ALS Laboratory Group
ANALYTICAL CHEMISTRY & TESTING SERVICES

Environmental Division
Fort Collins, Colorado

Total Volatile Petroleum Hydrocarbons (Gasoline)

Case Narrative

Colorado Oil & Gas Conservation Commission

Complaint 200265825

Work Order Number: 1008116

1. This report consists of 1 soil sample. The sample was received intact by ALS on 08/11/2010. The sample was received at 15.0˚ Celsius.

2. The sample was prepared and analyzed according to SW-846, 3rd Edition procedures. Specifically, the soil sample was prepared by heating and purging 1g of sample mixed with 5ml of reagent water using purge and trap procedures based on Method 5035A. 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 recoveries were within the acceptance criteria.

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 — 9.8.10

Mindy Norton
Organics Primary Data Reviewer — Date

Brandon Howard — 9/9/10

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 Environmental -- FC

Sample Number(s) Cross-Reference Table

Paragon OrderNum: 1008116
Client Name: Colorado Oil & Gas Conservation Commission
Client Project Name: Complaint 200265825
Client Project Number:
Client PO Number: OE PHA 11000000014

Client Sample Number	Lab Sample Number	COC Number	Matrix	Date Collected	Time Collected
United Oil 346	1008116-1		SOIL	04-Aug-10	11:40
Rix Background	1008116-2		SOIL	04-Aug-10	11:45

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 # 1008116

PAGE 1 of 1

DISPOSAL: By Lab or Return to Client

PROJECT NAME	Complaint #20026525	SAMPLER	P. Gintautas
PROJECT No.		SITE ID	United Oil 346 location
		EDD FORMAT	
		PURCHASE ORDER	PHA 11-04
COMPANY NAME	Colo. Oil & Gas Cons. Comm.	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	

DATE: 9 Aug 2010

TURNAROUND: 14 day

Lab ID	Field ID	Matrix	Sample Date	Sample Time	# Bottles	Pres.	QC	Volatile metals 6010	Ag by 6020	TVPH	TEPH	PAHs (SM 6270)	SAR, EC, pH (Sub)
1	United Oil 346	soil	4 Aug 2010	11:40	5	ICE	—	X	X	X	X	X	X
2	KRIX Background	soil	4 Aug 2010	11:45	1	None	—		X				

6010 metals = Ba, B, Cd, Cr, Cu, Pb, Ni, Se, Ag, Zn

6020 metal = Ag

*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:

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

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		Peter Gintautas	9 Aug 2010	11:45
RECEIVED BY		C Ochsner	8-11-10	0955
RELINQUISHED BY				
RECEIVED BY				
RELINQUISHED BY				
RECEIVED BY				

CONDITION OF SAMPLE UPON RECEIPT FORM

Client: COCGC Workorder No: 1008116

Project Manager: AW Initials: CKO Date: 8-11-10

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): 15

No. of custody seals on cooler: 1

DOT Survey/ Acceptance Information

External µR/hr reading: 12

Background µR/hr reading: 12

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: 8/12/10

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

Gasoline Range Organics

Method SW8015B

Method Blank

Lab Name: ALS Environmental -- FC

Work Order Number: 1008116

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: Complaint 200265825

Lab ID: HCG100816-1MB

Sample Matrix: SOIL
% Moisture: N/A
Date Collected: N/A
Date Extracted: 16-Aug-10
Date Analyzed: 16-Aug-10
Prep Method: SW5035 Rev A

Prep Batch: HCG100816-1
QCBatchID: HCG100816-1-1
Run ID: HCG100816-1A
Cleanup: NONE
Basis: N/A
File Name: 03117.dat

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

CASNO	Target Analyte	DF	Result	Reporting Limit	Result Qualifier	EPA Qualifier
8006-61-9	GASOLINE RANGE ORGANICS	1	0.5	0.5	U	

Surrogate Recovery

CASNO	Surrogate Analyte	Result	Flag	Spike Amount	Percent Recovery	Control Limits
193533-92-5	2,3,4-TRIFLUOROTOLUENE	0.52		0.5	104	76 - 126

Data Package ID: *HCG1008116-1*

Gasoline Range Organics

Method SW8015B

Sample Results

Lab Name: ALS Environmental -- FC

Work Order Number: 1008116

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: Complaint 200265825

Field ID: United Oil 346
Lab ID: 1008116-1

Sample Matrix: SOIL
% Moisture: 5.0
Date Collected: 04-Aug-10
Date Extracted: 16-Aug-10
Date Analyzed: 16-Aug-10
Prep Method: SW5035 Rev A

Prep Batch: HCG100816-1
QCBatchID: HCG100816-1-1
Run ID: HCG100816-1A
Cleanup: NONE
Basis: Dry Weight
File Name: 03126.dat

Sample Aliquot: 1.08 g
Final Volume: 5 ml
Result Units: MG/KG
Clean DF: 1

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
8006-61-9	GASOLINE RANGE ORGANICS	1	0.49	0.49	U	

Surrogate Recovery

CASNO	Surrogate Analyte	Result	Flag	Spike Amount	Percent Recovery	Control Limits
193533-92-5	2,3,4-TRIFLUOROTOLUENE	0.522		0.487	107	76 - 126

Data Package ID: *HCG1008116-1*

Gasoline Range Organics

Method SW8015B

Laboratory Control Sample and Laboratory Control Sample Duplicate

Lab Name: ALS Environmental -- FC

Work Order Number: 1008116

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: Complaint 200265825

Lab ID: HCG100816-1LCS

Sample Matrix: SOIL
% Moisture: N/A
Date Collected: N/A
Date Extracted: 08/16/2010
Date Analyzed: 08/16/2010
Prep Method: SW5035A

Prep Batch: HCG100816-1
QCBatchID: HCG100816-1-1
Run ID: HCG100816-1A
Cleanup: NONE
Basis: N/A
File Name: 03116.dat

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

CASNO	Target Analyte	Spike Added	LCS Result	Reporting Limit	Result Qualifier	LCS % Rec.	Control Limits
8006-61-9	GASOLINE RANGE ORGANICS	5	5.05	0.5		101	79 - 118%

Lab ID: HCG100816-1LCSD

Sample Matrix: SOIL
% Moisture: N/A
Date Collected: N/A
Date Extracted: 08/16/2010
Date Analyzed: 08/17/2010
Prep Method: SW5035A

Prep Batch: HCG100816-1
QCBatchID: HCG100816-1-1
Run ID: HCG100816-1A
Cleanup: NONE
Basis: N/A
File Name: 03129.dat

Sample Aliquot: 1 g
Final Volume: 5 ml
Result Units: MG/KG
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	5	4.85	0.5		97	20	4

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	0.5	106		115		76 - 126

Data Package ID: *HCG1008116-1*

Gasoline Range Organics

Method SW8015B

Matrix Spike

Lab Name: ALS Environmental -- FC

Work Order Number: 1008116

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: Complaint 200265825

Field ID: United Oil 346
LabID: 1008116-1MS

Sample Matrix: SOIL
% Moisture: 5.0
Date Collected: 04-Aug-10
Date Extracted: 16-Aug-10
Date Analyzed: 16-Aug-10

Prep Batch: HCG100816-1
QCBatchID: HCG100816-1-1
Run ID: HCG100816-1A
Cleanup: NONE
Basis: Dry Weight

Sample Aliquot: 1.19 g
Final Volume: 5 ml
Result Units: MG/KG
File Name: 03127.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	0.49	U	3.65		0.442	4.42	83	79 - 118%

Surrogate Recovery

CASNO	Surrogate Analyte	Result	Flag	Spike Amount	Percent Recovery	Control Limits
193533-92-5	2,3,4-TRIFLUOROTOLUENE	0.493		0.442	112	76 - 126

Data Package ID: *HCG1008116-1*

Total Volatile Petroleum Hydrocarbons / GRO (8015) Quantitation Report

ALSLG-Fort Collins

Sample : hcg100816-1MB
Filename : \\gcserver\gcdata\Projects\GC6\Data\2010\gro100816\03117.dat
Acquisition Date : 8/16/2010 6:46:05 PM
Quantitation Date : 8/17/2010 4:35:06 PM
Last Method Update : 8/16/2010 6:08:01 PM
Method : \\gcserver\gcdata\Projects\GC6\method\2010\gro100331s.met
Sequence : \\gcserver\gcdata\Projects\GC6\Sequence\2010\gro100816.seq
Data Description : soil

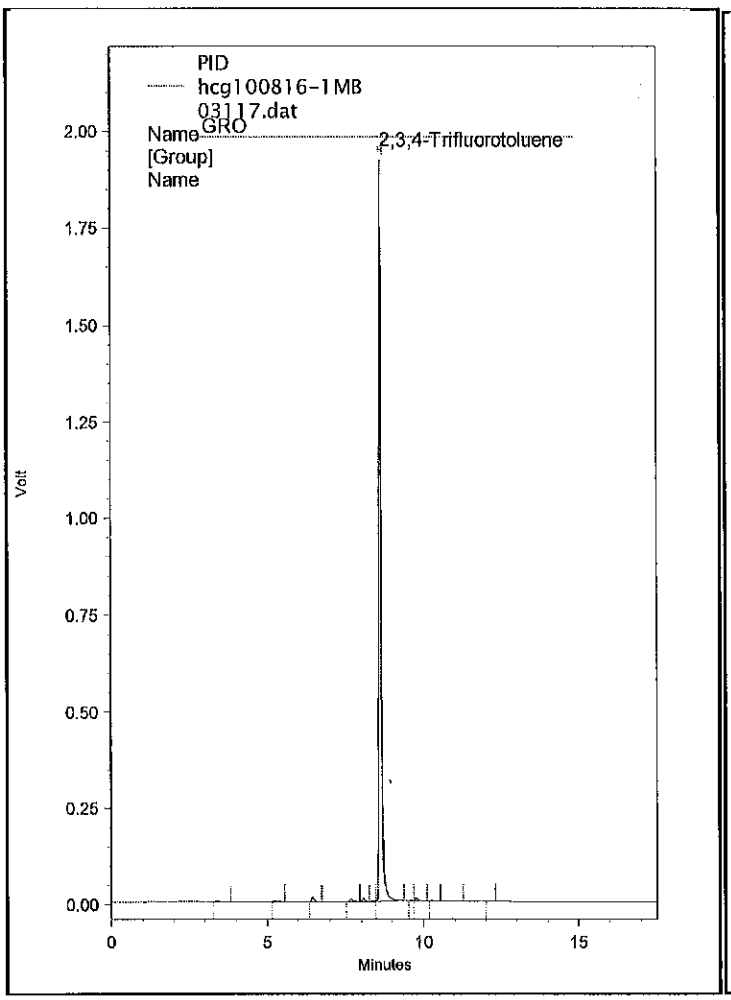
Instrument : GC6
Data Acquired By : noltej
Data Processed By : noltej
Surr. Nom. Conc. : 0.1

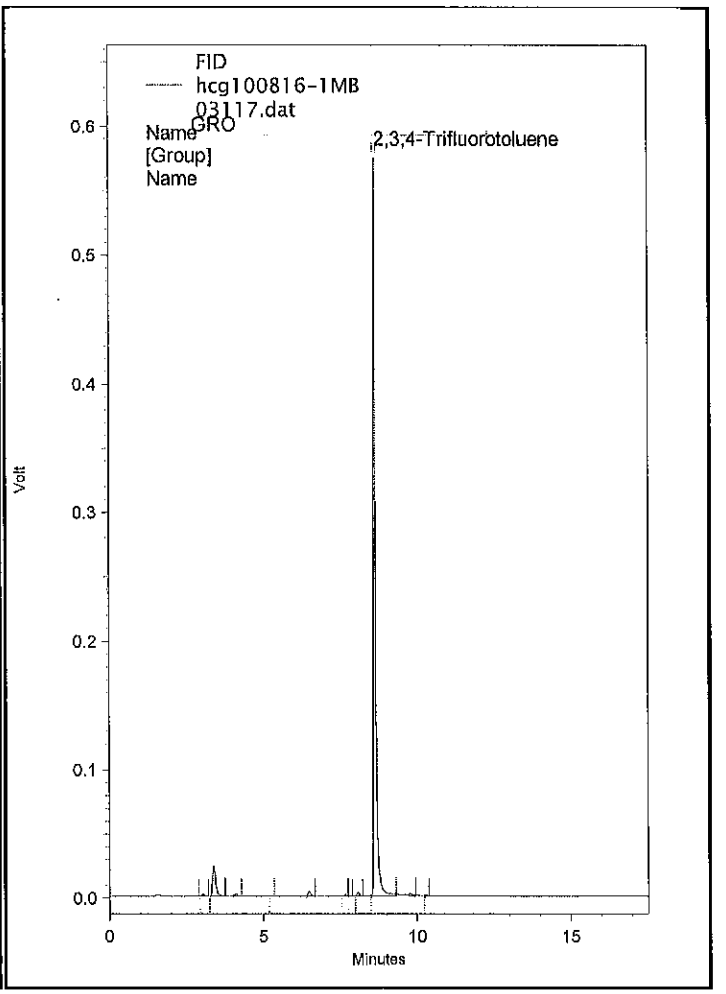
PID Results

Compound Name	RT	Expected RT	Peak Area	Integration Codes	Concentration	Conc. Units
2,3,4-Trifluorotoluene	8.620	8.643	9265347	VB	0.098	ppm
GRO			272734		0.001	ppm

FID Results

Name	RT	Expected RT	Peak Area	Integration Codes	Concentration	Conc. Units
2,3,4-Trifluorotoluene	8.627	8.640	2786966	LL	0.104	ppm
GRO			270233		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 : 8/17/2010 4:35:13 PM

Total Volatile Petroleum Hydrocarbons / GRO (8015) Quantitation Report

ALSLG-Fort Collins

Sample : 1008116-1
Filename : \\gcserver\gcdata\Projects\GC6\Data\2010\gro100816\03126.dat
Acquisition Date : 8/16/2010 11:06:13 PM
Quantitation Date : 8/17/2010 4:37:32 PM
Last Method Update : 8/16/2010 6:08:01 PM
Method : \\gcserver\gcdata\Projects\GC6\method\2010\gro100331s.met
Sequence : \\gcserver\gcdata\Projects\GC6\Sequence\2010\gro100816.seq
Data Description : 1.08g soil

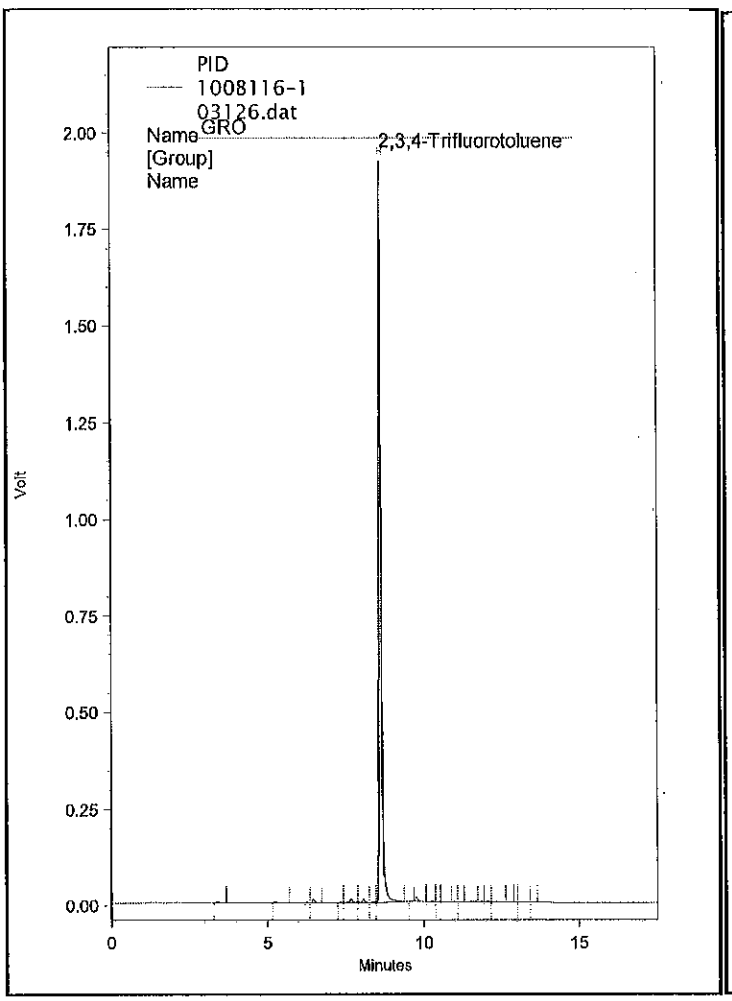
Instrument : GC6
Data Acquired By : noltej
Data Processed By : noltej
Surr. Nom. Conc. : 0.1

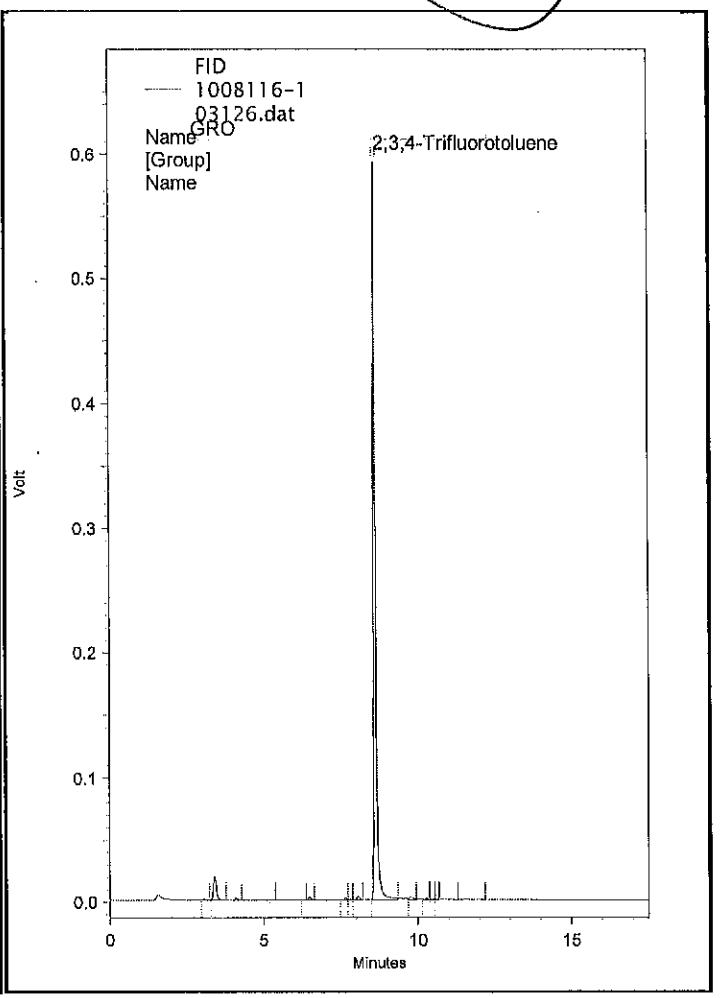
PID Results

Compound Name	RT	Expected RT	Peak Area	Integration Codes	Concentration	Conc. Units
2,3,4-Trifluorotoluene	8.620	8.643	9240907	VB	0.097	ppm
GRO			451430		0.002	ppm

FID Results

Name	RT	Expected RT	Peak Area	Integration Codes	Concentration	Conc. Units
2,3,4-Trifluorotoluene	8.627	8.640	2873646	LL	0.107	ppm
GRO			287416		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 : 8/17/2010 4:37:39 PM

Total Volatile Petroleum Hydrocarbons / GRO (8015) Quantitation Report

ALSLG-Fort Collins

Sample : hcg100816-1CCS
Filename : \\gcserver\gcdata\Projects\GC6\Data\2010\gro100816\03116.dat
Acquisition Date : 8/16/2010 6:17:08 PM
Quantitation Date : 8/17/2010 4:34:48 PM
Last Method Update : 8/16/2010 6:08:01 PM
Method : \\gcserver\gcdata\Projects\GC6\method\2010\gro100331s.met
Sequence : \\gcserver\gcdata\Projects\GC6\Sequence\2010\gro100816.seq
Data Description : soil, 1ppm

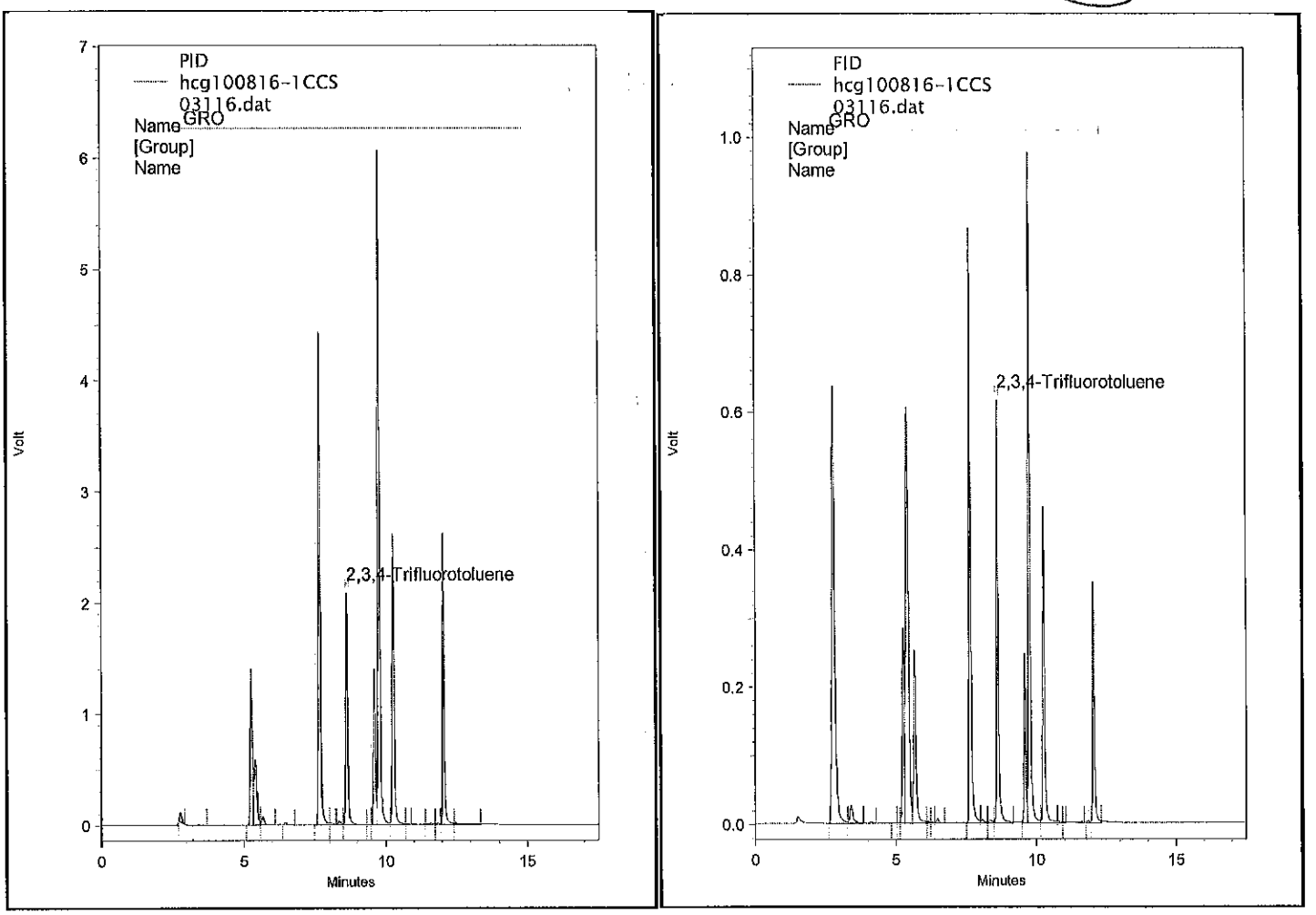
Instrument : GC6
Data Acquired By : noltej
Data Processed By : noltej
Surr. Nom. Conc. : 0.1

PID Results

Compound Name	RT	Expected RT	Peak Area	Integration Codes	Concentration	Conc. Units
2,3,4-Trifluorotoluene	8.623	8.643	9596793	VV	0.101	ppm
GRO			90092894		0.890	ppm

FID Results

Name	RT	Expected RT	Peak Area	Integration Codes	Concentration	Conc. Units
2,3,4-Trifluorotoluene	8.630	8.640	2842232	LL	0.106	ppm
GRO			25376170		1.011	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 : 8/17/2010 4:34:55 PM

Total Volatile Petroleum Hydrocarbons / GRO (8015) Quantitation Report

ALSLG-Fort Collins

Sample : hcg100816-1CCSD
Filename : \\gcserver\gcdata\Projects\GC6\Data\2010\gro100816\03129.dat
Acquisition Date : 8/17/2010 12:32:40 AM
Quantitation Date : 8/17/2010 4:38:21 PM
Last Method Update : 8/16/2010 6:08:01 PM
Method : \\gcserver\gcdata\Projects\GC6\method\2010\gro100331s.met
Sequence : \\gcserver\gcdata\Projects\GC6\Sequence\2010\gro100816.seq
Data Description : soil, 1ppm

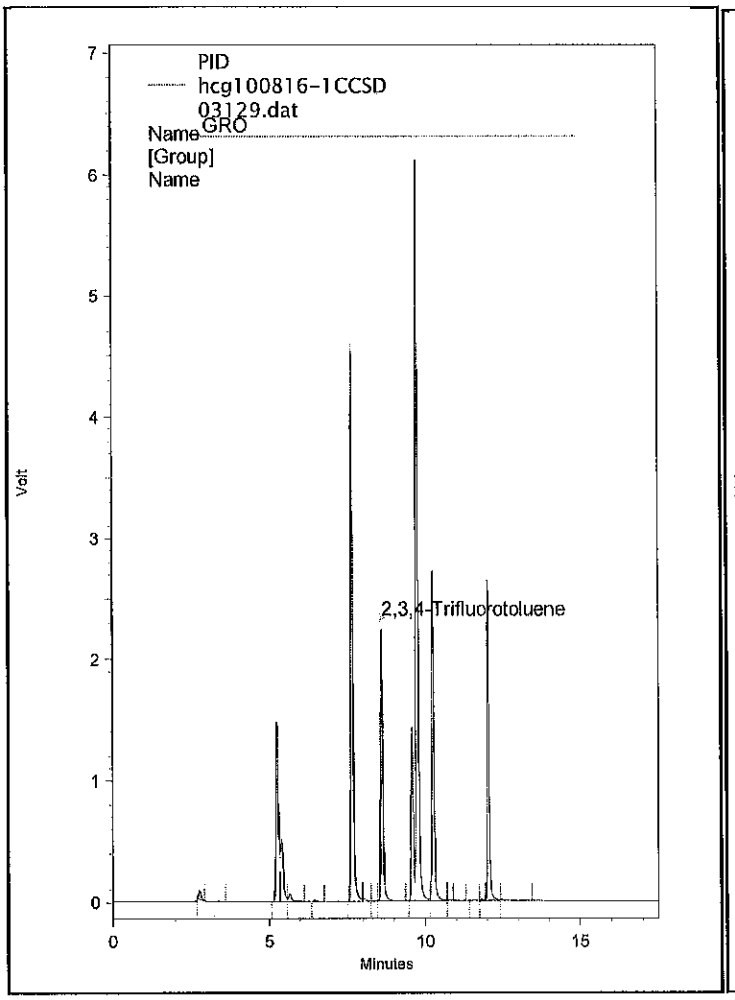
Instrument : GC6
Data Acquired By : noltej
Data Processed By : noltej
Surr. Nom. Conc. : 0.1

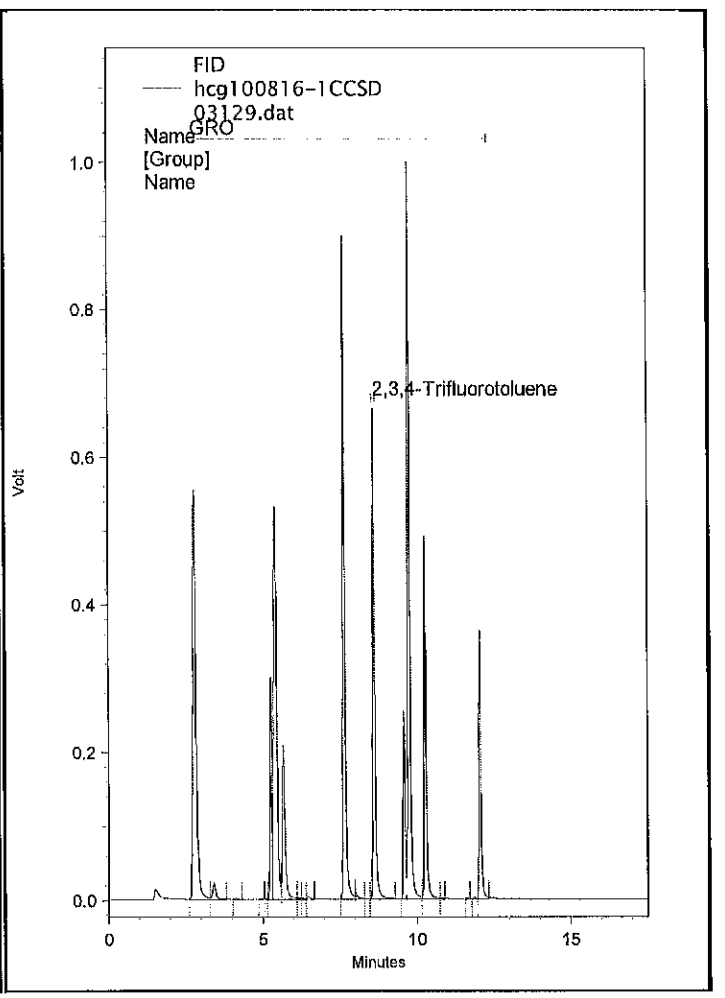
PID Results

Compound Name	RT	Expected RT	Peak Area	Integration Codes	Concentration	Conc. Units
2,3,4-Trifluorotoluene	8.617	8.643	10256873	VB	0.108	ppm
GRO			91005871		0.899	ppm

FID Results

Name	RT	Expected RT	Peak Area	Integration Codes	Concentration	Conc. Units
2,3,4-Trifluorotoluene	8.623	8.640	3072143	LL	0.115	ppm
GRO			24391118		0.971	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,I =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 : 8/17/2010 4:38:29 PM

Total Volatile Petroleum Hydrocarbons / GRO (8015) Quantitation Report

ALSLG-Fort Collins

Sample : 1008116-1MS
Filename : \\gcserver\gcdata\Projects\GC6\Data\2010\gro100816\03127.dat
Acquisition Date : 8/16/2010 11:35:02 PM
Quantitation Date : 8/17/2010 4:37:49 PM
Last Method Update : 8/16/2010 6:08:01 PM
Method : \\gcserver\gcdata\Projects\GC6\method\2010\gro100331s.met
Sequence : \\gcserver\gcdata\Projects\GC6\Sequence\2010\gro100816.seq
Data Description : 1.19g soil, 1ppm

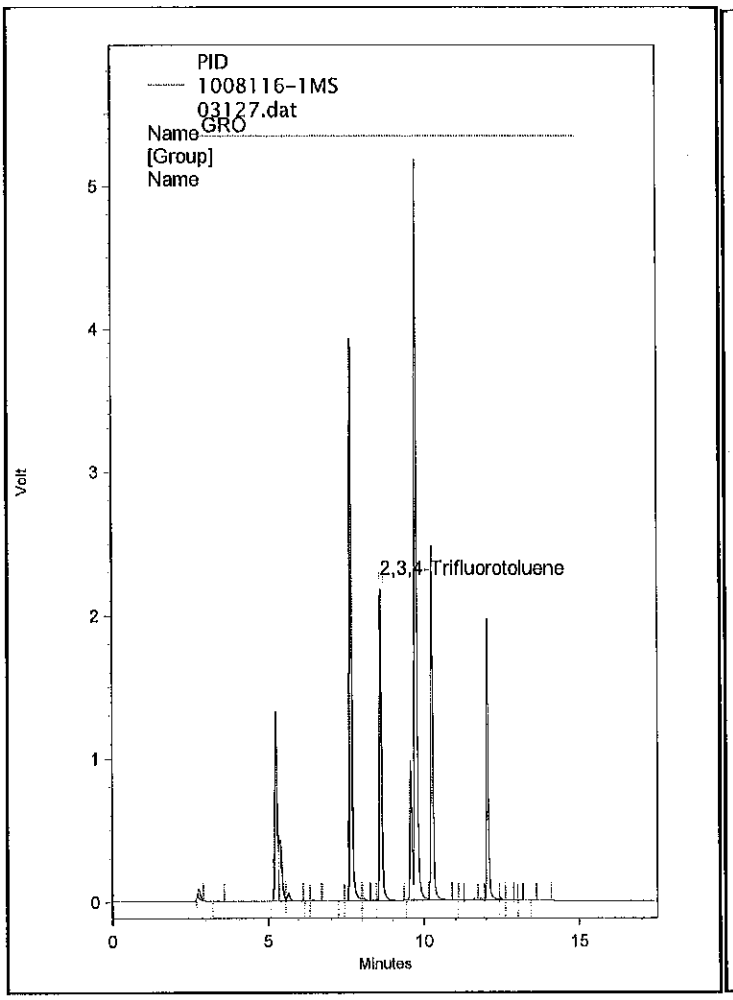
Instrument : GC6
Data Acquired By : noltej
Data Processed By : noltej
Surr. Nom. Conc. : 0.1

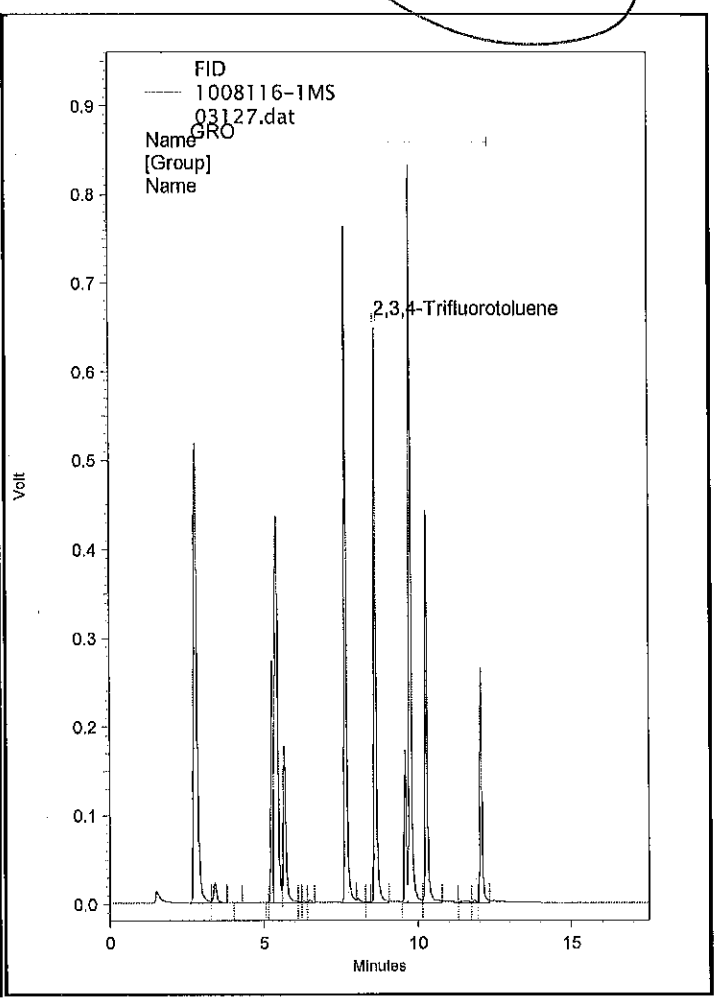
PID Results

Compound Name	RT	Expected RT	Peak Area	Integration Codes	Concentration	Conc. Units
2,3,4-Trifluorotoluene	8.620	8.643	10001928	VB	0.105	ppm
GRO			76424805		0.751	ppm

FID Results

Name	RT	Expected RT	Peak Area	Integration Codes	Concentration	Conc. Units
2,3,4-Trifluorotoluene	8.627	8.640	2990665	LL	0.112	ppm
GRO			20838294		0.826	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 : 8/17/2010 4:37:56 PM