ALS Laboratory Group
ANALYTICAL CHEMISTRY & TESTING SERVICES

Environmental Division
Fort Collins, Colorado

Total Volatile Petroleum Hydrocarbons (Gasoline)

Case Narrative

COGCC

DCU6-Orphan

Work Order Number: 1007167

1. This report consists of 1 water sample. The sample was received cool and intact by ALS on 07/16/2010.

   The water sample was free of head space prior to analysis.

   The sample had a pH > 2 at the time of analysis.

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

3. The sample was analyzed using a GC with a DB-624 capillary column and a flame ionization detector (FID) according to Standard Operating Procedure 425 Revision 13 generally based on SW-846 Methods 8000C and 8015C. The procedures are based on these methods because SW-846 does not have a specific method for TVPH or gasoline range organics. The only true modification from these methods is that TVPH is a multicomponent mixture and is quantitated by summing the entire range, rather than individual peaks. The carbon range integrated in this test extends from C_6 to C_{10}. All positive results in this range were quantitated using the responses from the initial calibration curve using the external standard technique.

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. All matrix spike and matrix spike duplicate recoveries and RPDs were within the acceptance criteria with the following exceptions:

Spiked Compound	QC Sample	Direction
Gasoline range organics	MS/MSD	High

The recoveries for gasoline range organics in the laboratory control sample and laboratory control sample duplicate were within control limits, which suggest the outlier in the matrix spikes may have been due to matrix effects. No further action was taken. Laboratory control sample and laboratory control sample duplicate results have been included.

8. The sample was 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 Standard Operating Procedure 939 Revision 3.

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 — 8.5.10
Mindy Norton
Organics Primary Data Reviewer
Date

Brendon Howard — 8/7/10
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.**

ALS Laboratory Group -- FC

Sample Number(s) Cross-Reference Table

Paragon OrderNum: 1007167
Client Name: COGCC
Client Project Name: DCU6-Orphan
Client Project Number:
Client PO Number: OE PHA 11000000014

Client Sample Number	Lab Sample Number	COC Number	Matrix	Date Collected	Time Collected
DCU #6	1007167-1		WATER	15-Jul-10	12:00
Trip Blank	1007167-2		WATER	15-Jul-10	

FedEx # 8732 9411 9890

ALS Laboratory Group

225 Commerce Drive, Fort Collins, CO 80524

TF: 800-443-1511 PH: 970-490-1511 FX: 970-490-1522

Chain-of-Custody

Date | Page 1 of 1 | Lab ID 1007167

Project Name/No.	DCU-Orphan
REPORT TO:	Linda Spry ORourke
PHONE:	970 625 2497
FAX:	970 625 5682
E-MAIL:	linda.spryorourke@state.co.us
COMPANY:	DOGCC
ADDRESS:	707 Wapiti Ct Suite 204 Rifle Co 81650

Turnaround: Standard or Due _____ | Disposal: By Lab or Return to Client

Sampler(s)

Provide additional information as needed in Comments below.

Circle Analytical Method Above

Sample ID	Date	Time *	Lab ID	Matrix	Preservative (Type HCl, etc.)	No. of Containers	TPH	VOCs	BTEX + MtBE	SVOCs	OC Pesticides	PCBs	Herbicides	Explosives	TCLP Organics SW1311	TCLP Metals SW1311	Total Metals (ICP) or Hg	Dissolved Metals (ICP) or Hg	Total Metals (ICP-MS)	Dissolved Metals (ICP-MS)	Hexavalent Chromium	Inorganic Anions	Solids	pH	Perchlorate	Alkalinity - Total, HCO3, CO3	Actinides	Gamma Isotopes	Gross Alpha / Beta	Total Alpha-Emitting Radium	Radium 226	Radium 228	Strontium 90 (Total RadioSr)	Tritium	Radon 222	SAR calc.	Cation/anion balance
DCU #6	7/15/10	1200	1	GW			X	X		X	X		X					X		X		X	X	X		X									X	X

Circle Analytical Method Above

Circle: Am / Cm / Pu / Th / U

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 analyte list below.

Comments:

anions = Br, Cl, F, NO_2, NO_3, SO_4

*8B/200.7 = Ba, Br, B, Ca, Cr, Co, Cu, Fe, Li, Mg, Mn, Ni, K, Si, Sr, V, Zn

8B/200.8 = Sb, As, Cd, Pb, Mo, Se, Ag, Tl, U

Return cooler to us - address inside lid

Sample at time of collection was 89°F -

16 of 17

Originator: Retain pink page or a photocopy!

Form 202r7 (5/19/09)

Relinquished By: (1)
Signature Kevin King
Printed Name Kevin King
Date 7/15/10 Time 16:00
Company

Relinquished By: (2)
Signature Linda Spry ORourke
Printed Name to FedEx
Date 7/15/10 Time 1800
Company

Received By: (1)
Signature Linda Spry ORourke
Printed Name Linda Spry ORourke
Date 7/15/10 Time 1600
Company

Received By: (2)
Signature Lauren Schmitt
Printed Name Lauren Schmitt
Date 7/16/10 Time 1005
Company ALS

ALS Laboratory Group - Fort Collins

CONDITION OF SAMPLE UPON RECEIPT FORM

Client: COGCC Workorder No: 1007167

Project Manager: ARW Initials: LAS Date: 7/16/10

1. Does this project require any **special handling** in addition to standard Paragon 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 perchlorate LCMS-MS samples **have** headspace? (at least 1/3 of container required)	(N/A)	YES	NO
16. Were samples checked for and free from the presence of **residual chlorine?** (Applicable when PM has indicated samples are from a chlorinated water source; note if field preservation with sodium thiosulfate was not observed.)	(N/A)	YES	NO
17. Were the samples **shipped on ice**?		(YES)	NO
18. Were cooler temperatures measured at 0.1-6.0°C? **IR gun used*:** (#2) #4	RAD ONLY	(YES)	NO

Cooler #:	1
Temperature (°C):	2.6
No. of custody seals on cooler:	2
DOT Survey/ Acceptance Information — External µR/hr reading:	12
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

(*8) 1007167-1-10 (DCU#6) 125ml amber initial pH = 7
0.4mL H_2SO_4 (Lot #49245) added by LAS @ 1040 7/16/10
Final pH < 2

(*14) 1007167-1-5, 1-6 40mL voas for GRO have headspace < pea size

If applicable, was the client contacted? (YES) / NO / NA Contact: Linda Spry Droske Date/Time: 7/19/10 e-mail

Project Manager Signature / Date: Arndt 7/19/10

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

Form 201r22.xls (6/1/09)

Gasoline Range Organics

Method SW8015B

Method Blank

Lab Name: ALS Laboratory Group -- FC
Work Order Number: 1007167
Client Name: COGCC
ClientProject ID: DCU6-Orphan

Lab ID: HCG100726-1MB

Sample Matrix: WATER
% Moisture: N/A
Date Collected: N/A
Date Extracted: 26-Jul-10
Date Analyzed: 26-Jul-10
Prep Method: SW5030 Rev C

Prep Batch: HCG100726-1
QCBatchID: HCG100726-1-1
Run ID: HCG100726-1A
Cleanup: NONE
Basis: N/A
File Name: 03012.dat

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

CASNO	Target Analyte	DF	Result	Reporting Limit	Result Qualifier	EPA Qualifier
8006-61-9	GASOLINE RANGE ORGANICS	1	0.1	0.1	U	

Surrogate Recovery

CASNO	Surrogate Analyte	Result	Flag	Spike Amount	Percent Recovery	Control Limits
193533-92-5	2,3,4-TRIFLUOROTOLUENE	0.0978		0.1	98	74 - 129

Data Package ID: *HCG1007167-1*

Gasoline Range Organics

Method SW8015B

Sample Results

Lab Name: ALS Laboratory Group -- FC
Work Order Number: 1007167
Client Name: COGCC
ClientProject ID: DCU6-Orphan

Field ID: DCU #6
Lab ID: 1007167-1

Sample Matrix: WATER
% Moisture: N/A
Date Collected: 15-Jul-10
Date Extracted: 26-Jul-10
Date Analyzed: 26-Jul-10
Prep Method: SW5030 Rev C

Prep Batch: HCG100726-1
QCBatchID: HCG100726-1-1
Run ID: HCG100726-1A
Cleanup: NONE
Basis: As Received
File Name: 03020.dat

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

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
8006-61-9	GASOLINE RANGE ORGANICS	1	0.1	0.1	U	

Surrogate Recovery

CASNO	Surrogate Analyte	Result	Flag	Spike Amount	Percent Recovery	Control Limits
193533-92-5	2,3,4-TRIFLUOROTOLUENE	0.109		0.1	109	74 - 129

Data Package ID: *HCG1007167-1*

Gasoline Range Organics

Method SW8015B

Laboratory Control Sample and Laboratory Control Sample Duplicate

Lab Name: ALS Laboratory Group -- FC
Work Order Number: 1007167
Client Name: COGCC
ClientProject ID: DCU6-Orphan

Lab ID: HCG100726-1LCS

Sample Matrix: WATER
% Moisture: N/A
Date Collected: N/A
Date Extracted: 07/26/2010
Date Analyzed: 07/26/2010
Prep Method: SW5030C

Prep Batch: HCG100726-1
QCBatchID: HCG100726-1-1
Run ID: HCG100726-1A
Cleanup: NONE
Basis: N/A
File Name: 03011.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	1.04	0.1		104	79 - 118%

Lab ID: HCG100726-1LCSD

Sample Matrix: WATER
% Moisture: N/A
Date Collected: N/A
Date Extracted: 07/26/2010
Date Analyzed: 07/26/2010
Prep Method: SW5030C

Prep Batch: HCG100726-1
QCBatchID: HCG100726-1-1
Run ID: HCG100726-1A
Cleanup: NONE
Basis: N/A
File Name: 03026.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	1.12	0.1		112	20	7

Surrogate Recovery LCS/LCSD

CASNO	Target Analyte	Spike Added	LCS % Rec.	LCS Flag	LCSD % Rec.	LCSD Flag	Control Limits
193533-92-5	2,3,4-TRIFLUOROTOLUENE	0.1	103		107		74 - 129

Data Package ID: *HCG1007167-1*

Gasoline Range Organics

Method SW8015B

Matrix Spike And Matrix Spike Duplicate

Lab Name: ALS Laboratory Group -- FC
Work Order Number: 1007167
Client Name: COGCC
ClientProject ID: DCU6-Orphan

Field ID: DCU #6
LabID: 1007167-1MS

Sample Matrix: WATER
% Moisture: N/A
Date Collected: 15-Jul-10
Date Extracted: 26-Jul-10
Date Analyzed: 26-Jul-10
Prep Method: SW5030 Rev C

Prep Batch: HCG100726-1
QCBatchID: HCG100726-1-1
Run ID: HCG100726-1A
Cleanup: NONE
Basis: As Received

Sample Aliquot: 5 ml
Final Volume: 5 ml
Result Units: MG/L
File Name: 03021.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	1.23	*	0.1	1	123	79 - 118%

Field ID: DCU #6
LabID: 1007167-1MSD

Sample Matrix: WATER
% Moisture: N/A
Date Collected: 15-Jul-10
Date Extracted: 26-Jul-10
Date Analyzed: 26-Jul-10
Prep Method: SW5030 Rev C

Prep Batch: HCG100726-1
QCBatchID: HCG100726-1-1
Run ID: HCG100726-1A
Cleanup: NONE
Basis: As Received

Sample Aliquot: 5 ml
Final Volume: 5 ml
Result Units: MG/L
File Name: 03022.dat

CASNO	Target Analyte	MSD Result	MSD Qual	Spike Added	MSD % Rec.	Reporting Limit	RPD Limit	RPD
8006-61-9	GASOLINE RANGE ORGANICS	1.23	*	1	123	0.1	30	0

Surrogate Recovery MS/MSD

CASNO	Target Analyte	Spike Added	MS % Rec.	MS Flag	MSD % Rec.	MSD Flag	Control Limits
193533-92-5	2,3,4-TRIFLUOROTOLUENE	0.1	113		115		74 - 129

Data Package ID: *HCG1007167-1*

Total Volatile Petroleum Hydrocarbons / GRO (8015) Quantitation Report

ALSLG-Fort Collins

Sample : hcg100726-1MB
Filename : \\gcserver\gcdata\Projects\GC6\Data\2010\gro100726\03012.dat
Instrument : GC6
Acquisition Date : 7/26/2010 11:13:04 AM
Data Acquired By : howardb

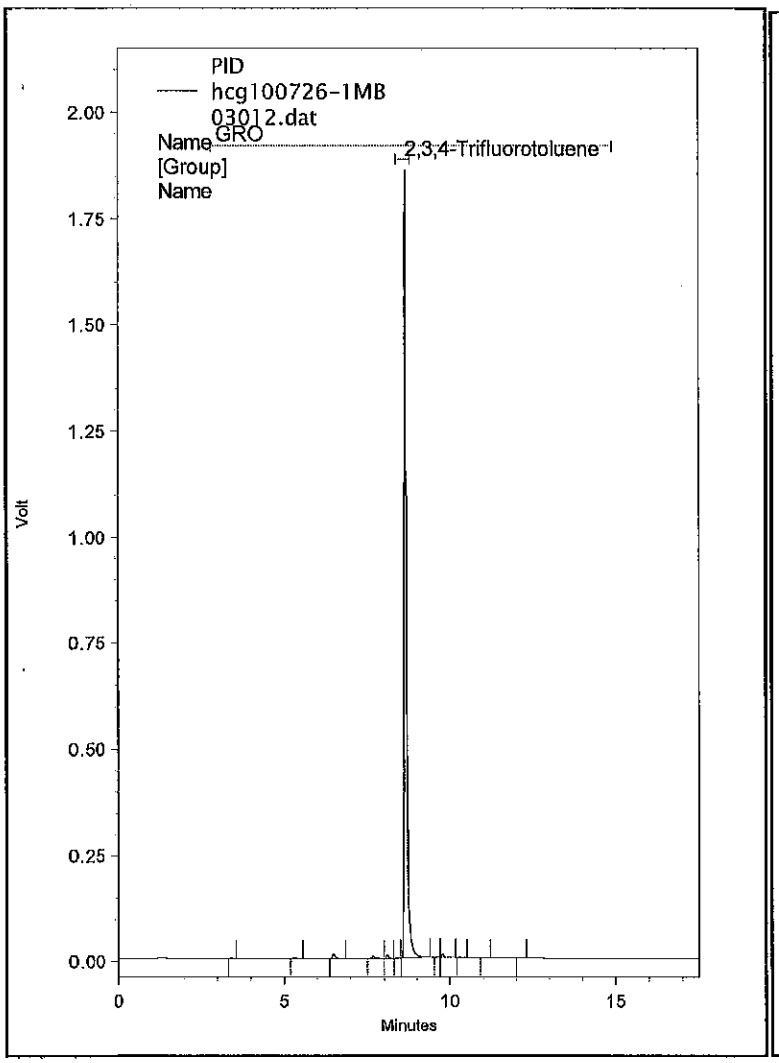
Quantitation Date : 7/27/2010 12:50:49 PM
Data Processed By : howardb
Last Method Update : 7/26/2010 6:46:23 PM
Surr. Nom. Conc. : 0.1
Method : \\gcserver\gcdata\Projects\GC6\method\2010\gro100331p.met
Sequence : \\gcserver\gcdata\Projects\GC6\Sequence\2010\gro100726.seq
Data Description : {Data Description}

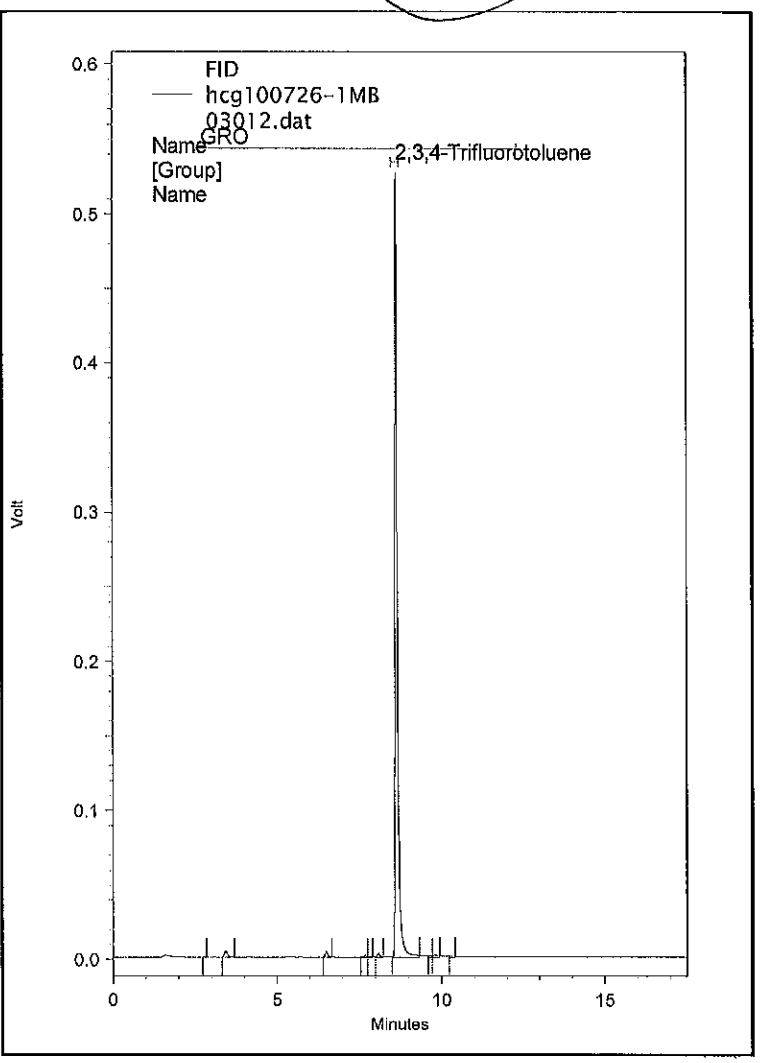
PID Results

Compound Name	RT	Expected RT	Peak Area	Integration Codes	Concentration	Conc. Units
2,3,4-Trifluorotoluene	8.643	8.570	9126439	BB	0.096	ppm
GRO			233506		0.000	ppm

FID Results

Name	RT	Expected RT	Peak Area	Integration Codes	Concentration	Conc. Units
2,3,4-Trifluorotoluene	8.650	8.633	2619626	LL	0.098	ppm
GRO			116571		0.000	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 : 7/27/2010 12:50:55 PM

Total Volatile Petroleum Hydrocarbons / GRO (8015) Quantitation Report

ALSLG-Fort Collins

Sample : 1007167-1
Filename : \\gcserver\gcdata\Projects\GC6\Data\2010\gro100726\03020.dat
Instrument : GC6
Acquisition Date : 7/26/2010 3:37:09 PM
Data Acquired By : howardb

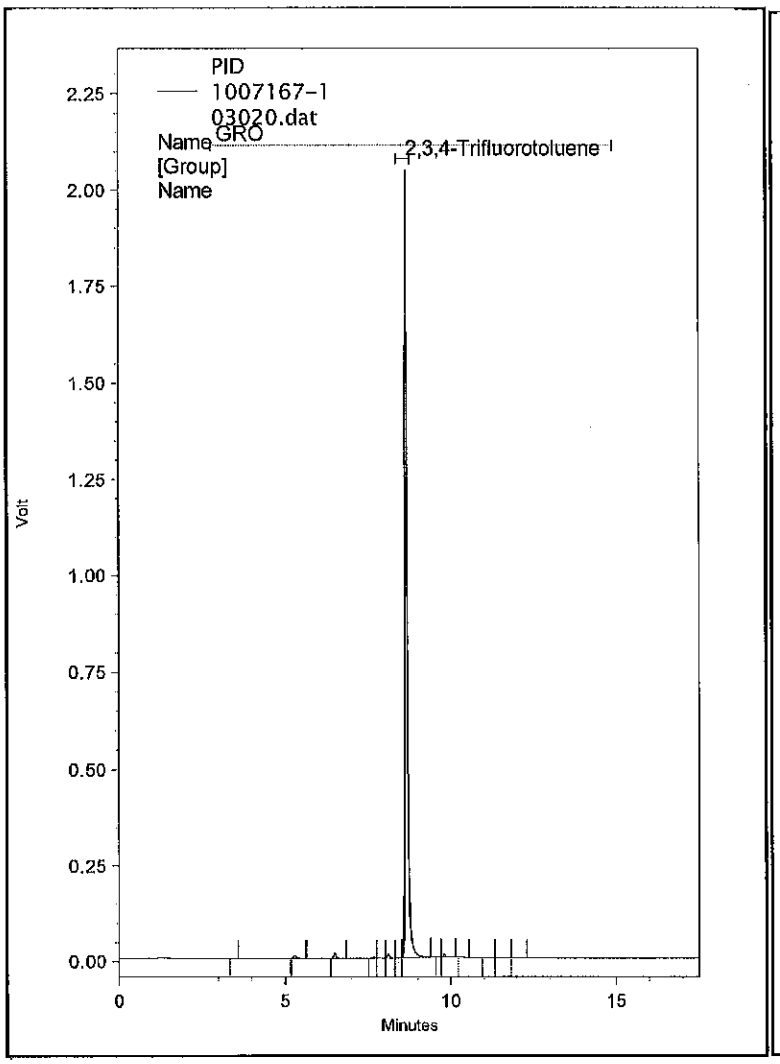
Quantitation Date : 7/27/2010 12:53:14 PM
Data Processed By : howardb
Last Method Update : 7/26/2010 6:46:23 PM
Surr. Nom. Conc. : 0.1
Method : \\gcserver\gcdata\Projects\GC6\method\2010\gro100331p.met
Sequence : \\gcserver\gcdata\Projects\GC6\Sequence\2010\gro100726.seq
Data Description : {Data Description}

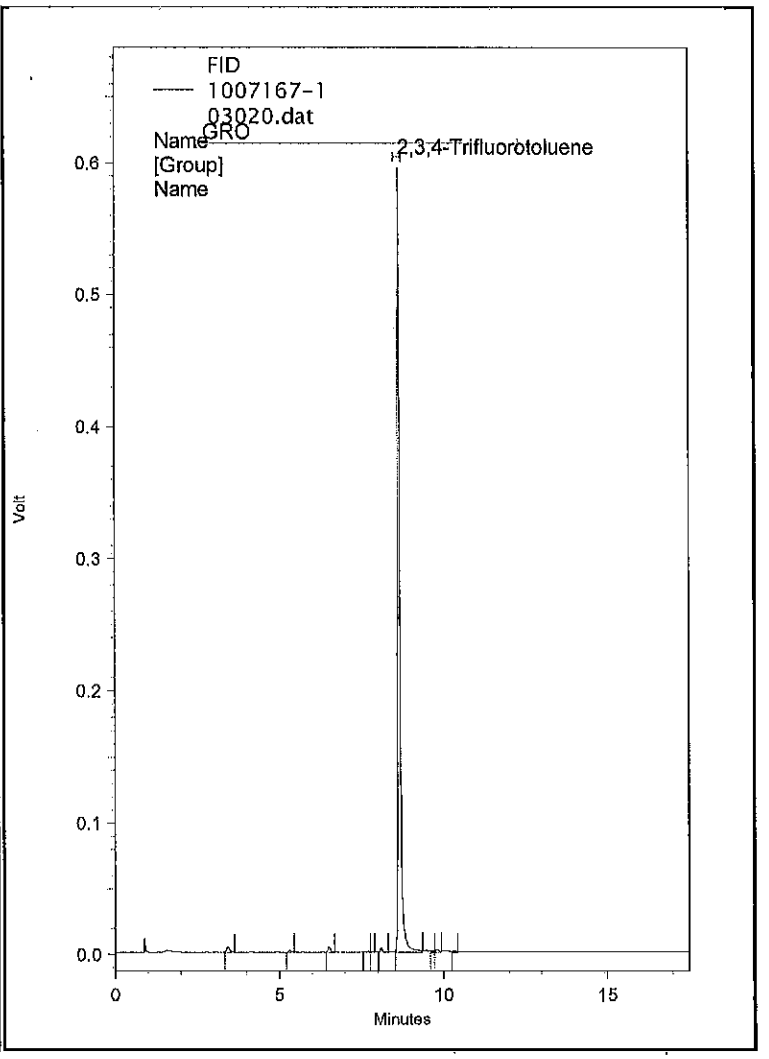
PID Results

Compound Name	RT	Expected RT	Peak Area	Integration Codes	Concentration	Conc. Units
2,3,4-Trifluorotoluene	8.657	8.570	9939570	BB	0.105	ppm
GRO			267924		0.001	ppm

FID Results

Name	RT	Expected RT	Peak Area	Integration Codes	Concentration	Conc. Units
2,3,4-Trifluorotoluene	8.660	8.633	2917078	LL	0.109	ppm
GRO			125448		0.000	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 : 7/27/2010 12:53:20 PM

Total Volatile Petroleum Hydrocarbons / GRO (8015) Quantitation Report

ALSLG-Fort Collins

Sample : hcg100726-1CCS
Filename : \\gcserver\gcdata\Projects\GC6\Data\2010\gro100726\03011.dat
Instrument : GC6
Acquisition Date : 7/26/2010 10:42:36 AM
Data Acquired By : howardb

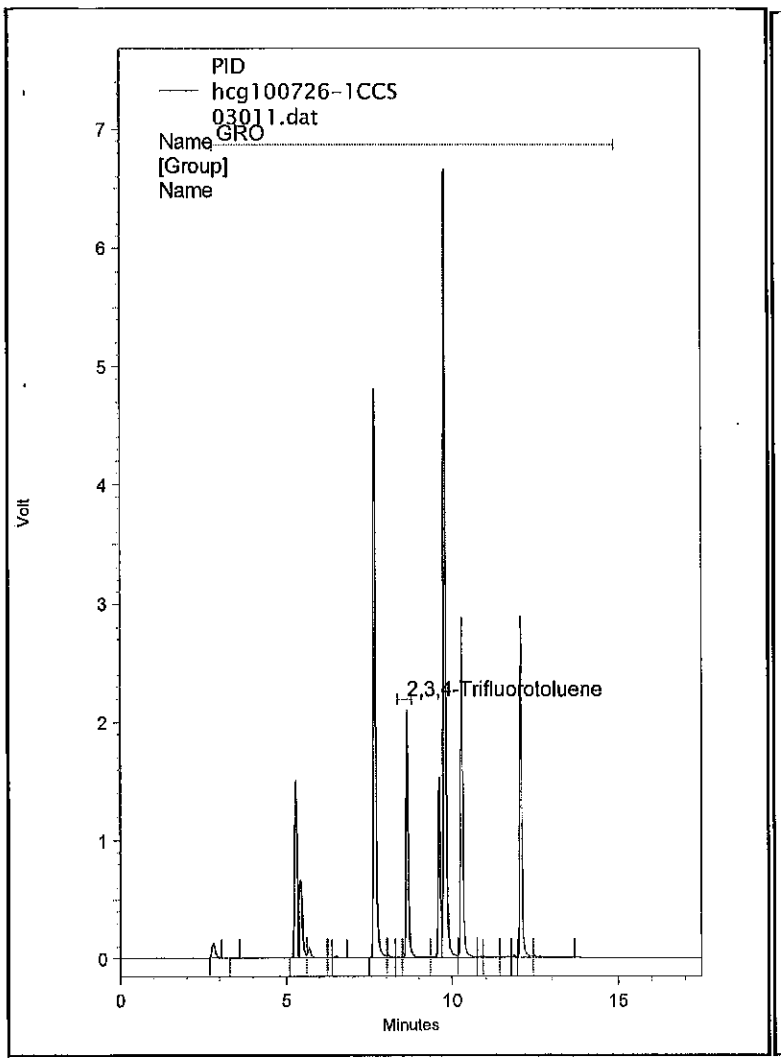
Quantitation Date : 7/27/2010 12:50:30 PM
Data Processed By : howardb
Last Method Update : 7/26/2010 6:46:23 PM
Surr. Nom. Conc. : 0.1
Method : \\gcserver\gcdata\Projects\GC6\method\2010\gro100331p.met
Sequence : \\gcserver\gcdata\Projects\GC6\Sequence\2010\gro100726.seq
Data Description : {Data Description}

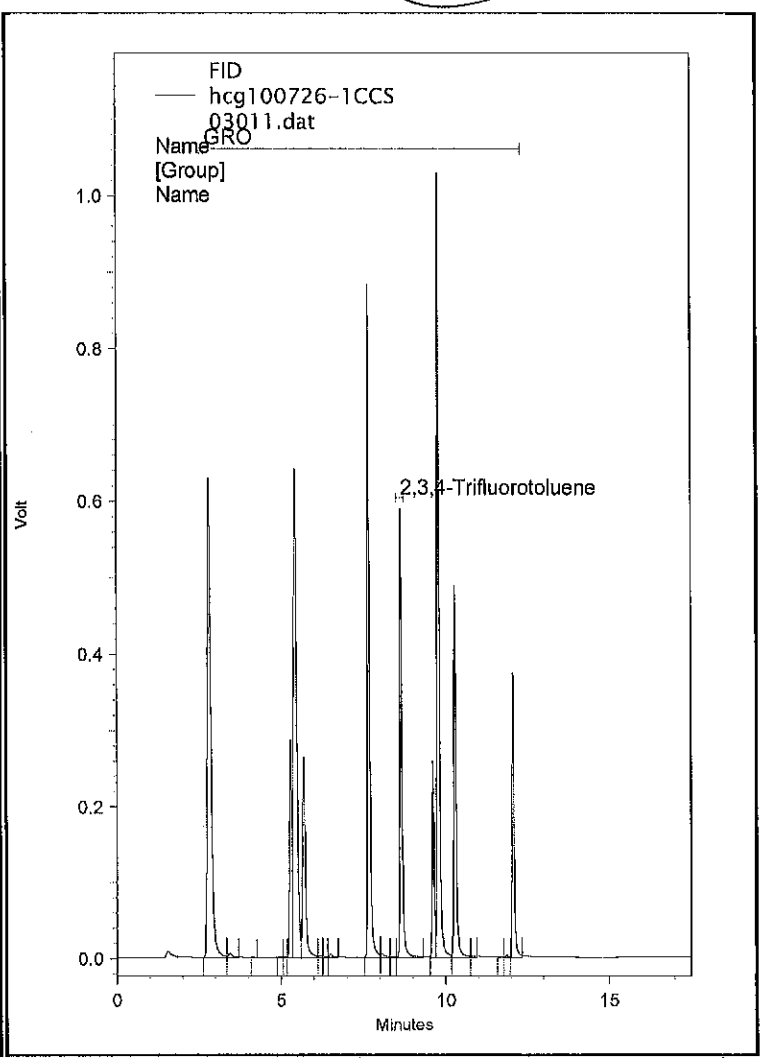
PID Results

Compound Name	RT	Expected RT	Peak Area	Integration Codes	Concentration	Conc. Units
2,3,4-Trifluorotoluene	8.640	8.570	9719920	VV	0.102	ppm
GRO			99568947		0.987	ppm

FID Results

Name	RT	Expected RT	Peak Area	Integration Codes	Concentration	Conc. Units
2,3,4-Trifluorotoluene	8.647	8.633	2748630	LL	0.103	ppm
GRO			26155349		1.043	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 : 7/27/2010 12:50:37 PM

Total Volatile Petroleum Hydrocarbons / GRO (8015) Quantitation Report

ALSLG-Fort Collins

Sample : hcg100726-1CCSD
Filename : \\gcserver\gcdata\Projects\GC6\Data\2010\gro100726\03026.dat
Acquisition Date : 7/26/2010 8:52:07 PM
Quantitation Date : 7/27/2010 12:55:06 PM
Last Method Update : 7/26/2010 6:46:23 PM
Method : \\gcserver\gcdata\Projects\GC6\method\2010\gro100331p.met
Sequence : \\gcserver\gcdata\Projects\GC6\Sequence\2010\gro100726.seq
Data Description : {Data Description}

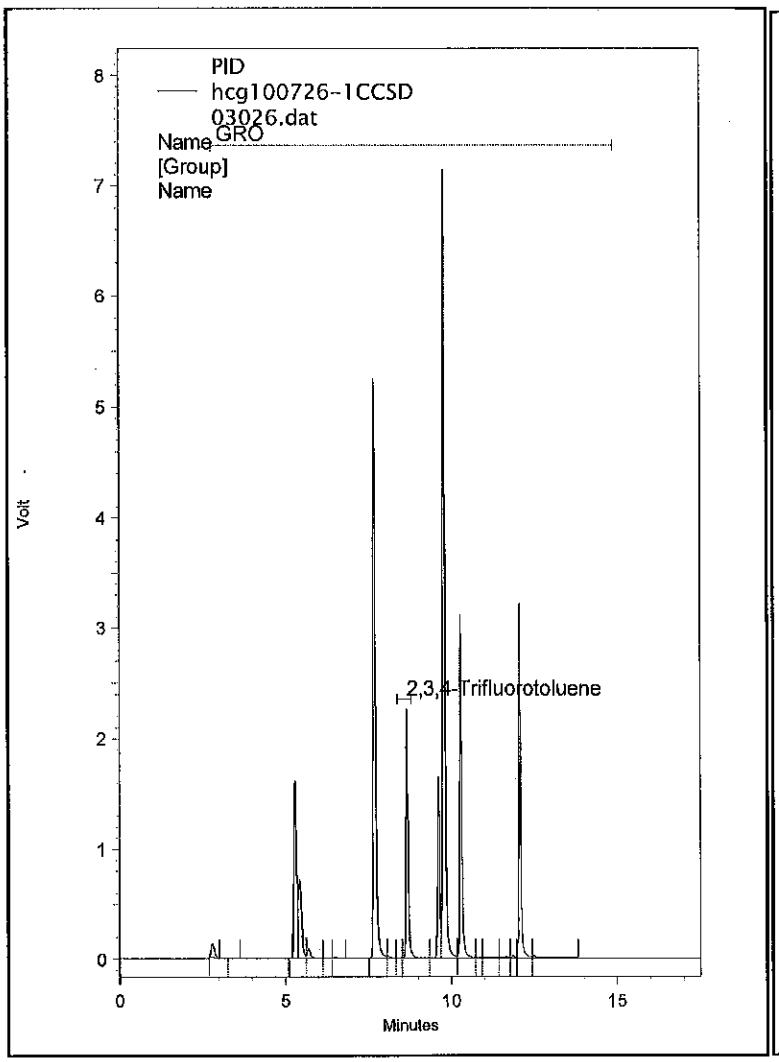
Instrument : GC6
Data Acquired By : noltej
Data Processed By : howardb
Surr. Nom. Conc. : 0.1

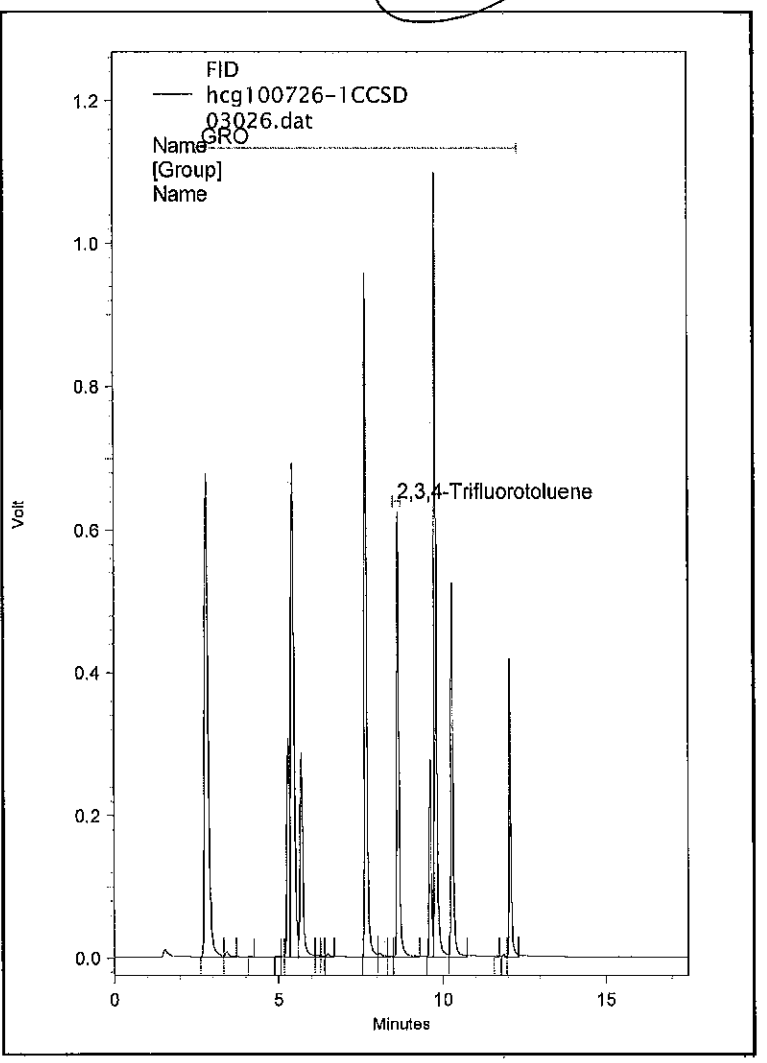
PID Results

Compound Name	RT	Expected RT	Peak Area	Integration Codes	Concentration	Conc. Units
2,3,4-Trifluorotoluene	8.643	8.570	10332492	VV	0.109	ppm
GRO			107671465		1.070	ppm

FID Results

Name	RT	Expected RT	Peak Area	Integration Codes	Concentration	Conc. Units
2,3,4-Trifluorotoluene	8.650	8.633	2867303	LL	0.107	ppm
GRO			28063095		1.121	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 : 7/27/2010 12:55:13 PM

Total Volatile Petroleum Hydrocarbons / GRO (8015) Quantitation Report

ALSLG-Fort Collins

Sample : 1007167-1MS
Filename : \\gcserver\gcdata\Projects\GC6\Data\2010\gro100726\03021.dat
Instrument : GC6
Acquisition Date : 7/26/2010 4:36:32 PM
Data Acquired By : howardb

Quantitation Date : 7/27/2010 12:53:32 PM
Data Processed By : howardb
Last Method Update : 7/26/2010 6:46:23 PM
Surr. Nom. Conc. : 0.1
Method : \\gcserver\gcdata\Projects\GC6\method\2010\gro100331p.met
Sequence : \\gcserver\gcdata\Projects\GC6\Sequence\2010\gro100726.seq
Data Description : {Data Description}

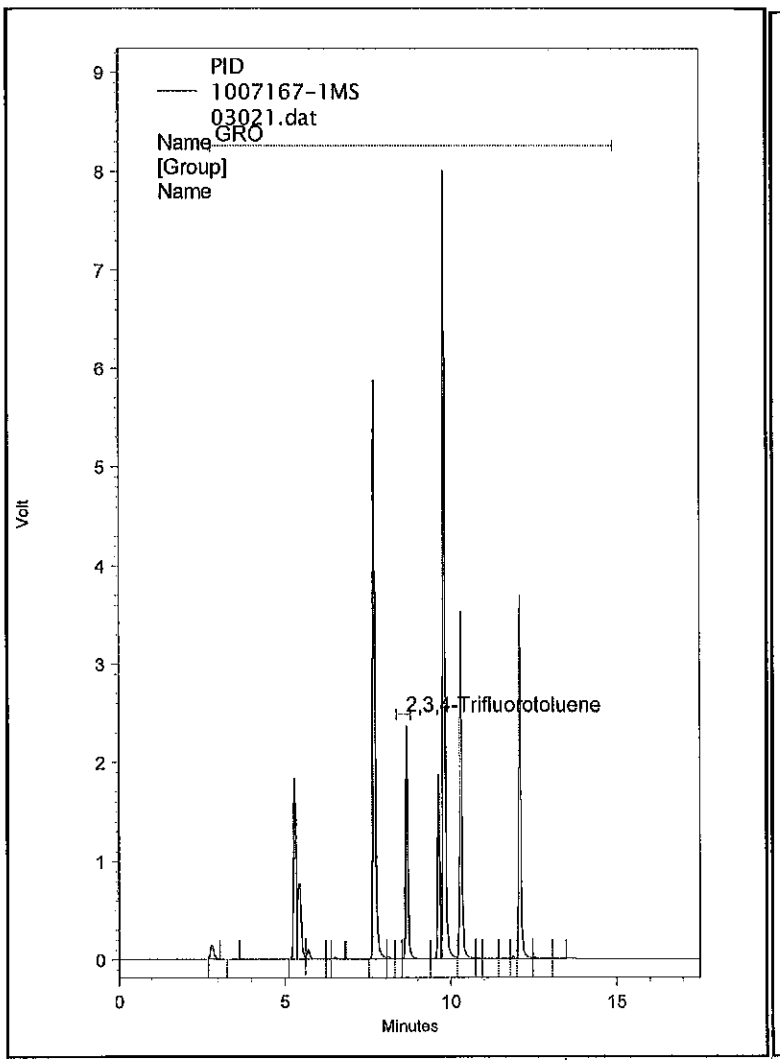
PID Results

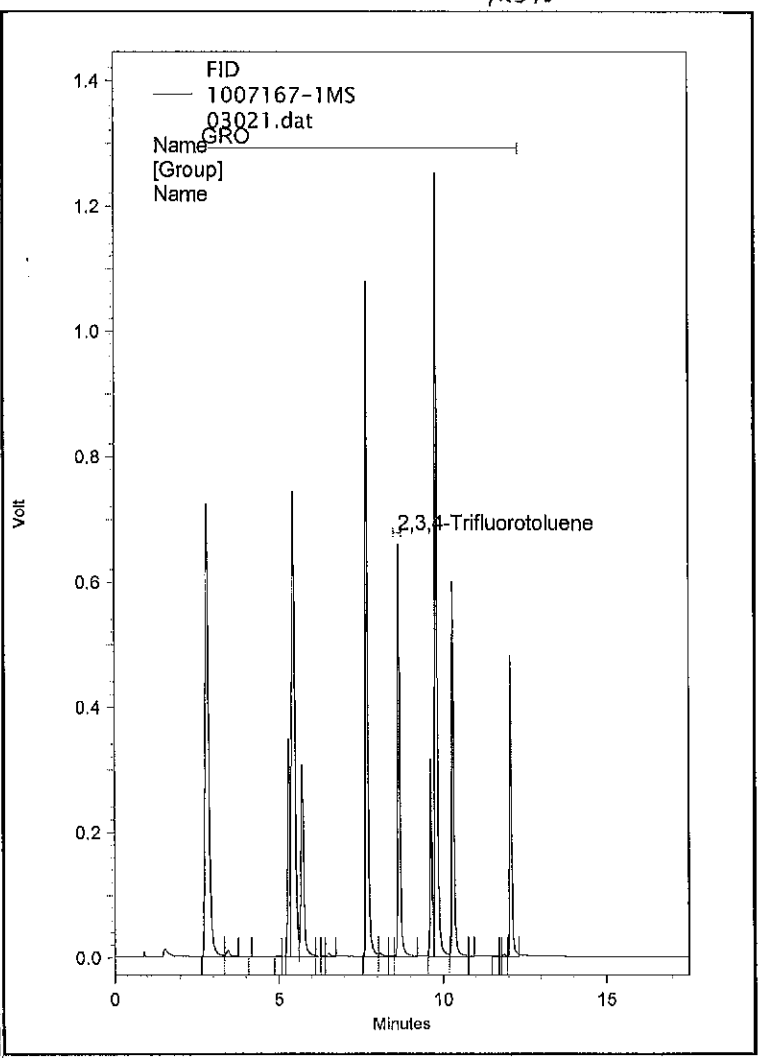
Compound Name	RT	Expected RT	Peak Area	Integration Codes	Concentration	Conc. Units
2,3,4-Trifluorotoluene	8.653	8.570	10822974	VV	0.114	ppm
GRO			119965788		1.197	ppm

FID Results

Name	RT	Expected RT	Peak Area	Integration Codes	Concentration	Conc. Units
2,3,4-Trifluorotoluene	8.660	8.633	3027986	LL	0.113	ppm
GRO			30853581		1.234	ppm

123% recovery





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.

Total Volatile Petroleum Hydrocarbons / GRO (8015) Quantitation Report

ALSLG-Fort Collins

Sample : 1007167-1MSD
Filename : \\gcserver\gcdata\Projects\GC6\Data\2010\gro100726\03022.dat
Instrument : GC6
Acquisition Date : 7/26/2010 5:12:42 PM
Data Acquired By : howardb

Quantitation Date : 7/27/2010 12:53:51 PM
Data Processed By : howardb
Last Method Update : 7/26/2010 6:46:23 PM
Surr. Nom. Conc. : 0.1
Method : \\gcserver\gcdata\Projects\GC6\method\2010\gro100331p.met
Sequence : \\gcserver\gcdata\Projects\GC6\Sequence\2010\gro100726.seq
Data Description : {Data Description}

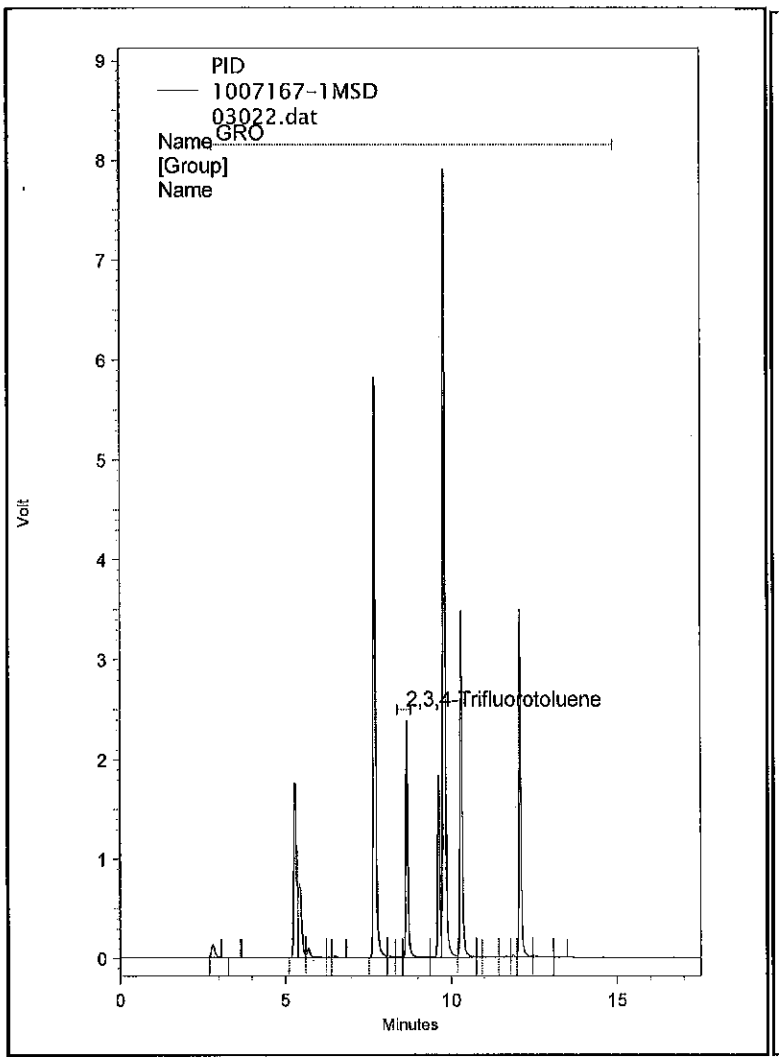
PID Results

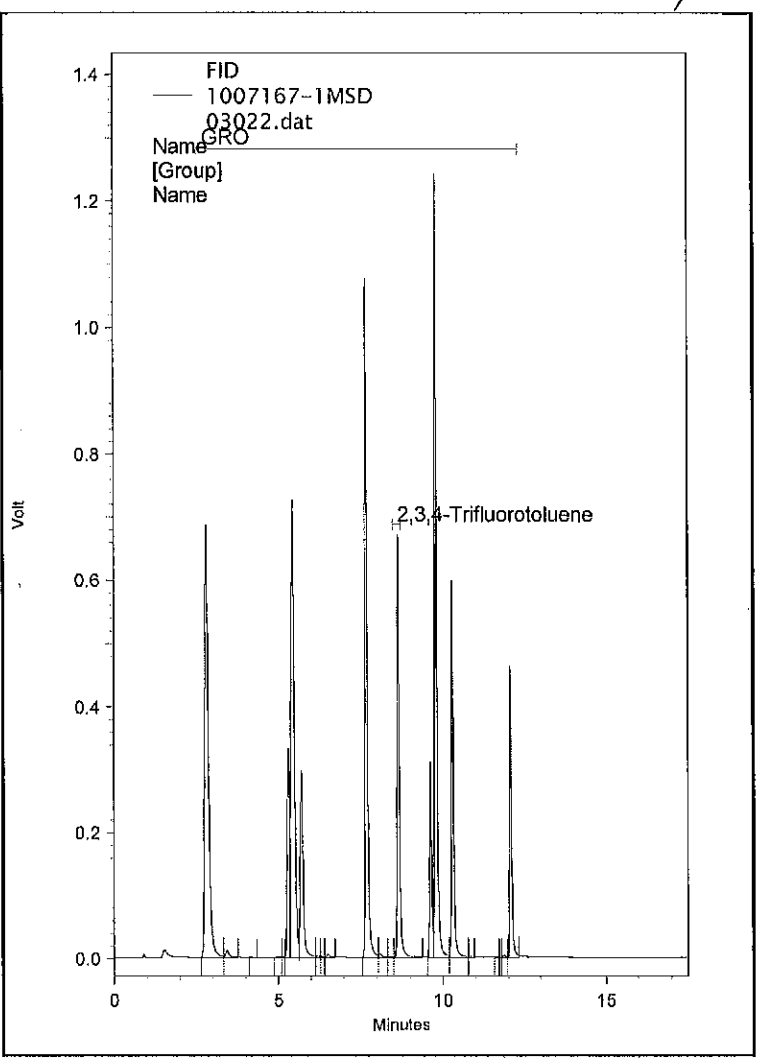
Compound Name	RT	Expected RT	Peak Area	Integration Codes	Concentration	Conc. Units
2,3,4-Trifluorotoluene	8.653	8.570	10888282	VV	0.115	ppm
GRO			118808466		1.185	ppm

FID Results

Name	RT	Expected RT	Peak Area	Integration Codes	Concentration	Conc. Units
2,3,4-Trifluorotoluene	8.660	8.633	3080269	LL	0.115	ppm
GRO			30810265		1.233	ppm

123% recovery





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 : 7/27/2010 12:53:57 PM