received 09/27/2013
Project 2130

Total Volatile Petroleum Hydrocarbons (Gasoline)

Case Narrative

Colorado Oil & Gas Conservation Commission

TBAL

Work Order Number: 1308545

1. This report consists of 2 water samples. The samples were received cool and intact by ALS on 08/30/2013.

   All water samples were free of head space prior to analysis.

   The samples had a pH < 2 at the time of analysis.

2. These samples were prepared and analyzed according to SW-846, 3rd Edition procedures. Specifically, the water samples were prepared by heating and purging 5ml using purge and trap procedures based on Method 5030C. The calibration curve was also prepared using the heated purge.

3. The samples were analyzed following the current revision of SOP 425 generally based on SW-846 Methods 8000C and 8015D. TVPH is a multicomponent mixture and is quantitated by summing the entire carbon range, rather than individual peaks. The carbon range integrated in this test extends from C6 to C10.

4. All initial and continuing calibration criteria were met.

5. The method blank associated with this project was below the MDL for gasoline range organics.

6. All laboratory control sample and laboratory control sample duplicate recoveries and RPDs were within the acceptance criteria.

7. Sample 1308545-3 was designated as the quality control sample for this analysis.

Similarity of matrix and therefore relevance of the QC results should not be automatically inferred for any sample other than the native sample selected for QC.

All matrix spike and matrix spike duplicate recoveries and RPDs were within the acceptance criteria.

8. All samples were extracted and analyzed within the established holding time.

9. All surrogate recoveries were within acceptance criteria.

10. Manual integrations are performed when needed to provide consistent and defensible data following the guidelines in the current revision of SOP 939. Whenever manual integrations are performed, before and after chromatograms of the peak that was manually integrated are included in the report along with the reason why the re-integration was necessary.

The data contained in the following report have been reviewed and approved by the personnel listed below. In addition, ALS certifies that the analyses reported herein are true, complete and correct within the limits of the methods employed.

Mindy Norton — 9/10/13
Mindy Norton
Organics Primary Data Reviewer
Date

Joel Nolte — 9-10-13
Organics Final Data Reviewer
Date

ALS
Data Qualifier Flags
Fuels

G:	**This flag indicates that a pattern resembling gasoline was detected in this sample.**
D:	**This flag indicates that a pattern resembling diesel was detected in this sample.**
M:	**This flag indicates that a pattern resembling motor oil was detected in this sample.**
H:	**This flag indicates that the fuel pattern was in the heavier end of the retention time window for the analyte of interest.**
L:	**This flag indicates that the fuel pattern was in the lighter end of the retention time window for the analyte of interest.**
Z:	**This flag indicates that a significant fraction of the reported result did not resemble the patterns of any of the following petroleum hydrocarbon products:** **gasoline** **JP-4** **JP-8** **diesel** **mineral spirits** **motor oil** **Stoddard solvent** **bunker C** **Multiple flags may be used to indicate the presence of more than one product or component.**

ALS
Data Qualifier Flags
Chromatography and Mass Spectrometry

U or ND:	**This flag indicates that the compound was analyzed for but not detected.**
J:	**This flag indicates an estimated value. This flag is used as follows : (1) when estimating a concentration for tentatively identified compounds (TICs) where a 1:1 response is assumed; (2) when the mass spectral and retention time data indicate the presence of a compound that meets the volatile and semivolatile GC/MS identification criteria, and the result is less than the reporting limit (RL) but greater than the method detection limit (MDL); (3) when the data indicate the presence of a compound that meets the identification criteria, and the result is less than the RL but greater than the MDL; and (4) the reported value is estimated.**
B:	**This flag is used when the analyte is detected in the associated method blank as well as in the sample. It indicates probable blank contamination and warns the data user. This flag shall be used for a tentatively identified compound (TIC) as well as for a positively identified target compound.**
E:	**This flag identifies compounds whose concentration exceeds the upper level of the calibration range.**
A:	**This flag indicates that a tentatively identified compound is a suspected aldol-condensation product.**
X:	**This flag indicates that the analyte was diluted below an accurate quantitation level.**
***:**	**This flag indicates that a spike recovery is outside the control criteria.**
+:	**This flag indicates that the relative percent difference (RPD) exceeds the control criteria.**

Chain of Custody

ALS Environmental -- FC

Sample Number(s) Cross-Reference Table

OrderNum: 1308545
Client Name: Colorado Oil & Gas Conservation Commission
Client Project Name: TBAL
Client Project Number:
Client PO Number: PHA 14-22

Client Sample Number	Lab Sample Number	COC Number	Matrix	Date Collected	Time Collected
704681 Dolores WW	1308545-1		WATER	29-Aug-13	9:01
Trip Blank	1308545-2		WATER	29-Aug-13	6:00
705737 Dolores MW	1308545-3		WATER	29-Aug-13	10:20
704681 Dolores WW 20	1308545-4		WATER	29-Aug-13	8:44
704681 Dolores WW 5	1308545-5		WATER	29-Aug-13	8:26

ALS Laboratory Group

225 Commerce Drive, Fort Collins, Colorado 80524
TF: (800) 443-1511 PH: (970) 490-1511 FX: (970) 490-1522

Chain-of-Custody

Form 202r8

WORKORDER #: 1308545

		SAMPLER	PAE	DATE	29 A 2013	PAGE	1 of 1
PROJECT NAME	TBAL	SITE ID		TURNAROUND	7 E-day	DISPOSAL	(By Lab) or Return to Client
PROJECT No.		EDD FORMAT					
		PURCHASE ORDER					
COMPANY NAME	Colo. Oil + Gas Cons Com	BILL TO COMPANY					
SEND REPORT TO	Peter Gintautas	INVOICE ATTN TO					
ADDRESS	PO Box 108	ADDRESS					
CITY / STATE / ZIP	Trinidad CO 81082	CITY / STATE / ZIP					
PHONE	719 846 3091	PHONE					
FAX		FAX					
E-MAIL	peter.gintautas@state.co.us	E-MAIL					

Lab ID	Field ID	Matrix	Sample Date	Sample Time	# Bottles	Pres.	QC	8260 + TICs	TVPH	8270 + 1,4-Dioxane + TICs	8270 SIM PAH	200.7 metals dissolved	200.8 metals dissolved	SAR Calc	Anion Cation Balance	Alk (tot, HCO3, CO3)	pH	Conductance	Anions	TDS	TOC
(1)	704681 Dolores MW	W	29 Aug 13	09:01	6	1		X	X												
	"	↓	↓	↓	6	8				X		X	X	X	X	X	X	X	X	X	
	"	↓	↓	↓	1	3															X
(2)	Trip Blak	W	29 Aug 13	06:00	2	1		X													
(3)	705737 Dolores MW	W	29 Aug 13	10:20	6	1		X	X												
	" "	"	"		3	8	X			X	X										
					6	8					X	X	X	X	X	X	X	X	X	X	
		↓			1	3															X
(4)	704681 Dolores MW 20	W	29 Aug 13	08:44	3	1		X													
(5)	704681 Dolores MW 5	W	29 Aug 13	08:26	3	1		X													

*Time Zone (Circle): EST CST (MST) PST Matrix: O = oil S = soil NS = non-soil solid W = water L = liquid E = extract F = filter

For metals or anions, please detail analytes below.

Comments: Anions = Br, Cl, F, NO2, NO3, SO4
filter and preserve metals on reagent = dissolved metals list as in other TBAL

QC PACKAGE (check below)	
	LEVEL II (Standard QC)
	LEVEL III (Std QC + forms)
X	LEVEL IV (Std QC + forms + raw data) EDD only

Preservative Key: 1-HCl 2-HNO3 3-H2SO4 4-NaOH 5-NaHSO4 7-Other 8-4 degrees C 9-5035

	SIGNATURE	PRINTED NAME	DATE	TIME
RELINQUISHED BY	[signature]	Peter Gintautas	29 Aug 13	16:40
RECEIVED BY	[signature]	Jacob Reddy	8/30/13	0930
RELINQUISHED BY				
RECEIVED BY				
RELINQUISHED BY				
RECEIVED BY				

ALS Environmental - Fort Collins
CONDITION OF SAMPLE UPON RECEIPT FORM

Client: COGCC Workorder No: 1308545

Project Manager: ARW Initials: JLR Date: 8/30/13

1. Does this project require any special handling in addition to standard ALS procedures?		YES	(NO)
2. Are custody seals on shipping containers intact?	NONE	(YES)	NO
3. Are Custody seals on sample containers intact?	(NONE)	YES	NO
4. Is there a COC (Chain-of-Custody) present or other representative documents?		(YES)	NO
5. Are the COC and bottle labels complete and legible?		(YES)	NO
6. Is the COC in agreement with samples received? (IDs, dates, times, no. of samples, no. of containers, matrix, requested analyses, etc.)		(YES)	NO
7. Were airbills / shipping documents present and/or removable?	DROP OFF	(YES)	NO
8. Are all aqueous samples requiring preservation preserved correctly? (excluding volatiles)	N/A	(YES)	NO
9. Are all aqueous non-preserved samples pH 4-9?	N/A	(YES)	NO
10. Is there sufficient sample for the requested analyses?		(YES)	NO
11. Were all samples placed in the proper containers for the requested analyses?		(YES)	NO
12. Are all samples within holding times for the requested analyses?		(YES)	NO
13. Were all sample containers received intact? (not broken or leaking, etc.)		(YES)	NO
14. Are all samples requiring no headspace (VOC, GRO, RSK/MEE, Rx CN/S, radon) headspace free? Size of bubble: ____ < green pea ____ > green pea	N/A	(YES)	NO
15. Do any water samples contain sediment? Amount Amount of sediment: ____ dusting ____ moderate ____ heavy	N/A	YES	(NO)
16. Were the samples shipped on ice?		(YES)	NO
17. Were cooler temperatures measured at 0.1-6.0°C? IR gun used*: #2 (#4)	RAD ONLY	(YES)	NO

Cooler #:	1	2							
Temperature (°C):	2°C	4°C							
No. of custody seals on cooler:	2	1							
DOT Survey/ Acceptance Information — External µR/hr reading:	11	11							
Background µR/hr reading:	10								

Were external µR/hr readings ≤ two times background and within DOT acceptance criteria? (YES) / NO / NA (If no, see Form 008.)

Additional Information: PROVIDE DETAILS BELOW FOR A NO RESPONSE TO ANY QUESTION ABOVE, EXCEPT #1 AND #16.

If applicable, was the client contacted? YES / NO / (NA) Contact: _____ Date/Time: _____

Project Manager Signature / Date: 8/30/13

*IR Gun #2: Oakton, SN 29922500201-0066
*IR Gun #4: Oakton, SN 2372220101-0002

1308545


PETER GINTAUTAS
719-846-3091
COLORADO OIL & GAS CONSERVATIO
213 CORUNDUM RD
TRINIDAD CO 81082
41 LBS
2 OF 2
DWT: 26,16,15
SHIP TO:
AMY WOLF
970-490-1511
ALS LABORATORY GROUP
225 COMMERCE DRIVE
FORT COLLINS CO 80524-2762
CO 805 0-01
UPS NEXT DAY AIR
TRACKING #: 1Z 014 8WR 01 9830 5716
1
BILLING: P/P
Reference#1: Special Project TBAL
UIS 15.6.12. WNTE90 36.0A 01/2013
TM

Analytical Results

Gasoline Range Organics

Method SW8015D

Method Blank

Lab Name: ALS Environmental -- FC

Work Order Number: 1308545

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: TBAL

Lab ID: HC130909-6MB

Sample Matrix: WATER
% Moisture: N/A
Date Collected: N/A
Date Extracted: 09-Sep-13
Date Analyzed: 09-Sep-13

Prep Batch: HC130909-6
QCBatchID: HC130909-6-1
Run ID: HC130909-6A
Cleanup: NONE
Basis: N/A
File Name: 09939.dat

Sample Aliquot: 5 ml
Final Volume: 5 ml
Result Units: MG/L
Clean DF: 1

CASNO	Target Analyte	DF	Result	RptLimit LOD/LOQ	MDL	Result Qualifier	EPA Qualifier
8006-61-9	GASOLINE RANGE ORGANICS	1	0.1	0.1	0.01	U	

Surrogate Recovery

CASNO	Surrogate Analyte	Result	Flag	Spike Amount	Percent Recovery	Control Limits
193533-92-5	2,3,4-TRIFLUOROTOLUENE	0.0808		0.1	81	74 - 129

Data Package ID: *HCG1308545-1*

Gasoline Range Organics

Method SW8015D

Sample Results

Lab Name: ALS Environmental -- FC

Work Order Number: 1308545

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: TBAL

Field ID: 704681 Dolores WW
Lab ID: 1308545-1

Sample Matrix: WATER
% Moisture: N/A
Date Collected: 29-Aug-13
Date Extracted: 09-Sep-13
Date Analyzed: 09-Sep-13
Prep Method: SW5030 Rev C

Prep Batch: HC130909-6
QCBatchID: HC130909-6-1
Run ID: HC130909-6A
Cleanup: NONE
Basis: As Received
File Name: 09954.dat

Analyst: Tyler Knaebel
Sample Aliquot: 5 ml
Final Volume: 5 ml
Result Units: MG/L
Clean DF: 1

CASNO	Target Analyte	Dilution Factor	Result	RptLimit\ LOD\LOQ	MDL/DL	Result Qualifier	EPA Qualifier
8006-61-9	GASOLINE RANGE ORGANICS	1	0.1	0.1	0.01	U	

Surrogate Recovery

CASNO	Surrogate Analyte	Result	Flag	Spike Amount	Percent Recovery	Control Limits
193533-92-5	2,3,4-TRIFLUOROTOLUENE	0.0868		0.1	87	74 - 129

Data Package ID: *HCG1308545-1*

Gasoline Range Organics

Method SW8015D

Sample Results

Lab Name: ALS Environmental -- FC

Work Order Number: 1308545

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: TBAL

Field ID: 705737 Dolores MW
Lab ID: 1308545-3

Sample Matrix: WATER
% Moisture: N/A
Date Collected: 29-Aug-13
Date Extracted: 09-Sep-13
Date Analyzed: 09-Sep-13
Prep Method: SW5030 Rev C

Prep Batch: HC130909-6
QCBatchID: HC130909-6-1
Run ID: HC130909-6A
Cleanup: NONE
Basis: As Received
File Name: 09955.dat

Analyst: Tyler Knaebel
Sample Aliquot: 5 ml
Final Volume: 5 ml
Result Units: MG/L
Clean DF: 1

CASNO	Target Analyte	Dilution Factor	Result	RptLimit\ LOD\LOQ	MDL/DL	Result Qualifier	EPA Qualifier
8006-61-9	GASOLINE RANGE ORGANICS	1	0.1	0.1	0.01	U	

Surrogate Recovery

CASNO	Surrogate Analyte	Result	Flag	Spike Amount	Percent Recovery	Control Limits
193533-92-5	2,3,4-TRIFLUOROTOLUENE	0.0874		0.1	87	74 - 129

Data Package ID: *HCG1308545-1*

Supporting QA/QC Data

Surrogate Summary for Gasoline Range Organics

Method SW8015D

Lab Name: ALS Environmental -- FC

Work Order Number: 1308545

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: TBAL

PrepBatchID: HC130909-6

QC Batch ID: HC130909-6-1

Date Extracted: 9/9/2013

Surrogate Compound	Control Limits Lower	Upper
2,3,4-trifluorotoluene	74	129

Lab ID	Client Sample ID	Date Collected	Date Received	% Recovery
HC130909-6MB	XXXXXXX	9/9/2013	8/30/2013	81
HC130909-6LCS	XXXXXXX	9/9/2013	8/30/2013	92
1308545-1	704681 Dolores WW	8/29/2013	8/30/2013	87
1308545-3	705737 Dolores MW	8/29/2013	8/30/2013	87
1308545-3MS	705737 Dolores MW	8/29/2013	8/30/2013	94
1308545-3MSD	705737 Dolores MW	8/29/2013	8/30/2013	92
HC130909-6LCSD	XXXXXXX	9/9/2013	8/30/2013	91

Data Package ID: *HCG1308545-1*

Gasoline Range Organics

Method SW8015D

Laboratory Control Sample and Laboratory Control Sample Duplicate

Lab Name: ALS Environmental -- FC

Work Order Number: 1308545

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: TBAL

Lab ID: HC130909-6LCS

Sample Matrix: WATER
% Moisture: N/A
Date Collected: N/A
Date Extracted: 09/09/2013
Date Analyzed: 09/09/2013
Prep Method: SW5030C

Prep Batch: HC130909-6
QCBatchID: HC130909-6-1
Run ID: HC130909-6A
Cleanup: NONE
Basis: N/A
File Name: 09949.dat

Sample Aliquot: 5 ml
Final Volume: 5 ml
Result Units: MG/L
Clean DF: 1

CASNO	Target Analyte	Spike Added	LCS Result	Reporting Limit	Result Qualifier	LCS % Rec.	Control Limits
8006-61-9	GASOLINE RANGE ORGANICS	1	1.02	0.1		102	79 - 118%

Lab ID: HC130909-6LCSD

Sample Matrix: WATER
% Moisture: N/A
Date Collected: N/A
Date Extracted: 09/09/2013
Date Analyzed: 09/09/2013
Prep Method: SW5030C

Prep Batch: HC130909-6
QCBatchID: HC130909-6-1
Run ID: HC130909-6A
Cleanup: NONE
Basis: N/A
File Name: 09960.dat

Sample Aliquot: 5 ml
Final Volume: 5 ml
Result Units: MG/L
Clean DF: 1

CASNO	Target Analyte	Spike Added	LCSD Result	Reporting Limit	Result Qualifier	LCSD % Rec.	RPD Limit	RPD
8006-61-9	GASOLINE RANGE ORGANICS	1	0.973	0.1		97	20	4

Surrogate Recovery LCS/LCSD

CASNO	Target Analyte	Spike Added	LCS % Rec.	LCS Flag	LCSD % Rec.	LCSD Flag	Control Limits
193533-92-	2,3,4-TRIFLUOROTOLUENE	0.1	92		91		74 - 129

Data Package ID: *HCG1308545-1*

Gasoline Range Organics

Method SW8015D

Matrix Spike And Matrix Spike Duplicate

Lab Name: ALS Environmental -- FC
Work Order Number: 1308545
Client Name: Colorado Oil & Gas Conservation Commission
ClientProject ID: TBAL

Field ID: 705737 Dolores MW
LabID: 1308545-3MS

Sample Matrix: WATER
% Moisture: N/A
Date Collected: 29-Aug-13
Date Extracted: 09-Sep-13
Date Analyzed: 09-Sep-13
Prep Method: SW5030 Rev C

Prep Batch: HC130909-6
QCBatchID: HC130909-6-1
Run ID: HC130909-6A
Cleanup: NONE
Basis: As Received

Sample Aliquot: 5 ml
Final Volume: 5 ml
Result Units: MG/L
File Name: 09956.dat

CASNO	Target Analyte	Sample Result	Samp Qual	MS Result	MS Qual	Reporting Limit	Spike Added	MS % Rec.	Control Limits
8006-61-9	GASOLINE RANGE ORGANICS	0.1	U	0.969		0.1	1	97	79 - 118%

Field ID: 705737 Dolores MW
LabID: 1308545-3MSD

Sample Matrix: WATER
% Moisture: N/A
Date Collected: 29-Aug-13
Date Extracted: 09-Sep-13
Date Analyzed: 09-Sep-13
Prep Method: SW5030 Rev C

Prep Batch: HC130909-6
QCBatchID: HC130909-6-1
Run ID: HC130909-6A
Cleanup: NONE
Basis: As Received

Sample Aliquot: 5 ml
Final Volume: 5 ml
Result Units: MG/L
File Name: 09957.dat

CASNO	Target Analyte	MSD Result	MSD Qual	Spike Added	MSD % Rec.	Reporting Limit	RPD Limit	RPD
8006-61-9	GASOLINE RANGE ORGANICS	0.949		1	95	0.1	30	2

Surrogate Recovery MS/MSD

CASNO	Target Analyte	Spike Added	MS % Rec.	MS Flag	MSD % Rec.	MSD Flag	Control Limits
193533-92-	2,3,4-TRIFLUOROTOLUENE	0.1	94		92		74 - 129

Data Package ID: *HCG1308545-1*

Prep Batch ID: HC130909-6

Start Date: 09/09/13
Start Time: 9:30
Prep Analyst: Tyler Knaebel

End Date: 09/09/13
End Time: 10:30

Concentration Method: NONE
Extract Method: SW5030C
Initial Volume Units: ml
Final Volume Units: ml

Batch Created By: twk
Date Created: 09/09/13
Time Created: 10:51
Validated By: twk
Date Validated: 09/10/13
Time Validated: 11:34

Comments:

QC Batch ID: HC130909-6-1

Lab ID	QC Type	Field ID	Matrix	Date Collected	Initial Wt/Vol	Final Wt/Vol	Cleanup Method	Cleanup DF	Order Number
HC130909-6	RVS	XXXXXX	WATER	XXXXXX	5	5	NONE	1	1308545
HC130909-6	MB	XXXXXX	WATER	XXXXXX	5	5	NONE	1	1308545
HC130909-6	LCS	XXXXXX	WATER	XXXXXX	5	5	NONE	1	1308545
HC130909-6	LCSD	XXXXXX	WATER	XXXXXX	5	5	NONE	1	1308545
1308545-3	MS	705737 Dolores MW	WATER	8/29/2013	5	5	NONE	1	1308545
1308545-3	MSD	705737 Dolores MW	WATER	8/29/2013	5	5	NONE	1	1308545
1308514-1	SMP	XXXXXX	WATER	XXXXXX	5	5	NONE	1	1308514
1308542-1	SMP	XXXXXX	WATER	XXXXXX	5	5	NONE	1	1308542
1308545-1	SMP	704681 Dolores WW	WATER	8/29/2013	5	5	NONE	1	1308545
1308545-3	SMP	705737 Dolores MW	WATER	8/29/2013	5	5	NONE	1	1308545
1309020-1	SMP	XXXXXX	WATER	XXXXXX	5	5	NONE	1	1309020
1309020-2	SMP	XXXXXX	WATER	XXXXXX	5	5	NONE	1	1309020
1309020-3	SMP	XXXXXX	WATER	XXXXXX	5	5	NONE	1	1309020
1309020-4	SMP	XXXXXX	WATER	XXXXXX	5	5	NONE	1	1309020
1309020-5	SMP	XXXXXX	WATER	XXXXXX	5	5	NONE	1	1309020
1309045-1	SMP	XXXXXX	WATER	XXXXXX	5	5	NONE	1	1309045
1309049-1	SMP	XXXXXX	WATER	XXXXXX	5	5	NONE	1	1309049
1309049-2	SMP	XXXXXX	WATER	XXXXXX	5	5	NONE	1	1309049
1309049-3	SMP	XXXXXX	WATER	XXXXXX	5	5	NONE	1	1309049
1309076-1	SMP	XXXXXX	WATER	XXXXXX	5	5	NONE	1	1309076
1309077-1	SMP	XXXXXX	WATER	XXXXXX	5	5	NONE	1	1309077
1309078-1	SMP	XXXXXX	WATER	XXXXXX	5	5	NONE	1	1309078
1309079-1	SMP	XXXXXX	WATER	XXXXXX	5	5	NONE	1	1309079
1309080-1	SMP	XXXXXX	WATER	XXXXXX	5	5	NONE	1	1309080
1309081-1	SMP	XXXXXX	WATER	XXXXXX	5	5	NONE	1	1309081

Calibration Report

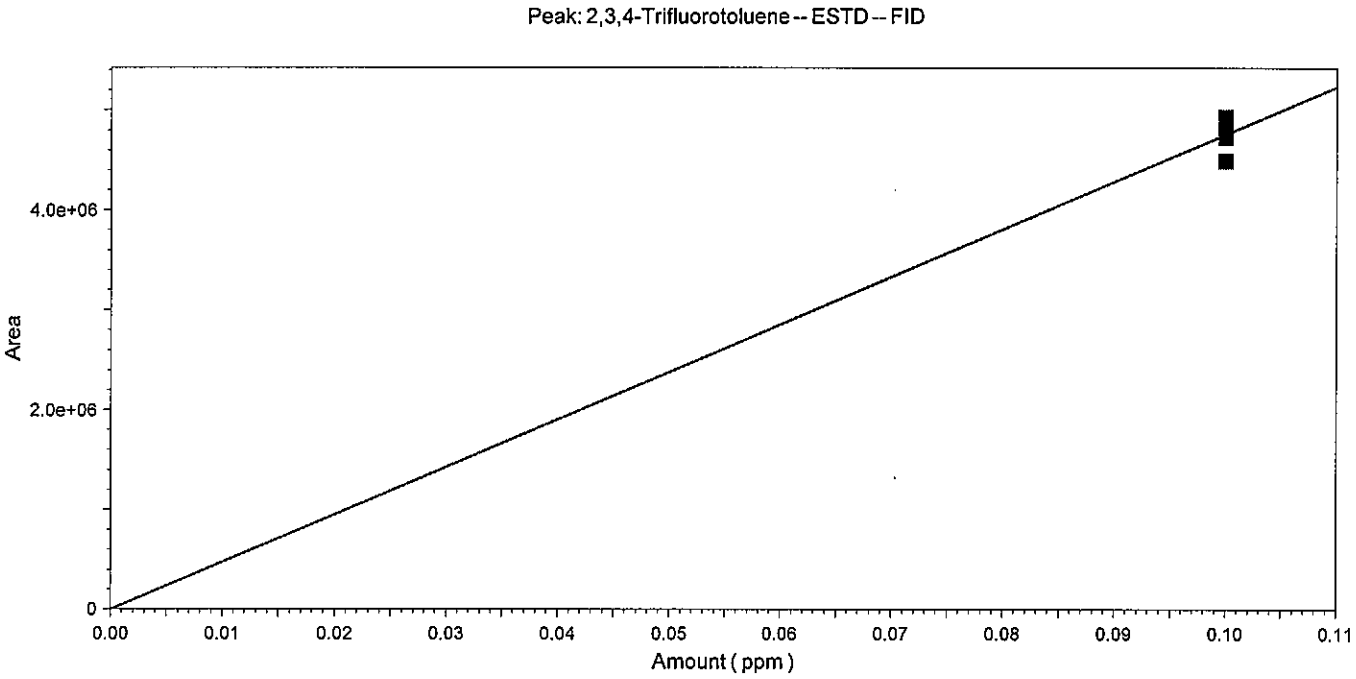
Sequence : \\gcserver\gcdata\Projects\GC6\Sequence\2013\gro130710.seq
User : noltej
Printed : 7/11/2013 9:10:28 AM

Instrument : GC6
Method Name : \\gcserver\gcdata\Projects\GC6\method\2013\gro130710.met
Method Created : 7/10/2013 12:18:55 PM

2,3,4-Trifluorotoluene (FID)
Average RF: 4.76299e+007 RF StDev: 1.96617e+006 RF %RSD: 4.12802
Scaling: None LSQ Weighting: None Force Through Zero: Off
Replicate Mode: Replace
Fit Type: Average RF

Average Slope: 4.76299e+007

	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7
Amount	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Area	4491022	4494798	4731042	4862105	4900285	4932548	4929161
RF	44910220	44947980	47310420	48621050	49002850	49325480	49291610
Last Area Residual	0.0057101 1	0.0056308 4	0.0006708 47	-0.002080 85	-0.002882 44	-0.003559 81	-0.003488 7
Rep StDev							
Rep %RSD							
Rep 1 Area	4491022	4494798	4731042	4862105	4900285	4932548	4929161

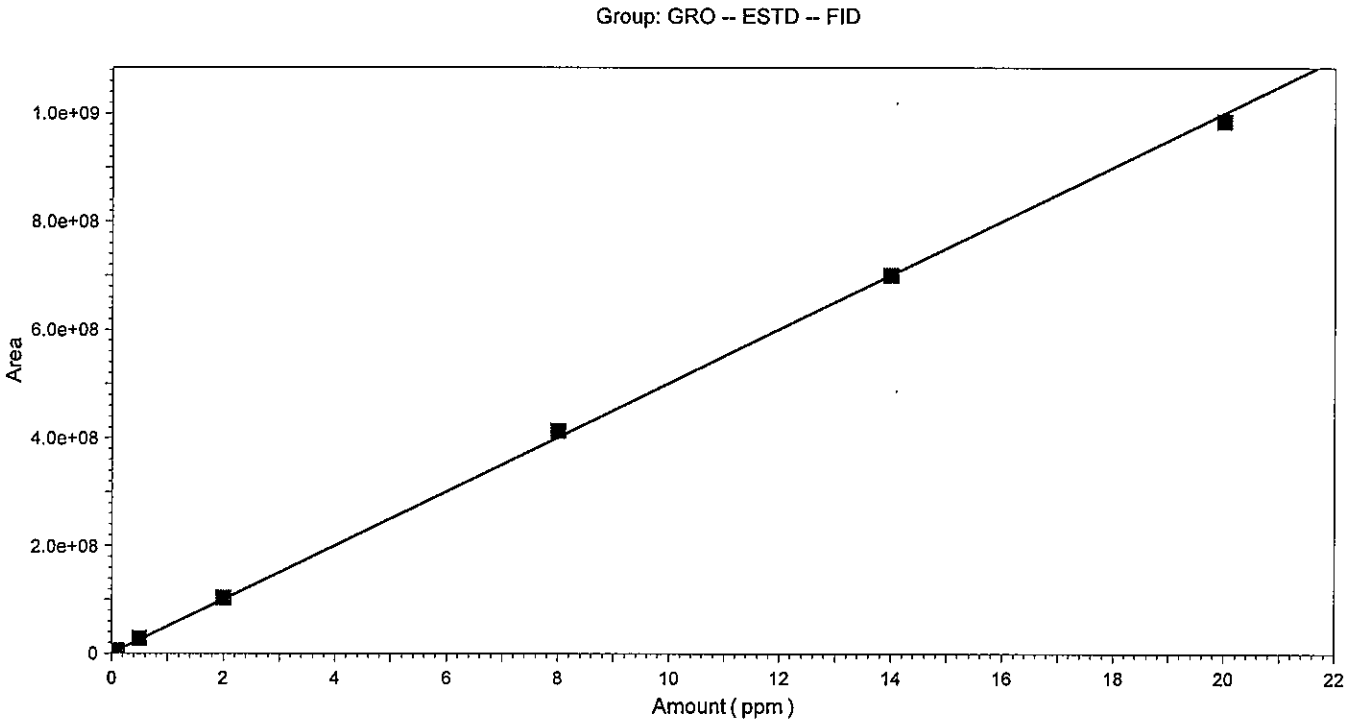


Calibration Report

Sequence : \\gcserver\gcdata\Projects\GC6\Sequence\2013\gro130710.seq
User : noltej
Printed : 7/11/2013 9:10:28 AM

GRO (FID)
Average RF: 5.15816e+007 RF StDev: 1.66439e+006 RF %RSD: 3.22672
Scaling: None LSQ Weighting: 1/Amount Force Through Zero: Off
Replicate Mode: Replace
Fit Type: Linear
y = 5.00897e+007x + 318910.
Goodness of fit (r^2): 0.999571

	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7
Amount	0.05	0.1	0.5	2	8	14	20
Area	2608716	5170443	27276086	10322916 4	41319582 6	70061188 3	98664431 0
RF	52174320	51704430	54552172	51614582	51649478. 25	50043705. 9285714	49332215. 5
Last Area Residual	0.0042858 7	0.0031430 6	-0.038178 3	-0.054520 2	-0.242755	0.0192155	0.308809
Rep StDev							
Rep %RSD							
Rep 1 Area	2608716	5170443	27276086	10322916 4	41319582 6	70061188 3	98664431 0



Gasoline Range Organics (8015) Calibration Verification Summary

ALSLG-Fort Collins

Acq. Sequence : \\gcserver\gcdata\Projects\GC6\Sequence\2013 \gro130710.seq
Instrument : GC6
Data Acquired by : noltej
Data Processed By : noltej

		(FID response) 2,3,4-Trifluorotoluene (surrogate)							(FID response) GRO			
Sample	Filename	Exp. RT (min.)	RT	Dev.	Avg CF	Conc. ppm	Nom. Conc.	% Rec.	Avg CF	Conc. ppm	Nom. Conc.	% Rec.
10ppm GRO ICV	09609.dat	5.370	5.367	-0.003	47629944.29	0.102	0.1	**102**	51581557.67	10.258	10	**103**
1ppm CCV	09617.dat	5.370	5.360	-0.010	47629944.29	0.100	0.1	**100**	51581557.67	1.013	1	**101**

Gasoline Range Organics (8015) Calibration Verification Summary

ALSLG-Fort Collins

Acq. Sequence : \\gcserver\gcdata\Projects\GC6\Sequence\2013 \gro130909.seq
Instrument : GC6
Data Acquired by : knaebelt
Data Processed By : knaebelt

		(FID response) *2,3,4-Trifluorotoluene (surrogate)*							(FID response) *GRO*			
Sample	Filename	Exp. RT (min.)	RT	Dev.	Avg CF	Conc. ppm	Nom. Conc.	% Rec.	Avg CF	Conc. ppm	Nom. Conc.	% Rec.
HC130909-6CCV	09938.dat	5.367	5.357	-0.010	47629944.29	0.093	0.1	**93**	51581557.67	0.817	1	**82**
HC130909-6CCS	09949.dat	5.367	5.357	-0.010	47629944.29	0.092	0.1	**92**	51581557.67	1.017	1	**102**
HC130909-6CCSD	09960.dat	5.367	5.357	-0.010	47629944.29	0.091	0.1	**91**	51581557.67	0.973	1	**97**
HC130909-6CCV	09966.dat	5.367	5.357	-0.010	47629944.29	0.089	0.1	**89**	51581557.67	0.964	1	**96**

Supporting Raw Data

TVPH / GRO (8015) Sequence Log

Logbook No. / Page : 3678 / 574

Analytical Method : 8015 GRO SOP : 425r16

Data Acquired By : noltej
Data Processed By : noltej

Instrument : GC6
(1st file) Acq. Date : 7/10/2013 1:05:50 PM
(1st file) Data Path : \\gcserver\gcdata\Projects\GC6\Data\2013\gro130710\09600.dat
Sequence File : \\gcserver\gcdata\Projects\GC6\Sequence\2013\gro130710.seq
Acq. Method Path : \\gcserver\gcdata\Projects\GC6\method\2013\gro130710.met

QC Name	GRO Std ID #	Spike Vol. Added (uL)	Final Std Vol. (uL)
CCV (LCS)	ST130508-1	10	5000
MS	ST130508-1	10	5000
ICV	ST121101-2	4	5000

Surr Std ID # : ST130508-3
Surr Spk Vol. (uL) : 1
(by autosampler)

Data File	Acq. Method	Sample	Auto Sampler Position	Head Space?	pH <= 2?	RR?		Comments
09600.dat	gro130710.met	blank	1	~~Y/N~~	~~Y/N~~	~~Y/N~~		
09601.dat	gro130710.met	blank	2	Y/N	Y/N	~~Y/N~~		(<MRL) SAL
09602.dat	gro130710.met	0.05ppm GRO ICAL	3	Y/N	Y/N	Y/N	ST130508-1, 5uL/50mL, 5mL	Acetone (PASS)
09603.dat	gro130710.met	0.1ppm GRO ICAL	4	Y/N	Y/N	Y/N	ST130508-1, 10uL/50mL, 5mL	
09604.dat	gro130710.met	0.5ppm GRO ICAL	5	Y/N	Y/N	Y/N	ST130508-1, 5uL/5mL FV	
09605.dat	gro130710.met	2ppm GRO ICAL	6	Y/N	Y/N	Y/N	ST130508-1, 20uL/5mL FV	
09606.dat	gro130710.met	8ppm GRO ICAL	7	Y/N	Y/N	Y/N	ST120801-4, 4uL/5mL FV	
09607.dat	gro130710.met	14ppm GRO ICAL	8	Y/N	Y/N	Y/N	ST120801-4, 7uL/5mL FV	
09608.dat	gro130710.met	20ppm GRO ICAL	9	Y/N	Y/N	Y/N		
09609.dat	gro130710.met	10ppm GRO ICV	10	Y/N	Y/N	Y/N	ST121101-2, 5uL/5mL FV	PASS
09610.dat	gro130710.met	HCG130708-1CCS	11	Y/N	Y/N	Y/N	soil, 1ppm	PASS
09611.dat	gro130710.met	HCG130708-1MB	12	Y/N	Y/N	Y/N	soil	<MRL
09612.dat	gro130710.met	HCG130708-1RVS	13	Y/N	Y/N	Y/N	soil, 0.05ppm	
09613.dat	gro130710.met	1307023-1	14	Y/N	Y/N	Y/N	soil, 1.21g	
09614.dat	gro130710.met	1307023-1MS	15	Y/N	Y/N	Y/N	soil, 1.17g	(Low)
09615.dat	gro130710.met	1307023-1MSD	16	Y/N	Y/N	Y/N	soil, 1.2g	
09616.dat	gro130710.met	HCG130708-1CCSD	17	Y/N	Y/N	Y/N	soil, 1ppm	PASS
09617.dat	gro130710.met	1ppm CCV	18	~~Y/N~~	~~Y/N~~	Y/N		PASS

TVPH / GRO (8015) Sequence Log

Logbook No. / Page : 3678 / 592

Analytical Method : 8015 GRO SOP : 425r16

Data Acquired By : knaebelt
Data Processed By : knaebelt

Instrument : GC6
(1st file) Acq. Date : 9/9/2013 9:18:22 AM
(1st file) Data Path : \\gcserver\gcdata\Projects\GC6\Data\2013\gro130909\09936.dat
Sequence File : \\gcserver\gcdata\Projects\GC6\Sequence\2013\gro130909.seq
Acq. Method Path : \\gcserver\gcdata\Projects\GC6\method\2013\gro130710c.met

QC Name	GRO Std ID #	Spike Vol. Added (uL)	Final Std Vol. (uL)
CCV (LCS)	ST1308~~12-1~~ ~~20-1~~ 12-1	10	5000
MS	ST1308~~12-1~~ ~~20-1~~ 12-1	10	5000
ICV	ST121101-2	4	5000

Surr Std ID # : ST130811-2
Surr Spk Vol. (uL) : 1 (by autosampler)

Data File	Acq. Method	Sample	Auto Sampler Position	Head Space?	pH <= 2?	RR?	Comments
09936.dat	gro130710c.met	blank	1	Y / N	Y / N	Y /(N)	<MDL
09937.dat	gro130710c.met	blank	2	Y / N	Y / N	Y /(N)	<MDL
09938.dat	gro130710c.met	HC130909-6CCV	3	Y / N	Y / N	Y /(N) water, 1ppm	PASS
09939.dat	gro130710c.met	HC130909-6MB	4	Y / N	Y / N	Y /(N) water	<MDL
09940.dat	gro130710c.met	HC130909-6RVS	5	Y / N	Y / N	Y /(N) water, 0.05ppm	
09941.dat	gro130710c.met	1308514-1 5X	6	Y /(N)	Y /(N)	Y /(N)	pH~6
09942.dat	gro130710c.met	1308542-1	7	Y /(N)	Y /(N)	(Y) / N	(E) exceeds calibrati
09943.dat	gro130710c.met	blank	8	Y / N	Y / N	Y /(N)	<RL 0.07ppm
09944.dat	gro130710c.met	1308542-1 10X	9	Y /(N)	Y /(N)	Y /(N)	pH~5
09945.dat	gro130710c.met	1309020-1 5X	10	Y /(N)	Y /(N)	Y /(N)	pH~5
09946.dat	gro130710c.met	1309020-2 10X	11	Y /(N)	(Y) / N	Y /(N)	
09947.dat	gro130710c.met	1309020-3 5X	12	Y /(N)	(Y) / N	Y /(N)	
09948.dat	gro130710c.met	1309020-4 5X	13	Y /(N)	Y /(N)	Y /(N)	pH~5
09949.dat	gro130710c.met	HC130909-6CCS	14	Y / N	Y / N	Y /(N) water, 1ppm	PASS
09950.dat	gro130710c.met	1309020-5 10X	15	Y /(N)	Y /(N)	Y /(N)	pH~5
09951.dat	gro130710c.met	1309049-1 10X	16	Y /(N)	(Y) / N	Y /(N)	
09952.dat	gro130710c.met	1309049-2 10X	17	Y /(N)	(Y) / N	Y /(N)	
09953.dat	gro130710c.met	1309049-3 5X	18	Y /(N)	Y /(N)	Y /(N)	pH~6
09954.dat	gro130710c.met	1308545-1	19	Y /(N)	(Y) / N	Y /(N)	
09955.dat	gro130710c.met	1308545-3	20	Y /(N)	(Y) / N	Y /(N)	
09956.dat	gro130710c.met	1308545-3MS	21	Y /(N)	(Y) / N	Y /(N)	PASS
09957.dat	gro130710c.met	1308545-3MSD	22	Y /(N)	(Y) / N	Y /(N)	PASS
09958.dat	gro130710c.met	1309045-1	23	Y /(N)	(Y) / N	Y /(N)	
09959.dat	gro130710c.met	1309076-1	24	Y /(N)	(Y) / N	Y /(N)	
09960.dat	gro130710c.met	HC130909-6CCSD	25	Y / N	Y / N	Y /(N) water, 1ppm	PASS
09961.dat	gro130710c.met	1309077-1	26	Y /(N)	(Y) / N	Y /(N)	
09962.dat	gro130710c.met	1309078-1	27	Y /(N)	Y /(N)	Y /(N)	pH~5

Calibration Raw Data

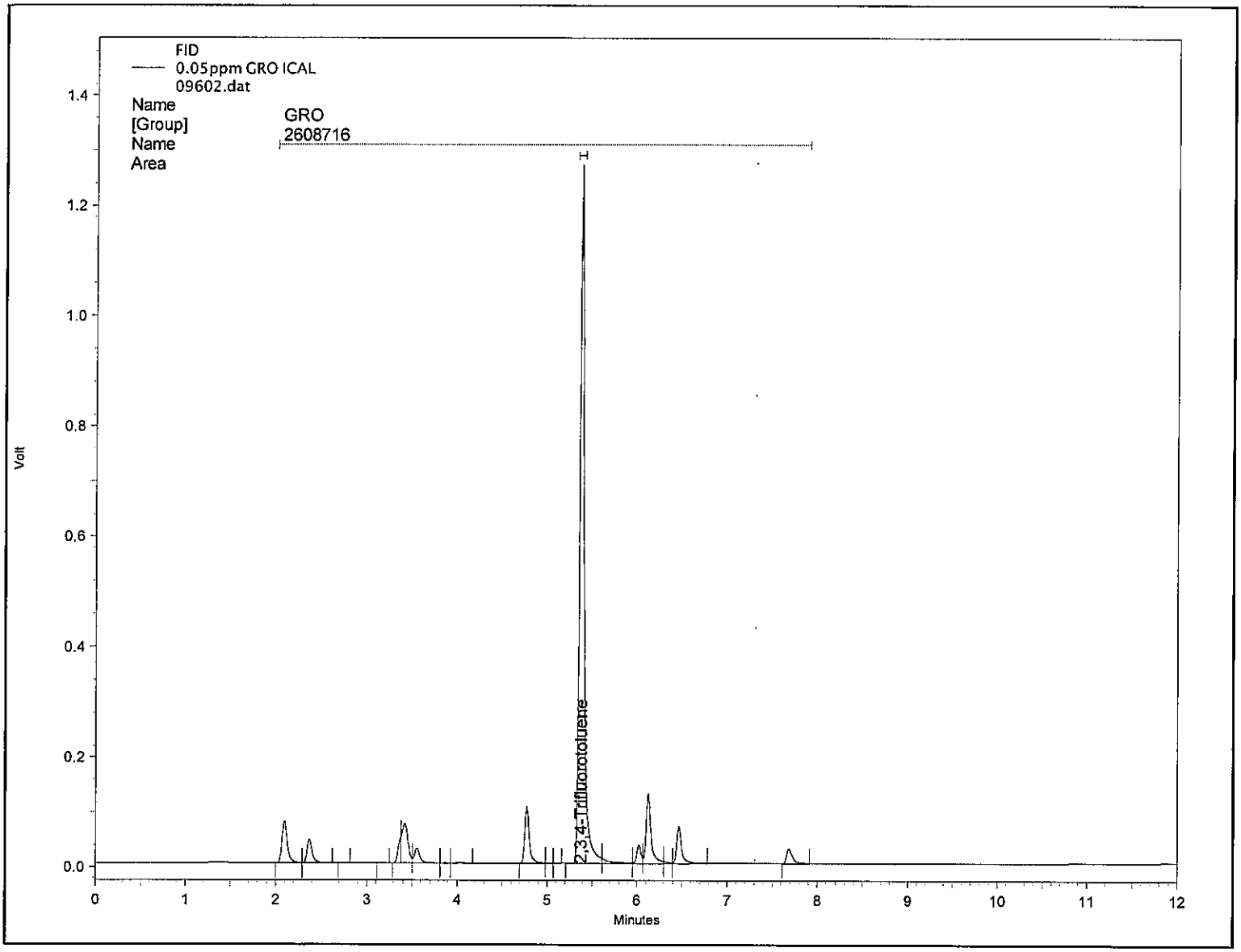
Total Volatile Petroleum Hydrocarbons / GRO (8015) Quantitation Report

ALSLG-Fort Collins

Sample : 0.05ppm GRO ICAL
Filename : \\gcserver\gcdata\Projects\GC6\Data\2013\gro130710\09602.dat Instrument : GC6
Acquisition Date : 7/10/2013 1:48:56 PM Data Acquired By : noltej
Quantitation Date : 7/11/2013 8:59:31 AM Data Processed By : noltej
Last Method Update : 7/10/2013 4:23:46 PM Surr. Nom. Conc. : 0.1
Method : \\gcserver\gcdata\Projects\GC6\method\2013\gro130710.met
Sequence : \\gcserver\gcdata\Projects\GC6\Sequence\2013\gro130710.seq
Data Description : ST130508-1, 5uL/50mL, 5mL aliquot

FID Results

Name	RT	Expected RT	Peak Area	Integration Codes	Concentration	Conc. Units
2,3,4-Trifluorotoluene	5.373	5.370	4491022	LL	0.0943	ppm
GRO			2608716		0.0457	ppm



Column : DB-624 (30M x 0.53mm x 3.0u)

(1st int. code is for peak start, 2nd int code is for peak stop) B=baseline, f=force start or stop, I=ended by int. off event, N=begin negative peak, P=end negative peak, H=forward horiz, h=backward horiz, M=manual baseline or peak, m=move baseline start/stop, S=shoulder, T=tangent skim, V=valley, v=forced valley point, x=split peak, E=end of chromatogram encountered, R=reset baseline, L=lowest point horiz.

Printed On : 7/11/2013 8:59:38 AM

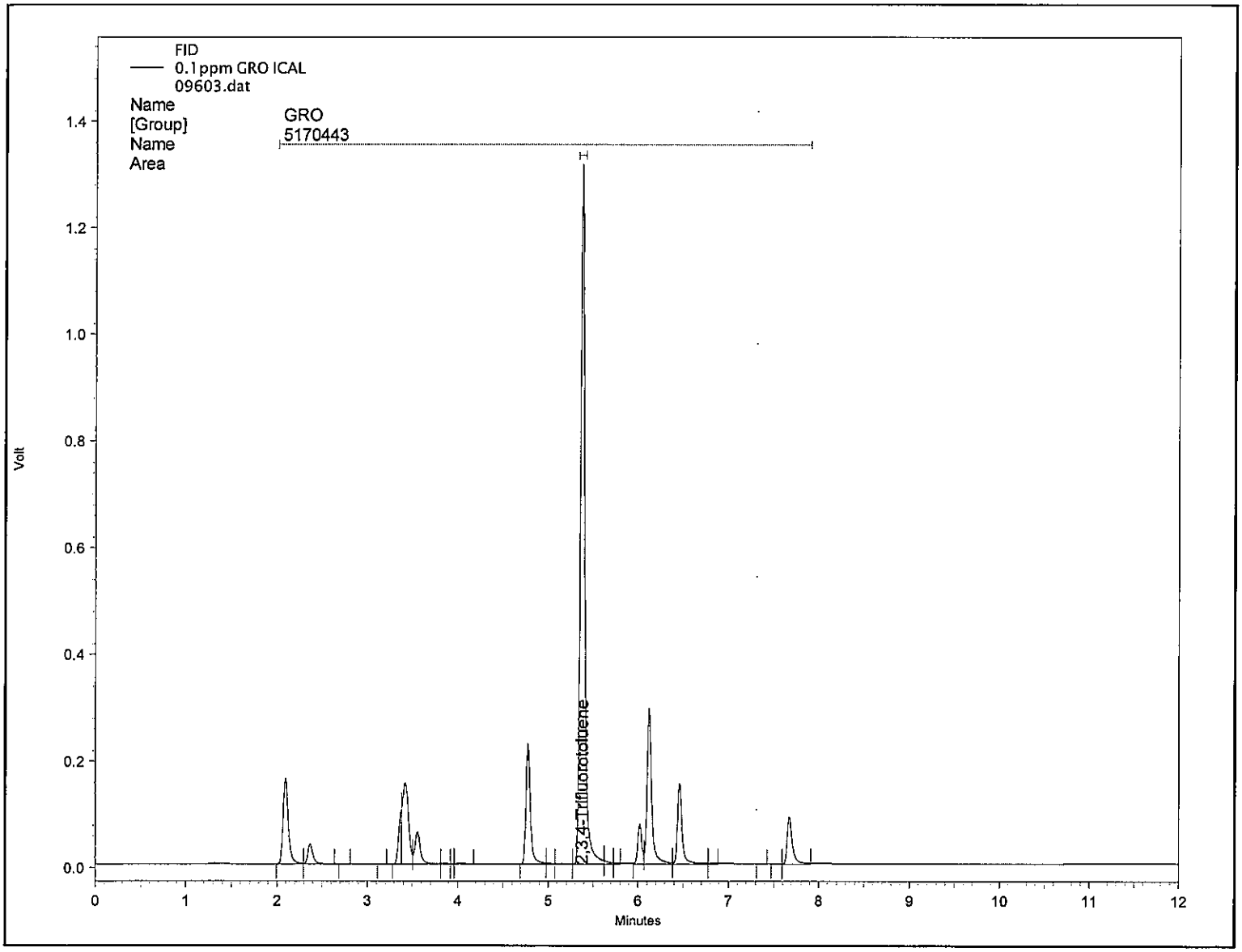
Total Volatile Petroleum Hydrocarbons / GRO (8015) Quantitation Report

ALSLG-Fort Collins

Sample : 0.1ppm GRO ICAL
Filename : \\gcserver\gcdata\Projects\GC6\Data\2013\gro130710\09603.dat Instrument : GC6
Acquisition Date : 7/10/2013 2:08:18 PM Data Acquired By : noltej
Quantitation Date : 7/11/2013 8:59:50 AM Data Processed By : noltej
Last Method Update : 7/10/2013 4:23:46 PM Surr. Nom. Conc. : 0.1
Method : \\gcserver\gcdata\Projects\GC6\method\2013\gro130710.met
Sequence : \\gcserver\gcdata\Projects\GC6\Sequence\2013\gro130710.seq
Data Description : ST130508-1, 10uL/50mL, 5mL aliquot

FID Results

Name	RT	Expected RT	Peak Area	Integration Codes	Concentration	Conc. Units
2,3,4-Trifluorotoluene	5.370	5.370	4494798	LL	0.0944	ppm
GRO			5170443		0.0969	ppm



Column : DB-624 (30M x 0.53mm x 3.0u)

(1st int. code is for peak start, 2nd int code is for peak stop) B=baseline, f=force start or stop, I=ended by int. off event, N=begin negative peak, P=end negative peak, H=forward horiz, h=backward horiz, M=manual baseline or peak, m=move baseline start/stop, S=shoulder, T=tangent skim, V=valley, v=forced valley point, x=split peak, E=end of chromatogram encountered, R=reset baseline, L=lowest point horiz.

Printed On : 7/11/2013 8:59:56 AM

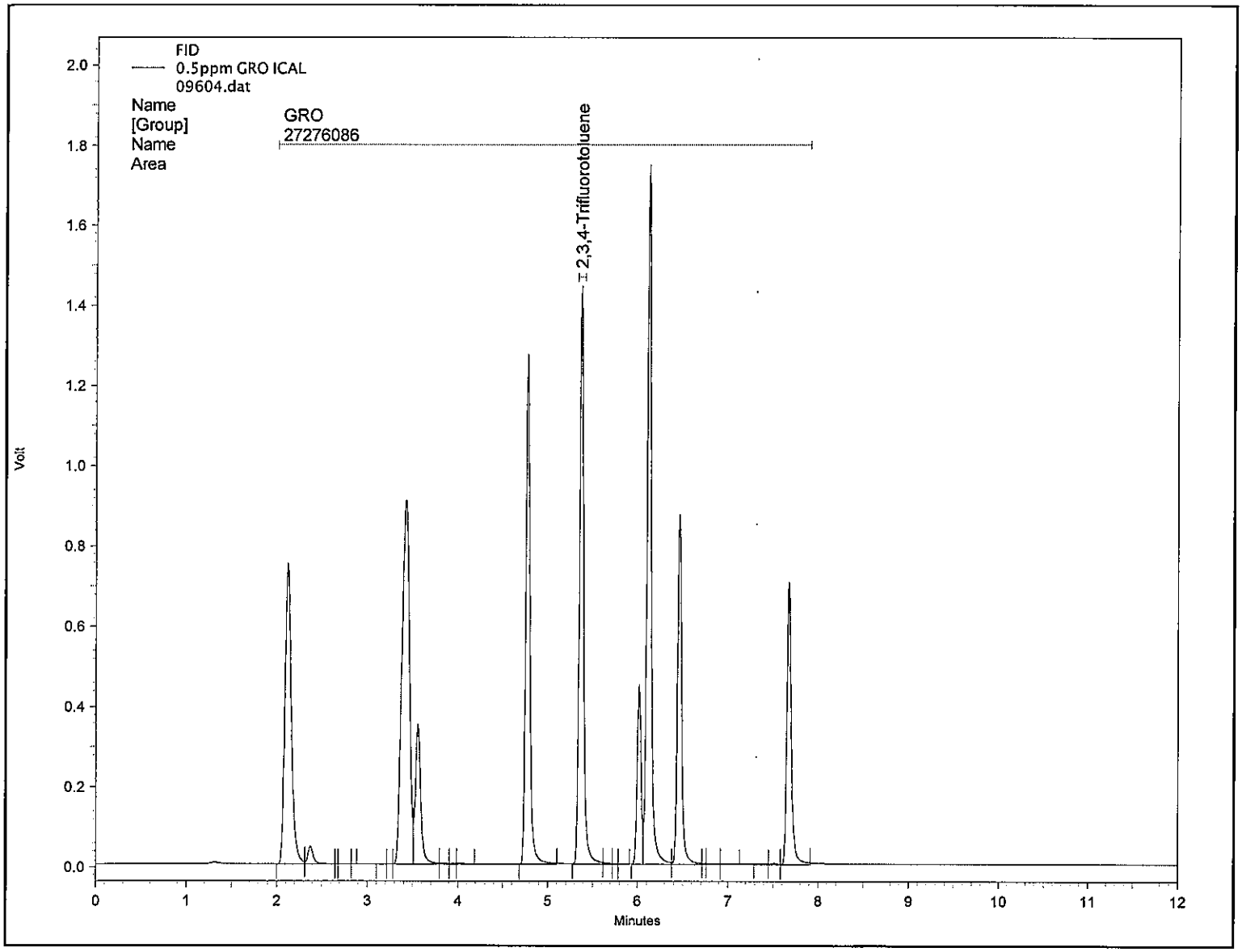
Total Volatile Petroleum Hydrocarbons / GRO (8015) Quantitation Report

ALSLG-Fort Collins

Sample : 0.5ppm GRO ICAL
Filename : \\gcserver\gcdata\Projects\GC6\Data\2013\gro130710\09604.dat Instrument : GC6
Acquisition Date : 7/10/2013 2:27:32 PM Data Acquired By : noltej
Quantitation Date : 7/11/2013 9:00:07 AM Data Processed By : noltej
Last Method Update : 7/10/2013 4:23:46 PM Surr. Nom. Conc. : 0.1
Method : \\gcserver\gcdata\Projects\GC6\method\2013\gro130710.met
Sequence : \\gcserver\gcdata\Projects\GC6\Sequence\2013\gro130710.seq
Data Description : ST130508-1, 5uL/5mL FV

FID Results

Name	RT	Expected RT	Peak Area	Integration Codes	Concentration	Conc. Units
2,3,4-Trifluorotoluene	5.367	5.370	4731042	LL	0.0993	ppm
GRO			27276086		0.5382	ppm



Column : DB-624 (30M x 0.53mm x 3.0u)

(1st int. code is for peak start, 2nd int code is for peak stop) B=baseline, f=force start or stop, I=ended by int. off event, N=begin negative peak, P=end negative peak, H=forward horiz, h=backward horiz, M=manual baseline or peak, m=move baseline start/stop, S=shoulder, T=tangent skim, V=valley, v=forced valley point, x=split peak, E=end of chromatogram encountered, R=reset baseline, L=lowest point horiz.

Printed On : 7/11/2013 9:00:14 AM

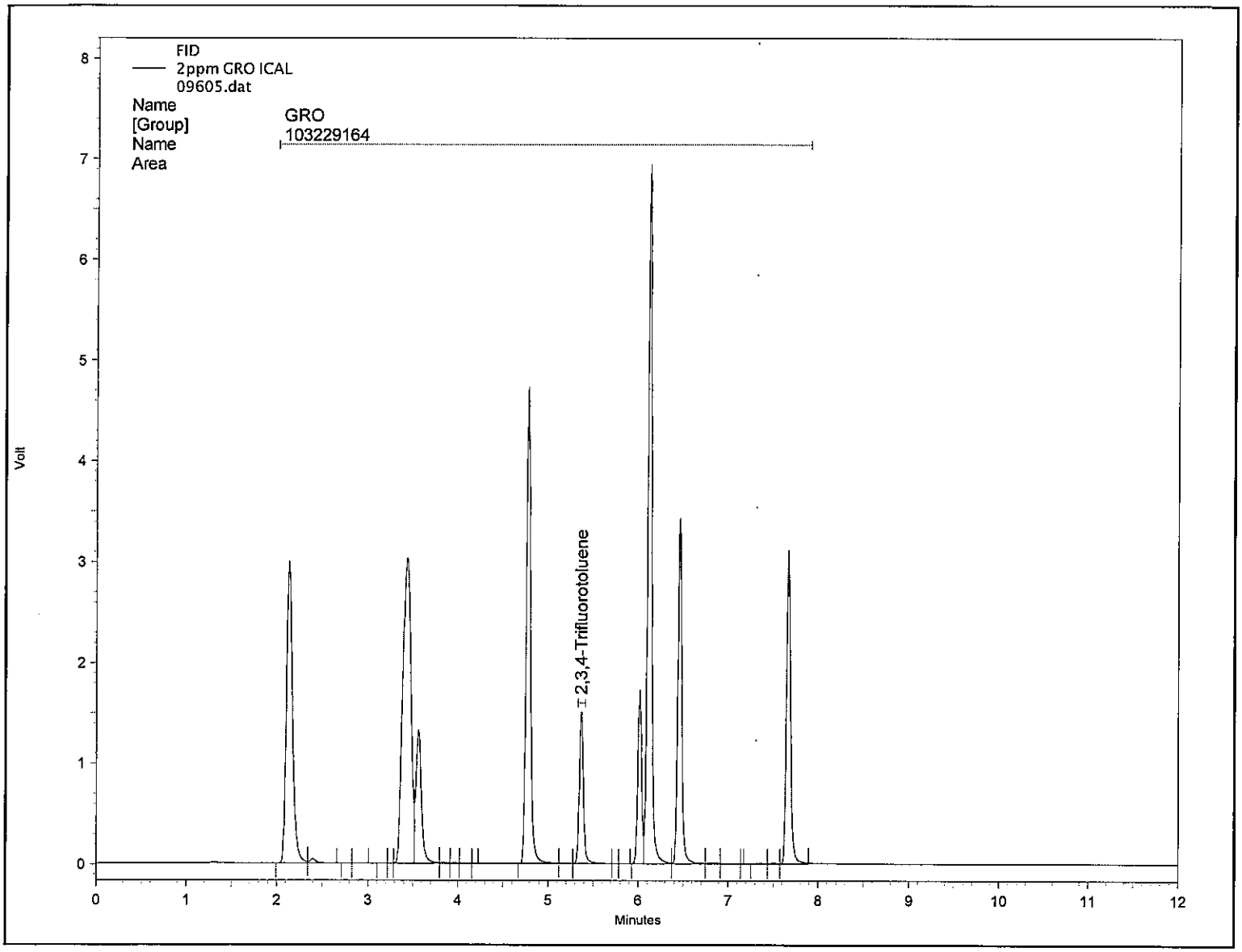
Total Volatile Petroleum Hydrocarbons / GRO (8015) Quantitation Report

ALSLG-Fort Collins

Sample : 2ppm GRO ICAL
Filename : \\gcserver\gcdata\Projects\GC6\Data\2013\gro130710\09605.dat Instrument : GC6
Acquisition Date : 7/10/2013 2:46:49 PM Data Acquired By : noltej
Quantitation Date : 7/11/2013 9:00:25 AM Data Processed By : noltej
Last Method Update : 7/10/2013 4:23:46 PM Surr. Nom. Conc. : 0.1
Method : \\gcserver\gcdata\Projects\GC6\method\2013\gro130710.met
Sequence : \\gcserver\gcdata\Projects\GC6\Sequence\2013\gro130710.seq
Data Description : ST130508-1, 20uL/5mL FV

FID Results

Name	RT	Expected RT	Peak Area	Integration Codes	Concentration	Conc. Units
2,3,4-Trifluorotoluene	5.363	5.370	4862105	LL	0.1021	ppm
GRO			103229164		2.0545	ppm



Column : DB-624 (30M x 0.53mm x 3.0u)

(1st int. code is for peak start, 2nd int code is for peak stop) B=baseline, f=force start or stop, I=ended by int. off event, N=begin negative peak, P=end negative peak, H=forward horiz, h=backward horiz, M=manual baseline or peak, m=move baseline start/stop, S=shoulder, T=tangent skim, V=valley, v=forced valley point, x=split peak, E=end of chromatogram encountered, R=reset baseline, L=lowest point horiz.

Printed On : 7/11/2013 9:00:32 AM

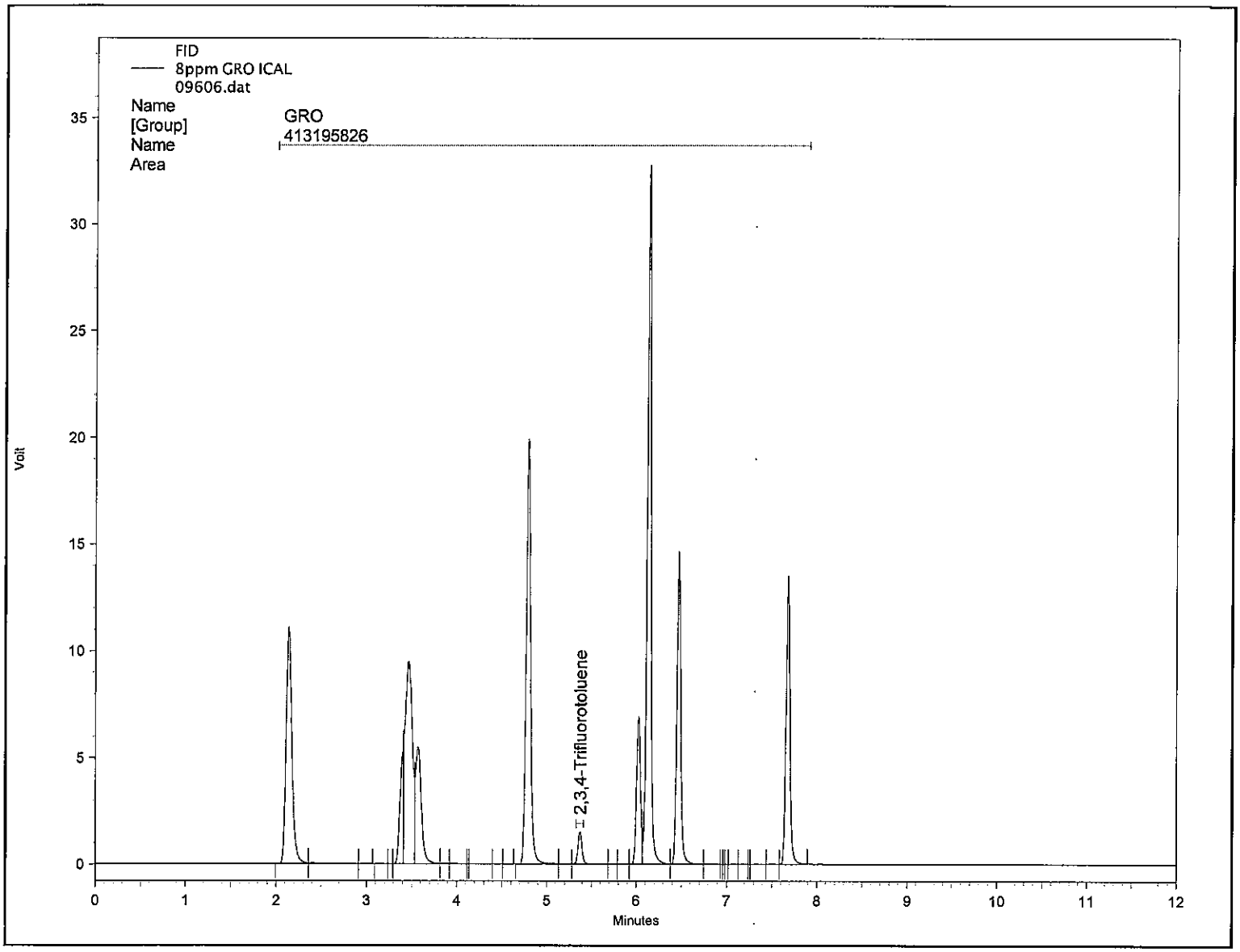
Total Volatile Petroleum Hydrocarbons / GRO (8015) Quantitation Report

ALSLG-Fort Collins

Sample : 8ppm GRO ICAL
Filename : \\gcserver\gcdata\Projects\GC6\Data\2013\gro130710\09606.dat Instrument : GC6
Acquisition Date : 7/10/2013 3:06:04 PM Data Acquired By : noltej
Quantitation Date : 7/11/2013 9:00:42 AM Data Processed By : noltej
Last Method Update : 7/10/2013 4:23:46 PM Surr. Nom. Conc. : 0.1
Method : \\gcserver\gcdata\Projects\GC6\method\2013\gro130710.met
Sequence : \\gcserver\gcdata\Projects\GC6\Sequence\2013\gro130710.seq
Data Description : ST120801-4, 4uL/5mL FV

FID Results

Name	RT	Expected RT	Peak Area	Integration Codes	Concentration	Conc. Units
2,3,4-Trifluorotoluene	5.370	5.370	4900285	LL	0.1029	ppm
GRO			413195826		8.2428	ppm



Column : DB-624 (30M x 0.53mm x 3.0u)

(1st int. code is for peak start, 2nd int code is for peak stop) B=baseline, f=force start or stop, I=ended by int. off event, N=begin negative peak, P=end negative peak, H=forward horiz, h=backward horiz, M=manual baseline or peak, m=move baseline start/stop, S=shoulder, T=tangent skim, V=valley, v=forced valley point, x=split peak, E=end of chromatogram encountered, R=reset baseline, L=lowest point horiz.

Printed On : 7/11/2013 9:00:49 AM

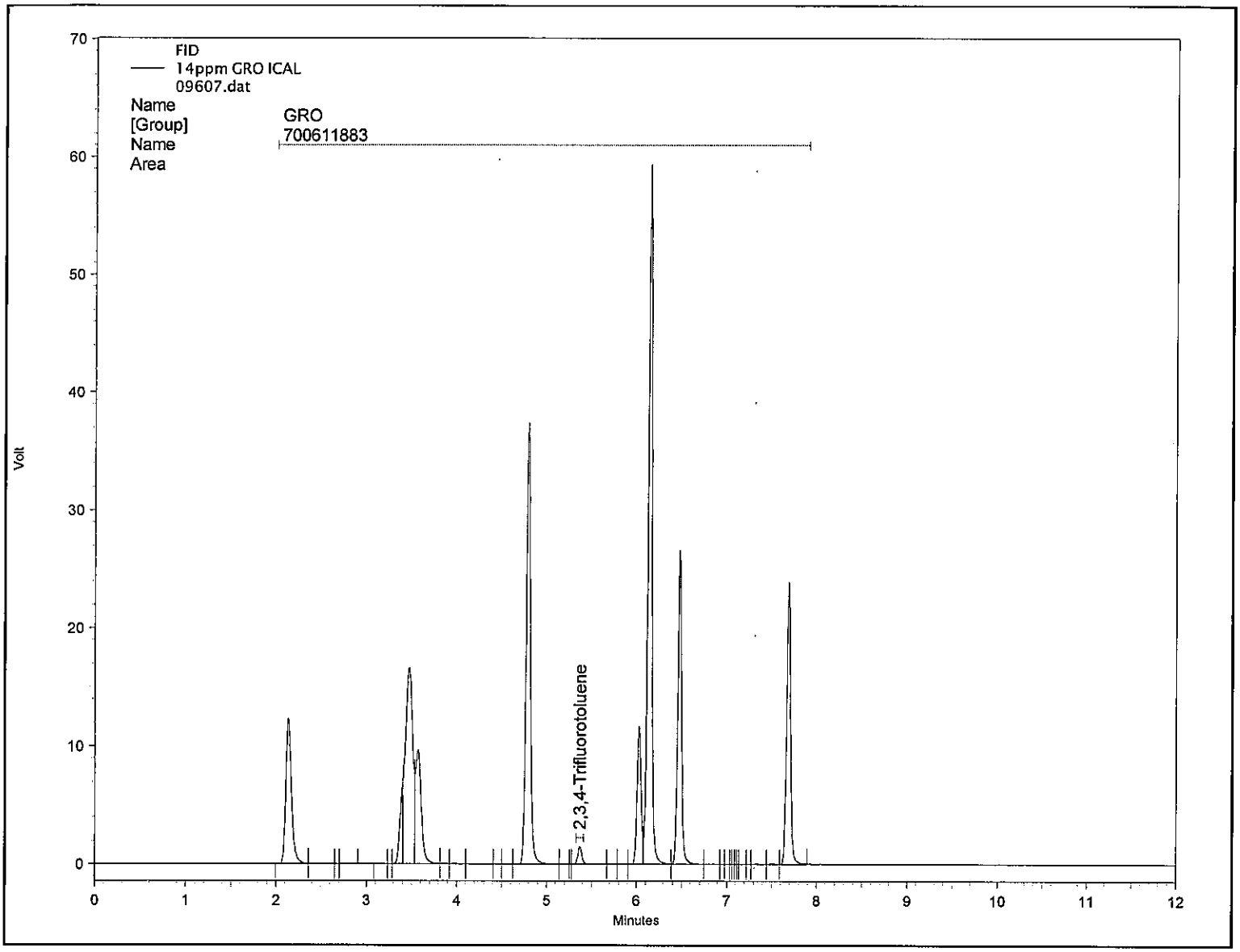
Total Volatile Petroleum Hydrocarbons / GRO (8015) Quantitation Report

ALSLG-Fort Collins

Sample : 14ppm GRO ICAL
Filename : \\gcserver\gcdata\Projects\GC6\Data\2013\gro130710\09607.dat Instrument : GC6
Acquisition Date : 7/10/2013 3:25:18 PM Data Acquired By : noltej
Quantitation Date : 7/11/2013 9:01:00 AM Data Processed By : noltej
Last Method Update : 7/10/2013 4:23:46 PM Surr. Nom. Conc. : 0.1
Method : \\gcserver\gcdata\Projects\GC6\method\2013\gro130710.met
Sequence : \\gcserver\gcdata\Projects\GC6\Sequence\2013\gro130710.seq
Data Description : ST120801-4, 7uL/5mL FV

FID Results

Name	RT	Expected RT	Peak Area	Integration Codes	Concentration	Conc. Units
2,3,4-Trifluorotoluene	5.367	5.370	4932548	LL	0.1036	ppm
GRO			700611883		13.9808	ppm



Column : DB-624 (30M x 0.53mm x 3.0u)

(1st int. code is for peak start, 2nd int code is for peak stop) B=baseline, f=force start or stop, I=ended by int. off event, N=begin negative peak, P=end negative peak, H=forward horiz, h=backward horiz, M=manual baseline or peak, m=move baseline start/stop, S=shoulder, T=tangent skim, V=valley, v=forced valley point, x=split peak, E=end of chromatogram encountered, R=reset baseline, L=lowest point horiz.

Printed On : 7/11/2013 9:01:06 AM

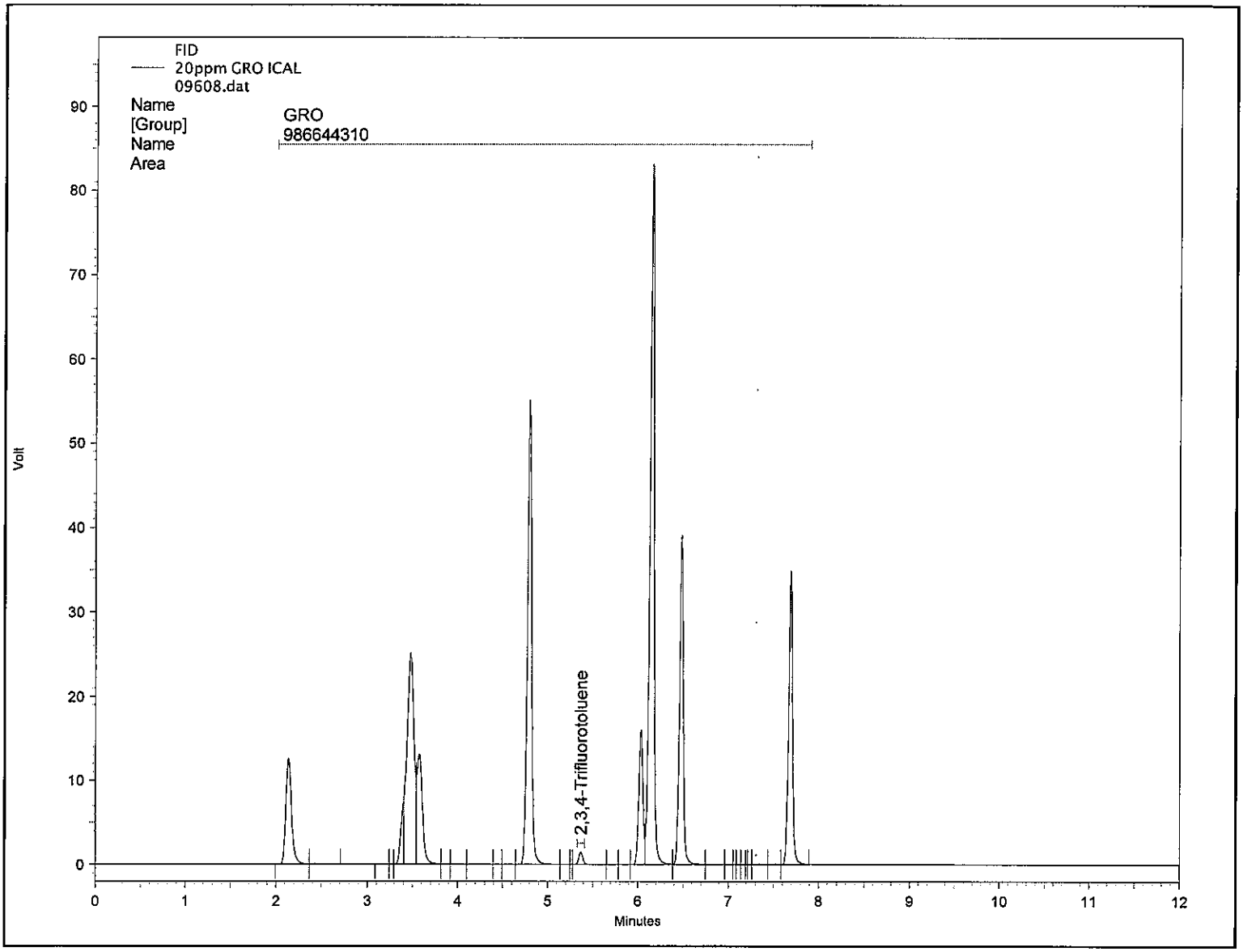
Total Volatile Petroleum Hydrocarbons / GRO (8015) Quantitation Report

ALSLG-Fort Collins

Sample : 20ppm GRO ICAL
Filename : \\gcserver\gcdata\Projects\GC6\Data\2013\gro130710\09608.dat Instrument : GC6
Acquisition Date : 7/10/2013 3:44:34 PM Data Acquired By : noltej
Quantitation Date : 7/11/2013 9:01:16 AM Data Processed By : noltej
Last Method Update : 7/10/2013 4:23:46 PM Surr. Nom. Conc. : 0.1
Method : \\gcserver\gcdata\Projects\GC6\method\2013\gro130710.met
Sequence : \\gcserver\gcdata\Projects\GC6\Sequence\2013\gro130710.seq
Data Description : {Data Description}

FID Results

Name	RT	Expected RT	Peak Area	Integration Codes	Concentration	Conc. Units
2,3,4-Trifluorotoluene	5.367	5.370	4929161	LL	0.1035	ppm
GRO			986644310		19.6912	ppm



Column : DB-624 (30M x 0.53mm x 3.0u)

(1st int. code is for peak start, 2nd int code is for peak stop) B=baseline, f=force start or stop, I=ended by int. off event, N=begin negative peak, P=end negative peak, H=forward horiz, h=backward horiz, M=manual baseline or peak, m=move baseline start/stop, S=shoulder, T=tangent skim, V=valley, v=forced valley point, x=split peak, E=end of chromatogram encountered, R=reset baseline, L=lowest point horiz.

Printed On : 7/11/2013 9:01:23 AM

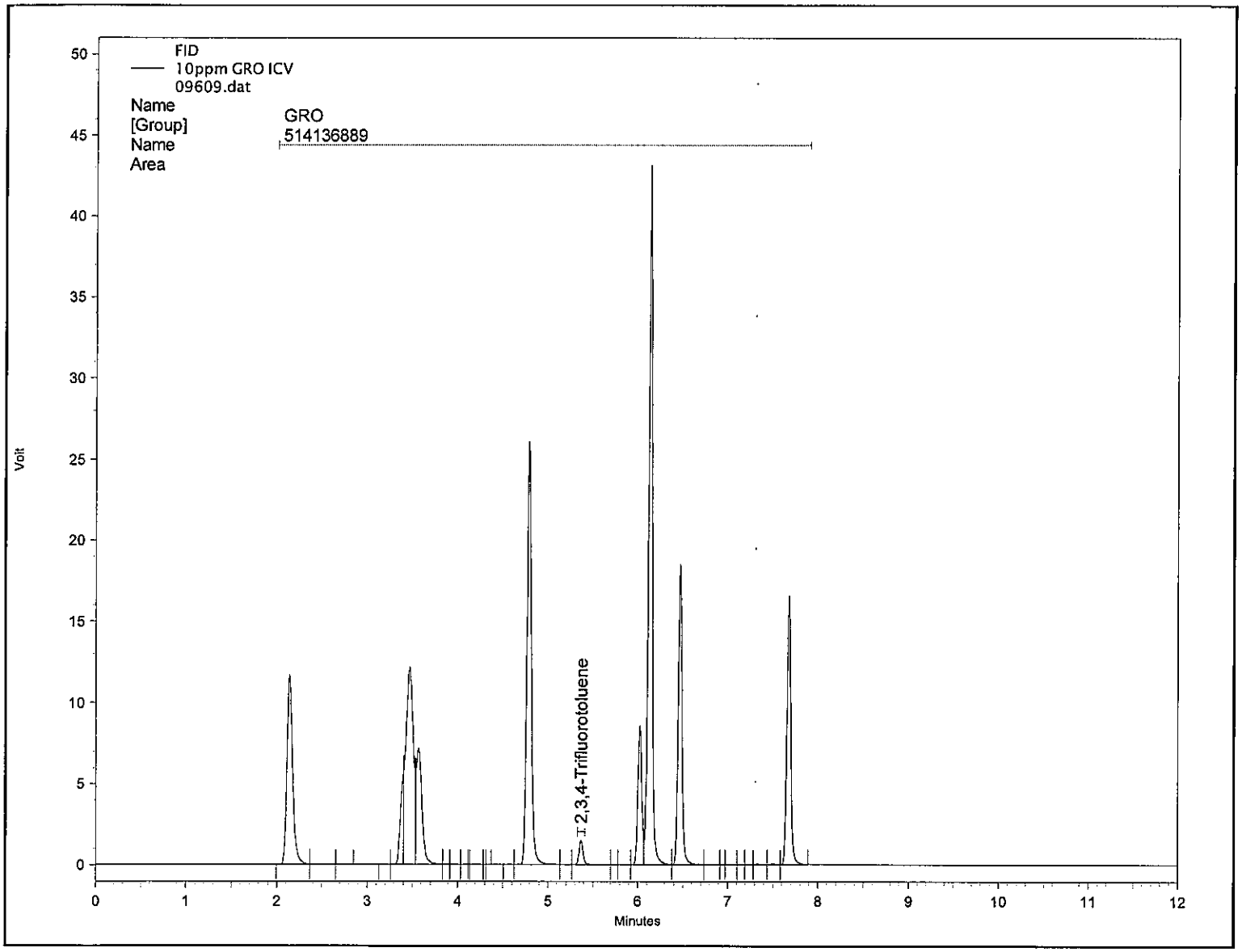
Total Volatile Petroleum Hydrocarbons / GRO (8015) Quantitation Report

ALSLG-Fort Collins

Sample : 10ppm GRO ICV
Filename : \\gcserver\gcdata\Projects\GC6\Data\2013\gro130710\09609.dat Instrument : GC6
Acquisition Date : 7/10/2013 4:03:51 PM Data Acquired By : noltej
Quantitation Date : 7/11/2013 9:01:33 AM Data Processed By : noltej
Last Method Update : 7/10/2013 4:23:46 PM Surr. Nom. Conc. : 0.1
Method : \\gcserver\gcdata\Projects\GC6\method\2013\gro130710.met
Sequence : \\gcserver\gcdata\Projects\GC6\Sequence\2013\gro130710.seq
Data Description : ST121101-2, 5uL/5mL FV

FID Results

Name	RT	Expected RT	Peak Area	Integration Codes	Concentration	Conc. Units
2,3,4-Trifluorotoluene	5.367	5.370	4874757	LL	0.1023	ppm
GRO			514136889		10.2580	ppm



Column : DB-624 (30M x 0.53mm x 3.0u)

(1st int. code is for peak start, 2nd int code is for peak stop) B=baseline, f=force start or stop, I=ended by int. off event, N=begin negative peak, P=end negative peak, H=forward horiz, h=backward horiz, M=manual baseline or peak, m=move baseline start/stop, S=shoulder, T=tangent skim, V=valley, v=forced valley point, x=split peak, E=end of chromatogram encountered, R=reset baseline, L=lowest point horiz.

Printed On : 7/11/2013 9:01:40 AM

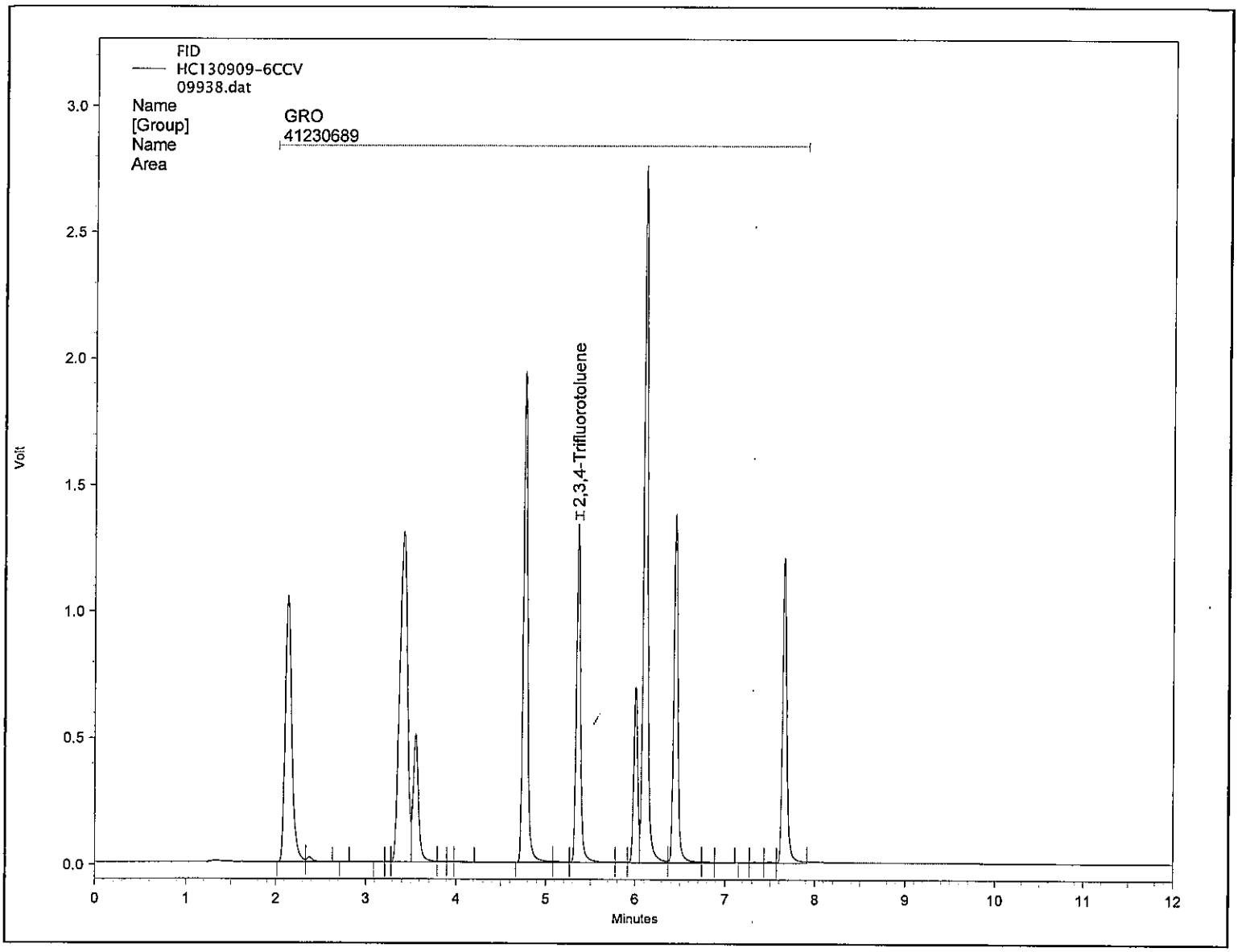
Total Volatile Petroleum Hydrocarbons / GRO (8015) Quantitation Report

ALSLG-Fort Collins

Sample : HC130909-6CCV
Filename : \\gcserver\gcdata\Projects\GC6\Data\2013\gro130909\09938.dat
Instrument : GC6
Acquisition Date : 9/9/2013 9:57:28 AM
Data Acquired By : knaebelt
Quantitation Date : 9/10/2013 7:48:05 AM
Data Processed By : knaebelt
Last Method Update : 9/9/2013 8:03:15 AM
Surr. Nom. Conc. : 0.1
Method : \\gcserver\gcdata\Projects\GC6\method\2013\gro130710c.met
Sequence : \\gcserver\gcdata\Projects\GC6\Sequence\2013\gro130909.seq
Data Description : water, 1ppm

FID Results

Name	RT	Expected RT	Peak Area	Integration Codes	Concentration	Conc. Units
2,3,4-Trifluorotoluene	5.357	5.367	4409627	LL	0.0926	ppm
GRO			41230689		0.8168	ppm



Column : DB-624 (30M x 0.53mm x 3.0u)

(1st int. code is for peak start, 2nd int code is for peak stop) B=baseline, f=force start or stop, I=ended by int. off event, N=begin negative peak, P=end negative peak, H=forward horiz, h=backward horiz, M=manual baseline or peak, m=move baseline start/stop, S=shoulder, T=tangent skim, V=valley, v=forced valley point, x=split peak, E=end of chromatogram encountered, R=reset baseline, L=lowest point horiz.

Printed On : 9/10/2013 7:48:09 AM

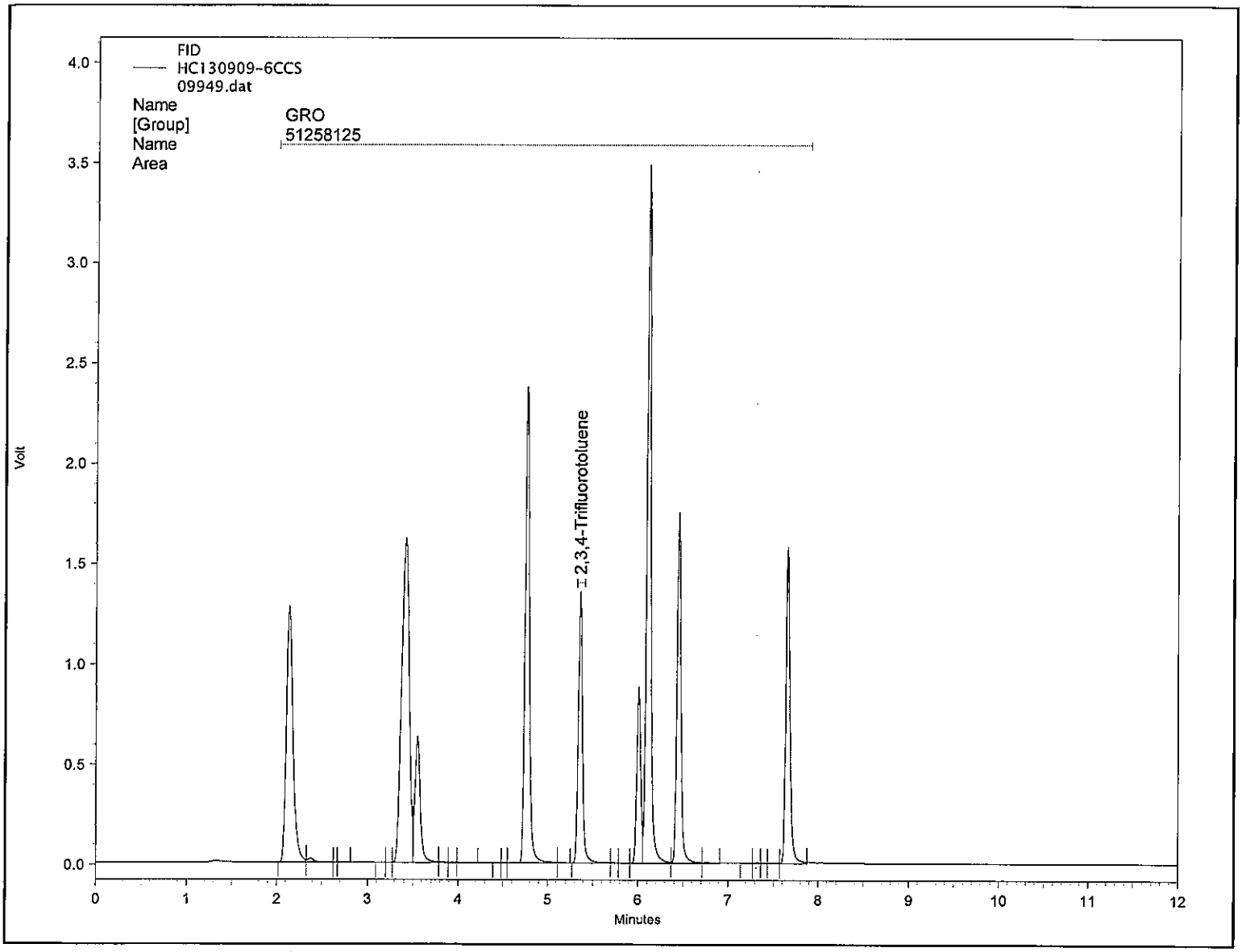
Total Volatile Petroleum Hydrocarbons / GRO (8015) Quantitation Report

ALSLG-Fort Collins

Sample : HC130909-6CCS
Filename : \\gcserver\gcdata\Projects\GC6\Data\2013\gro130909\09949.dat Instrument : GC6
Acquisition Date : 9/9/2013 3:38:09 PM Data Acquired By : knaebelt
Quantitation Date : 9/10/2013 7:50:27 AM Data Processed By : knaebelt
Last Method Update : 9/9/2013 8:03:15 AM Surr. Nom. Conc. : 0.1
Method : \\gcserver\gcdata\Projects\GC6\method\2013\gro130710c.met
Sequence : \\gcserver\gcdata\Projects\GC6\Sequence\2013\gro130909.seq
Data Description : water, 1ppm

FID Results

Name	RT	Expected RT	Peak Area	Integration Codes	Concentration	Conc. Units
2,3,4-Trifluorotoluene	5.357	5.367	4390437	LL	0.0922	ppm
GRO			51258125		1.0170	ppm



Column : DB-624 (30M x 0.53mm x 3.0u)

(1st int. code is for peak start, 2nd int code is for peak stop) B=baseline, f=force start or stop, I=ended by int. off event, N=begin negative peak, P=end negative peak, H=forward horiz, h=backward horiz, M=manual baseline or peak, m=move baseline start/stop, S=shoulder, T=tangent skim, V=valley, v=forced valley point, x=split peak, E=end of chromatogram encountered, R=reset baseline, L=lowest point horiz.

Printed On : 9/10/2013 7:50:32 AM

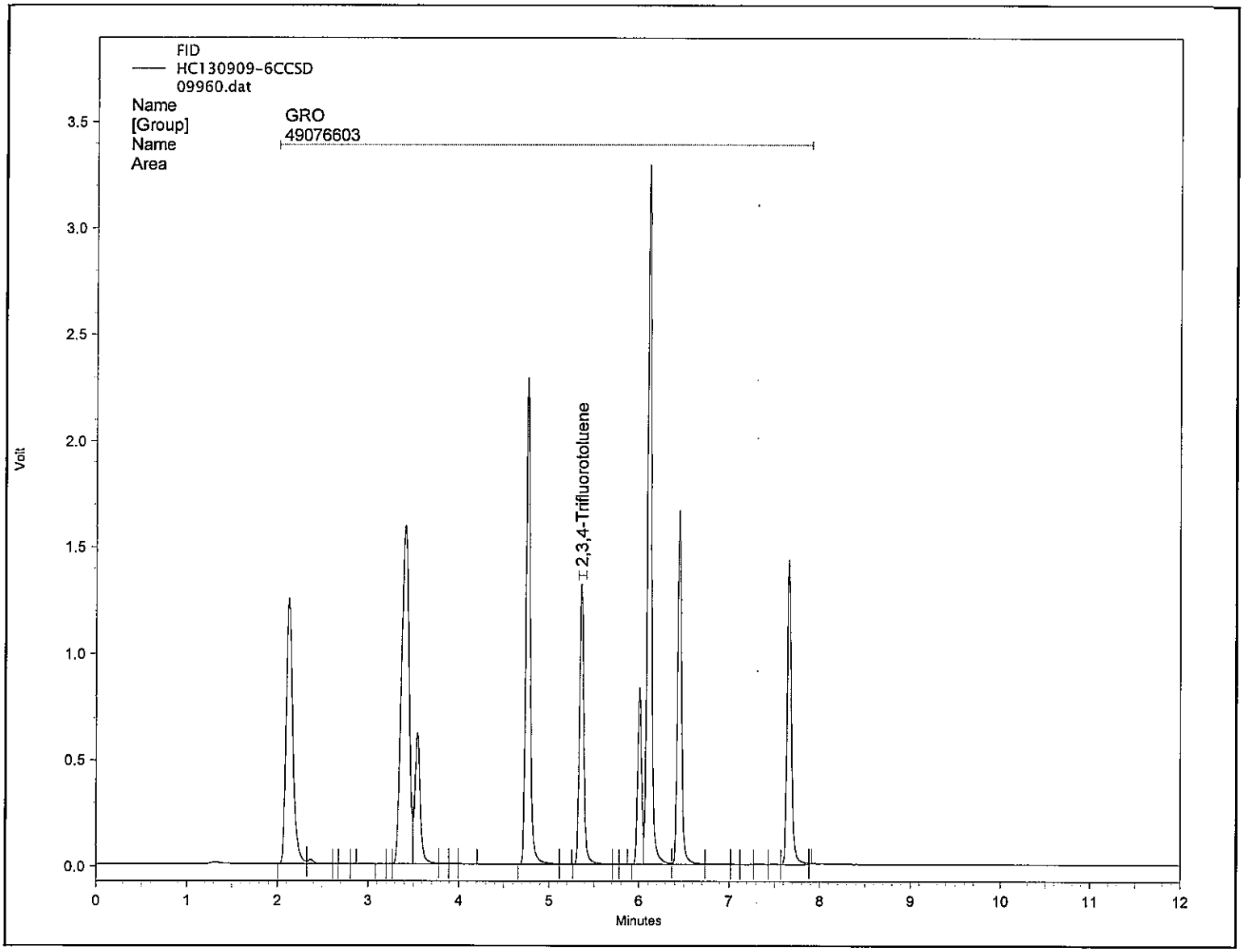
Total Volatile Petroleum Hydrocarbons / GRO (8015) Quantitation Report

ALSLG-Fort Collins

Sample : HC130909-6CCSD
Filename : \\gcserver\gcdata\Projects\GC6\Data\2013\gro130909\09960.dat Instrument : GC6
Acquisition Date : 9/9/2013 7:11:35 PM Data Acquired By : knaebelt
Quantitation Date : 9/10/2013 7:52:53 AM Data Processed By : knaebelt
Last Method Update : 9/9/2013 8:03:15 AM Surr. Nom. Conc. : 0.1
Method : \\gcserver\gcdata\Projects\GC6\method\2013\gro130710c.met
Sequence : \\gcserver\gcdata\Projects\GC6\Sequence\2013\gro130909.seq
Data Description : water, 1ppm

FID Results

Name	RT	Expected RT	Peak Area	Integration Codes	Concentration	Conc. Units
2,3,4-Trifluorotoluene	5.357	5.367	4339023	LL	0.0911	ppm
GRO			49076603		0.9734	ppm



Column : DB-624 (30M x 0.53mm x 3.0u)

(1st int. code is for peak start, 2nd int code is for peak stop) B=baseline, f=force start or stop, I=ended by int. off event, N=begin negative peak, P=end negative peak, H=forward horiz, h=backward horiz, M=manual baseline or peak, m=move baseline start/stop, S=shoulder, T=tangent skim, V=valley, v=forced valley point, x=split peak, E=end of chromatogram encountered, R=reset baseline, L=lowest point horiz.

Printed On : 9/10/2013 7:52:58 AM

Sample Raw Data

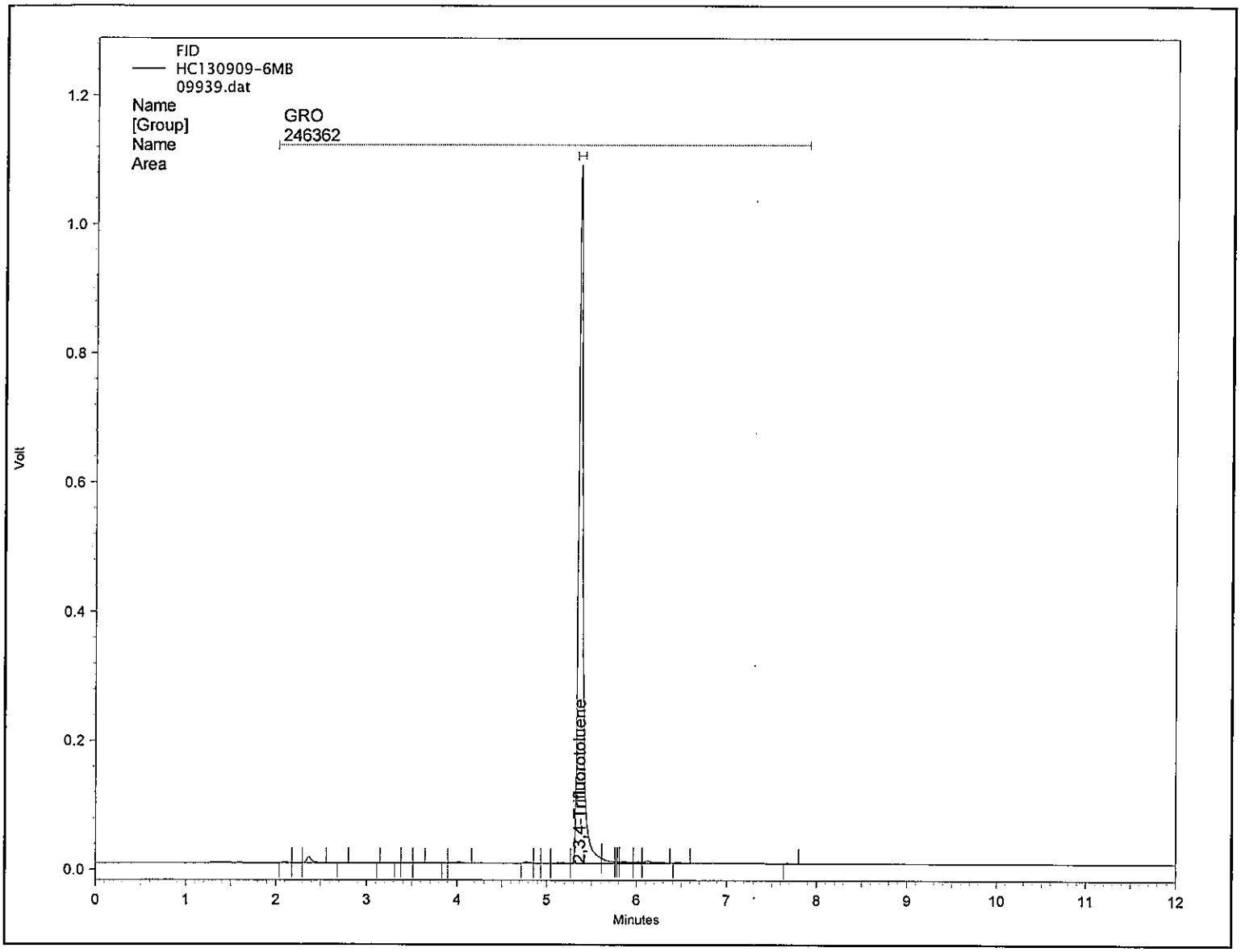
Total Volatile Petroleum Hydrocarbons / GRO (8015) Quantitation Report

ALSLG-Fort Collins

Sample : HC130909-6MB
Filename : \\gcserver\gcdata\Projects\GC6\Data\2013\gro130909\09939.dat
Instrument : GC6
Acquisition Date : 9/9/2013 10:24:50 AM
Data Acquired By : knaebelt
Quantitation Date : 9/10/2013 7:48:16 AM
Data Processed By : knaebelt
Last Method Update : 9/9/2013 8:03:15 AM
Surr. Nom. Conc. : 0.1
Method : \\gcserver\gcdata\Projects\GC6\method\2013\gro130710c.met
Sequence : \\gcserver\gcdata\Projects\GC6\Sequence\2013\gro130909.seq
Data Description : water

FID Results

Name	RT	Expected RT	Peak Area	Integration Codes	Concentration	Conc. Units
2,3,4-Trifluorotoluene	5.363	5.367	3848838	LL	0.0808	ppm
GRO			246362		0.0000	ppm



Column : DB-624 (30M x 0.53mm x 3.0u)

(1st int. code is for peak start, 2nd int code is for peak stop) B=baseline, f=force start or stop, I=ended by int. off event, N=begin negative peak, P=end negative peak, H=forward horiz, h=backward horiz, M=manual baseline or peak, m=move baseline start/stop, S=shoulder, T=tangent skim, V=valley, v=forced valley point, x=split peak, E=end of chromatogram encountered, R=reset baseline, L=lowest point horiz.

Printed On : 9/10/2013 7:48:21 AM

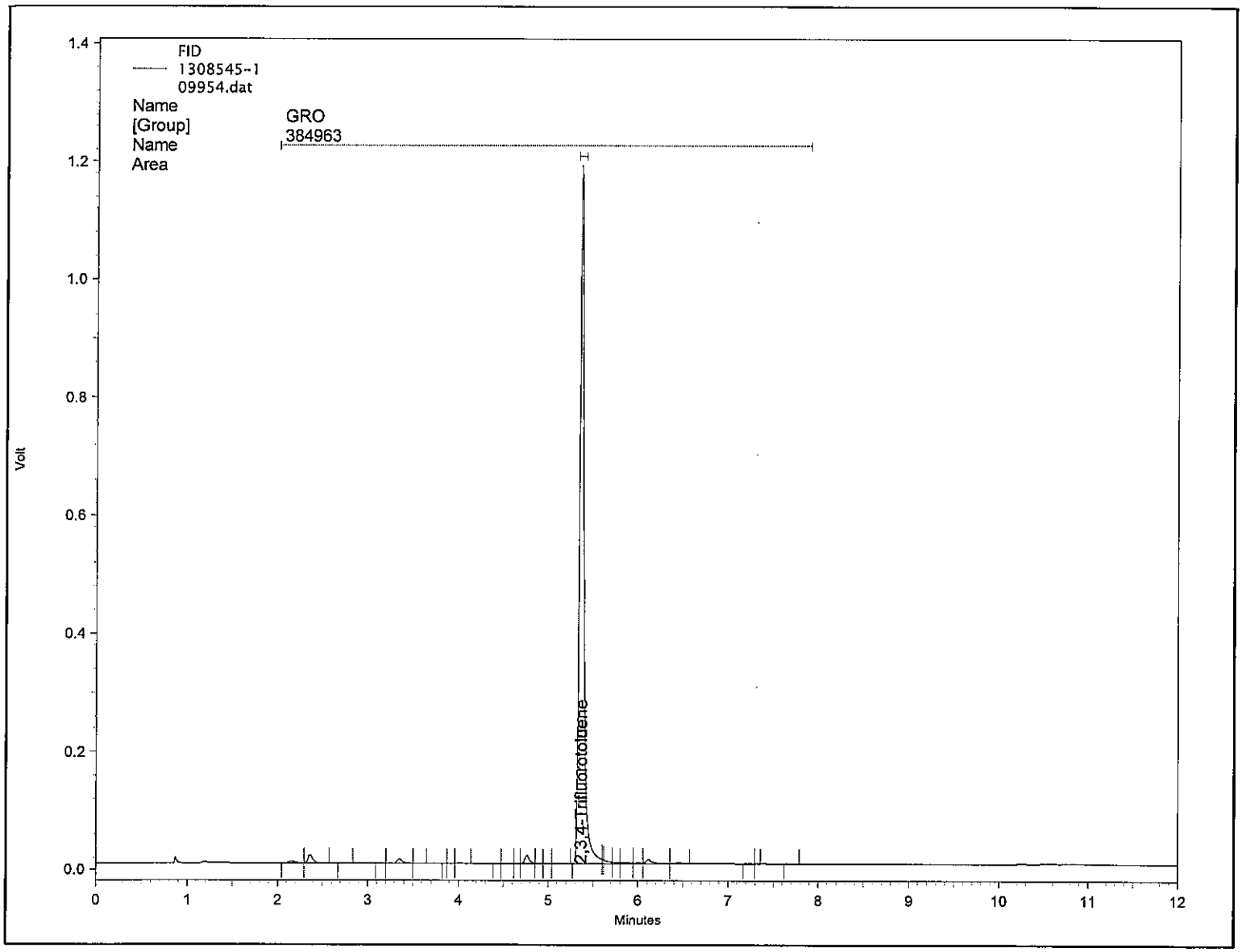
Total Volatile Petroleum Hydrocarbons / GRO (8015) Quantitation Report

ALSLG-Fort Collins

Sample : 1308545-1
Filename : \\gcserver\gcdata\Projects\GC6\Data\2013\gro130909\09954.dat
Instrument : GC6
Acquisition Date : 9/9/2013 5:15:49 PM
Data Acquired By : knaebelt
Quantitation Date : 9/10/2013 7:51:34 AM
Data Processed By : knaebelt
Last Method Update : 9/9/2013 8:03:15 AM
Surr. Nom. Conc. : 0.1
Method : \\gcserver\gcdata\Projects\GC6\method\2013\gro130710c.met
Sequence : \\gcserver\gcdata\Projects\GC6\Sequence\2013\gro130909.seq
Data Description : {Data Description}

FID Results

Name	RT	Expected RT	Peak Area	Integration Codes	Concentration	Conc. Units
2,3,4-Trifluorotoluene	5.360	5.367	4134655	LL	0.0868	ppm
GRO			384963		0.0013	ppm



Column : DB-624 (30M x 0.53mm x 3.0u)

(1st int. code is for peak start, 2nd int code is for peak stop) B=baseline, f=force start or stop, I=ended by int. off event, N=begin negative peak, P=end negative peak, H=forward horiz, h=backward horiz, M=manual baseline or peak, m=move baseline start/stop, S=shoulder, T=tangent skim, V=valley, v=forced valley point, x=split peak, E=end of chromatogram encountered, R=reset baseline, L=lowest point horiz.

Printed On : 9/10/2013 7:51:39 AM

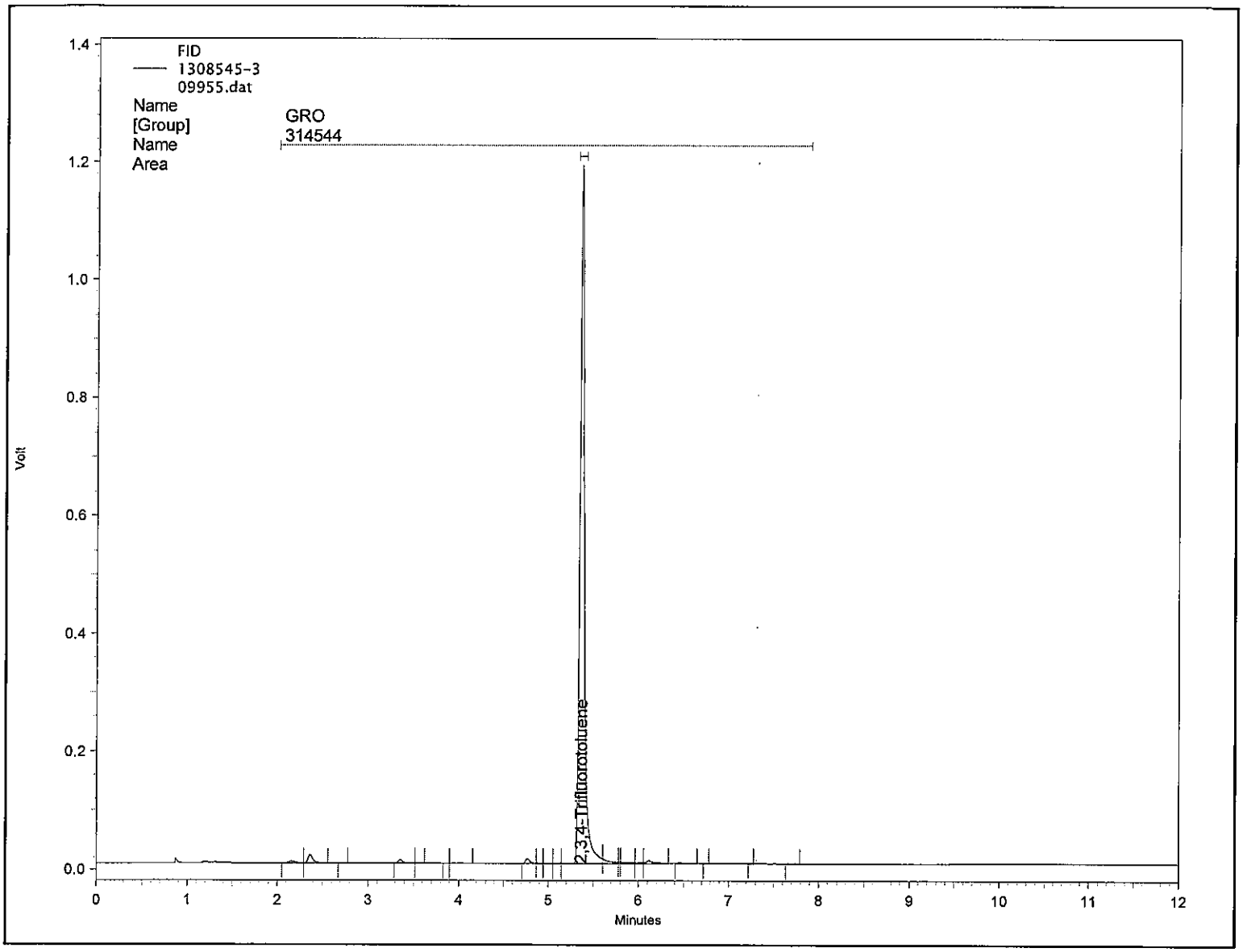
Total Volatile Petroleum Hydrocarbons / GRO (8015) Quantitation Report

ALSLG-Fort Collins

Sample : 1308545-3
Filename : \\gcserver\gcdata\Projects\GC6\Data\2013\gro130909\09955.dat
Instrument : GC6
Acquisition Date : 9/9/2013 5:35:07 PM
Data Acquired By : knaebelt
Quantitation Date : 9/10/2013 7:51:47 AM
Data Processed By : knaebelt
Last Method Update : 9/9/2013 8:03:15 AM
Surr. Nom. Conc. : 0.1
Method : \\gcserver\gcdata\Projects\GC6\method\2013\gro130710c.met
Sequence : \\gcserver\gcdata\Projects\GC6\Sequence\2013\gro130909.seq
Data Description : {Data Description}

FID Results

Name	RT	Expected RT	Peak Area	Integration Codes	Concentration	Conc. Units
2,3,4-Trifluorotoluene	5.360	5.367	4161789	LL	0.0874	ppm
GRO			314544		0.0000	ppm



Column : DB-624 (30M x 0.53mm x 3.0u)

(1st int. code is for peak start, 2nd int code is for peak stop) B=baseline, f=force start or stop, I=ended by int. off event, N=begin negative peak, P=end negative peak, H=forward horiz, h=backward horiz, M=manual baseline or peak, m=move baseline start/stop, S=shoulder, T=tangent skim, V=valley, v=forced valley point, x=split peak, E=end of chromatogram encountered, R=reset baseline, L=lowest point horiz.

Printed On : 9/10/2013 7:51:52 AM

Raw Data Quality Control Samples

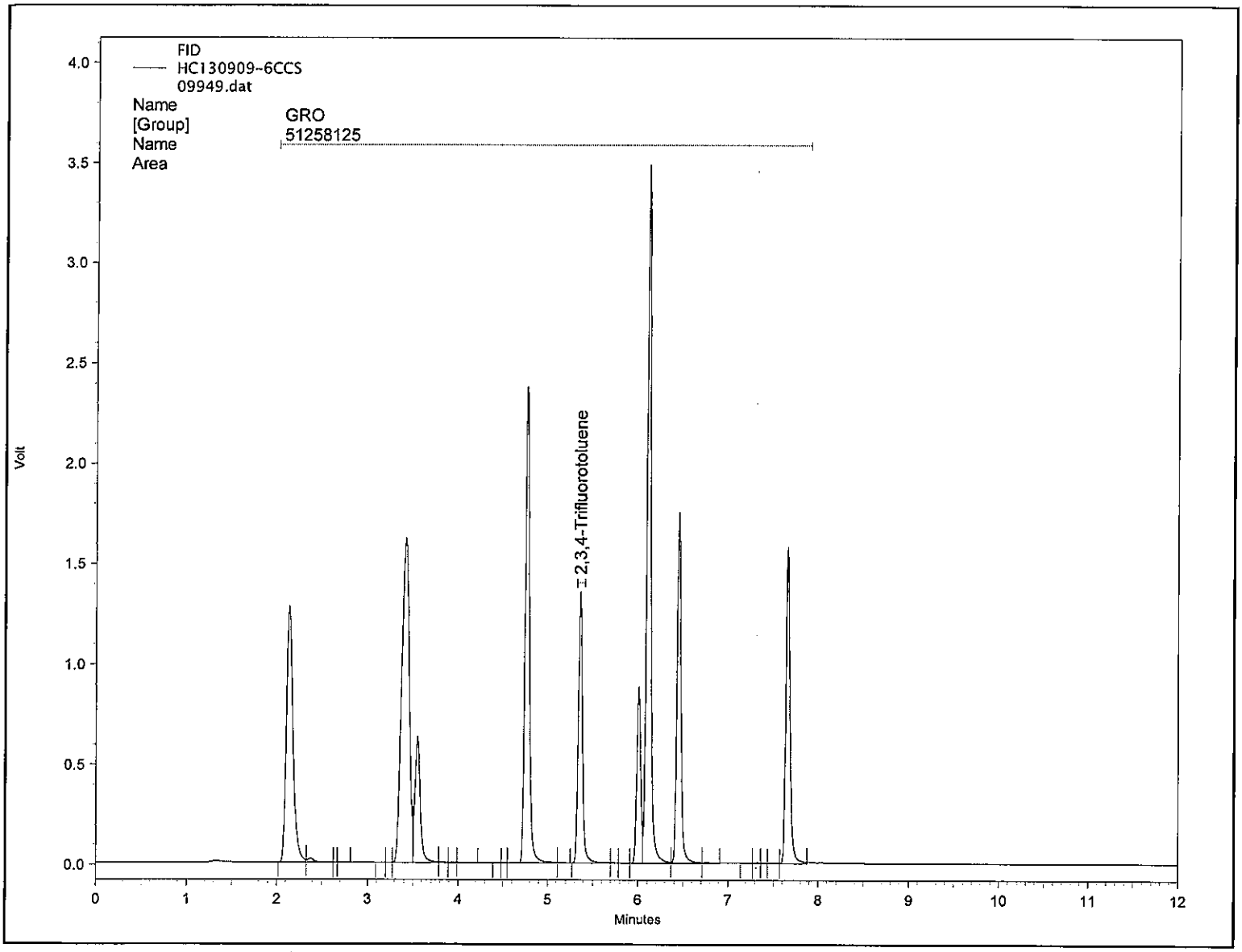
Total Volatile Petroleum Hydrocarbons / GRO (8015) Quantitation Report

ALSLG-Fort Collins

Sample : HC130909-6CCS
Filename : \\gcserver\gcdata\Projects\GC6\Data\2013\gro130909\09949.dat Instrument : GC6
Acquisition Date : 9/9/2013 3:38:09 PM Data Acquired By : knaebelt
Quantitation Date : 9/10/2013 7:50:27 AM Data Processed By : knaebelt
Last Method Update : 9/9/2013 8:03:15 AM Surr. Nom. Conc. : 0.1
Method : \\gcserver\gcdata\Projects\GC6\method\2013\gro130710c.met
Sequence : \\gcserver\gcdata\Projects\GC6\Sequence\2013\gro130909.seq
Data Description : water, 1ppm

FID Results

Name	RT	Expected RT	Peak Area	Integration Codes	Concentration	Conc. Units
2,3,4-Trifluorotoluene	5.357	5.367	4390437	LL	0.0922	ppm
GRO			51258125		1.0170	ppm



Column : DB-624 (30M x 0.53mm x 3.0u)

(1st int. code is for peak start, 2nd int code is for peak stop) B=baseline, f=force start or stop, I=ended by int. off event, N=begin negative peak, P=end negative peak, H=forward horiz, h=backward horiz, M=manual baseline or peak, m=move baseline start/stop, S=shoulder, T=tangent skim, V=valley, v=forced valley point, x=split peak, E=end of chromatogram encountered, R=reset baseline, L=lowest point horiz.

Printed On : 9/10/2013 7:50:32 AM

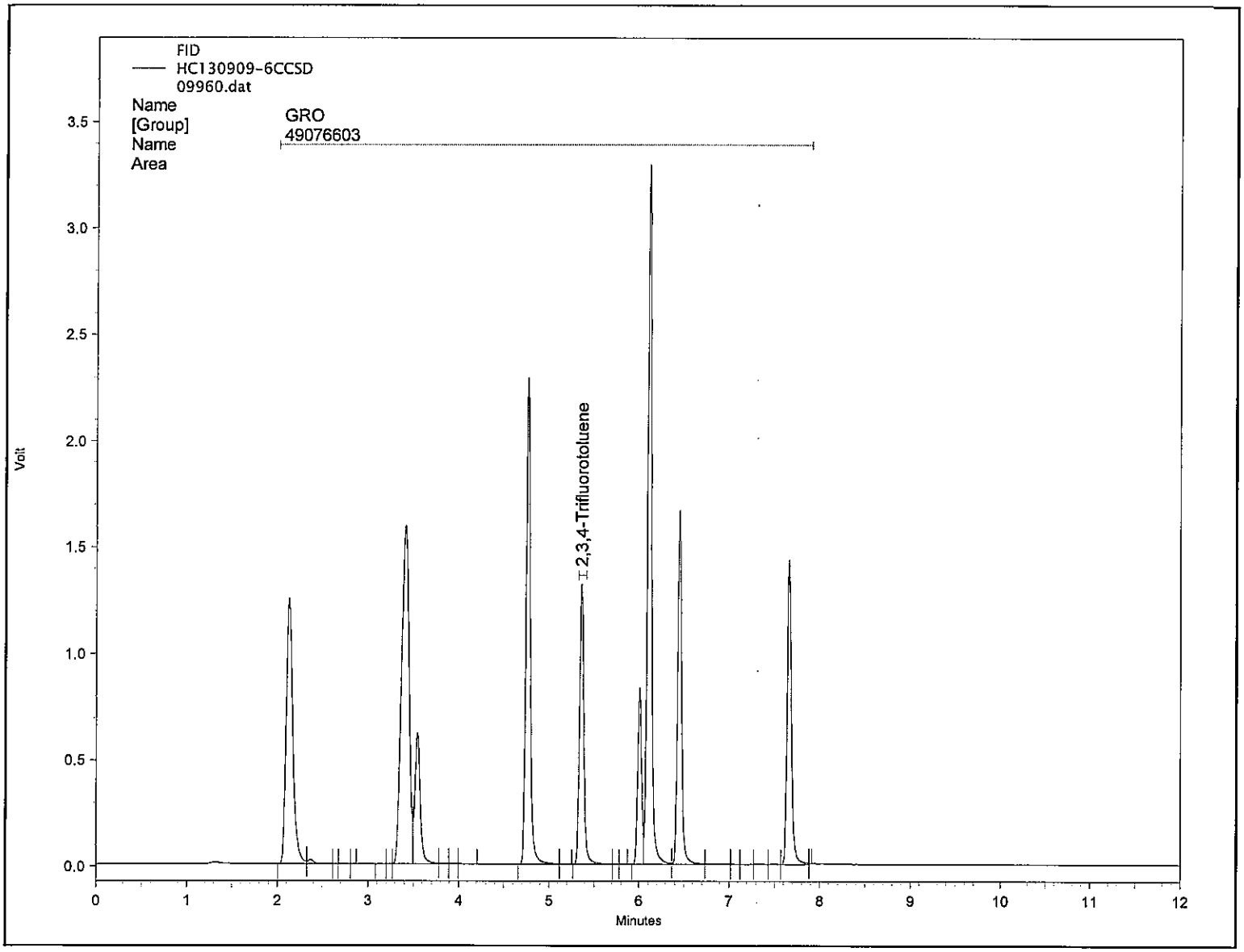
Total Volatile Petroleum Hydrocarbons / GRO (8015) Quantitation Report

ALSLG-Fort Collins

Sample : HC130909-6CCSD
Filename : \\gcserver\gcdata\Projects\GC6\Data\2013\gro130909\09960.dat Instrument : GC6
Acquisition Date : 9/9/2013 7:11:35 PM Data Acquired By : knaebelt
Quantitation Date : 9/10/2013 7:52:53 AM Data Processed By : knaebelt
Last Method Update : 9/9/2013 8:03:15 AM Surr. Nom. Conc. : 0.1
Method : \\gcserver\gcdata\Projects\GC6\method\2013\gro130710c.met
Sequence : \\gcserver\gcdata\Projects\GC6\Sequence\2013\gro130909.seq
Data Description : water, 1ppm

FID Results

Name	RT	Expected RT	Peak Area	Integration Codes	Concentration	Conc. Units
2,3,4-Trifluorotoluene	5.357	5.367	4339023	LL	0.0911	ppm
GRO			49076603		0.9734	ppm



Column : DB-624 (30M x 0.53mm x 3.0u)

(1st int. code is for peak start, 2nd int code is for peak stop) B=baseline, f=force start or stop, I=ended by int. off event, N=begin negative peak, P=end negative peak, H=forward horiz, h=backward horiz, M=manual baseline or peak, m=move baseline start/stop, S=shoulder, T=tangent skim, V=valley, v=forced valley point, x=split peak, E=end of chromatogram encountered, R=reset baseline, L=lowest point horiz.

Printed On : 9/10/2013 7:52:58 AM

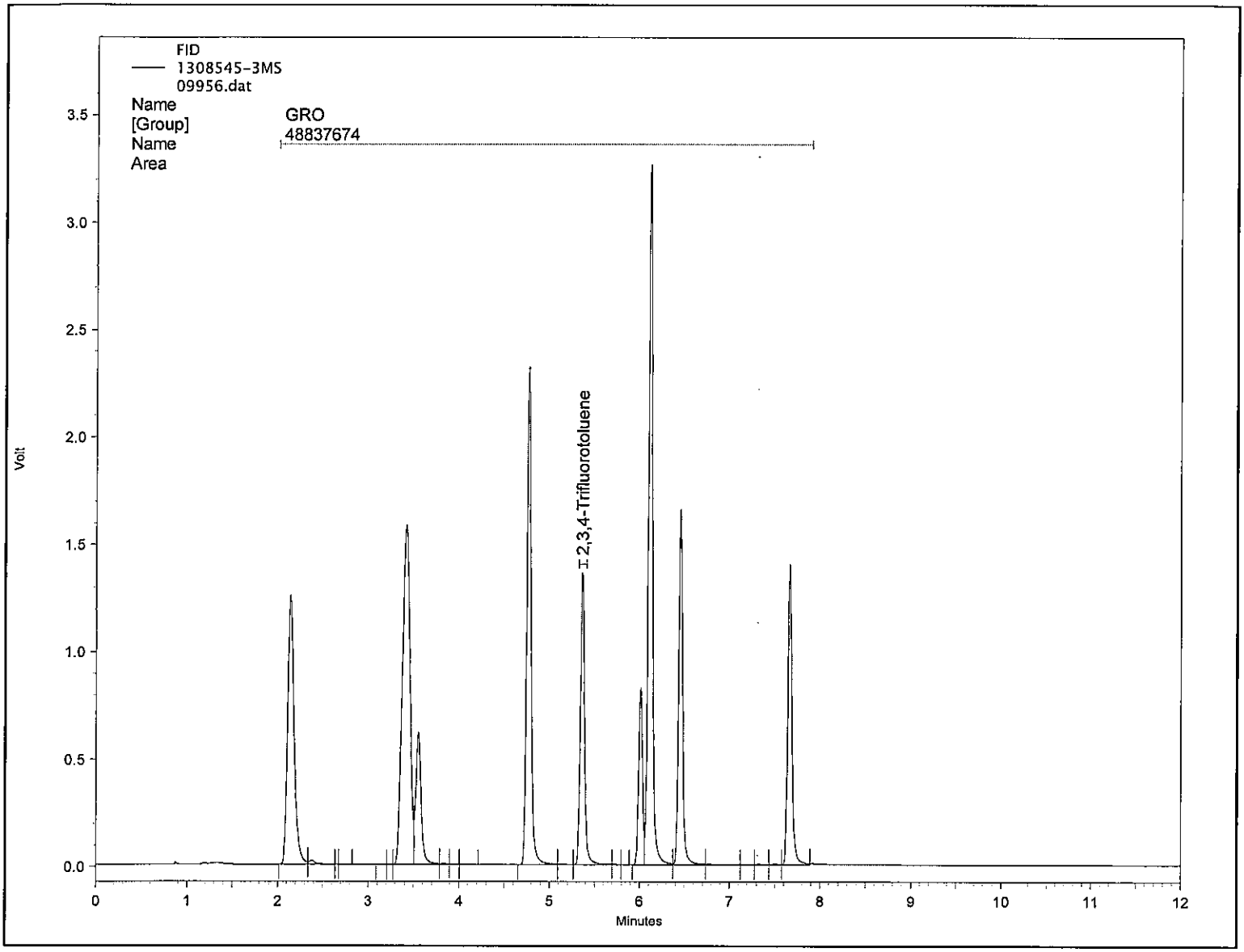
Total Volatile Petroleum Hydrocarbons / GRO (8015) Quantitation Report

ALSLG-Fort Collins

Sample : 1308545-3MS
Filename : \\gcserver\gcdata\Projects\GC6\Data\2013\gro130909\09956.dat
Instrument : GC6
Acquisition Date : 9/9/2013 5:54:21 PM
Data Acquired By : knaebelt
Quantitation Date : 9/10/2013 7:52:01 AM
Data Processed By : knaebelt
Last Method Update : 9/9/2013 8:03:15 AM
Surr. Nom. Conc. : 0.1
Method : \\gcserver\gcdata\Projects\GC6\method\2013\gro130710c.met
Sequence : \\gcserver\gcdata\Projects\GC6\Sequence\2013\gro130909.seq
Data Description : {Data Description}

FID Results

Name	RT	Expected RT	Peak Area	Integration Codes	Concentration	Conc. Units
2,3,4-Trifluorotoluene	5.360	5.367	4475050	LL	0.0940	ppm
GRO			48837674		0.9686	ppm



Column : DB-624 (30M x 0.53mm x 3.0u)

(1st int. code is for peak start, 2nd int code is for peak stop) B=baseline, f=force start or stop, I=ended by int. off event, N=begin negative peak, P=end negative peak, H=forward horiz, h=backward horiz, M=manual baseline or peak, m=move baseline start/stop, S=shoulder, T=tangent skim, V=valley, v=forced valley point, x=split peak, E=end of chromatogram encountered, R=reset baseline, L=lowest point horiz.

Printed On : 9/10/2013 7:52:06 AM

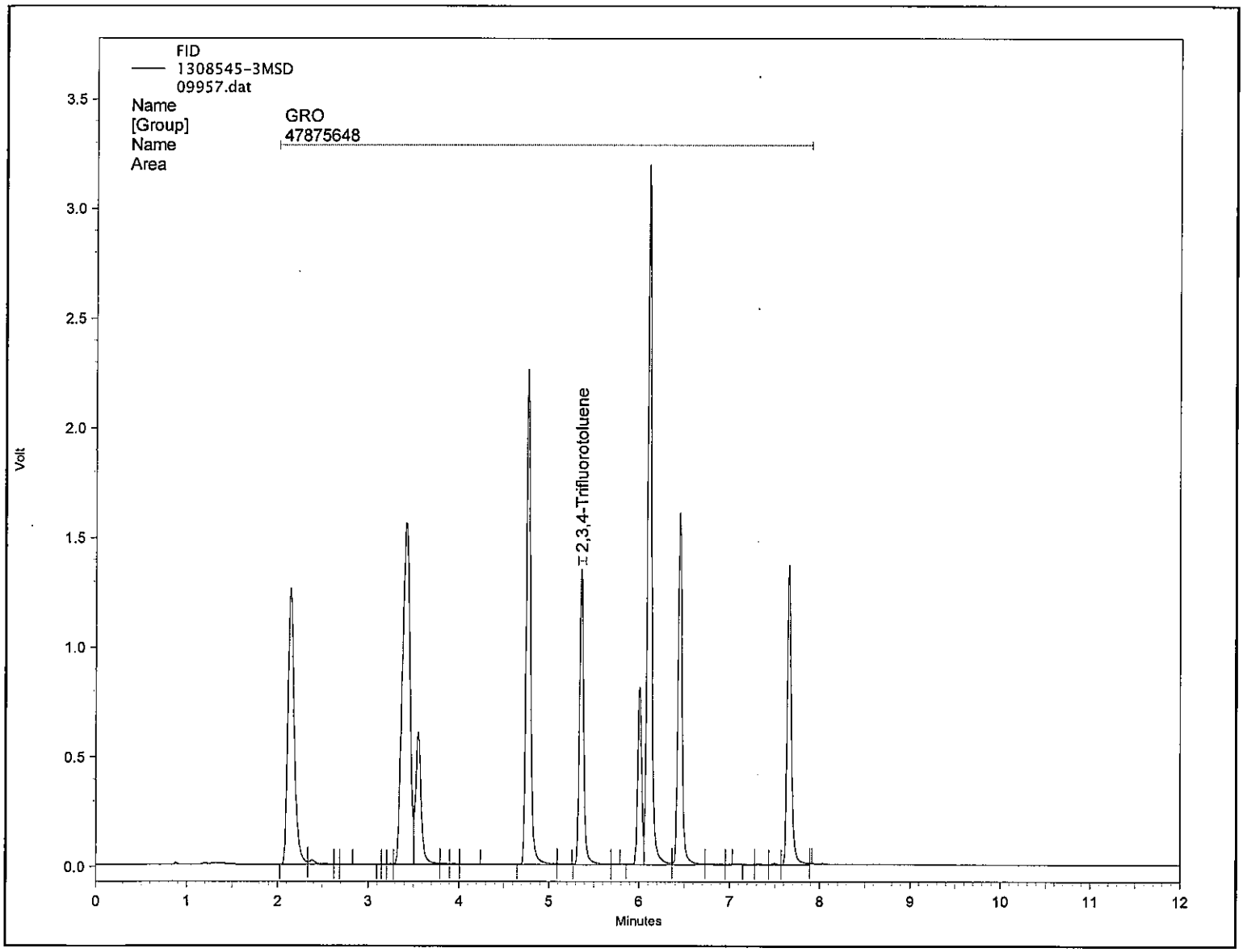
Total Volatile Petroleum Hydrocarbons / GRO (8015) Quantitation Report

ALSLG-Fort Collins

Sample : 1308545-3MSD
Filename : \\gcserver\gcdata\Projects\GC6\Data\2013\gro130909\09957.dat
Instrument : GC6
Acquisition Date : 9/9/2013 6:13:59 PM
Data Acquired By : knaebelt
Quantitation Date : 9/10/2013 7:52:14 AM
Data Processed By : knaebelt
Last Method Update : 9/9/2013 8:03:15 AM
Surr. Nom. Conc. : 0.1
Method : \\gcserver\gcdata\Projects\GC6\method\2013\gro130710c.met
Sequence : \\gcserver\gcdata\Projects\GC6\Sequence\2013\gro130909.seq
Data Description : {Data Description}

FID Results

Name	RT	Expected RT	Peak Area	Integration Codes	Concentration	Conc. Units
2,3,4-Trifluorotoluene	5.360	5.367	4405724	LL	0.0925	ppm
GRO			47875648		0.9494	ppm



Column : DB-624 (30M x 0.53mm x 3.0u)

(1st int. code is for peak start, 2nd int code is for peak stop) B=baseline, f=force start or stop, I=ended by int. off event, N=begin negative peak, P=end negative peak, H=forward horiz, h=backward horiz, M=manual baseline or peak, m=move baseline start/stop, S=shoulder, T=tangent skim, V=valley, v=forced valley point, x=split peak, E=end of chromatogram encountered, R=reset baseline, L=lowest point horiz.

Printed On : 9/10/2013 7:52:19 AM