898 (-NA- / 1000mlAmber), 2899 (-NA- / 1000mlAmber) (2)	HW46	02/02/2012 11:39	

Special Instructions: COOLER @ 2°C, SEALS INTACT, ON ICE [illegible] 2/3/12

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

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

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
18	[illegible]	2/2/12	[illegible]	2/3/12	10:00						

COOLER #3

00041

00022

USEPA CLP Generic COC (LAB COPY)
DateShipped: 2/2/2012
CarrierName: FedEx
AirbillNo: 7980 1706 1646

CHAIN OF CUSTODY RECORD

Case #: CT5865

No: 3-020212-152058-0085
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
TB16	Aqueous/ Kim Whitlock	Grab	RSK-175(7), RSK-175(7), GRO(7), GRO(7)	2820 (HCl / 40mlGlassVial), 2821 (HCl / 40mlGlassVial), 2822 (HCl / 40mlGlassVial), 2823 (HCl / 40mlGlassVial) (4)	TB16	02/02/2012 07:57	

Special Instructions: COOLED @ 2°C, SEALS INTACT, ON ICE JAD 2/3/12

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

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

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
4	[signature]	2/2/12	[signature]	2/3/12	1000						

COOLER #3

00042

00043

WORK ORDER

Printed: 2/6/2012 9:51:43AM

1202013

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
1Cooler	Cooler	5	Yes	Yes	Yes	No	Yes	798020303707
2Cooler	Cooler	6	Yes	Yes	Yes	No	Yes	798022548089
3Cooler	Cooler	6	Yes	Yes	Yes	No	Yes	793189754676
4Cooler	Cooler	5	Yes	Yes	Yes	No	Yes	793191650196

Date Due:	02/26/12 15:00 (21 day TAT)	SDG:	12037A
Received By:	Eloy Balderas	Date Received:	02/04/12 15:35
Logged In By:	Richard Bauer	Date Logged In:	02/06/12 08:07

Analysis	Hold Time Expires	Comments
1202013-01 HW40 [Water] Sampled 02/02/12 15:39 Pacific		
TPH - Extractable	02/09/12	
TPH - Purgeable	02/16/12	
Dissolved HC Gases	02/16/12	5 day prelim results
1202013-02 HW40-P [Water] Sampled 02/02/12 15:44 Pacific		
TPH - Purgeable	02/16/12	
TPH - Extractable	02/09/12	
Dissolved HC Gases	02/16/12	5 day prelim results
1202013-03 HW41 [Water] Sampled 02/02/12 16:12 Pacific		
TPH - Extractable	02/09/12	
TPH - Purgeable	02/16/12	
Dissolved HC Gases	02/16/12	5 day prelim results
1202013-04 HW41-P [Water] Sampled 02/02/12 15:54 Pacific		
TPH - Purgeable	02/16/12	
TPH - Extractable	02/09/12	
Dissolved HC Gases	02/16/12	5 day prelim results

WORK ORDER

Printed: 2/6/2012 9:51:43AM

1202013

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
1202013-05 TB18 [Water] Sampled 02/02/12 08:05 Pacific		
Dissolved HC Gases	02/16/12	5 day prelim results
TPH - Purgeable	02/16/12	
1202013-06 HW28a [Water] Sampled 02/03/12 11:49 Pacific		
TPH - Purgeable	02/17/12	
Dissolved HC Gases	02/17/12	5 day prelim results
TPH - Extractable	02/10/12	
1202013-07 HW28a-P [Water] Sampled 02/03/12 11:52 Pacific		
TPH - Purgeable	02/17/12	
TPH - Extractable	02/10/12	
Dissolved HC Gases	02/17/12	5 day prelim results
1202013-08 HW39 [Water] Sampled 02/03/12 10:42 Pacific		**Lab QC Sample for TPH-gas and RSK**
TPH - Purgeable	02/17/12	
Dissolved HC Gases	02/17/12	5 day prelim results
TPH - Extractable	02/10/12	
1202013-09 HW39-P [Water] Sampled 02/03/12 11:13 Pacific		
TPH - Purgeable	02/17/12	
TPH - Extractable	02/10/12	
Dissolved HC Gases	02/17/12	5 day prelim results
1202013-10 TB19 [Water] Sampled 02/03/12 07:20 Pacific		
Dissolved HC Gases	02/17/12	5 day prelim results
TPH - Purgeable	02/17/12	
1202013-11 TB17 [Water] Sampled 02/02/12 08:00 Pacific		
TPH - Purgeable	02/16/12	
Dissolved HC Gases	02/16/12	5 day prelim results
1202013-12 TB20 [Water] Sampled 02/03/12 07:25 Pacific		
Dissolved HC Gases	02/17/12	5 day prelim results
TPH - Purgeable	02/17/12	

Reviewed By _____ Date _____

Cooler #1

USEPA CLP Generic COC (LAB COPY)

DateShipped: 2/3/2012
CarrierName: FedEx
AirbillNo: 7980 2030 3707

CHAIN OF CUSTODY RECORD

Case #: CT5865

No: 3-020312-115716-0097

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
HW40	Drinking Water/ Tom Sedlacek	Grab	RSK-175(7), RSK-175(7), DRO(7), DRO(7), GRO(7), GRO(7)	2952 (HCl / 40mlGlassVial), 2953 (HCl / 40mlGlassVial), 2970 (-NA- / 1000mlAmber), 2971 (-NA- / 1000mlAmber), 2974 (HCl / 40mlGlassVial), 2975 (HCl / 40mlGlassVial) (6)	HW40	02/02/2012 16:39	
HW40-P	Drinking Water/ Dan Jacobsen	Grab	RSK-175(7), RSK-175(7), DRO(7), DRO(7), GRO(7), GRO(7)	2988 (HCl / 40mlGlassVial), 2989 (HCl / 40mlGlassVial), 3006 (-NA- / 1000mlAmber), 3007 (-NA- / 1000mlAmber), 3010 (HCl / 40mlGlassVial), 3011 (HCl / 40mlGlassVial) (6)	HW40	02/02/2012 15:44	
HW41	Drinking Water/ David Johnson	Grab	DRO(7), DRO(7)	3042 (-NA- / 1000mlAmber), 3043 (-NA- / 1000mlAmber) (2)	HW41	02/02/2012 16:12	
HW41-P	Drinking Water/ Mike Ferrier	Grab	DRO(7), DRO(7)	3078 (-NA- / 1000mlAmber), 3079 (-NA- / 1000mlAmber) (2)	HW41	02/02/2012 15:54	

00045

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

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

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
16	[signature]	2/3/12	FedEx						Elroy I Balderas [signature]	2/4/12	1535

– Custody seals intact, rec'd on ice @ 5°C

00025

USEPA CLP Generic COC (LAB COPY)
DateShipped: 2/3/2012
CarrierName: FedEx
AirbillNo: 7980 2030 3707

CHAIN OF CUSTODY RECORD

Case #: CT5865

No: 3-020312-115716-0097
Lab: EPA R9 Laboratory
Lab Contact:
Lab Phone: 510.412.2369

Sample #	Matrix/Sampler	Coll. Method	Analysis/Turnaround	Tag/Preservative/Bottles	Station Location	Collected	For Lab Use Only
TB18	Aqueous/ Kim Whitlock	Grab	RSK-175(7), RSK-175(7), GRO(7), GRO(7)	2834 (HCl / 40mlGlassVial), 2835 (HCl / 40mlGlassVial), 2836 (HCl / 40mlGlassVial), 2837 (HCl / 40mlGlassVial) (4)	TB18	02/02/2012 08:05	

Special Instructions:

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

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

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
4	[signature]	2/3/12	FedEx					→	Ebly Balderas [signature]	2/4/12	1535

- custody seals intact, rec'd on ice @ 5°C

00046

00026

USEPA CLP Generic COC (LAB COPY)

DateShipped: 2/3/2012

CarrierName: FedEx

AirbillNo: 7980 2254 8069

CHAIN OF CUSTODY RECORD

Case #: CT5665

Cooler #2

No: 3-020312-172043-0107

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
HW28a	Drinking Water/ David Johnson	Grab	RSK-175(7), RSK-175(7), DRO(7), DRO(7), GRO(7), GRO(7)	3162 (HCl / 40mlGlassVial), 3163 (HCl / 40mlGlassVial), 3200 (-NA- / 1000mlAmber), 3201 (-NA- / 1000mlAmber), 3204 (HCl / 40mlGlassVial), 3205 (HCl / 40mlGlassVial) (6)	HW28a	02/03/2012 11:49	
HW28a-P	Drinking Water/ Mike Ferrier	Grab	RSK-175(7), RSK-175(7), DRO(7), DRO(7), GRO(7), GRO(7)	3218 (HCl / 40mlGlassVial), 3219 (HCl / 40mlGlassVial), 3236 (-NA- / 1000mlAmber), 3237 (-NA- / 1000mlAmber), 3240 (HCl / 40mlGlassVial), 3241 (HCl / 40mlGlassVial) (6)	HW28a	02/03/2012 11:52	
HW39	Drinking Water/ Tom Sedlacek	Grab	DRO(7), DRO(7)	3114 (-NA- / 1000mlAmber), 3115 (-NA- / 1000mlAmber) (2)	HW39	02/03/2012 10:42	
HW39-P	Drinking Water/ Dan Jacobsen	Grab	DRO(7), DRO(7)	3164 (-NA- / 1000mlAmber), 3165 (-NA- / 1000mlAmber) (2)	HW39	02/03/2012 11:13	

00047

Special Instructions:

Shipment for Case Complete? N

Samples Transferred From Chain of Custody #

Analysis Key: RSK-175=11-Dissolved Gases_Meth,Ethe,Etha, DRO=11-Diesel Range Organics, 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]	2/3/12	FedEx					→	Elay I Bilbers [illegible]	2/4/12	1535

– rec'd on ice, custody seals intact, @ 6°C

000369

DIM0278627

DIM0278674

cooler #2

USEPA CLP Generic COC (LAB COPY)
DateShipped: 2/3/2012
CarrierName: FedEx
AirbillNo: 7980 2254 8069

CHAIN OF CUSTODY RECORD

Case #: CT5865

No: 3-020312-172043-0107
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
TB19	Aqueous/ Kim Whitlock	Grab	RSK-175(7), RSK-175(7), GRO(7), GRO(7)	3251 (HCl / 40mlGlassVial), 3252 (HCl / 40mlGlassVial), 3253 (HCl / 40mlGlassVial), 3254 (HCl / 40mlGlassVial) (4)	TB19	02/03/2012 07:20	

Special Instructions:

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

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

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
4	[signature]	2/3/12	Fed Ex						Elizabeth Williams [signature]	2/4/12	1535

- rec'd on ice, custody seals intact, @ 6°C

00048

00027

cooler #3

USEPA CLP Generic COC (LAB COPY)
DateShipped: 2/3/2012
CarrierName: FedEx
AirbillNo: 7931 8975 4676

CHAIN OF CUSTODY RECORD

Case #: CT5865

No: 3-020312-114335-0096
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
HW41	Drinking Water/ David Johnson	Grab	RSK-175(7), RSK-175(7), GRO(7), GRO(7)	3024 (HCl / 40mlGlassVial), 3025 (HCl / 40mlGlassVial), 3046 (HCl / 40mlGlassVial), 3047 (HCl / 40mlGlassVial) (4)	HW41	02/02/2012 16:12	
HW41-P	Drinking Water/ Mike Ferrier	Grab	RSK-175(7), RSK-175(7), GRO(7), GRO(7)	3060 (HCl / 40mlGlassVial), 3061 (HCl / 40mlGlassVial), 3082 (HCl / 40mlGlassVial), 3083 (HCl / 40mlGlassVial) (4)	HW41	02/02/2012 16:54	
TB17	Aqueous/ Kim Whitlock	Grab	RSK-175(7), RSK-175(7), GRO(7), GRO(7)	2827 (HCl / 40mlGlassVial), 2828 (HCl / 40mlGlassVial), 2829 (HCl / 40mlGlassVial), 2830 (HCl / 40mlGlassVial) (4)	TB17	02/02/2012 08:00	

Special Instructions:

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
12	[signature]	2/3/12	FedeX				Eloy I Boldera	S	U.S.EPA	2/4/12	1535

— custody seals intact
— rec'd @ 6°C
— on ice, yes.

00045

00028

cooler #4

USEPA CLP Generic COC (LAB COPY)

DateShipped: 2/3/2012
CarrierName: FedEx
AirbillNo: 7931 9165 0196

CHAIN OF CUSTODY RECORD

Case #: CT5865

No: 3-020312-154233-0102

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
HW39	Drinking Water/ Tom Sedlacek	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)	3096 (HCl / 40mlGlassVial), 3097 (HCl / 40mlGlassVial), 3118 (HCl / 40mlGlassVial), 3119 (HCl / 40mlGlassVial), 3132 (HCl / 40mlGlassVial), 3133 (HCl / 40mlGlassVial), 3134 (HCl / 40mlGlassVial), 3135 (HCl / 40mlGlassVial), 3136 (HCl / 40mlGlassVial), 3137 (HCl / 40mlGlassVial), 3138 (HCl / 40mlGlassVial), 3139 (HCl / 40mlGlassVial) (12)	HW39	02/03/2012 10:42	
HW39-P	Drinking Water/ Dan Jacobsen	Grab	RSK-175(7), RSK-175(7), GRO(7), GRO(7)	3146 (HCl / 40mlGlassVial), 3147 (HCl / 40mlGlassVial), 3168 (HCl / 40mlGlassVial), 3169 (HCl / 40mlGlassVial) (4)	HW39	02/03/2012 11:13	
TB20	Aqueous/ Kim Whitlock	Grab	RSK-175(7), RSK-175(7), GRO(7), GRO(7)	3258 (HCl / 40mlGlassVial), 3259 (HCl / 40mlGlassVial), 3260 (HCl / 40mlGlassVial), 3261 (HCl / 40mlGlassVial) (4)	TB20	02/03/2012 07:25	

Sample(s) to be used for Lab QC: HW39	**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
20	[signature]	2/3/12	FedEx						Eley I Balkas KB	2/9/12	1535

- custody seals intact
- rec'd on ice
- 5°C rec'd

00058

00028A 2/13/12

DIM0278627

DIM0278677

00851

WORK ORDER

Printed: 2/6/2012 11:23:43AM

1202014

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
1Cooler	Cooler	4	Yes	Yes	Yes	No	Yes	798023630362
2Cooler	Cooler	4	Yes	Yes	Yes	No	Yes	793193092019

Date Due:	02/28/12 15:00 (21 day TAT)	SDG:	12037A
Received By:	Jack Berges	Date Received:	02/06/12 09:15
Logged In By:	Jack Berges	Date Logged In:	02/06/12 09:50

Analysis	Hold Time Expires	Comments
1202014-01 FB10 [Water] Sampled 02/03/12 14:09 Pacific		
TPH - Extractable	02/10/12	
TPH - Purgeable	02/17/12	
Dissolved HC Gases	02/17/12	5 day prelim results
1202014-02 HW09 [Water] Sampled 02/03/12 15:20 Pacific		
Dissolved HC Gases	02/17/12	5 day prelim results
TPH - Extractable	02/10/12	
TPH - Purgeable	02/17/12	
1202014-03 HW09-P [Water] Sampled 02/03/12 15:16 Pacific		
TPH - Purgeable	02/17/12	
TPH - Extractable	02/10/12	
Dissolved HC Gases	02/17/12	5 day prelim results
1202014-04 HW28b-P [Water] Sampled 02/03/12 14:27 Pacific		
Dissolved HC Gases	02/17/12	5 day prelim results
TPH - Extractable	02/10/12	
TPH - Purgeable	02/17/12	
1202014-05 TB22 [Water] Sampled 02/03/12 11:17 Pacific		
Dissolved HC Gases	02/17/12	5 day prelim results
TPH - Purgeable	02/17/12	

WORK ORDER

Printed: 2/6/2012 11:23:43AM

1202014

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
1202014-06 TB21 [Water] Sampled 02/03/12 07:56 Pacific		
TPH - Purgeable	02/17/12	
Dissolved HC Gases	02/17/12	5 day prelim results

Reviewed By

Date

USEPA CLP Generic COC (LAB COPY)
DateShipped: 2/3/2012
CarrierName: FedEx
AirbillNo: 7980 2363 0362

CHAIN OF CUSTODY RECORD

Case #: CT5865

No: 3-020312-190546-0113
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
FB10	Aqueous/ Mike Ferrier	Grab	DRO(7), DRO(7)	3335 (-NA- / 1000mlAmber), 3336 (-NA- / 1000mlAmber) (2)	FB10	02/03/2012 14:09	
HW09	Drinking Water/ Tom Sedlacek	Grab	RSK-175(7), RSK-175(7), DRO(7), DRO(7), GRO(7), GRO(7)	3389 (HCl / 40mlGlassVial), 3390 (HCl / 40mlGlassVial), 3407 (-NA- / 1000mlAmber), 3408 (-NA- / 1000mlAmber), 3411 (HCl / 40mlGlassVial), 3412 (HCl / 40mlGlassVial) (6)	HW09	02/03/2012 15:20	
HW09-P	Drinking Water/ Dan Jacobsen	Grab	RSK-175(7), RSK-175(7), DRO(7), DRO(7), GRO(7), GRO(7)	3425 (HCl / 40mlGlassVial), 3426 (HCl / 40mlGlassVial), 3443 (-NA- / 1000mlAmber), 3444 (-NA- / 1000mlAmber), 3447 (HCl / 40mlGlassVial), 3448 (HCl / 40mlGlassVial) (6)	HW09	02/03/2012 15:16	
HW28b-P	Drinking Water/ David Johnson	Grab	DRO(7), DRO(7)	3371 (-NA- / 1000mlAmber), 3372 (-NA- / 1000mlAmber) (2)	HW28b	02/03/2012 14:27	

00053

Special Instructions: COOLER @ 4°C, ON ICE, SEALS INTACT RAB 2/6/12

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

Analysis Key: DRO=11-Diesel Range Organics, 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]	02/03/12	[illegible]	2/3/12	2130	16	[illegible]	2/4/12	[illegible] RALAB	2/6/12	915

COOLER #1

00031

USEPA CLP Generic COC (LAB COPY)
DateShipped: 2/3/2012
CarrierName: FedEx
AirbillNo: 7980 2363 0362

CHAIN OF CUSTODY RECORD

Case #: CT5865

No: 3-020312-190546-0113
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
TB22	Aqueous/ Christina Rice	Grab	RSK-175(7), RSK-175(7), GRO(7), GRO(7)	3272 (HCl / 40mlGlassVial), 3273 (HCl / 40mlGlassVial), 3274 (HCl / 40mlGlassVial), 3275 (HCl / 40mlGlassVial) (4)	TB22	02/03/2012 11:17	

Special Instructions: COOLER @ 4°C, ON ICE, SEALS INTACT DAB 2/6/12

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

Analysis Key: DRO=11-Diesel Range Organics, 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
4	[signature]	02/03/12	[signature]	2/3/12	2130	4	[signature]	2/4/12	[signature]	2/6/12	915

COOLER #1

00054

020312

2/13/12

USEPA CLP Generic COC (LAB COPY)
DateShipped: 2/3/2012
CarrierName: FedEx
AirbillNo: 7931 9309 2019

CHAIN OF CUSTODY RECORD

Case #: CT5865

No: 3-020312-185707-0112
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
FB10	Aqueous/ Mike Ferrier	Grab	RSK-175(7), RSK-175(7), GRO(7), GRO(7)	3317 (HCl / 40mlGlassVial), 3318 (HCl / 40mlGlassVial), 3339 (HCl / 40mlGlassVial), 3340 (HCl / 40mlGlassVial) (4)	FB10	02/03/2012 14:09	
HW28b-P	Drinking Water/ David Johnson	Grab	RSK-175(7), RSK-175(7), GRO(7), GRO(7)	3353 (HCl / 40mlGlassVial), 3354 (HCl / 40mlGlassVial), 3375 (HCl / 40mlGlassVial), 3376 (HCl / 40mlGlassVial) (4)	HW28b	02/03/2012 14:27	
TB21	Aqueous/ Kim Whitlock	Grab	RSK-175(7), RSK-175(7), GRO(7), GRO(7)	3265 (HCl / 40mlGlassVial), 3266 (HCl / 40mlGlassVial), 3267 (HCl / 40mlGlassVial), 3268 (HCl / 40mlGlassVial) (4)	TB21	02/03/2012 07:56	

00055

Special Instructions: COOLER @ 4°C, ON ICE, SEALS INTACT EDS 2/6/12

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
12	[signature]	02/03/12	[signature]	2/3/12	2130	12	[signature]	2/4/12	[signature] EDS	2/6/12	915

COOLER #2

00031B

2/13/12

DIM0278627

DIM0278682

00056

WORK ORDER

Printed: 2/7/2012 12:52:19PM

1202017

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
1Cooler	Cooler	2	Yes	Yes	Yes	No	Yes	798023630362
2Cooler	Cooler	2	Yes	Yes	Yes	No	Yes	793193092019

Date Due:	02/29/12 15:00 (21 day TAT)	SDG:	12038C
Received By:	Richard Bauer	Date Received:	02/07/12 11:10
Logged In By:	Eloy Balderas	Date Logged In:	02/07/12 11:49

Analysis	Hold Time Expires	Comments
1202017-01 EB02 [Water] Sampled 02/05/12 15:00 Pacific		
TPH - Extractable	02/12/12	
Dissolved HC Gases	02/19/12	5 day prelim results
TPH - Purgeable	02/19/12	
1202017-02 HW45 [Water] Sampled 02/06/12 10:28 Pacific		**Lab QC sample**
Dissolved HC Gases	02/20/12	5 day prelim results
TPH - Extractable	02/13/12	
TPH - Purgeable	02/20/12	
1202017-03 HW45-P [Water] Sampled 02/06/12 11:06 Pacific		
TPH - Purgeable	02/20/12	
Dissolved HC Gases	02/20/12	5 day prelim results
TPH - Extractable	02/13/12	
1202017-04 TB24 [Water] Sampled 02/06/12 07:10 Pacific		
TPH - Purgeable	02/20/12	
Dissolved HC Gases	02/20/12	5 day prelim results
1202017-05 HW43 [Water] Sampled 02/06/12 12:06 Pacific		
TPH - Purgeable	02/20/12	
Dissolved HC Gases	02/20/12	5 day prelim results

00057

WORK ORDER

Printed: 2/7/2012 12:52:19PM

1202017

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
1202017-06 HW43-P [Water] Sampled 02/06/12 12:19 Pacific		
TPH - Purgeable	02/20/12	
Dissolved HC Gases	02/20/12	5 day prelim results
1202017-07 TB23 [Water] Sampled 02/06/12 07:05 Pacific		
TPH - Purgeable	02/20/12	
Dissolved HC Gases	02/20/12	5 day prelim results

Reviewed By

Date

Courier

USEPA CLP Generic COC (LAB COPY)

DateShipped: 2/6/2012
CarrierName: FedEx
AirbillNo: 7931 9744 7284

CHAIN OF CUSTODY RECORD

Case #: CT5865

No: 3-020612-160909-0120

Lab: EPA R9 Laboratory
Lab Contact:
Lab Phone: 510.412.2369

Sample #	Matrix/Sampler	Coll. Method	Analysis/Turnaround	Tag/Preservative/Bottles	Station Location	Collected	For Lab Use Only
EB02	Aqueous/ Bryan Berna	Grab	RSK-175(7), RSK-175(7), DRO(7), DRO(7), GRO(7), GRO(7)	3482 (HCl / 40mlGlassVial), 3483 (HCl / 40mlGlassVial), 3481 (-NA- / 1000mlAmber), 3482 (-NA- / 1000mlAmber), 3485 (HCl / 40mlGlassVial), 3486 (HCl / 40mlGlassVial) (6)	EB02	02/05/2012 15:00	
HW45	Drinking Water/ Tom Sedlacek	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) 6 RSK, 6 GRO	3527 (HCl / 40mlGlassVial), 3528 (HCl / 40mlGlassVial), 3549 (HCl / 40mlGlassVial), 3550 (HCl / 40mlGlassVial), 3597 (HCl / 40mlGlassVial), 3598 (HCl / 40mlGlassVial), 3599 (HCl / 40mlGlassVial), 3600 (HCl / 40mlGlassVial), 3601 (HCl / 40mlGlassVial), 3602 (HCl / 40mlGlassVial), 3603 (HCl / 40mlGlassVial), 3604 (HCl / 40mlGlassVial) (12)	HW45	02/06/2012 10:28	

Sample(s) to be used for Lab QC: HW45

custody seals intact & temp. blank 2°C upon receipt @ lab 2/7/12

Shipment for Case Complete? N

Samples Transferred From Chain of Custody #

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

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
18	[signature]	2/6/12	FedEx						EPA R9 Lab	2/7/12	1110

00058

00034

cooler #1

USEPA CLP Generic COC (LAB COPY)
DateShipped: 2/6/2012
CarrierName: FedEx
AirbillNo: 7931 9744 7284

CHAIN OF CUSTODY RECORD

Case #: CT5865

No: 3-020612-160909-0120
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
HW45-P	Drinking Water/ Dan Jacobsen	Grab	RSK-175(7), RSK-175(7), DRO(7), DRO(7), GRO(7), GRO(7)	3567 (HCl / 40mlGlassVial), 3568 (HCl / 40mlGlassVial), 3585 (-NA- / 1000mlAmber), 3586 (-NA- / 1000mlAmber), 3589 (HCl / 40mlGlassVial), 3590 (HCl / 40mlGlassVial) (6)	HW45	02/06/2012 11:06	
TB24	Aqueous/ Christina Rice	Grab	RSK-175(7), RSK-175(7), GRO(7), GRO(7)	3503 (HCl / 40mlGlassVial), 3504 (HCl / 40mlGlassVial), 3505 (HCl / 40mlGlassVial), 3506 (HCl / 40mlGlassVial) (4)	TB24	02/06/2012 07:10	

Special Instructions: Custody seals intact and temp. blank 2°C upon receipt @ lab. RPS 2/7/12

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

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

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
10	[signature]	2/6/12				Fed Ex			[signature] EPA R9 Lab	2/7/12	1110

00059

00035

Cooler #2

USEPA CLP Generic COC (LAB COPY)

DateShipped: 2/6/2012
CarrierName: FedEx
AirbillNo: 7980 2858 0648

CHAIN OF CUSTODY RECORD

Case #: CT5865

No: 3-020612-173523-0126

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
HW43	Drinking Water/ David Johnson	Grab	RSK-175(7), RSK-175(7), GRO(7)	3723 (HCl / 40mlGlassVial), 3724 (HCl / 40mlGlassVial), 3745 (HCl / 40mlGlassVial) (3)	HW43	02/06/2012 12:06	
HW43-P	Drinking Water/ Francisco Lapostol	Grab	RSK-175(7), RSK-175(7), GRO(7), GRO(7)	3759 (HCl / 40mlGlassVial), 3760 (HCl / 40mlGlassVial), 3781 (HCl / 40mlGlassVial), 3782 (HCl / 40mlGlassVial) (4)	HW43	02/06/2012 12:19	
HW45	Drinking Water/ Tom Sedlacek	Grab	DRO(7), DRO(7), DRO(7), DRO(7), DRO(7), DRO(7)	3545 (-NA- / 1000mlAmber), 3546 (-NA- / 1000mlAmber), 3609 (-NA- / 1000mlAmber), 3610 (-NA- / 1000mlAmber), 3611 (-NA- / 1000mlAmber), 3612 (-NA- / 1000mlAmber) (6)	HW45	02/06/2012 10:28	
TB23	Aqueous/ Christina Rice	Grab	RSK-175(7), RSK-175(7), GRO(7), GRO(7)	3496 (HCl / 40mlGlassVial), 3497 (HCl / 40mlGlassVial), 3498 (HCl / 40mlGlassVial), 3499 (HCl / 40mlGlassVial) (4)	TB23	02/06/2012 07:05	

Sample(s) to be used for Lab QC: HW45

Custody seal intact and temperature blank 2°C upon receipt @ lab. RM 2/7/12

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, DRO=11-Diesel Range Organics

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
17	[signature]	2/6/12	— FedEx			→			RM EPA R9 Lab	2/7/12	1110

00060

C00354 2/13/12

DIM0278627

DIM0278687

00061

Sample Preparation

: 00036

DIM0278627 DIM0278688

PREPARATION BENCH SHEET

B2B0015

EPA Region 9 Laboratory

Printed: 2/6/2012 11:38:06AM

Project: R33911 - Dimock Residential Groundwater

Matrix: Water **Analysis:Dissolved HC Gases** **Prepared using: Volatiles - RSK175** **Surrogate used: 1L13003**

Lab Number	SampleName	Prepared	Initial (mL)	Final (mL)	Spike ID	Source ID	ul Spike	ul Surrogate	Prepared By	pH	Weight 1	Weight 2	Extraction Comments
1202005-01RE1 F	HW32	02/03/12 11:43	6	16.1				100	RFH	2			5 day prelim results
1202005-02RE1 F	HW32-P	02/03/12 11:43	6	16.1				100	RFH	2			5 day prelim results
1202005-08RE1 D	HW26-P	02/03/12 11:43	0.04	16.1				100	RFH	2			5 day prelim results
1202005-09RE1 F	HW29	02/03/12 11:43	0.02	16.1				100	RFH	2			5 day prelim results
1202005-10RE1 F	HW29z	02/03/12 11:43	0.03	16.1				100	RFH	2			5 day prelim results
1202005-12RE1 F	HW52	02/03/12 11:43	0.15	16.1				100	RFH	2			5 day prelim results
1202005-16RE1 D	HW26	02/03/12 11:43	0.04	16.1				100	RFH	2			5 day prelim results
1202011-01 E	HW42	02/03/12 11:43	16.1	16.1				100	RFH	2			5 day prelim results
1202011-02 E	HW46	02/03/12 11:43	16.1	16.1				100	RFH	2			5 day prelim results
1202011-03 E	HW46-P	02/03/12 11:43	16.1	16.1				100	RFH	2			5 day prelim results
1202011-04 C	TB15	02/03/12 11:43	16.1	16.1				100	RFH	2			5 day prelim results
1202011-05 E	FB08	02/03/12 11:43	16.1	16.1				100	RFH	2			5 day prelim results
1202011-06 E	HW34a	02/03/12 11:43	16.1	16.1				100	RFH	2			5 day prelim results
1202011-06RE1 E	HW34a	02/03/12 11:43	0.08	16.1				100	RFH	2			5 day prelim results

00062

00037

Preparation Reviewed By — Date: 02/7/12

PREPARATION BENCH SHEET

B2B0015

EPA Region 9 Laboratory

Printed: 2/6/2012 11:38:06AM

Project: R33911 - Dimock Residential Groundwater

Matrix: Water **Analysis:Dissolved HC Gases** **Prepared using: Volatiles - RSK175** **Surrogate used: 1L13003**

Lab Number	SampleName	Prepared	Initial (mL)	Final (mL)	Spike ID	Source ID	ul Spike	ul Surrogate	Prepared By	pH	Weight 1	Weight 2	Extraction Comments
1202011-07 M	HW34a-P	02/03/12 11:43	16.1	16.1				100	RFH	2			5 day prelim results
1202011-07RE1 M	HW34a-P	02/03/12 11:43	5	16.1				100	RFH	2			5 day prelim results
1202011-08 C	TB14	02/03/12 11:43	16.1	16.1				100	RFH	2			5 day prelim results
1202011-09 E	FB09	02/03/12 11:43	16.1	16.1				100	RFH	2			5 day prelim results
1202011-10 E	HW42z	02/03/12 11:43	16.1	16.1				100	RFH	2			5 day prelim results
1202011-11 C	TB16	02/03/12 11:43	16.1	16.1				100	RFH	2			5 day prelim results
B2B0015-BLK1	Blank	02/03/12 11:43	16.1	16.1				100	RFH				
B2B0015-BS1	LCS	02/03/12 11:43	16.1	16.1	0L07008		100		RFH				
B2B0015-MS1	Matrix Spike	02/03/12 11:43	16.1	16.1	0L07008	1202011-07	100		RFH				
B2B0015-MSD1	Matrix Spike Dup	02/03/12 11:43	16.1	16.1	0L07008	1202011-07	100		RFH				

00063

Reagents

Reagent # **Description**

000379

2/13/12 JG

ZR 02/7/12

Preparation Reviewed By Date

PREPARATION BENCH SHEET

B2B0024

EPA Region 9 Laboratory

Printed: 2/8/2012 3:48:42PM

Project: R33911 - Dimock Residential Groundwater

Matrix: Water **Analysis:Dissolved HC Gases** **Prepared using: Volatiles - RSK175** **Surrogate used: 1L13003**

Lab Number	SampleName	Prepared	Initial (mL)	Final (mL)	Spike ID	Source ID	ul Spike	ul Surrogate	Prepared By	pH	Weight 1	Weight 2	Extraction Comments
1202011-06RE2 E	HW34a	02/06/12 16:07	0.08	16.1				100	RFH	2			5 day prelim results
1202011-07RE2 M	HW34a-P	02/06/12 16:07	5	16.1				100	RFH	2			5 day prelim results
1202013-01 E	HW40	02/06/12 16:07	16.1	16.1				100	RFH	2			5 day prelim results
1202013-02 E	HW40-P	02/06/12 16:07	16.1	16.1				100	RFH	2			5 day prelim results
1202013-03 E	HW41	02/06/12 16:07	16.1	16.1				100	RFH	2			5 day prelim results
1202013-04 E	HW41-P	02/06/12 16:07	16.1	16.1				100	RFH	2			5 day prelim results
1202013-05 C	TB18	02/06/12 16:07	16.1	16.1				100	RFH	2			5 day prelim results
1202013-06 E	HW28a	02/06/12 16:07	16.1	16.1				100	RFH	2			5 day prelim results
1202013-07 E	HW28a-P	02/06/12 16:07	16.1	16.1				100	RFH	2			5 day prelim results
1202013-08 M	HW39	02/06/12 16:07	16.1	16.1				100	RFH	2			5 day prelim results
1202013-08RE1 N	HW39	02/06/12 16:07	0.5	16.1				100	RFH	2			5 day prelim results
1202013-08RE2 N	HW39	02/06/12 16:07	0.2	16.1				100	RFH	2			Made from vial with aprox. 0.5 ml of headspace
1202013-09 E	HW39-P	02/06/12 16:07	16.1	16.1				100	RFH	2			5 day prelim results
1202013-10 D	TB19	02/06/12 16:07	16.1	16.1				100	RFH	2			5 day prelim results

00064

00036

SL 2/9/12

Preparation Reviewed By Date

PREPARATION BENCH SHEET

B2B0024

EPA Region 9 Laboratory

Printed: 2/8/2012 3:48:42PM

Project: R33911 - Dimock Residential Groundwater

Matrix: Water **Analysis:Dissolved HC Gases** **Prepared using: Volatiles - RSK175** **Surrogate used: 1L13003**

Lab Number	SampleName	Prepared	Initial (mL)	Final (mL)	Spike ID	Source ID	ul Spike	ul Surrogate	Prepared By	pH	Weight 1	Weight 2	Extraction Comments
1202013-11 C	TB17	02/06/12 16:07	16.1	16.1				100	RFH	2			5 day prelim results
1202013-12 C	TB20	02/06/12 16:07	16.1	16.1				100	RFH	2			5 day prelim results
1202014-01 E	FB10	02/06/12 16:07	16.1	16.1				100	RFH	2			5 day prelim results
1202014-02 E	HW09	02/06/12 16:07	16.1	16.1				100	RFH	2			5 day prelim results
1202014-03 E	HW09-P	02/06/12 16:07	16.1	16.1				100	RFH	2			5 day prelim results
1202014-04 E	HW28b-P	02/06/12 16:07	16.1	16.1				100	RFH	2			5 day prelim results
1202014-05 C	TB22	02/06/12 16:07	16.1	16.1				100	RFH	2			5 day prelim results
1202014-06 C	TB21	02/06/12 16:07	16.1	16.1				100	RFH	2			5 day prelim results
B2B0024-BLK1	Blank	02/06/12 16:07	16.1	16.1				100	RFH				
B2B0024-BS1	LCS	02/06/12 16:07	16.1	16.1	0L07008		100		RFH				
B2B0024-MS1	Matrix Spike	02/06/12 16:07	16.1	16.1	0L07008	1202013-08	100		RFH				
B2B0024-MSD1	Matrix Spike Dup	02/06/12 16:07	16.1	16.1	0L07008	1202013-08	100		RFH				

00065

00039

SL 2/9/12

Preparation Reviewed By Date

PREPARATION BENCH SHEET

B2B0032

EPA Region 9 Laboratory

Project: R33911 - Dimock Residential Groundwater

Printed: 2/10/2012 10:11:53AM

Matrix: Water **Analysis: Dissolved HC Gases** **Prepared using: Volatiles - RSK175** **Surrogate used: 1L13003**

Lab Number	SampleName	Prepared	Initial (mL)	Final (mL)	Spike ID	Source ID	ul Spike	ul Surrogate	Prepared By	pH	Weight 1	Weight 2	Extraction Comments
1201034-10 C	HW01	02/08/12 09:35	16.1	16.1				100	JV				5 day prelim results
1202005-11RE1 G	HW35	02/08/12 09:35	16.1	16.1				100	RFH	2			5 day prelim results
1202017-01 E	EB02	02/08/12 09:35	16.1	16.1				100	RFH	2			5 day prelim results
1202017-02 M	HW45	02/08/12 09:35	16.1	16.1				100	RFH	2			5 day prelim results
1202017-03 E	HW45-P	02/08/12 09:35	16.1	16.1				100	RFH	2			5 day prelim results
1202017-04 C	TB24	02/08/12 09:35	16.1	16.1				100	RFH	2			5 day prelim results
1202017-05 B	HW43	02/08/12 09:35	16.1	16.1				100	RFH	2			5 day prelim results
1202017-06 C	HW43-P	02/08/12 09:35	16.1	16.1				100	RFH	2			5 day prelim results
1202017-07 C	TB23	02/08/12 09:35	16.1	16.1				100	RFH	2			5 day prelim results
1202020-03 E	HW31	02/08/12 09:35	16.1	16.1				100	RFH	2			5 day prelim results
1202020-04 E	HW31-P	02/08/12 09:35	16.1	16.1				100	RFH	2			5 day prelim results
1202020-05 E	HW31z	02/08/12 09:35	16.1	16.1				100	RFH	2			5 day prelim results
1202020-06 C	TB25	02/08/12 09:35	16.1	16.1				100	RFH	2			5 day prelim results
1202020-07 E	FB11	02/08/12 09:35	16.1	16.1				100	RFH	2			5 day prelim results

TD 02-10-12

Preparation Reviewed By Date

PREPARATION BENCH SHEET

B2B0032

EPA Region 9 Laboratory

Project: R33911 - Dimock Residential Groundwater

inted: 2/10/2012 10:11:53AM

Matrix: Water **Analysis:Dissolved HC Gases** **Prepared using: Volatiles - RSK175** **Surrogate used: 1L13003**

Lab Number	SampleName	Prepared	Initial (mL)	Final (mL)	Spike ID	Source ID	ul Spike	ul Surrogate	Prepared By	pH	Weight 1	Weight 2	Extraction Comments
1202020-08 E	HW30	02/08/12 09:35	16.1	16.1				100	RFH	2			5 day prelim results
1202020-09 E	HW30-P	02/08/12 09:35	16.1	16.1				100	RFH	2			5 day prelim results
1202020-10 C	TB26	02/08/12 09:35	16.1	16.1				100	RFH	2			5 day prelim results
1202020-11 E	HW15a	02/08/12 09:35	16.1	16.1				100	RFH	2			5 day prelim results
1202020-12 E	HW15a-P	02/08/12 09:35	16.1	16.1				100	RFH	2			5 day prelim results
1202020-13 D	TB28	02/08/12 09:35	16.1	16.1				100	RFH	2			5 day prelim results
B2B0032-BLK1	Blank	02/08/12 09:35	16.1	16.1				100	RFH				
B2B0032-BS1	LCS	02/08/12 09:35	16.1	16.1	0L07008		100		RFH				
B2B0032-MS1	Matrix Spike	02/08/12 09:35	16.1	16.1	0L07008	1202017-02	100		RFH				
B2B0032-MSD1	Matrix Spike Dup	02/08/12 09:35	16.1	16.1	0L07008	1202017-02	100		RFH				

00067

Reagents

Reagent #	Description

00040

2/13/12

TD 02-10-12

Preparation Reviewed By Date

DIM0278627

DIM0278694

INITIAL CALIBRATION

DIM0278627 DIM0278695

Injection Log

Directory: D:\MSDCHEM\1\2012\DATA\012612RSK

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	0126126r001.d	1.	2010040-ibl1		Unrecognized:Un
2	2	0126126r002.d	1.	2010040-CAL7		Unrecognized:Un
3	3	0126126r003.d	1.	2010040-CAL6		Unrecognized:Un
4	4	0126126r004.d	1.	2010040-CAL5		Unrecognized:Un
5	5	0126126r005.d	1.	2010040-CAL4		Unrecognized:Un
6	6	0126126r006.d	1.	2010040-CAL3		Unrecognized:Un
7	7	0126126r007.d	1.	2010040-CAL2		Unrecognized:Un
8	8	0126126r008.d	1.	2010040-CAL1		Unrecognized:Un
9	9	0126126r009.d	1.	2010040-SCV1		Unrecognized:Un
10	10	0126126r010.d	1.	DIAG MIXED GAS		26 Jan 2012 22:08
11	11	0126126r011.d	1.	PROPANE		26 Jan 2012 22:35
12	12	0126126r012.d	1.	BUTANE		26 Jan 2012 23:11

Compound List Report AG6890N-6

Method Path : D:\MSDCHEM\1\2012\METHOD\
Method File : 0126126RSK.M
Title :
Last Update : Fri Jan 27 09:53:18 2012
Response Via : Initial Calibration

Total Cpnds : 4

PK#		Compound Name	Exp_RT	Rel_RT	Cal	A/H	ID
1	T	Methane	1.53	1.000	A	A	R
2	S	Acetylene	7.98	1.000	A	A	R
3	T	Ethene	8.37	1.000	A	A	R
4	T	Ethane	9.00	1.000	A	A	R

Cal A = Average L = Linear LO = Linear w/origin Q = Quad QO = Quad w/origin
A/H = Area or Height
ID R = R.T. B = R.T. & Q Q = Qvalue L = Largest A = All

0126126RSK.M Fri Jan 27 10:35:07 2012

RESPONSE FACTOR REPORT AG6890N-6

Method Path: C:\MSDCHEM\1\METHODS
Method File: 020396RWA.M
Title:
Last Update: Fri Jan 27 09:53:18 2012
Response Via: Initial Calibration

Calibration Files:
1 = 0126126R008. 2 = 0126126R007. 3 = 0126126R006 4 = 0126126R005.D
5 = 0126126R004. 6 = 0126126R003. 7 = 0126126R002.D

Compound	1	2	3	4	5	6	7	AVG.	%RSD
1) TM Methane									
ug/L		1.23	4.10	13.23	44.10	110.25	220.50		
RF		1.100E+06	1.004E+06	1.003E+06	9.970E+05	1.028E+06	9.768E+05	1.018E+06	4.25%
2) S Acetylene									
ug/L	1.007	2.01	6.71	21.65	72.17	180.42	360.83		
RF	322059.5829	3.304E+05	3.380E+05	3.710E+05	3.595E+05	3.697E+05	3.560E+05	3.495E+05	5.56%
3) TM Ethene									
ug/L	1.09	2.18	7.27	23.46	78.18	195.46	390.92		
RF	8.210E+05	8.669E+05	8.696E+05	9.069E+05	9.135E+05	9.418E+05	8.959E+05	8.879E+05	4.42%
4) TM Ethane									
ug/L	1.162	2.324	7.746	24.981	83.269	208.172	416.343		
RF	8.940E+05	9.414E+05	9.563E+05	9.856E+05	9.942E+05	1.023E+06	9.713E+05	9.666E+05	4.30%

00071

Response Factor Report AG6890N-6

Method Path : D:\MSDCHEM\1\2012\METHOD\
Method File : 0126126RSK.M
Title :
Last Update : Fri Jan 27 11:26:56 2012
Response Via : Initial Calibration

Calibration Files
1 =0126126R008.D 2 =0126126R007.D 3 =0126126R006.D
4 =0126126R005.D 5 =0126126R004.D 6 =0126126R003.D

		Compound	1	2	3	4	5	6	Avg		%RSD
1)	TM	Methane		1.100	1.004	1.003	0.997	1.028	1.018	E6	4.25
2)	S	Acetylene	3.221	3.304	3.380	3.710	3.595	3.697	3.495	E5	5.56
3)	TM	Ethene	8.210	8.669	8.696	9.069	9.135	9.418	8.879	E5	4.42
4)	TM	Ethane	0.894	0.941	0.956	0.986	0.994	1.023	0.967	E6	4.30
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\012612RSK\
Data File : 0126126R001.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 26 Jan 2012 5:14 pm
Operator : rh
Sample : 2010040-ibl1
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 27 10:30:05 2012
Quant Method : D:\MSDCHEM\1\2012\METHOD\0126126RSK.M
Quant Title :
QLast Update : Fri Jan 27 09:53:18 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	8.013	25294373	72.370 ug/L
Spiked Amount 66.330 Range 66 - 153		Recovery =	109.11%
Target Compounds			
1) TM Methane	1.536	589704	0.579 ug/L
3) TM Ethene	0.000	0	N.D. ug/L
4) TM Ethane	0.000	0	N.D. ug/L

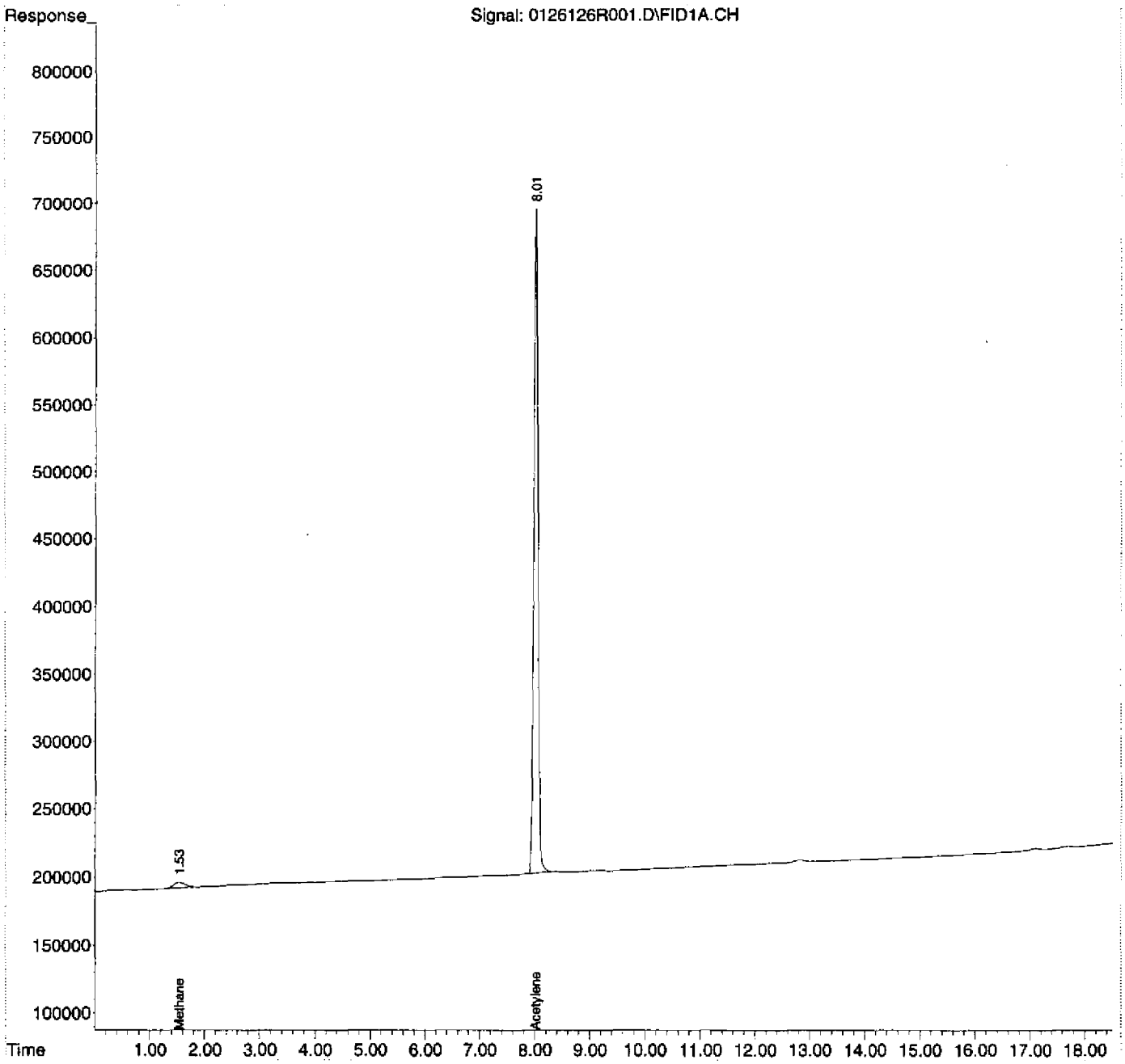
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\012612RSK\
Data File : 0126126R001.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 26 Jan 2012 5:14 pm
Operator : rh
Sample : 2010040-ibl1
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 27 10:30:05 2012
Quant Method : D:\MSDCHEM\1\2012\METHOD\0126126RSK.M
Quant Title :
QLast Update : Fri Jan 27 09:53:18 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\012612RSK\
Data File : 0126126R002.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 26 Jan 2012 5:42 pm
Operator : rh
Sample : 2010040-CAL7
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 27 09:19:53 2012
Quant Method : D:\MSDCHEM\1\2012\METHOD\0126126RSK.M
Quant Title :
QLast Update : Fri Jan 27 09:19:46 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	7.985	128462468	365.512 ug/L
Spiked Amount 66.330 Range 66 - 153		Recovery = 551.05%#	
Target Compounds			
1) TM Methane	1.519	215382184	215.738 ug/L
3) TM Ethene	8.362	350221237	401.340 ug/L
4) TM Ethane	8.993	404407946	425.684 ug/L

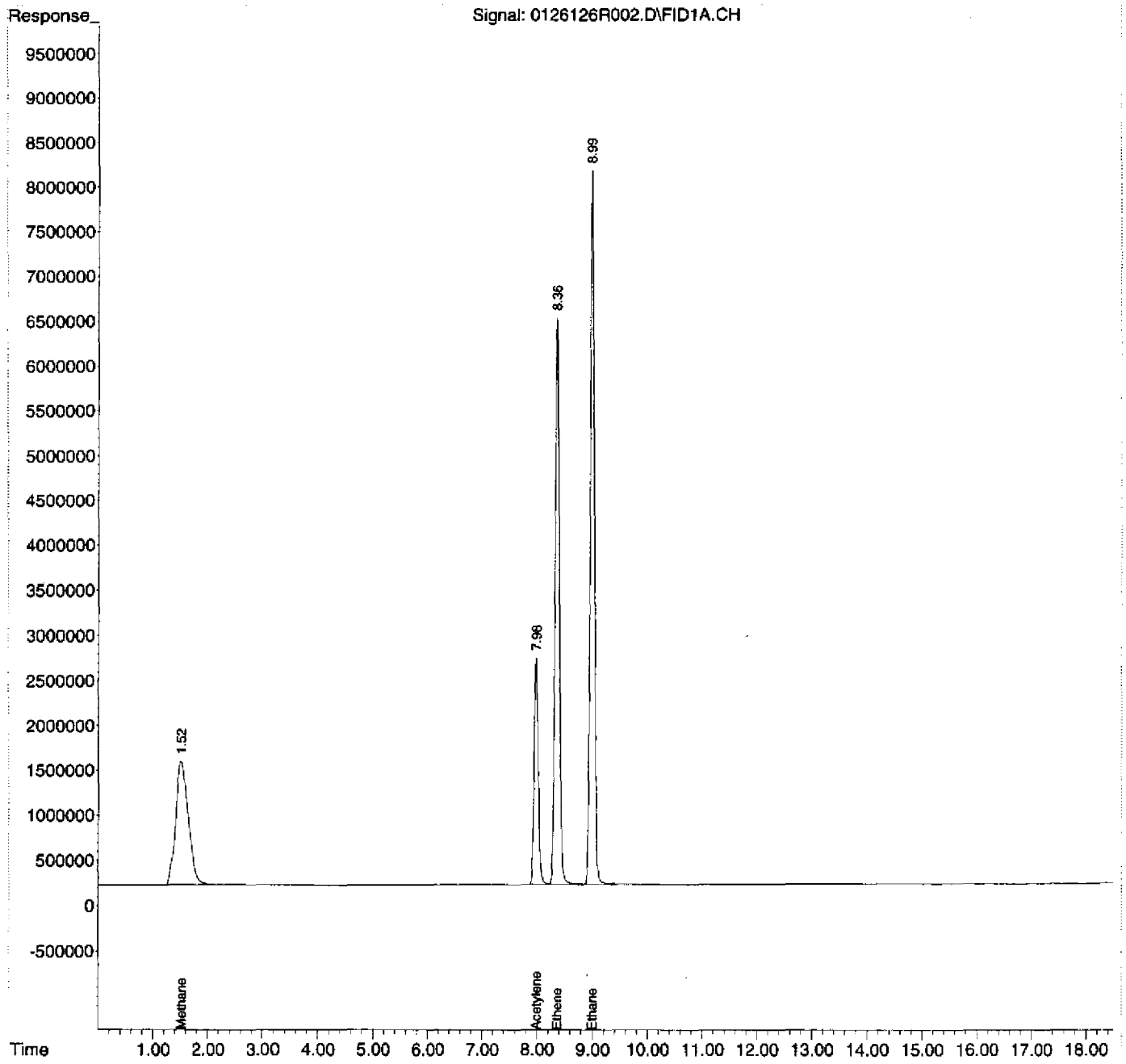
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\012612RSK\
Data File : 0126126R002.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 26 Jan 2012 5:42 pm
Operator : rh
Sample : 2010040-CAL7
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 27 09:19:53 2012
Quant Method : D:\MSDCHEM\1\2012\METHOD\0126126RSK.M
Quant Title :
QLast Update : Fri Jan 27 09:19:46 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\012612RSK\
Data File : 0126126R003.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 26 Jan 2012 6:17 pm
Operator : rh
Sample : 2010040-CAL6
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jan 27 09:19:34 2012
Quant Method : D:\MSDCHEM\1\2012\METHOD\0126126RSK.M
Quant Title :
QLast Update : Fri Jan 27 09:19:26 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	7.982	66702184	194.665 ug/L
Spiked Amount 66.330 Range 66 - 153		Recovery =	293.48%#
Target Compounds			
1) TM Methane	1.521	113285210	116.945 ug/L
3) TM Ethene	8.365	184084316	215.885 ug/L
4) TM Ethane	8.995	212992811	229.807 ug/L

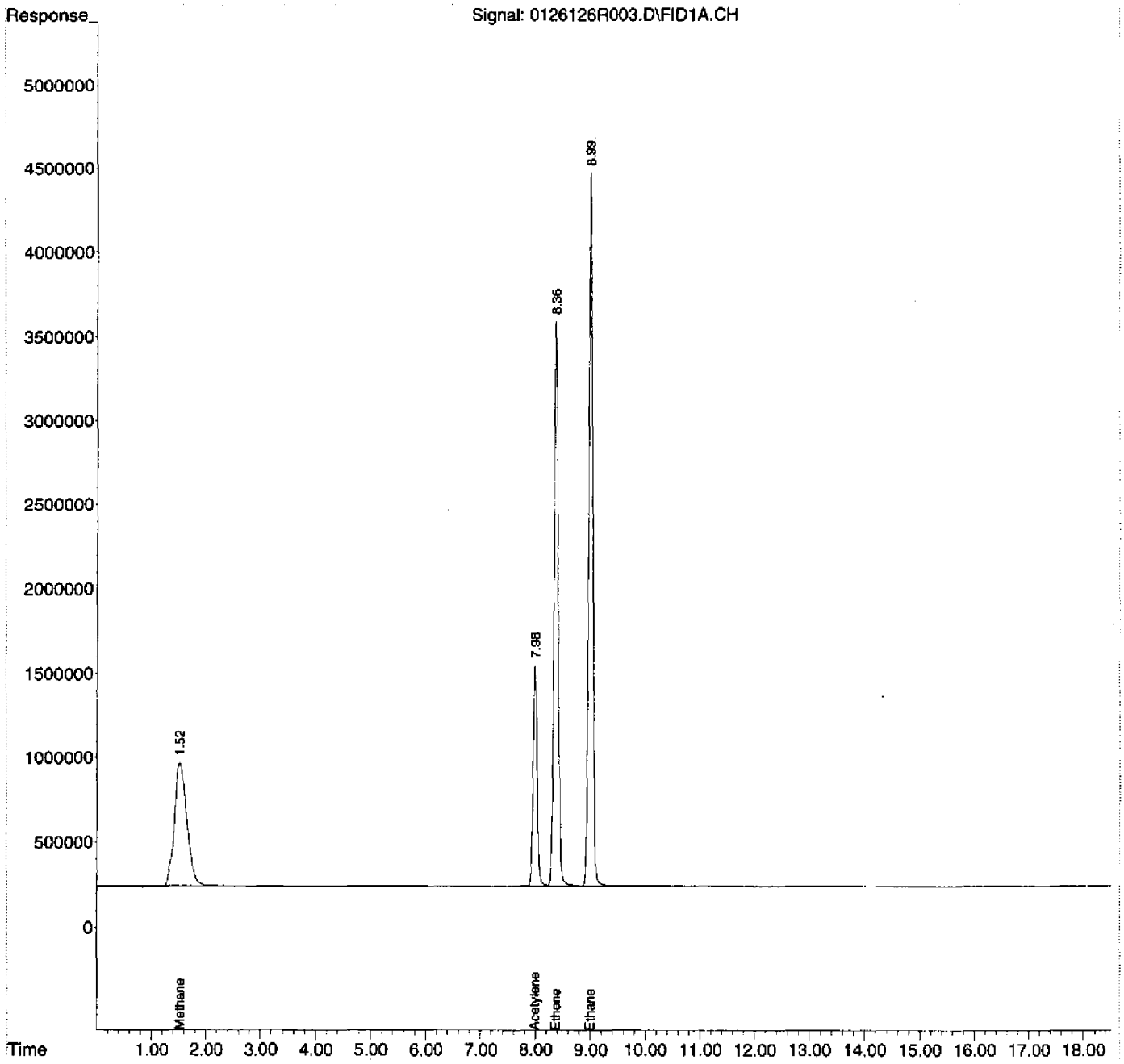
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\012612RSK\
Data File : 0126126R003.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 26 Jan 2012 6:17 pm
Operator : rh
Sample : 2010040-CAL6
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jan 27 09:19:34 2012
Quant Method : D:\MSDCHEM\1\2012\METHOD\0126126RSK.M
Quant Title :
QLast Update : Fri Jan 27 09:19:26 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\012612RSK\
Data File : 0126126R004.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 26 Jan 2012 6:50 pm
Operator : rh
Sample : 2010040-CAL5
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 27 09:19:19 2012
Quant Method : D:\MSDCHEM\1\2012\METHOD\0126126RSK.M
Quant Title :
QLast Update : Fri Jan 27 09:19:11 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	7.982	25945224	79.002 ug/L
Spiked Amount 66.330 Range 66 - 153		Recovery =	119.10%
Target Compounds			
1) TM Methane	1.522	43965430	46.859 ug/L
3) TM Ethene	8.368	71418710	86.350 ug/L
4) TM Ethane	8.998	82785070	91.913 ug/L

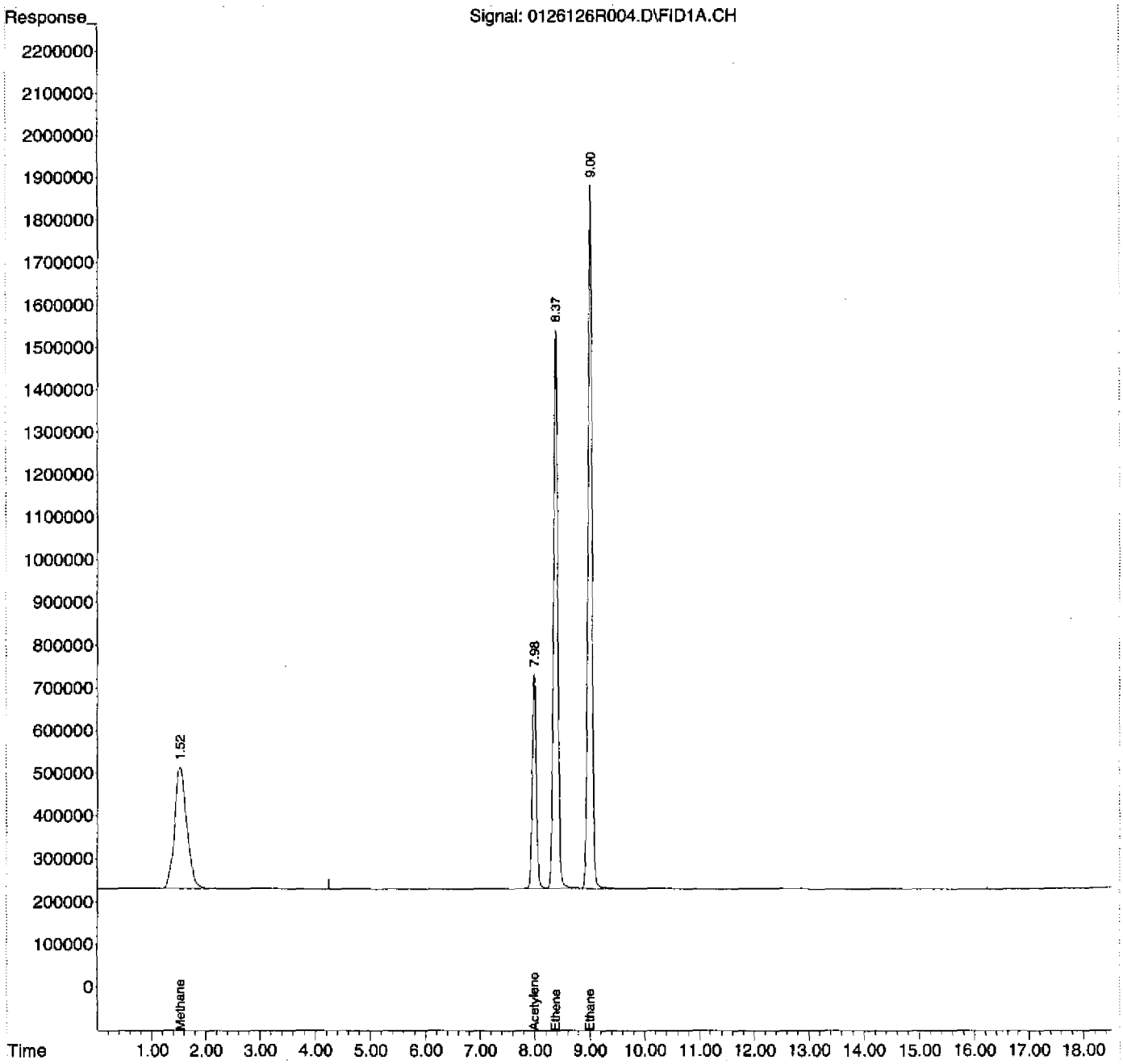
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\012612RSK\
Data File : 0126126R004.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 26 Jan 2012 6:50 pm
Operator : rh
Sample : 2010040-CAL5
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 27 09:19:19 2012
Quant Method : D:\MSDCHEM\1\2012\METHOD\0126126RSK.M
Quant Title :
QLast Update : Fri Jan 27 09:19:11 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\012612RSK\
Data File : 0126126R005.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 26 Jan 2012 7:24 pm
Operator : rh
Sample : 2010040-CAL4
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jan 27 09:19:01 2012
Quant Method : D:\MSDCHEM\1\2012\METHOD\0126126RSK.M
Quant Title :
QLast Update : Fri Jan 27 09:18:54 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	7.980	8031683	27.257 ug/L
Spiked Amount 66.330 Range 66 - 153		Recovery =	41.09%#
Target Compounds			
1) TM Methane	1.523	13268375	15.122 ug/L
3) TM Ethene	8.368	21272017	27.225 ug/L
4) TM Ethane	8.999	24621194	28.814 ug/L

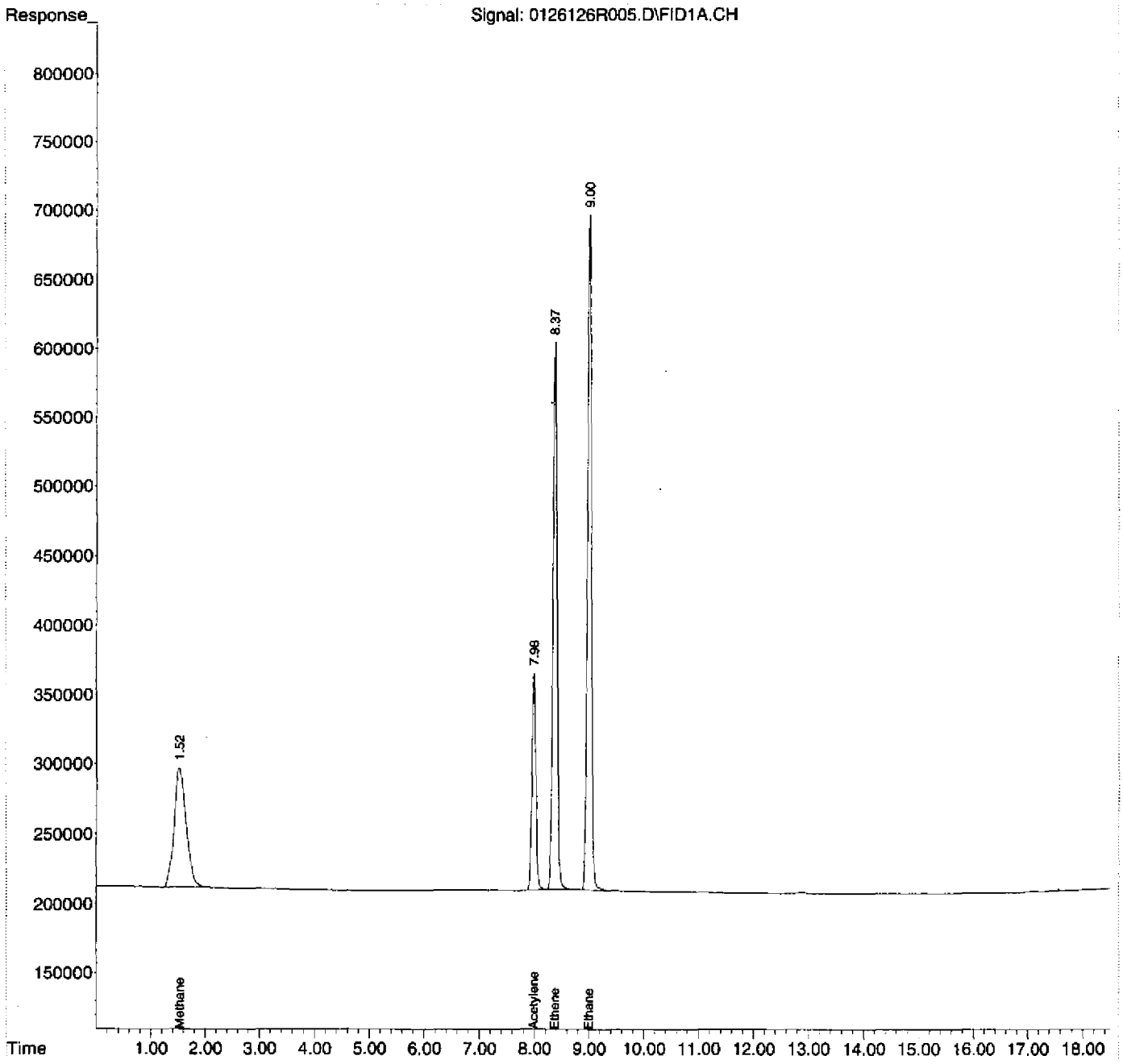
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\012612RSK\
Data File : 0126126R005.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 26 Jan 2012 7:24 pm
Operator : rh
Sample : 2010040-CAL4
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jan 27 09:19:01 2012
Quant Method : D:\MSDCHEM\1\2012\METHOD\0126126RSK.M
Quant Title :
QLast Update : Fri Jan 27 09:18:54 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\012612RSK\
Data File : 0126126R006.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 26 Jan 2012 7:58 pm
Operator : rh
Sample : 2010040-CAL3
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 27 09:18:44 2012
Quant Method : D:\MSDCHEM\1\2012\METHOD\0126126RSK.M
Quant Title :
QLast Update : Fri Jan 27 09:18:36 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	7.979	2268728	8.271 ug/L
Spiked Amount 66.330 Range 66 - 153		Recovery =	12.47%#
Target Compounds			
1) TM Methane	1.522	4118226	4.869 ug/L
3) TM Ethene	8.369	6324323	8.412 ug/L
4) TM Ethane	9.000	7407829	8.966 ug/L

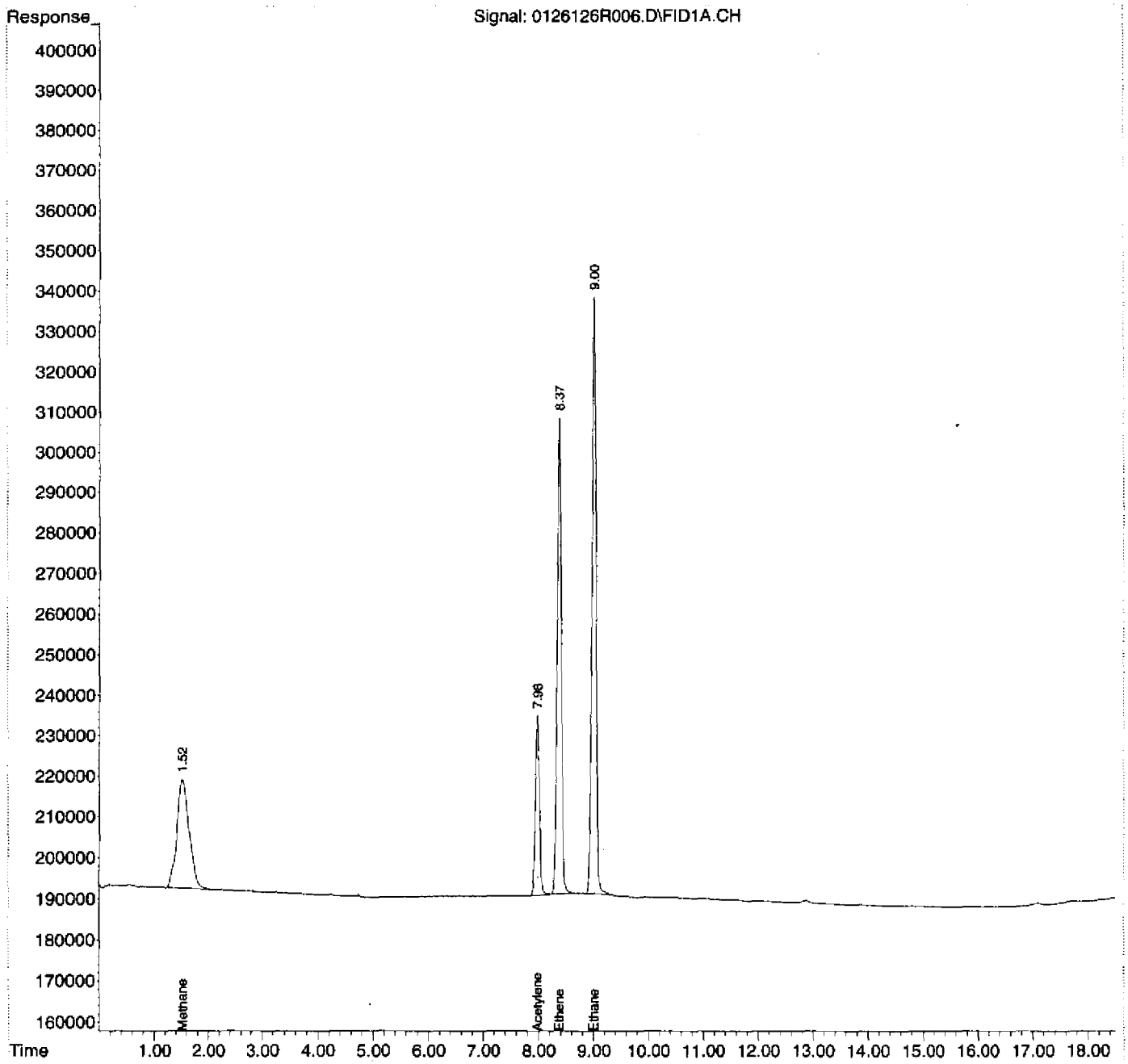
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\012612RSK\
Data File : 0126126R006.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 26 Jan 2012 7:58 pm
Operator : rh
Sample : 2010040-CAL3
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 27 09:18:44 2012
Quant Method : D:\MSDCHEM\1\2012\METHOD\0126126RSK.M
Quant Title :
QLast Update : Fri Jan 27 09:18:36 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\012612RSK\
Data File : 0126126R007.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 26 Jan 2012 8:31 pm
Operator : rh
Sample : 2010040-CAL2
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 27 09:18:23 2012
Quant Method : D:\MSDCHEM\1\2012\METHOD\0126126RSK.M
Quant Title :
QLast Update : Fri Jan 27 09:18:10 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	7.976	665342	2.426 ug/L
Spiked Amount 66.330 Range 66 - 153		Recovery =	3.66%#
Target Compounds			
1) TM Methane	1.524	1354094	1.657 ug/L
3) TM Ethene	8.368	1891551	2.657 ug/L
4) TM Ethane	9.000	2187768	2.770 ug/L

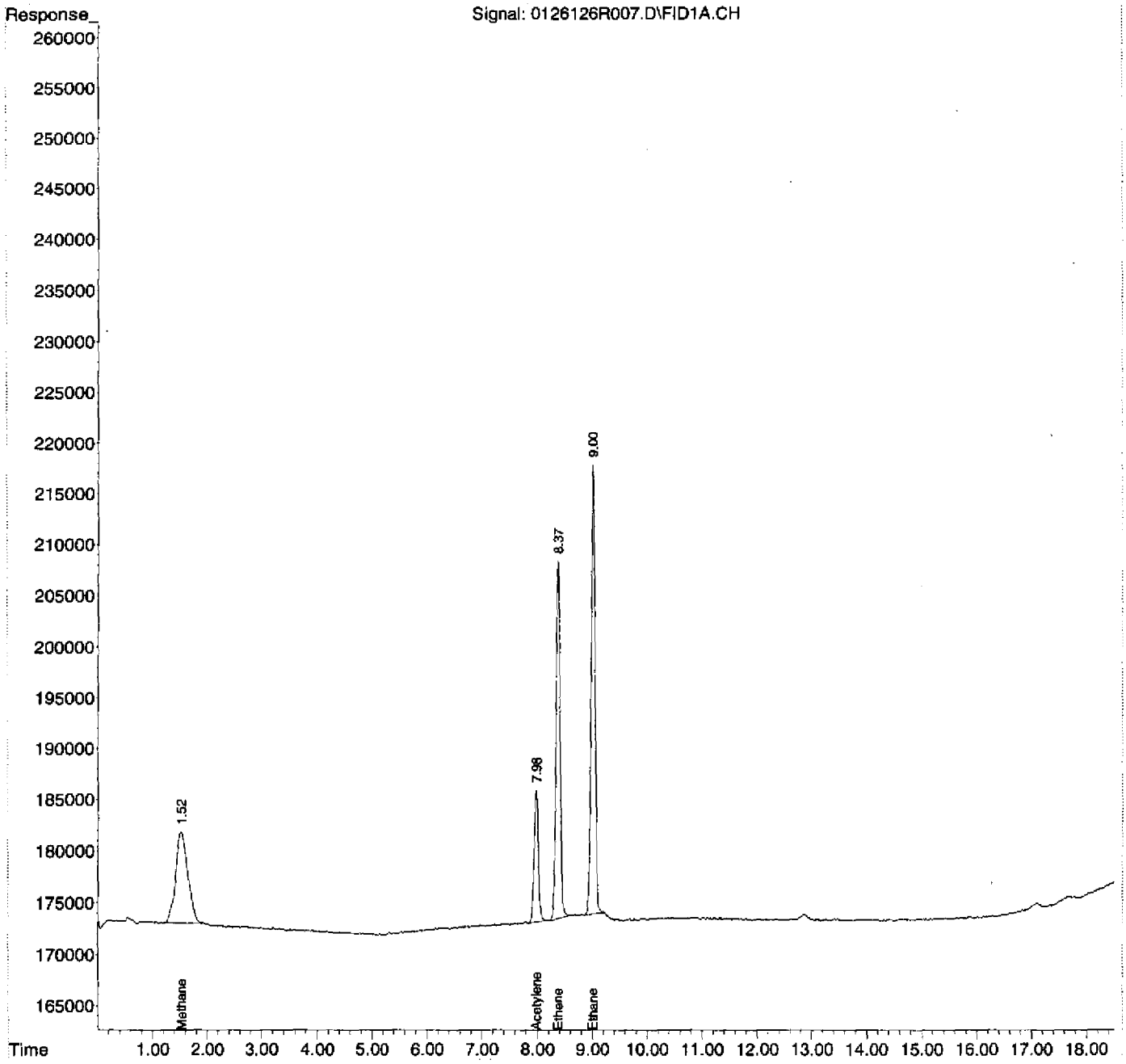
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\012612RSK\
Data File : 0126126R007.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 26 Jan 2012 8:31 pm
Operator : rh
Sample : 2010040-CAL2
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 27 09:18:23 2012
Quant Method : D:\MSDCHEM\1\2012\METHOD\0126126RSK.M
Quant Title :
QLast Update : Fri Jan 27 09:18:10 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



Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\012612RSK\
Data File : 0126126R008.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 26 Jan 2012 9:04 pm
Operator : rh
Sample : 2010040-CAL1
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 27 09:17:33 2012
Quant Method : D:\MSDCHEM\1\2012\METHOD\0126126RSK.M
Quant Title :
QLast Update : Fri Jan 27 09:16:46 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	7.976	324314	NoCal	ug/L
Spiked Amount 66.330 Range 66 - 153		Recovery =	0.00%#	
Target Compounds				
1) TM Methane	1.519	766241	NoCal	ug/L
3) TM Ethene	8.368	895692	NoCal	ug/L
4) TM Ethane	9.000	1038795	NoCal	ug/L

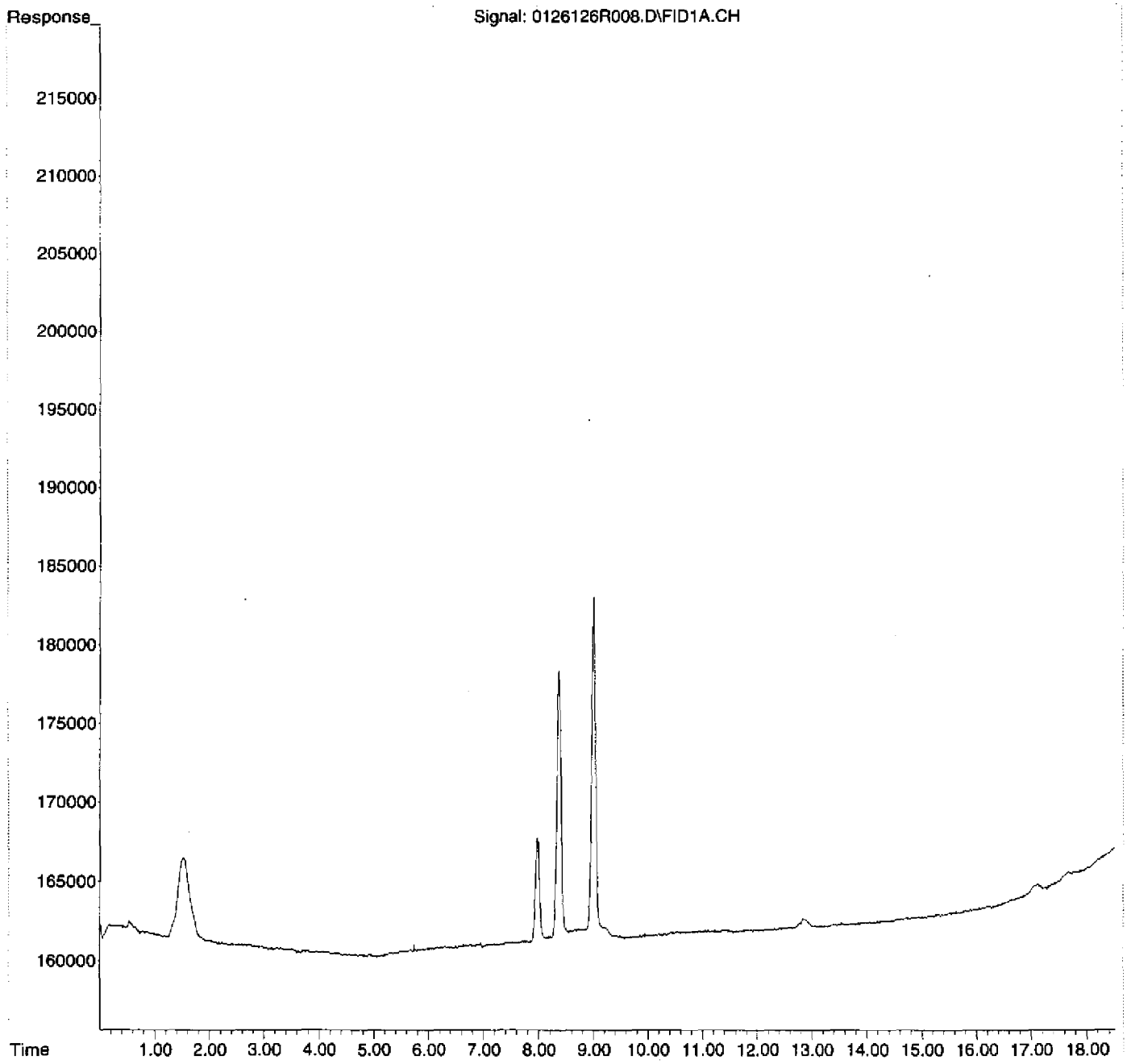
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\012612RSK\
Data File : 0126126R008.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 26 Jan 2012 9:04 pm
Operator : rh
Sample : 2010040-CAL1
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 27 09:17:33 2012
Quant Method : D:\MSDCHEM\1\2012\METHOD\0126126RSK.M
Quant Title :
QLast Update : Fri Jan 27 09:16:46 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: 0126126R009.D
Date Acquired: 1/26/2012
Operator: rh

Second Source Std: 1H18014

Analyte	Spike ug/L	Calculated ug/L	QC Limits	%R	Status
Methane	43.723	40.910	70 -130	93.6%	pass
Acetylene	70.346	73.371	70 -130	104.3%	pass
Ethene	75.758	75.217	70 -130	99.3%	pass
Ethane	81.169	80.900	70 -130	99.7%	pass

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\012612RSK\
Data File : 0126126R009.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 26 Jan 2012 9:32 pm
Operator : rh
Sample : 2010040-SCV1
Misc :
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jan 27 11:29:04 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	7.968	25644386	73.371 ug/L
Spiked Amount 66.330 Range 66 - 153		Recovery =	110.62%
Target Compounds			
1) TM Methane	1.521	41647328	40.910 ug/L
3) TM Ethene	8.364	66787780	75.217 ug/L
4) TM Ethane	8.997	78195027	80.900 ug/L
5) Qual Propane	0.000	0	N.D.
6) Qual Butane	0.000	0	N.D.

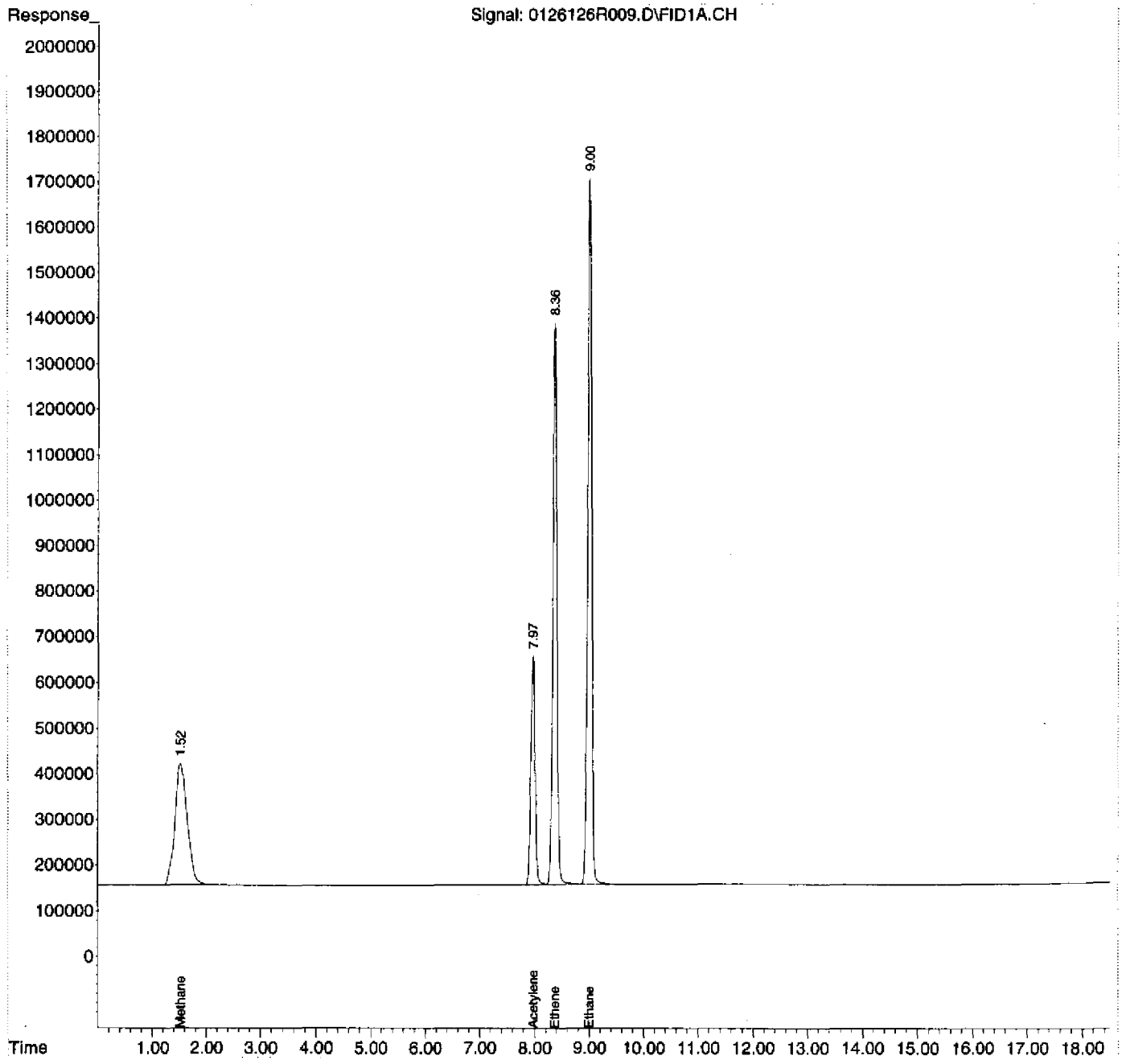
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\012612RSK\
Data File : 0126126R009.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 26 Jan 2012 9:32 pm
Operator : rh
Sample : 2010040-SCV1
Misc :
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jan 27 11:29:04 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\012612RSK\
Data File : 0126126R010.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 26 Jan 2012 10:08 pm
Operator : rh
Sample : DIAG MIXED GAS
Misc :
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jan 27 11:48:42 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	7.975	7518601	21.511 ug/L
Spiked Amount 66.330 Range 66 - 153		Recovery =	32.43%#
Target Compounds			
1) TM Methane	1.511	3903857	3.835 ug/L
3) TM Ethene	8.371	6989111	7.871 ug/L
4) TM Ethane	9.020	7037708	7.281 ug/L
5) Qual Propane	12.895	10460329	NoCal
6) Qual Butane	17.725	12892720	NoCal

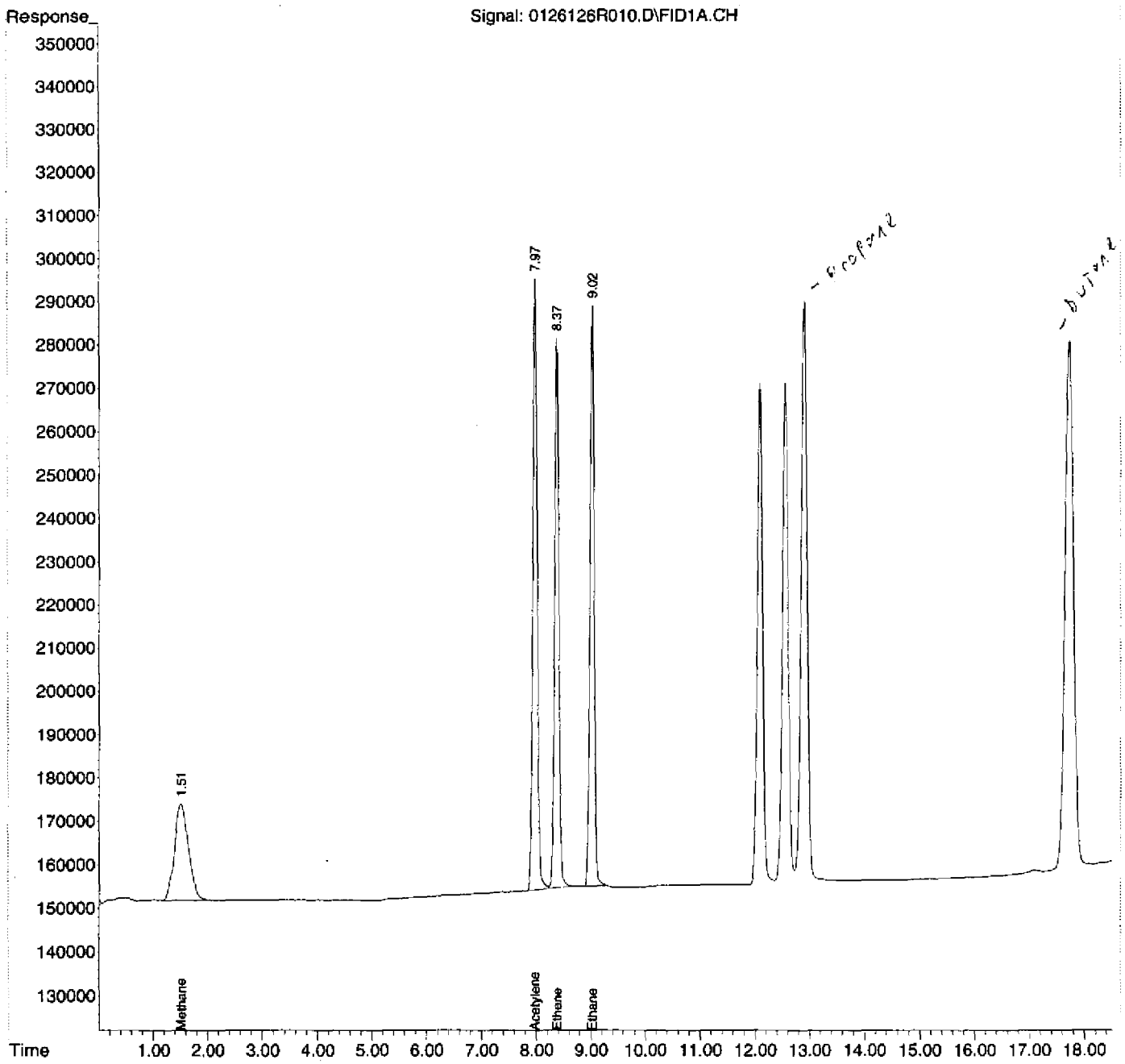
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\012612RSK\
Data File : 0126126R010.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 26 Jan 2012 10:08 pm
Operator : rh
Sample : DIAG MIXED GAS
Misc :
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jan 27 11:48:42 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\012612RSK\
Data File : 0126126R011.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 26 Jan 2012 10:35 pm
Operator : rh
Sample : PROPANE
Misc :
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jan 27 11:49:06 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	0.000	0	N.D.	ug/L
Spiked Amount 66.330 Range 66 - 153 Recovery = 0.00%#				
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	12.883	237365336	NoCal	
6) Qual Butane	0.000	0	N.D.	

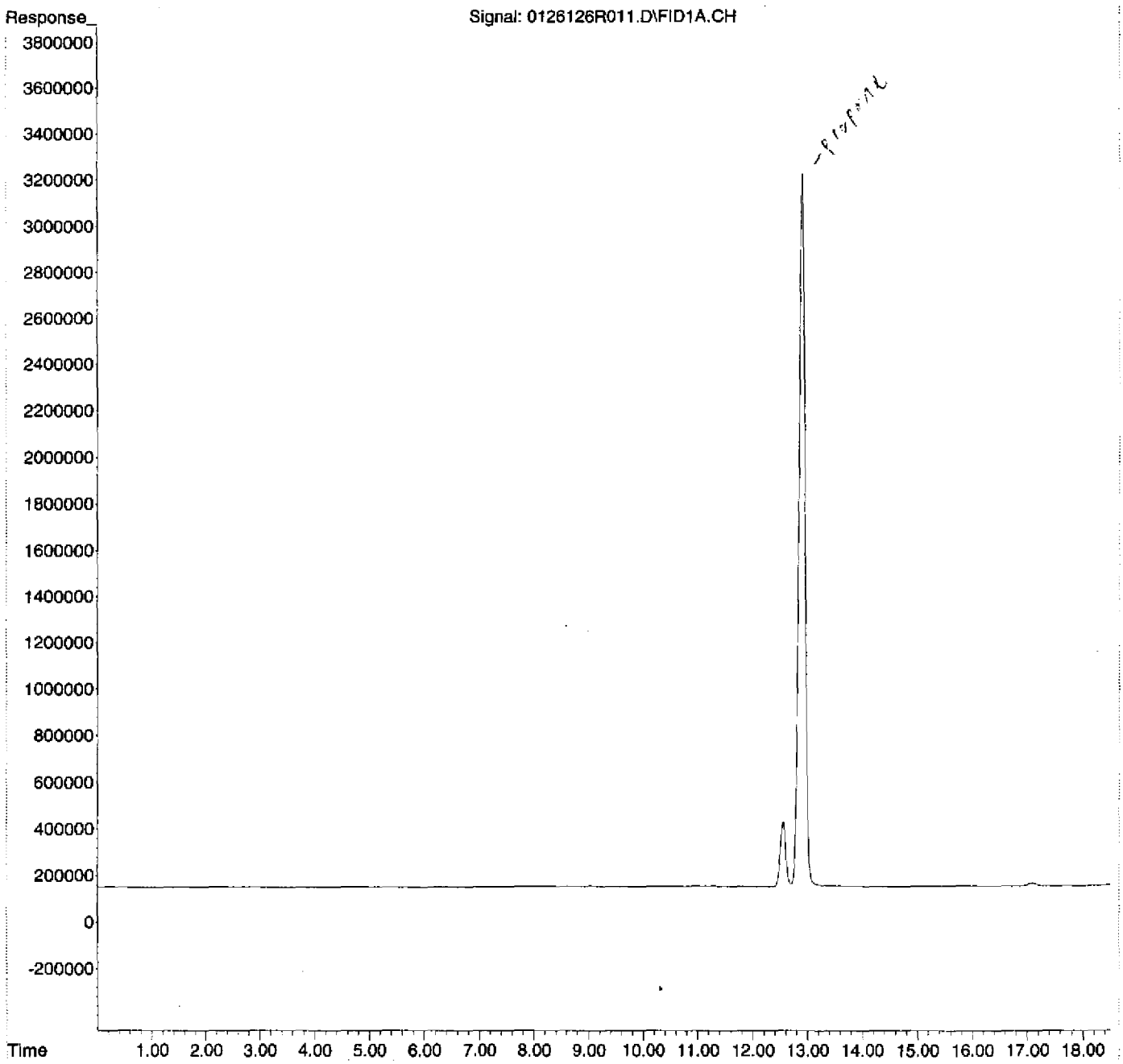
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\012612RSK\
Data File : 0126126R011.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 26 Jan 2012 10:35 pm
Operator : rh
Sample : PROPANE
Misc :
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jan 27 11:49:06 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\012612RSK\
Data File : 0126126R012.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 26 Jan 2012 11:11 pm
Operator : rh
Sample : BUTANE
Misc :
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 27 11:49:40 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	0.000	0	N.D. ug/L
Spiked Amount 66.330 Range 66 - 153 Recovery = 0.00%#			
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	9.023	1000416	1.035 ug/L
5) Qual Propane	12.899	34506244	NoCal
6) Qual Butane	17.710	56367388	NoCal

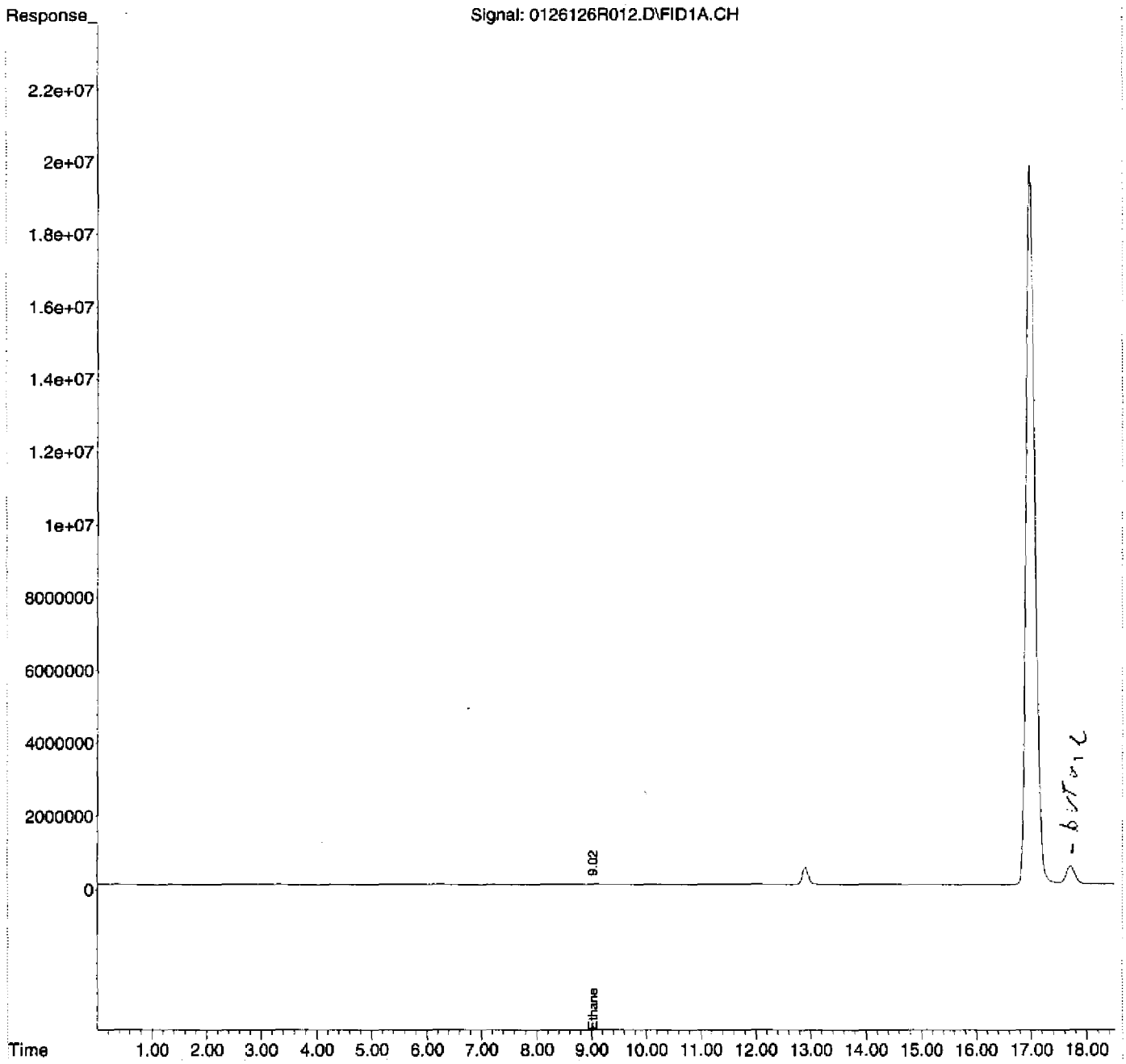
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\012612RSK\
Data File : 0126126R012.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 26 Jan 2012 11:11 pm
Operator : rh
Sample : BUTANE
Misc :
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 27 11:49:40 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



SDG: 12034C

Instrument: AG6890N-6

Analysis Date: 2/6/12

SAMPLE DATA

G:\USER\ESAT\1 Organic Group\Forms\DataPackageSeparators.doc

Injection Log

Operator: rh
Directory: D:\MSDCHEM\1\2012\DATA\020612RSK\

Vial	File Name	Mult	Sample Info	Misc Info	Date Acquired
1	0206126R01.D	0	2020016-CCV1	2B06005	06 Feb 2012 9:40 am
2	0206126R02.D	0	2020016-LCV1	2B06003	06 Feb 2012 10:07 am
3	0206126R03.D	0	2020016-LCV2	2B06004	06 Feb 2012 10:34 am
4	0206126R04.D	0	B2B0015-BLK1	MB	06 Feb 2012 11:10 am
5	0206126R05.D	0	B2B0015-BS1	LCS	06 Feb 2012 11:37 am
6	0206126R06.D	0	1202005-01RE1	HW32 6.0ML	06 Feb 2012 12:13 pm
7	0206126R07.D	0	1202005-02RE1	HW32-P 6.0ML	06 Feb 2012 12:41 pm
8	0206126R08.D	0	1202005-08RE1	HW26-P 0.04ML	06 Feb 2012 1:18 pm
9	0206126R09.D	0	1202005-09RE1	HW29 0.02ML	06 Feb 2012 1:46 pm
10	0206126R10.D	0	1202005-10RE1	HW29Z 0.03ML	06 Feb 2012 2:22 pm
11	0206126R11.D	0	1202005-12RE1	HW52 0.15ML	06 Feb 2012 2:56 pm
12	0206126R12.D	0	1202005-16RE1	HW26 0.04ML	06 Feb 2012 3:30 pm
13	0206126R13.D	0	1202011-01	HW42	06 Feb 2012 4:04 pm
14	0206126R14.D	0	1202011-02	HW46	06 Feb 2012 4:38 pm
15	0206126R15.D	0	1202011-03	HW46-P	06 Feb 2012 5:12 pm
16	0206126R16.D	0	1202011-06	HW34A	06 Feb 2012 5:46 pm
17	0206126R17.D	0	1202011-07	HW34A-P	06 Feb 2012 6:14 pm
18	0206126R18.D	0	B2B0015-MS1	MS 11-07	06 Feb 2012 6:50 pm
19	0206126R19.D	0	B2B0015-MSD1	MSD 11-07	06 Feb 2012 7:17 pm
20	0206126R20.D	0	1202011-10	HW42Z	06 Feb 2012 7:53 pm
21	0206126R21.D	0	1202011-06RE1	HW34A 0.08ML	06 Feb 2012 8:21 pm
22	0206126R22.D	0	1202011-07RE1	HW34A-P 5.0ML	06 Feb 2012 8:56 pm
23	0206126R23.D	0	1202005-IBL1	IB	06 Feb 2012 9:23 pm
24	0206126R24.D	0	1202011-04	TB15	06 Feb 2012 9:58 pm
25	0206126R25.D	0	1202011-05	FB08	06 Feb 2012 10:25 pm
26	0206126R26.D	0	1202011-08	TB14	06 Feb 2012 11:01 pm
27	0206126R27.D	0	1202011-09	FB09	06 Feb 2012 11:28 pm
28	0206126R28.D	0	1202011-11	TB16	07 Feb 2012 12:02 am
29	0206126R29.D	0	2020016-CCV2	2B06005	07 Feb 2012 12:29 am
30	0206126R30.D	0	2020016-CCV3	2B06005	07 Feb 2012 1:04 am

Response Factor Report AG6890N-6

Method Path : D:\MSDCHEM\1\2012\METHOD\
Method File : 0126126RSK.M
Title :
Last Update : Fri Jan 27 11:26:56 2012
Response Via : Initial Calibration

Calibration Files
1 =0126126R008.D 2 =0126126R007.D 3 =0126126R006.D
4 =0126126R005.D 5 =0126126R004.D 6 =0126126R003.D

	Compound	1	2	3	4	5	6	Avg	%RSD
1) TM	Methane		1.100	1.004	1.003	0.997	1.028	1.018 E6	4.25
2) S	Acetylene	3.221	3.304	3.380	3.710	3.595	3.697	3.495 E5	5.56
3) TM	Ethene	8.210	8.669	8.696	9.069	9.135	9.418	8.879 E5	4.42
4) TM	Ethane	0.894	0.941	0.956	0.986	0.994	1.023	0.967 E6	4.30
5) Qual	Propane							0.000	-1.00
6) Qual	Butane							0.000	-1.00

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

GC QA-QC Check Report 00101

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

File	Sample	Surrogate Recovery %
0206126R01.D	2020016-CCV1	33*
0206126R02.D	2020016-LCV1	2*
0206126R03.D	2020016-LCV2	3*
0206126R04.D	B2B0015-BLK1	114
0206126R05.D	B2B0015-BS1	112
0206126R06.D	1202005-01RE1	104
0206126R07.D	1202005-02RE1	110
0206126R08.D	1202005-08RE1	114
0206126R09.D	1202005-09RE1	110
0206126R10.D	1202005-10RE1	115
0206126R11.D	1202005-12RE1	111
0206126R12.D	1202005-16RE1	114
0206126R13.D	1202011-01	111
0206126R14.D	1202011-02	110
0206126R15.D	1202011-03	113
0206126R16.D	1202011-06	113
0206126R17.D	1202011-07	109
0206126R18.D	B2B0015-MS1	104
0206126R19.D	B2B0015-MSD1	107
0206126R20.D	1202011-10	116
0206126R21.D	1202011-06RE1	0*
0206126R22.D	1202011-07RE1	0*
0206126R23.D	1202005-IBL1	223*
0206126R24.D	1202011-04	112
0206126R25.D	1202011-05	109
0206126R26.D	1202011-08	110
0206126R27.D	1202011-09	110
0206126R28.D	1202011-11	109
0206126R29.D	2020016-CCV2	35*

→ did not add surrogate. RH 2/7/12

– double surr.

00074

0206126R30.D 2020016-CCV3 34*

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

Created: Tue Feb 07 09:47:14 2012 AG6890N-6

Evaluate Continuing Calibration Report

Data Path : D:\MSDCHEM\1\2012\DATA\020612RSK\
Data File : 0206126R01.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 06 Feb 2012 9:40 am
Operator : rh
Sample : 2020016-CCV1
Misc : 2B06005
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Feb 06 09:59:12 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

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	1.018	0.926 E6	9.0	92	0.00
2 S	Acetylene	349.516	353.374 E3	-1.1	95	-0.03
3 TM	Ethene	887.936	837.695 E3	5.7	92	0.00
4 TM	Ethane	966.567	904.258 E3	6.4	92	0.00
6 Qual	Butane	0.000	0.000	0.0	0#	-0.20

Evaluate Continuing Calibration Report - Not Founds

5 Qual	Propane	0.000	0.000	0.0	0#	-12.89#

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

$$\frac{904258 - 966567}{966567} \times 100 = 6.4\%$$

RH
2/8/12

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\020612RSK\
Data File : 0206126R01.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 06 Feb 2012 9:40 am
Operator : rh
Sample : 2020016-CCV1
Misc : 2B06005
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Feb 06 09:59:12 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	7.945	7650548	21.889 ug/L
Spiked Amount 66.330 Range 66 - 153		Recovery =	33.00%#
Target Compounds			
1) TM Methane	1.523	12250257	12.033 ug/L
3) TM Ethene	8.366	19648125	22.128 ug/L
4) TM Ethane	9.002	22589267	23.371 ug/L
5) Qual Propane	0.000	0	N.D.
6) Qual Butane	17.519	564252	NoCal

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

7650548 = 21.889
349516

RA
2/9/12

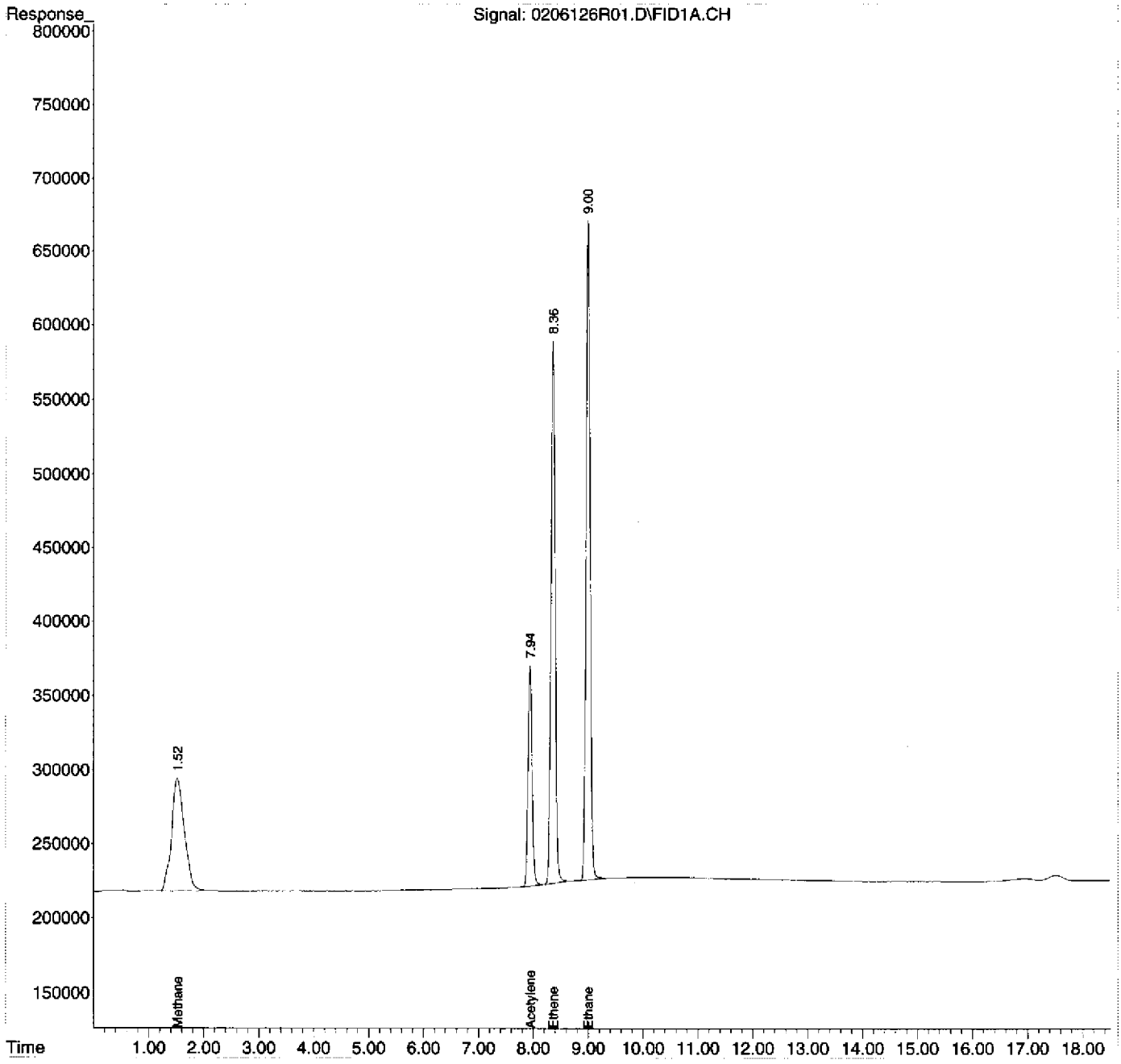
DIM0278627 DIM0278732

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\020612RSK\
Data File : 0206126R01.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 06 Feb 2012 9:40 am
Operator : rh
Sample : 2020016-CCV1
Misc : 2B06005
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Feb 06 09:59:12 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



RSK-175 HC LCV REPORT

Instrument Name: AG6890N-6
File Name LCV1: 0206126R02
File Name LCV2: 0206126R03
Date Acquired: 02/06/12
Operator: rh

Analyte	Spike ug/L	Calculated ug/L	QC Limits	%R	Status
Methane	1.231	1.5	60 - 140	121.9%	pass
Acetylene	2.014	1.986	60 - 140	98.6%	NA
Ethene	1.091	1.142	60 - 140	104.7%	pass
Ethane	1.162	1.217	60 - 140	104.7%	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\020612RSK\
Data File : 0206126R02.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 06 Feb 2012 10:07 am
Operator : rh
Sample : 2020016-LCV1
Misc : 2B06003
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 06 10:54:51 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	7.965	356520	1.020 ug/L
Spiked Amount 66.330 Range 66 - 153		Recovery =	1.54%#
Target Compounds			
1) TM Methane	1.524	934377	0.918 ug/L
3) TM Ethene	8.370	1013799	1.142 ug/L
4) TM Ethane	9.006	1176094	1.217 ug/L
5) Qual Propane	0.000	0	N.D.
6) Qual Butane	0.000	0	N.D.

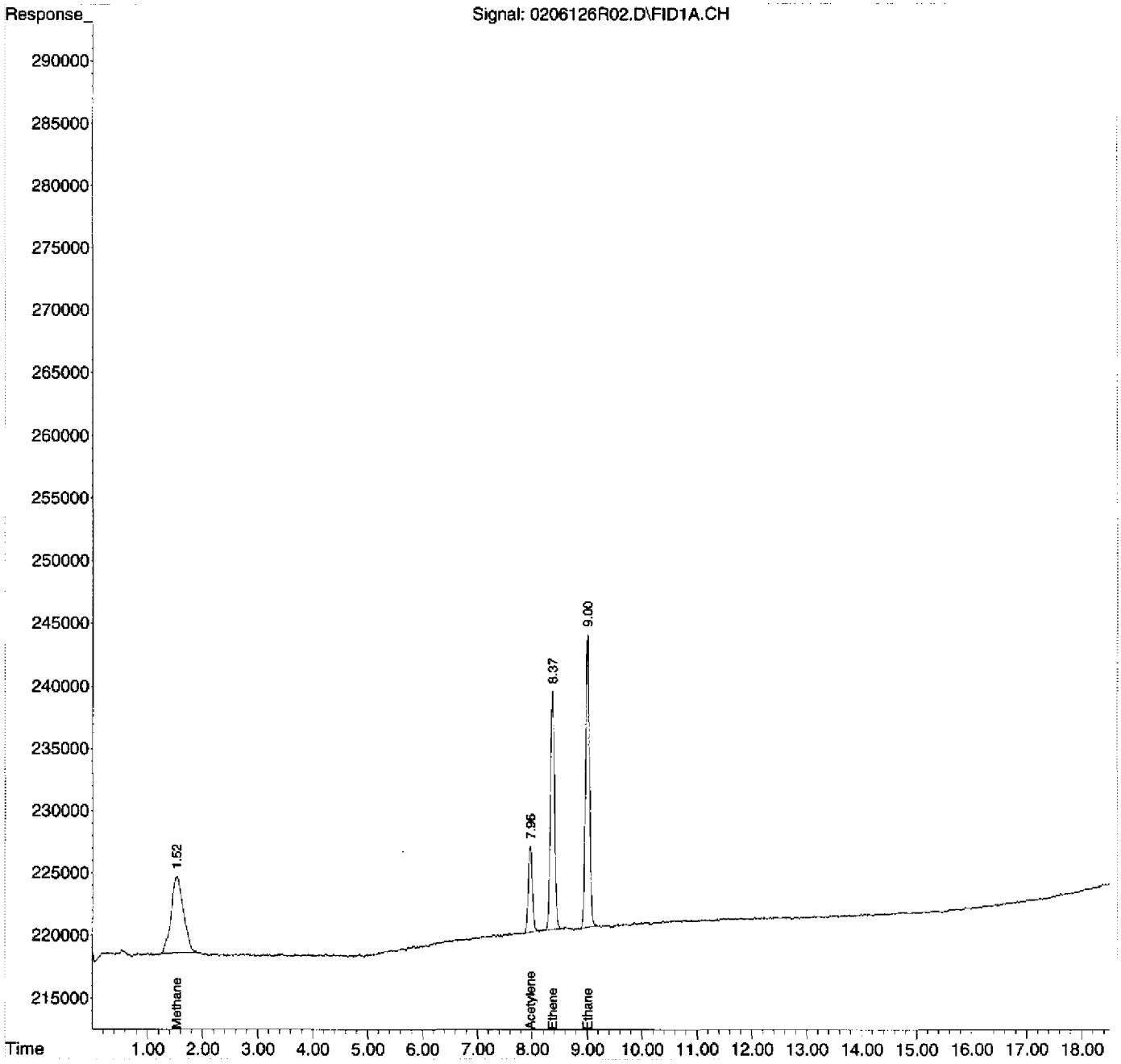
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\020612RSK\
Data File : 0206126R02.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 06 Feb 2012 10:07 am
Operator : rh
Sample : 2020016-LCV1
Misc : 2B06003
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 06 10:54:51 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\020612RSK\
Data File : 0206126R03.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 06 Feb 2012 10:34 am
Operator : rh
Sample : 2020016-LCV2
Misc : 2B06004
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 06 10:55:01 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	7.965	694177	1.986 ug/L
Spiked Amount 66.330 Range 66 - 153		Recovery =	2.99%#
Target Compounds			
1) TM Methane	1.526	1527284	1.500 ug/L
3) TM Ethene	8.370	1958020	2.205 ug/L
4) TM Ethane	9.006	2296921	2.376 ug/L
5) Qual Propane	0.000	0	N.D.
6) Qual Butane	0.000	0	N.D.

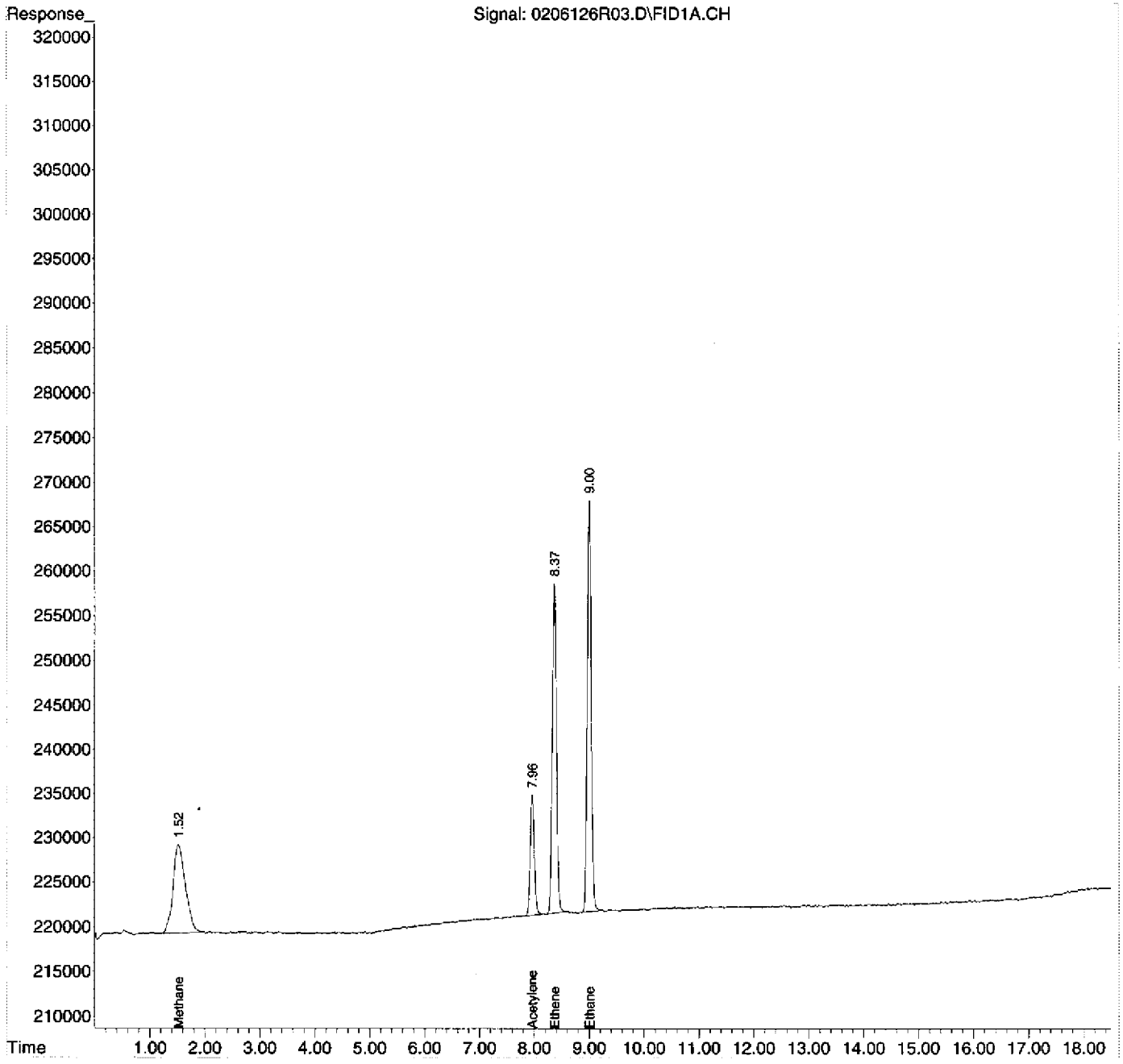
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\020612RSK\
Data File : 0206126R03.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 06 Feb 2012 10:34 am
Operator : rh
Sample : 2020016-LCV2
Misc : 2B06004
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 06 10:55:01 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\020612RSK\
Data File : 0206126R04.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 06 Feb 2012 11:10 am
Operator : rh
Sample : B2B0015-BLK1
Misc : MB
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 06 11:29:22 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	7.958	26473013	75.742 ug/L
Spiked Amount 66.330 Range 66 - 153		Recovery =	114.19%
Target Compounds			
1) TM Methane	1.531	729237	0.716 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.

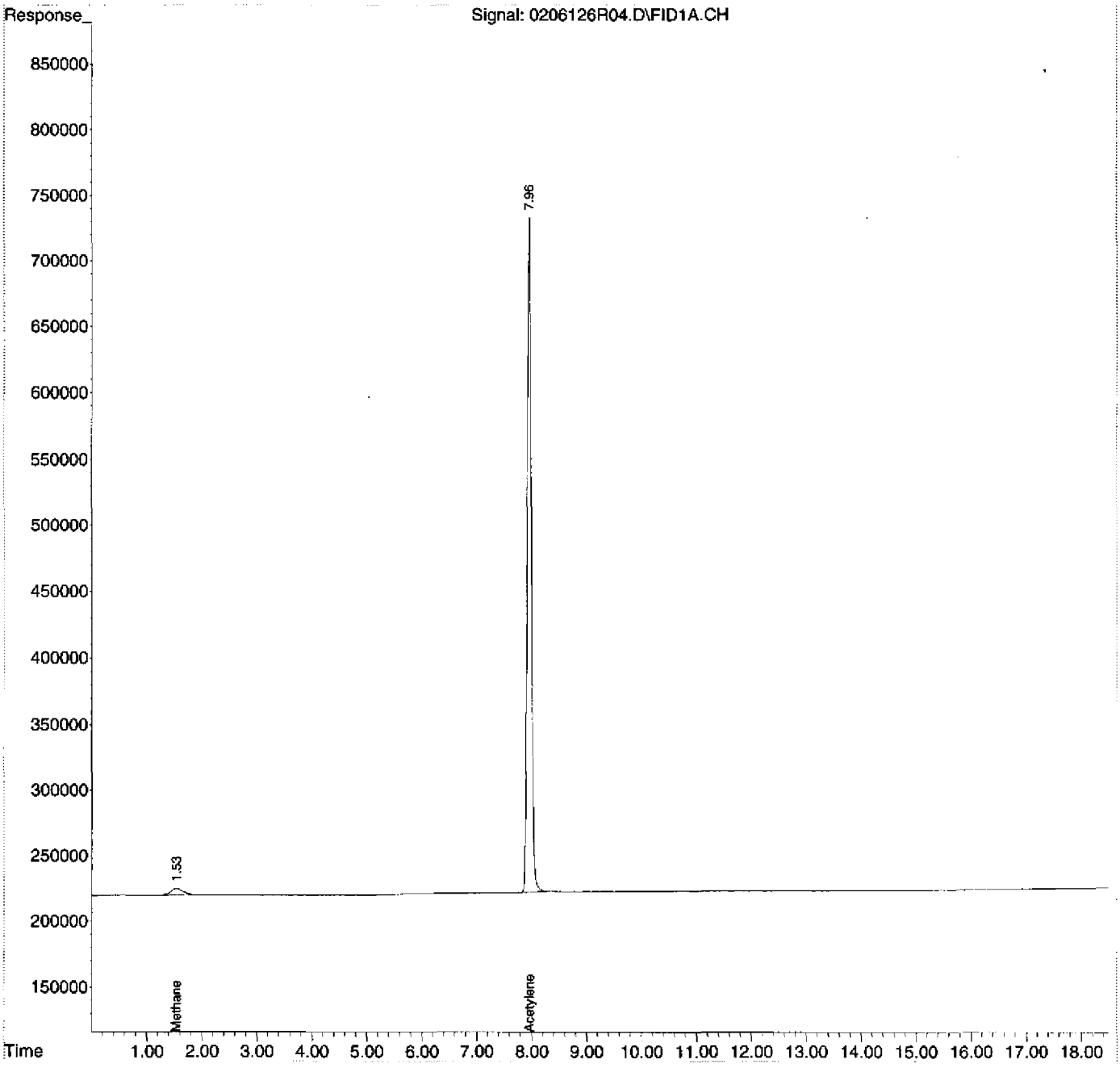
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\020612RSK\
Data File : 0206126R04.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 06 Feb 2012 11:10 am
Operator : rh
Sample : B2B0015-BLK1
Misc : MB
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 06 11:29:22 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



RSK-175 LCSSUMMARY REPORT

Instrument Name: AG6890N-6
File Name: 0206126R05.D
Date Acquired: 2/6/2012
Operator: rh

Analyte	Spike ug/L	Calculated ug/L	QC Limits	%R	Status
Methane	44.099	37.667	70-130	85.4%	pass
Acetylene	72.166	74.389	66.4-153	103.1%	pass
Ethene	78.183	71.984	78-138	92.1%	pass
Ethane	83.269	74.352	77-137	89.3%	pass

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\020612RSK\
Data File : 0206126R05.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 06 Feb 2012 11:37 am
Operator : rh
Sample : B2B0015-BS1
Misc : LCS
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Feb 06 11:56:59 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	7.958	25999995	74.389 ug/L
Spiked Amount 66.330 Range 66 - 153		Recovery =	112.15%
Target Compounds			
1) TM Methane	1.526	38346391	37.667 ug/L
3) TM Ethene	8.367	63917482	71.984 ug/L
4) TM Ethane	9.003	71865965	74.352 ug/L
5) Qual Propane	0.000	0	N.D.
6) Qual Butane	0.000	0	N.D.

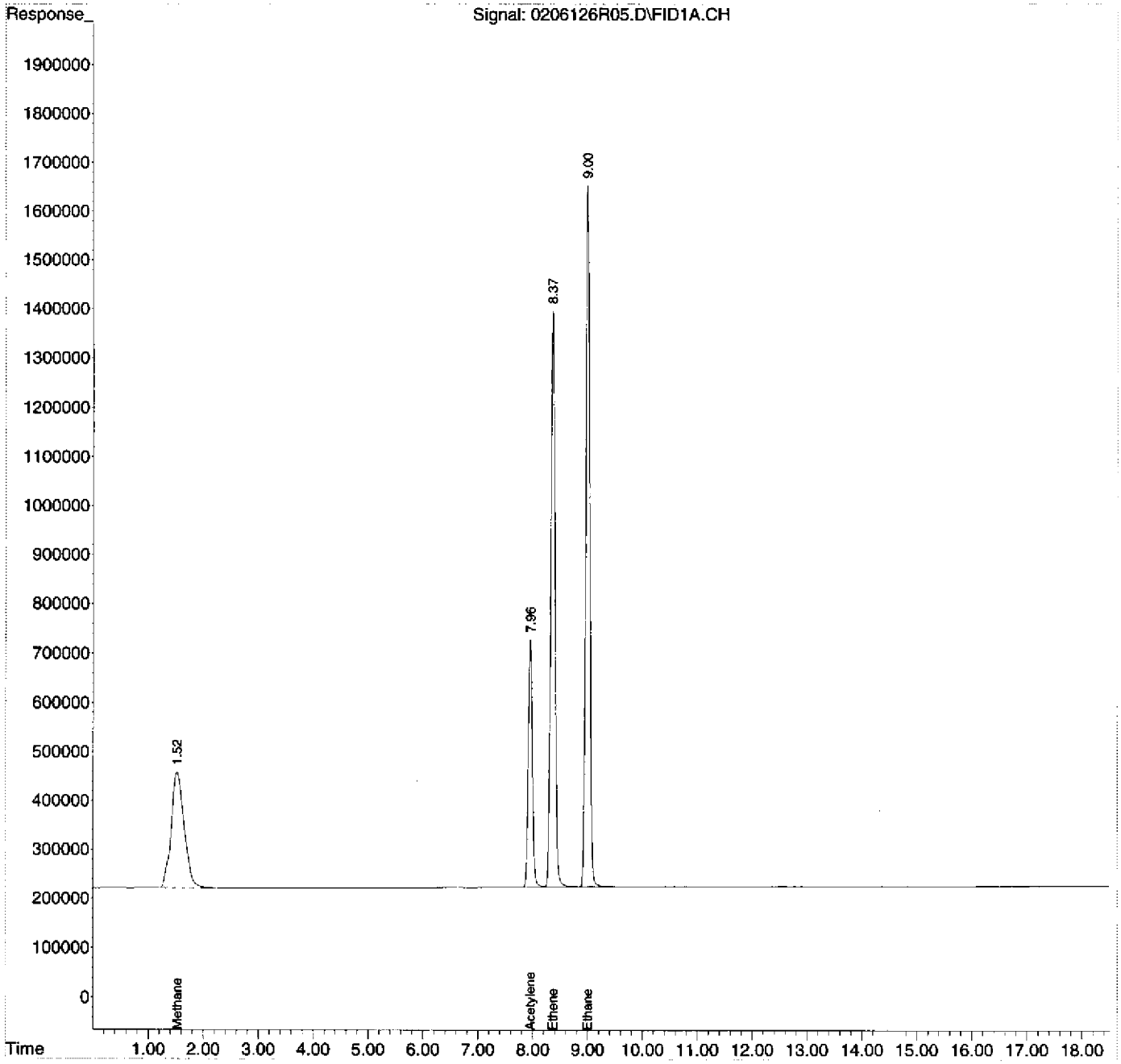
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\020612RSK\
Data File : 0206126R05.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 06 Feb 2012 11:37 am
Operator : rh
Sample : B2B0015-BS1
Misc : LCS
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Feb 06 11:56:59 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



0126126RSK.M Mon Feb 06 11:57:04 2012

0008717 2/13/12

Quantitation Report (QT Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\020612RSK\
Data File : 0206126R13.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 06 Feb 2012 4:04 pm
Operator : rh
Sample : 1202011-01
Misc : HW42
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Feb 10 15:56:43 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	7.957	25836984	73.922 ug/L
Spiked Amount 66.330 Range 66 - 153		Recovery =	111.45%
Target Compounds			
1) TM Methane	1.524	2267754	2.228 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.

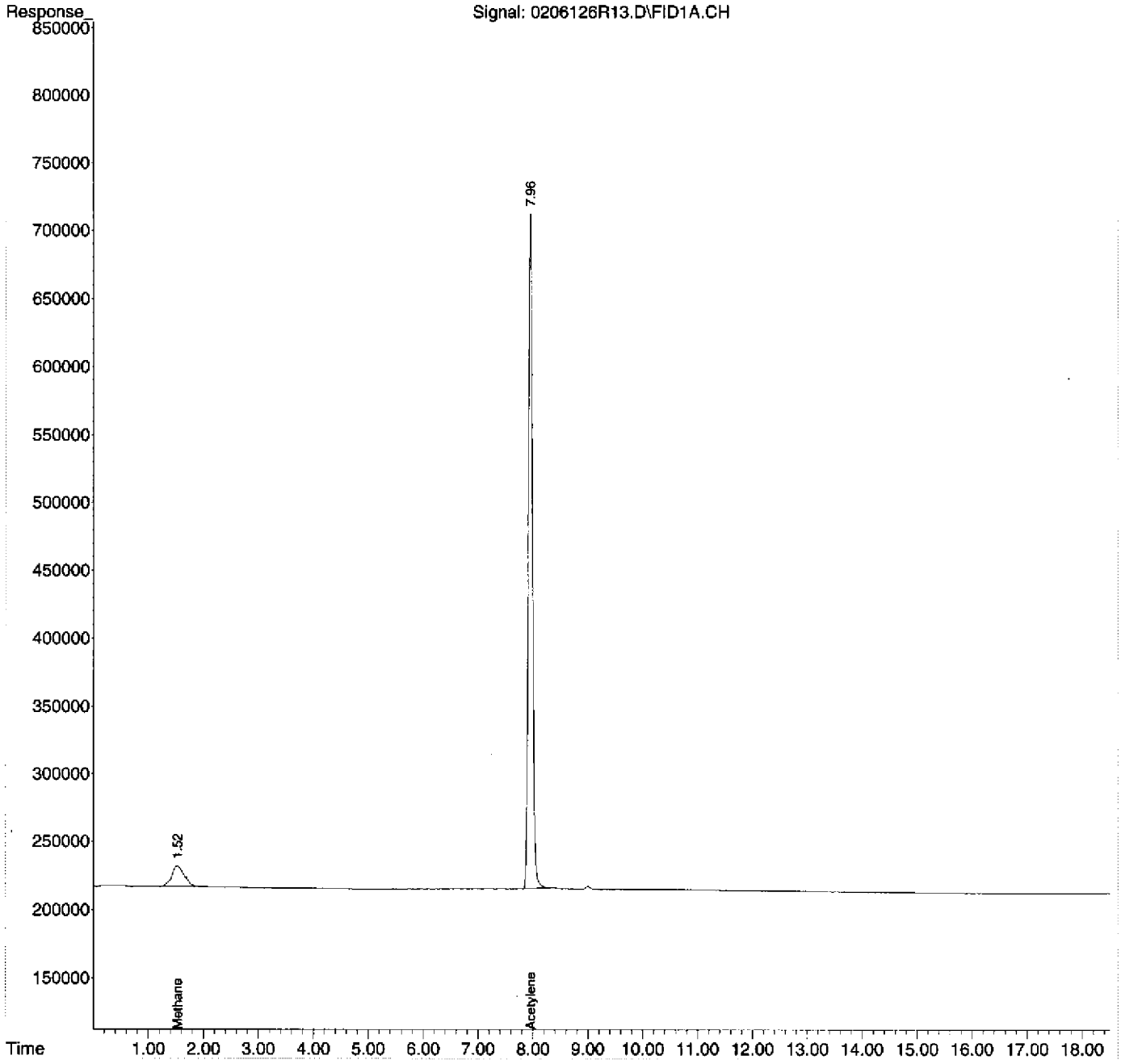
After M.I.
RH 2/10/12

Quantitation Report (QT Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\020612RSK\
Data File : 0206126R13.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 06 Feb 2012 4:04 pm
Operator : rh
Sample : 1202011-01
Misc : HW42
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Feb 10 15:56:43 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

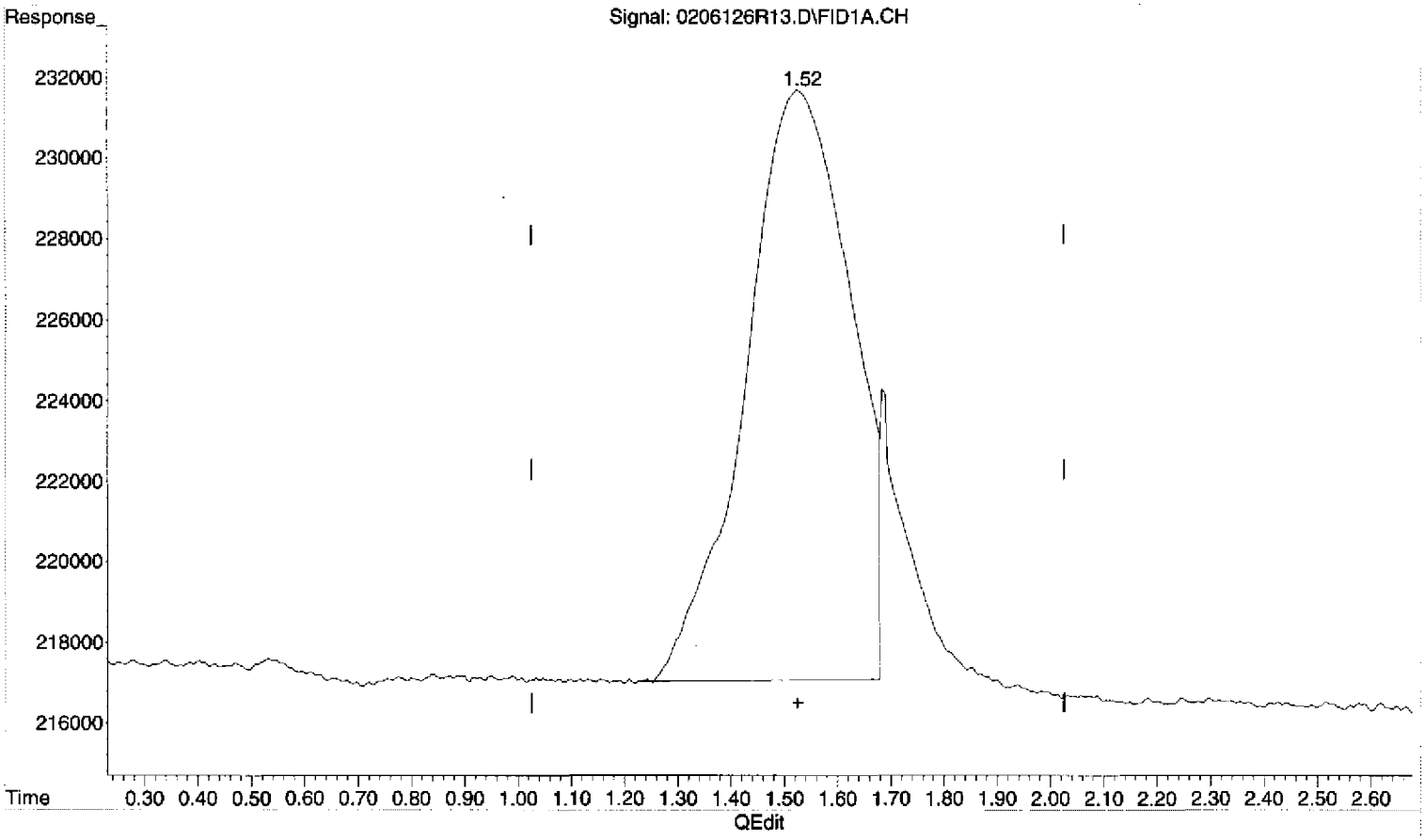


Quantitation Report (Qedit)

Data Path : D:\MSDCHEM\1\2012\DATA\020612RSK\
Data File : 0206126R13.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 06 Feb 2012 4:04 pm
Operator : rh
Sample : 1202011-01
Misc : HW42
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Feb 07 09:27:32 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



(1) Methane (TM)
1.53min 1.951ug/L
response 1986205

Peak cropped.
R/+
2/10/12

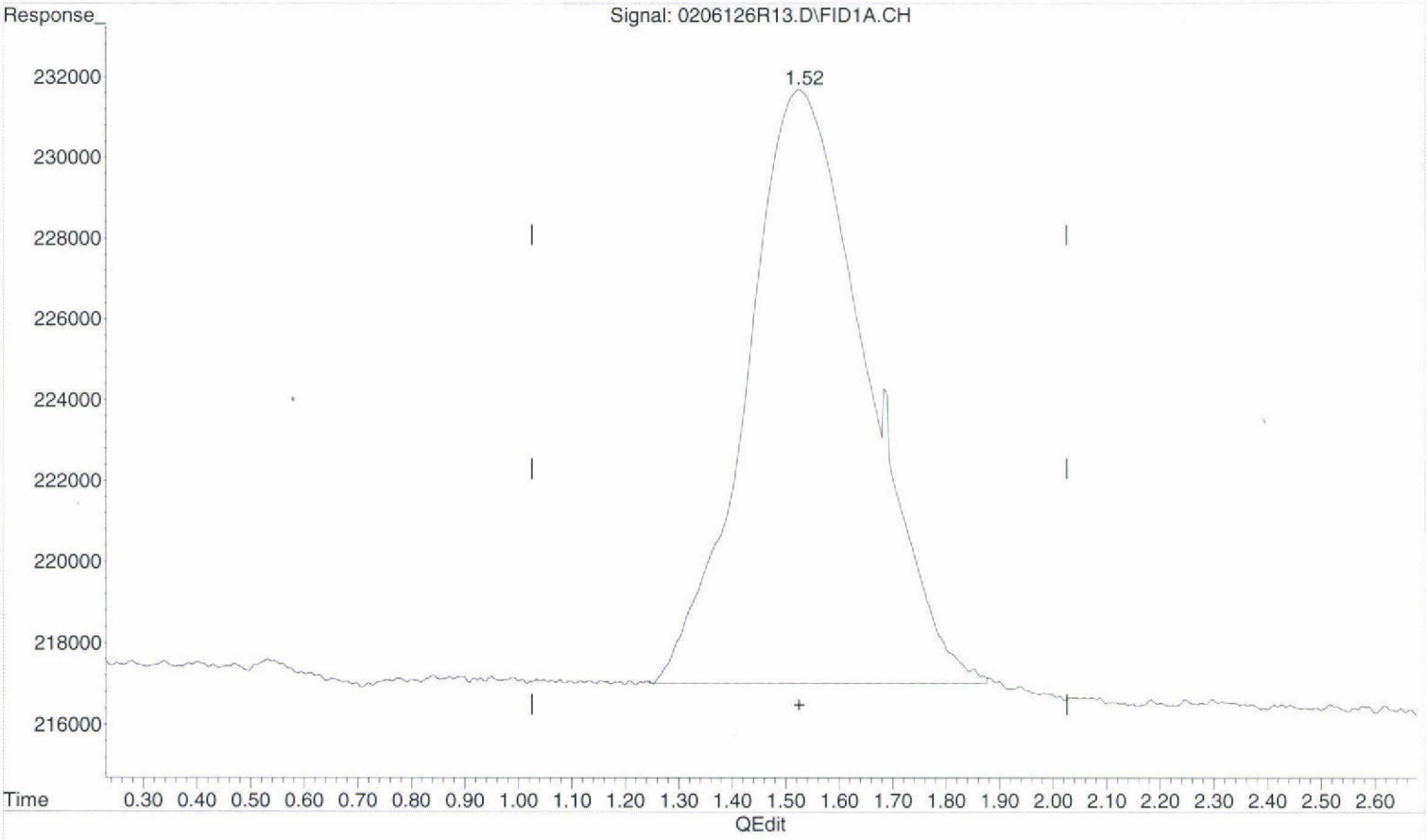
(+) = Expected Retention Time
0126126RSK.M Fri Feb 10 15:56:31 2012

Quantitation Report (Qedit)

Data Path : D:\MSDCHEM\1\2012\DATA\020612RSK\
Data File : 0206126R13.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 06 Feb 2012 4:04 pm
Operator : rh
Sample : 1202011-01
Misc : HW42
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Feb 07 09:27:32 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



(1) Methane (TM)

1.52min 2.228ug/L m

response 2267754

Correct integration

RH 2/10/12

2/10/12

(+) = Expected Retention Time

0126126RSK.M Fri Feb 10 15:56:48 2012

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\020612RSK\
Data File : 0206126R13.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 06 Feb 2012 4:04 pm
Operator : rh
Sample : 1202011-01
Misc : HW42
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Feb 07 09:27:32 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	7.957	25836984	73.922 ug/L
Spiked Amount 66.330 Range 66 - 153		Recovery =	111.45%
Target Compounds			
1) TM Methane	1.526	1986205	1.951 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.

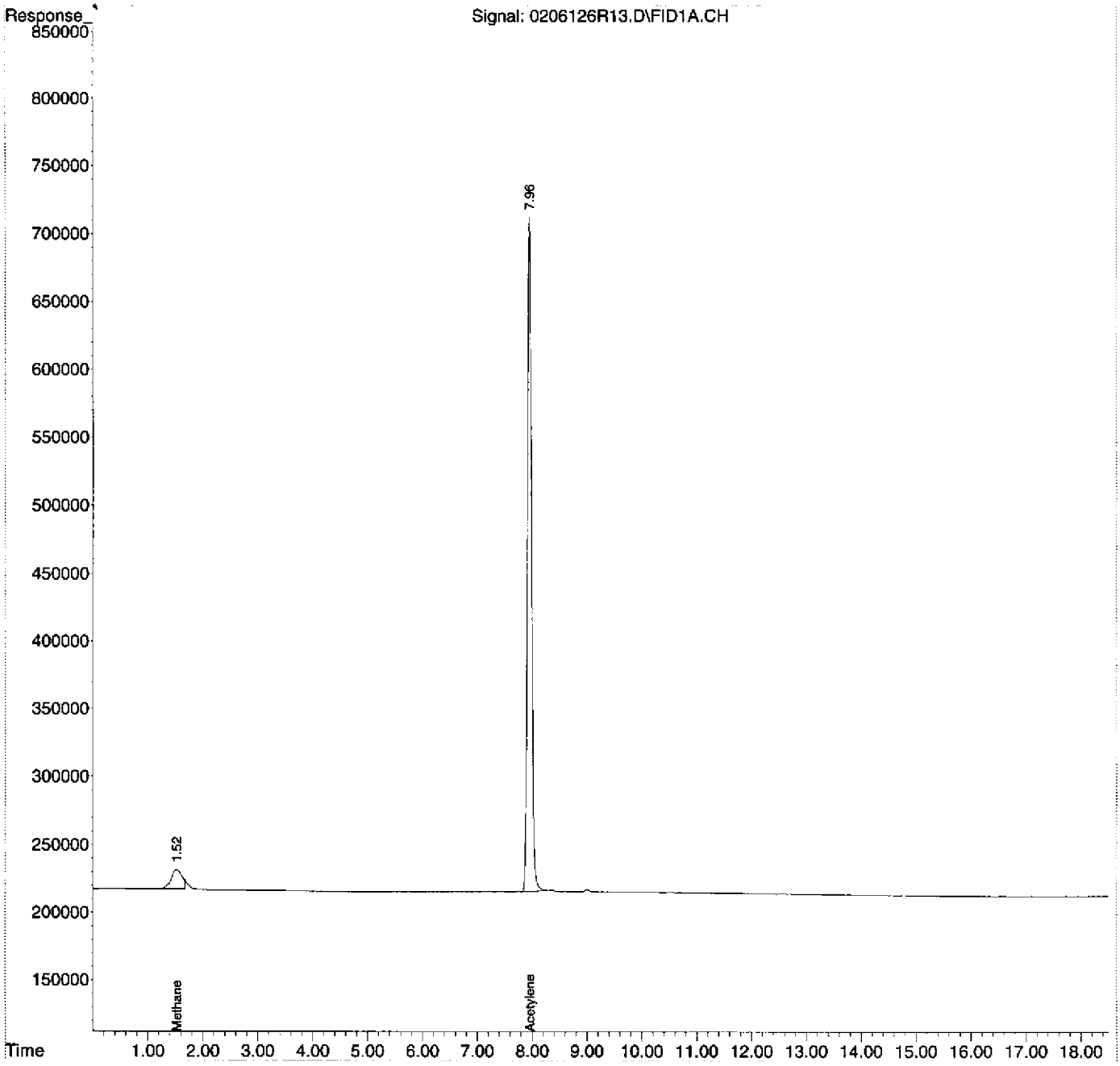
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\020612RSK\
Data File : 0206126R13.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 06 Feb 2012 4:04 pm
Operator : rh
Sample : 1202011-01
Misc : HW42
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Feb 07 09:27:32 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\020612RSK\
Data File : 0206126R14.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 06 Feb 2012 4:38 pm
Operator : rh
Sample : 1202011-02
Misc : HW46
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Feb 07 09:27:39 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	7.955	25462334	72.850 ug/L
Spiked Amount 66.330 Range 66 - 153		Recovery =	109.83%
Target Compounds			
1) TM Methane	1.524	1574662	1.547 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.

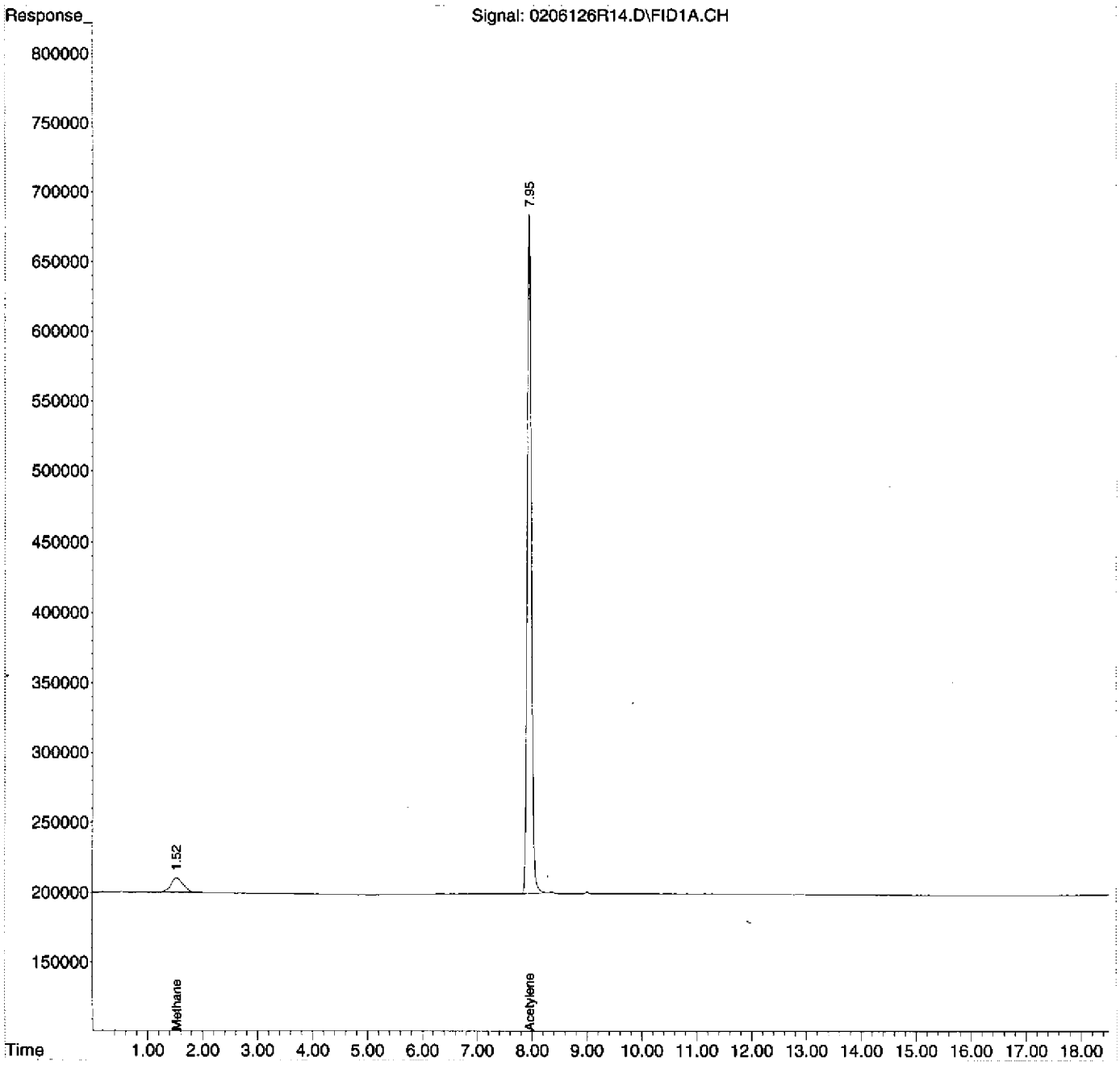
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\020612RSK\
Data File : 0206126R14.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 06 Feb 2012 4:38 pm
Operator : rh
Sample : 1202011-02
Misc : HW46
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Feb 07 09:27:39 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\020612RSK\
Data File : 0206126R15.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 06 Feb 2012 5:12 pm
Operator : rh
Sample : 1202011-03
Misc : HW46-P
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Feb 07 09:27:47 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	7.955	26172448	74.882 ug/L
Spiked Amount 66.330 Range 66 - 153 Recovery = 112.89%			
Target Compounds			
1) TM Methane	1.529	1564131	1.536 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.

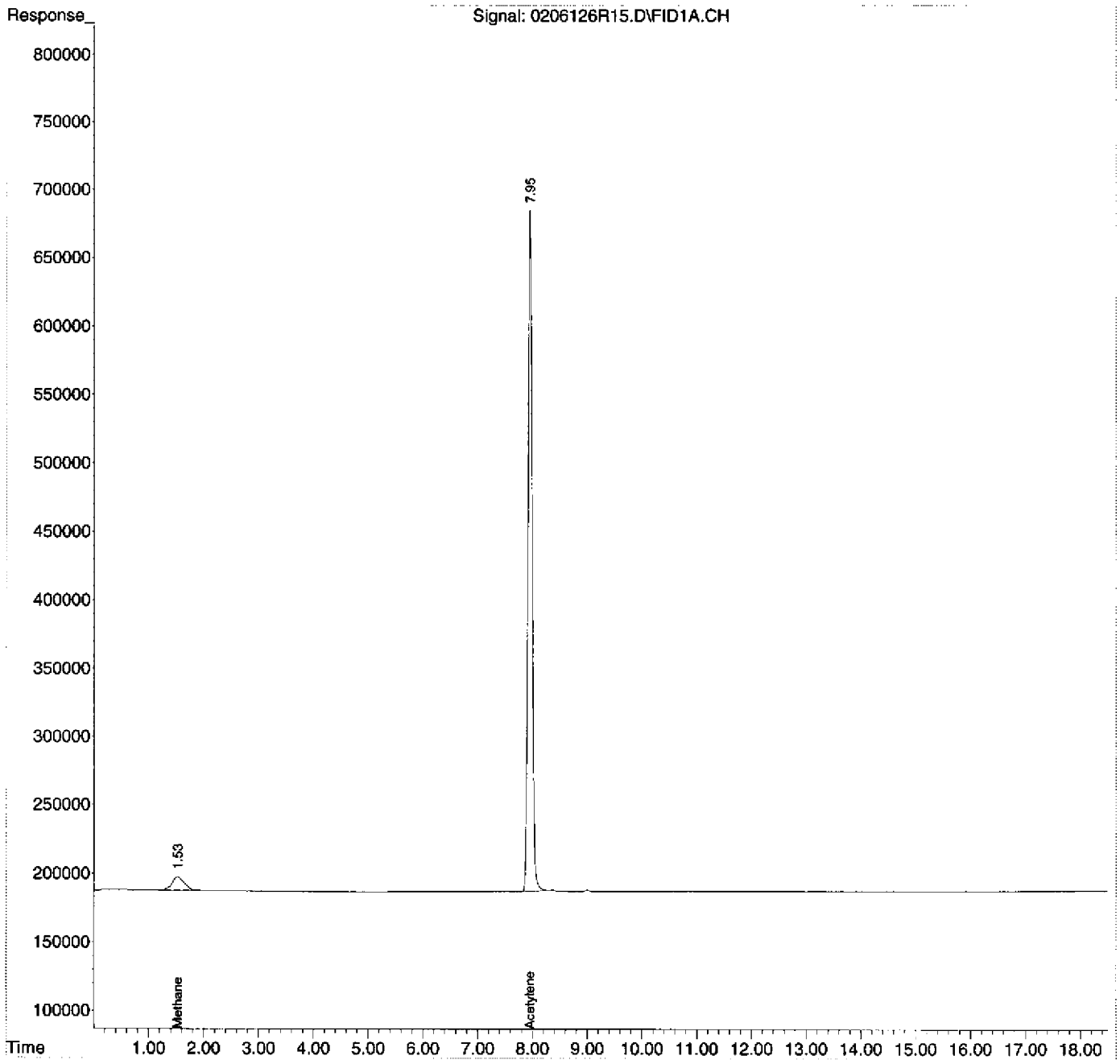
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\020612RSK\
Data File : 0206126R15.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 06 Feb 2012 5:12 pm
Operator : rh
Sample : 1202011-03
Misc : HW46-P
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Feb 07 09:27:47 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\020612RSK\
Data File : 0206126R16.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 06 Feb 2012 5:46 pm
Operator : rh
Sample : 1202011-06
Misc : HW34A
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Feb 07 09:27:54 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

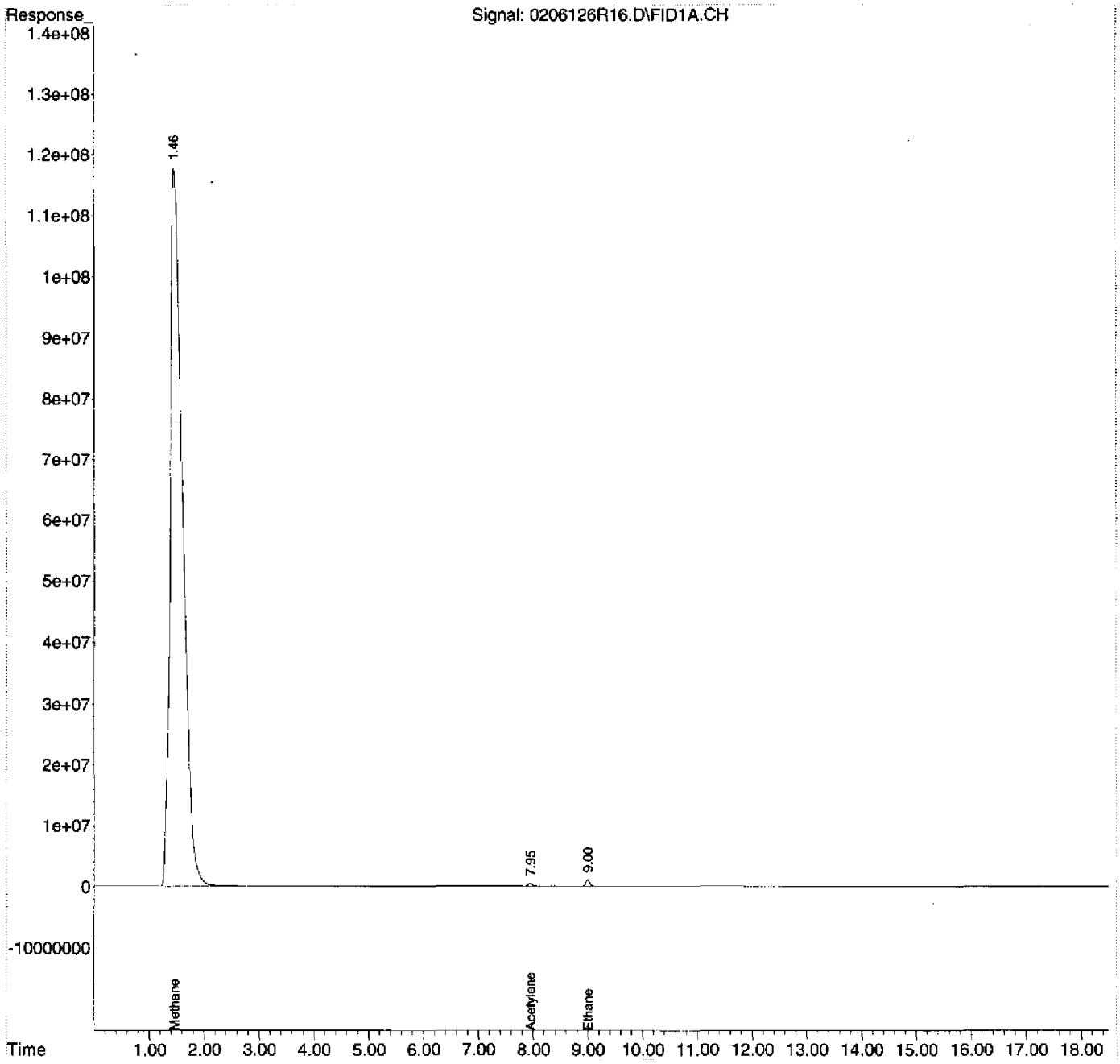
Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
2) S Acetylene	7.956	26164582	74.859 ug/L
Spiked Amount 66.330 Range 66 - 153		Recovery =	112.86%
Target Compounds			
1) TM Methane	1.458	18317742770	17993.338 ug/L → 0.C
3) TM Ethene	0.000	0	N.D. ug/L
4) TM Ethane	9.004	52790363	54.616 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.

Data Path : D:\MSDCHEM\1\2012\DATA\020612RSK\
Data File : 0206126R16.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 06 Feb 2012 5:46 pm
Operator : rh
Sample : 1202011-06
Misc : HW34A
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Feb 07 09:27:54 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\020612RSK\
Data File : 0206126R17.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 06 Feb 2012 6:14 pm
Operator : rh
Sample : 1202011-07
Misc : HW34A-P
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Feb 07 09:28:01 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	7.957	25249454	72.241 ug/L
Spiked Amount 66.330 Range 66 - 153		Recovery =	108.91%
Target Compounds			
1) TM Methane	1.523	368747598	362.217 ug/L ~0.01
3) TM Ethene	0.000	0	N.D. ug/L
4) TM Ethane	9.006	1524472	1.577 ug/L
5) Qual Propane	0.000	0	N.D.
6) Qual Butane	0.000	0	N.D.

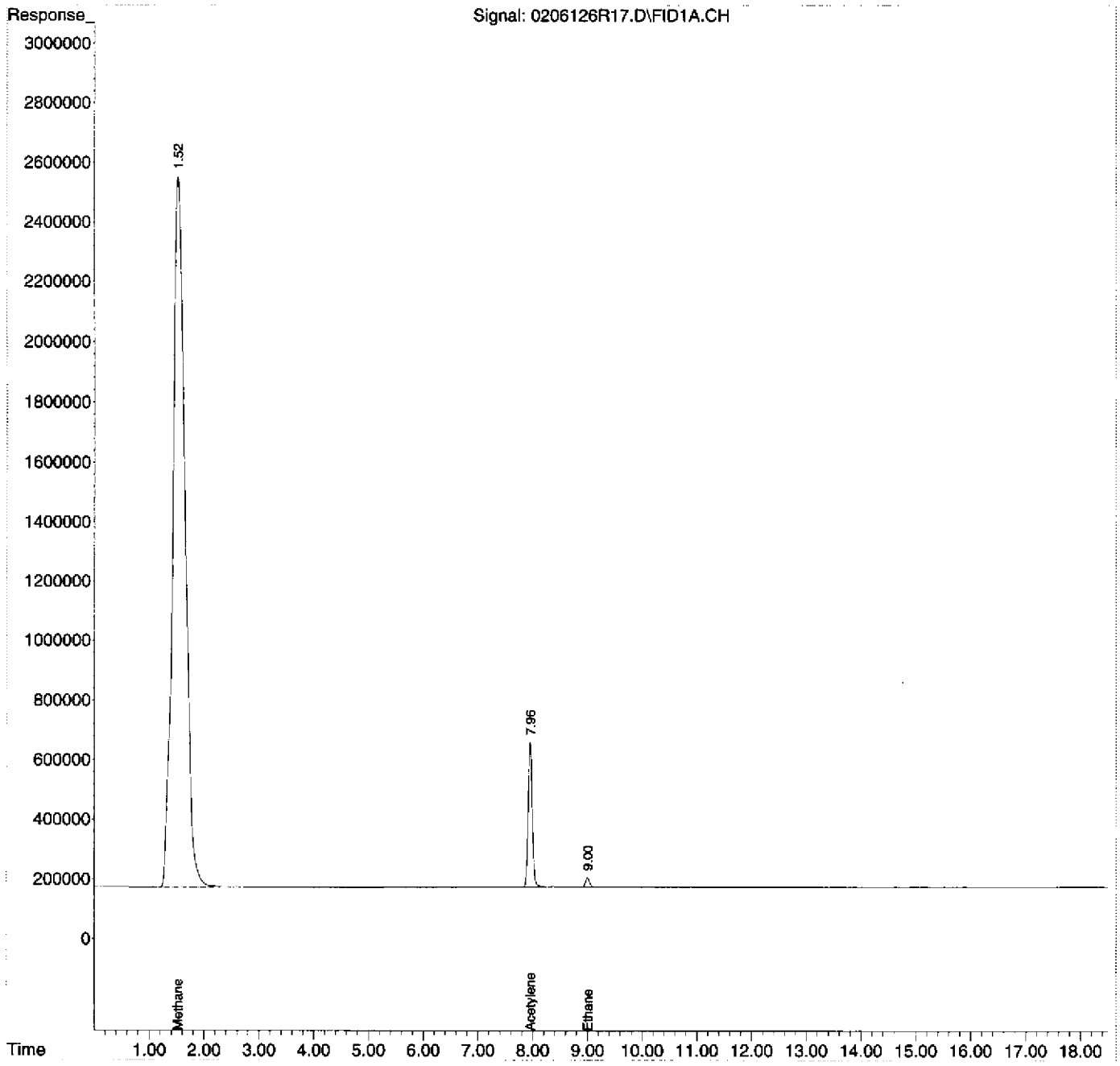
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\020612RSK\
Data File : 0206126R17.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 06 Feb 2012 6:14 pm
Operator : rh
Sample : 1202011-07
Misc : HW34A-P
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Feb 07 09:28:01 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\020612RSK\
Data File : 0206126R18.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 06 Feb 2012 6:50 pm
Operator : rh
Sample : B2B0015-MS1
Misc : MS 11-07
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Feb 07 09:28:09 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	7.956	24076861	68.886 ug/L
Spiked Amount 66.330 Range 66 - 153		Recovery =	103.85%
Target Compounds			
1) TM Methane	1.524	406586528	399.386 ug/L
3) TM Ethene	8.367	64404340	72.533 ug/L
4) TM Ethane	9.003	76008895	78.638 ug/L
5) Qual Propane	0.000	0	N.D.
6) Qual Butane	0.000	0	N.D.

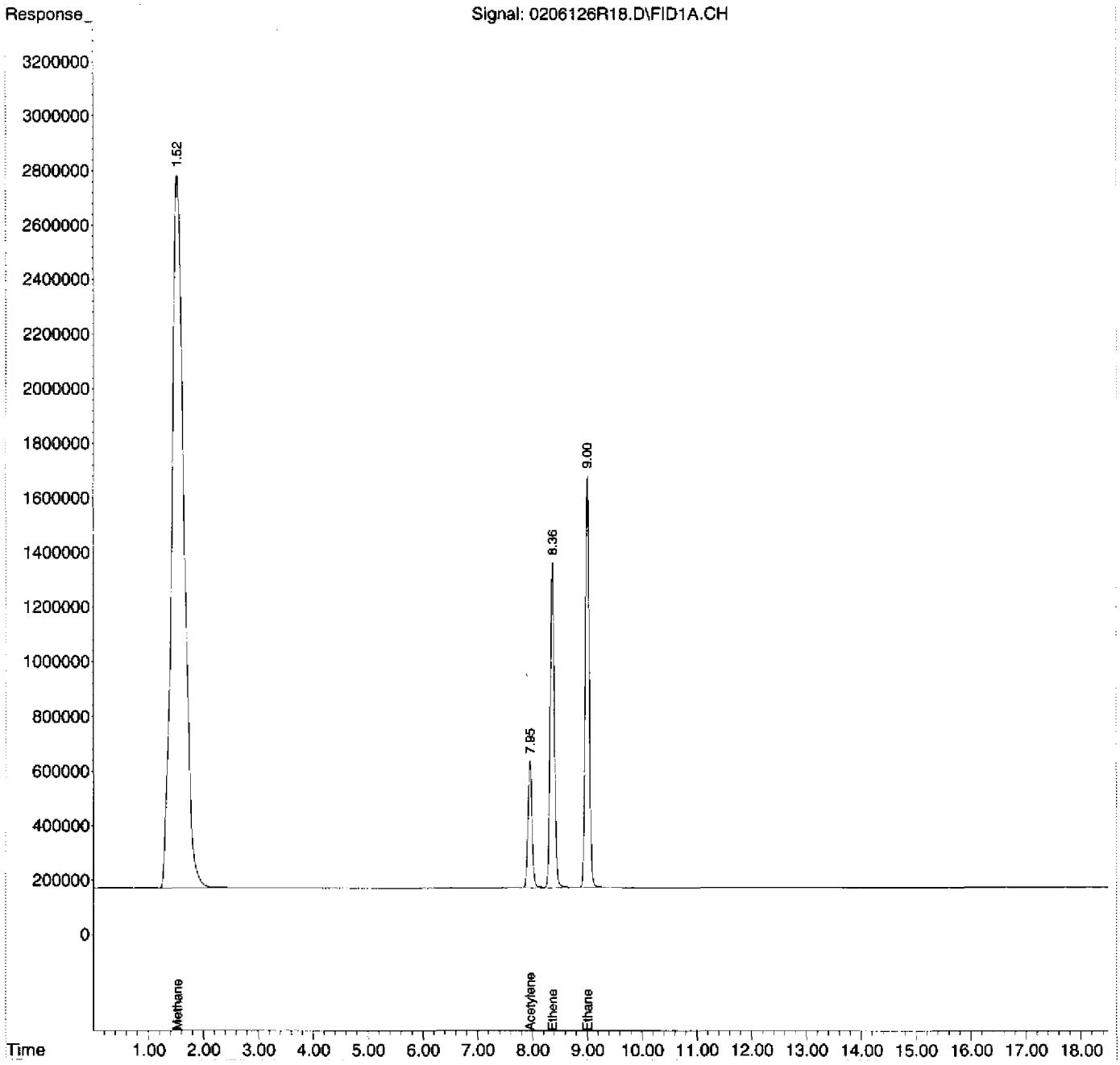
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\020612RSK\
Data File : 0206126R18.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 06 Feb 2012 6:50 pm
Operator : rh
Sample : B2B0015-MS1
Misc : MS 11-07
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Feb 07 09:28:09 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\020612RSK\
Data File : 0206126R19.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 06 Feb 2012 7:17 pm
Operator : rh
Sample : B2B0015-MSD1
Misc : MSD 11-07
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Feb 07 09:28:17 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	7.957	24887900	71.207 ug/L
Spiked Amount 66.330 Range 66 - 153		Recovery =	107.35%
Target Compounds			
1) TM Methane	1.524	294127765	288.919 ug/L
3) TM Ethene	8.368	65096398	73.312 ug/L
4) TM Ethane	9.005	75862232	78.486 ug/L
5) Qual Propane	0.000	0	N.D.
6) Qual Butane	0.000	0	N.D.

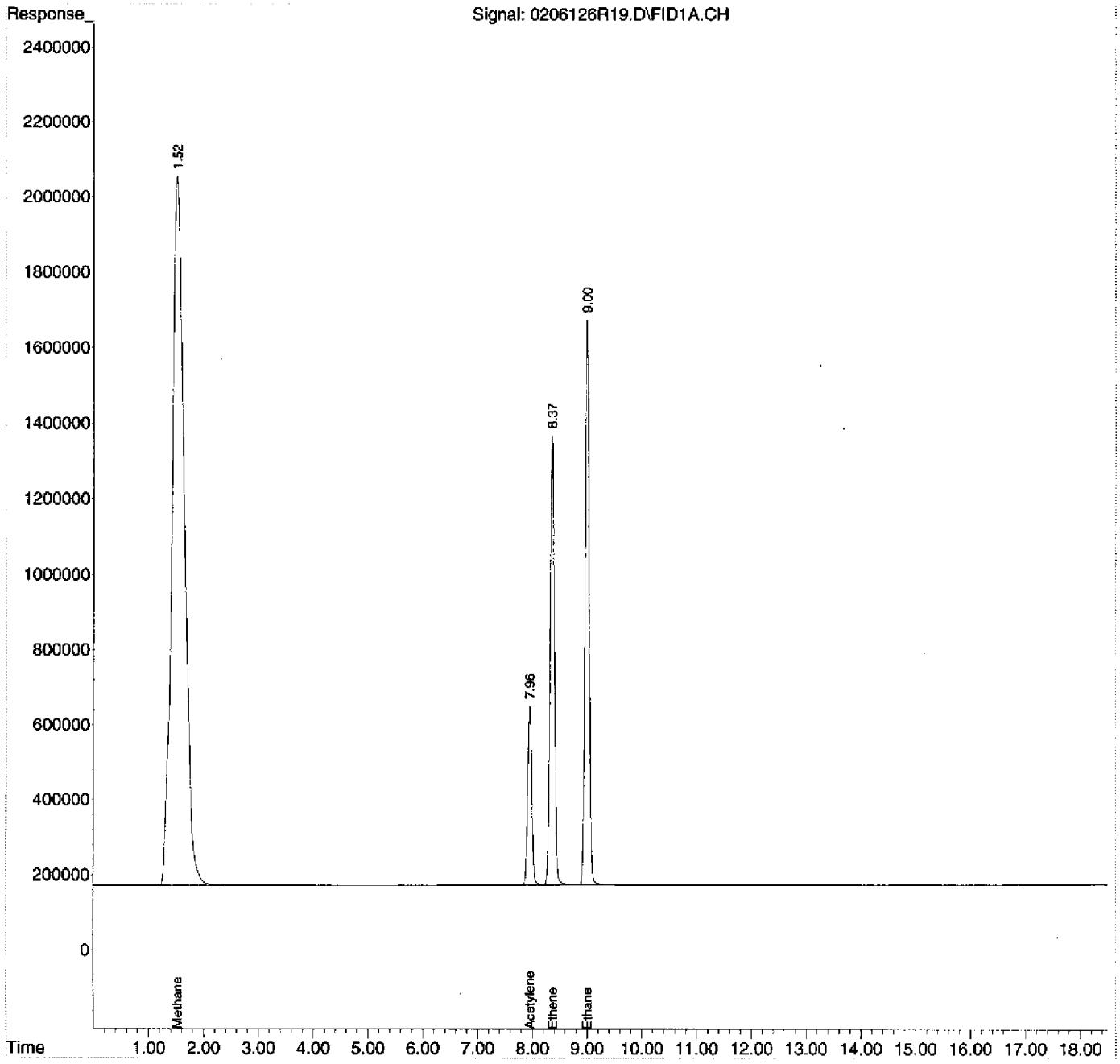
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\020612RSK\
Data File : 0206126R19.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 06 Feb 2012 7:17 pm
Operator : rh
Sample : B2B0015-MSD1
Misc : MSD 11-07
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Feb 07 09:28:17 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\020612RSK\
Data File : 0206126R20.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 06 Feb 2012 7:53 pm
Operator : rh
Sample : 1202011-10
Misc : HW42Z
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Feb 07 09:28:25 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	7.959	26810703	76.708 ug/L
Spiked Amount 66.330 Range 66 - 153		Recovery =	115.65%
Target Compounds			
1) TM Methane	1.526	18228183	17.905 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.

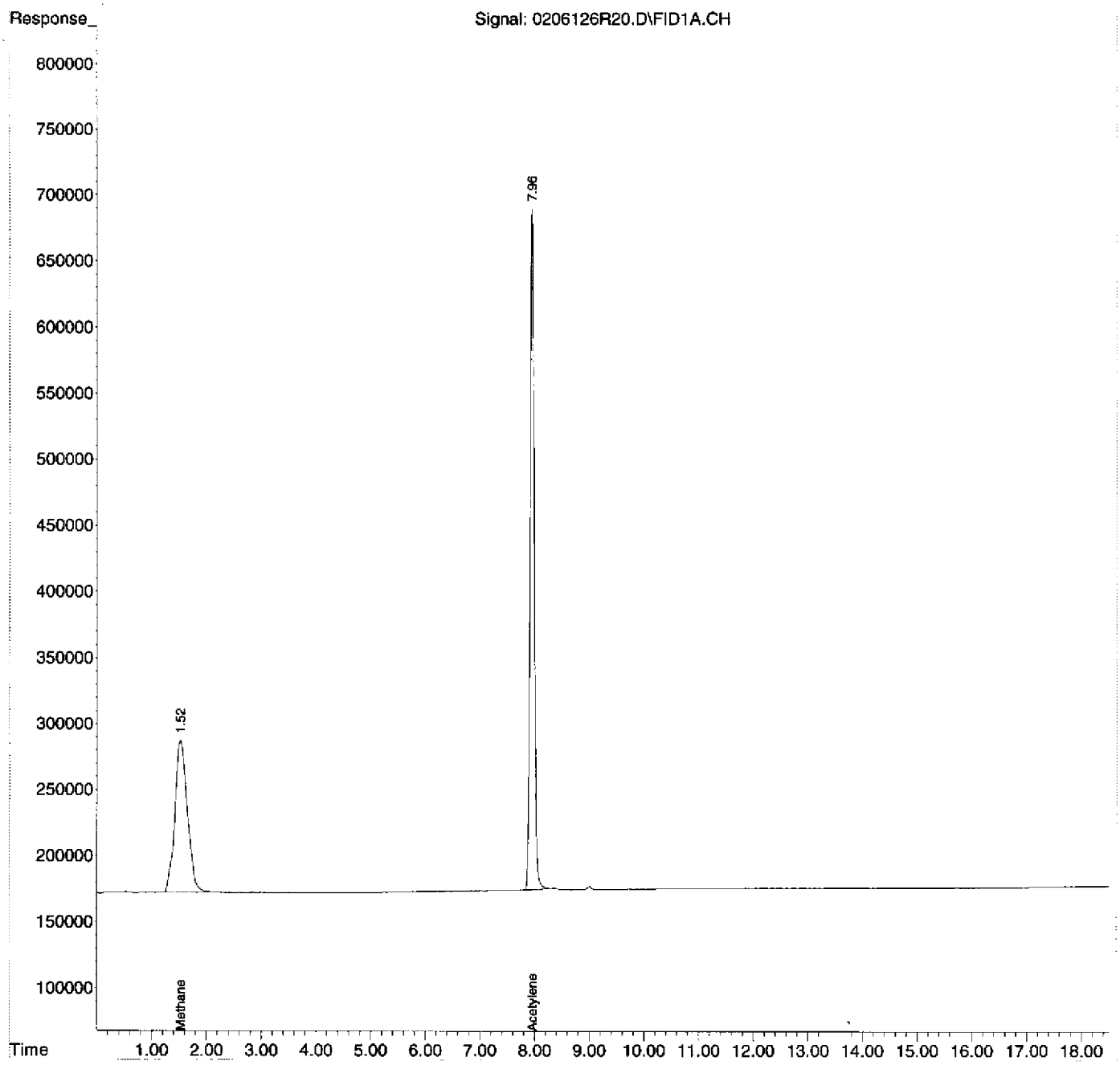
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\020612RSK\
Data File : 0206126R20.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 06 Feb 2012 7:53 pm
Operator : rh
Sample : 1202011-10
Misc : HW42Z
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Feb 07 09:28:25 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\020612RSK\
Data File : 0206126R21.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 06 Feb 2012 8:21 pm
Operator : rh
Sample : 1202011-06RE1
Misc : HW34A 0.08ML
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Feb 07 09:28:33 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	0.000	0	N.D. ug/L
Spiked Amount 66.330 Range 66 - 153 Recovery = 0.00%#			
Target Compounds			
1) TM Methane	1.527	147694972	145.079 ug/L
3) TM Ethene	0.000	0	N.D. ug/L
4) TM Ethane	9.008	405245	0.419 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.

- No surr.

Rerun

RK

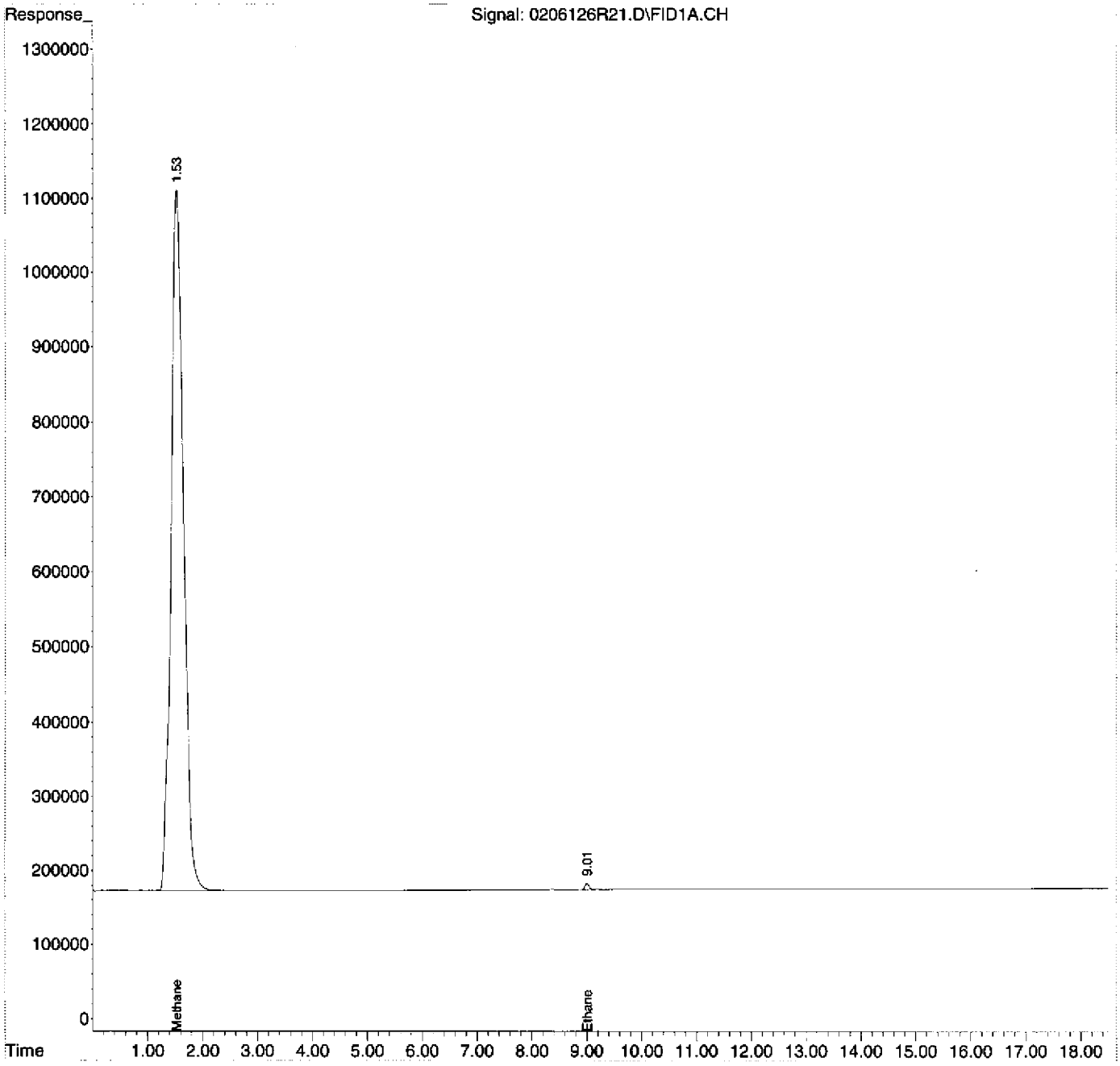
2/7/12

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\020612RSK\
Data File : 0206126R21.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 06 Feb 2012 8:21 pm
Operator : rh
Sample : 1202011-06RE1
Misc : HW34A 0.08ML
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Feb 07 09:28:33 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\020612RSK\
Data File : 0206126R22.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 06 Feb 2012 8:56 pm
Operator : rh
Sample : 1202011-07RE1
Misc : HW34A-P 5.0ML
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Feb 07 09:28:41 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	0.000	0	N.D.	ug/L
Spiked Amount 66.330 Range 66 - 153 Recovery = 0.00%#				
Target Compounds				
1) TM Methane	1.527	165855621	162.918	ug/L
3) TM Ethene	0.000	0	N.D.	ug/L
4) TM Ethane	9.008	666720	0.690	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.

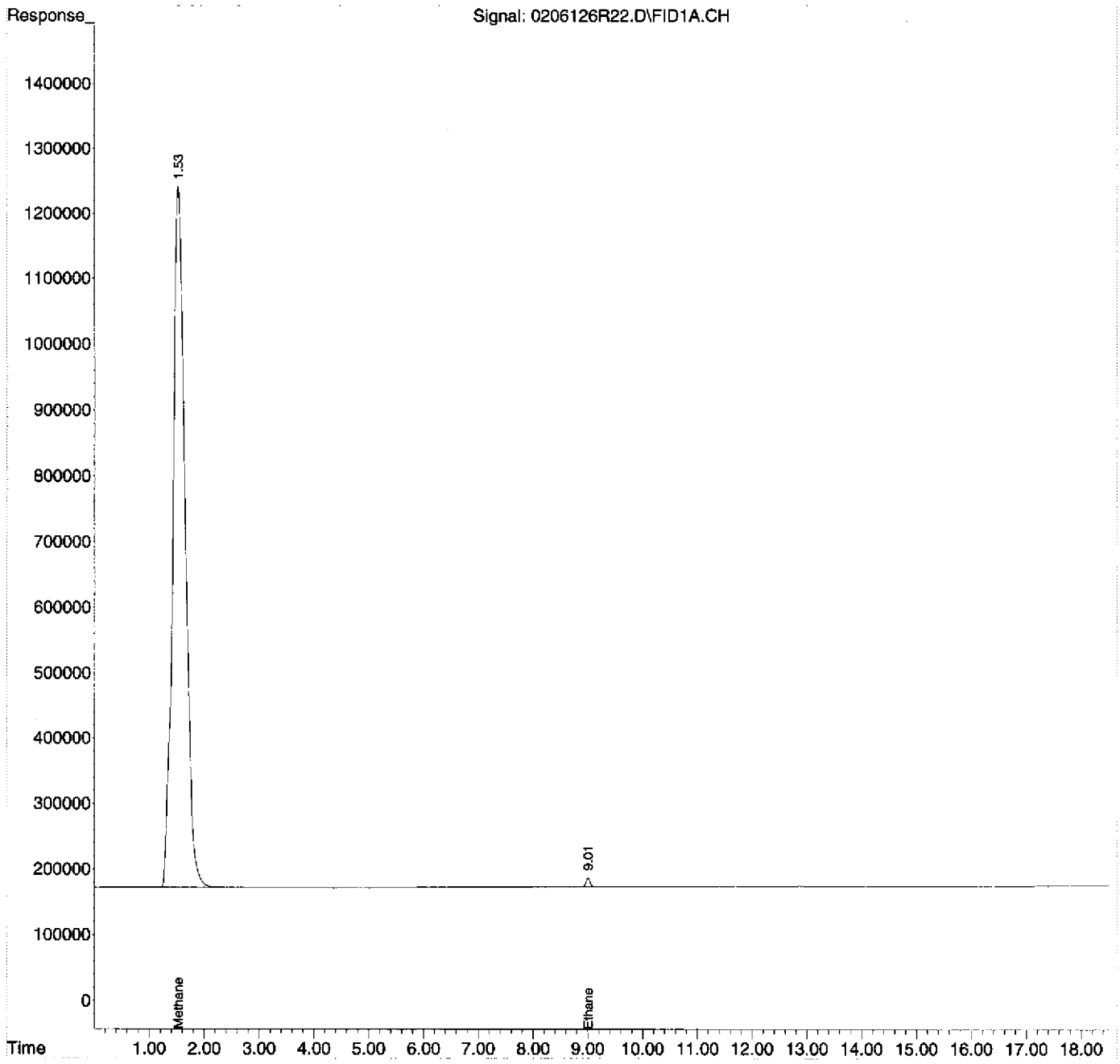
No
soil.
Rerun.
RH
2/7/12

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\020612RSK\
Data File : 0206126R22.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 06 Feb 2012 8:56 pm
Operator : rh
Sample : 1202011-07RE1
Misc : HW34A-P 5.0ML
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Feb 07 09:28:41 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\020612RSK\
Data File : 0206126R23.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 06 Feb 2012 9:23 pm
Operator : rh
Sample : 1202005-IBL1
Misc : IB
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Feb 07 09:28:49 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	7.956	51749255	148.060	ug/L
Spiked Amount 66.330 Range 66 - 153 Recovery = 223.22%#				
Target Compounds				
1) TM Methane	1.528	1293100	1.270	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.	

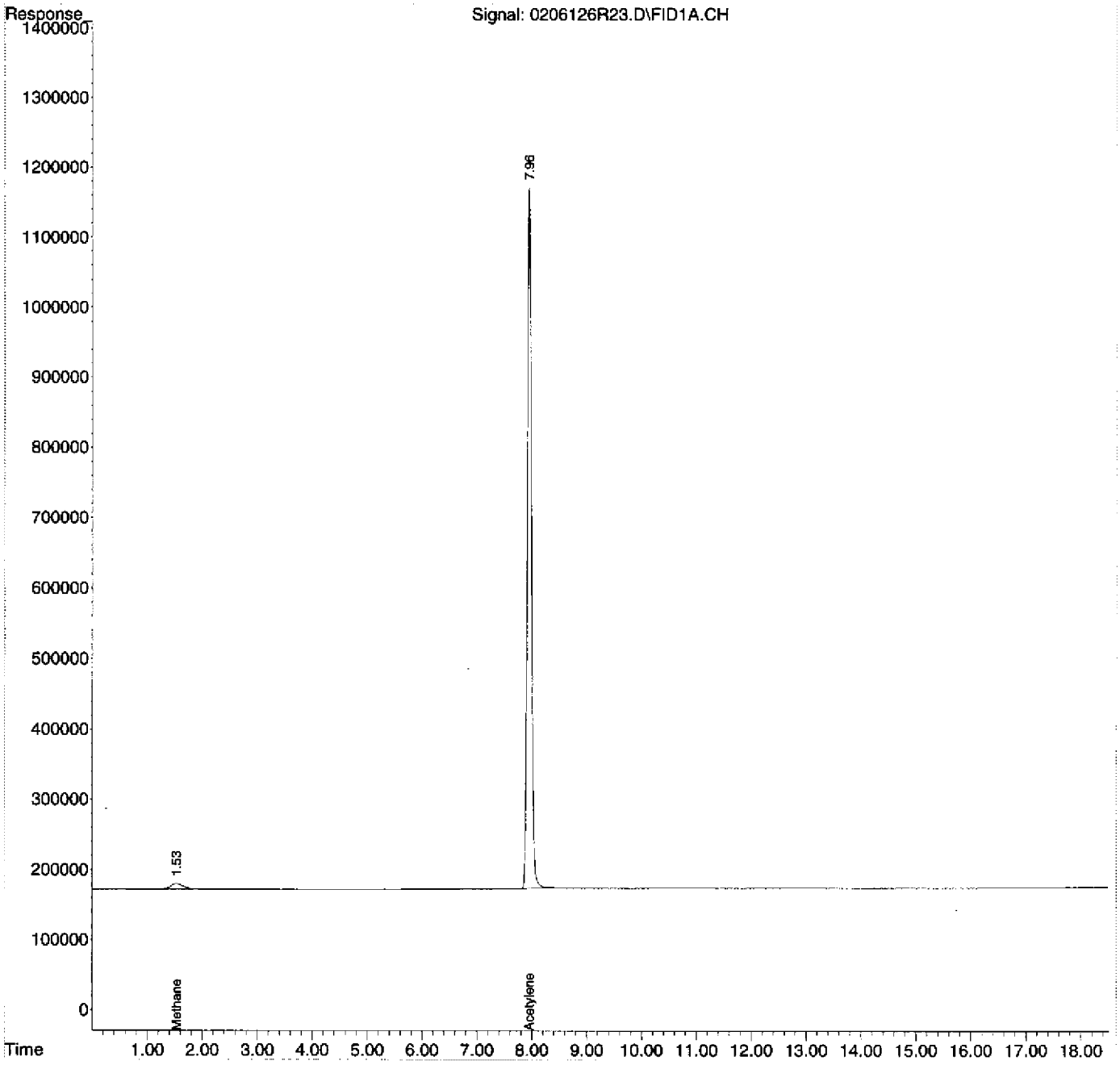
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\020612RSK\
Data File : 0206126R23.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 06 Feb 2012 9:23 pm
Operator : rh
Sample : 1202005-IBL1
Misc : IB
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Feb 07 09:28:49 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\020612RSK\
Data File : 0206126R24.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 06 Feb 2012 9:58 pm
Operator : rh
Sample : 1202011-04
Misc : TB15 .
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Feb 07 09:28:57 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	7.960	26039144	74.501 ug/L
Spiked Amount 66.330 Range 66 - 153		Recovery =	112.32%
Target Compounds			
1) TM Methane	1.529	1489293	1.463 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.

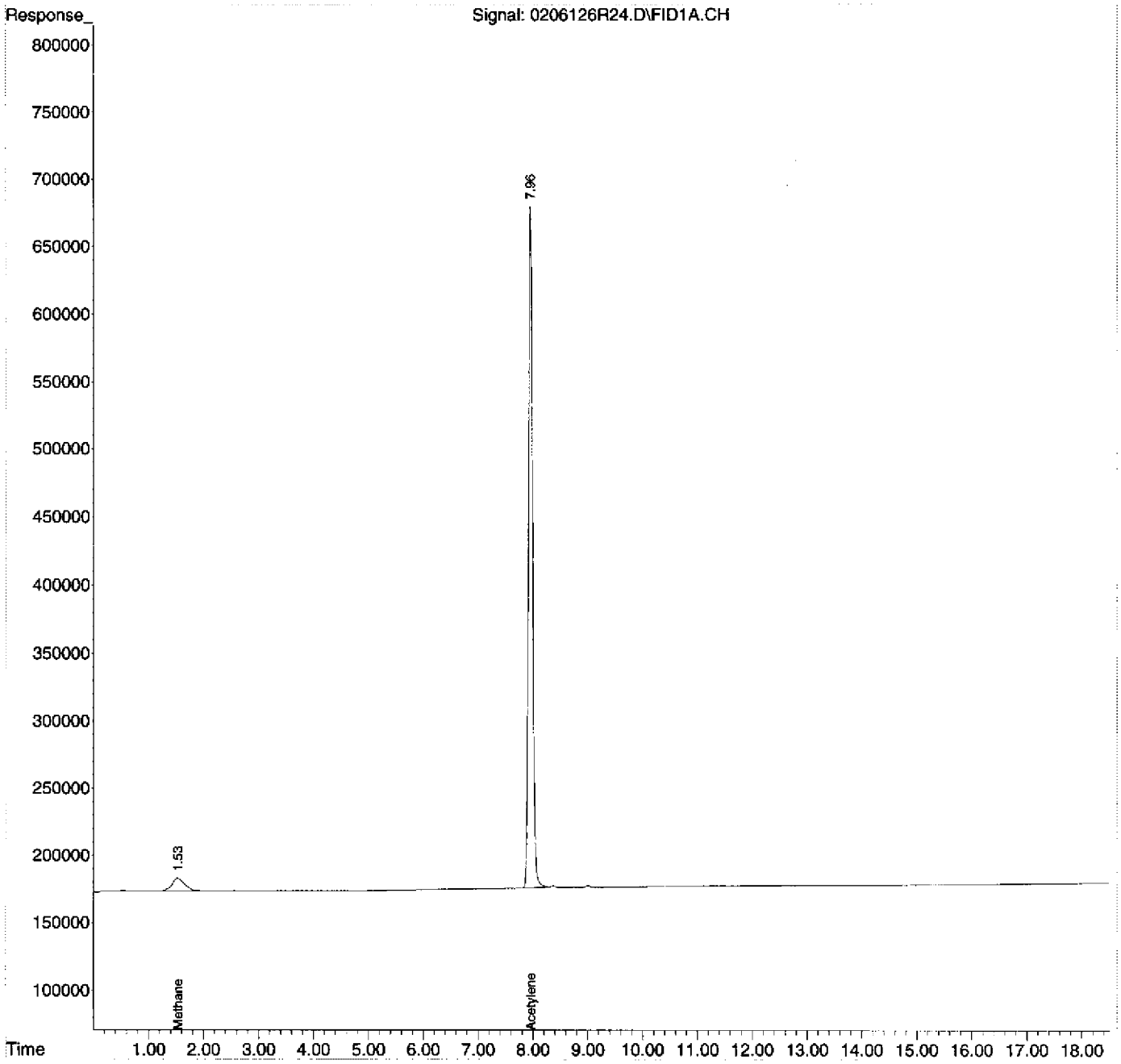
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\020612RSK\
Data File : 0206126R24.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 06 Feb 2012 9:58 pm
Operator : rh
Sample : 1202011-04
Misc : TB15
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Feb 07 09:28:57 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\020612RSK\
Data File : 0206126R25.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 06 Feb 2012 10:25 pm
Operator : rh
Sample : 1202011-05
Misc : FB08
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Feb 07 09:29:05 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	7.959	25198853	72.096 ug/L
Spiked Amount 66.330 Range 66 - 153		Recovery =	108.69%
Target Compounds			
1) TM Methane	1.527	1325081	1.302 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.

extra peak →

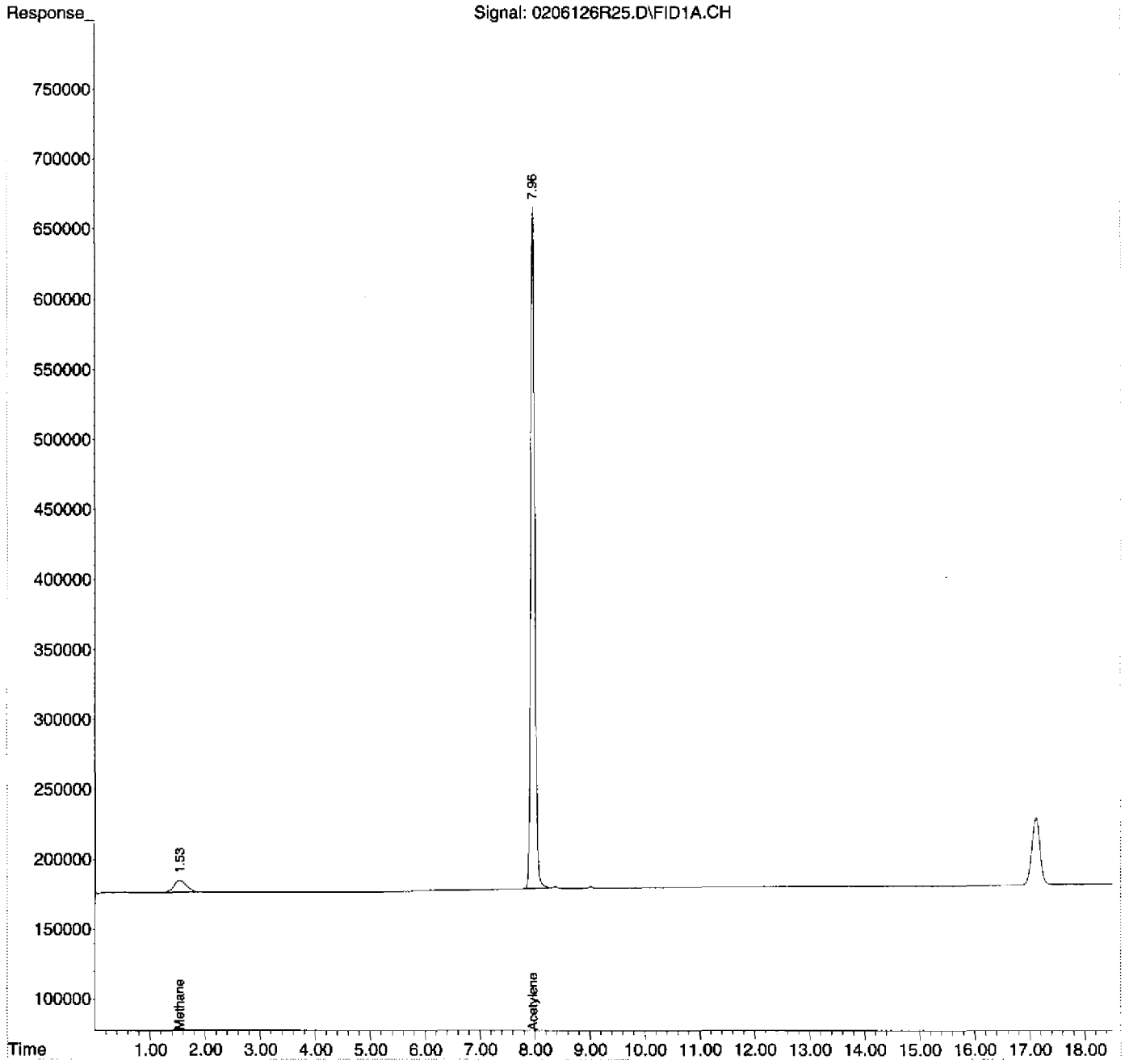
RH 2/7/12

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\020612RSK\
Data File : 0206126R25.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 06 Feb 2012 10:25 pm
Operator : rh
Sample : 1202011-05
Misc : FB08
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Feb 07 09:29:05 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\020612RSK\
Data File : 0206126R26.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 06 Feb 2012 11:01 pm
Operator : rh
Sample : 1202011-08
Misc : TB14
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Feb 07 09:29:13 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	7.960	25453755	72.826 ug/L
Spiked Amount 66.330 Range 66 - 153		Recovery =	109.79%
Target Compounds			
1) TM Methane	1.531	1392524	1.368 ug/L
3) TM Ethene	0.000	0	N.D. ug/L
4) TM Ethane	9.344f	144329	<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.

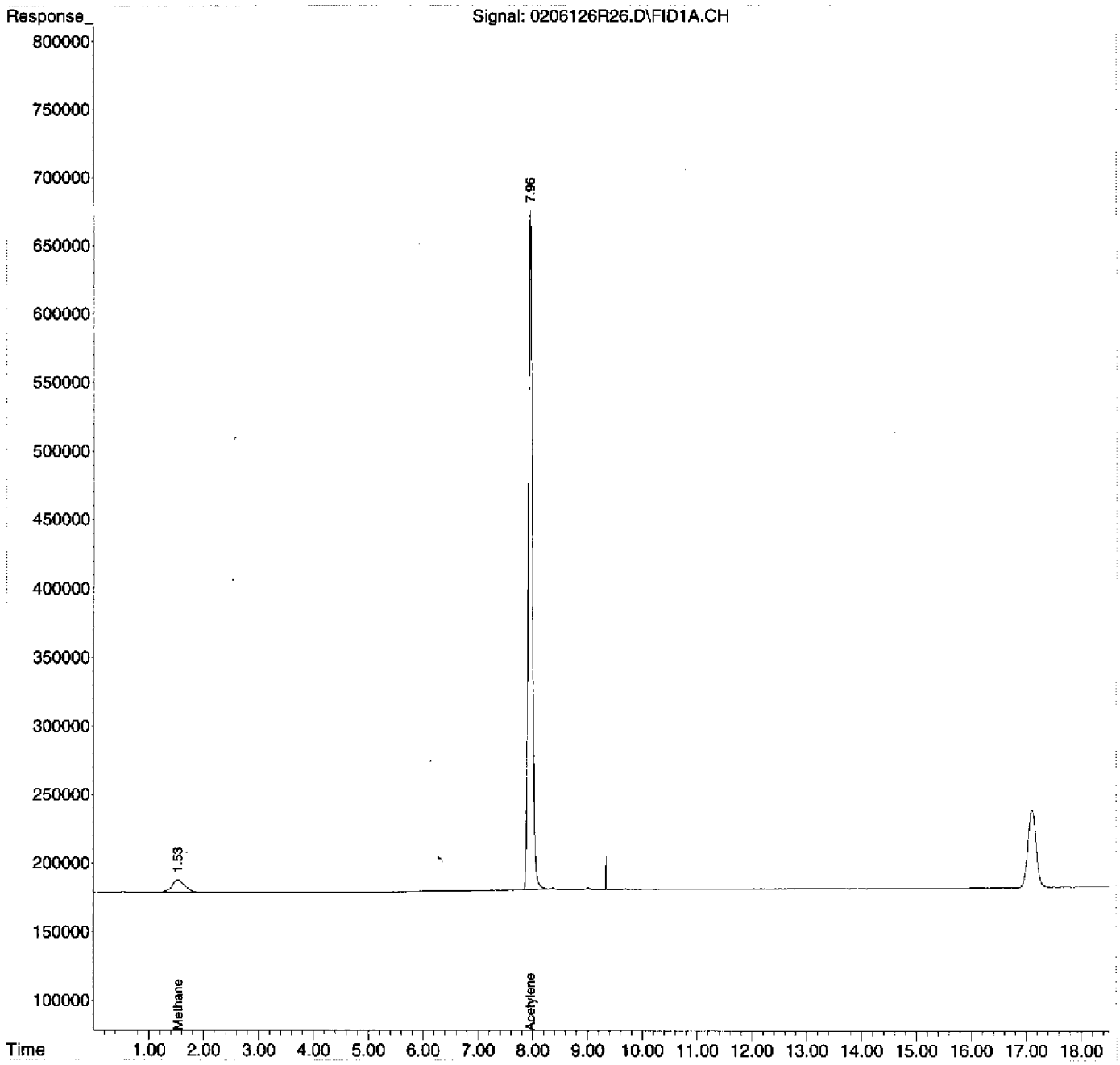
extra Peak
RH
2/7/12

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\020612RSK\
Data File : 0206126R26.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 06 Feb 2012 11:01 pm
Operator : rh
Sample : 1202011-08
Misc : TB14
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Feb 07 09:29:13 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\020612RSK\
Data File : 0206126R27.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 06 Feb 2012 11:28 pm
Operator : rh
Sample : 1202011-09
Misc : FB09
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Feb 07 09:29:21 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	7.961	25503277	72.967 ug/L
Spiked Amount 66.330 Range 66 - 153		Recovery =	110.01%
Target Compounds			
1) TM Methane	1.529	1287213	1.264 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.

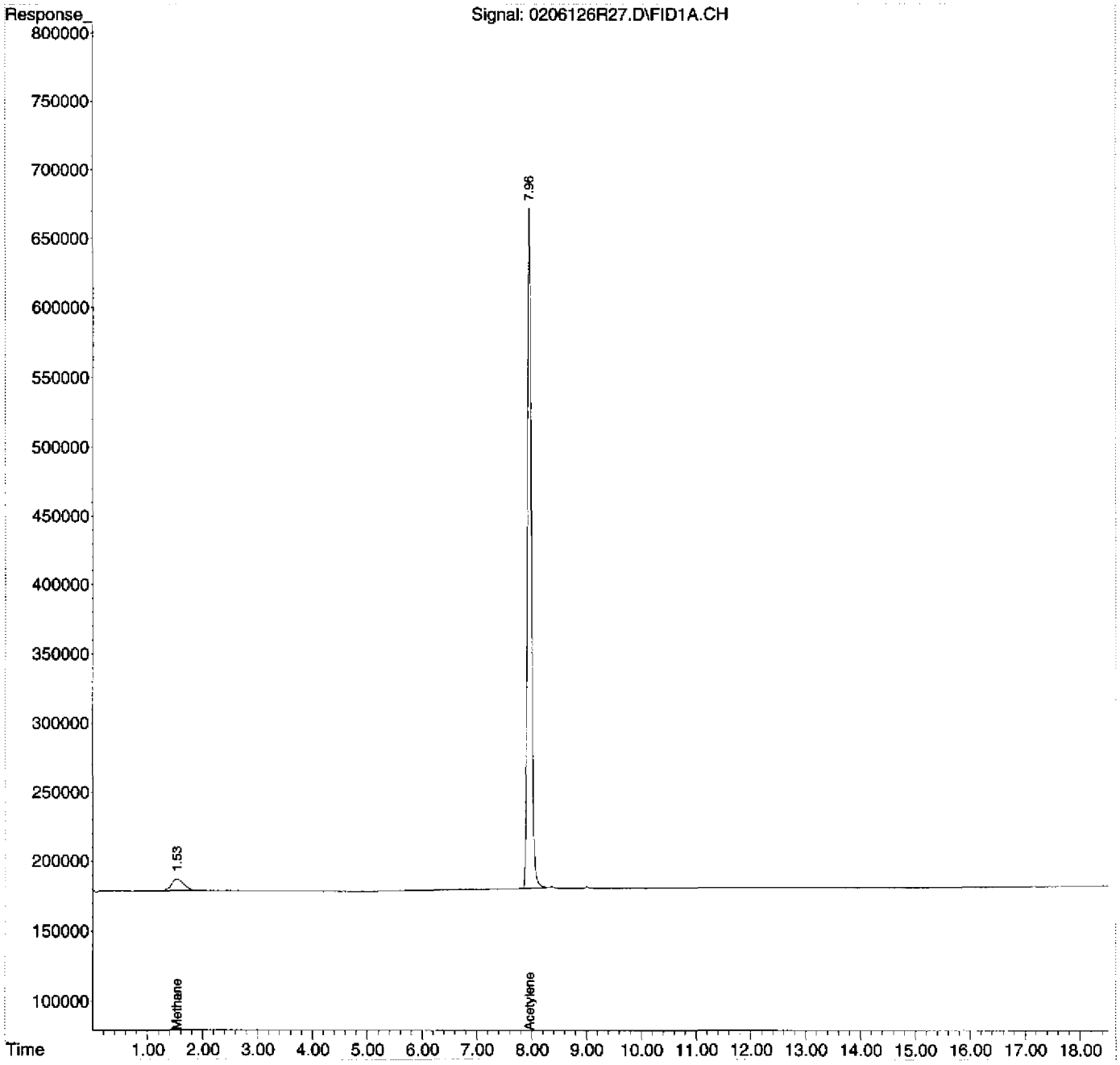
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\020612RSK\
Data File : 0206126R27.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 06 Feb 2012 11:28 pm
Operator : rh
Sample : 1202011-09
Misc : FB09
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Feb 07 09:29:21 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\020612RSK\
Data File : 0206126R28.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 07 Feb 2012 12:02 am
Operator : rh
Sample : 1202011-11
Misc : TB16
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Feb 07 09:29:29 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	7.961	25286122	72.346 ug/L
Spiked Amount 66.330 Range 66 - 153		Recovery =	109.07%
Target Compounds			
1) TM Methane	1.530	6332405	6.220 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.

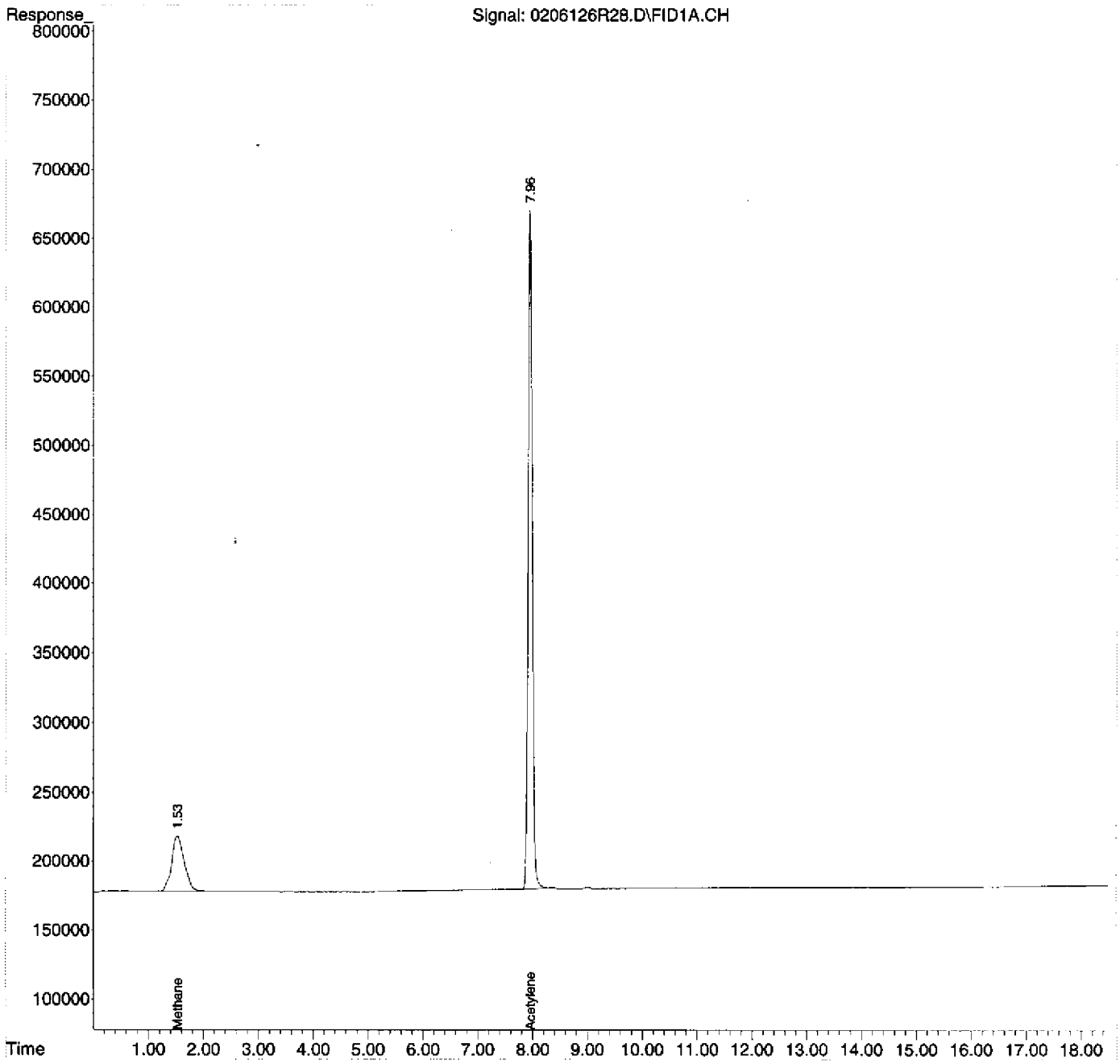
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\020612RSK\
Data File : 0206126R28.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 07 Feb 2012 12:02 am
Operator : rh
Sample : 1202011-11
Misc : TB16
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Feb 07 09:29:29 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



Evaluate Continuing Calibration Report

Data Path : D:\MSDCHEM\1\2012\DATA\020612RSK\
Data File : 0206126R29.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 07 Feb 2012 12:29 am
Operator : rh
Sample : 2020016-CCV2
Misc : 2B06005
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Feb 07 09:29:37 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

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	1.018	1.104 E6	-8.4	110	0.00
2 S	Acetylene	349.516	377.334 E3	-8.0	102	-0.01
3 TM	Ethene	887.936	961.642 E3	-8.3	106	0.00
4 TM	Ethane	966.567	1051.060 E3	-8.7	107	0.01

Evaluate Continuing Calibration Report - Not Founds

5 Qual	Propane	0.000	0.000	0.0	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\020612RSK\
Data File : 0206126R29.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 07 Feb 2012 12:29 am
Operator : rh
Sample : 2020016-CCV2
Misc : 2B06005
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Feb 07 09:29:37 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	7.965	8169272	23.373 ug/L
Spiked Amount 66.330 Range 66 - 153		Recovery =	35.24%#
Target Compounds			
1) TM Methane	1.526	14609686	14.351 ug/L
3) TM Ethene	8.371	22555302	25.402 ug/L
4) TM Ethane	9.010	26256540	27.165 ug/L
5) Qual Propane	0.000	0	N.D.
6) Qual Butane	0.000	0	N.D.

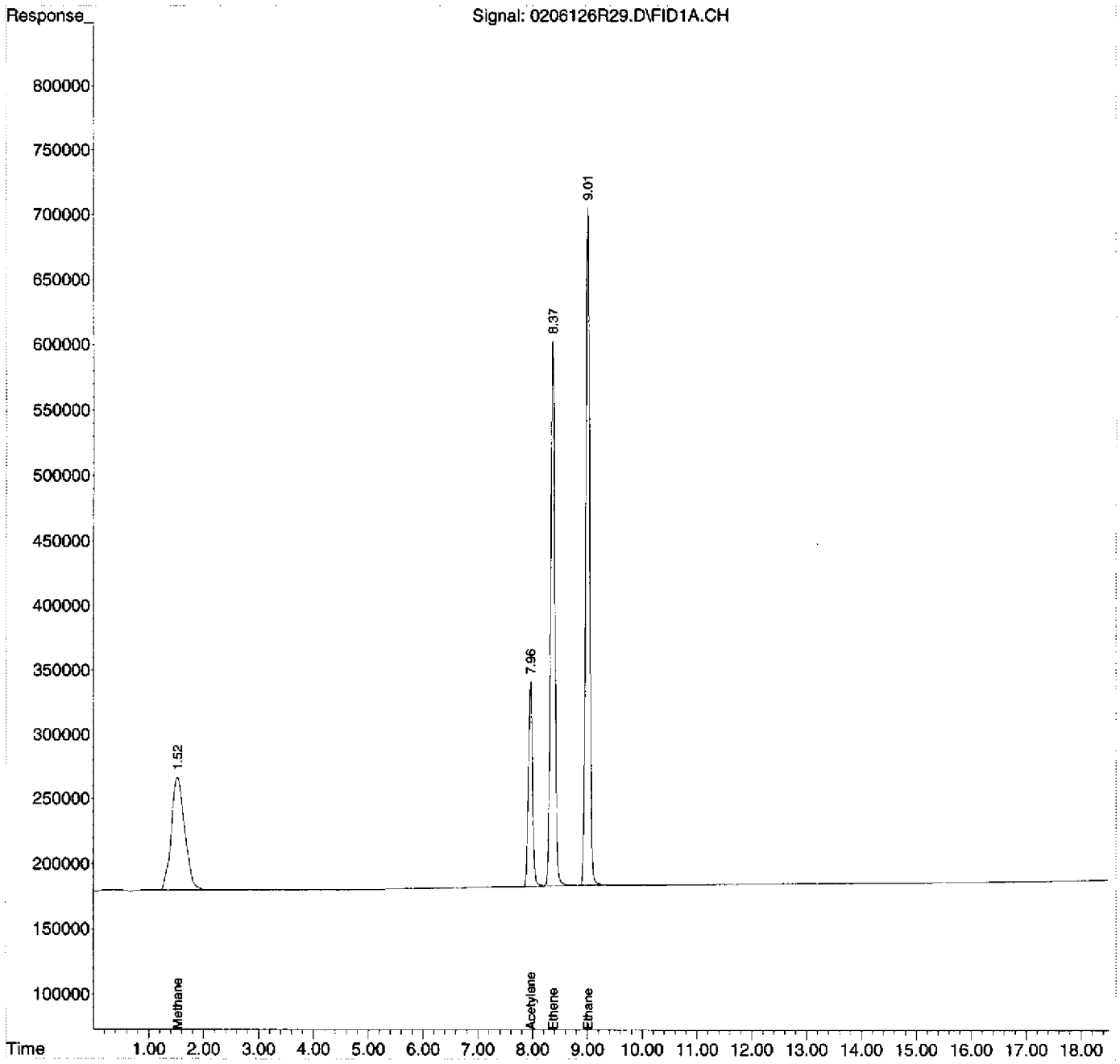
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\020612RSK\
Data File : 0206126R29.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 07 Feb 2012 12:29 am
Operator : rh
Sample : 2020016-CCV2
Misc : 2B06005
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Feb 07 09:29:37 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\020612RSK\
Data File : 0206126R30.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 07 Feb 2012 1:04 am
Operator : rh
Sample : 2020016-CCV3
Misc : 2B06005
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Feb 07 09:29:45 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	7.965	7907785	22.625 ug/L
Spiked Amount 66.330 Range 66 - 153		Recovery =	34.11%#
Target Compounds			
1) TM Methane	1.529	14041560	13.793 ug/L
3) TM Ethene	8.371	22150675	24.946 ug/L
4) TM Ethane	9.004	25848184	26.742 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.

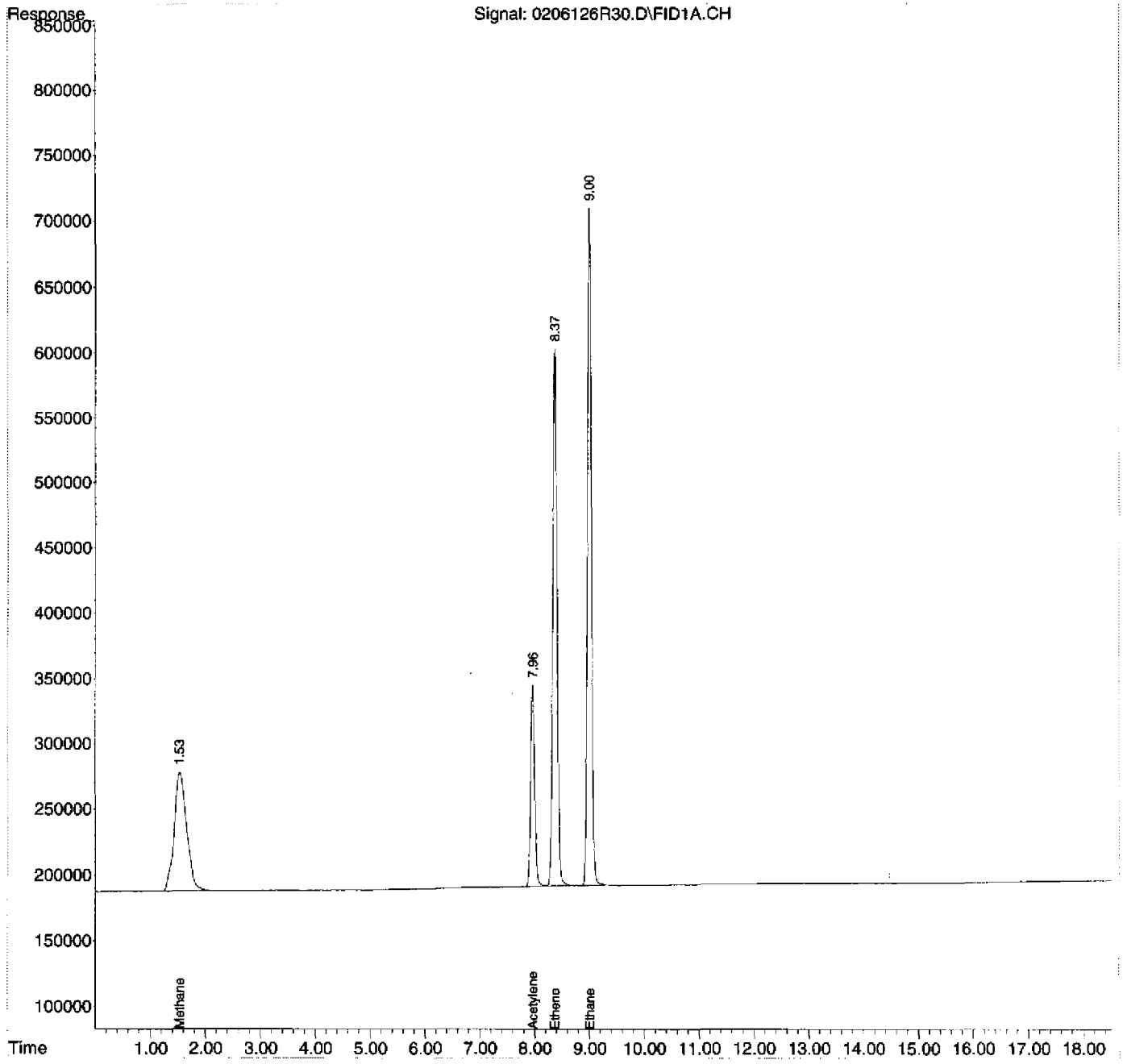
Not evaluated

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\020612RSK\
Data File : 0206126R30.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 07 Feb 2012 1:04 am
Operator : rh
Sample : 2020016-CCV3
Misc : 2B06005
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Feb 07 09:29:45 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



0126126RSK.M Tue Feb 07 09:29:50 2012

DIM0278627

DIM0278784

SDG: 12034C, 12037A
Instrument: AG6890N-6
Analysis Date: 2/7/12

SAMPLE DATA

Injection Log

Operator: rh
Directory: D:\MSDCHEM\1\2012\DATA\020712RSK\

Vial	File Name	Mult	Sample Info	Misc Info	Date Acquired
1	0207126R01.D	0	2020021-CCV1	2B07008	07 Feb 2012 10:46 am
2	0207126R02.D	0	2020021-LCV1	2B07006	07 Feb 2012 11:13 am
3	0207126R03.D	0	2020021-LCV2	2B07007	07 Feb 2012 11:40 am
4	0207126R04.D	0	B2B0024-BLK1	MB	07 Feb 2012 12:16 pm
5	0207126R05.D	0	B2B0024-BS1	LCS	07 Feb 2012 12:44 pm
6	0207126R06.D	0	B2B0024-MS1	MS 13-08	07 Feb 2012 1:20 pm
7	0207126R07.D	0	B2B0024-MSD1	MSD 13-08	07 Feb 2012 1:47 pm
8	0207126R08.D	0	1202011-06RE2	HW34A 0.08ML	07 Feb 2012 2:24 pm
9	0207126R09.D	0	1202011-07RE2	HW34A-P 5.0ML	07 Feb 2012 2:51 pm
10	0207126R10.D	0	1202013-01	HW40	07 Feb 2012 3:28 pm
11	0207126R11.D	0	1202013-02	HW70-P	07 Feb 2012 3:55 pm
12	0207126R12.D	0	1202013-03	HW41	07 Feb 2012 4:32 pm
13	0207126R13.D	0	1202013-04	HW41-P	07 Feb 2012 5:00 pm
14	0207126R14.D	0	1202013-06	HW28A	07 Feb 2012 5:36 pm
15	0207126R15.D	0	1202013-07	HW28A-P	07 Feb 2012 6:04 pm
16	0207126R16.D	0	1202013-08	HW39	07 Feb 2012 6:40 pm
17	0207126R17.D	0	1202013-09	HW39-P	07 Feb 2012 7:08 pm
18	0207126R18.D	0	1202014-02	HW09	07 Feb 2012 7:44 pm
19	0207126R19.D	0	1202014-03	HW09-P	07 Feb 2012 8:11 pm
29	0207126R20.D	0	2020021-CCV2	2B07008	08 Feb 2012 9:03 am
20	0207126R21.D	0	1202014-04	HW28B-P	08 Feb 2012 9:30 am
21	0207126R22.D	0	1202011-IBL1	IB	08 Feb 2012 9:57 am
22	0207126R23.D	0	1202013-05	TB18	08 Feb 2012 10:32 am
23	0207126R24.D	0	1202013-10	TB19	08 Feb 2012 11:00 am
24	0207126R25.D	0	1202013-11	TB17	08 Feb 2012 11:36 am
25	0207126R26.D	0	1202013-12	TB20	08 Feb 2012 12:03 pm
26	0207126R27.D	0	1202014-01	FB10	08 Feb 2012 12:40 pm
27	0207126R28.D	0	1202014-05	TB22	08 Feb 2012 1:13 pm
28	0207126R29.D	0	1202014-06	TB21	08 Feb 2012 1:47 pm
29	0207126R30.D	0	1202013-08RE1	HW39 0.5ML	08 Feb 2012 2:20 pm
30	0207126R31.D	0	1202013-08RE2	HW39 0.2ML	08 Feb 2012 2:59 pm
31	0207126R32.D	0	2020021-CCV3	2B07008	08 Feb 2012 3:26 pm

Response Factor Report AG6890N-6

00159

Method Path : D:\MSDCHEM\1\2012\METHOD\
Method File : 0126126RSK.M
Title :
Last Update : Fri Jan 27 11:26:56 2012
Response Via : Initial Calibration

Calibration Files

1	=0126126R008.D	2	=0126126R007.D	3	=0126126R006.D
4	=0126126R005.D	5	=0126126R004.D	6	=0126126R003.D

	Compound	1	2	3	4	5	6	Avg		%RSD
1)	TM Methane		1.100	1.004	1.003	0.997	1.028	1.018	E6	4.25
2)	S Acetylene	3.221	3.304	3.380	3.710	3.595	3.697	3.495	E5	5.56
3)	TM Ethene	8.210	8.669	8.696	9.069	9.135	9.418	8.879	E5	4.42
4)	TM Ethane	0.894	0.941	0.956	0.986	0.994	1.023	0.967	E6	4.30
5)	QualPropane							0.000		-1.00
6)	QualButane							0.000		-1.00

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

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 %
0207126R01.D	2020021-CCV1	34*
0207126R02.D	2020021-LCV1	1*
0207126R03.D	2020021-LCV2	3*
0207126R04.D	B2B0024-BLK1	109
0207126R05.D	B2B0024-BS1	87
0207126R06.D	B2B0024-MS1	107
0207126R07.D	B2B0024-MSD1	106
0207126R08.D	1202011-06RE2	118
0207126R09.D	1202011-07RE2	120
0207126R10.D	1202013-01	112
0207126R11.D	1202013-02	111
0207126R12.D	1202013-03	113
0207126R13.D	1202013-04	115
0207126R14.D	1202013-06	115
0207126R15.D	1202013-07	113
0207126R16.D	1202013-08	115
0207126R17.D	1202013-09	117
0207126R18.D	1202014-02	113
0207126R19.D	1202014-03	116
0207126R20.D	2020021-CCV2	32*
0207126R21.D	1202014-04	117
0207126R22.D	1202011-IBL1	116
0207126R23.D	1202013-05	117
0207126R24.D	1202013-10	117
0207126R25.D	1202013-11	116
0207126R26.D	1202013-12	115
0207126R27.D	1202014-01	102
0207126R28.D	1202014-05	112
0207126R29.D	1202014-06	112

0207126R30.D 1202013-08RE1	109
0207126R31.D 1202013-08RE2	116
0207126R32.D 2020021-CCV3	32*

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

Created: Wed Feb 08 16:18:46 2012 AG6890N-6

Evaluate Continuing Calibration Report

Data Path : D:\MSDCHEM\1\2012\DATA\0207126RSK\
Data File : 0207126R01.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 07 Feb 2012 10:46 am
Operator : rh
Sample : 2020021-CCV1
Misc : 2B07008
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Feb 07 15:18:34 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

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	1.018	1.043 E6	-2.5	104	0.00
2 S	Acetylene	349.516	361.617 E3	-3.5	97	-0.03
3 TM	Ethene	887.936	943.796 E3	-6.3	104	0.00
4 TM	Ethane	966.567	1032.820 E3	-6.9	105	0.00

Evaluate Continuing Calibration Report - Not Founds

5	QualPropane	0.000	0.000	0.0	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)

00163

Data Path : D:\MSDCHEM\1\2012\DATA\0207126RSK\
Data File : 0207126R01.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 07 Feb 2012 10:46 am
Operator : rh
Sample : 2020021-CCV1
Misc : 2B07008
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Feb 07 15:18:34 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	7.948	7829012	22.400 ug/L
Spiked Amount 66.330 Range 66 - 153		Recovery =	33.77%#
Target Compounds			
1) TM Methane	1.526	13793710	13.549 ug/L
3) TM Ethene	8.368	22136743	24.931 ug/L
4) TM Ethane	9.001	25800878	26.693 ug/L
5) Qual Propane	0.000	0	N.D.
6) Qual Butane	0.000	0	N.D.

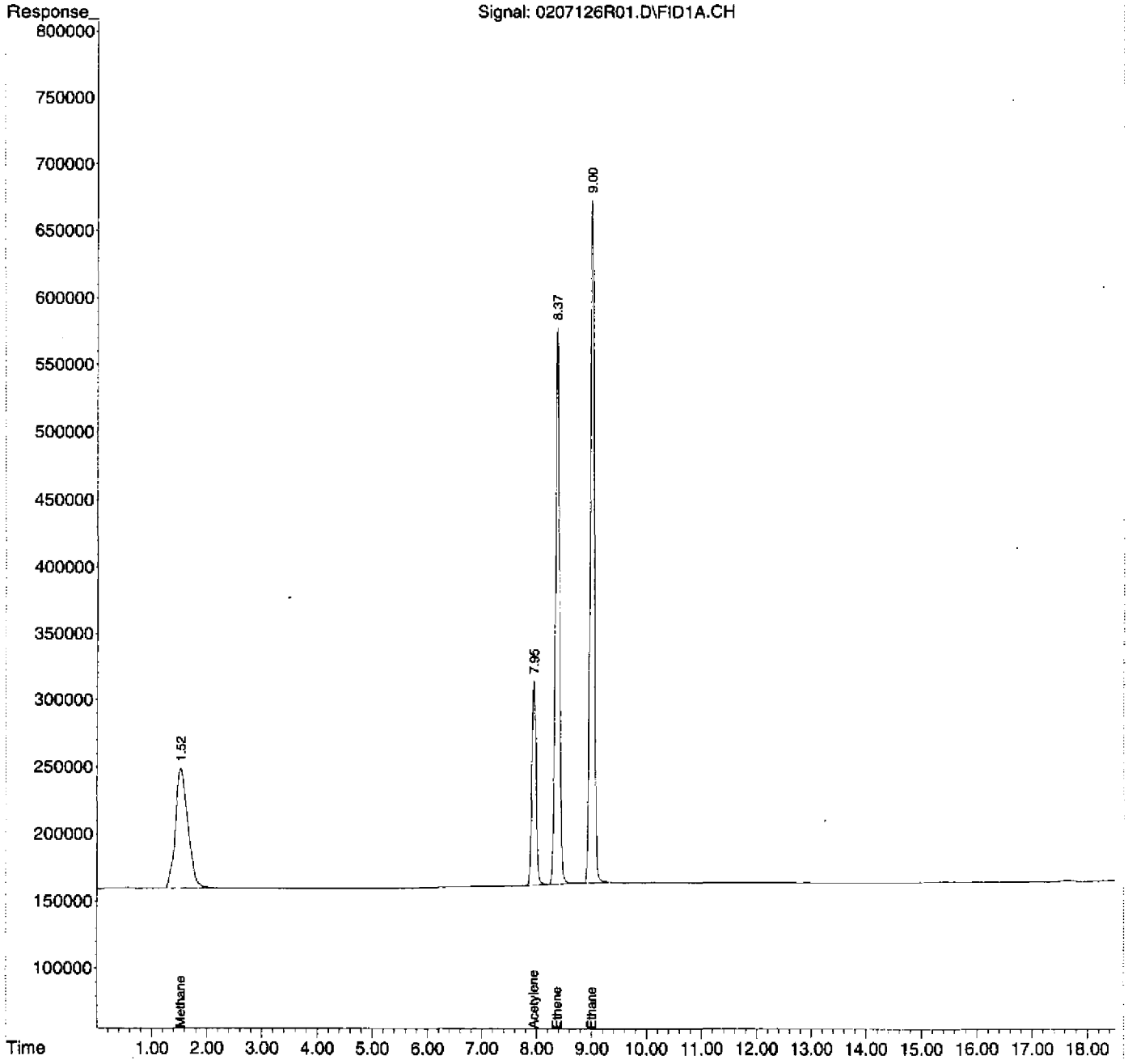
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\0207126RSK\
Data File : 0207126R01.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 07 Feb 2012 10:46 am
Operator : rh
Sample : 2020021-CCV1
Misc : 2B07008
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Feb 07 15:18:34 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



RSK-175 HC LCV REPORT

Instrument Name: AG6890N-6
File Name LCV1: 0207126R02
File Name LCV2: 0207126R03
Date Acquired: 02/07/12
Operator: rh

Analyte	Spike ug/L	Calculated ug/L	QC Limits	%R	Status
Methane	1.231	1.437	60 - 140	116.8%	pass
Acetylene	2.014	1.863	60 - 140	92.5%	NA
Ethene	1.091	1.042	60 - 140	95.5%	pass
Ethane	1.162	1.082	60 - 140	93.1%	pass

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

Quantitation Report (Not Reviewed)

00156

Data Path : D:\MSDCHEM\1\2012\DATA\020712RSK\
Data File : 0207126R02.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 07 Feb 2012 11:13 am
Operator : rh
Sample : 2020021-LCV1
Misc : 2B07006
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 07 15:18:42 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	7.966	344310	0.985 ug/L
Spiked Amount 66.330 Range 66 - 153		Recovery =	1.48%#
Target Compounds			
1) TM Methane	1.521	1039515	1.021 ug/L
3) TM Ethene	8.372	925481	1.042 ug/L
4) TM Ethane	9.008	1045957	1.082 ug/L
5) Qual Propane	0.000	0	N.D.
6) Qual Butane	0.000	0	N.D.

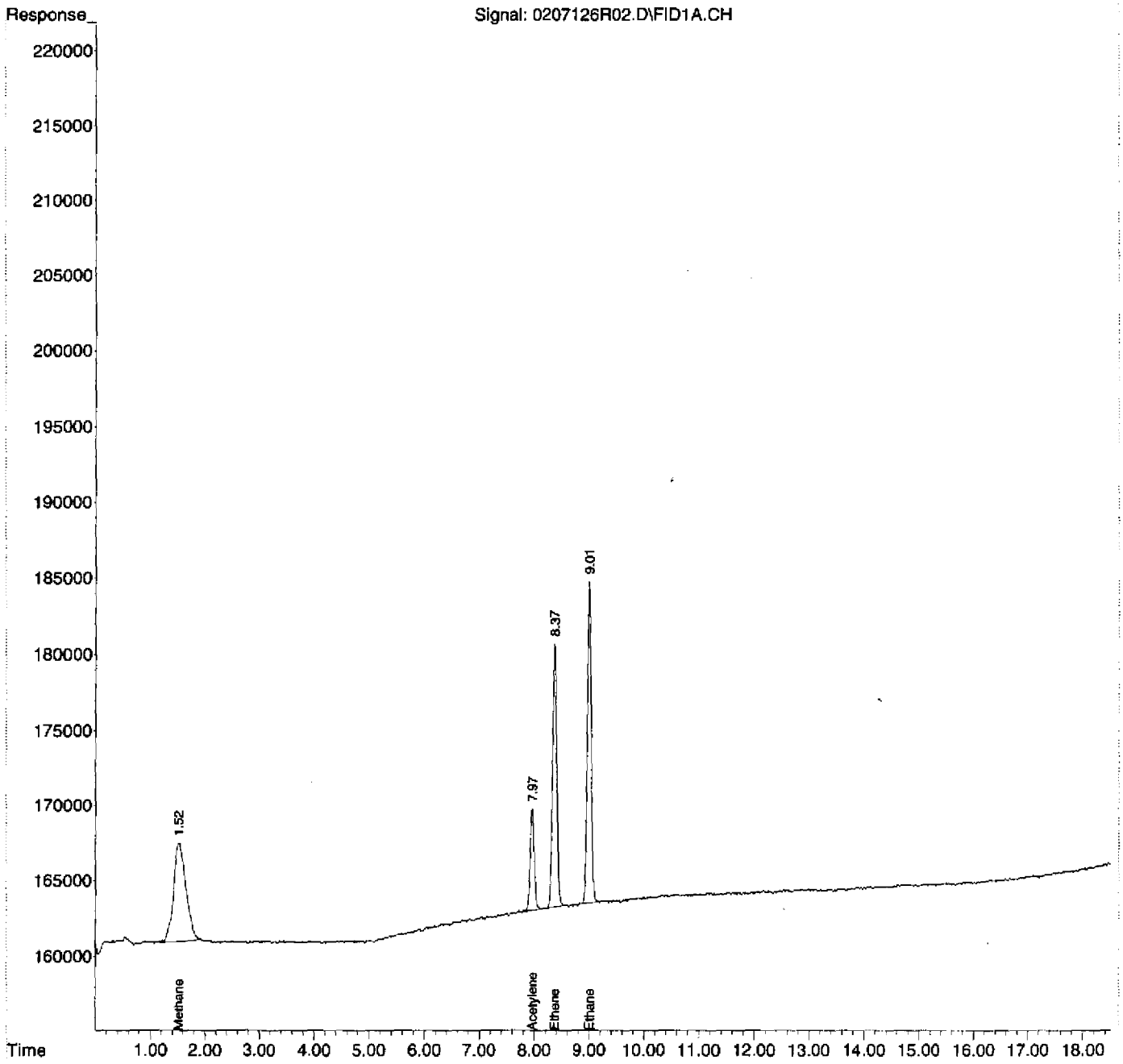
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\020712RSK\
Data File : 0207126R02.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 07 Feb 2012 11:13 am
Operator : rh
Sample : 2020021-LCV1
Misc : 2B07006
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 07 15:18:42 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\020712RSK\
Data File : 0207126R03.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 07 Feb 2012 11:40 am
Operator : rh
Sample : 2020021-LCV2
Misc : 2B07007
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 07 15:18:49 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	7.963	651253	1.863 ug/L
Spiked Amount 66.330 Range 66 - 153		Recovery =	2.81%#
Target Compounds			
1) TM Methane	1.529	1462851	1.437 ug/L
3) TM Ethene	8.370	1733571	1.952 ug/L
4) TM Ethane	8.996	1980431	2.049 ug/L
5) Qual Propane	0.000	0	N.D.
6) Qual Butane	0.000	0	N.D.

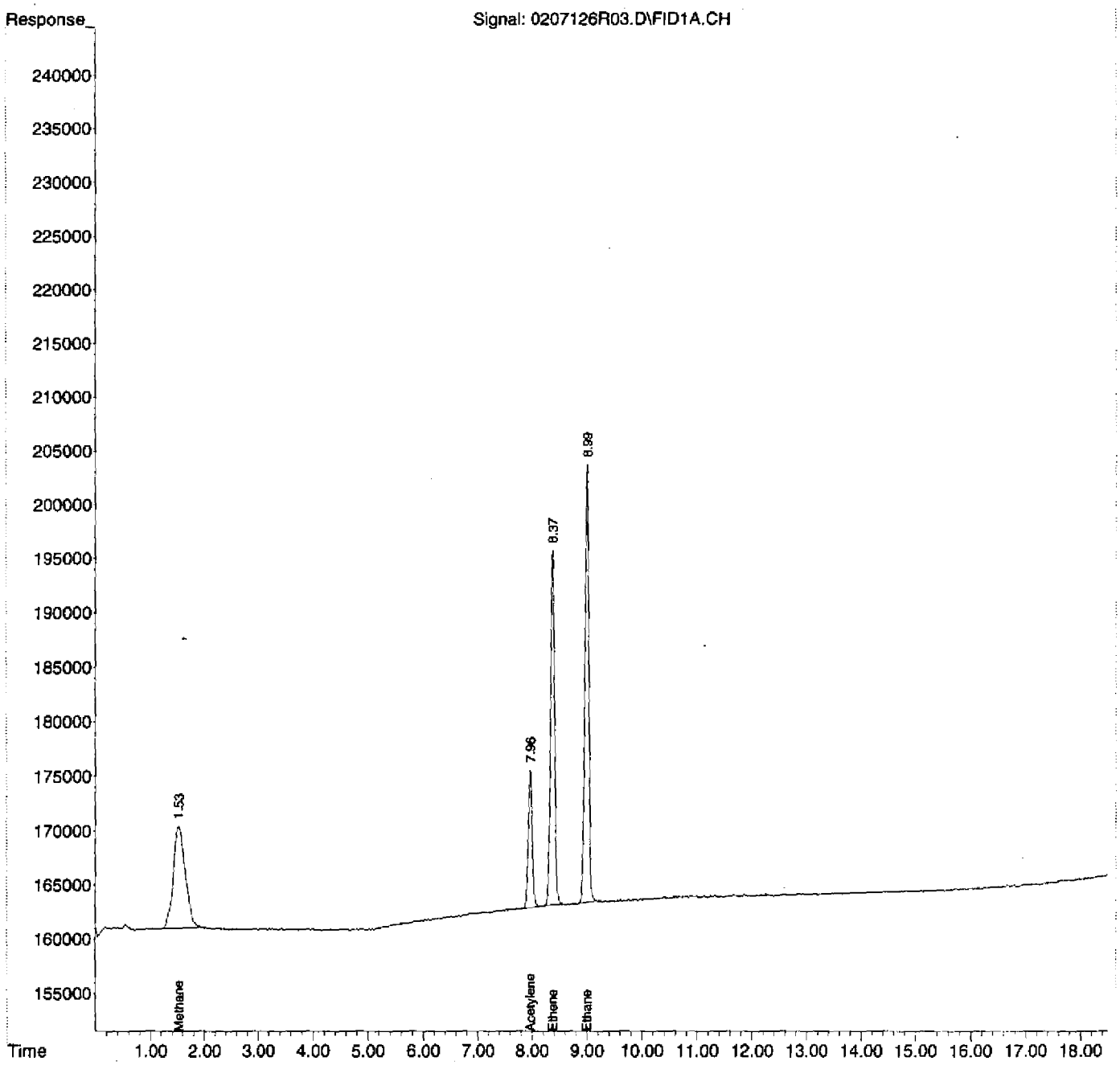
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\020712RSK\
Data File : 0207126R03.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 07 Feb 2012 11:40 am
Operator : rh
Sample : 2020021-LCV2
Misc : 2B07007
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 07 15:18:49 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\020712RSK\
Data File : 0207126R04.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 07 Feb 2012 12:16 pm
Operator : rh
Sample : B2B0024-BLK1
Misc : MB
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 07 15:18:56 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	7.953	25246986	72.234 ug/L
Spiked Amount 66.330 Range 66 - 153		Recovery =	108.90%
Target Compounds			
1) TM Methane	1.537	711093	0.698 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.

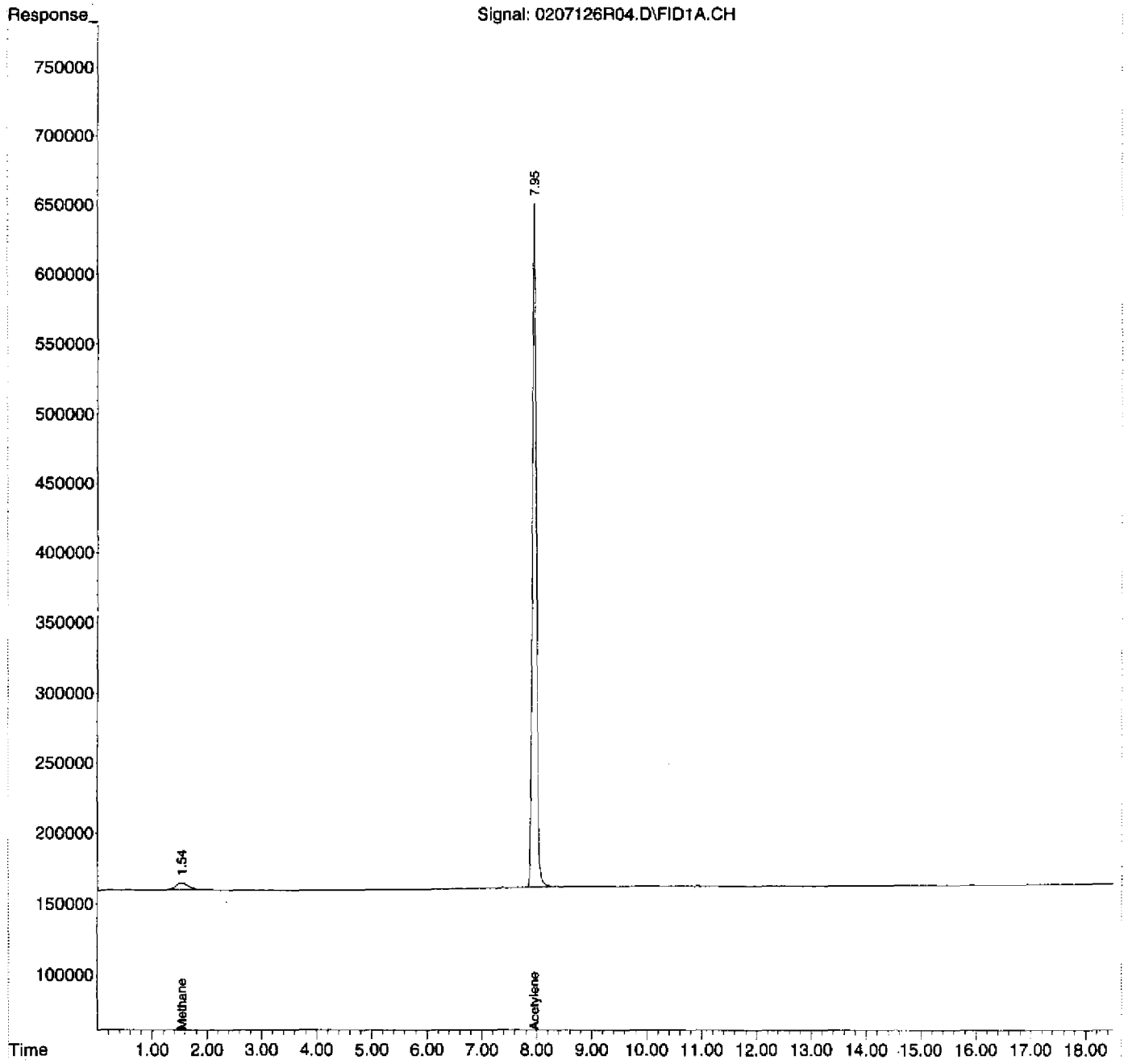
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\020712RSK\
Data File : 0207126R04.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 07 Feb 2012 12:16 pm
Operator : rh
Sample : B2B0024-BLK1
Misc : MB
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 07 15:18:56 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



RSK-175 LCSSUMMARY REPORT

Instrument Name: AG6890N-6
File Name: 0207126R05.D
Date Acquired: 2/7/2012
Operator: rh

Analyte	Spike ug/L	Calculated ug/L	QC Limits	%R	Status
Methane	44.099	33.902	70-130	76.9%	pass
Acetylene	72.166	57.580	66.4-153	79.8%	pass
Ethene	78.183	64.595	78-138	82.6%	pass
Ethane	83.269	69.988	77-137	84.1%	pass

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\020712RSK\
Data File : 0207126R05.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 07 Feb 2012 12:44 pm
Operator : rh
Sample : B2B0024-BS1
Misc : LCS
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Feb 07 15:19:04 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	7.955	20125288	57.580 ug/L
Spiked Amount 66.330 Range 66 - 153		Recovery =	86.81%
Target Compounds			
1) TM Methane	1.529	34513446	33.902 ug/L
3) TM Ethene	8.368	57356058	64.595 ug/L
4) TM Ethane	9.003	67648455	69.988 ug/L
5) Qual Propane	0.000	0	N.D.
6) Qual Butane	0.000	0	N.D.

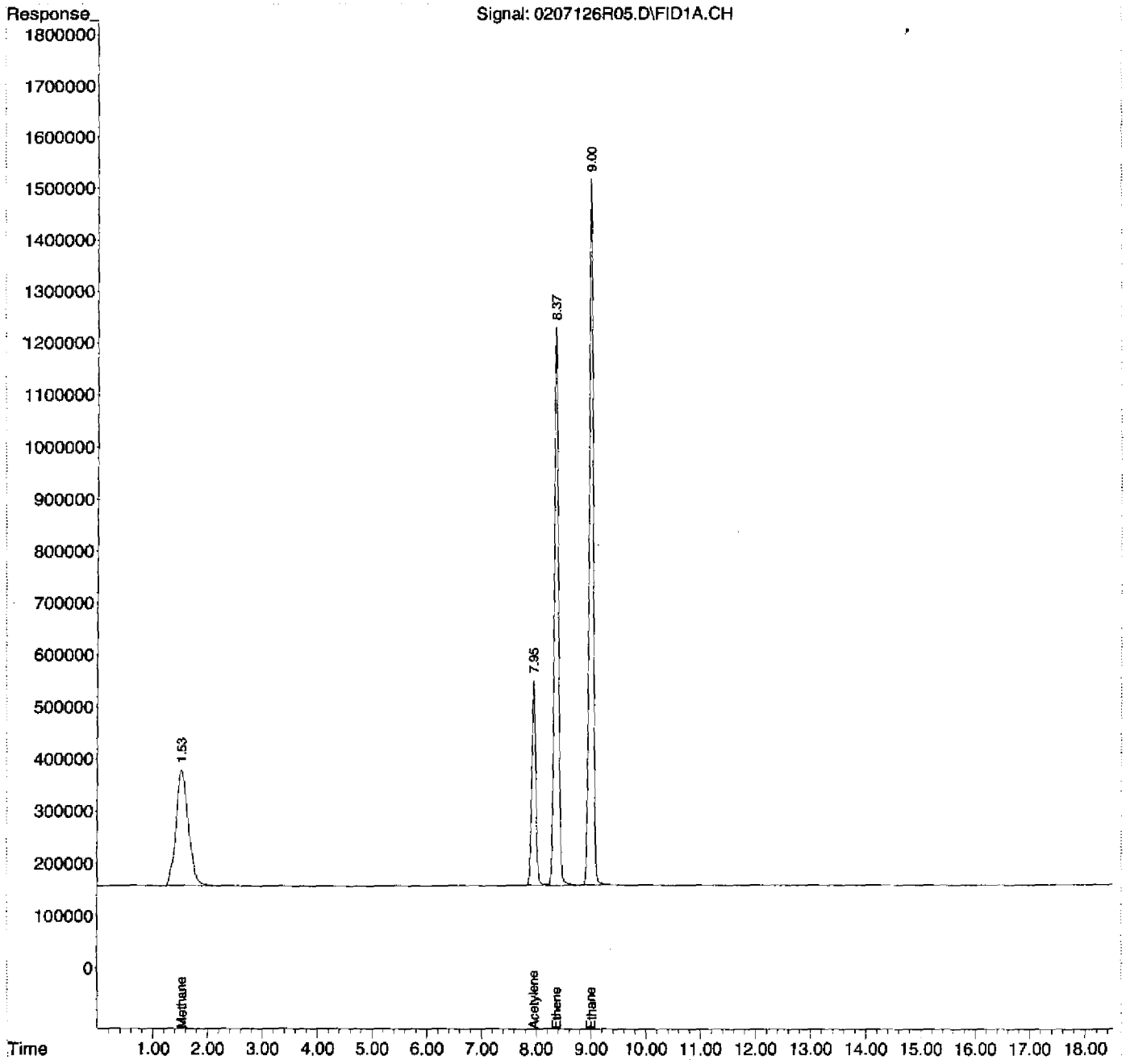
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\020712RSK\
Data File : 0207126R05.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 07 Feb 2012 12:44 pm
Operator : rh
Sample : B2B0024-BS1
Misc : LCS
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Feb 07 15:19:04 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\020712RSK\
Data File : 0207126R06.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 07 Feb 2012 1:20 pm
Operator : rh
Sample : B2B0024-MS1
Misc : MS 13-08
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Feb 07 15:19:12 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	7.953	24884600	71.197 ug/L
Spiked Amount 66.330 Range 66 - 153		Recovery =	107.34%
Target Compounds			
1) TM Methane	1.502	6828715194	6707.780 ug/L
3) TM Ethene	8.365	70711209	79.635 ug/L
4) TM Ethane	9.001	87876936	90.917 ug/L
5) Qual Propane	0.000	0	N.D.
6) Qual Butane	0.000	0	N.D.

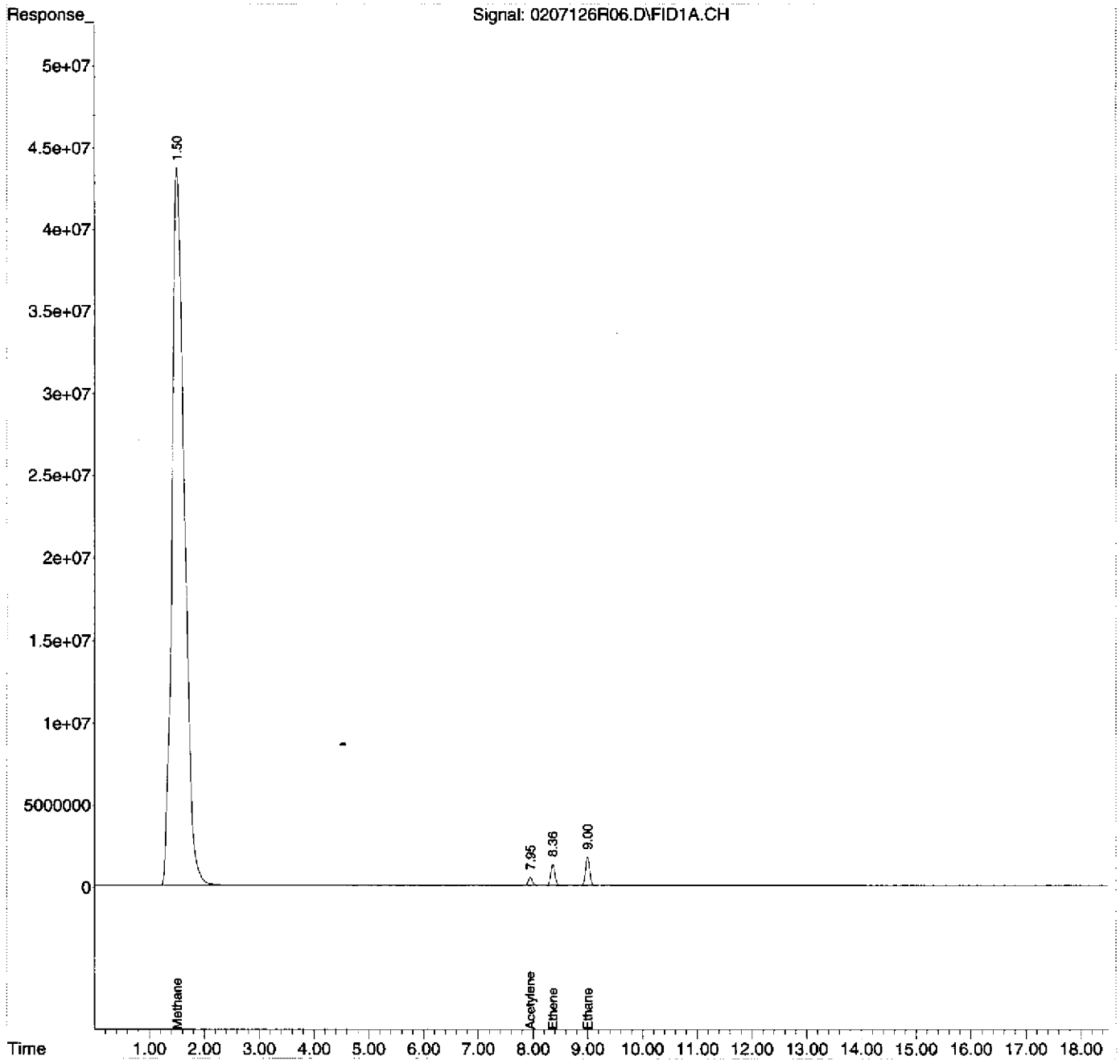
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\020712RSK\
Data File : 0207126R06.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 07 Feb 2012 1:20 pm
Operator : rh
Sample : B2B0024-MS1
Misc : MS 13-08
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Feb 07 15:19:12 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\020712RSK\
Data File : 0207126R07.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 07 Feb 2012 1:47 pm
Operator : rh
Sample : B2B0024-MSD1
Misc : MSD 13-08
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Feb 07 15:19:20 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	7.954	24460211	69.983 ug/L
Spiked Amount 66.330 Range 66 - 153		Recovery =	105.51%
Target Compounds			
1) TM Methane	1.509	4866606424	4780.419 ug/L
3) TM Ethene	8.366	70201128	79.061 ug/L
4) TM Ethane	9.002	86116268	89.095 ug/L
5) Qual Propane	0.000	0	N.D.
6) Qual Butane	0.000	0	N.D.

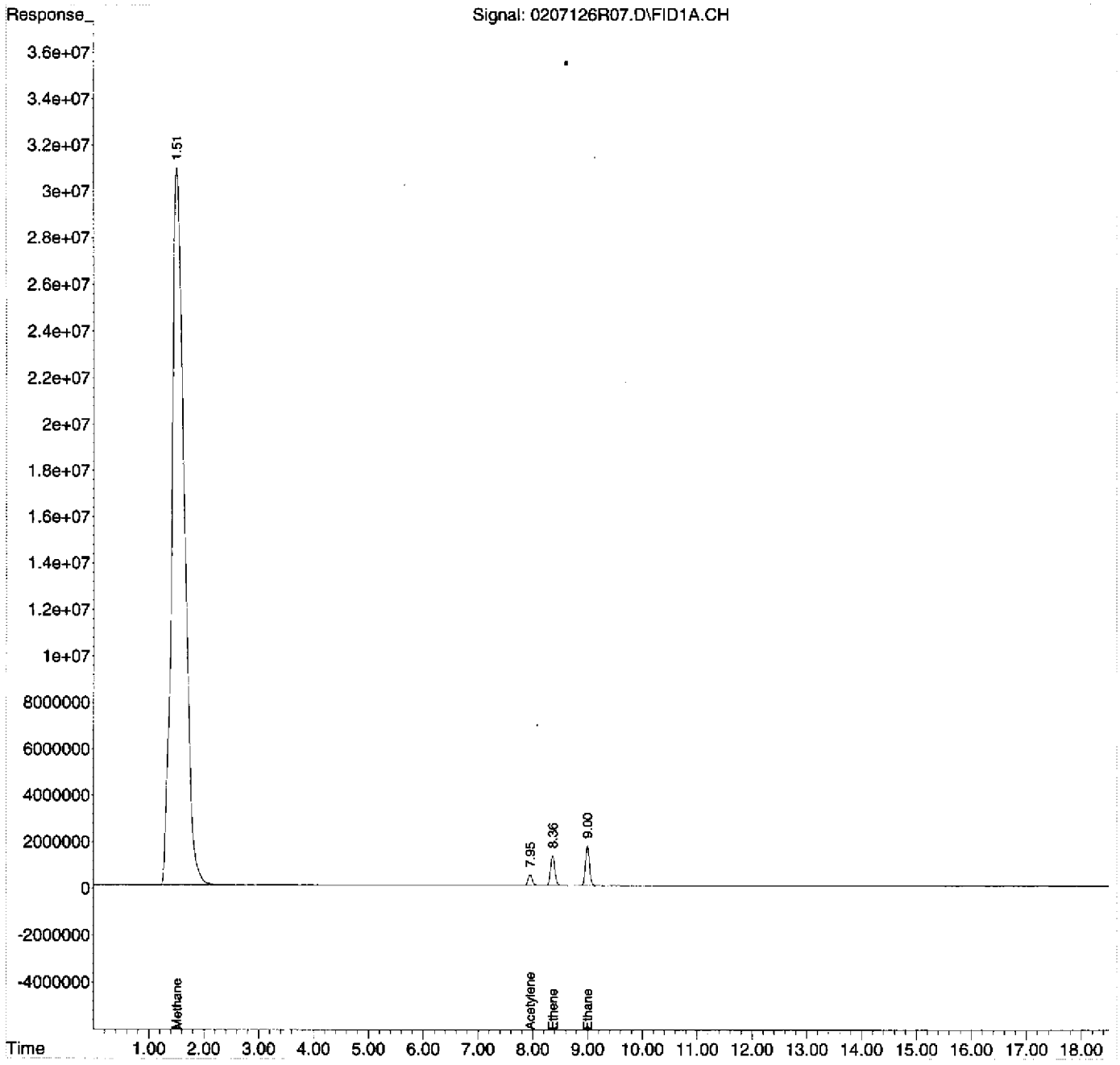
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\020712RSK\
Data File : 0207126R07.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 07 Feb 2012 1:47 pm
Operator : rh
Sample : B2B0024-MSD1
Misc : MSD 13-08
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Feb 07 15:19:20 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\020712RSK\
Data File : 0207126R08.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 07 Feb 2012 2:24 pm
Operator : rh
Sample : 1202011-06RE2
Misc : HW34A 0.08ML
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Feb 07 15:19:28 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	7.955	27324038	78.177 ug/L
Spiked Amount 66.330 Range 66 - 153		Recovery =	117.86%
Target Compounds			
1) TM Methane	1.528	129949420	127.648 ug/L
3) TM Ethene	0.000	0	N.D. ug/L
4) TM Ethane	9.005	364596	<MDL ug/L
5) Qual Propane	0.000	0	N.D.
6) Qual Butane	0.000	0	N.D.

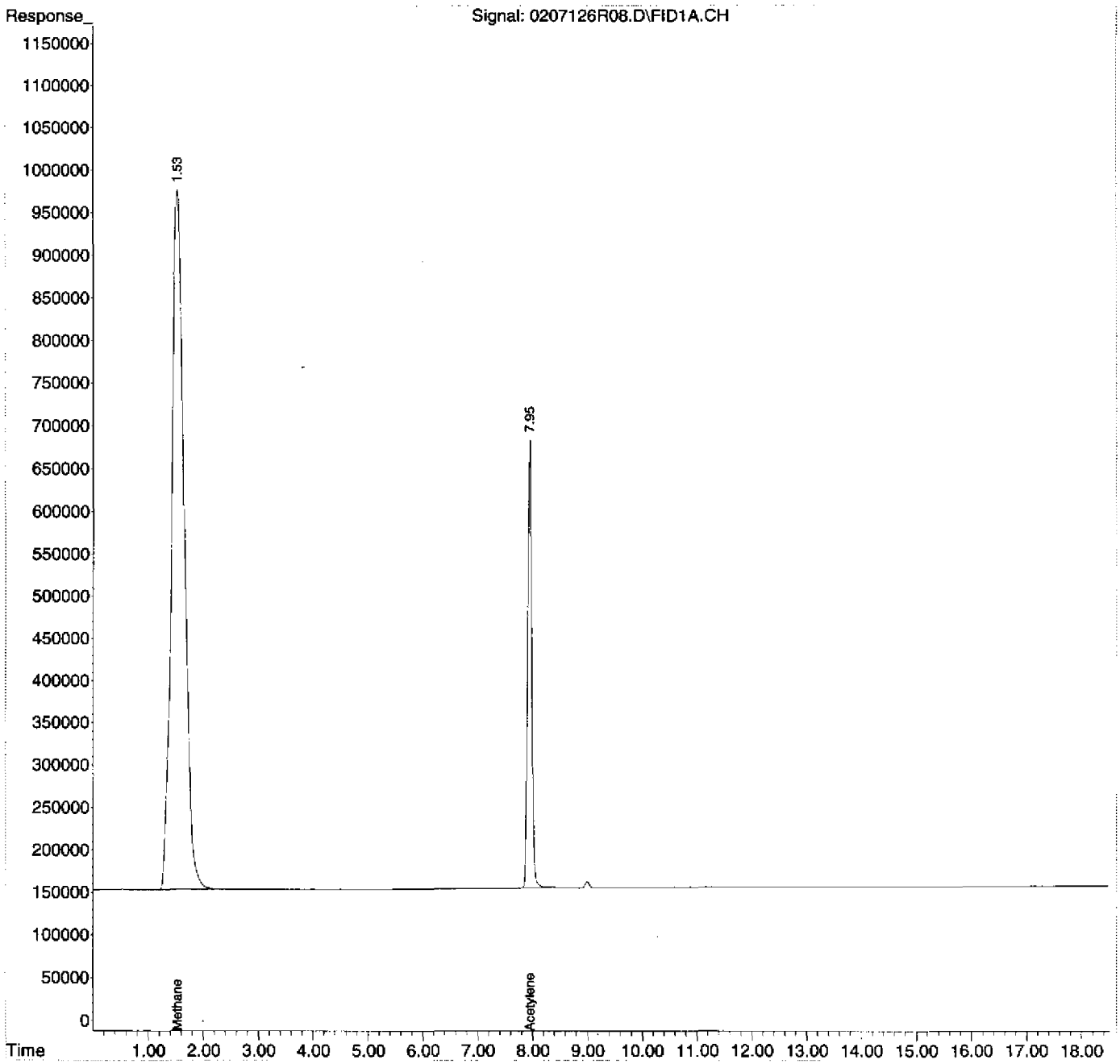
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\020712RSK\
Data File : 0207126R08.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 07 Feb 2012 2:24 pm
Operator : rh
Sample : 1202011-06RE2
Misc : HW34A 0.08ML
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Feb 07 15:19:28 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\020712RSK\
Data File : 0207126R09.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 07 Feb 2012 2:51 pm
Operator : rh
Sample : 1202011-07RE2
Misc : HW34A-P 5.0ML
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Feb 07 15:19:36 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	7.956	27866786	79.730 ug/L
Spiked Amount 66.330 Range 66 - 153		Recovery =	120.20%
Target Compounds			
1) TM Methane	1.524	147361431	144.752 ug/L
3) TM Ethene	0.000	0	N.D. ug/L
4) TM Ethane	9.006	603502	0.624 ug/L
5) Qual Propane	0.000	0	N.D.
6) Qual Butane	0.000	0	N.D.

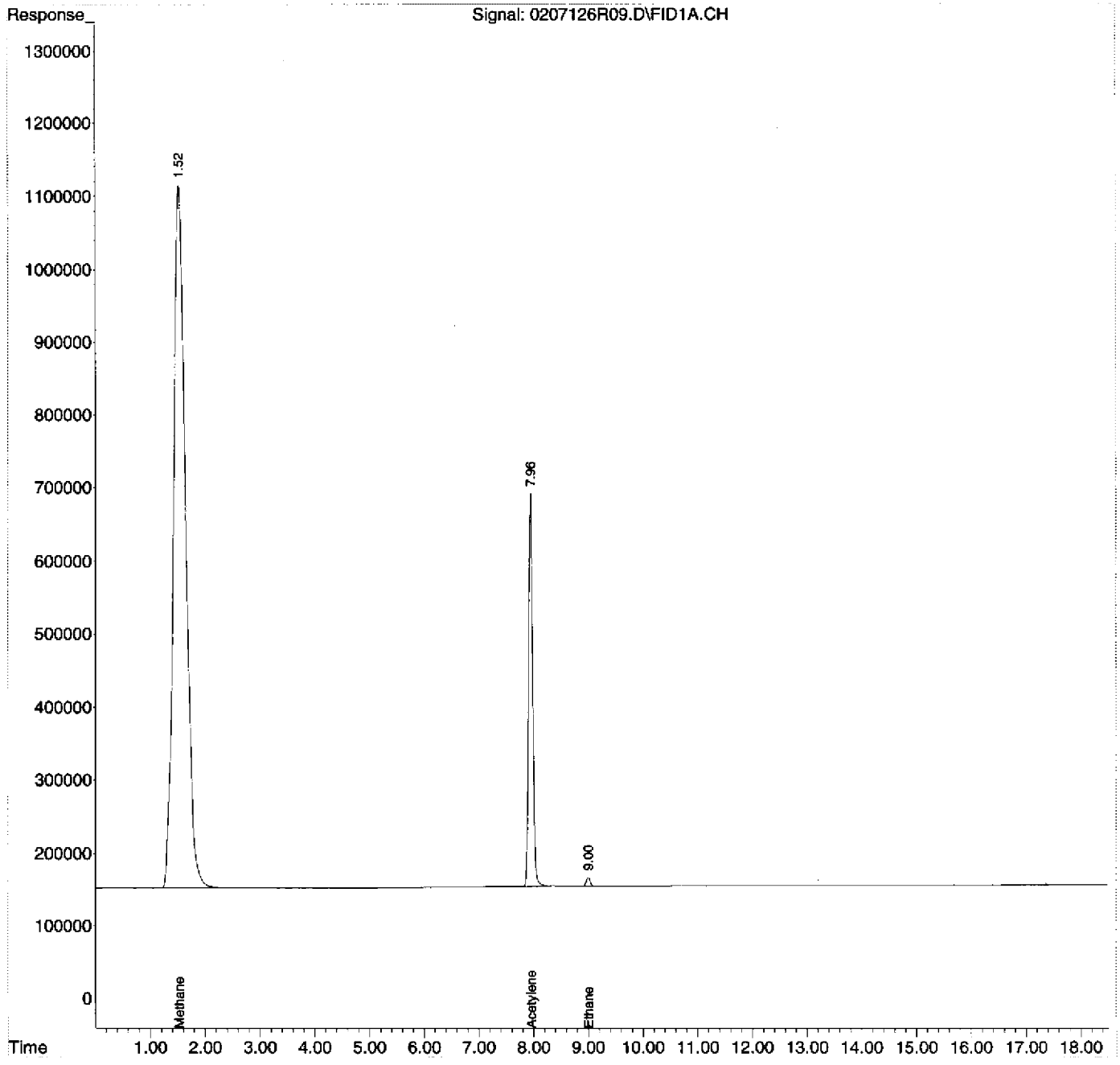
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\020712RSK\
Data File : 0207126R09.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 07 Feb 2012 2:51 pm
Operator : rh
Sample : 1202011-07RE2
Misc : HW34A-P 5.0ML
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Feb 07 15:19:36 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



JB 2/13/12

00152A

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\020712RSK\
Data File : 0207126R10.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 07 Feb 2012 3:28 pm
Operator : rh
Sample : 1202013-01
Misc : HW40
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Feb 08 08:59:58 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	7.955	25980262	74.332 ug/L
Spiked Amount 66.330 Range 66 - 153		Recovery =	112.06%
Target Gompounds			
1) TM Methane	1.528	1465030	1.439 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.

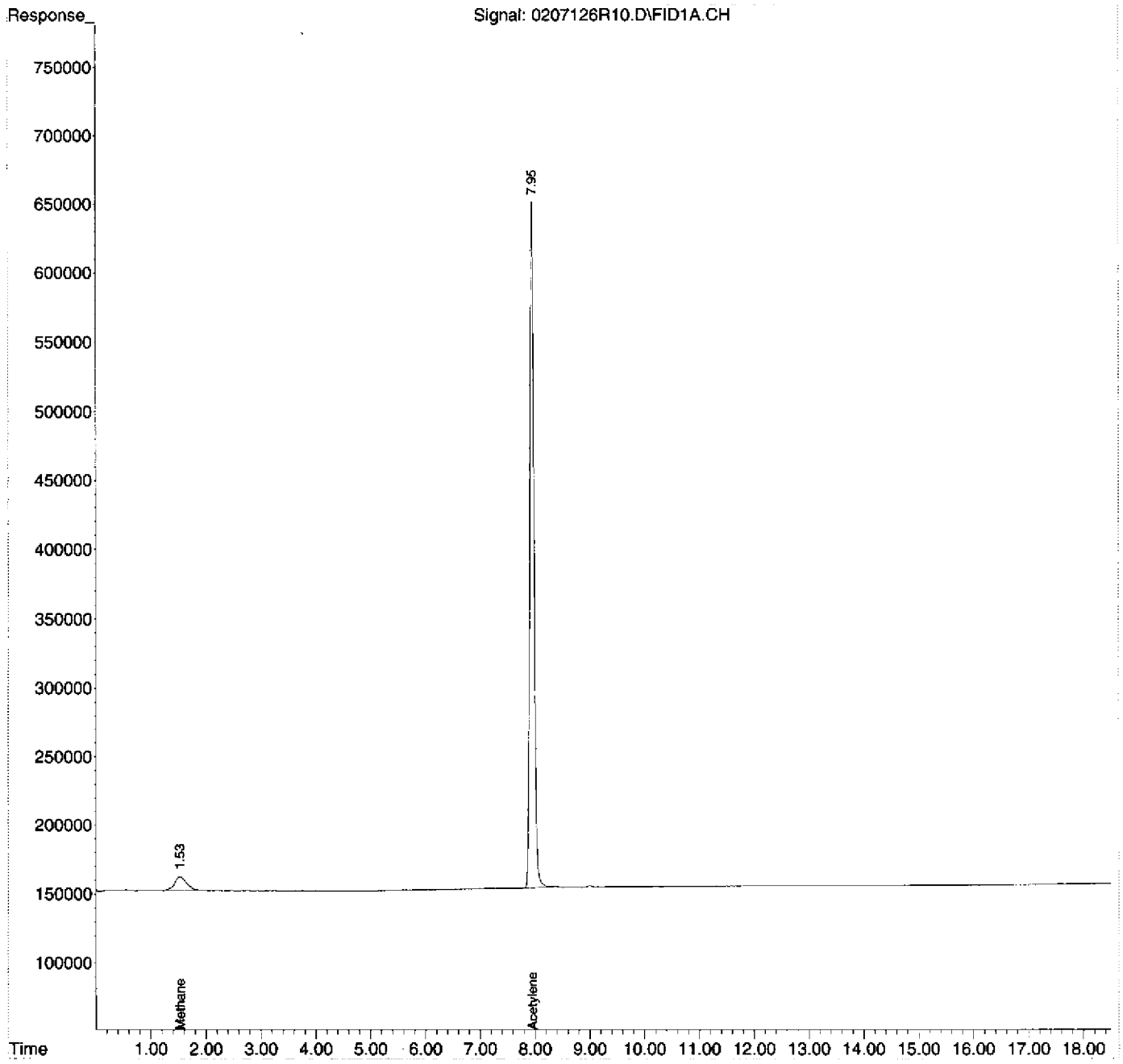
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\020712RSK\
Data File : 0207126R10.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 07 Feb 2012 3:28 pm
Operator : rh
Sample : 1202013-01
Misc : HW40
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Feb 08 08:59:58 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\020712RSK\
Data File : 0207126R11.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 07 Feb 2012 3:55 pm
Operator : rh
Sample : 1202013-02
Misc : HW70-P
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Feb 08 09:00:06 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	7.954	25749377	73.672 ug/L
Spiked Amount 66.330 Range 66 - 153		Recovery =	111.07%
Target Compounds			
1) TM Methane	1.528	1046787	1.028 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.

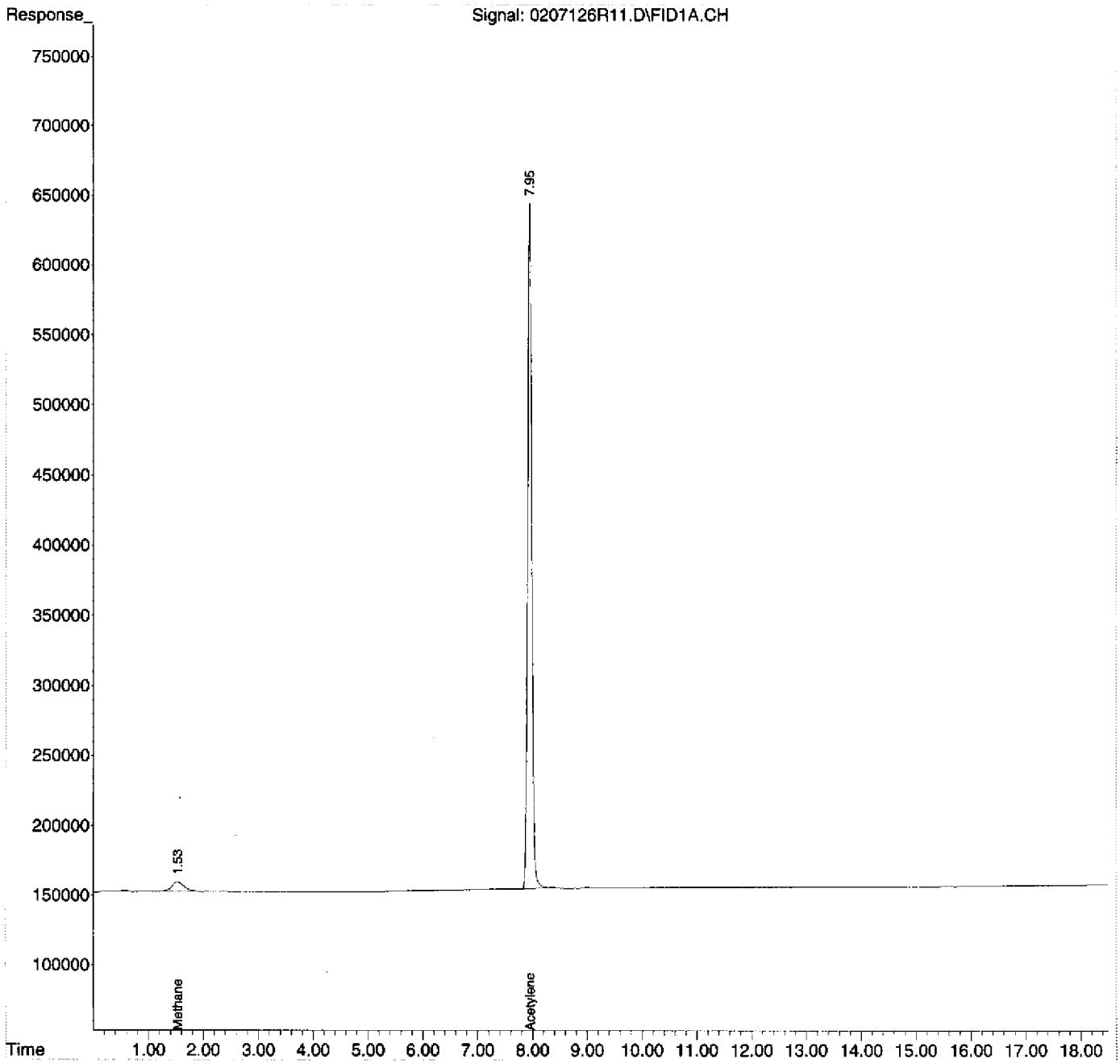
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\020712RSK\
Data File : 0207126R11.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 07 Feb 2012 3:55 pm
Operator : rh
Sample : 1202013-02
Misc : HW70-P
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Feb 08 09:00:06 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\020712RSK\
Data File : 0207126R12.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 07 Feb 2012 4:32 pm
Operator : rh
Sample : 1202013-03
Misc : HW41
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Feb 08 09:00:14 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	7.954	26143215	74.798 ug/L
Spiked Amount 66.330 Range 66 - 153		Recovery =	112.77%
Target Compounds			
1) TM Methane	1.527	4083287	4.011 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.

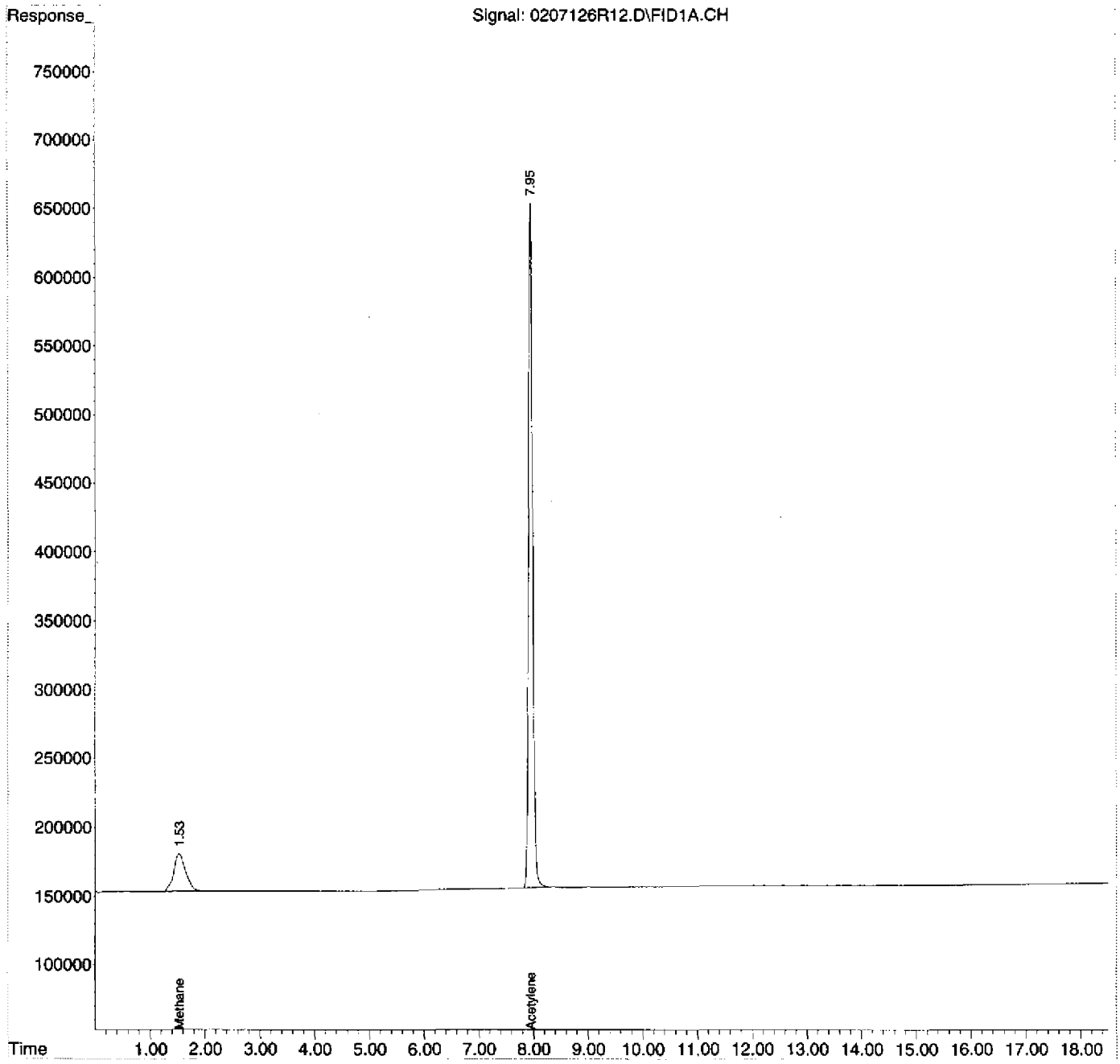
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\020712RSK\
Data File : 0207126R12.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 07 Feb 2012 4:32 pm
Operator : rh
Sample : 1202013-03
Misc : HW41
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Feb 08 09:00:14 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\020712RSK\
Data File : 0207126R13.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 07 Feb 2012 5:00 pm
Operator : rh
Sample : 1202013-04
Misc : HW41-P
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Feb 08 09:00:22 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	7.953	26580549	76.050 ug/L
Spiked Amount 66.330 Range 66 - 153		Recovery =	114.65%
Target Compounds			
1) TM Methane	1.526	3881704	3.813 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.

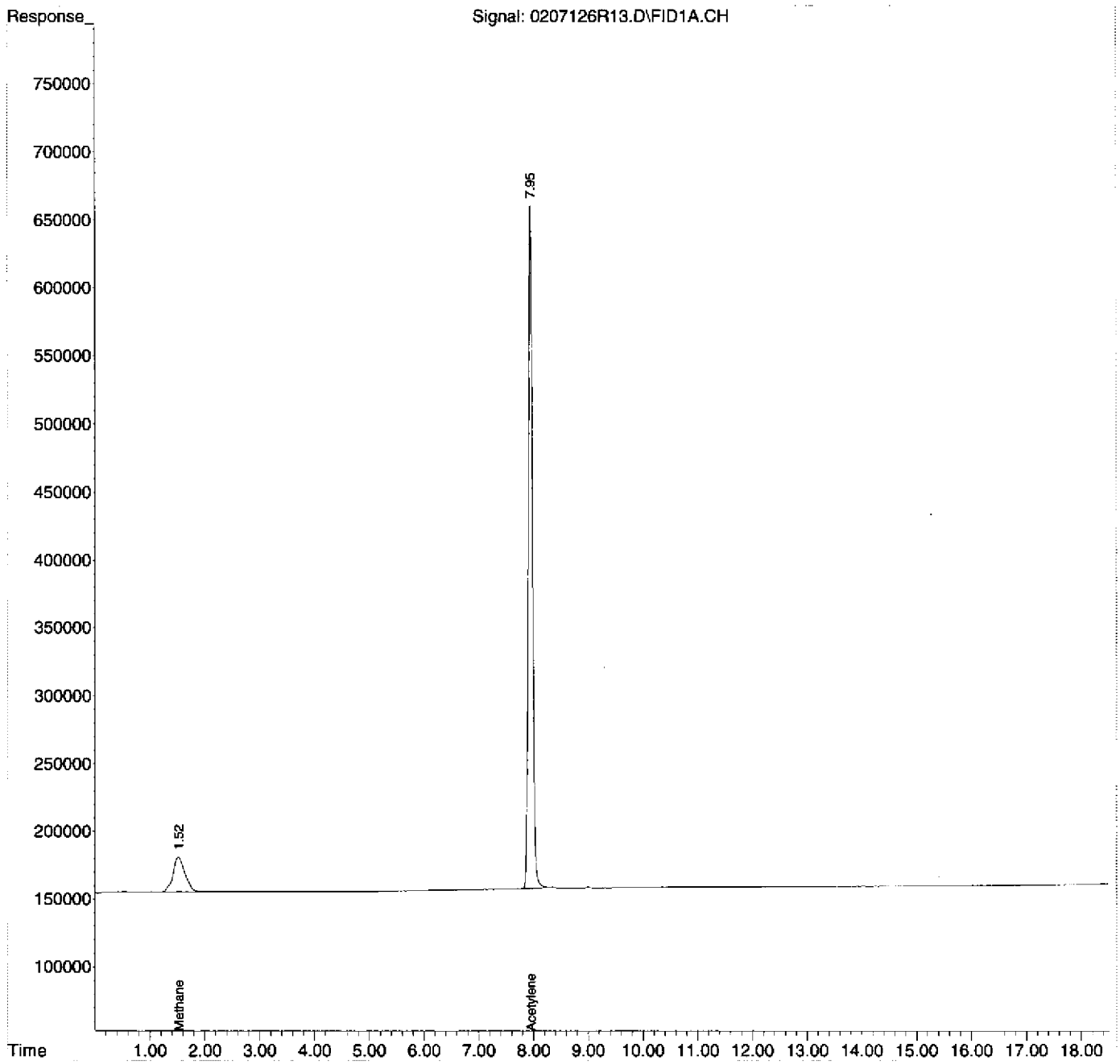
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\020712RSK\
Data File : 0207126R13.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 07 Feb 2012 5:00 pm
Operator : rh
Sample : 1202013-04
Misc : HW41-P
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Feb 08 09:00:22 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\020712RSK\
Data File : 0207126R14.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 07 Feb 2012 5:36 pm
Operator : rh
Sample : 1202013-06
Misc : HW28A
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Feb 08 09:00:29 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	7.954	26769245	76.589 ug/L
Spiked Amount 66.330 Range 66 - 153		Recovery =	115.47%
Target Compounds			
1) TM Methane	1.531	1007414	0.990 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.

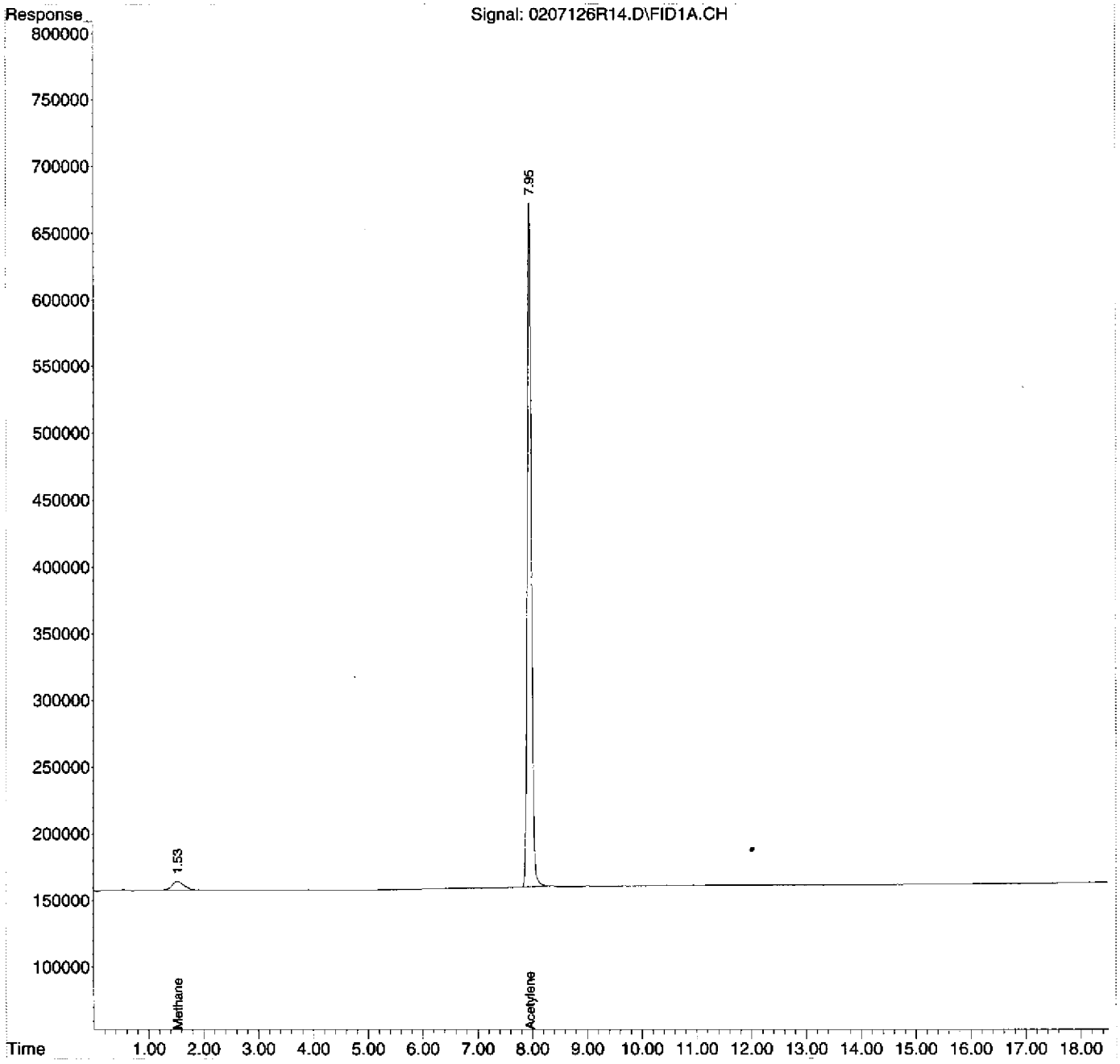
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\020712RSK\
Data File : 0207126R14.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 07 Feb 2012 5:36 pm
Operator : rh
Sample : 1202013-06
Misc : HW28A
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Feb 08 09:00:29 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\020712RSK\
Data File : 0207126R15.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 07 Feb 2012 6:04 pm
Operator : rh
Sample : 1202013-07
Misc : HW28A-P
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Feb 08 09:00:37 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	7.955	26141400	74.793 ug/L
Spiked Amount 66.330 Range 66 - 153		Recovery =	112.76%
Target Compounds			
1) TM Methane	1.537	1057902	1.039 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.

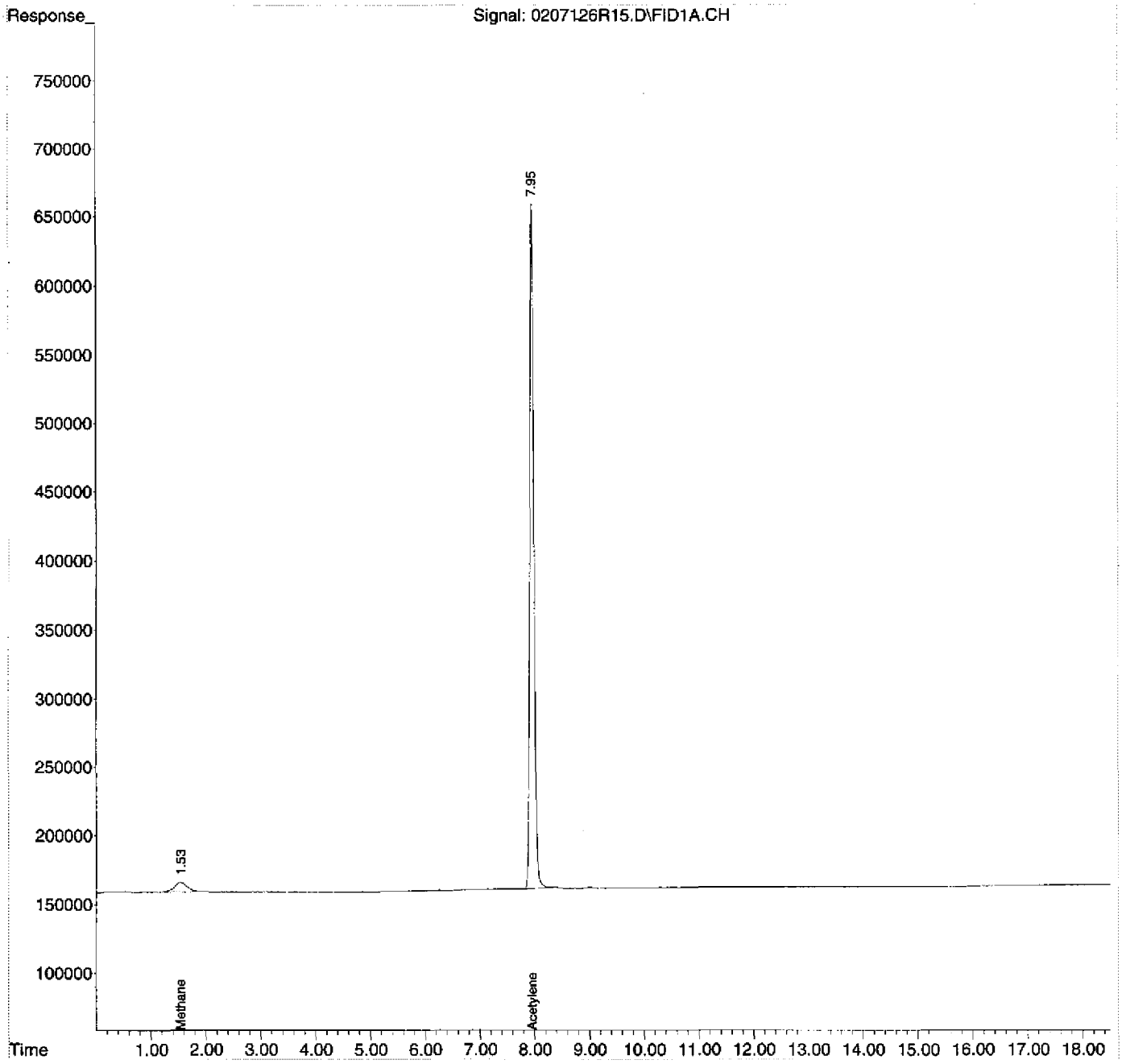
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\020712RSK\
Data File : 0207126R15.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 07 Feb 2012 6:04 pm
Operator : rh
Sample : 1202013-07
Misc : HW28A-P
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Feb 08 09:00:37 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\020712RSK\
Data File : 0207126R16.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 07 Feb 2012 6:40 pm
Operator : rh
Sample : 1202013-08
Misc : HW39
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Feb 08 09:00:45 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	7.954	26773340	76.601 ug/L
Spiked Amount 66.330 Range 66 - 153		Recovery =	115.48%
Target Compounds			
1) TM Methane	1.499	6842966207	6721.778 ug/L — o.c.
3) TM Ethene	0.000	0	N.D. ug/L
4) TM Ethane	9.004	5165835	5.345 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.

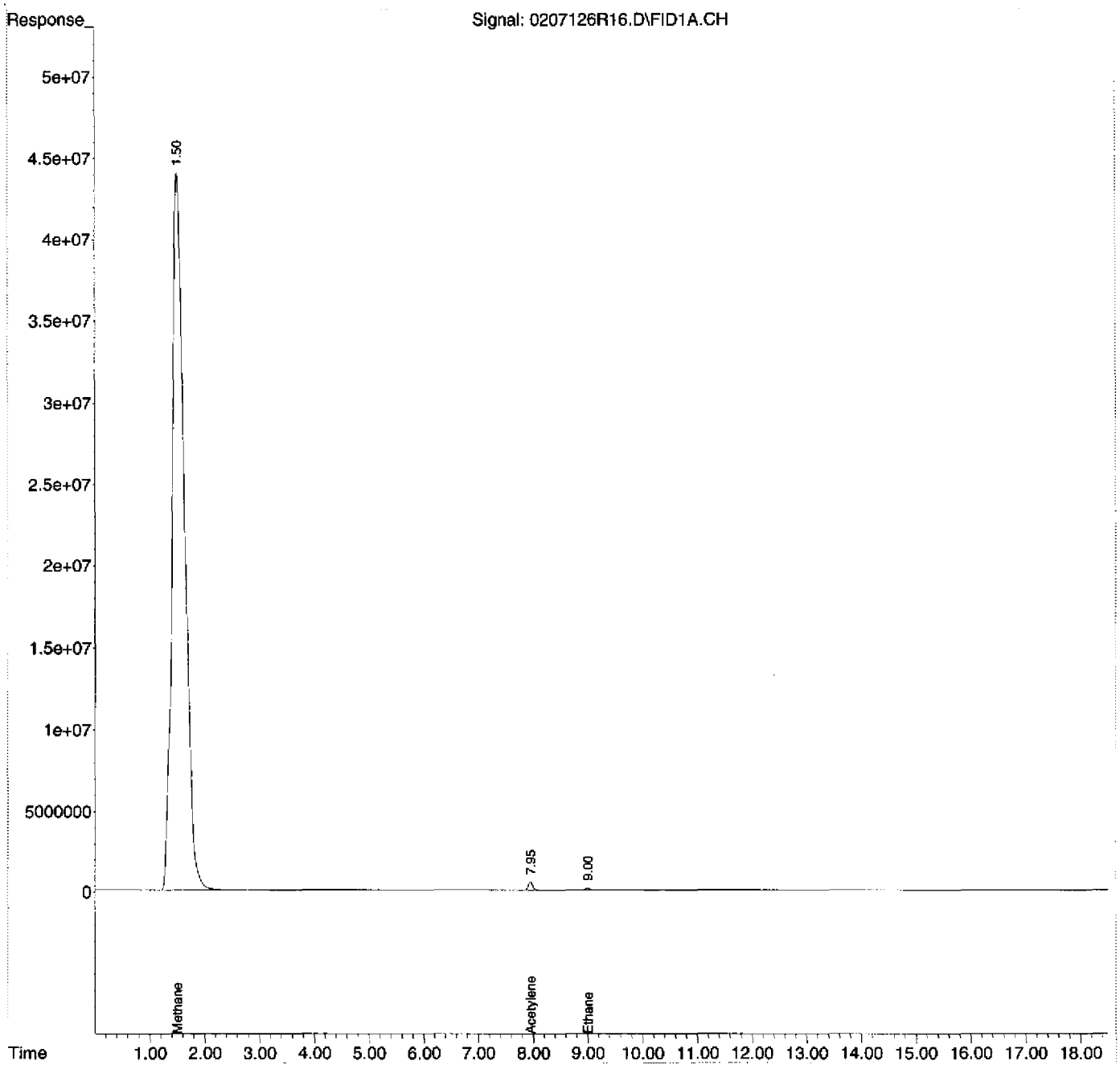
RR
0.5 ml

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\020712RSK\
Data File : 0207126R16.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 07 Feb 2012 6:40 pm
Operator : rh
Sample : 1202013-08
Misc : HW39
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Feb 08 09:00:45 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\020712RSK\
Data File : 0207126R17.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 07 Feb 2012 7:08 pm
Operator : rh
Sample : 1202013-09
Misc : HW39-P
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Feb 08 09:00:53 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	7.955	27036317	77.354 ug/L
Spiked Amount 66.330 Range 66 - 153		Recovery =	116.62%
Target Compounds			
1) TM Methane	1.526	27546543	27.059 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.

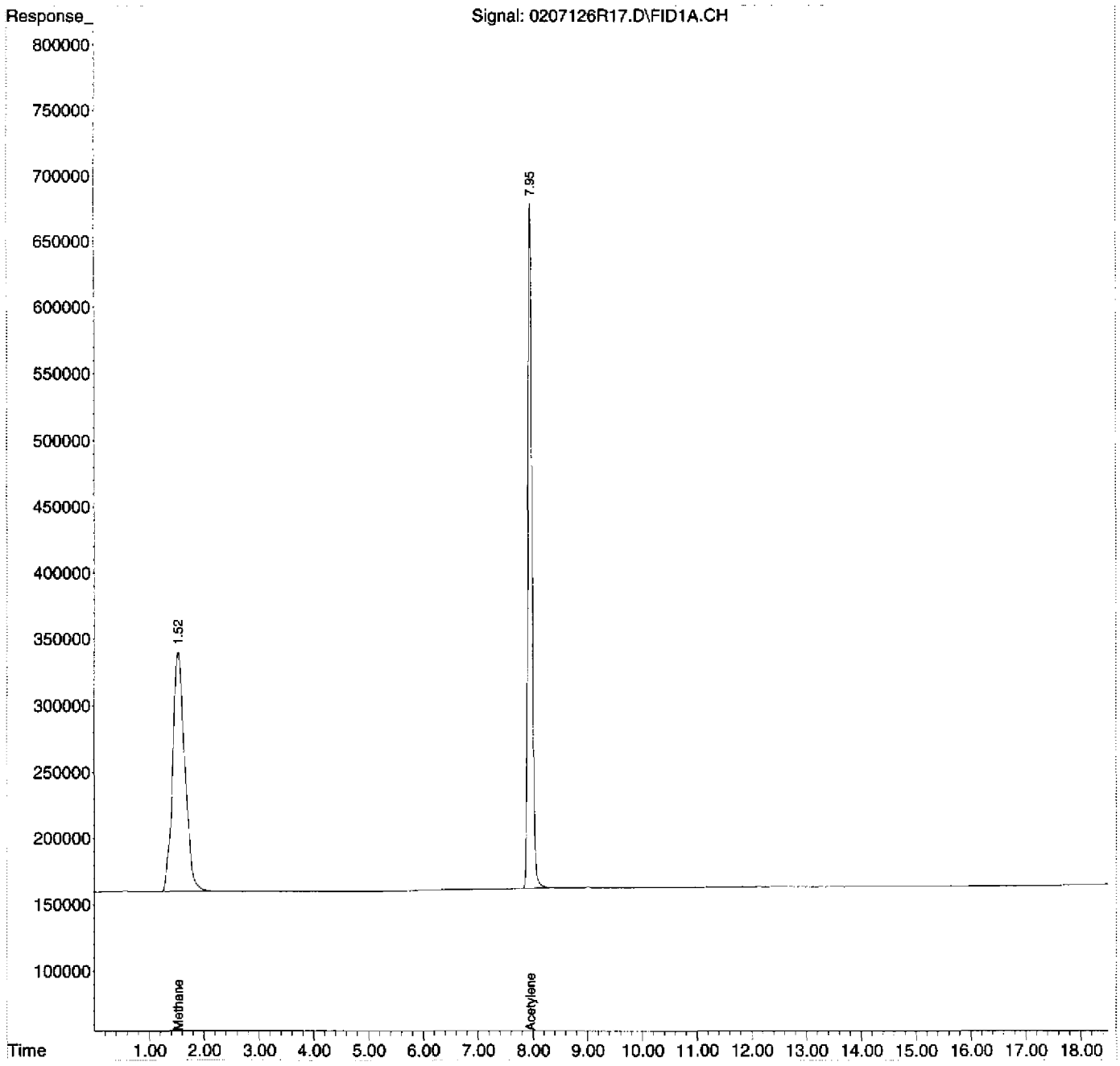
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\020712RSK\
Data File : 0207126R17.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 07 Feb 2012 7:08 pm
Operator : rh
Sample : 1202013-09
Misc : HW39-P
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Feb 08 09:00:53 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\020712RSK\
Data File : 0207126R18.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 07 Feb 2012 7:44 pm
Operator : rh
Sample : 1202014-02
Misc : HW09
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Feb 08 09:01:01 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	7.955	26210251	74.990 ug/L
Spiked Amount 66.330 Range 66 - 153		Recovery =	113.06%
Target Compounds			
1) TM Methane	1.525	4330616	4.254 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.

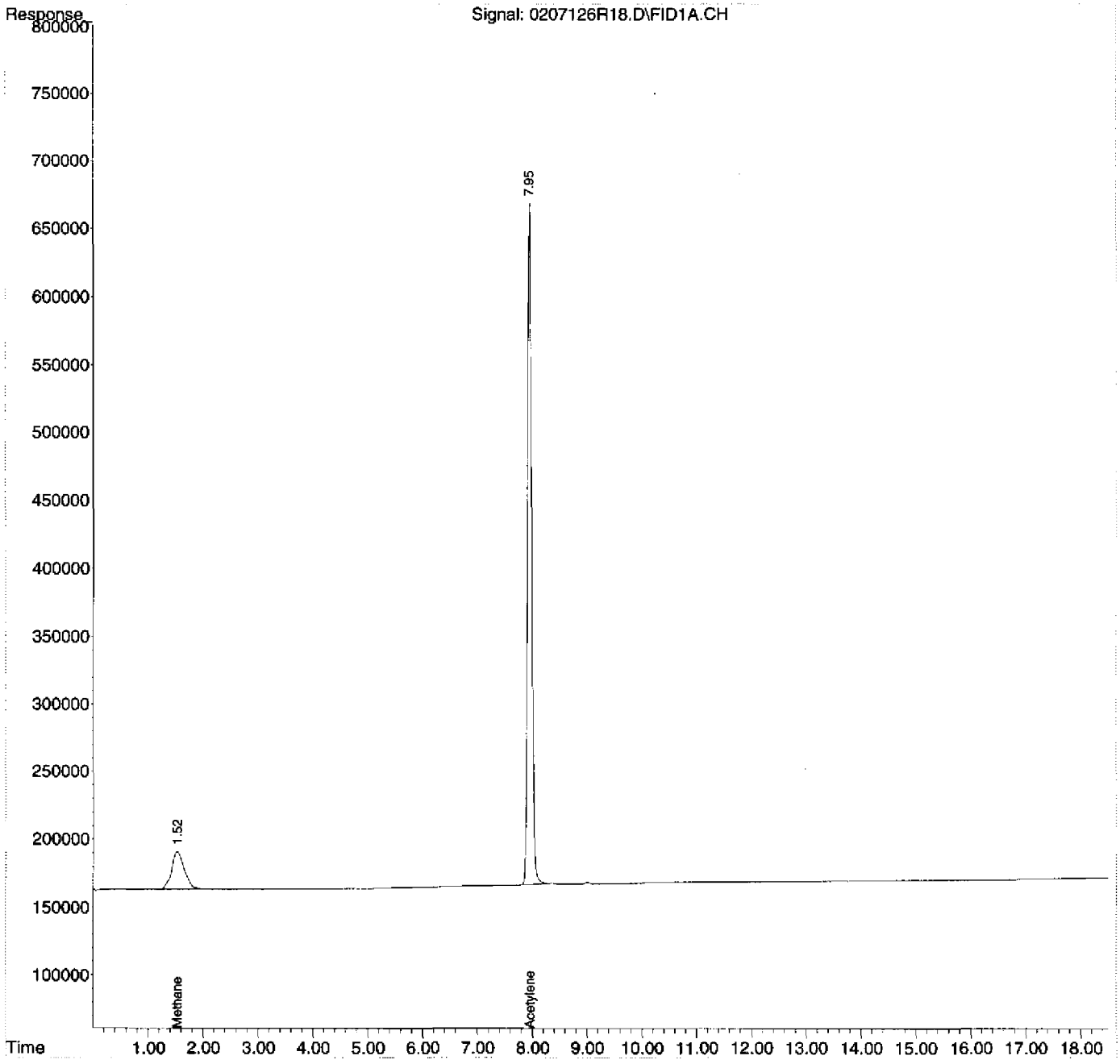
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\020712RSK\
Data File : 0207126R18.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 07 Feb 2012 7:44 pm
Operator : rh
Sample : 1202014-02
Misc : HW09
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Feb 08 09:01:01 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\020712RSK\
Data File : 0207126R19.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 07 Feb 2012 8:11 pm
Operator : rh
Sample : 1202014-03
Misc : HW09-P
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Feb 08 09:01:08 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	7.956	26988002	77.215 ug/L
Spiked Amount 66.330 Range 66 - 153		Recovery =	116.41%
Target Compounds			
1) TM Methane	1.534	1801401	1.769 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.

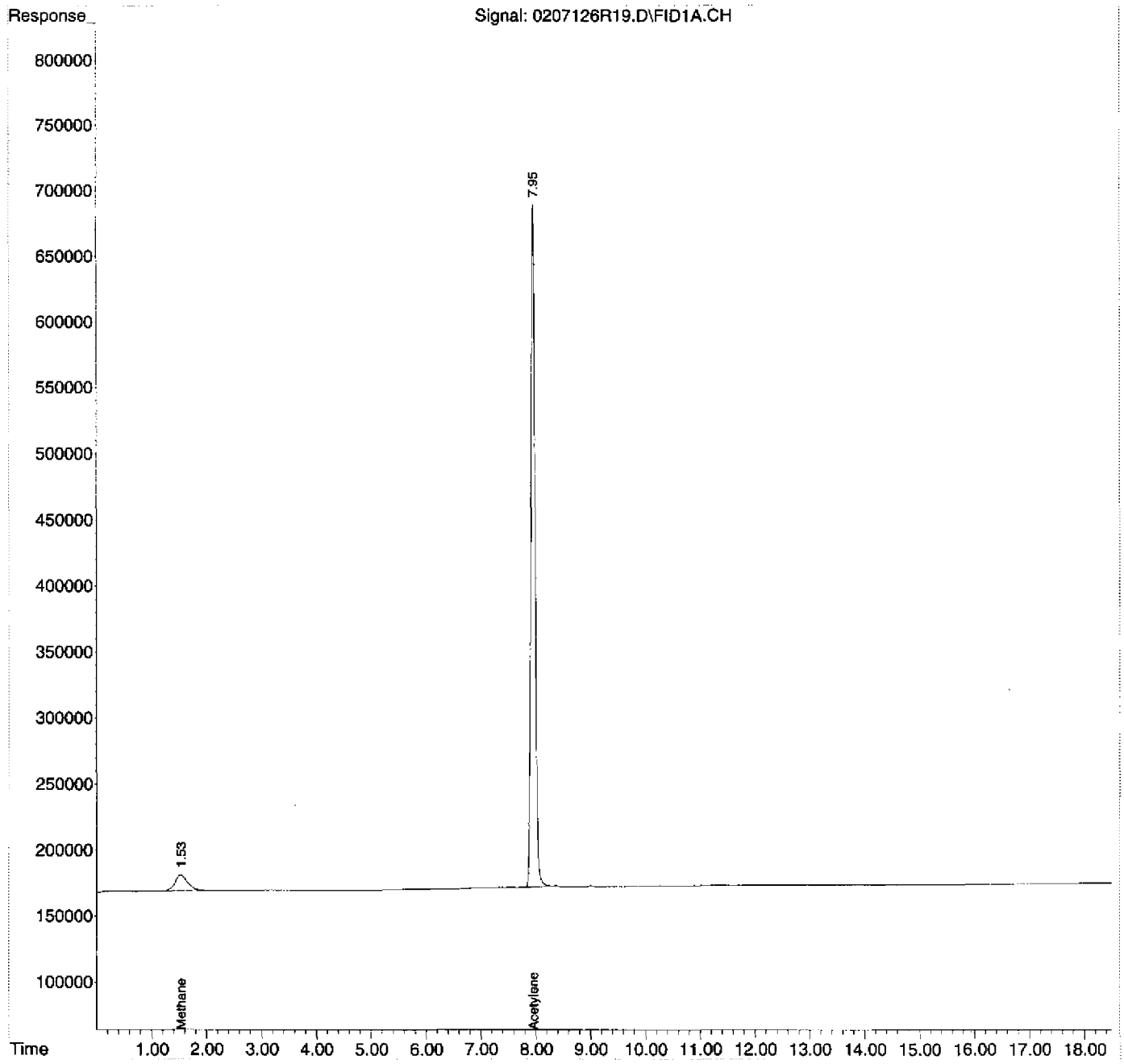
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\020712RSK\
Data File : 0207126R19.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 07 Feb 2012 8:11 pm
Operator : rh
Sample : 1202014-03
Misc : HW09-P
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Feb 08 09:01:08 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



Evaluate Continuing Calibration Report

Data Path : D:\MSDCHEM\1\2012\DATA\020712RSK\
Data File : 0207126R20.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 08 Feb 2012 9:03 am
Operator : rh
Sample : 2020021-CCV2
Misc : 2B07008
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Feb 08 16:14:05 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

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	1.018	0.938 E6	7.9	93	0.00
2 S	Acetylene	349.516	344.926 E3	1.3	93	-0.03
3 TM	Ethene	887.936	839.255 E3	5.5	93	0.00
4 TM	Ethane	966.567	906.136 E3	6.3	92	0.00

Evaluate Continuing Calibration Report - Not Founds

5	QualPropane	0.000	0.000	0.0	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\020712RSK\
Data File : 0207126R20.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 08 Feb 2012 9:03 am
Operator : rh
Sample : 2020021-CCV2
Misc : 2B07008
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Feb 08 16:14:05 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	7.944	7467647	21.366 ug/L
Spiked Amount 66.330 Range 66 - 153		Recovery =	32.21%#
Target Compounds			
1) TM Methane	1.527	12403529	12.184 ug/L
3) TM Ethene	8.366	19684718	22.169 ug/L
4) TM Ethane	9.003	22636187	23.419 ug/L
5) Qual Propane	0.000	0	N.D.
6) Qual Butane	0.000	0	N.D.

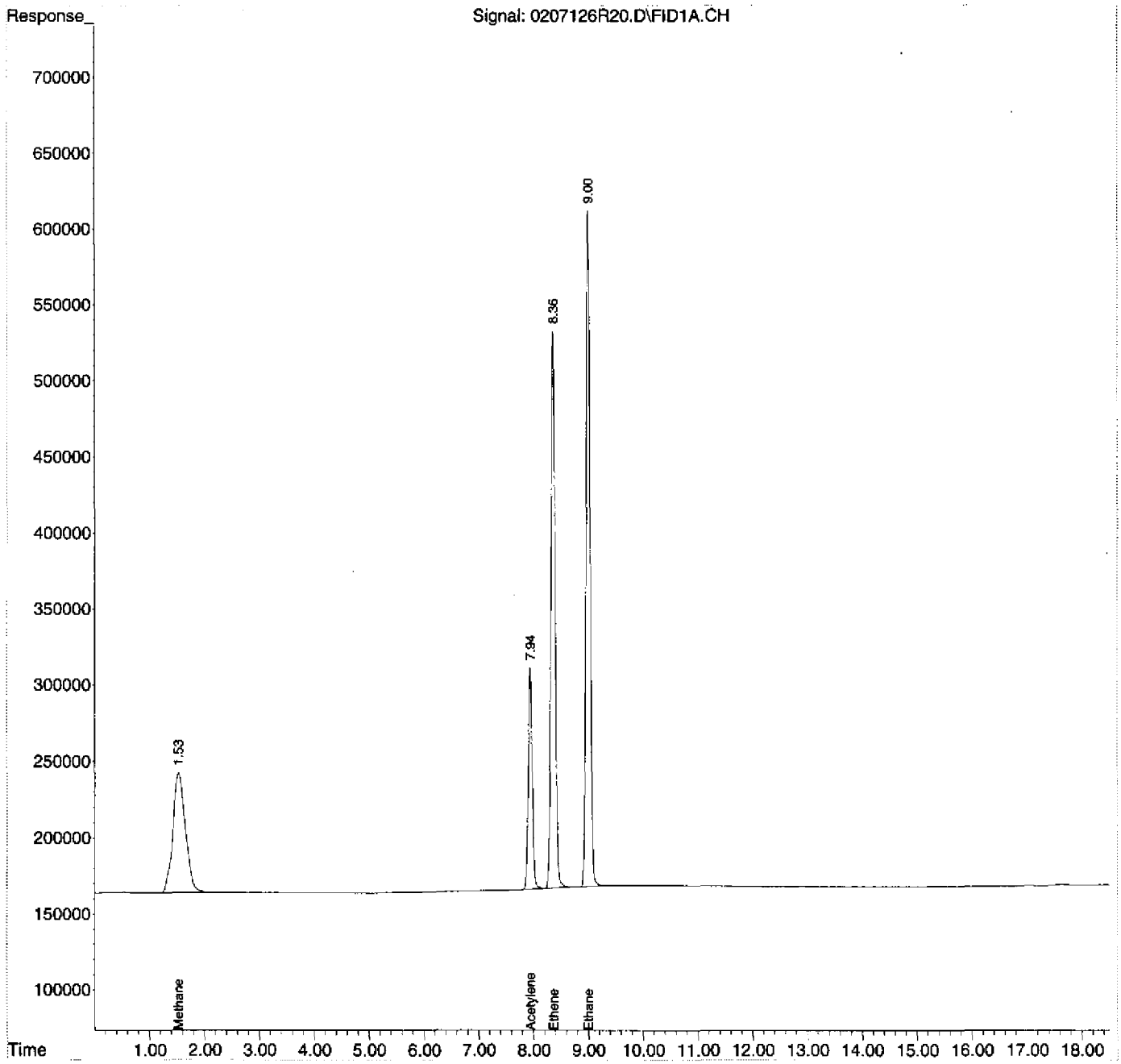
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\020712RSK\
Data File : 0207126R20.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 08 Feb 2012 9:03 am
Operator : rh
Sample : 2020021-CCV2
Misc : 2B07008
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Feb 08 16:14:05 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\020712RSK\
Data File : 0207126R21.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 08 Feb 2012 9:30 am
Operator : rh
Sample : 1202014-04
Misc : HW28B-P
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Feb 08 16:14:13 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	7.955	27162062	77.713 ug/L
Spiked Amount 66.330 Range 66 - 153		Recovery =	117.16%
Target Compounds			
1) TM Methane	1.526	945021	0.928 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.

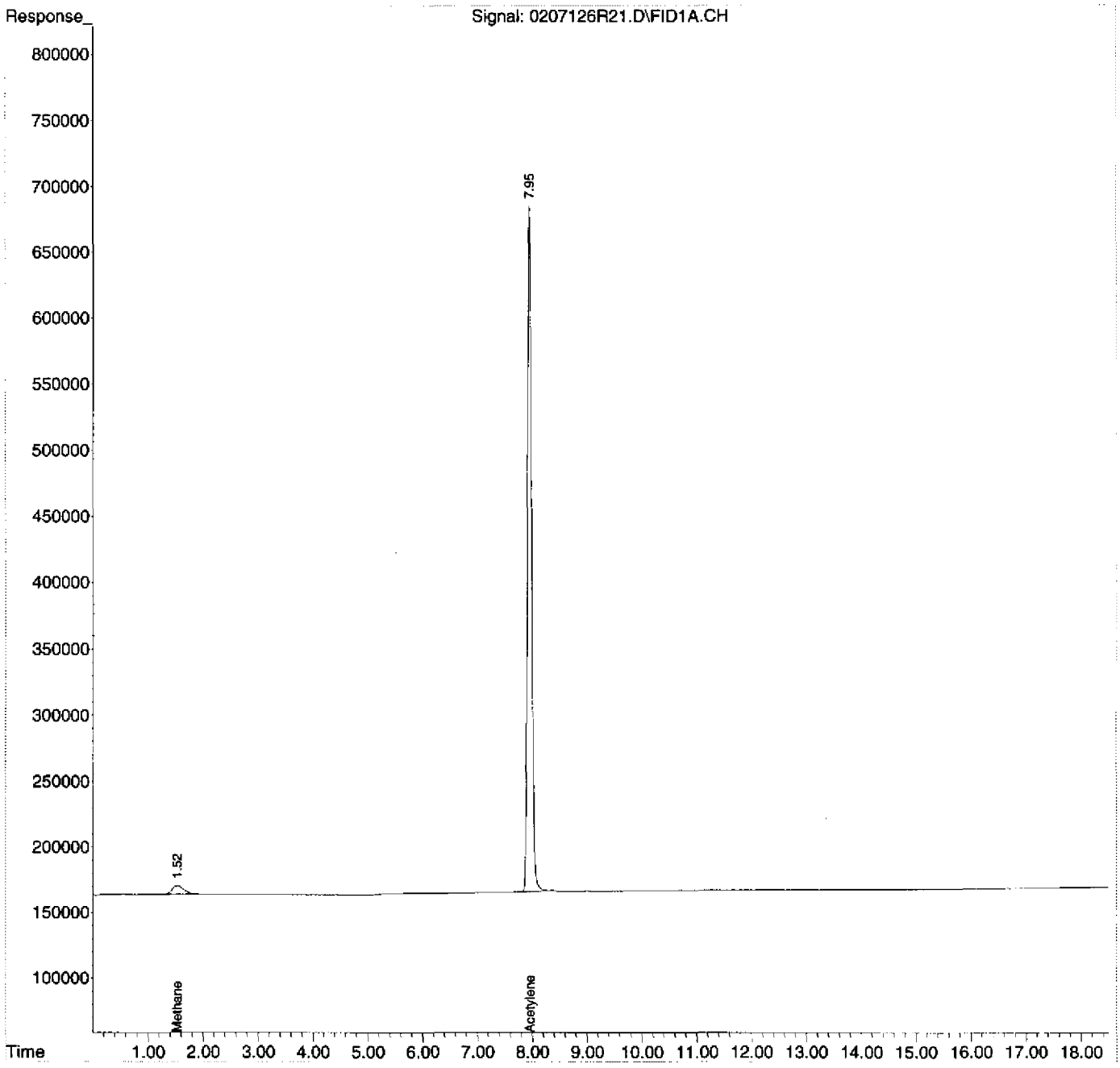
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\020712RSK\
Data File : 0207126R21.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 08 Feb 2012 9:30 am
Operator : rh
Sample : 1202014-04
Misc : HW28B-P
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Feb 08 16:14:13 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\020712RSK\
Data File : 0207126R22.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 08 Feb 2012 9:57 am
Operator : rh
Sample : 1202011-IBL1
Misc : IB
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Feb 08 16:14:21 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	7.957	26994593	77.234 ug/L
Spiked Amount 66.330 Range 66 - 153		Recovery =	116.44%
Target Compounds			
1) TM Methane	1.521	835909	0.821 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.

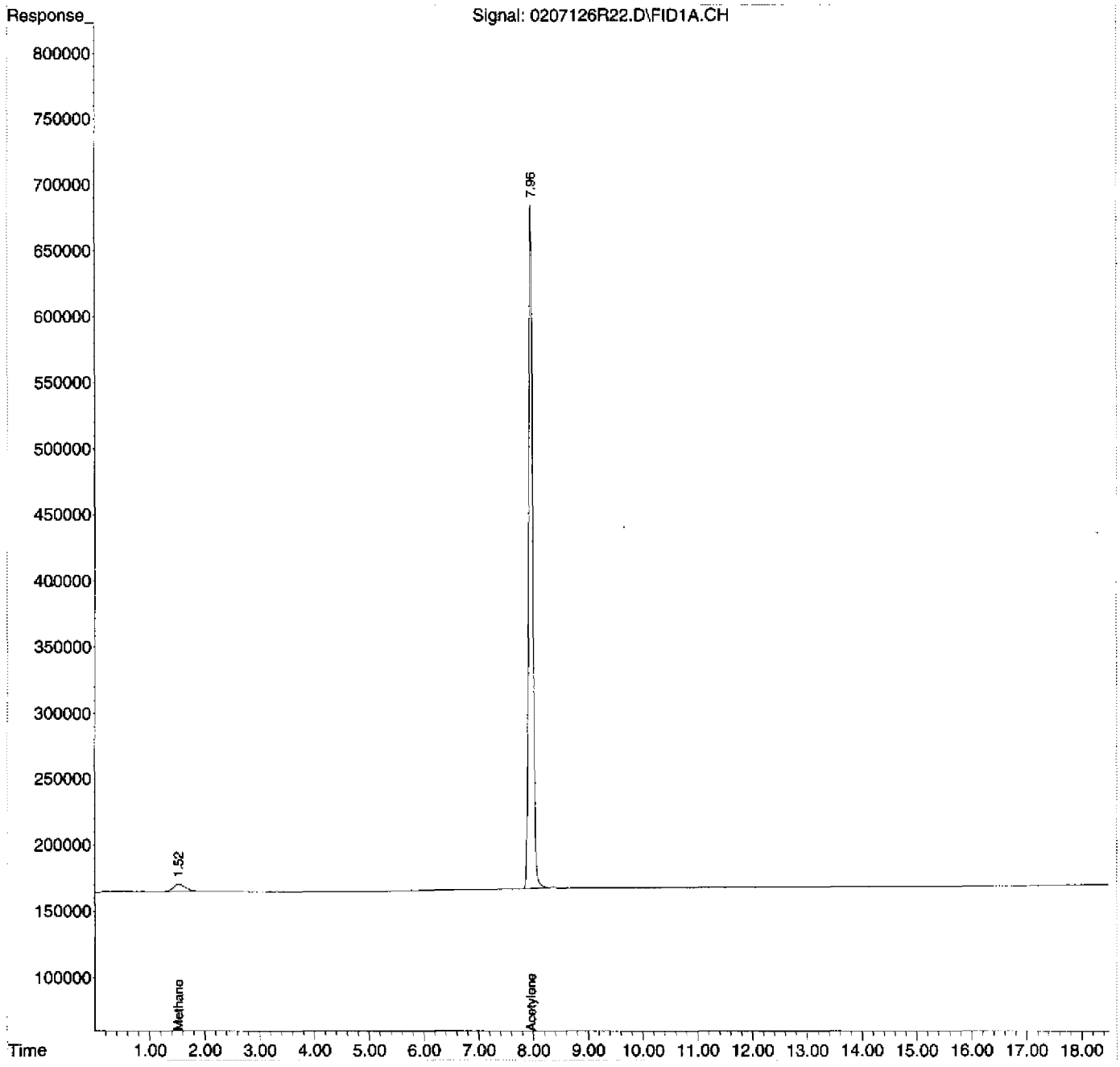
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\020712RSK\
Data File : 0207126R22.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 08 Feb 2012 9:57 am
Operator : rh
Sample : 1202011-IBL1
Misc : IB
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Feb 08 16:14:21 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\020712RSK\
Data File : 0207126R23.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 08 Feb 2012 10:32 am
Operator : rh
Sample : 1202013-05
Misc : TB18
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Feb 08 16:14:28 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	7.957	27092823	77.515 ug/L
Spiked Amount 66.330 Range 66 - 153		Recovery =	116.86%
Target Compounds			
1) TM Methane	1.531	3301694	3.243 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.

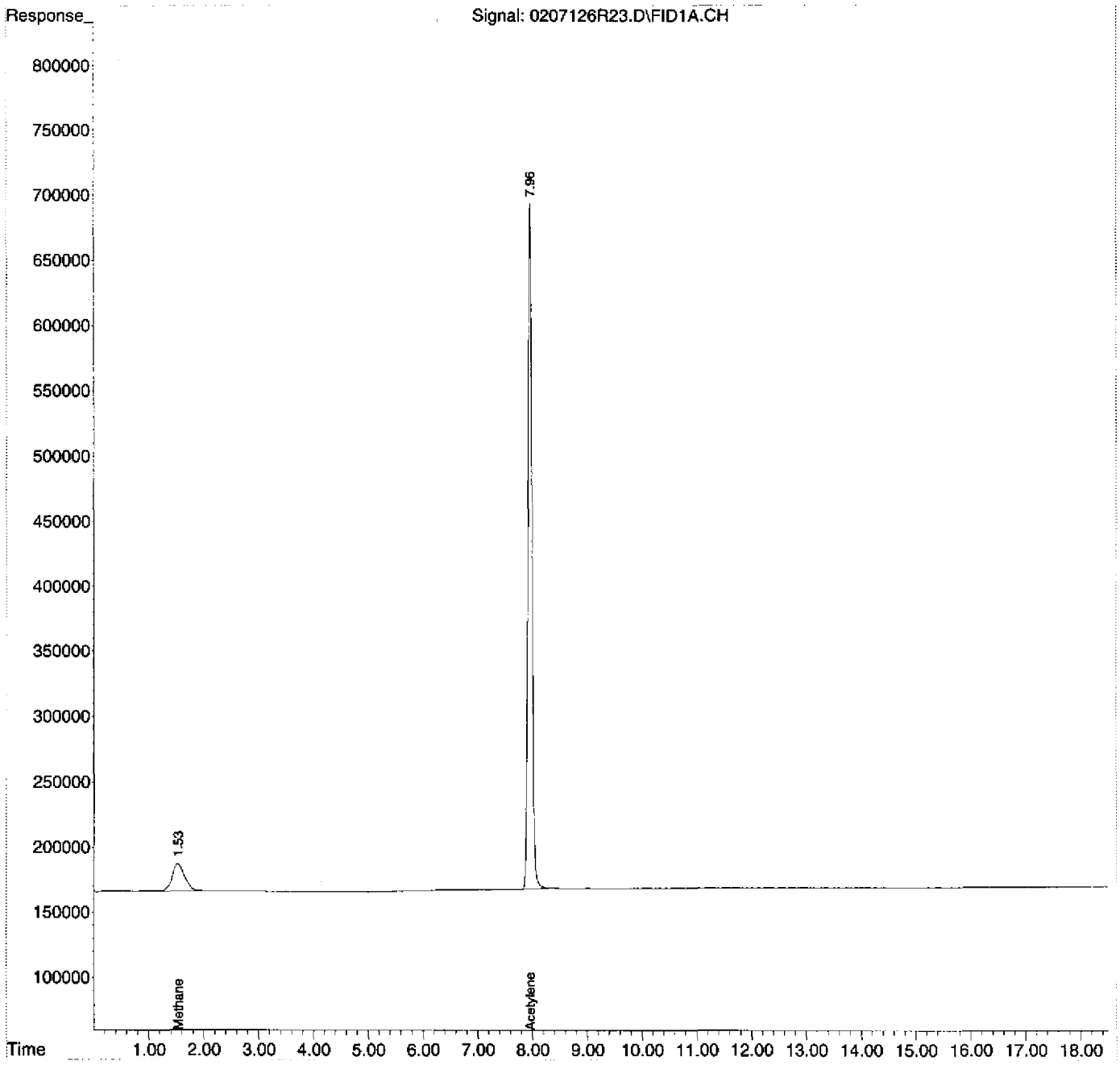
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\020712RSK\
Data File : 0207126R23.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 08 Feb 2012 10:32 am
Operator : rh
Sample : 1202013-05
Misc : TB18
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Feb 08 16:14:28 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\020712RSK\
Data File : 0207126R24.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 08 Feb 2012 11:00 am
Operator : rh
Sample : 1202013-10
Misc : TB19
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Feb 08 16:14:36 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	7.956	27012734	77.286 ug/L
Spiked Amount 66.330 Range 66 - 153		Recovery =	116.52%
Target Compounds			
1) TM Methane	1.531	2475976	2.432 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.

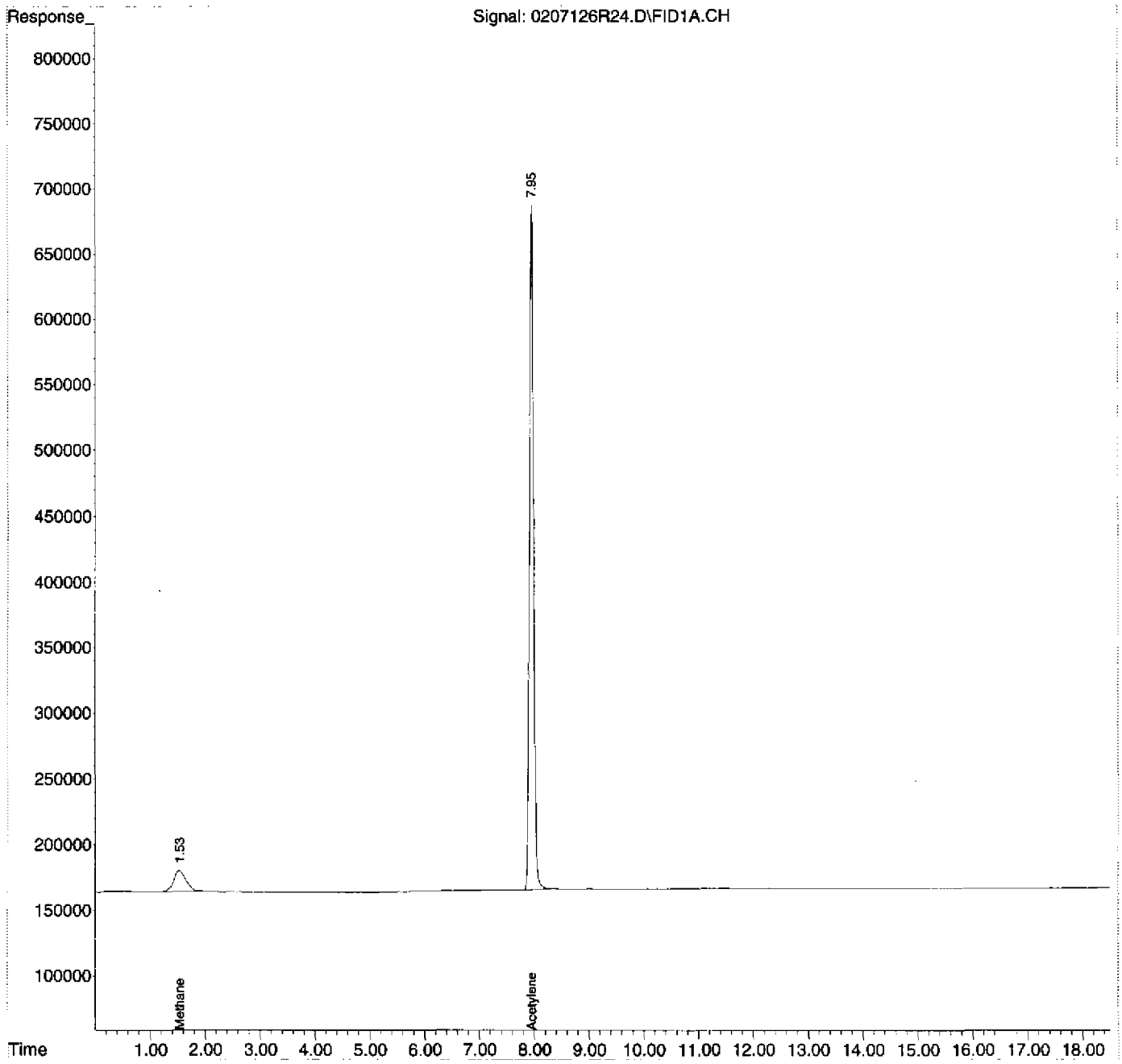
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\020712RSK\
Data File : 0207126R24.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 08 Feb 2012 11:00 am
Operator : rh
Sample : 1202013-10
Misc : TB19
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Feb 08 16:14:36 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\020712RSK\
Data File : 0207126R25.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 08 Feb 2012 11:36 am
Operator : rh
Sample : 1202013-11
Misc : TB17
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Feb 08 16:14:44 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	7.955	26853229	76.830 ug/L
Spiked Amount 66.330 Range 66 - 153		Recovery =	115.83%
Target Compounds			
1) TM Methane	1.531	1676938	1.647 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.

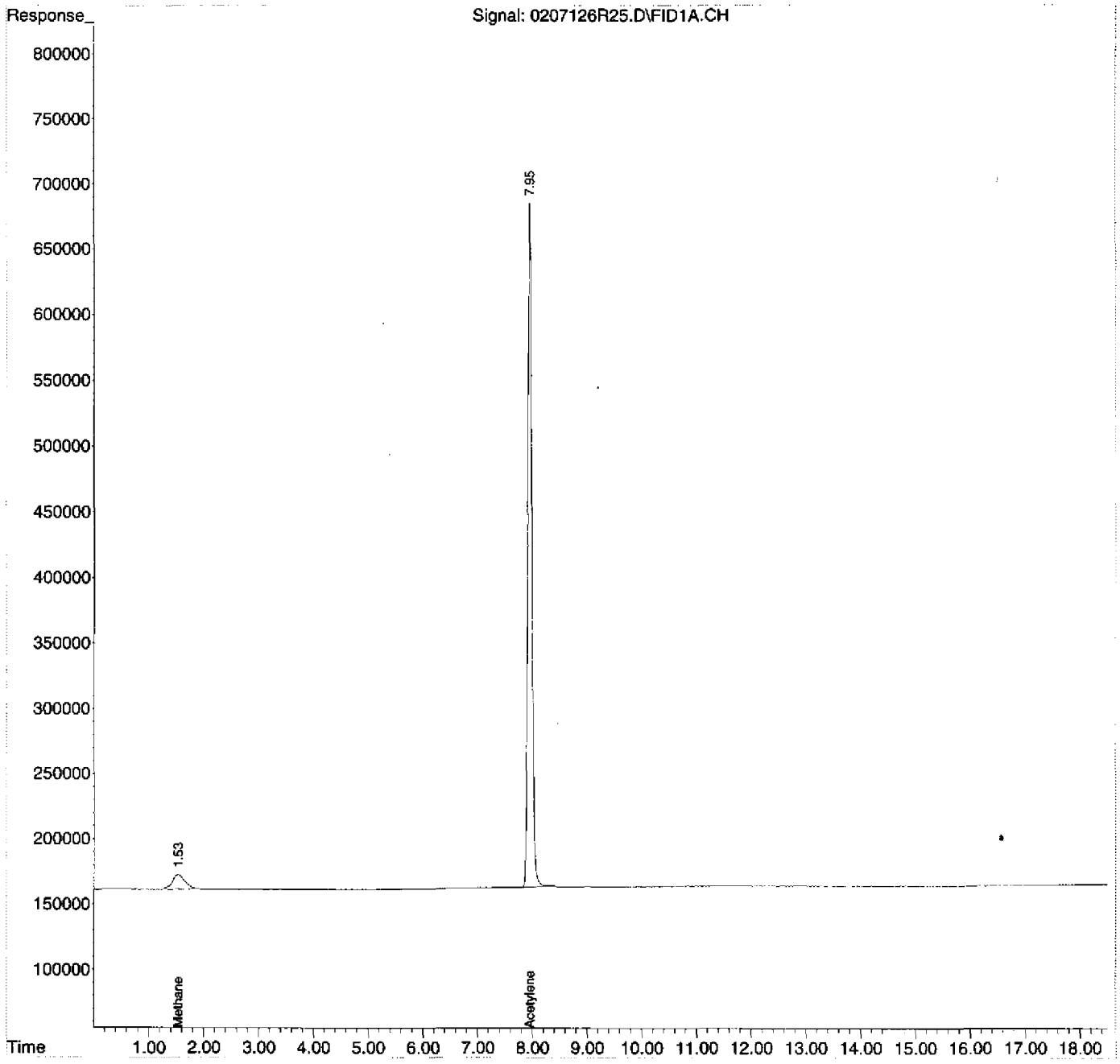
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\020712RSK\
Data File : 0207126R25.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 08 Feb 2012 11:36 am
Operator : rh
Sample : 1202013-11
Misc : TB17
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Feb 08 16:14:44 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\020712RSK\
Data File : 0207126R26.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 08 Feb 2012 12:03 pm
Operator : rh
Sample : 1202013-12
Misc : TB20
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Feb 08 16:14:52 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	7.954	26612686	76.142 ug/L
Spiked Amount 66.330 Range 66 - 153		Recovery =	114.79%
Target Compounds			
1) TM Methane	1.527	1275608	1.253 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.

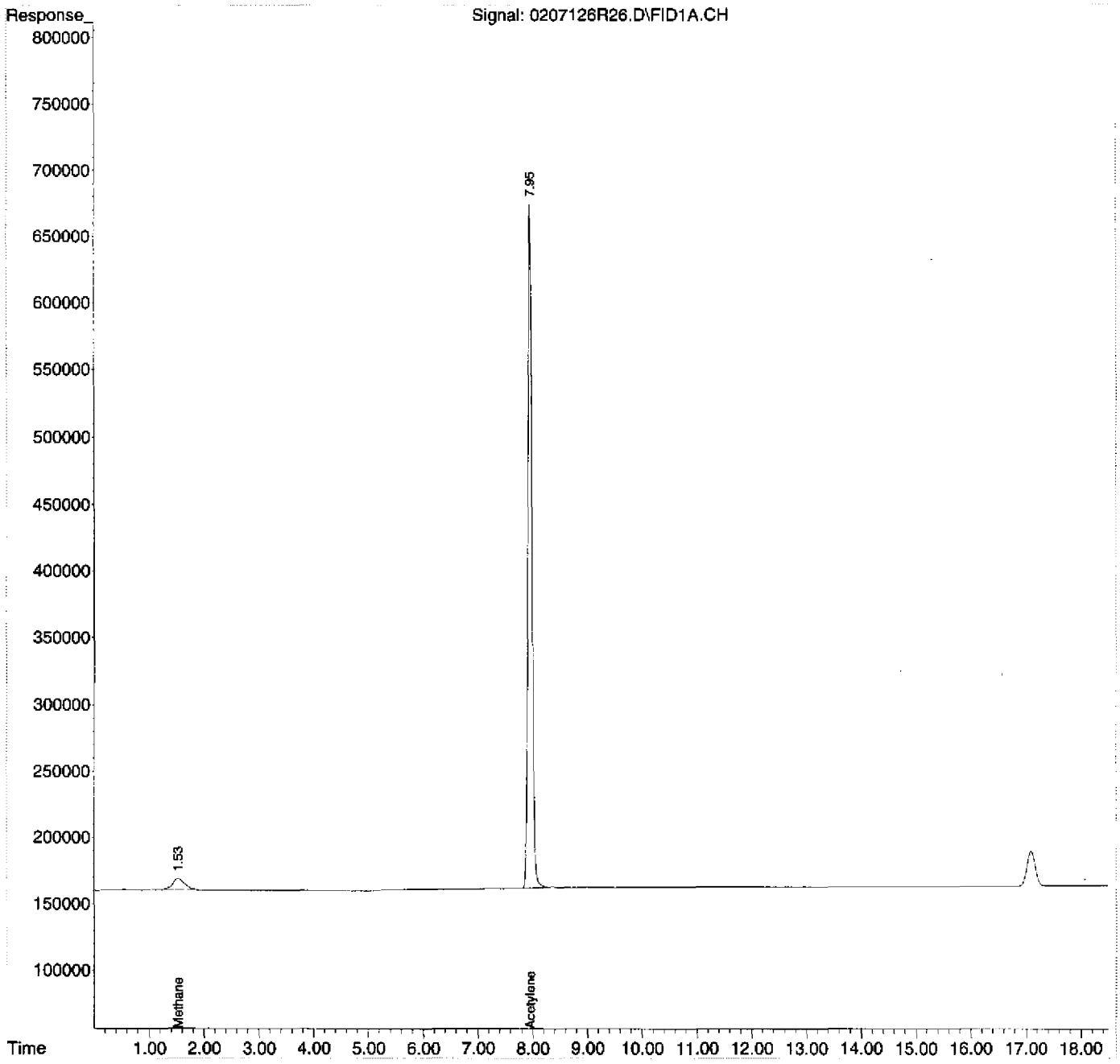
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\020712RSK\
Data File : 0207126R26.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 08 Feb 2012 12:03 pm
Operator : rh
Sample : 1202013-12
Misc : TB20
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Feb 08 16:14:52 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\020712RSK\
Data File : 0207126R27.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 08 Feb 2012 12:40 pm
Operator : rh
Sample : 1202014-01
Misc : FB10
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Feb 08 16:14:59 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	7.955	23684262	67.763 ug/L
Spiked Amount 66.330 Range 66 - 153		Recovery =	102.16%
Target Compounds			
1) TM Methane	1.536	1274536	1.252 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.

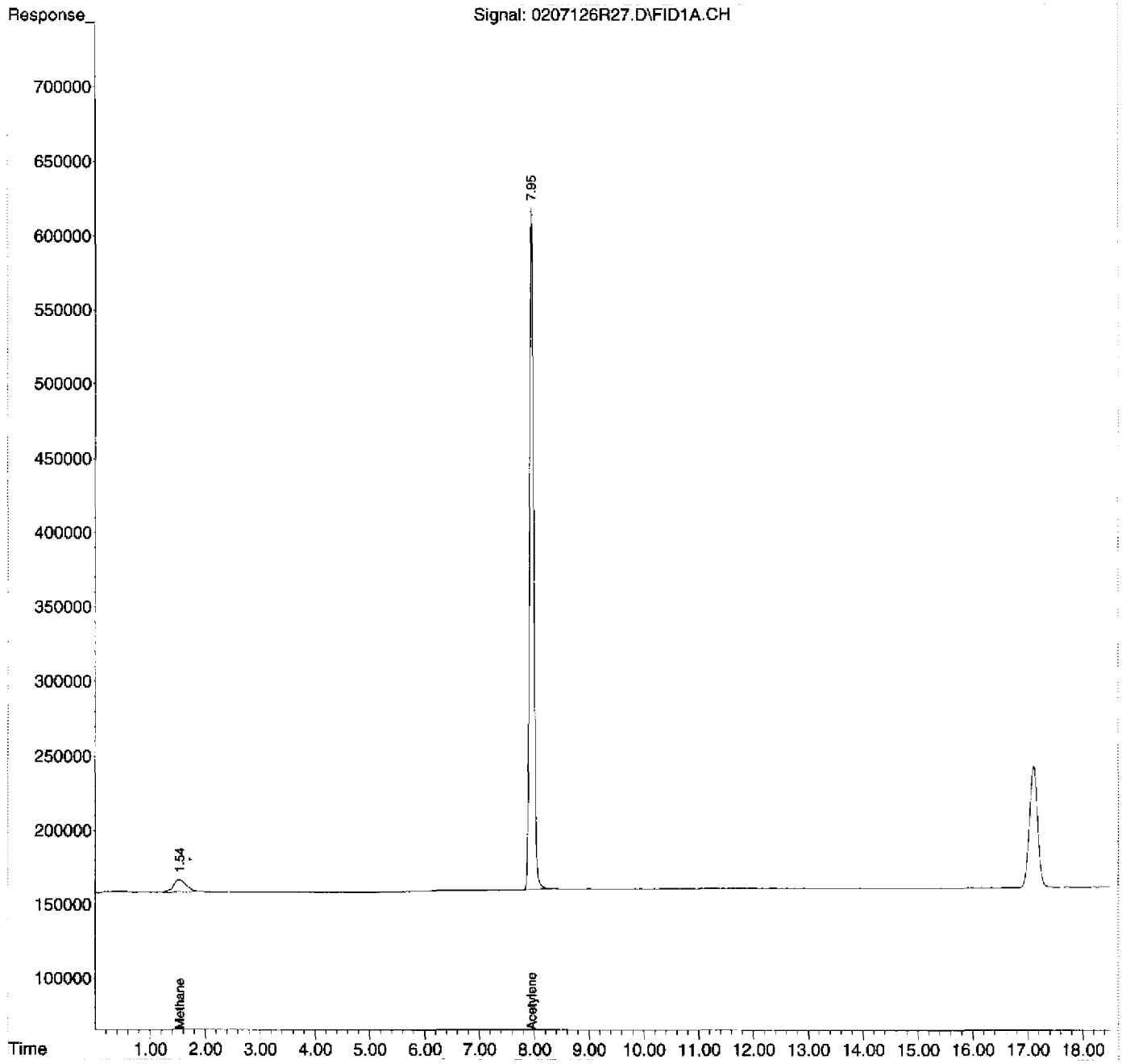
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\020712RSK\
Data File : 0207126R27.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 08 Feb 2012 12:40 pm
Operator : rh
Sample : 1202014-01
Misc : FB10
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Feb 08 16:14:59 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\020712RSK\
Data File : 0207126R28.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 08 Feb 2012 1:13 pm
Operator : rh
Sample : 1202014-05
Misc : TB22
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Feb 08 16:15:07 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	7.955	26001971	74.394 ug/L
Spiked Amount 66.330 Range 66 - 153		Recovery =	112.16%
Target Compounds			
1) TM Methane	1.529	1006449	0.989 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.

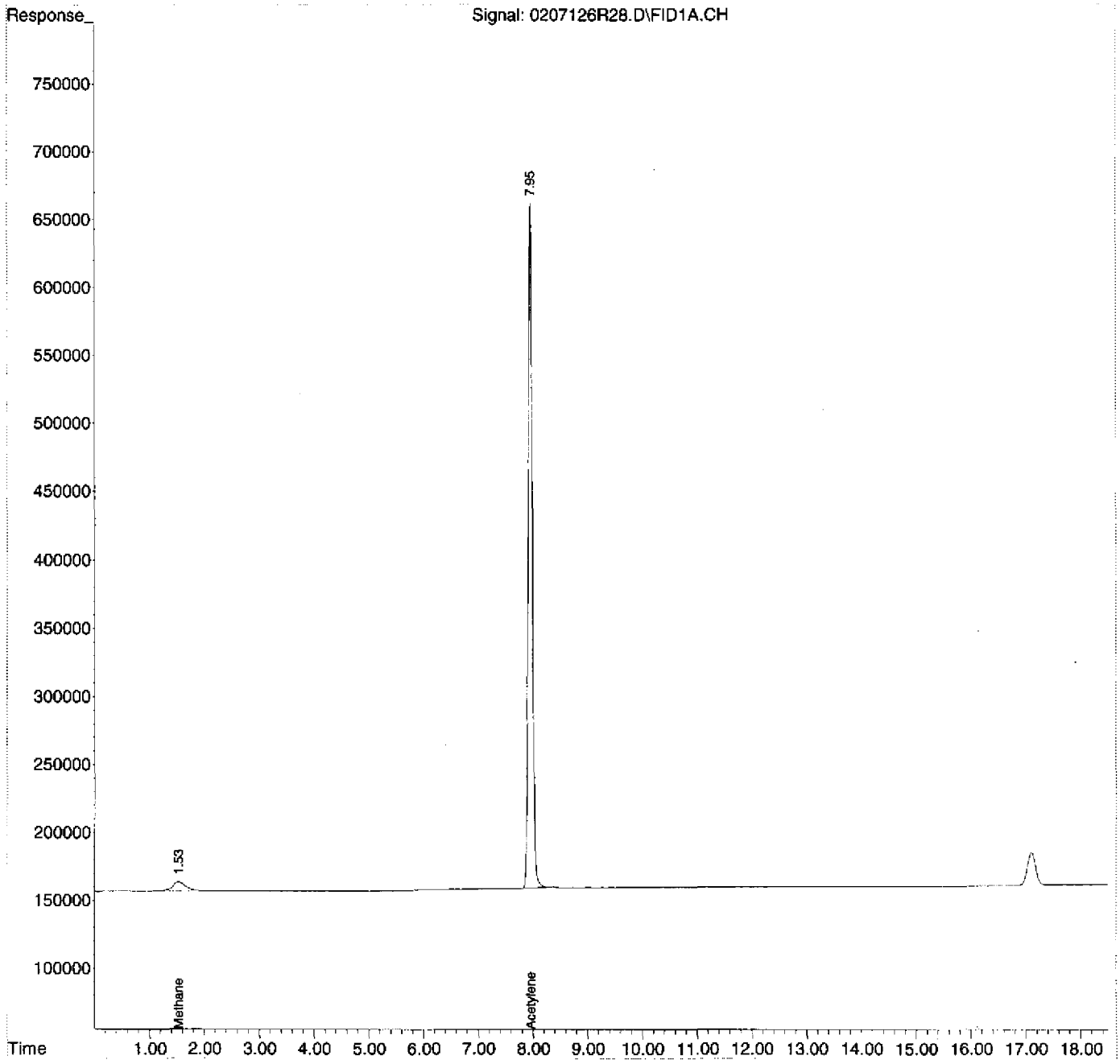
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\020712RSK\
Data File : 0207126R28.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 08 Feb 2012 1:13 pm
Operator : rh
Sample : 1202014-05
Misc : TB22
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Feb 08 16:15:07 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\020712RSK\
Data File : 0207126R29.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 08 Feb 2012 1:47 pm
Operator : rh
Sample : 1202014-06
Misc : TB21
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Feb 08 16:15:15 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	7.954	25915107	74.146 ug/L
Spiked Amount 66.330 Range 66 - 153		Recovery =	111.78%
Target Compounds			
1) TM Methane	1.526	1002134	0.984 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.

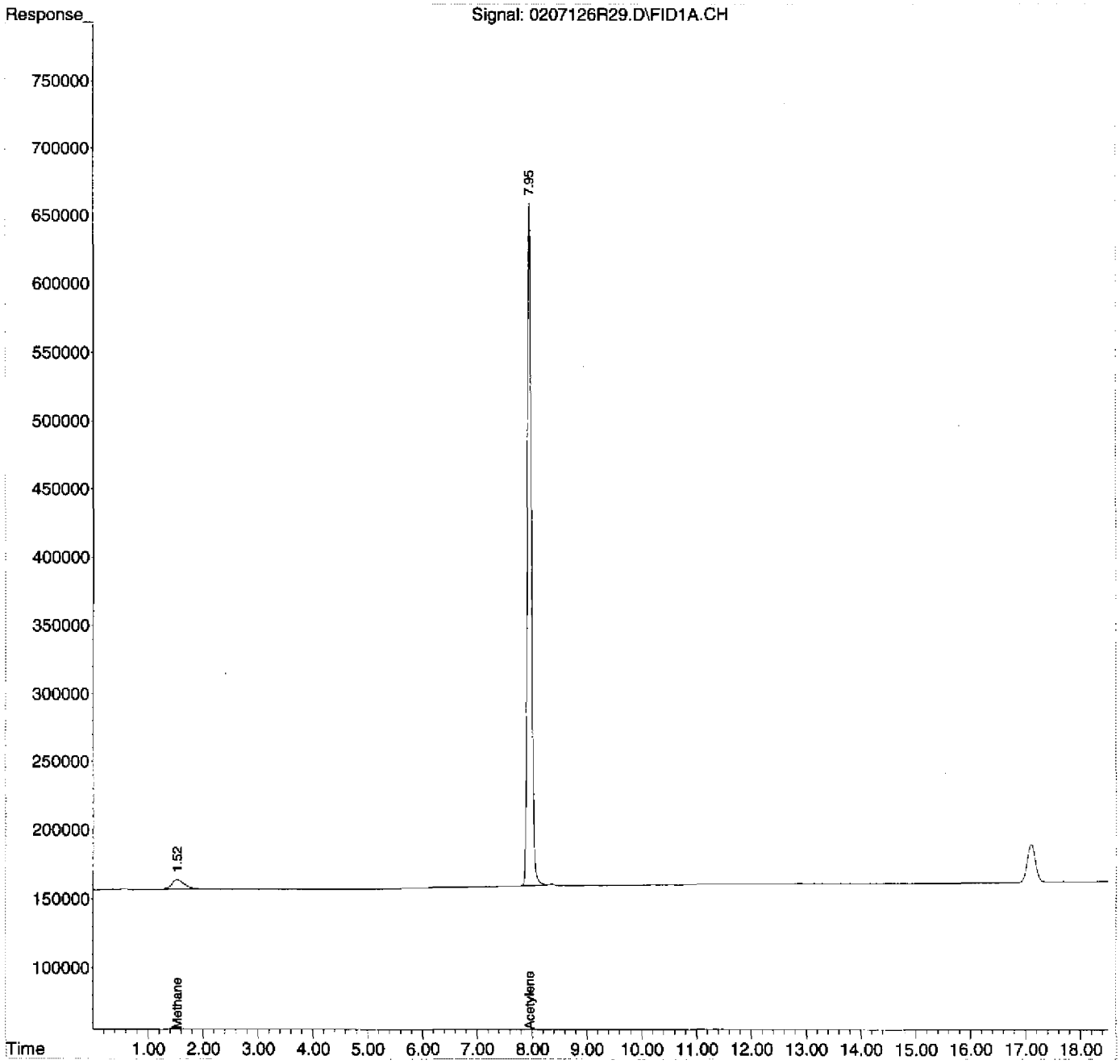
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\020712RSK\
Data File : 0207126R29.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 08 Feb 2012 1:47 pm
Operator : rh
Sample : 1202014-06
Misc : TB21
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Feb 08 16:15:15 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\020712RSK\
Data File : 0207126R30.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 08 Feb 2012 2:20 pm
Operator : rh
Sample : 1202013-08RE1
Misc : HW39 0.5ML
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Feb 08 16:15:23 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	7.954	25159592	71.984	ug/L
Spiked Amount 66.330 Range 66 - 153		Recovery =	108.52%	
Target Compounds				
1) TM Methane	1.524	337688113	331.708	ug/L
3) TM Ethene	0.000	0	N.D.	ug/L
4) TM Ethane	9.003	254597	<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.

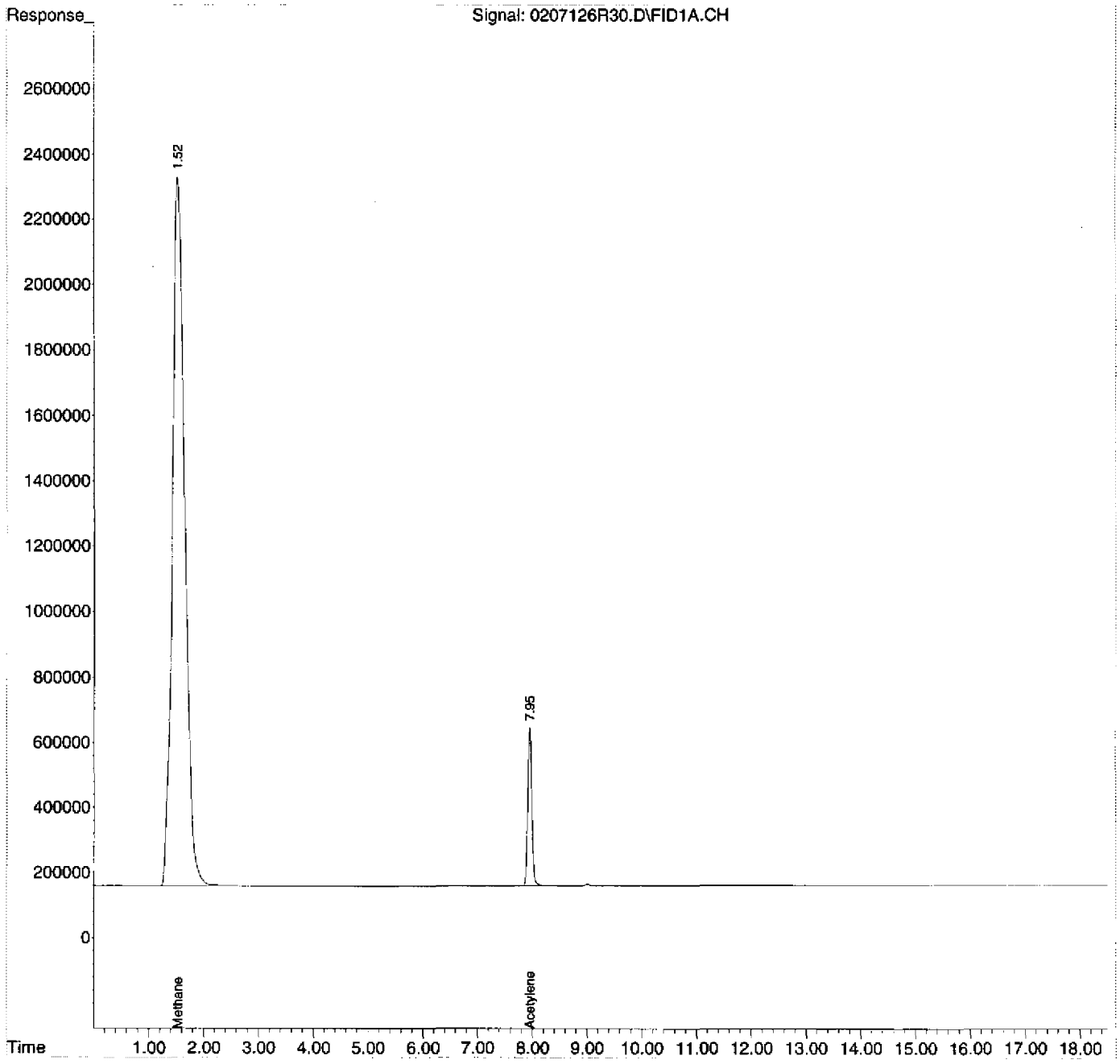
NU

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\020712RSK\
Data File : 0207126R30.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 08 Feb 2012 2:20 pm
Operator : rh
Sample : 1202013-08RE1
Misc : HW39 0.5ML
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Feb 08 16:15:23 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\020712RSK\
Data File : 0207126R31.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 08 Feb 2012 2:59 pm
Operator : rh
Sample : 1202013-08RE2
Misc : HW39 0.2ML
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Feb 08 16:15:31 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	7.953	26830140	76.764 ug/L
Spiked Amount 66.330 Range 66 - 153		Recovery =	115.73%
Target Compounds			
1) TM Methane	1.524	102924377	101.102 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.

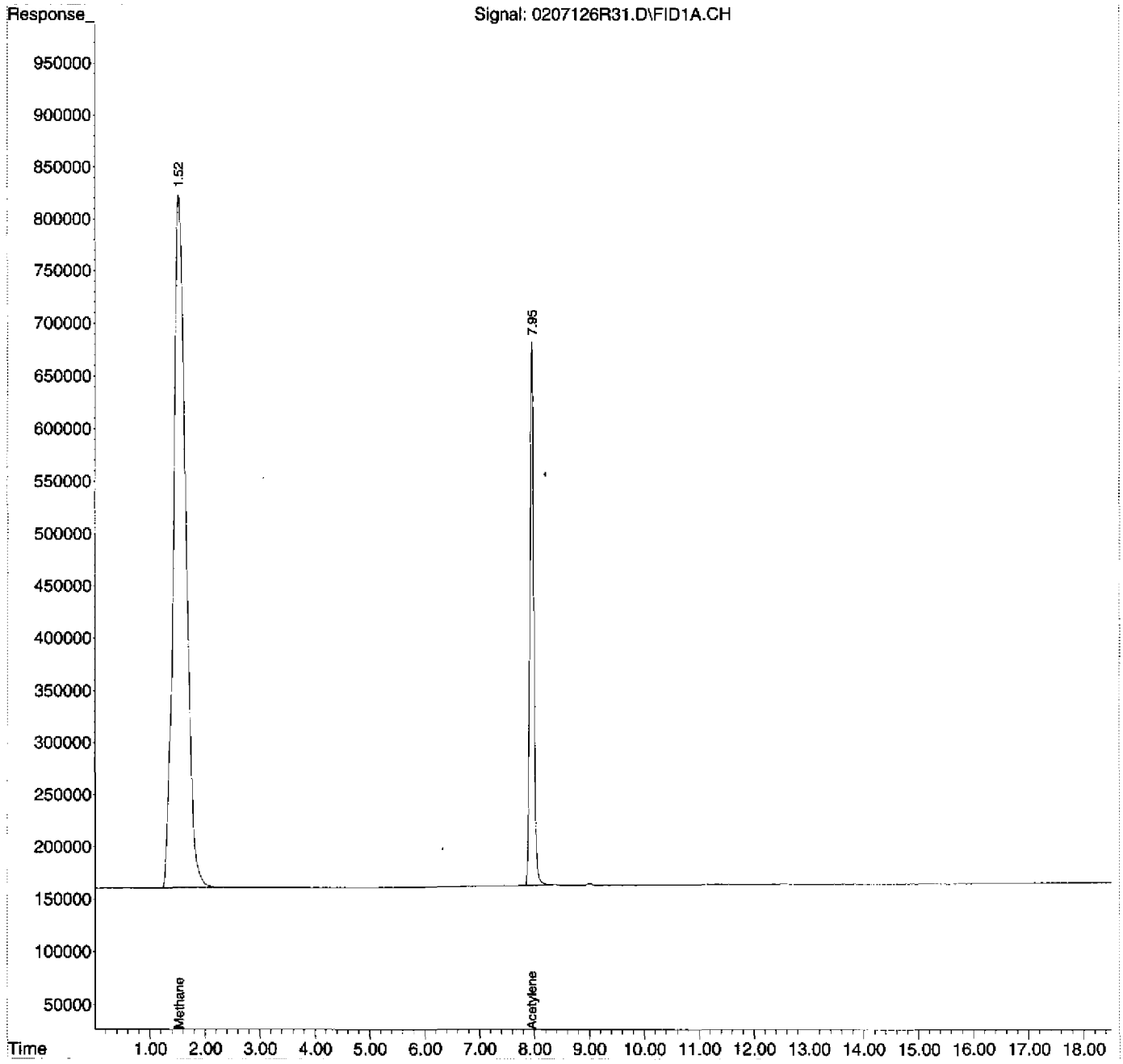
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\020712RSK\
Data File : 0207126R31.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 08 Feb 2012 2:59 pm
Operator : rh
Sample : 1202013-08RE2
Misc : HW39 0.2ML
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Feb 08 16:15:31 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



Evaluate Continuing Calibration Report

Data Path : D:\MSDCHEM\1\2012\DATA\020712RSK\
Data File : 0207126R32.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 08 Feb 2012 3:26 pm
Operator : rh
Sample : 2020021-CCV3
Misc : 2B07008
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Feb 08 16:15:39 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

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	1.018	0.855 E6	16.0	85	0.00
2 S	Acetylene	349.516	339.617 E3	2.8	92	-0.02
3 TM	Ethene	887.936	774.874 E3	12.7	85	0.00
4 TM	Ethane	966.567	818.693 E3	15.3	83	0.00

Evaluate Continuing Calibration Report - Not Founds

5 Qual	Propane	0.000	0.000	0.0	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\020712RSK\
Data File : 0207126R32.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 08 Feb 2012 3:26 pm
Operator : rh
Sample : 2020021-CCV3
Misc : 2B07008
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Feb 08 16:15:39 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	7.955	7352713	21.037 ug/L
Spiked Amount 66.330 Range 66 - 153		Recovery =	31.72%#
Target Compounds			
1) TM Methane	1.527	11316218	11.116 ug/L
3) TM Ethene	8.367	18174658	20.468 ug/L
4) TM Ethane	8.994	20451774	21.159 ug/L
5) Qual Propane	0.000	0	N.D.
6) Qual Butane	0.000	0	N.D.

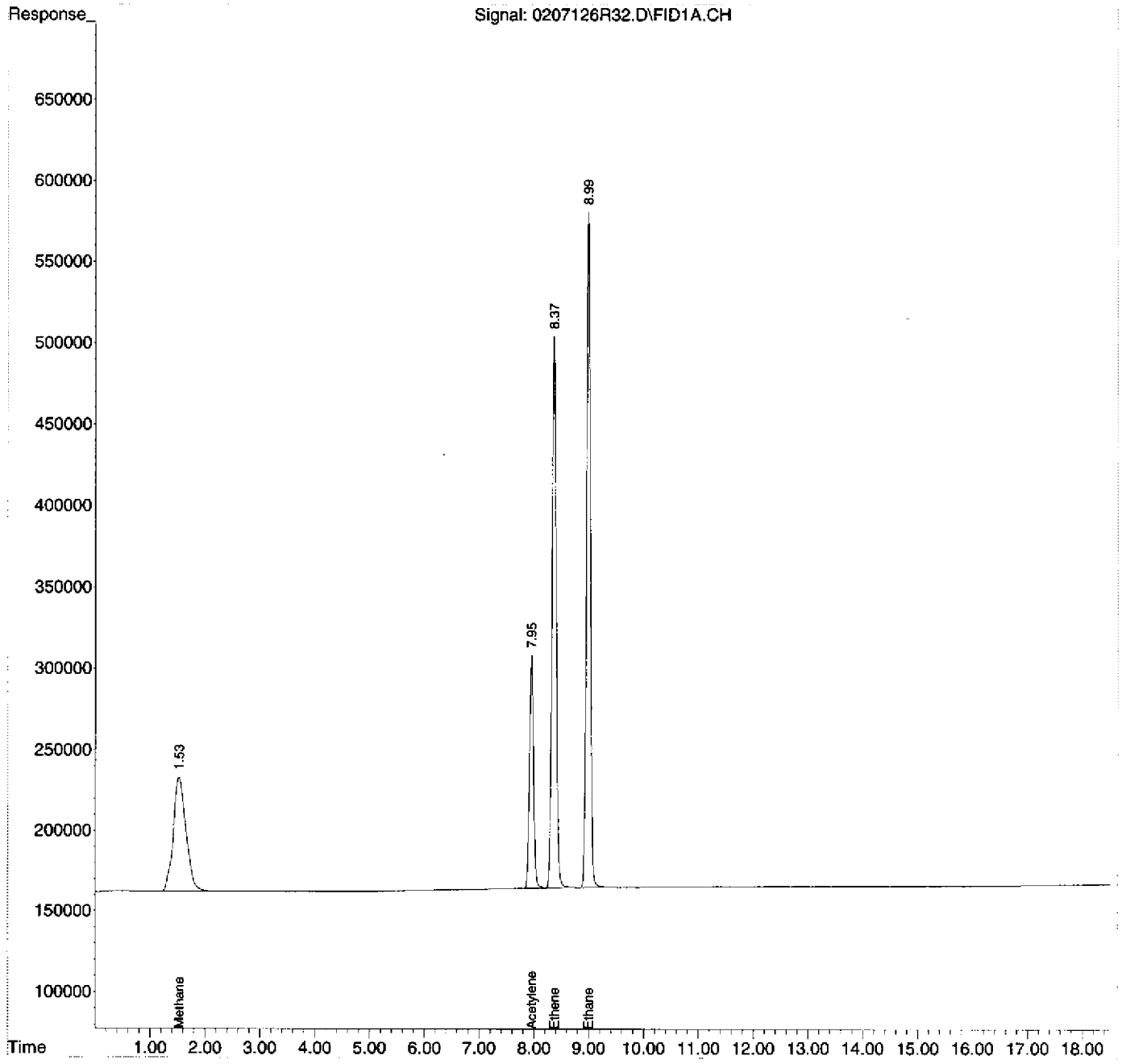
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\020712RSK\
Data File : 0207126R32.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 08 Feb 2012 3:26 pm
Operator : rh
Sample : 2020021-CCV3
Misc : 2B07008
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Feb 08 16:15:39 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



JS 2/13/12

00199 A

SDG: 120380

Instrument: AG6890N-6

Analysis Date: 2/9/12

SAMPLE DATA

G:\USER\ESAT\1 Organic Group\Forms\DataPackageSeparators.doc

Injection Log

Operator: rh
Directory: D:\MSDCHEM\1\2012\DATA\020812RSK\

Vial	File Name	Mult	Sample Info	Misc Info	Date Acquired
1	0208126R01.D	0	2020026-CCV1	2B08005	08 Feb 2012 4:14 pm
2	0208126R02.D	0	2020026-LCV1	2B08003	08 Feb 2012 4:41 pm
3	0208126R03.D	0	2020026-LCV2	2B08004	08 Feb 2012 5:15 pm
4	0208126R04.D	0	B2B0032-BLK1	MB	08 Feb 2012 5:42 pm
5	0208126R05.D	0	B2B0032-BS1	LCS	08 Feb 2012 6:18 pm
6	0208126R06.D	0	1201034-10	HW01	08 Feb 2012 6:45 pm
7	0208126R07.D	0	1202005-11RE1	HW35 16.1 ML	08 Feb 2012 7:20 pm
8	0208126R08.D	0	B2B0032-MS1	MS 17-02	08 Feb 2012 7:46 pm
9	0208126R09.D	0	B2B0032-MSD1	MSD 17-02	08 Feb 2012 8:21 pm
10	0208126R10.D	0	1202017-02	HW45	08 Feb 2012 8:48 pm
11	0208126R11.D	0	1202017-03	HW45	08 Feb 2012 9:22 pm
12	0208126R12.D	0	1202017-05	HW43	08 Feb 2012 9:49 pm
13	0208126R13.D	0	1202017-06	HW43-P	08 Feb 2012 10:23 pm
14	0208126R14.D	0	1202020-03	HW31	08 Feb 2012 10:50 pm
15	0208126R15.D	0	1202020-04	HW31-P	08 Feb 2012 11:24 pm
16	0208126R16.D	0	1202020-05	HW31Z	08 Feb 2012 11:51 pm
17	0208126R17.D	0	1202020-08	HW30	09 Feb 2012 12:25 am
18	0208126R18.D	0	1202020-09	HW30-P	09 Feb 2012 12:51 am
19	0208126R19.D	0	1202020-11	HW15A	09 Feb 2012 1:18 am
20	0208126R20.D	0	1202020-12	HW15A-P	09 Feb 2012 1:53 am
21	0208126R21.D	0	2020026-IBL1	IB	09 Feb 2012 2:19 am
22	0208126R22.D	0	1202017-01	EB02	09 Feb 2012 2:46 am
23	0208126R23.D	0	1202017-04	TB24	09 Feb 2012 3:21 am
24	0208126R24.D	0	1202017-07	TB23	09 Feb 2012 3:47 am
25	0208126R25.D	0	1202020-06	TB25	09 Feb 2012 4:13 am
26	0208126R26.D	0	1202020-07	FB11	09 Feb 2012 4:48 am
27	0208126R27.D	0	1202020-10	TB26	09 Feb 2012 5:15 am
28	0208126R28.D	0	1202020-13	TB28	09 Feb 2012 5:41 am
29	0208126R29.D	0	2020026-CCV2	2B08005	09 Feb 2012 6:16 am

Response Factor Report AG6890N-6

Method Path : D:\MSDCHEM\1\2012\METHOD\
Method File : 0126126RSK.M
Title :
Last Update : Fri Jan 27 11:26:56 2012
Response Via : Initial Calibration

Calibration Files
1 =0126126R008.D 2 =0126126R007.D 3 =0126126R006.D
4 =0126126R005.D 5 =0126126R004.D 6 =0126126R003.D

	Compound	1	2	3	4	5	6	Avg		%RSD
1)	TM Methane		1.100	1.004	1.003	0.997	1.028	1.018	E6	4.25
2)	S Acetylene	3.221	3.304	3.380	3.710	3.595	3.697	3.495	E5	5.56
3)	TM Ethene	8.210	8.669	8.696	9.069	9.135	9.418	8.879	E5	4.42
4)	TM Ethane	0.894	0.941	0.956	0.986	0.994	1.023	0.967	E6	4.30
5)	Qual Propane							0.000		-1.00
6)	Qual Butane							0.000		-1.00

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

GC QA-QC Check Report 00234

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

File	Sample	Surrogate Recovery %
0208126R01.D	2020026-CCV1	36*
0208126R02.D	2020026-LCV1	2*
0208126R03.D	2020026-LCV2	3*
0208126R04.D	B2B0032-BLK1	118
0208126R05.D	B2B0032-BS1	119
0208126R06.D	1201034-10	113
0208126R07.D	1202005-11RE1	115
0208126R08.D	B2B0032-MS1	115
0208126R09.D	B2B0032-MSD1	117
0208126R10.D	1202017-02	117
0208126R11.D	1202017-03	116
0208126R12.D	1202017-05	118
0208126R13.D	1202017-06	118
0208126R14.D	1202020-03	116
0208126R15.D	1202020-04	116
0208126R16.D	1202020-05	115
0208126R17.D	1202020-08	116
0208126R18.D	1202020-09	114
0208126R19.D	1202020-11	112
0208126R20.D	1202020-12	111
0208126R21.D	2020026-IBL1	117
0208126R22.D	1202017-01	118
0208126R23.D	1202017-04	116
0208126R24.D	1202017-07	112
0208126R25.D	1202020-06	116
0208126R26.D	1202020-07	113
0208126R27.D	1202020-10	114
0208126R28.D	1202020-13	116
0208126R29.D	2020026-CCV2	37*

Evaluate Continuing Calibration Report

Data Path : D:\MSDCHEM\1\2012\DATA\020812RSK\
Data File : 0208126R01.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 08 Feb 2012 4:14 pm
Operator : rh
Sample : 2020026-CCV1
Misc : 2B08005
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Feb 09 09:02:27 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

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	1.018	1.112 E6	-9.2	111	0.00
2 S	Acetylene	349.516	386.955 E3	-10.7	104	-0.03
3 TM	Ethene	887.936	996.449 E3	-12.2	110	0.00
4 TM	Ethane	966.567	1090.241 E3	-12.8	111	0.00

Evaluate Continuing Calibration Report - Not Founds

5 Qual	Propane	0.000	0.000	0.0	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\020812RSK\
Data File : 0208126R01.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 08 Feb 2012 4:14 pm
Operator : rh
Sample : 2020026-CCV1
Misc : 2B08005
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Feb 09 09:02:27 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	7.950	8377577	23.969 ug/L
Spiked Amount 66.330 Range 66 - 153		Recovery =	36.14%#
Target Compounds			
1) TM Methane	1.528	14712664	14.452 ug/L
3) TM Ethene	8.366	23371712	26.321 ug/L
4) TM Ethane	9.002	27235321	28.177 ug/L
5) Qual Propane	0.000	0	N.D.
6) Qual Butane	0.000	0	N.D.

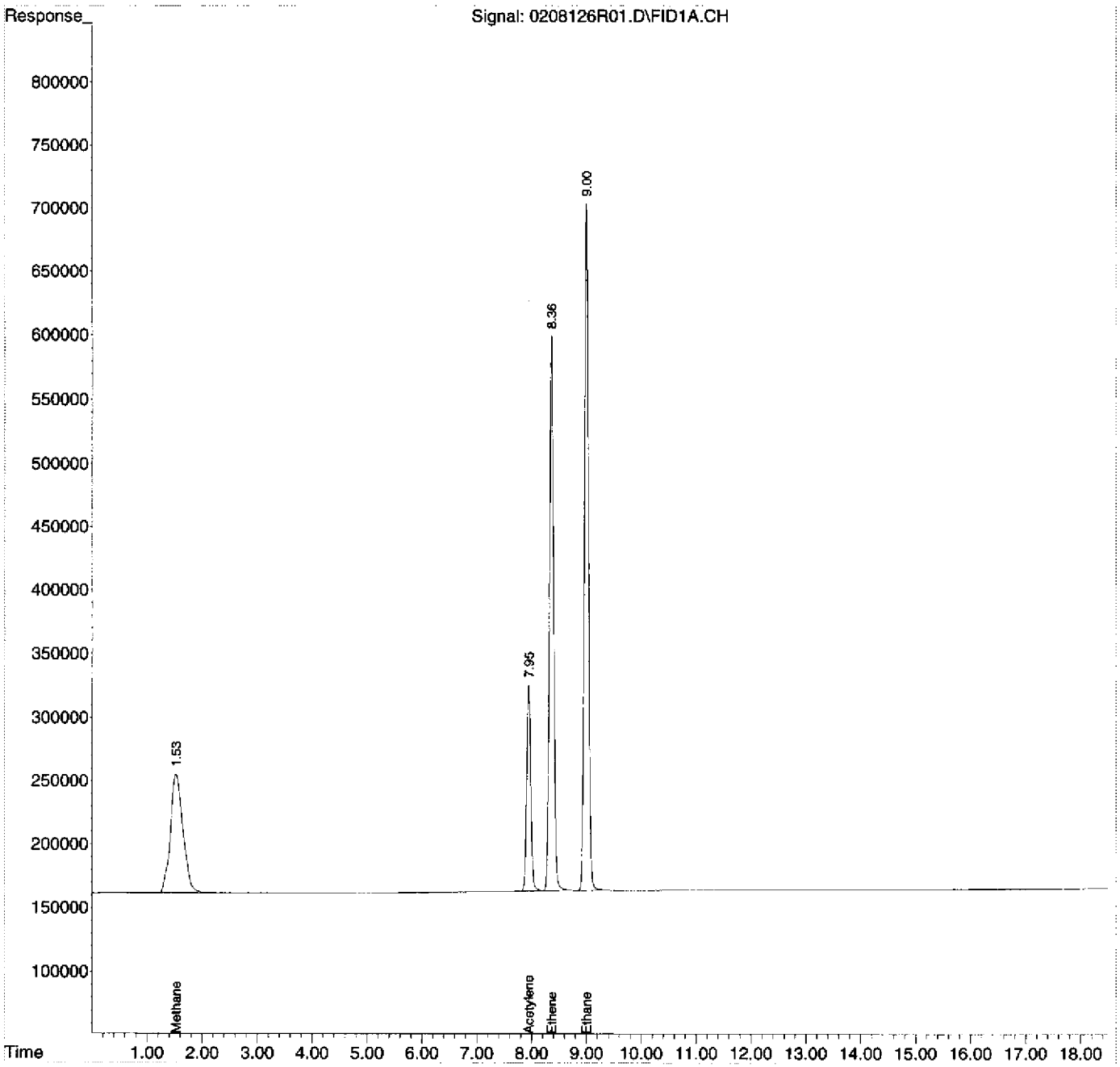
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\020812RSK\
Data File : 0208126R01.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 08 Feb 2012 4:14 pm
Operator : rh
Sample : 2020026-CCV1
Misc : 2B08005
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Feb 09 09:02:27 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



RSK-175 HC LCV REPORT

Instrument Name: AG6890N-6
File Name LCV1: 0208126R02
File Name LCV2: 0208126R03
Date Acquired: 02/08/12
Operator: rh

Analyte	Spike ug/L	Calculated ug/L	QC Limits	%R	Status
Methane	1.231	1.514	60 - 140	123.0%	pass
Acetylene	2.014	1.924	60 - 140	95.5%	NA
Ethene	1.091	1.13	60 - 140	103.6%	pass
Ethane	1.162	1.214	60 - 140	104.5%	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\020812RSK\
Data File : 0208126R02.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 08 Feb 2012 4:41 pm
Operator : rh
Sample : 2020026-LCV1
Misc : 2B08003
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 09 09:02:35 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	7.959	358013	1.024 ug/L
Spiked Amount 66.330 Range 66 - 153		Recovery =	1.54%#
Target Compounds			
1) TM Methane	1.517	1012323	0.994 ug/L
3) TM Ethene	8.368	1003113	1.130 ug/L
4) TM Ethane	9.005	1172938	1.214 ug/L
5) Qual Propane	0.000	0	N.D.
6) Qual Butane	0.000	0	N.D.

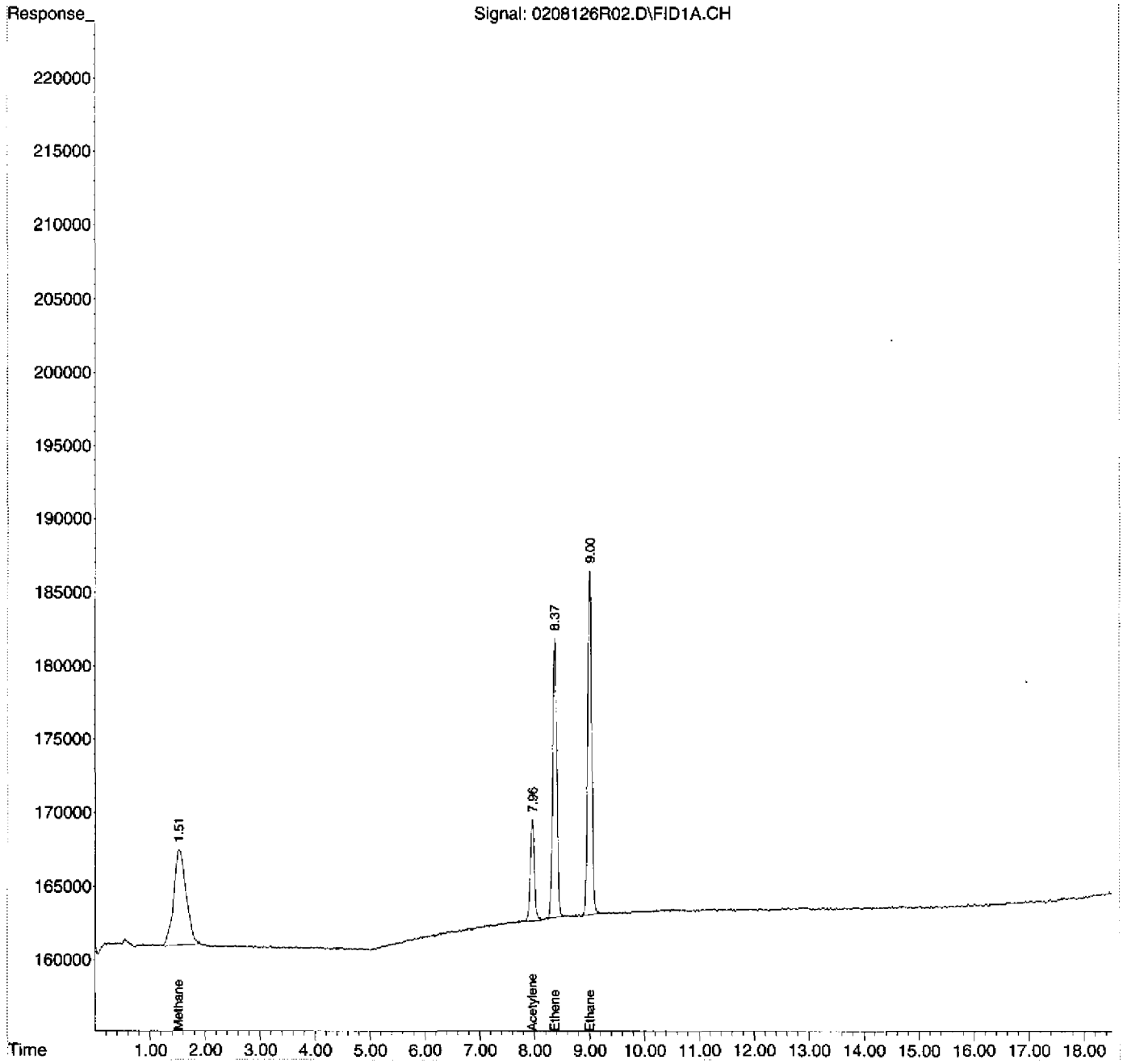
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\020812RSK\
Data File : 0208126R02.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 08 Feb 2012 4:41 pm
Operator : rh
Sample : 2020026-LCV1
Misc : 2B08003
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 09 09:02:35 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\020812RSK\
Data File : 0208126R03.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 08 Feb 2012 5:15 pm
Operator : rh
Sample : 2020026-LCV2
Misc : 2B08004
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 09 09:02:43 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	7.959	672342	1.924 ug/L
Spiked Amount 66.330 Range 66 - 153		Recovery =	2.90%#
Target Compounds			
1) TM Methane	1.530	1541715	1.514 ug/L
3) TM Ethene	8.370	1946981	2.193 ug/L
4) TM Ethane	9.006	2265537	2.344 ug/L
5) Qual Propane	0.000	0	N.D.
6) Qual Butane	0.000	0	N.D.

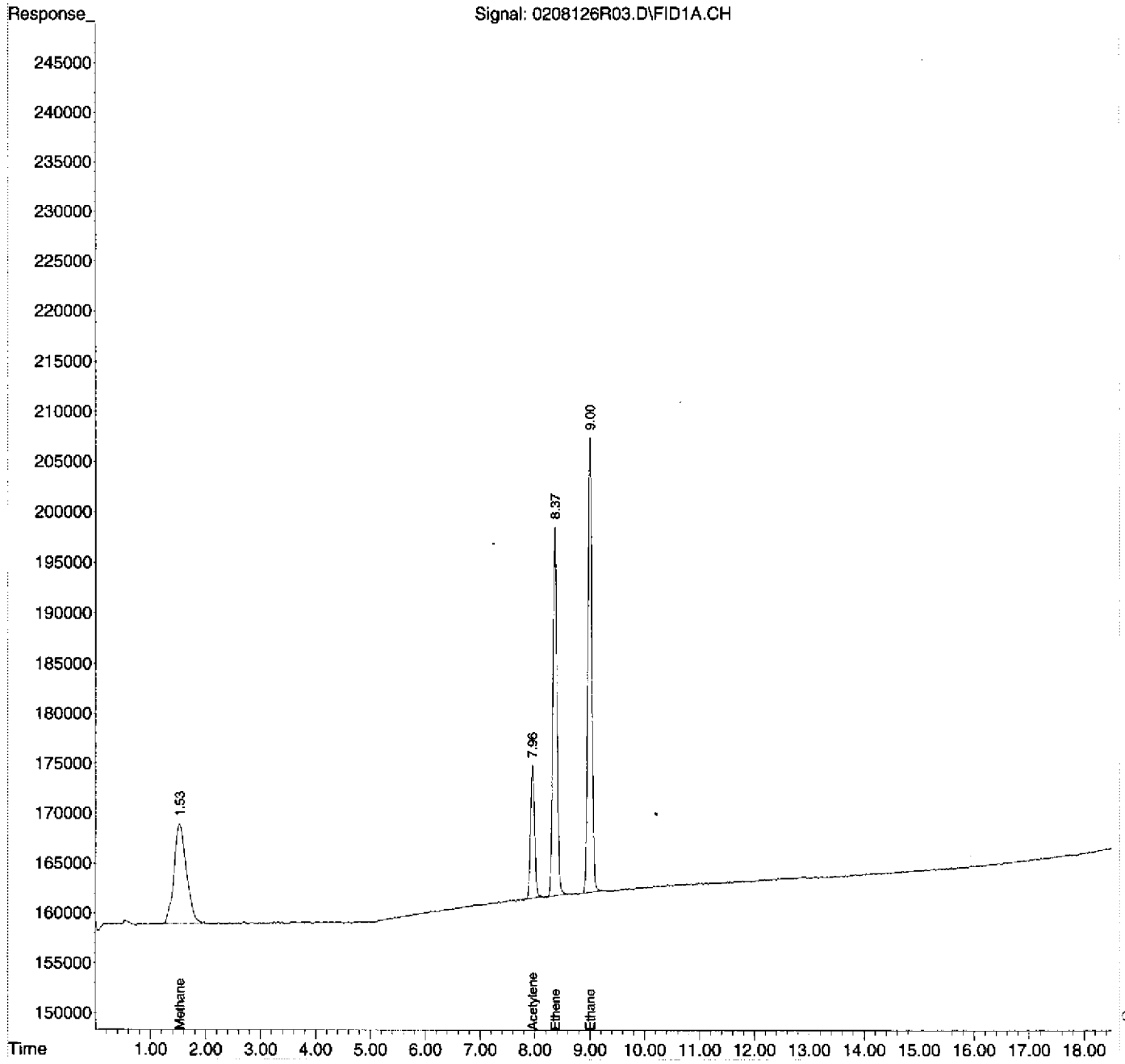
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\020812RSK\
Data File : 0208126R03.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 08 Feb 2012 5:15 pm
Operator : rh
Sample : 2020026-LCV2
Misc : 2B08004
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 09 09:02:43 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



0126126RSK.M Thu Feb 09 09:02:48 2012 Page: 2

00210 A

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\020812RSK\
Data File : 0208126R04.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 08 Feb 2012 5:42 pm
Operator : rh
Sample : B2B0032-BLK1
Misc : MB
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 09 09:02:50 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	7.954	27437947	78.503 ug/L
Spiked Amount 66.330 Range 66 - 153		Recovery =	118.35%
Target Compounds			
1) TM Methane	1.528	938031	0.921 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.

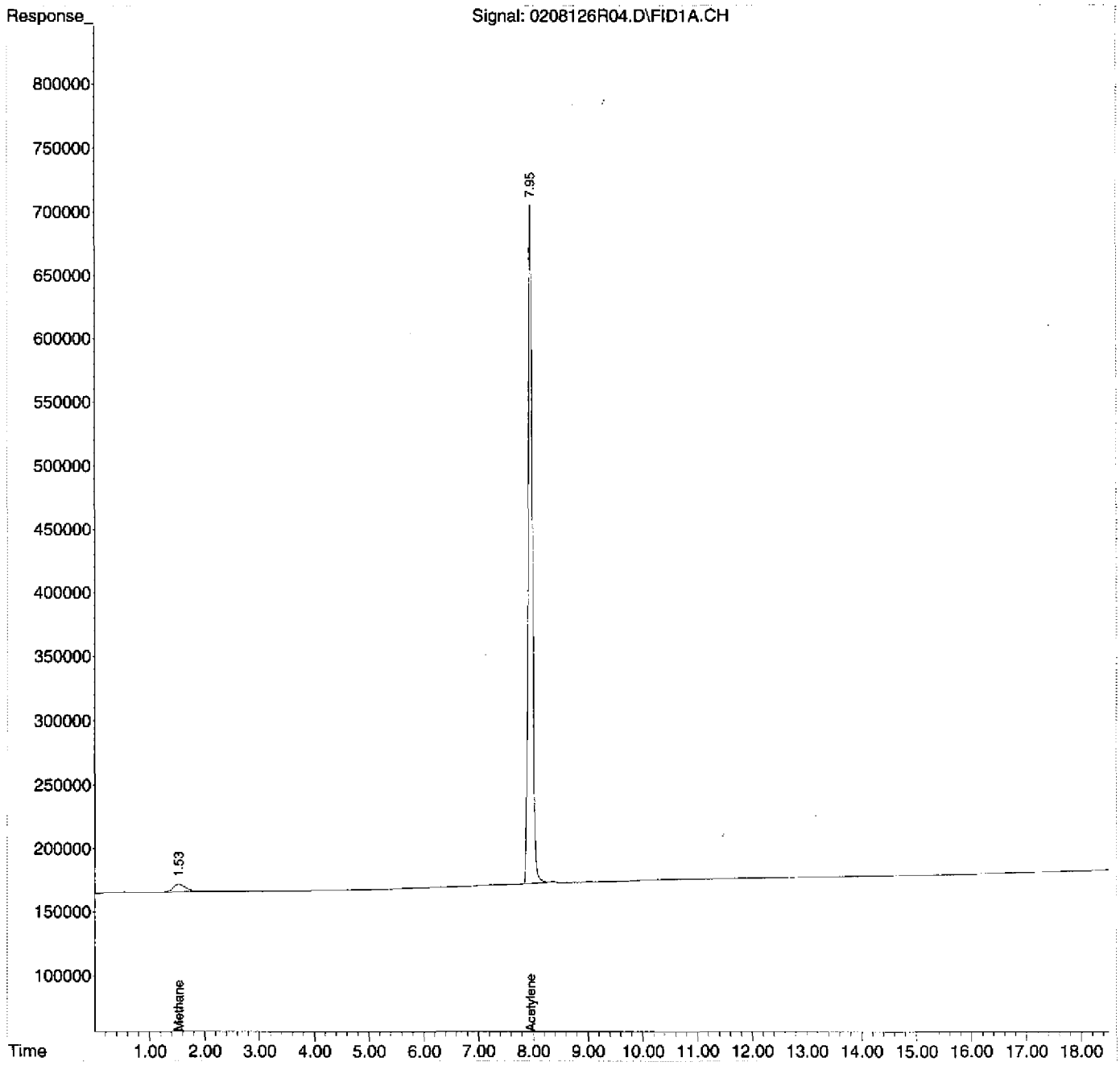
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\020812RSK\
Data File : 0208126R04.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 08 Feb 2012 5:42 pm
Operator : rh
Sample : B2B0032-BLK1
Misc : MB
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 09 09:02:50 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



RSK-175 LCSSUMMARY REPORT

Instrument Name: AG6890N-6
File Name: 0208126R05.D
Date Acquired: 2/8/2012
Operator: rh

Analyte	Spike ug/L	Calculated ug/L	QC Limits	%R	Status
Methane	44.099	47.723	70-130	108.2%	pass
Acetylene	72.166	79.241	66.4-153	109.8%	pass
Ethene	78.183	87.984	78-138	112.5%	pass
Ethane	83.269	93.878	77-137	112.7%	pass

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\020812RSK\
Data File : 0208126R05.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 08 Feb 2012 6:18 pm
Operator : rh
Sample : B2B0032-BS1
Misc : LCS
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Feb 09 09:02:57 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	7.953	27696121	79.241 ug/L
Spiked Amount 66.330 Range 66 - 153		Recovery =	119.46%
Target Compounds			
1) TM Methane	1.527	48583186	47.723 ug/L
3) TM Ethene	8.366	78124145	87.984 ug/L
4) TM Ethane	9.003	90739159	93.878 ug/L
5) Qual Propane	0.000	0	N.D.
6) Qual Butane	0.000	0	N.D.

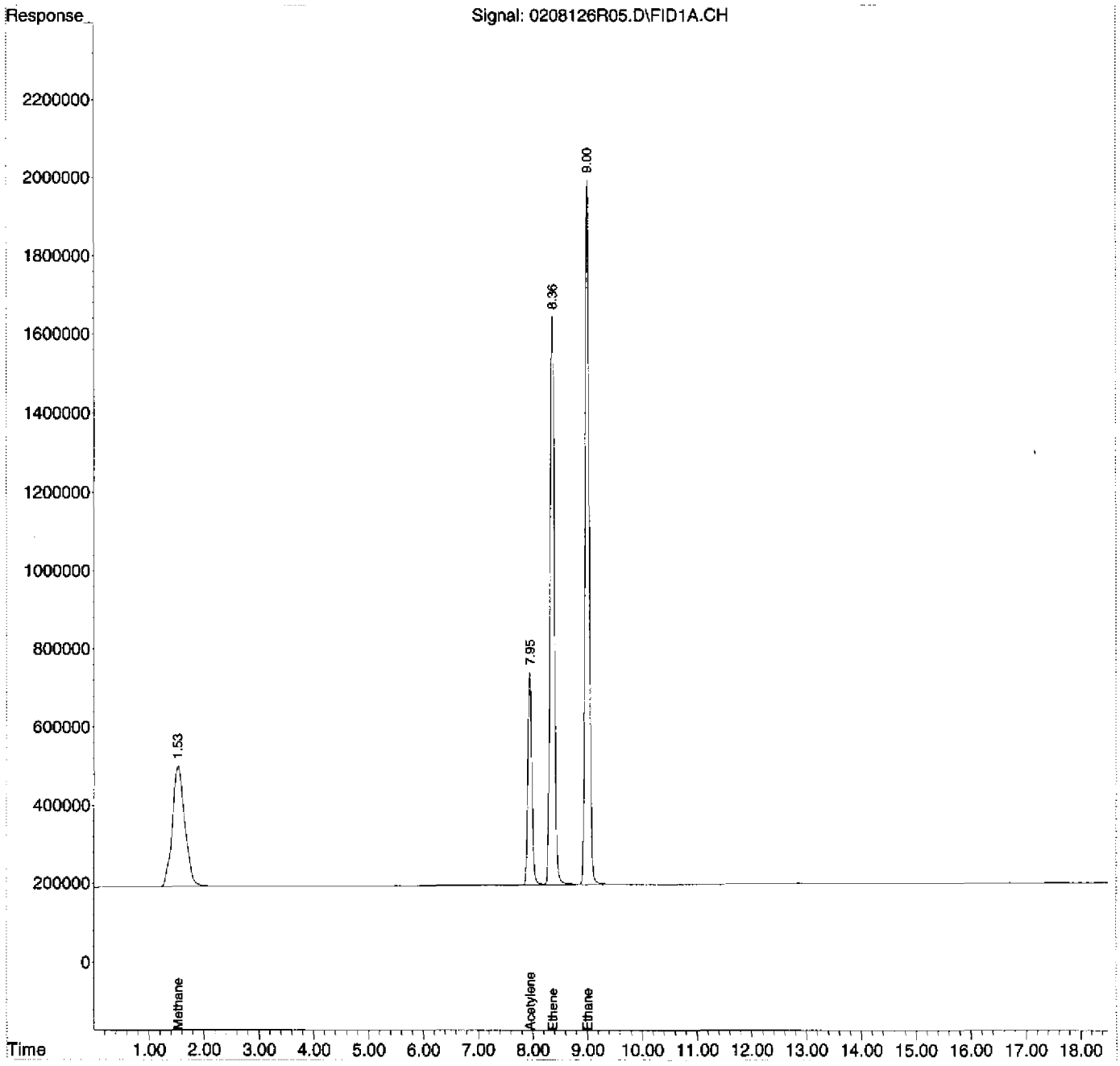
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\020812RSK\
Data File : 0208126R05.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 08 Feb 2012 6:18 pm
Operator : rh
Sample : B2B0032-BS1
Misc : LCS
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Feb 09 09:02:57 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\020812RSK\
Data File : 0208126R08.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 08 Feb 2012 7:46 pm
Operator : rh
Sample : B2B0032-MS1
Misc : MS 17-02
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Feb 09 09:03:21 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	7.953	26633055	76.200 ug/L
Spiked Amount 66.330 Range 66 - 153		Recovery =	114.88%
Target Compounds			
1) TM Methane	1.524	43945313	43.167 ug/L
3) TM Ethene	8.364	71183391	80.167 ug/L
4) TM Ethane	9.004	81899342	84.732 ug/L
5) Qual Propane	0.000	0	N.D.
6) Qual Butane	0.000	0	N.D.

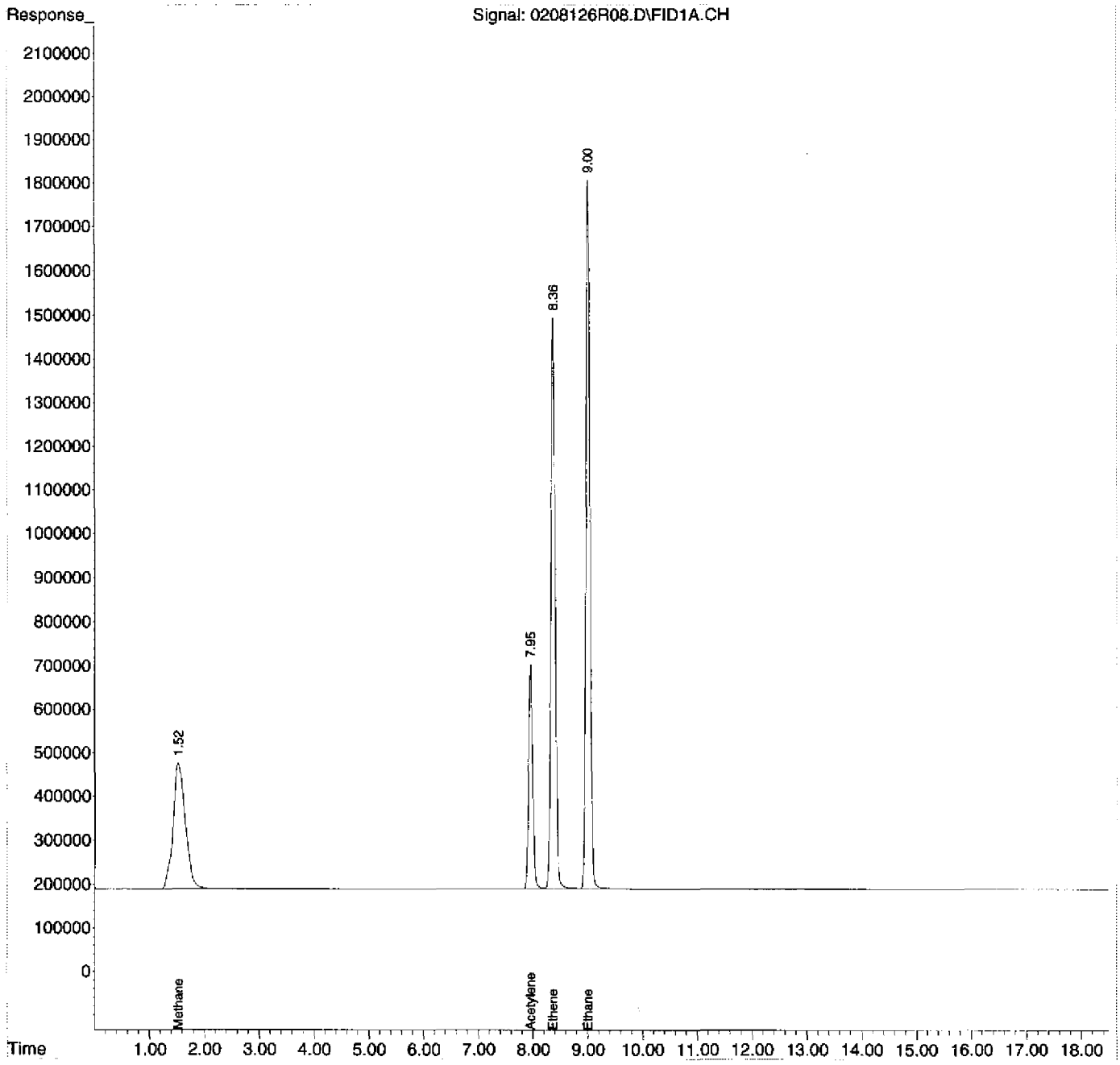
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\020812RSK\
Data File : 0208126R08.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 08 Feb 2012 7:46 pm
Operator : rh
Sample : B2B0032-MS1
Misc : MS 17-02
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Feb 09 09:03:21 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\020812RSK\
Data File : 0208126R09.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 08 Feb 2012 8:21 pm
Operator : rh
Sample : B2B0032-MSD1
Misc : MSD 17-02
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Feb 09 09:03:29 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	7.954	27053504	77.403 ug/L
Spiked Amount 66.330 Range 66 - 153		Recovery =	116.69%
Target Compounds			
1) TM Methane	1.523	46274927	45.455 ug/L
3) TM Ethene	8.366	74592027	84.006 ug/L
4) TM Ethane	9.004	86424693	89.414 ug/L
5) Qual Propane	0.000	0	N.D.
6) Qual Butane	0.000	0	N.D.

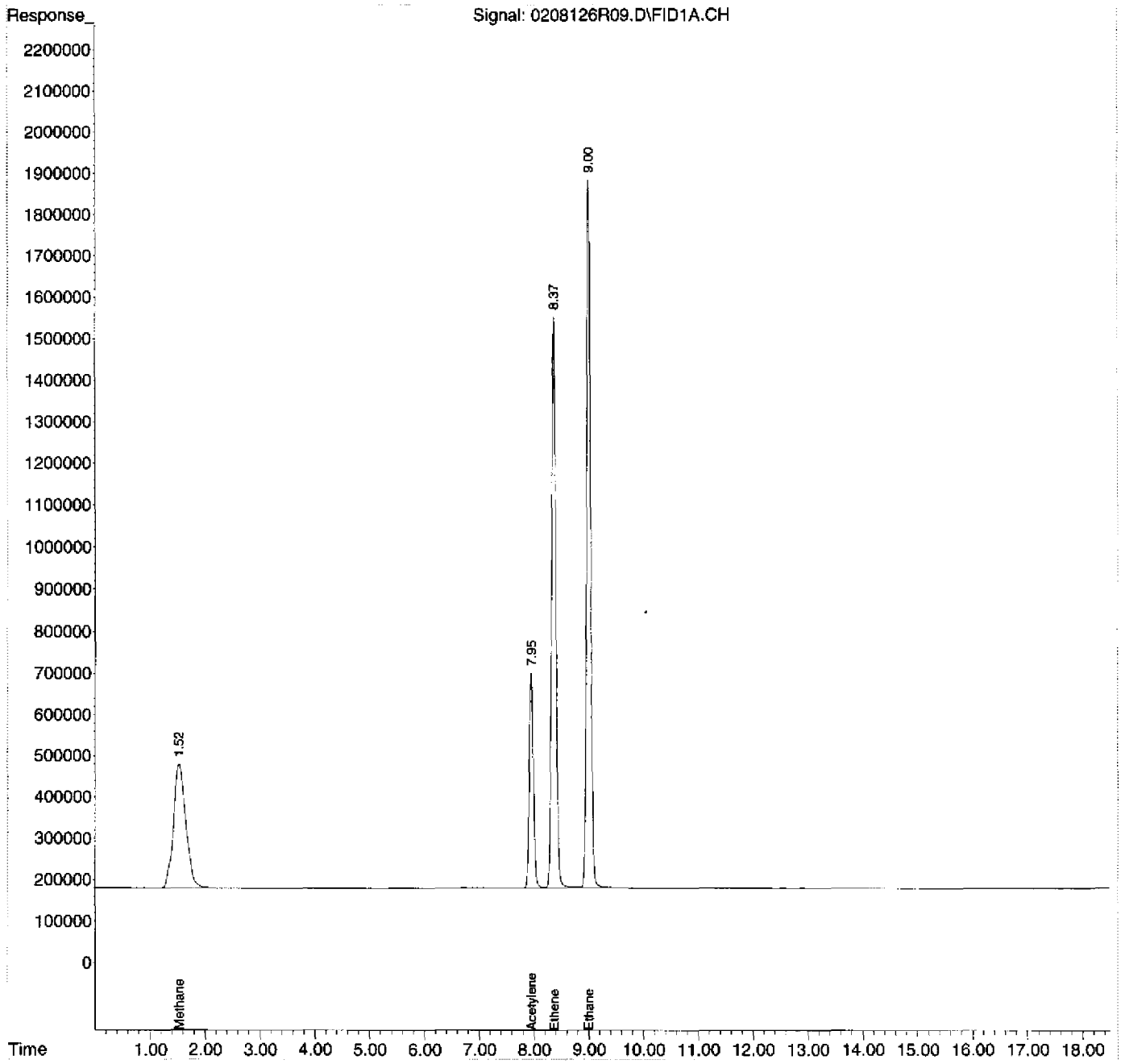
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\020812RSK\
Data File : 0208126R09.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 08 Feb 2012 8:21 pm
Operator : rh
Sample : B2B0032-MSD1
Misc : MSD 17-02
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Feb 09 09:03:29 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\020812RSK\
Data File : 0208126R10.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 08 Feb 2012 8:48 pm
Operator : rh
Sample : 1202017-02
Misc : HW45
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Feb 09 09:03:37 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	7.956	27014518	77.291 ug/L
Spiked Amount 66.330 Range 66 - 153		Recovery =	116.52%
Target Compounds			
1) TM Methane	1.527	983621	0.966 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.

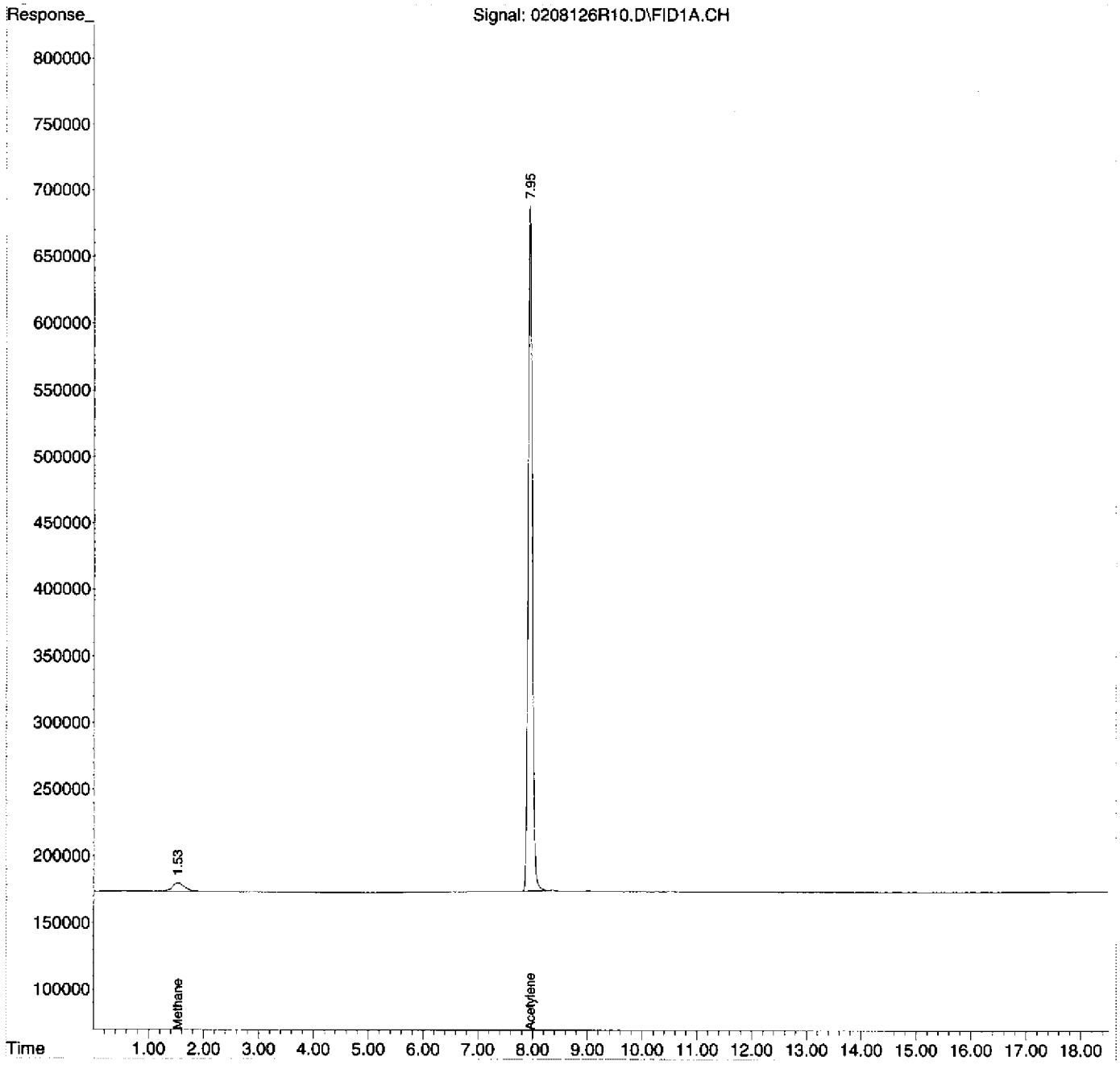
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\020812RSK\
Data File : 0208126R10.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 08 Feb 2012 8:48 pm
Operator : rh
Sample : 1202017-02
Misc : HW45
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Feb 09 09:03:37 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\020812RSK\
Data File : 0208126R11.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 08 Feb 2012 9:22 pm
Operator : rh
Sample : 1202017-03
Misc : HW45
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Feb 09 09:03:45 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	7.954	26989839	77.221 ug/L
Spiked Amount 66.330 Range 66 - 153		Recovery =	116.42%
Target Compounds			
1) TM Methane	1.521	921113	0.905 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.

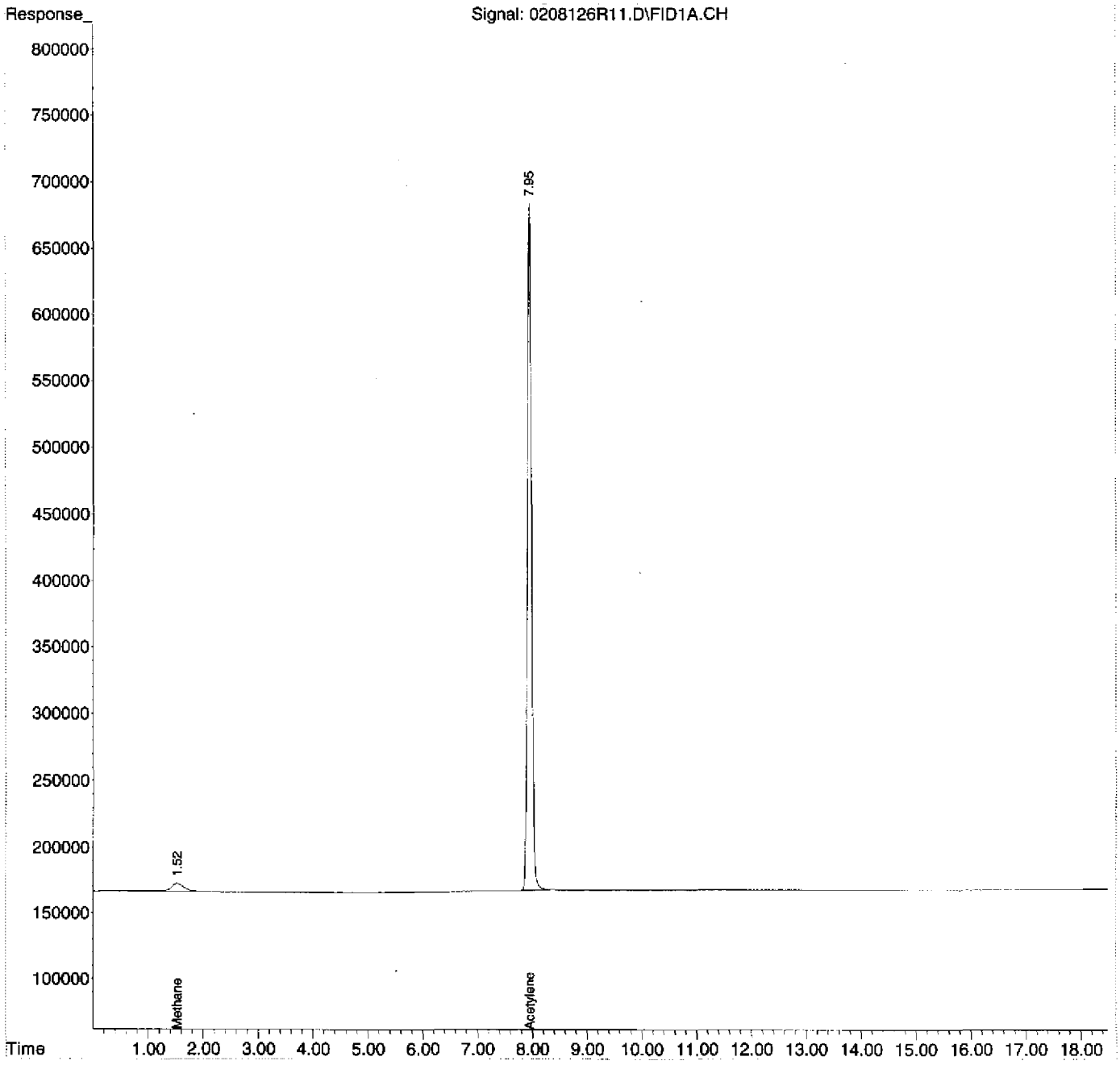
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\020812RSK\
Data File : 0208126R11.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 08 Feb 2012 9:22 pm
Operator : rh
Sample : 1202017-03
Misc : HW45
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Feb 09 09:03:45 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\020812RSK\
Data File : 0208126R12.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 08 Feb 2012 9:49 pm
Operator : rh
Sample : 1202017-05
Misc : HW43
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Feb 09 09:03:53 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	7.956	27249211	77.963 ug/L
Spiked Amount 66.330 Range 66 - 153		Recovery =	117.54%
Target Compounds			
1) TM Methane	1.529	880287	0.865 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.

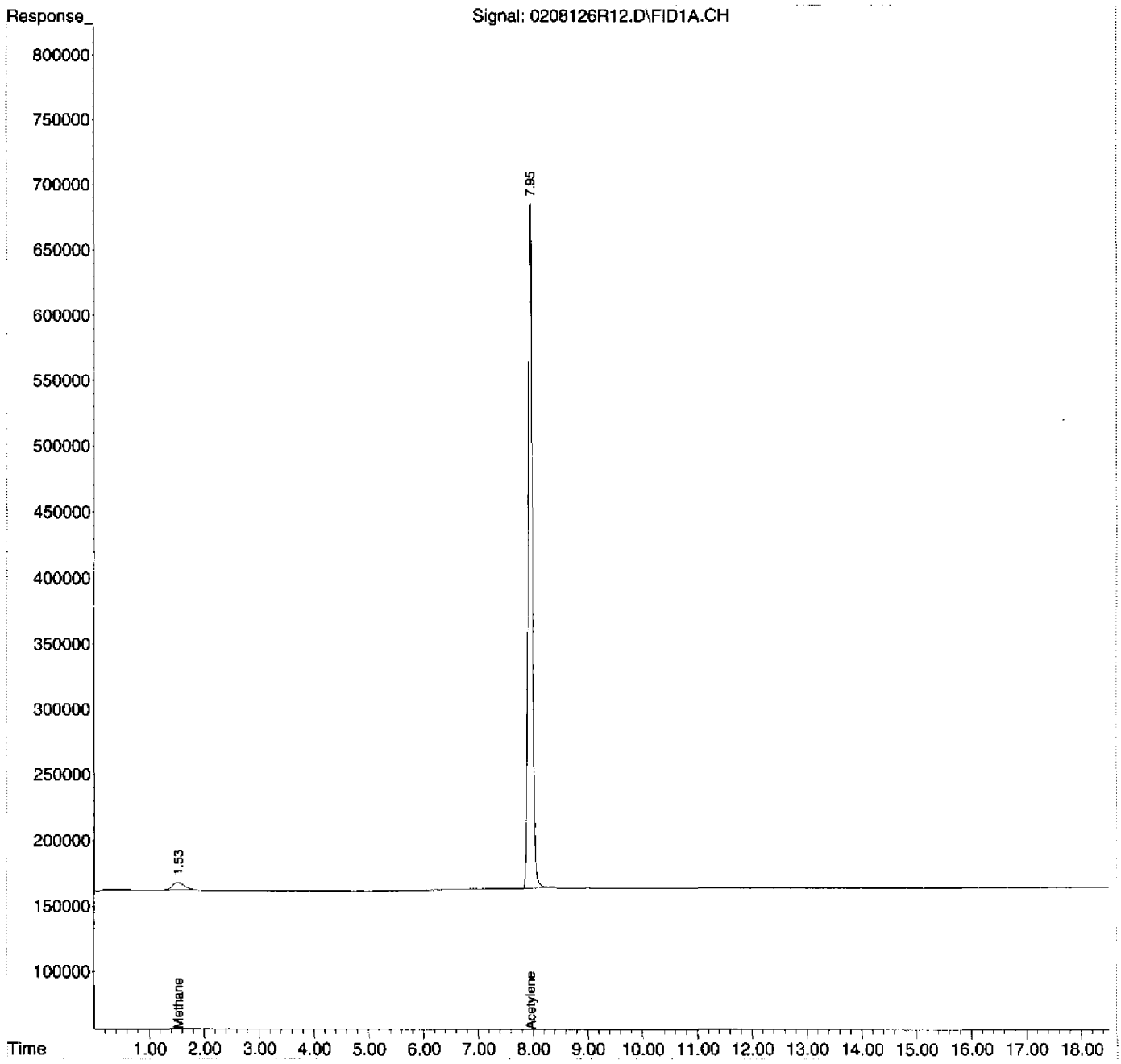
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\020812RSK\
Data File : 0208126R12.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 08 Feb 2012 9:49 pm
Operator : rh
Sample : 1202017-05
Misc : HW43
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Feb 09 09:03:53 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\020812RSK\
Data File : 0208126R13.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 08 Feb 2012 10:23 pm
Operator : rh
Sample : 1202017-06
Misc : HW43-P
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Feb 09 09:04:01 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	7.956	27251531	77.969 ug/L
Spiked Amount 66.330 Range 66 - 153		Recovery =	117.55%
Target Compounds			
1) TM Methane	1.530	895904	0.880 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.

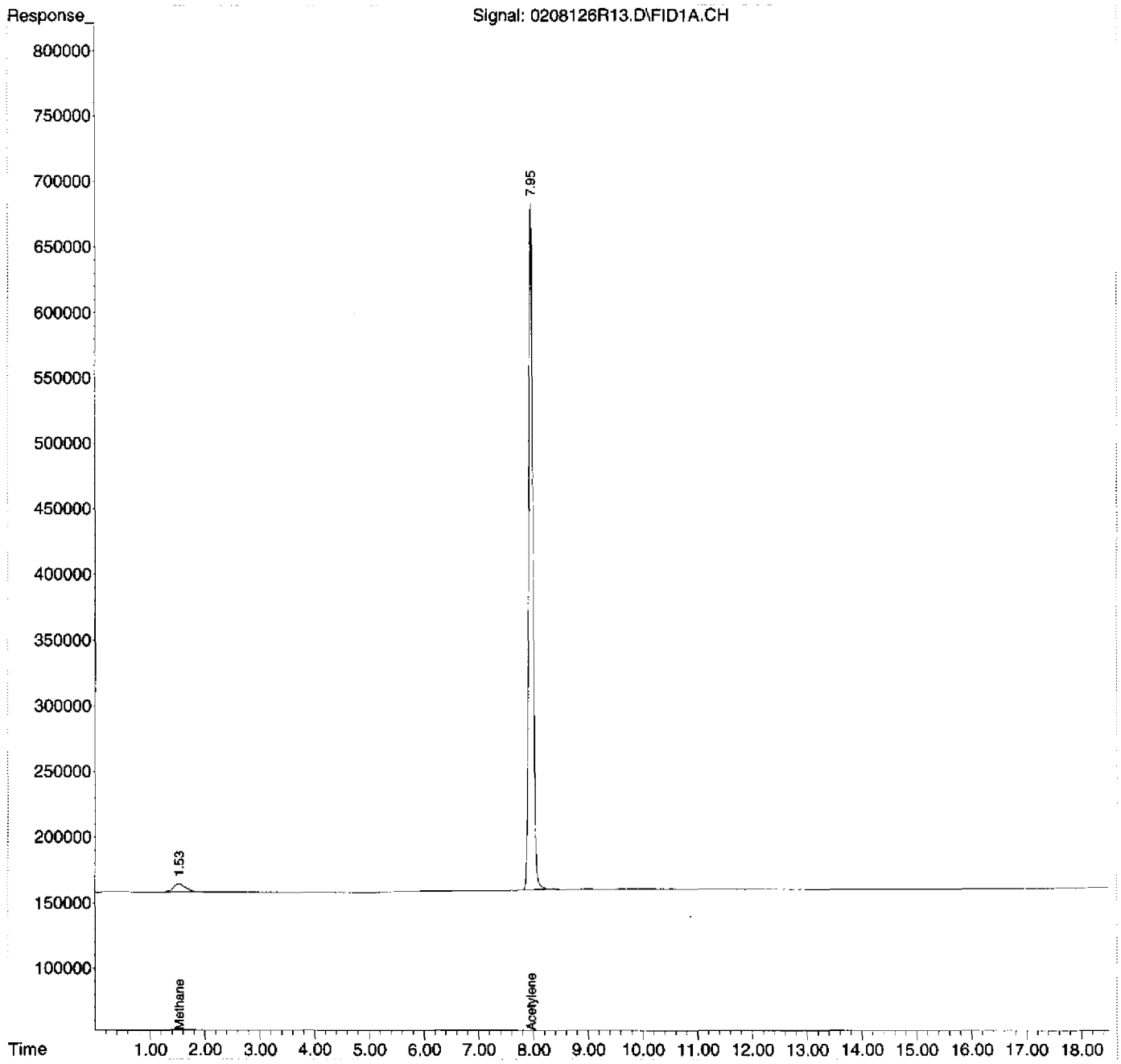
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\020812RSK\
Data File : 0208126R13.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 08 Feb 2012 10:23 pm
Operator : rh
Sample : 1202017-06
Misc : HW43-P
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Feb 09 09:04:01 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\020812RSK\
Data File : 0208126R21.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 09 Feb 2012 2:19 am
Operator : rh
Sample : 2020026-IBL1
Misc : IB
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Feb 09 09:05:12 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	7.958	27228412	77.903 ug/L
Spiked Amount 66.330 Range 66 - 153		Recovery =	117.45%
Target Compounds			
1) TM Methane	1.531	1078448	1.059 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.

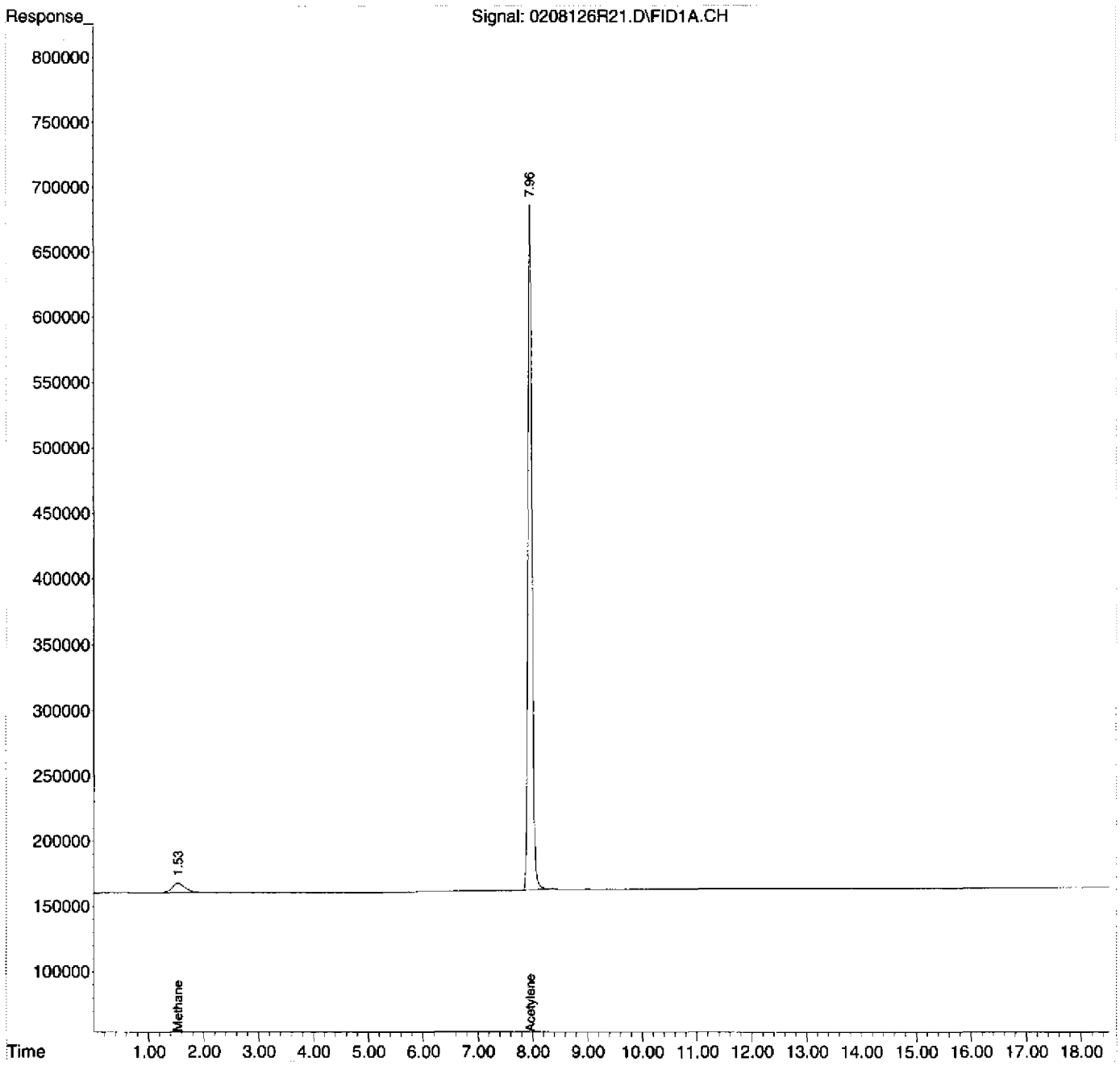
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\020812RSK\
Data File : 0208126R21.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 09 Feb 2012 2:19 am
Operator : rh
Sample : 2020026-IBL1
Misc : IB
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Feb 09 09:05:12 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\020812RSK\
Data File : 0208126R22.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 09 Feb 2012 2:46 am
Operator : rh
Sample : 1202017-01
Misc : EB02
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Feb 09 09:05:20 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	7.958	27365582	78.296 ug/L
Spiked Amount 66.330 Range 66 - 153		Recovery =	118.04%
Target Compounds			
1) TM Methane	1.532	900321	0.884 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.

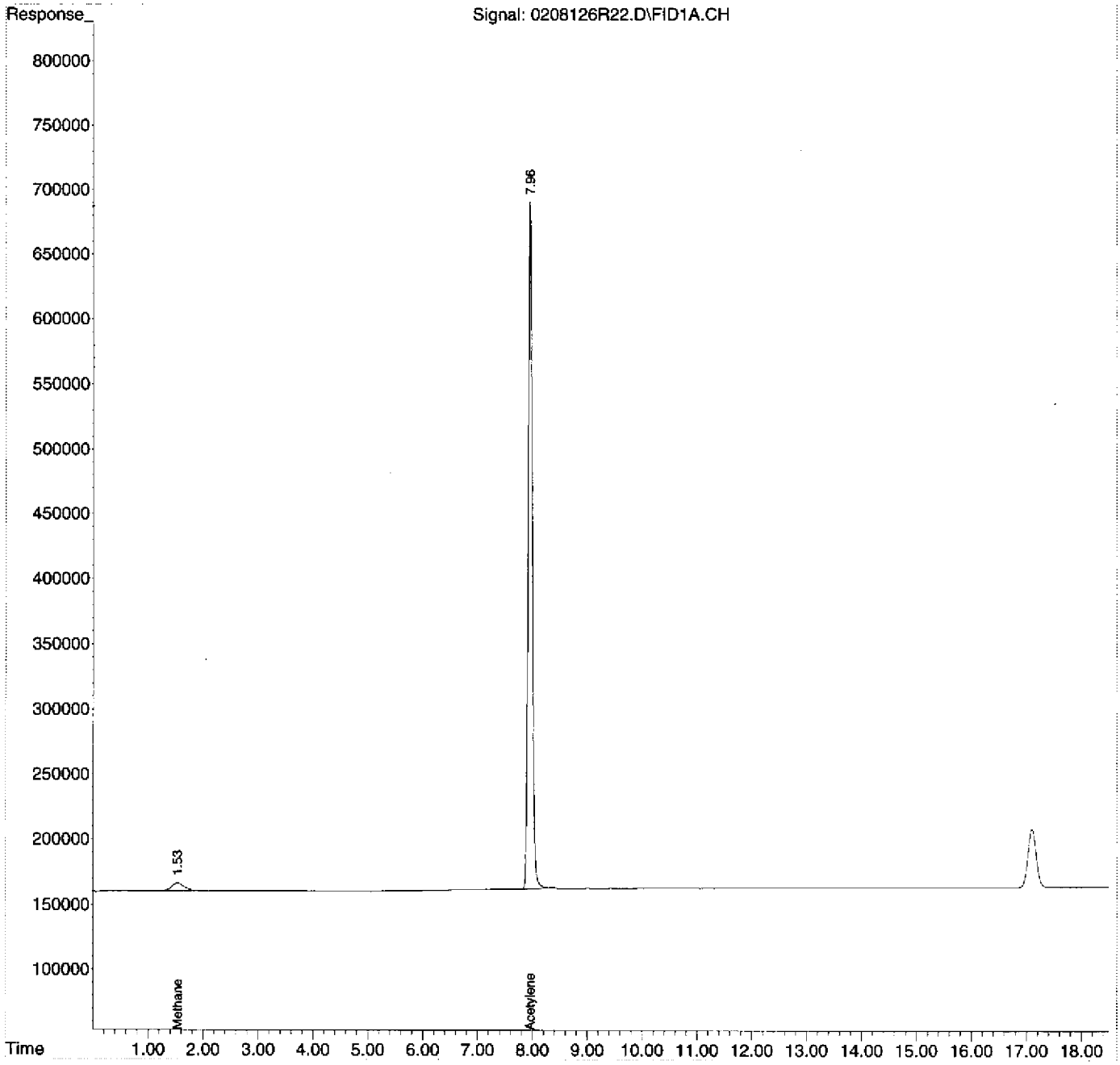
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\020812RSK\
Data File : 0208126R22.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 09 Feb 2012 2:46 am
Operator : rh
Sample : 1202017-01
Misc : EB02
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Feb 09 09:05:20 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\020812RSK\
Data File : 0208126R23.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 09 Feb 2012 3:21 am
Operator : rh
Sample : 1202017-04
Misc : TB24
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Feb 09 09:05:28 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	7.957	26797387	76.670 ug/L
Spiked Amount 66.330 Range 66 - 153		Recovery =	115.59%
Target Compounds			
1) TM Methane	1.533	772443	0.759 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.

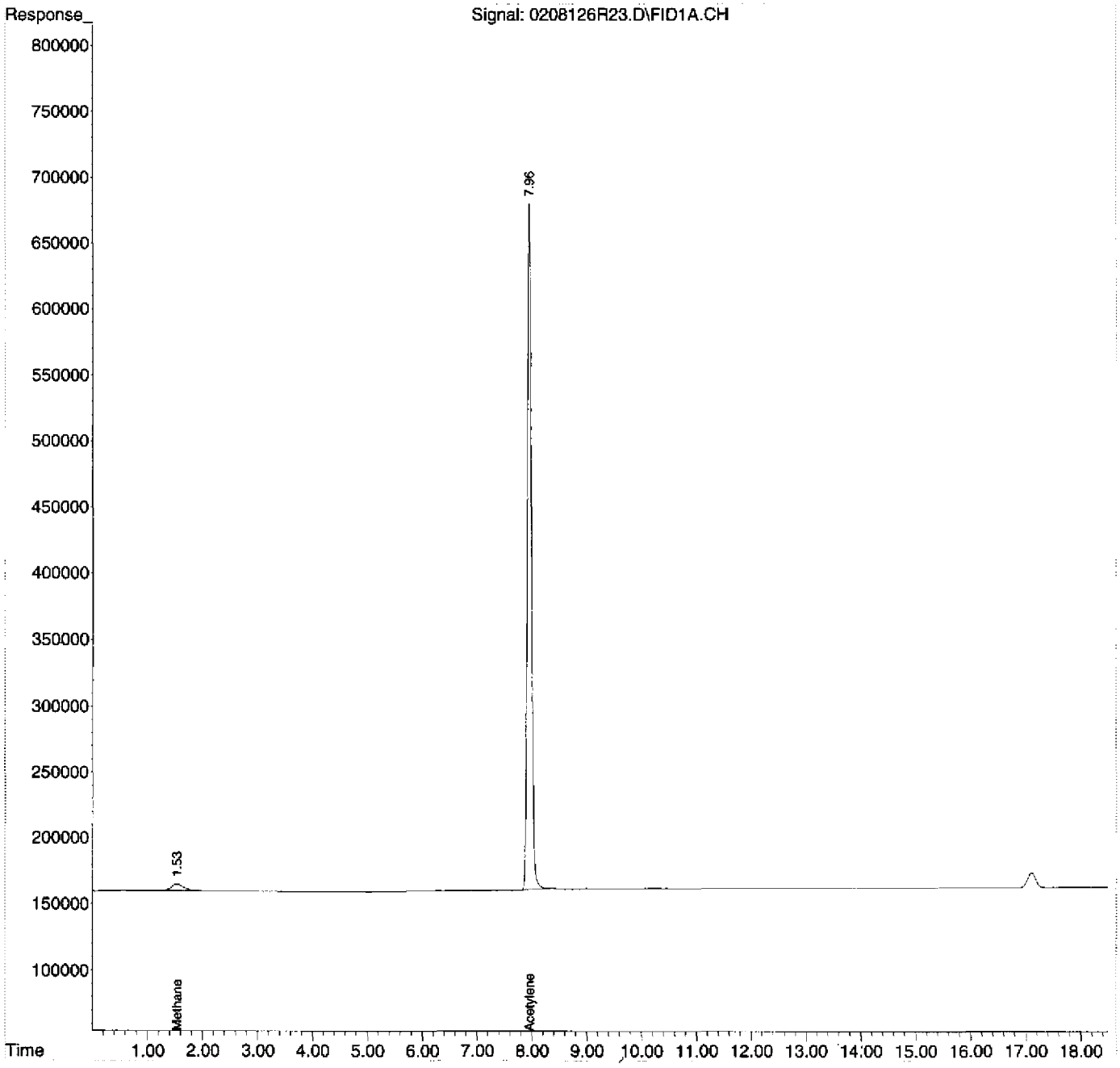
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\020812RSK\
Data File : 0208126R23.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 09 Feb 2012 3:21 am
Operator : rh
Sample : 1202017-04
Misc : TB24
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Feb 09 09:05:28 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\020812RSK\
Data File : 0208126R24.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 09 Feb 2012 3:47 am
Operator : rh
Sample : 1202017-07
Misc : TB23
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Feb 09 09:05:36 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	7.954	25870231	74.017 ug/L
Spiked Amount 66.330 Range 66 - 153		Recovery =	111.59%
Target Compounds			
1) TM Methane	1.539	896842	0.881 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.

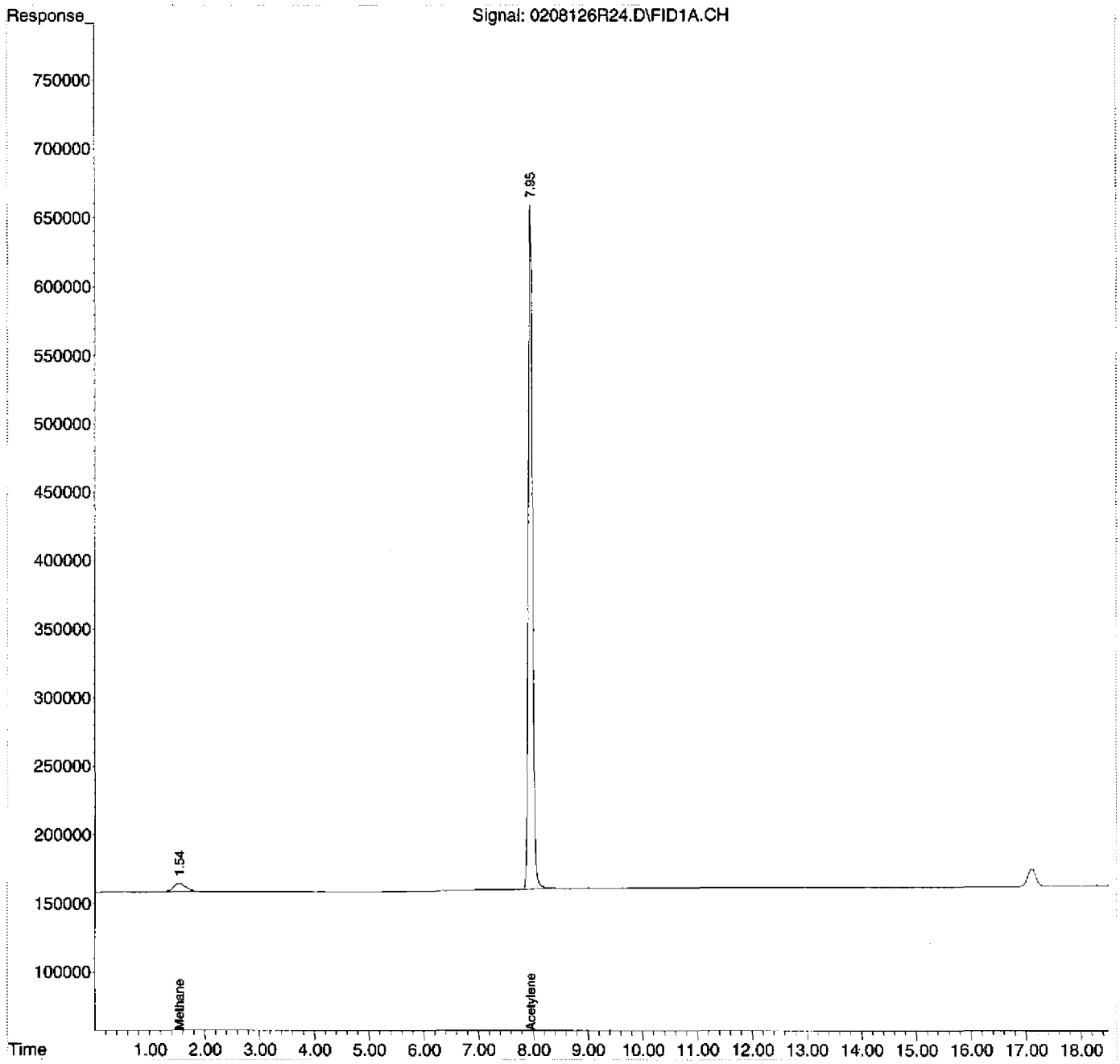
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\020812RSK\
Data File : 0208126R24.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 09 Feb 2012 3:47 am
Operator : rh
Sample : 1202017-07
Misc : TB23
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Feb 09 09:05:36 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



0126126RSK.M Thu Feb 09 09:05:41 2012 Page: 2

2/13/12

00234A

Evaluate Continuing Calibration Report

Data Path : D:\MSDCHEM\1\2012\DATA\020812RSK\
Data File : 0208126R29.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 09 Feb 2012 6:16 am
Operator : rh
Sample : 2020026-CCV2
Misc : 2B08005
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Feb 09 09:06:16 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

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	1.018	1.158 E6	-13.8	115	0.00
2 S	Acetylene	349.516	396.155 E3	-13.3	107	-0.02
3 TM	Ethene	887.936	1034.912 E3	-16.6	114	0.00
4 TM	Ethane	966.567	1130.648 E3	-17.0	115	0.00

Evaluate Continuing Calibration Report - Not Founds

5 Qual	Propane	0.000	0.000	0.0	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\020812RSK\
Data File : 0208126R29.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 09 Feb 2012 6:16 am
Operator : rh
Sample : 2020026-CCV2
Misc : 2B08005
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Feb 09 09:06:16 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	7.961	8576752	24.539 ug/L
Spiked Amount 66.330 Range 66 - 153 Recovery = 37.00%#			
Target Compounds			
1) TM Methane	1.525	15323973	15.053 ug/L
3) TM Ethene	8.368	24273866	27.337 ug/L
4) TM Ethane	9.006	28244727	29.222 ug/L
5) Qual Propane	0.000	0	N.D.
6) Qual Butane	0.000	0	N.D.

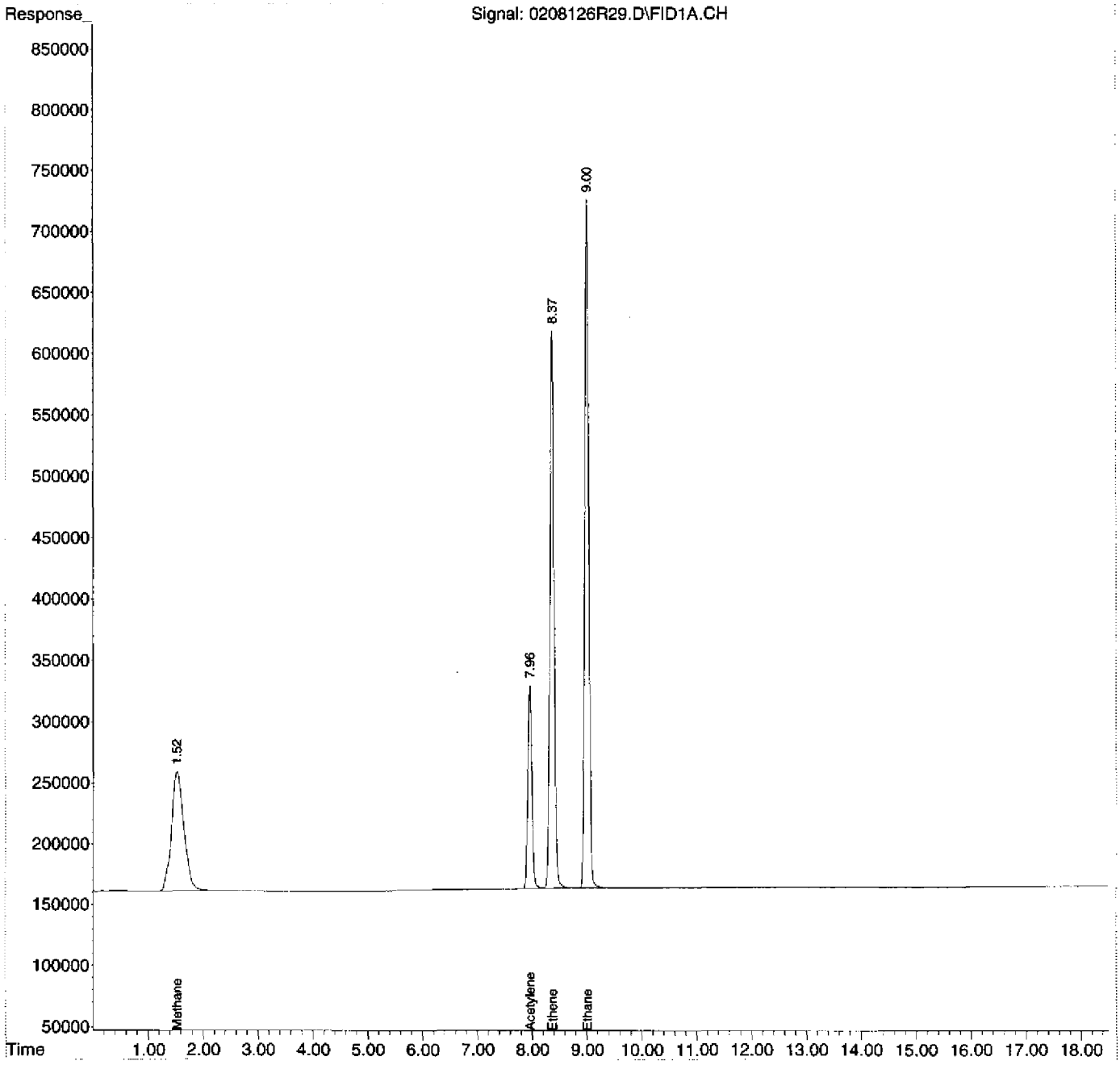
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\020812RSK\
Data File : 0208126R29.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 09 Feb 2012 6:16 am
Operator : rh
Sample : 2020026-CCV2
Misc : 2B08005
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Feb 09 09:06:16 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



00271

Standard Records

:00238

DIM0278627 DIM0278899

MATHESON TRI-GAS INC
1650 Enterprise Pkwy
Twinsburg, OH 44087
1-215-648-4000

CERTIFICATE OF ANALYSIS

Alltech Associates
2051 Waukegan Road
Deerfield, Il 60015

0L07008

Ref Po# 4501647701

---

14 LITER DISPOSABLE

LOT NUMBER: 109-06-03881

AU003098

COMPONENT	CONCENTRATION
Carbon Monoxide	1.003 %
Carbon Dioxide	0.999 %
Methane	0.994 %
Ethylene	1.007 %
Ethane	1.001 %
Acetylene	1.001 %
Nitrogen	Balance

ITEM NUMBER: GMT10402TC

CGA: 160

PSIG: 240

FILL DATE: 9/2/10

EXPIRATION DATE: 09/02/12

Above are the results of the analysis you requested, as reported by our laboratory. Results are in mole percent, unless otherwise indicated. Mixture accuracy is ± 2%. NIST traceable by weights or gaseous standards.

Thomas J Purdon

Thomas Purdon, Plant Manager

9/10/2010

DATE

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 Numbe**	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

AIR LIQUIDE Air Liquide America Specialty Gases LLC Scott

Shipped From:
6141 EASTON ROAD, BLDG 1 PO BOX 310
PLUMSTEADVILLE PA 18949-0310
Phone: 800-331-4953 Fax: 215-766-7226

CERTIFICATE OF ANALYSIS

SUPELCO
PO#P405616
SUPELCO PARK
595 NORTH HARRISON ROAD
BELLEFONTE PA 16823-0048

PROJECT #: 01-36433-003
PO#: P405616
ITEM #: 0104216 4
CUST ITEM #: 501662
DATE: 25Oct2010

ANALYTICAL ACCURACY: +/-2%
PRODUCT EXPIRATION: 24Oct2012

SCOTT LOT#: 029501E

COMPONENT	REQUESTED GAS CONC MOLES		ANALYSIS (MOLES)	
ACETYLENE	1.	%	1.00	%
CARBON DIOXIDE	1.	%	1.00	%
CARBON MONOXIDE	1.	%	1.01	%
ETHANE	1.	%	1.00	%
ETHYLENE	1.	%	1.00	%
METHANE	1.	%	1.01	%
NITROGEN		BALANCE		BALANCE

1H18014
Expires 10/24/12
Preparer: Tatyana Dadiomov 08 18 11

RSK-175 HYDROCARBON SCV

MANUFACTURED DATE: 25Oct2010

SCOTTY SIZE: 4

APPROVED BY: JAKE SENKOW

Analytical Standard Record

EPA Region 9 Laboratory

1H18014

Description:	RSK-175 HYDROCARBON SCV	**Expires:**	10/24/12
Standard Type:	Analyte Spike	**Prepared:**	08/18/11
Solvent:	Nitrogen	**Prepared By:**	Tatyana Dadiomov
Final Volume (mls):	4000	**Department:**	Volatiles
Vials:	1	**Last Edit:**	09/06/11 11:42 by YNB
Vendor:	Scott Specialty Gases	**Lot Numbe**	904001E

Supelco Cat # 501662, Scott Item # 01-04-216 --4, Inventory # AU001071

Analyte	CAS Number	Concentration (ppm)
Methane	74-82-8	7.21
Ethene	74-85-1	12.5
Ethane	74-84-0	13.4
Carbon dioxide	124-38-9	19.6
Acetylene	74-86-2	12

MATHESON TRI-GAS INC
1650 Enterprise Pkwy
Twinsburg, OH 44087
1-215-648-4000

CERTIFICATE OF ANALYSIS

Alltech Associates
2051 Waukegan Road
Deerfield, Il 60015

Ref Po# 4501822881

MICROSOL 10 LITER DISPOSABLE

LOT NUMBER: 109-14-06128-I1

COMPONENT	CONCENTRATION
Acetylene	0.92 %
Helium	Balance

ITEM NUMBER: GMT10303TK

CGA: N/A

PSIG: 160 PSIG

FILL DATE: 9/12/11

EXPIRATION DATE: 09/12/13

Above are the results of the analysis you requested, as reported by our laboratory. Results are in mole percent, unless otherwise indicated. Mixture accuracy is ± 2%. NIST traceable by weights or gaseous standards.

Dave Drew, Chemist

9/14/2011
DATE

1L13003
Expires 09/12/13
Prepurer-** Vendor ** 12 13 11
RSK-175 Surrogate

Analytical Standard Record

EPA Region 9 Laboratory

1L13003

Description:	RSK-175 Surrogate	**Expires:**	09/12/13
Standard Type:	Surrogate Spike	**Prepared:**	12/13/11
Solvent:	Helium	**Prepared By:**	** Vendor **
Final Volume (mls):	10000	**Department:**	Volatiles
Vials:	1	**Last Edit:**	12/13/11 10:16 by TD
Vendor:	Matheson	**Lot Numbe**	109-14-04897

Grace Cat # G0413, Item Nu: GMT10303TK AU003115

Analyte	CAS Number	Concentration (ppm)
Acetylene	74-86-2	10.7

Analytical Standard Record

EPA Region 9 Laboratory

2A27003

Description:	RSK-175 HC PDS 012612	**Expires:**	01/28/12
Standard Type:	Reference Material	**Prepared:**	01/26/12
Solvent:	N2	**Prepared By:**	Bob Hopeman
Final Volume (mls):	21.5	**Department:**	Volatiles
Vials:	1	**Last Edit:**	01/27/12 10:40 by RFH
Vendor:	*Prepared*	**Lot Numbe**	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, Stock	09/02/10	** Vendor **	09/02/12	12/07/10 10:27 by EM	1

Analytical Standard Record

EPA Region 9 Laboratory

2A27004

Description:	RSK-175 ICAL Level 1 012612	**Expires:**	01/28/12
Standard Type:	Other Solution	**Prepared:**	01/26/12
Solvent:	N2	**Prepared By:**	Bob Hopeman
Final Volume (mls):	16.1	**Department:**	Volatiles
Vials:	1	**Last Edit:**	01/27/12 10:43 by RFH
Vendor:	*Prepared*	**Lot Numbe**	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)
2A27003	RSK-175 HC PDS 012612	01/26/12	Bob Hopeman	01/28/12	01/27/12 10:40 by RFH	0.03

Analytical Standard Record

EPA Region 9 Laboratory

2A27005

Description:	RSK-175 ICAL Level 2 012612	**Expires:**	01/28/12
Standard Type:	Other Solution	**Prepared:**	01/26/12
Solvent:	N2	**Prepared By:**	Bob Hopeman
Final Volume (mls):	16.1	**Department:**	Volatiles
Vials:	1	**Last Edit:**	01/27/12 15:38 by RFH
Vendor:	*Prepared*	**Lot Numbe**	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)
2A27003	RSK-175 HC PDS 012612	01/26/12	Bob Hopeman	01/28/12	01/27/12 10:40 by RFH	0.06

Analytical Standard Record

EPA Region 9 Laboratory

2A27006

Description:	RSK-175 ICAL Level 3 012612	**Expires:**	01/28/12
Standard Type:	Other Solution	**Prepared:**	01/26/12
Solvent:	N2	**Prepared By:**	Bob Hopeman
Final Volume (mls):	16.1	**Department:**	Volatiles
Vials:	1	**Last Edit:**	01/27/12 10:49 by RFH
Vendor:	*Prepared*	**Lot Numbe**	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)
2A27003	RSK-175 HC PDS 012612	01/26/12	Bob Hopeman	01/28/12	01/27/12 10:40 by RFH	0.2

Analytical Standard Record

EPA Region 9 Laboratory

2A27007

Description:	RSK-175 ICAL Level 4 012612	**Expires:**	01/28/12
Standard Type:	Other Solution	**Prepared:**	01/26/12
Solvent:	N2	**Prepared By:**	Bob Hopeman
Final Volume (mls):	16.1	**Department:**	Volatiles
Vials:	1	**Last Edit:**	01/27/12 10:48 by RFH
Vendor:	*Prepared*	**Lot Numbe**	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, Stock	09/02/10	** Vendor **	09/02/12	12/07/10 10:27 by EM	0.03

Analytical Standard Record

EPA Region 9 Laboratory

2A27008

Description:	RSK-175 ICAL Level 5 012612	**Expires:**	01/28/12
Standard Type:	Other Solution	**Prepared:**	01/26/12
Solvent:	N2	**Prepared By:**	Bob Hopeman
Final Volume (mls):	16.1	**Department:**	Volatiles
Vials:	1	**Last Edit:**	01/27/12 10:51 by RFH
Vendor:	*Prepared*	**Lot Numbe**	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, Stock	09/02/10	** Vendor **	09/02/12	12/07/10 10:27 by EM	0.1

Analytical Standard Record

EPA Region 9 Laboratory

2A27009

Description:	RSK-175 ICAL Level 6 012612	**Expires:**	01/28/12
Standard Type:	Other Solution	**Prepared:**	01/26/12
Solvent:	N2	**Prepared By:**	Bob Hopeman
Final Volume (mls):	16.1	**Department:**	Volatiles
Vials:	1	**Last Edit:**	01/27/12 10:51 by RFH
Vendor:	*Prepared*	**Lot Numbe**	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, Stock	09/02/10	** Vendor **	09/02/12	12/07/10 10:27 by EM	0.25

Analytical Standard Record

EPA Region 9 Laboratory

2A27010

Description:	RSK-175 ICAL Level 7 012612	**Expires:**	01/28/12
Standard Type:	Other Solution	**Prepared:**	01/26/12
Solvent:	N2	**Prepared By:**	Bob Hopeman
Final Volume (mls):	16.1	**Department:**	Volatiles
Vials:	1	**Last Edit:**	01/27/12 10:52 by RFH
Vendor:	*Prepared*	**Lot Numbe**	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, Stock	09/02/10	** Vendor **	09/02/12	12/07/10 10:27 by EM	0.5

Analytical Standard Record

EPA Region 9 Laboratory

2A27011

Description:	RSK-175 SCV 012612	**Expires:**	01/28/12
Standard Type:	Other Solution	**Prepared:**	01/26/12
Solvent:	N2	**Prepared By:**	Bob Hopeman
Final Volume (mls):	16.1	**Department:**	Volatiles
Vials:	1	**Last Edit:**	01/27/12 10:59 by RFH
Vendor:	*Prepared*	**Lot Numbe**	N/A

Analyte	CAS Number	Concentration (ppm)
Methane	74-82-8	0.0448
Ethene	74-85-1	0.0776
Ethane	74-84-0	0.0832
Carbon dioxide	124-38-9	0.122
Acetylene	74-86-2	0.0721

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	0.1

Analytical Standard Record

EPA Region 9 Laboratory

2B06002

Description:	RSK-175 HC PDS 020612	**Expires:**	02/08/12
Standard Type:	Reference Material	**Prepared:**	02/06/12
Solvent:	N2	**Prepared By:**	Bob Hopeman
Final Volume (mls):	21.5	**Department:**	Volatiles
Vials:	1	**Last Edit:**	02/06/12 09:29 by RFH
Vendor:	*Prepared*	**Lot Numbe**	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, Stock	09/02/10	** Vendor **	09/02/12	12/07/10 10:27 by EM	1

Analytical Standard Record

EPA Region 9 Laboratory

2B06003

Description:	RSK-175 LCV1	**Expires:**	02/08/12
Standard Type:	Other Solution	**Prepared:**	02/06/12
Solvent:	N2	**Prepared By:**	Bob Hopeman
Final Volume (mls):	16.1	**Department:**	Volatiles
Vials:	1	**Last Edit:**	02/06/12 09:30 by RFH
Vendor:	*Prepared*	**Lot Numbe**	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)
2B06002	RSK-175 HC PDS 020612	02/06/12	Bob Hopeman	02/08/12	02/06/12 09:29 by RFH	0.03

Analytical Standard Record

EPA Region 9 Laboratory

2B06004

Description:	RSK-175 LCV2	**Expires:**	02/08/12
Standard Type:	Other Solution	**Prepared:**	02/06/12
Solvent:	N2	**Prepared By:**	Bob Hopeman
Final Volume (mls):	16.1	**Department:**	Volatiles
Vials:	1	**Last Edit:**	02/06/12 09:30 by RFH
Vendor:	*Prepared*	**Lot Numbe**	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)
2B06002	RSK-175 HC PDS 020612	02/06/12	Bob Hopeman	02/08/12	02/06/12 09:29 by RFH	0.06

Analytical Standard Record

EPA Region 9 Laboratory

2B06005

Description:	RSK-175 CCV	**Expires:**	02/08/12
Standard Type:	Other Solution	**Prepared:**	02/06/12
Solvent:	N2	**Prepared By:**	Bob Hopeman
Final Volume (mls):	16.1	**Department:**	Volatiles
Vials:	1	**Last Edit:**	02/06/12 09:31 by RFH
Vendor:	*Prepared*	**Lot Numbe**	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, Stock	09/02/10	** Vendor **	09/02/12	12/07/10 10:27 by EM	0.03

Analytical Standard Record

EPA Region 9 Laboratory

2B07005

Description:	RSK-175 HC PDS 020712	**Expires:**	02/09/12
Standard Type:	Reference Material	**Prepared:**	02/07/12
Solvent:	N2	**Prepared By:**	Bob Hopeman
Final Volume (mls):	21.5	**Department:**	Volatiles
Vials:	1	**Last Edit:**	02/07/12 10:11 by RFH
Vendor:	*Prepared*	**Lot Numbe**	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, Stock	09/02/10	** Vendor **	09/02/12	12/07/10 10:27 by EM	1

Analytical Standard Record

EPA Region 9 Laboratory

2B07006

Description:	RSK-175 LCV1	**Expires:**	02/09/12
Standard Type:	Other Solution	**Prepared:**	02/07/12
Solvent:	N2	**Prepared By:**	Bob Hopeman
Final Volume (mls):	16.1	**Department:**	Volatiles
Vials:	1	**Last Edit:**	02/07/12 10:11 by RFH
Vendor:	*Prepared*	**Lot Numbe**	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)
2B07005	RSK-175 HC PDS 020712	02/07/12	Bob Hopeman	02/09/12	02/07/12 10:11 by RFH	0.03

Analytical Standard Record

EPA Region 9 Laboratory

2B07007

Description:	RSK-175 LCV2	**Expires:**	02/09/12
Standard Type:	Other Solution	**Prepared:**	02/07/12
Solvent:	N2	**Prepared By:**	Bob Hopeman
Final Volume (mls):	16.1	**Department:**	Volatiles
Vials:	1	**Last Edit:**	02/07/12 10:12 by RFH
Vendor:	*Prepared*	**Lot Numbe**	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)
2B07005	RSK-175 HC PDS 020712	02/07/12	Bob Hopeman	02/09/12	02/07/12 10:11 by RFH	0.06

Analytical Standard Record

EPA Region 9 Laboratory

2B07008

Description:	RSK-175 CCV	**Expires:**	02/09/12
Standard Type:	Other Solution	**Prepared:**	02/07/12
Solvent:	N2	**Prepared By:**	Bob Hopeman
Final Volume (mls):	16.1	**Department:**	Volatiles
Vials:	1	**Last Edit:**	02/07/12 10:12 by RFH
Vendor:	*Prepared*	**Lot Numbe**	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, Stock	09/02/10	** Vendor **	09/02/12	12/07/10 10:27 by EM	0.03

Analytical Standard Record

EPA Region 9 Laboratory

2B07008

Description:	RSK-175 CCV	**Expires:**	02/09/12
Standard Type:	Other Solution	**Prepared:**	02/07/12
Solvent:	N2	**Prepared By:**	Bob Hopeman
Final Volume (mls):	16.1	**Department:**	Volatiles
Vials:	1	**Last Edit:**	02/07/12 10:12 by RFH
Vendor:	*Prepared*	**Lot Numbe**	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, Stock	09/02/10	** Vendor **	09/02/12	12/07/10 10:27 by EM	0.03

Analytical Standard Record

EPA Region 9 Laboratory

2B08002

Description:	RSK-175 HC PDS 020812	**Expires:**	02/10/12
Standard Type:	Reference Material	**Prepared:**	02/08/12
Solvent:	N2	**Prepared By:**	Bob Hopeman
Final Volume (mls):	21.5	**Department:**	Volatiles
Vials:	1	**Last Edit:**	02/08/12 09:44 by RFH
Vendor:	*Prepared*	**Lot Numbe**	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, Stock	09/02/10	** Vendor **	09/02/12	12/07/10 10:27 by EM	1

Analytical Standard Record

EPA Region 9 Laboratory

2B08003

Description:	RSK-175 LCV1	**Expires:**	02/10/12
Standard Type:	Other Solution	**Prepared:**	02/08/12
Solvent:	N2	**Prepared By:**	Bob Hopeman
Final Volume (mls):	16.1	**Department:**	Volatiles
Vials:	1	**Last Edit:**	02/08/12 09:45 by RFH
Vendor:	*Prepared*	**Lot Numbe**	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)
2B08002	RSK-175 HC PDS 020812	02/08/12	Bob Hopeman	02/10/12	02/08/12 09:44 by RFH	0.03

Analytical Standard Record

EPA Region 9 Laboratory

2B08004

Description:	RSK-175 LCV2	**Expires:**	02/10/12
Standard Type:	Other Solution	**Prepared:**	02/08/12
Solvent:	N2	**Prepared By:**	Bob Hopeman
Final Volume (mls):	16.1	**Department:**	Volatiles
Vials:	1	**Last Edit:**	02/08/12 09:45 by RFH
Vendor:	*Prepared*	**Lot Numbe**	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)
2B08002	RSK-175 HC PDS 020812	02/08/12	Bob Hopeman	02/10/12	02/08/12 09:44 by RFH	0.06

Analytical Standard Record

EPA Region 9 Laboratory

2B08005

Description:	RSK-175 CCV	**Expires:**	02/10/12
Standard Type:	Other Solution	**Prepared:**	02/08/12
Solvent:	N2	**Prepared By:**	Bob Hopeman
Final Volume (mls):	16.1	**Department:**	Volatiles
Vials:	1	**Last Edit:**	02/08/12 09:45 by RFH
Vendor:	*Prepared*	**Lot Numbe**	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, Stock	09/02/10	** Vendor **	09/02/12	12/07/10 10:27 by EM	0.03

Analytical Standard Record

EPA Region 9 Laboratory

2B09002

Description:	RSK-175 HC PDS 020912	**Expires:**	02/11/12
Standard Type:	Reference Material	**Prepared:**	02/09/12
Solvent:	N2	**Prepared By:**	Bob Hopeman
Final Volume (mls):	21.5	**Department:**	Volatiles
Vials:	1	**Last Edit:**	02/09/12 10:46 by RFH
Vendor:	*Prepared*	**Lot Numbe**	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, Stock	09/02/10	** Vendor **	09/02/12	12/07/10 10:27 by EM	1

Analytical Standard Record

EPA Region 9 Laboratory

2B09003

Description:	RSK-175 LCV1	**Expires:**	02/11/12
Standard Type:	Other Solution	**Prepared:**	02/09/12
Solvent:	N2	**Prepared By:**	Bob Hopeman
Final Volume (mls):	16.1	**Department:**	Volatiles
Vials:	1	**Last Edit:**	02/09/12 10:47 by RFH
Vendor:	*Prepared*	**Lot Numbe**	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)
2B09002	RSK-175 HC PDS 020912	02/09/12	Bob Hopeman	02/11/12	02/09/12 10:46 by RFH	0.03

Analytical Standard Record

EPA Region 9 Laboratory

2B09004

Description:	RSK-175 LCV2	**Expires:**	02/11/12
Standard Type:	Other Solution	**Prepared:**	02/09/12
Solvent:	N2	**Prepared By:**	Bob Hopeman
Final Volume (mls):	16.1	**Department:**	Volatiles
Vials:	1	**Last Edit:**	02/09/12 10:47 by RFH
Vendor:	*Prepared*	**Lot Numbe**	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)
2B09002	RSK-175 HC PDS 020912	02/09/12	Bob Hopeman	02/11/12	02/09/12 10:46 by RFH	0.06

Analytical Standard Record

EPA Region 9 Laboratory

2B09005

Description:	RSK-175 CCV	**Expires:**	02/11/12
Standard Type:	Other Solution	**Prepared:**	02/09/12
Solvent:	N2	**Prepared By:**	Bob Hopeman
Final Volume (mls):	16.1	**Department:**	Volatiles
Vials:	1	**Last Edit:**	02/09/12 10:47 by RFH
Vendor:	*Prepared*	**Lot Numbe**	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, Stock	09/02/10	** Vendor **	09/02/12	12/07/10 10:27 by EM	0.03

2/13/12

00269A

00364

MISCELLANEOUS DATA

Organics Daily Folder Preparation/Technical Review Guide

Analysis Method	Dissolved Gasses	Analyst Initial	RH	Reviewer Initial		Batch/ Sequence	2020032/B2B0041
Instrument ID	AG6890N-6	Date Analyzed	2/9/12	Date	2/10/12	Chemstation Last Update	1/27/12 1:26:56
Cases	R33911			SDGs	12037A, 12039A,		

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
	✓	✓	Runlog (Present, legible, peer reviewed)
✓			Tune/ Degradation Standard
	✓	✓	Initial Calibration (SOP criteria for number of levels, concentration, and %RSD). Manual calculation. Include summary for daily review.
	✓	✓	Continuing Calibration Verification (frequency, recovery, and %D). Manual calculation.
	✓	✓	QLS (level, frequency, and recovery) (include Chemstation summary)
	✓	✓	Method / Extraction / Storage Blanks (frequency and contamination levels)
	✓	✓	Surrogate Recoveries
✓			IS Areas (SOP criteria met)
	✓	✓	LCS (level, frequency, and recovery) (include Chemstation summary)
✓			MS/MSD
	✓	✓	Samples (within calibration range, results calculated correctly)
✓			Manual Integration Verified
✓			Standard Prep Log (all pages present, legible, peer reviewed, legible)
	✓	✓	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
BLK1	0209126R04	.729	≤ 0.615					Methane hit ≤ QL but ≥ ½ QL

G:\USER\ESAT\1 Organic Group\supplies & equipment\RFH\daily review_rsk_.doc

Injection Log

Operator: rh
Directory: D:\MSDCHEM\1\2012\DATA\020912RSK\

Vial	File Name	Mult	Sample Info	Misc Info	Date Acquired
1	0209126R01.D	0	2020032-CCV1	2B09005	09 Feb 2012 10:59 am
2	0209126R02.D	0	2020032-LCV1	2B09003	09 Feb 2012 11:25 am
3	0209126R03.D	0	2020032-LCV2	2B09004	09 Feb 2012 11:51 am
4	0209126R04.D	0	B2B0041-BLK1	MB	09 Feb 2012 12:18 pm
5	0209126R05.D	0	B2B0041-BS1	LCS	09 Feb 2012 12:53 pm
6	0209126R06.D	0	1202020-03RE1	HW31 0.15 ML	09 Feb 2012 1:19 pm
7	0209126R07.D	0	1202020-05RE1	HW31Z 0.15 ML	09 Feb 2012 1:46 pm
8	0209126R08.D	0	1202020-11RE1	HW15A 0.2 ML	09 Feb 2012 2:21 pm
9	0209126R09.D	0	1202020-12RE1	HW15AP 16.1ML	09 Feb 2012 2:48 pm
10	0209126R10.D	0	1202013-09RE1	HW39P 16.1ML	09 Feb 2012 3:22 pm
11	0209126R11.D	0	1202023-01	FB12 16.1ML	09 Feb 2012 4:59 pm
12	0209126R12.D	0	1202023-04	TB27 16.1ML	09 Feb 2012 5:25 pm
13	0209126R13.D	0	1202023-07	TB29 16.1ML	09 Feb 2012 6:00 pm
14	0209126R14.D	0	1202023-08	FB13 16.1ML	09 Feb 2012 6:26 pm
15	0209126R15.D	0	1202023-11	TB30 16.1ML	09 Feb 2012 7:01 pm
16	0209126R16.D	0	2020032-IBL1	IB	09 Feb 2012 7:27 pm
17	0209126R17.D	0	1202023-02	HW51 16.1ML	09 Feb 2012 8:02 pm
18	0209126R18.D	0	1202023-03	HW51-P 16.1ML	09 Feb 2012 8:28 pm
19	0209126R19.D	0	1202023-05	HW47 16.1ML	09 Feb 2012 8:55 pm
20	0209126R20.D	0	1202023-06	HW47-P 16.1ML	09 Feb 2012 9:30 pm
21	0209126R21.D	0	1202023-09	HW38 16.1ML	09 Feb 2012 9:56 pm
22	0209126R22.D	0	1202023-10	HW38-P 16.1ML	09 Feb 2012 10:23 pm
23	0209126R23.D	0	2020032-CCV2	2B09005	09 Feb 2012 10:58 pm
24	0209126R24.D	0	2020032-CCV3	2B09005	09 Feb 2012 11:24 pm
25	0209126R25.D	0	regular ib	2B09005	09 Feb 2012 11:50 pm
26	0209126R26.D	0	ib no surrogate	2B09005	10 Feb 2012 12:25 am
27	0209126R27.D	0	empty He vial	2B09005	10 Feb 2012 12:51 am

Response Factor Report AG6890N-6

Method Path : D:\MSDCHEM\1\2012\METHOD\
Method File : 0126126RSK.M
Title :
Last Update : Fri Jan 27 11:26:56 2012
Response Via : Initial Calibration

Calibration Files
1 =0126126R008.D 2 =0126126R007.D 3 =0126126R006.D
4 =0126126R005.D 5 =0126126R004.D 6 =0126126R003.D

	Compound	1	2	3	4	5	6	Avg	%RSD
1) TM	Methane		1.100	1.004	1.003	0.997	1.028	1.018 E6	4.25
2) S	Acetylene	3.221	3.304	3.380	3.710	3.595	3.697	3.495 E5	5.56
3) TM	Ethene	8.210	8.669	8.696	9.069	9.135	9.418	8.879 E5	4.42
4) TM	Ethane	0.894	0.941	0.956	0.986	0.994	1.023	0.967 E6	4.30
5) Qual	Propane							0.000	-1.00
6) Qual	Butane							0.000	-1.00

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

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 %
0209126R01.D	2020032-CCV1	35*
0209126R02.D	2020032-LCV1	1*
0209126R03.D	2020032-LCV2	3*
0209126R04.D	B2B0041-BLK1	111
0209126R05.D	B2B0041-BS1	115
0209126R06.D	1202020-03RE1	116
0209126R07.D	1202020-05RE1	111
0209126R08.D	1202020-11RE1	119
0209126R09.D	1202020-12RE1	109
0209126R10.D	1202013-09RE1	89
0209126R11.D	1202023-01	114
0209126R12.D	1202023-04	121
0209126R13.D	1202023-07	113
0209126R14.D	1202023-08	113
0209126R15.D	1202023-11	115
0209126R16.D	2020032-IBL1	113
0209126R17.D	1202023-02	110
0209126R18.D	1202023-03	112
0209126R19.D	1202023-05	108
0209126R20.D	1202023-06	106
0209126R21.D	1202023-09	114
0209126R22.D	1202023-10	113
0209126R23.D	2020032-CCV2	34*
0209126R24.D	2020032-CCV3	34*
0209126R25.D	regular ib	104

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

Created: Fri Feb 10 08:45:54 2012 AG6890N-6

Evaluate Continuing Calibration Report

Data Path : D:\MSDCHEM\1\2012\DATA\020912RSK\
Data File : 0209126R01.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 09 Feb 2012 10:59 am
Operator : rh
Sample : 2020032-CCV1
Misc : 2B09005
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Feb 09 12:39:17 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

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	1.018	1.079 E6	-6.0	108	0.00
2 S	Acetylene	349.516	370.277 E3	-5.9	100	-0.03
3 TM	Ethene	887.936	969.332 E3	-9.2	107	0.00
4 TM	Ethane	966.567	1062.563 E3	-9.9	108	0.00

Evaluate Continuing Calibration Report - Not Founds

5 Qual	Propane	0.000	0.000	0.0	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\020912RSK\
Data File : 0209126R01.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 09 Feb 2012 10:59 am
Operator : rh
Sample : 2020032-CCV1
Misc : 2B09005
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Feb 09 12:39:17 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	7.948	8016495	22.936 ug/L
Spiked Amount 66.330 Range 66 - 153		Recovery =	34.58%#
Target Compounds			
1) TM Methane	1.525	14277800	14.025 ug/L
3) TM Ethene	8.366	22735682	25.605 ug/L
4) TM Ethane	9.006	26543893	27.462 ug/L
5) Qual Propane	0.000	0	N.D.
6) Qual Butane	0.000	0	N.D.

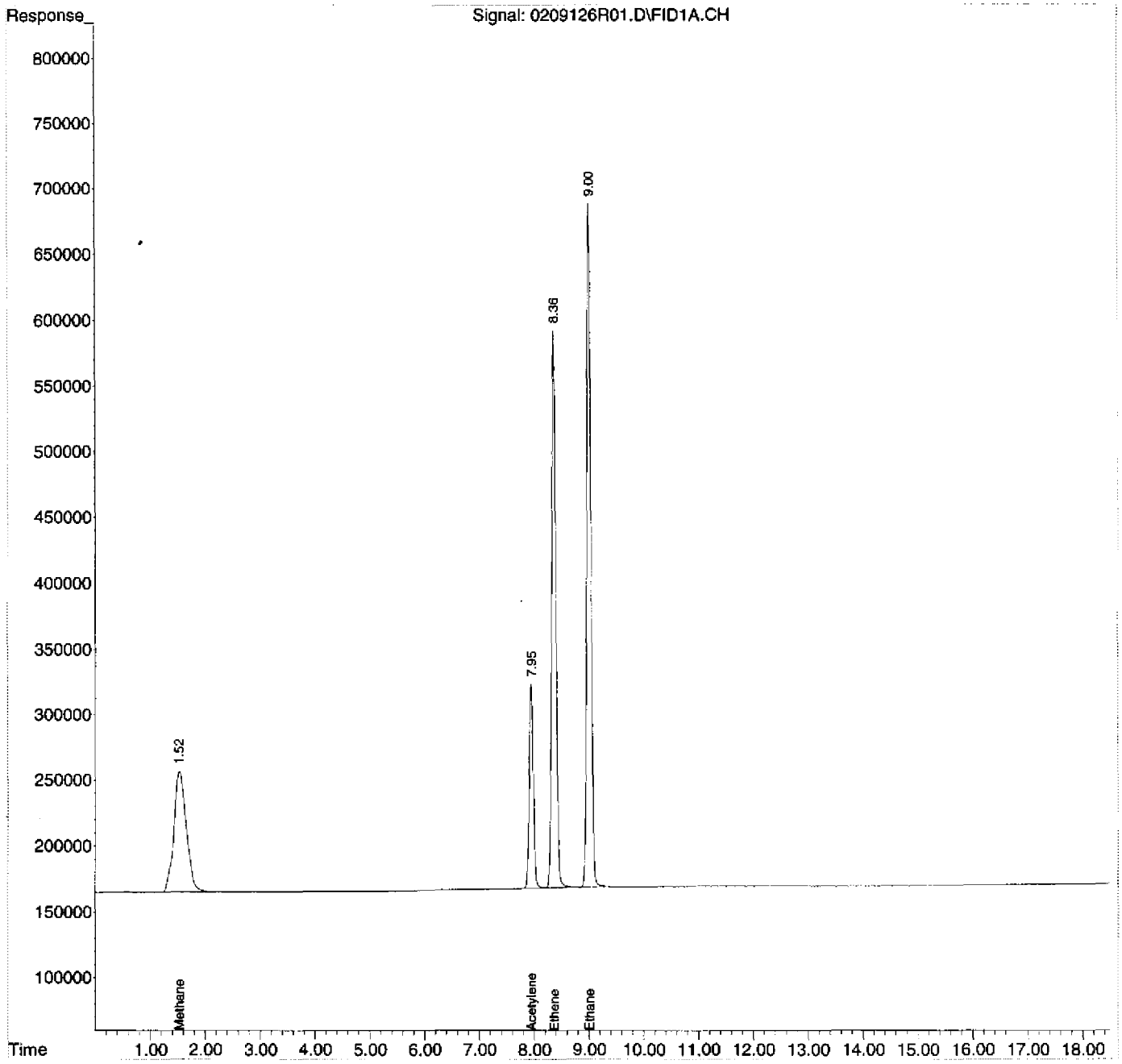
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\020912RSK\
Data File : 0209126R01.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 09 Feb 2012 10:59 am
Operator : rh
Sample : 2020032-CCV1
Misc : 2B09005
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Feb 09 12:39:17 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



RSK-175 HC LCV REPORT

Instrument Name: AG6890N-6
File Name LCV1: 0209126R02
File Name LCV2: 0209126R03
Date Acquired: 02/09/12
Operator: rh

Analyte	Spike ug/L	Calculated ug/L	QC Limits	%R	Status
Methane	1.231	1.382	60 - 140	112.3%	pass
Acetylene	2.014	1.732	60 - 140	86.0%	NA
Ethene	1.091	1.03	60 - 140	94.4%	pass
Ethane	1.162	1.077	60 - 140	92.7%	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\020912RSK\
Data File : 0209126R02.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 09 Feb 2012 11:25 am
Operator : rh
Sample : 2020032-LCV1
Misc : 2B09003
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 09 12:39:25 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	7.964	311472	0.891 ug/L
Spiked Amount 66.330 Range 66 - 153		Recovery =	1.34%#
Target Compounds			
1) TM Methane	1.534	990251	0.973 ug/L
3) TM Ethene	8.370	914871	1.030 ug/L
4) TM Ethane	9.009	1040726	1.077 ug/L
5) Qual Propane	0.000	0	N.D.
6) Qual Butane	0.000	0	N.D.

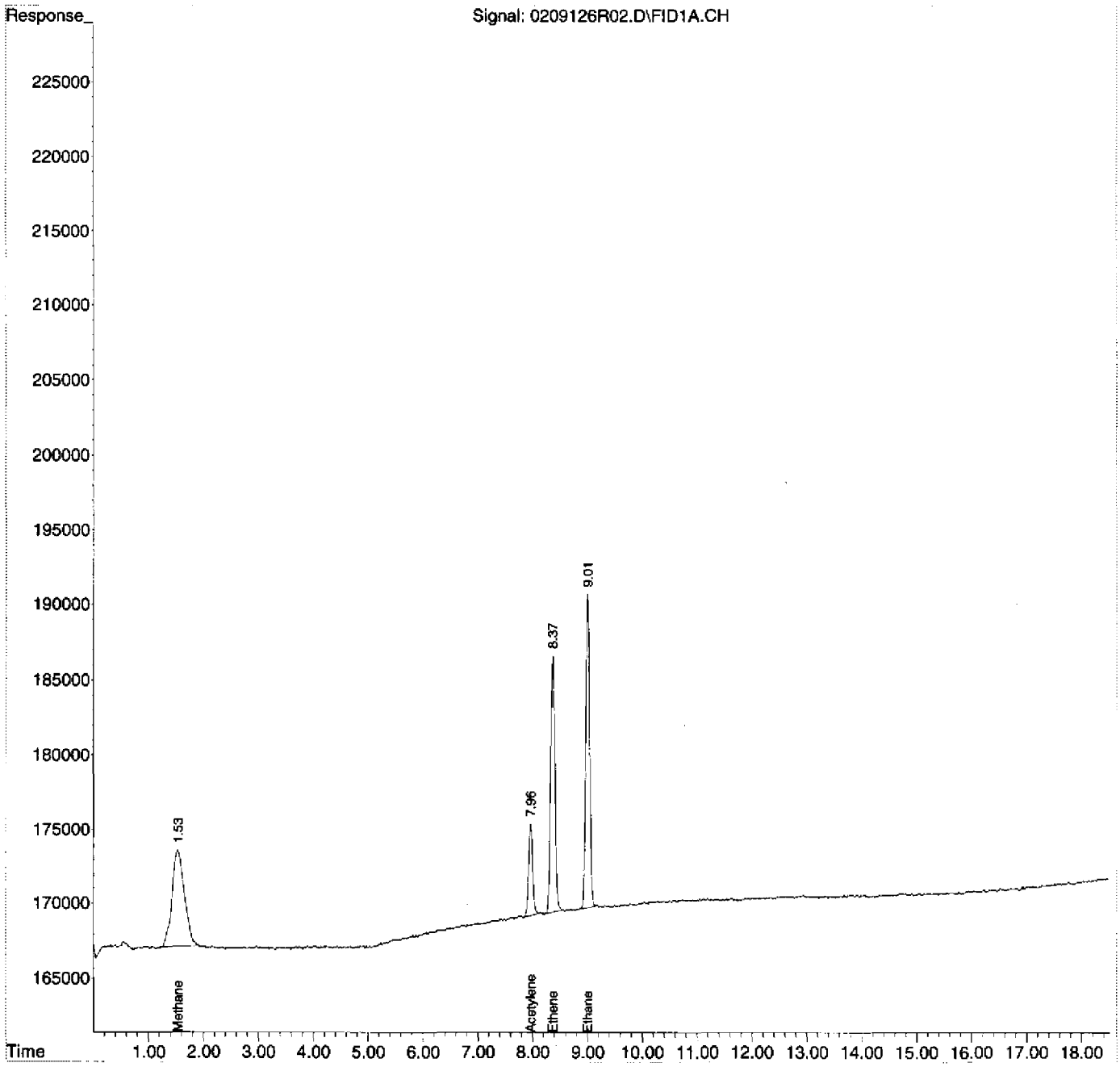
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\020912RSK\
Data File : 0209126R02.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 09 Feb 2012 11:25 am
Operator : rh
Sample : 2020032-LCV1
Misc : 2B09003
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 09 12:39:25 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\020912RSK\
Data File : 0209126R03.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 09 Feb 2012 11:51 am
Operator : rh
Sample : 2020032-LCV2
Misc : 2B09004
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 09 12:39:33 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	7.965	605533	1.732 ug/L
Spiked Amount 66.330 Range 66 - 153		Recovery =	2.61%#
Target Compounds			
1) TM Methane	1.536	1407158	1.382 ug/L
3) TM Ethene	8.370	1756369	1.978 ug/L
4) TM Ethane	9.008	2074137	2.146 ug/L
5) Qual Propane	0.000	0	N.D.
6) Qual Butane	0.000	0	N.D.

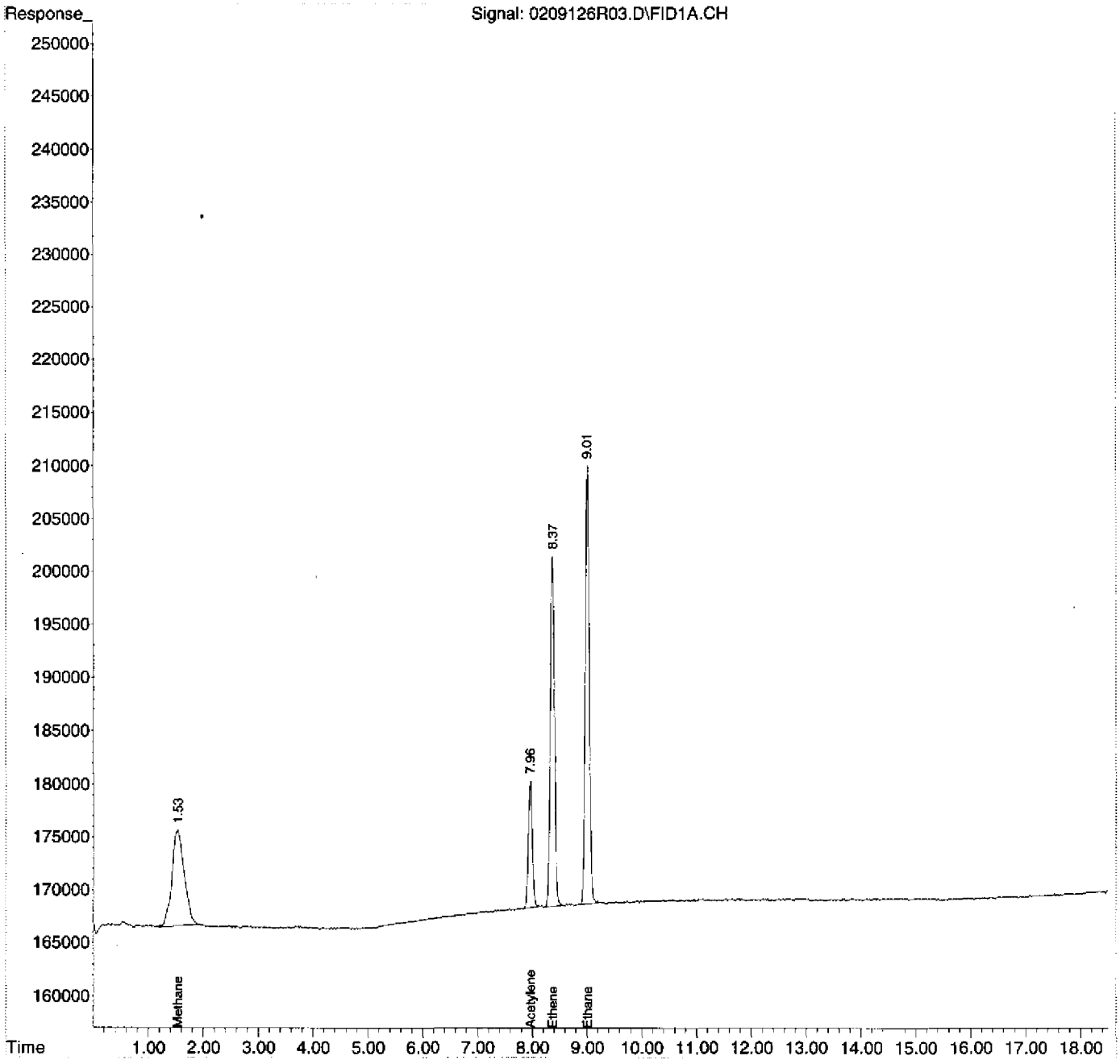
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\020912RSK\
Data File : 0209126R03.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 09 Feb 2012 11:51 am
Operator : rh
Sample : 2020032-LCV2
Misc : 2B09004
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 09 12:39:33 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\020912RSK\
Data File : 0209126R04.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 09 Feb 2012 12:18 pm
Operator : rh
Sample : B2B0041-BLK1
Misc : MB
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 09 12:38:54 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	7.958	25680866	73.476 ug/L
Spiked Amount 66.330 Range 66 - 153		Recovery =	110.77%
Target Compounds			
1) TM Methane	1.538	741871	0.729 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.

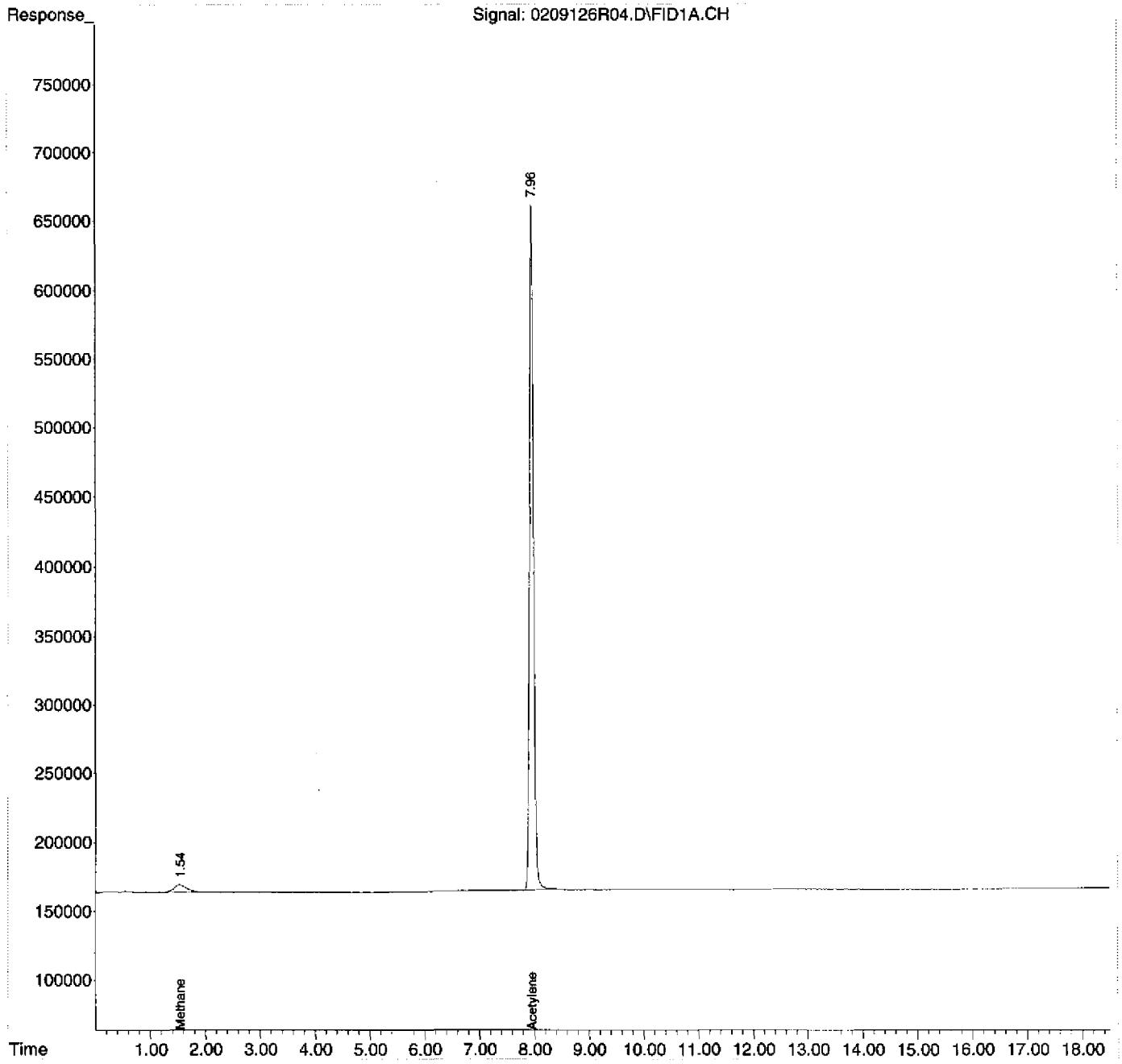
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\020912RSK\
Data File : 0209126R04.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 09 Feb 2012 12:18 pm
Operator : rh
Sample : B2B0041-BLK1
Misc : MB
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 09 12:38:54 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



RSK-175 LCSSUMMARY REPORT

Instrument Name: AG6890N-6
File Name: 0209126R05.D
Date Acquired: 2/9/2012
Operator: rh

Analyte	Spike ug/L	Calculated ug/L	QC Limits	%R	Status
Methane	44.099	44.910	70-130	101.8%	pass
Acetylene	72.166	76.233	66.4-153	105.6%	pass
Ethene	78.183	83.224	78-138	106.4%	pass
Ethane	83.269	88.601	77-137	106.4%	pass

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\020912RSK\
Data File : 0209126R05.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 09 Feb 2012 12:53 pm
Operator : rh
Sample : B2B0041-BS1
Misc : LCS
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Feb 10 08:37:42 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	7.957	26644707	76.233 ug/L
Spiked Amount 66.330 Range 66 - 153		Recovery =	114.93%
Target Compounds			
1) TM Methane	1.527	45719904	44.910 ug/L
3) TM Ethene	8.367	73897158	83.224 ug/L
4) TM Ethane	9.005	85639059	88.601 ug/L
5) Qual Propane	0.000	0	N.D.
6) Qual Butane	0.000	0	N.D.

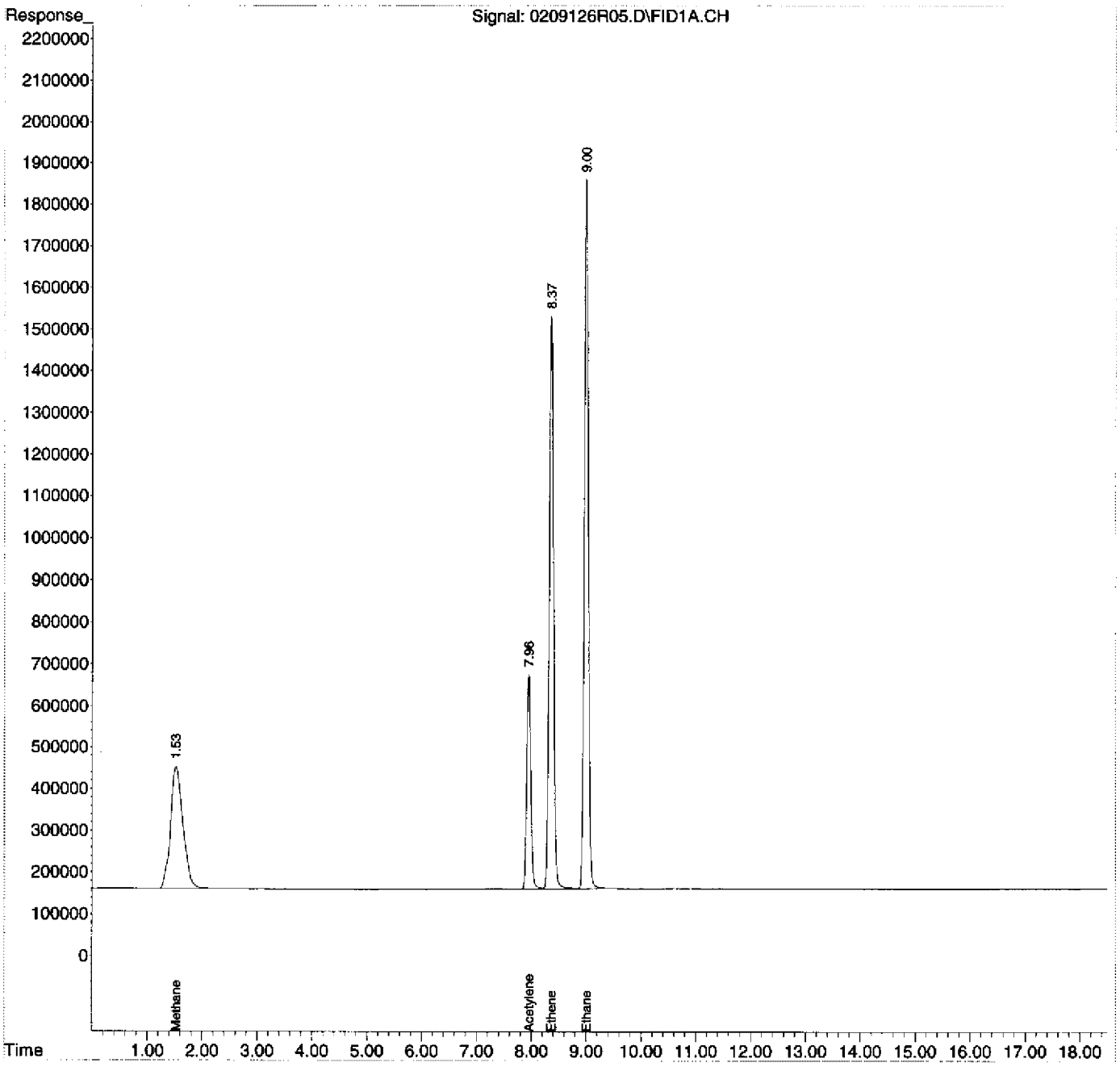
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\020912RSK\
Data File : 0209126R05.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 09 Feb 2012 12:53 pm
Operator : rh
Sample : B2B0041-BS1
Misc : LCS
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Feb 10 08:37:42 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\020912RSK\
Data File : 0209126R10.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 09 Feb 2012 3:22 pm
Operator : rh
Sample : 1202013-09RE1
Misc : HW39P 16.1ML
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Feb 10 08:38:21 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	7.957	20532376	58.745 ug/L
Spiked Amount 66.330 Range 66 - 153		Recovery =	88.56%
Target Compounds			
1) TM Methane	1.527	18976419	18.640 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.

methane result similar to first run,
Confirms there was no carry over.
Report first run.

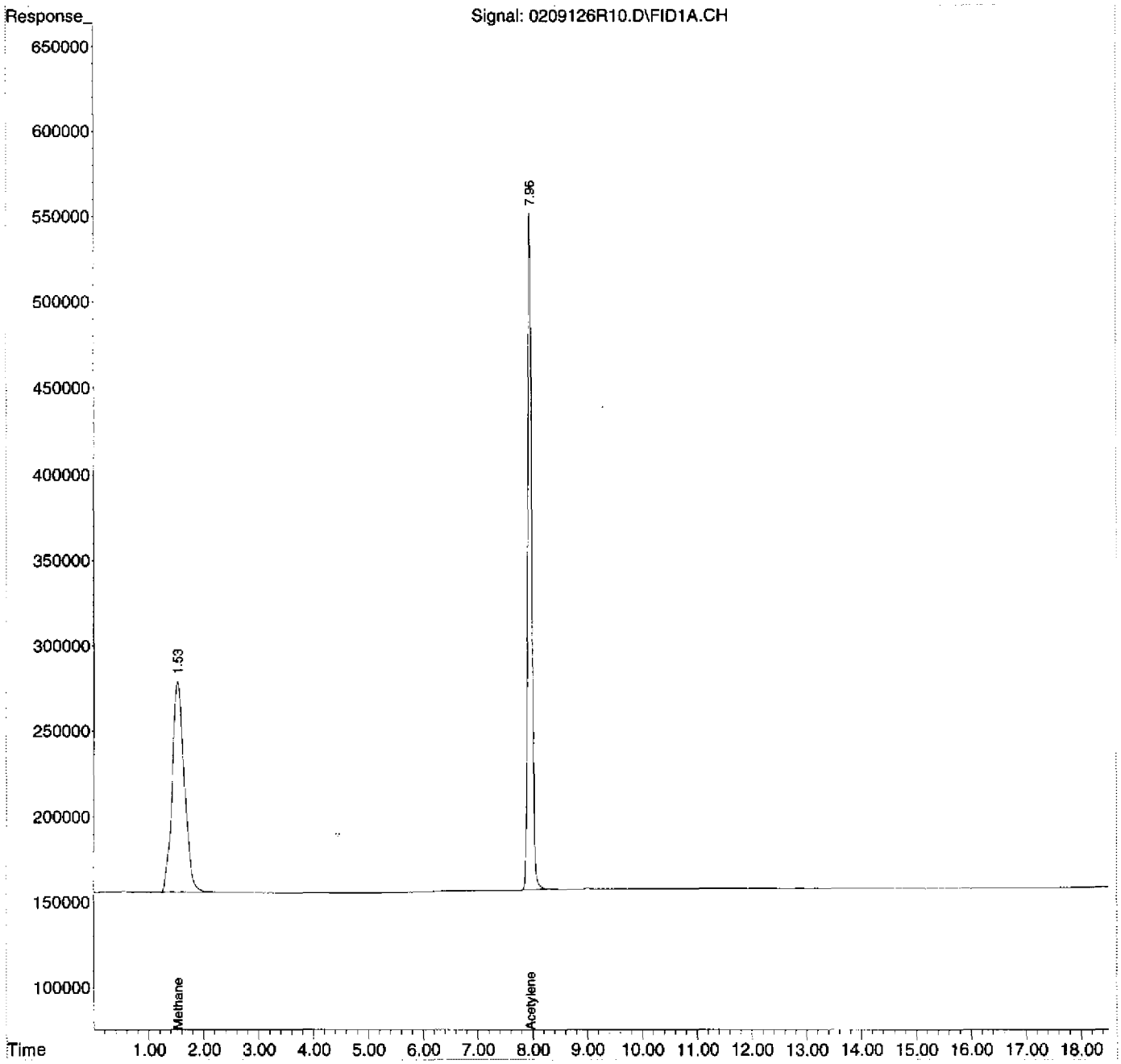
FH
2/10/12

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\020912RSK\
Data File : 0209126R10.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 09 Feb 2012 3:22 pm
Operator : rh
Sample : 1202013-09RE1
Misc : HW39P 16.1ML
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Feb 10 08:38:21 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



Evaluate Continuing Calibration Report

Data Path : D:\MSDCHEM\1\2012\DATA\020912RSK\
Data File : 0209126R23.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 09 Feb 2012 10:58 pm
Operator : rh
Sample : 2020032-CCV2
Misc : 2B09005
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Feb 10 08:40:05 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

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	1.018	1.041 E6	-2.3	104	0.00
2	S	Acetylene	349.516	365.049 E3	-4.4	98	-0.02
3	TM	Ethene	887.936	928.494 E3	-4.6	102	0.00
4	TM	Ethane	966.567	1010.400 E3	-4.5	103	0.01

Evaluate Continuing Calibration Report - Not Founds

5	QualPropane	0.000	0.000	0.0	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\020912RSK\
Data File : 0209126R23.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 09 Feb 2012 10:58 pm
Operator : rh
Sample : 2020032-CCV2
Misc : 2B09005
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Feb 10 08:40:05 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	7.961	7903305	22.612 ug/L
Spiked Amount 66.330 Range 66 - 153		Recovery =	34.09%#
Target Compounds			
1) TM Methane	1.533	13774229	13.530 ug/L
3) TM Ethene	8.370	21777818	24.526 ug/L
4) TM Ethane	9.008	25240805	26.114 ug/L
5) Qual Propane	0.000	0	N.D.
6) Qual Butane	0.000	0	N.D.

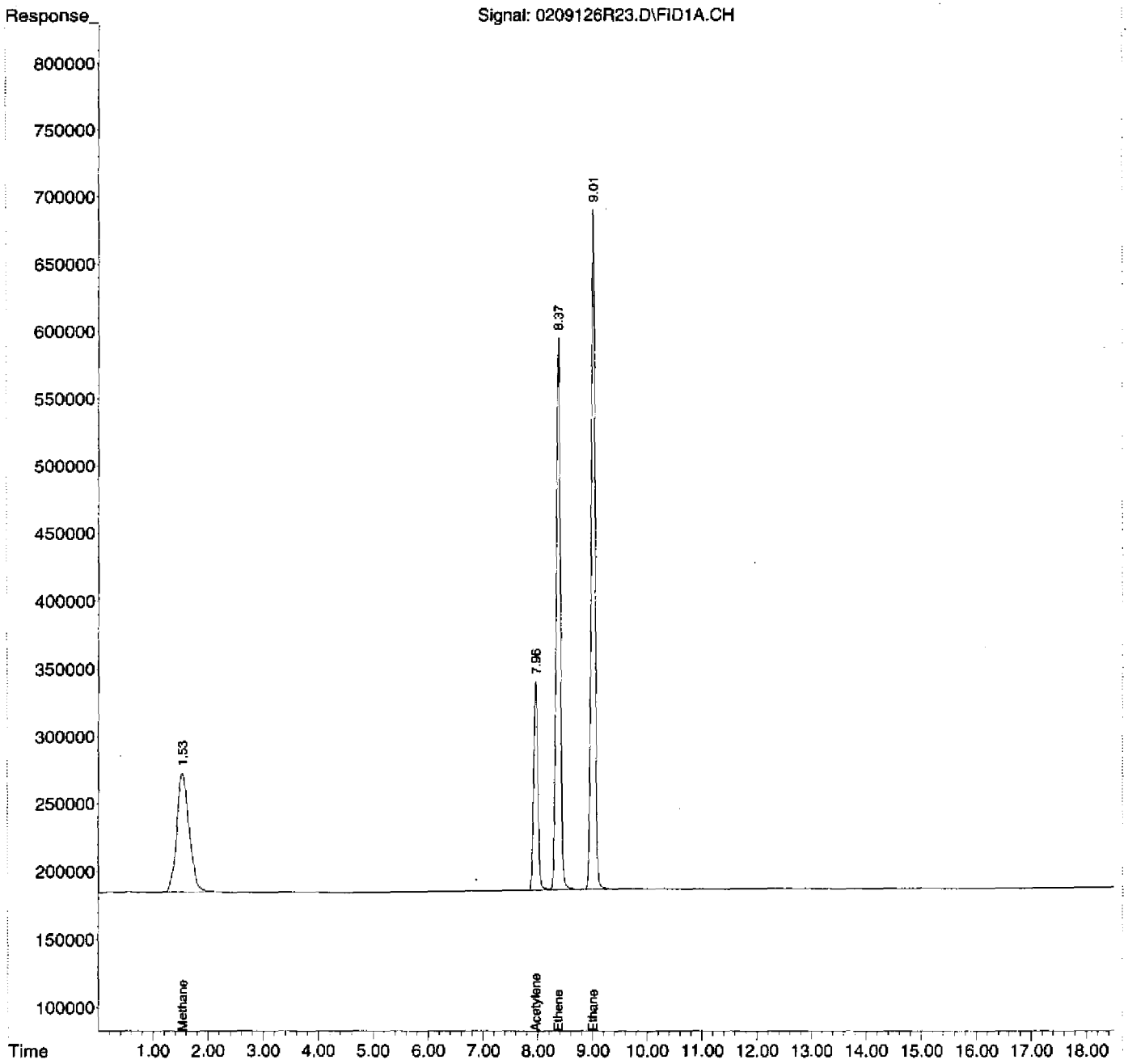
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\020912RSK\
Data File : 0209126R23.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 09 Feb 2012 10:58 pm
Operator : rh
Sample : 2020032-CCV2
Misc : 2B09005
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Feb 10 08:40:05 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\020912RSK\
Data File : 0209126R24.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 09 Feb 2012 11:24 pm
Operator : rh
Sample : 2020032-CCV3
Misc : 2B09005
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Feb 10 08:40:13 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	7.962	7909495	22.630 ug/L
Spiked Amount 66.330 Range 66 - 153		Recovery =	34.12%#
Target Compounds			
1) TM Methane	1.529	12982241	12.752 ug/L
3) TM Ethene	8.369	20648832	23.255 ug/L
4) TM Ethane	9.008	23767750	24.590 ug/L
5) Qual Propane	0.000	0	N.D.
6) Qual Butane	0.000	0	N.D.

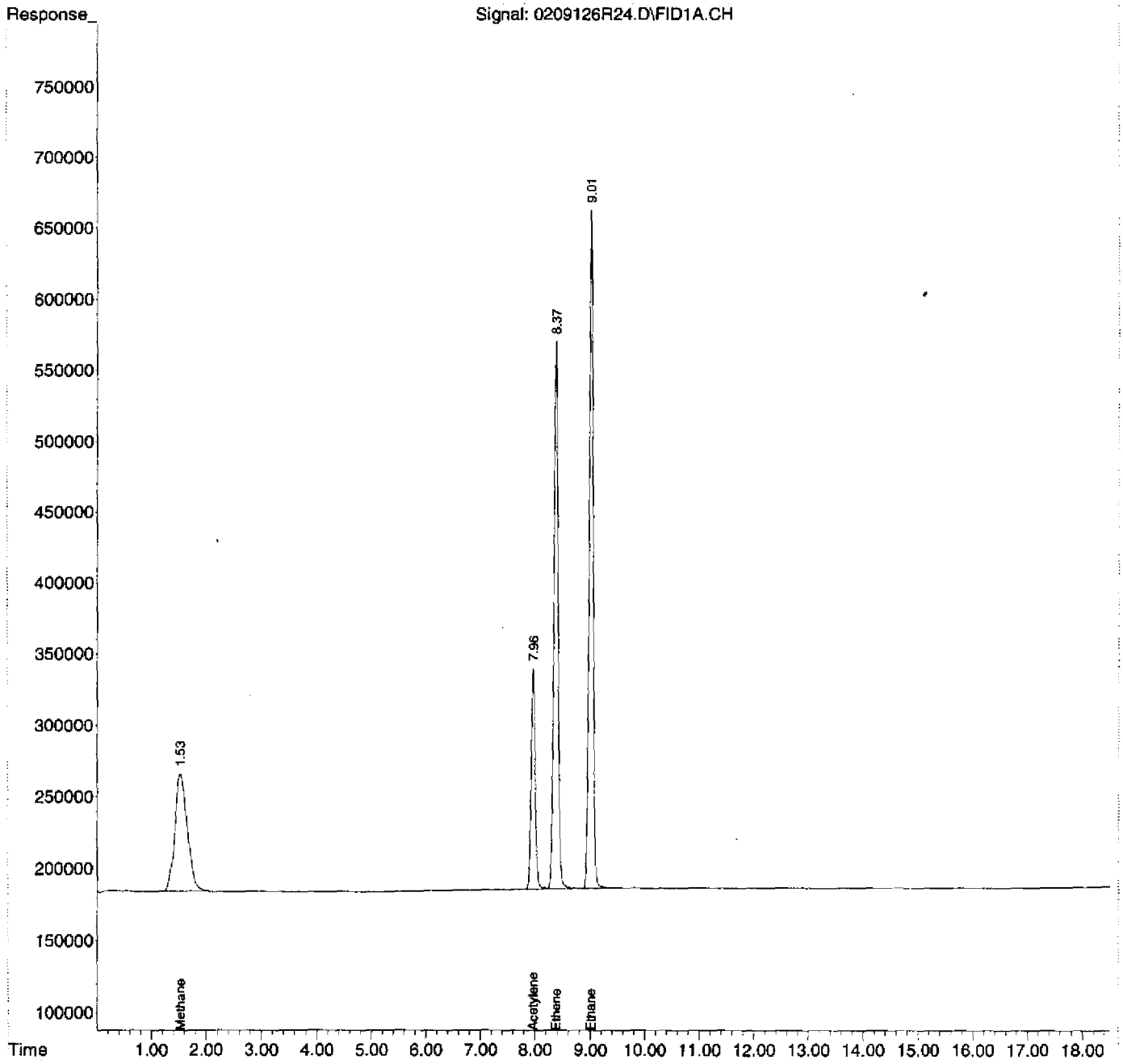
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2012\DATA\020912RSK\
Data File : 0209126R24.D
Signal(s) : FID1A.CH
InstName : AG6890N-6
DataAcq Meth:0126126RSK.M
Acq On : 09 Feb 2012 11:24 pm
Operator : rh
Sample : 2020032-CCV3
Misc : 2B09005
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Feb 10 08:40:13 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



DIM0278957
DIM0278627

PREPARATION BENCH SHEET

B2B0041

EPA Region 9 Laboratory

Printed: 2/9/2012 2:47:51PM

Project: R33911 - Dimock Residential Groundwater

Matrix: Water **Analysis: Dissolved HC Gases** **Prepared using: Volatiles - RSK175** **Surrogate used: 1L13003**

Lab Number	SampleName	Prepared	Initial (mL)	Final (mL)	Spike ID	Source ID	ul Spike	ul Surrogate	Prepared By	pH	Weight 1	Weight 2	Extraction Comments
1202013-09RE1 F	HW39-P	02/06/12 16:07	16.1	16.1				100	RFH	2			5 day prelim results
1202020-03RE1 E	HW31	02/09/11 11:07	0.15	16.1				100	RFH	2			5 day prelim results
1202020-05RE1 E	HW31z	02/09/11 11:07	0.15	16.1				100	RFH	2			5 day prelim results
1202020-11RE1 E	HW15a	02/09/11 11:07	0.2	16.1				100	RFH	2			5 day prelim results
1202020-12RE1 F	HW15a-P	02/08/12 09:35	16.1	16.1				100	RFH	2			5 day prelim results
1202023-01 E	FB12	02/09/11 11:07	16.1	16.1				100	RFH	2			5 day prelim results
1202023-02 E	HW51	02/09/11 11:07	16.1	16.1				100	RFH	2			5 day prelim results
1202023-03 D	HW51-P	02/09/11 11:07	16.1	16.1				100	RFH	2			5 day prelim results
1202023-04 C	TB27	02/09/11 11:07	16.1	16.1				100	RFH	2			5 day prelim results
1202023-05 E	HW47	02/09/11 11:07	16.1	16.1				100	RFH	2			5 day prelim results
1202023-06 E	HW47-P	02/09/11 11:07	16.1	16.1				100	RFH	2			5 day prelim results
1202023-07 C	TB29	02/09/11 11:07	16.1	16.1				100	RFH	2			5 day prelim results
1202023-08 E	FB13	02/09/11 11:07	16.1	16.1				100	RFH	2			5 day prelim results
1202023-09 E	HW38	02/09/11 11:07	16.1	16.1				100	RFH	2			5 day prelim results

Preparation Reviewed By — Date: 2/16/12

PREPARATION BENCH SHEET

B2B0041

EPA Region 9 Laboratory

Printed: 2/9/2012 2:47:51PM

Project: R33911 - Dimock Residential Groundwater

Matrix: Water **Analysis: Dissolved HC Gases** **Prepared using: Volatiles - RSK175** **Surrogate used: 1L13003**

Lab Number	SampleName	Prepared	Initial (mL)	Final (mL)	Spike ID	Source ID	ul Spike	ul Surrogate	Prepared By	pH	Weight 1	Weight 2	Extraction Comments
1202023-10 E	HW38-P	02/09/11 11:07	16.1	16.1				100	RFH	2			5 day prelim results
1202023-11 D	TB30	02/09/11 11:07	16.1	16.1				100	RFH	2			5 day prelim results
B2B0041-BLK1	Blank	02/09/12 11:07	16.1	16.1				100	RFH				
B2B0041-BS1	LCS	02/09/12 11:07	16.1	16.1	0L07008		100	100	RFH				

Reagents

Reagent #	Description

Preparation Reviewed By — Date: 2/10/12