

September 28, 2009

Peter Gintautas
Colorado Oil & Gas Conservation Comm.
PO Box 108
Trinidad, CO 81082

Lab Work Order: 09-7170
Client Project ID: Meadows Damelio

Dear Peter Gintautas:

SUPPLEMENTAL REPORT

Per your inquiry on 9/25/09, attached is additional information on the 8260 Library Searches (TICs) done on the samples in this work order. Those searches showed no unknown compounds detected except for Octane and methyl-Octane in the Trip Blank. The non-detects include Iodomethane and tert-Butanol.

We have no way to report a specific compound if we do not calibrate for it and if the Library search does not detect it, so we could not generate a report for those compounds. However, we have added hand-written notes on the TIC reports and included the ion spectra of those compounds to prove that they are in the NIST Library and thus would have been detected, had they been present.

All other results were mailed and e-mailed on 9/24/09.

Thank you for using the services of this laboratory. If you require further information, I can be reached at 303-425-6021.

Sincerely,

Carl Smith, for
Joseph J Egry IV/ Tiffany Pham
Quality Assurance

WORK ORDER Summary

Evergreen Analytical, Inc.

09-7170

Rpt To: Peter Gintautas

Email To: peter.gintautas@state.co.us

9/28/2009 3:41:58 PM

Colorado Oil & Gas Conservation
Comm.

PO Box 108

Trinidad, CO 81082

(719) 846-3091

Client Project ID: Meadows Damelio

QC Level: LEVEL I+

Comments EDD in COGCC format and PDF.

Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Test Code	Test Name	Hold	MS	Date Due	Hold Time
09-7170-01A	Meadows-Exterior	Drinking Water	9/03/09 1205	9/04/09	200.7_D *	200.7: Dissolved Metals	<input type="checkbox"/>	<input type="checkbox"/>	9/21/09	3/02/10
09-7170-01A	Meadows-Exterior	Drinking Water	9/03/09 1205	9/04/09	200.8_D *	200.8: Dissolved Metals	<input type="checkbox"/>	<input type="checkbox"/>	9/21/09	3/02/10
09-7170-01B	Meadows-Exterior	Drinking Water	9/03/09 1205	9/04/09	ANIONS_NonDW *	300.0: Anions by IC	<input type="checkbox"/>	<input type="checkbox"/>	9/21/09	9/05/09
09-7170-01B	Meadows-Exterior	Drinking Water	9/03/09 1205	9/04/09	C/A_BAL	Cation / Anion Balance calculation	<input type="checkbox"/>	<input type="checkbox"/>	9/21/09	
09-7170-01C	Meadows-Exterior	Drinking Water	9/03/09 1205	9/04/09	MEEP_W *	RSK175M: MEEP	<input type="checkbox"/>	<input type="checkbox"/>	9/21/09	9/17/09
09-7170-01D	Meadows-Exterior	Drinking Water	9/03/09 1205	9/04/09	8270_W *	8270C: BNA HSL	<input type="checkbox"/>	<input type="checkbox"/>	9/21/09	9/10/09
09-7170-01E	Meadows-Exterior	Drinking Water	9/03/09 1205	9/04/09	ALK_WGRP *	Alkalinity	<input type="checkbox"/>	<input type="checkbox"/>	9/21/09	9/17/09
09-7170-01E	Meadows-Exterior	Drinking Water	9/03/09 1205	9/04/09	COND_W	Specific Conductance @ 25°C	<input type="checkbox"/>	<input type="checkbox"/>	9/21/09	10/01/09
09-7170-01E	Meadows-Exterior	Drinking Water	9/03/09 1205	9/04/09	F_W	Fluoride	<input type="checkbox"/>	<input type="checkbox"/>	9/21/09	10/01/09
09-7170-01E	Meadows-Exterior	Drinking Water	9/03/09 1205	9/04/09	PH_DW	E150.1 pH	<input type="checkbox"/>	<input type="checkbox"/>	9/21/09	9/04/09
09-7170-01E	Meadows-Exterior	Drinking Water	9/03/09 1205	9/04/09	TDS_W	Total Dissolved Solids (TDS)	<input type="checkbox"/>	<input type="checkbox"/>	9/21/09	9/10/09
09-7170-01F	Meadows-Exterior	Drinking Water	9/03/09 1205	9/04/09	6010_D *	6010: Dissolved Metals	<input type="checkbox"/>	<input type="checkbox"/>	9/21/09	3/02/10
09-7170-01F	Meadows-Exterior	Drinking Water	9/03/09 1205	9/04/09	SAR_W	Sodium Adsorption Ratio for Water	<input type="checkbox"/>	<input type="checkbox"/>	9/21/09	3/02/10
09-7170-01G	Meadows-Exterior	Drinking Water	9/03/09 1205	9/04/09	8260_W *	8260B: VOA HSL	<input type="checkbox"/>	<input type="checkbox"/>	9/21/09	9/17/09
09-7170-01G	Meadows-Exterior	Drinking Water	9/03/09 1205	9/04/09	VOATICS	VOA TICS (Largest 10)	<input type="checkbox"/>	<input type="checkbox"/>	9/21/09	9/17/09
09-7170-02A	Damelil	Drinking Water	9/03/09 1255	9/04/09	200.7_D *	200.7: Dissolved Metals	<input type="checkbox"/>	<input type="checkbox"/>	9/21/09	3/02/10
09-7170-02A	Damelil	Drinking Water	9/03/09 1255	9/04/09	200.8_D *	200.8: Dissolved Metals	<input type="checkbox"/>	<input type="checkbox"/>	9/21/09	3/02/10
09-7170-02B	Damelil	Drinking Water	9/03/09 1255	9/04/09	ANIONS_NonDW *	300.0: Anions by IC	<input type="checkbox"/>	<input type="checkbox"/>	9/21/09	9/05/09
09-7170-02B	Damelil	Drinking Water	9/03/09 1255	9/04/09	C/A_BAL	Cation / Anion Balance calculation	<input type="checkbox"/>	<input type="checkbox"/>	9/21/09	
09-7170-02C	Damelil	Drinking Water	9/03/09 1255	9/04/09	MEEP_W *	RSK175M: MEEP	<input type="checkbox"/>	<input type="checkbox"/>	9/21/09	9/17/09

Definitions: * - Test Code has a Select List

WORK ORDER Summary

Evergreen Analytical, Inc.

09-7170

Rpt To: Peter Gintautas

Email To: peter.gintautas@state.co.us

9/28/2009 3:41:58 PM

Colorado Oil & Gas Conservation
Comm.

PO Box 108

Trinidad, CO 81082

(719) 846-3091

Client Project ID: Meadows Damelio

QC Level: LEVEL I+

09-7170-02D	Damelil	Drinking Water	9/03/09 1255	9/04/09	8270_W *	8270C: BNA HSL	<input type="checkbox"/>	<input type="checkbox"/>	9/21/09	9/10/09
09-7170-02E	Damelil	Drinking Water	9/03/09 1255	9/04/09	ALK_WGRP *	Alkalinity	<input type="checkbox"/>	<input type="checkbox"/>	9/21/09	9/17/09
09-7170-02E	Damelil	Drinking Water	9/03/09 1255	9/04/09	COND_W	Specific Conductance @ 25°C	<input type="checkbox"/>	<input type="checkbox"/>	9/21/09	10/01/09
09-7170-02E	Damelil	Drinking Water	9/03/09 1255	9/04/09	F_W	Fluoride	<input type="checkbox"/>	<input type="checkbox"/>	9/21/09	10/01/09
09-7170-02E	Damelil	Drinking Water	9/03/09 1255	9/04/09	PH_DW	E150.1 pH	<input type="checkbox"/>	<input type="checkbox"/>	9/21/09	9/04/09
09-7170-02E	Damelil	Drinking Water	9/03/09 1255	9/04/09	TDS_W	Total Dissolved Solids (TDS)	<input type="checkbox"/>	<input type="checkbox"/>	9/21/09	9/10/09
09-7170-02F	Damelil	Drinking Water	9/03/09 1255	9/04/09	6010_D *	6010: Dissolved Metals	<input type="checkbox"/>	<input type="checkbox"/>	9/21/09	3/02/10
09-7170-02F	Damelil	Drinking Water	9/03/09 1255	9/04/09	SAR_W	Sodium Adsorption Ratio for Water	<input type="checkbox"/>	<input type="checkbox"/>	9/21/09	3/02/10
09-7170-02G	Damelil	Drinking Water	9/03/09 1255	9/04/09	8260_W *	8260B: VOA HSL	<input type="checkbox"/>	<input type="checkbox"/>	9/21/09	9/17/09
09-7170-02G	Damelil	Drinking Water	9/03/09 1255	9/04/09	VOATICS	VOA TICS (Largest 10)	<input type="checkbox"/>	<input type="checkbox"/>	9/21/09	9/17/09
09-7170-03A	Meadows-Interior	Drinking Water	9/03/09 1215	9/04/09	MEEP_W *	RSK175M: MEEP	<input type="checkbox"/>	<input type="checkbox"/>	9/21/09	9/17/09
09-7170-04A	Trip Blank	Trip Blank	9/03/09 0000	9/04/09	8260_W *	8260B: VOA HSL	<input type="checkbox"/>	<input type="checkbox"/>	9/21/09	9/17/09
09-7170-04A	Trip Blank	Trip Blank	9/03/09 0000	9/04/09	VOATICS	VOA TICS (Largest 10)	<input type="checkbox"/>	<input type="checkbox"/>	9/21/09	9/17/09

Peter,
I placed the order for 8260 + TICS as requested. I will make an inquiry with the lab as to the specific TICs you are looking for.

Carl, Tami,
Can you help?

Patty McClellan
Accutest Mountain States, Inc.

From: Gintautas, Peter [mailto:Peter.Gintautas@state.co.us]
Sent: Friday, September 25, 2009 8:28 AM
To: Patty McClellan
Cc: Ash, Margaret
Subject: 09-7170-01 (Meadows water well) VOC analyte list

Patty, when I requested bottle kits for this sampling, I specifically requested two target analytes (iodomethane and tertbutanol) be analyzed and reported. I again repeated that request on the chain of custody that I returned to you and I voiced the same request to Andrea on September 4th and in an email to you and Andrea on the same day.

The report submitted to me yesterday does not include any results for those two compounds in the 8260 report. Please tell me how you plan to correct this problem.

Peter Gintautas

Environmental Protection Specialist

Colorado Oil and Gas Conservation Commission

719-846-3091

719-679-1326 (cell)

719-846-3384 (fax)

colorado.gov/cogcc

peter.gintautas@state.co.us

Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\DATA\V5091509.S\
Data File : 5V02477.D
Acq On : 15 Sep 2009 3:37 pmm
Operator : DONCC
Sample : 09-7170-01GG
Misc : ,SAMP,8260_W,1,MS329,V5V104,,,,,11
ALS Vial : 7 Sample Multiplier: 11

MEADOWS - EXTERIOR

Quant Method : C:\msdchem\1\METHODS\V5hsl103tvh097.MM
Quant Title : 82600

TIC Library : C:\DATABASE\NIST98.LL
TIC Integration Parameters: LSCINT.PP

TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
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---Internal Standard---

No Library Search Compounds Detected

IODOMETHANE AND tert-BUTANOL WERE NOT DETECTED.

ESTIMATED DETECTION LIMIT = 5 ug/L

CWZ 9/28/09

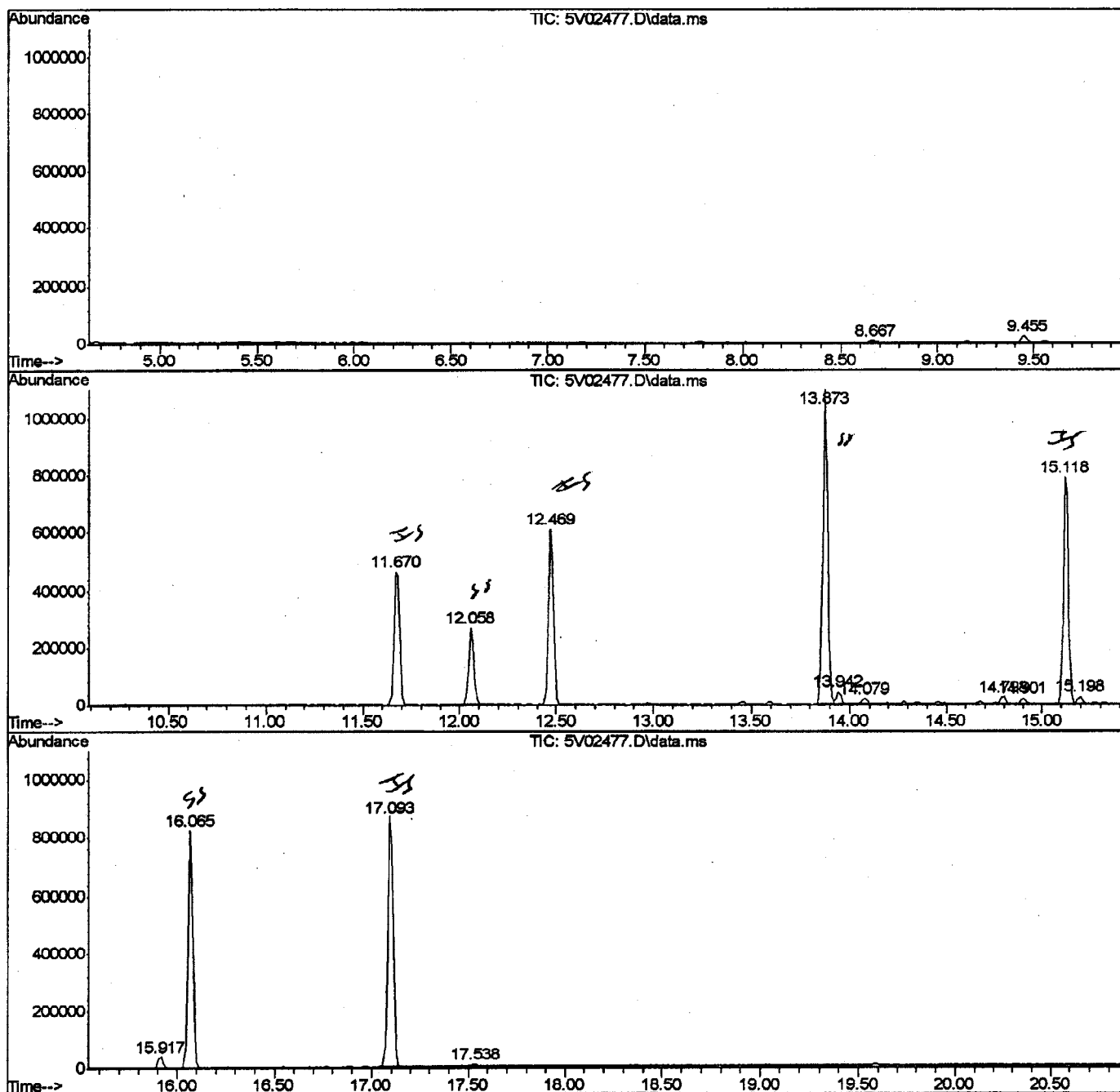
LSC Report - Integrated Chromatogram

Data Path : C:\msdchem\1\DATA\V5091509.S\
 Data File : 5V02477.D
 Acq On : 15 Sep 2009 3:37 pm
 Operator : DONC
 Sample : 09-7170-01G
 Misc : ,SAMP,8260_W,1,MS329,V5V104,,,,,1
 ALS Vial : 7 Sample Multiplier: 1

034

Quant Method : C:\msdchem\1\METHODS\V5hsl103tvh097.M
 Quant Title : 8260

TIC Library : C:\DATABASE\NIST98.L
 TIC Integration Parameters: LSCINT.P



Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\DATA\V5091509.S\
 Data File : 5V02478.D
 Acq On : 15 Sep 2009 4:08 pm
 Operator : DONCC
 Sample : 09-7170-02GG
 Misc : ,SAMP,8260_W,1,MS329,V5V104,,,,,11
 ALS Vial : 8 Sample Multiplier: 11

DAMELIL

Quant Method : C:\msdchem\1\METHODS\V5hsl103tvh097.MM
 Quant Title : 82600

TIC Library : C:\DATABASE\NIST98.LL
 TIC Integration Parameters: LSCINT.PP

TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
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No Library Search Compounds Detected

IODOMETHANE AND tert-BUTANOL WERE NOT DETECTED.

ESTIMATED DETECTION LIMIT = 5 ng/L

cmr 9/28/09

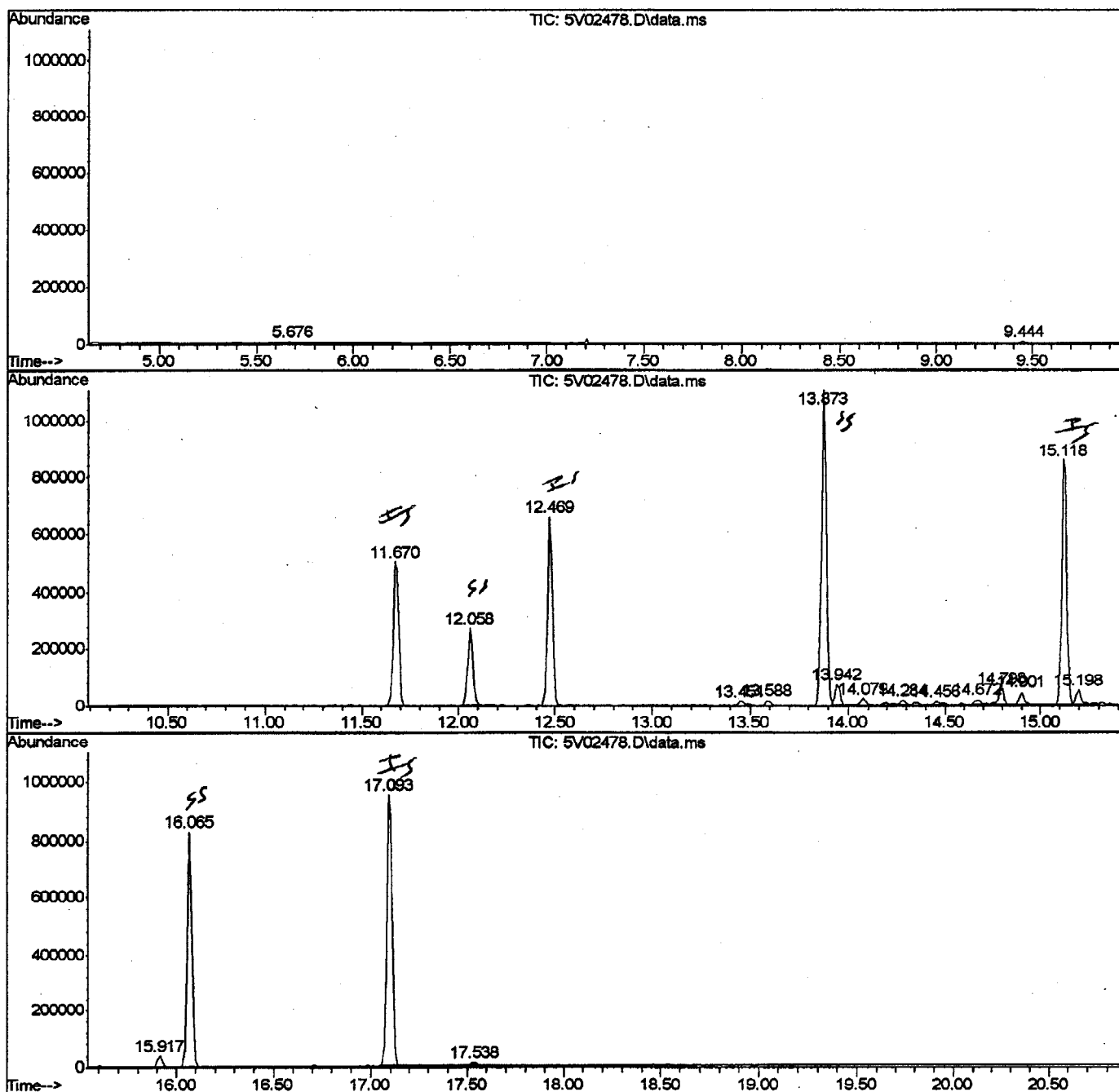
LSC Report - Integrated Chromatogram

Data Path : C:\msdchem\1\DATA\V5091509.S\
Data File : 5V02478.D
Acq On : 15 Sep 2009 4:08 pm
Operator : DONC
Sample : 09-7170-02G
Misc : ,SAMP,8260_W,1,MS329,V5V104,,,,,1
ALS Vial : 8 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\V5hsl103tvh097.M
Quant Title : 8260

TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: LSCINT.P

039



Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\DATA\V5091509.S\
Data File : 5V02483.D
Acq On : 15 Sep 2009 6:42 pm
Operator : DONC
Sample : 09-7170-04A
Misc : ,SAMP,8260_W,1,MS329,V5V104,,,,,1
ALS Vial : 13 Sample Multiplier: 1

TRIP BLANK

Quant Method : C:\msdchem\1\METHODS\V5hsl103tvh097.M
Quant Title : 8260

TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: LSCINT.P

TIC Top Hit name	RT	EstConc	Units	Response	---Internal Standard---			
					#	RT	Resp	Conc
Octane	13.942	6.2	ug/l	172230	3	15.129	1396340	50.0
Octane, 2-methyl-	14.798	5.9	ug/l	163600	3	15.129	1396340	50.0

IODOMETHANE AND tert-BUTANOL WERE NOT DETECTED.

ESTIMATED DETECTION LIMIT = 5 ug/L

was 9/28/09

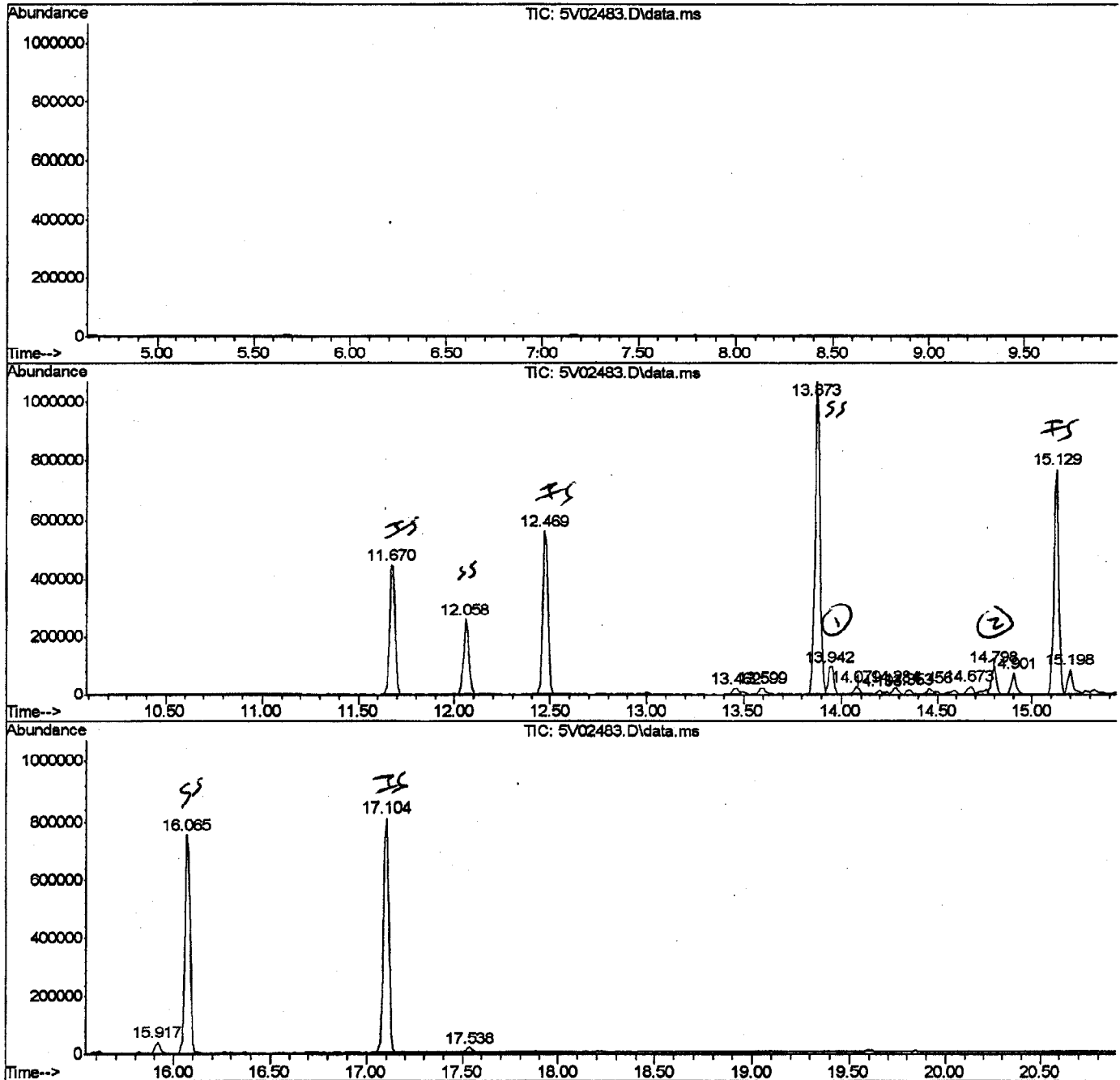
LSC Report - Integrated Chromatogram

Data Path : C:\msdchem\1\DATA\V5091509.S\
 Data File : 5V02483.D
 Acq On : 15 Sep 2009 6:42 pm
 Operator : DONC
 Sample : 09-7170-04A
 Misc : ,SAMP,8260_W,1,MS329,V5V104,,,,,1
 ALS Vial : 13 Sample Multiplier: 1

044

Quant Method : C:\msdchem\1\METHODS\V5hsl1103tvh097.M
 Quant Title : 8260

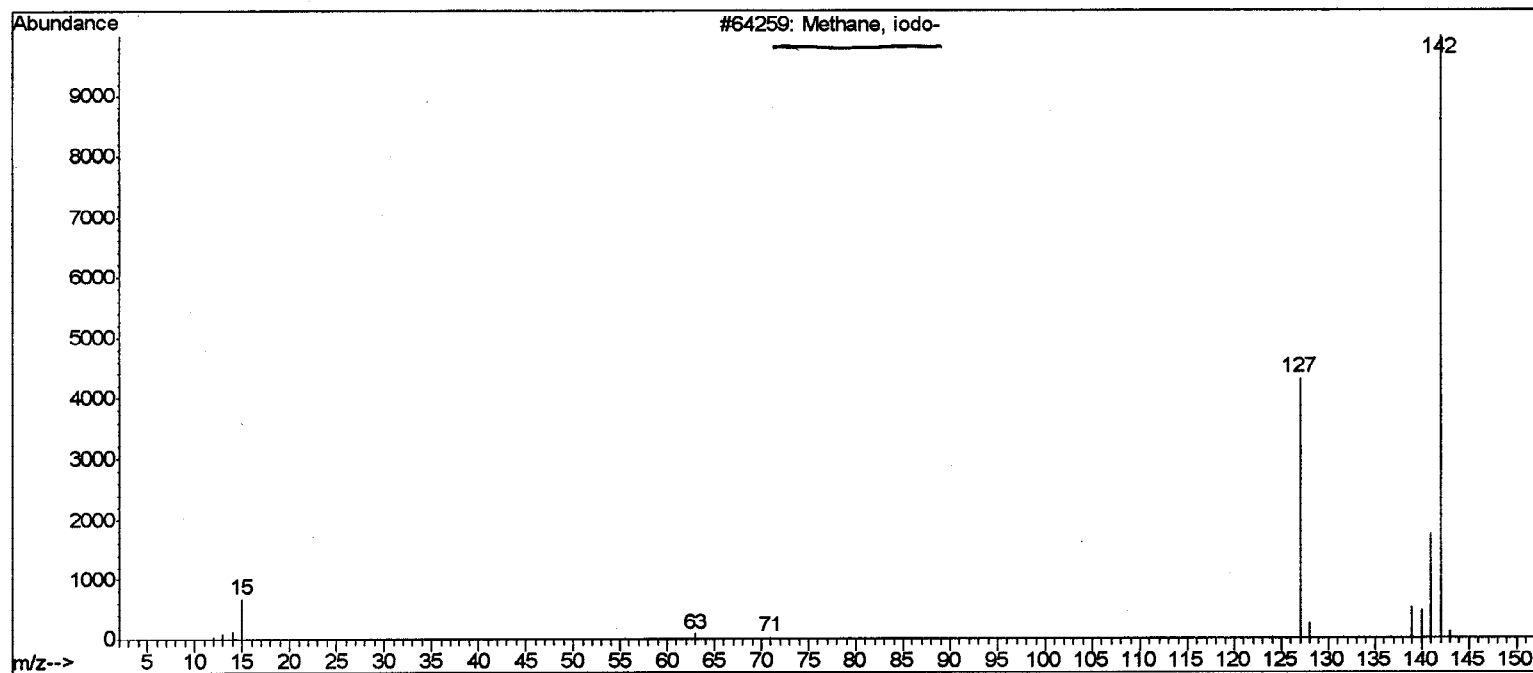
TIC Library : C:\DATABASE\NIST98.L
 TIC Integration Parameters: LSCINT.P



Methane, iodo-

Entry Number 64259 from C:\Database\NIST98.L
CAS 000074-88-4
Melting Point -300
Boiling Point -300
Retention Index 0
Mol Formula CH₃I
Mol Weight 141.928
Company ID NIST 1998

Miscellaneous Information
NIST MS# 118703, Seq# M64259



No structure available for 000074-88-4

Methane, iodo-

Formula: CH₃I

MW: 142 CAS#: 74-88-4 NIST#: 118703 ID#: 64259 DB: mainlib

Other DBs: EPA, NIH

Contributor: NIST Mass Spectrometry Data Center, 1990.

10 Largest Peaks

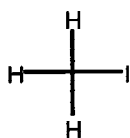
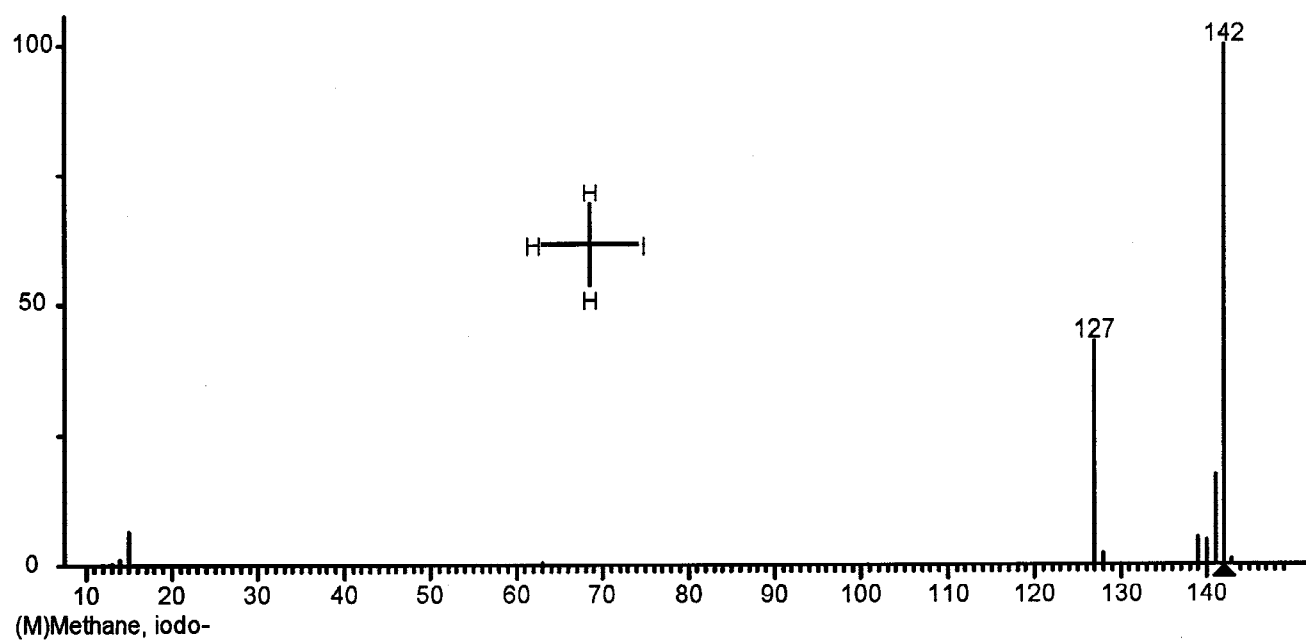
142	999		141	173		139	52		128	23		143	12	
127	430		15	67		140	47		14	13		63	7	

15 Masses and Abundances

12	3		14	13		16	1		71	2		127	430		139	52		141	173		143	12		
13	7		15	67		63	7		124	1		128	23		140	47		142	999					

Synonyms:

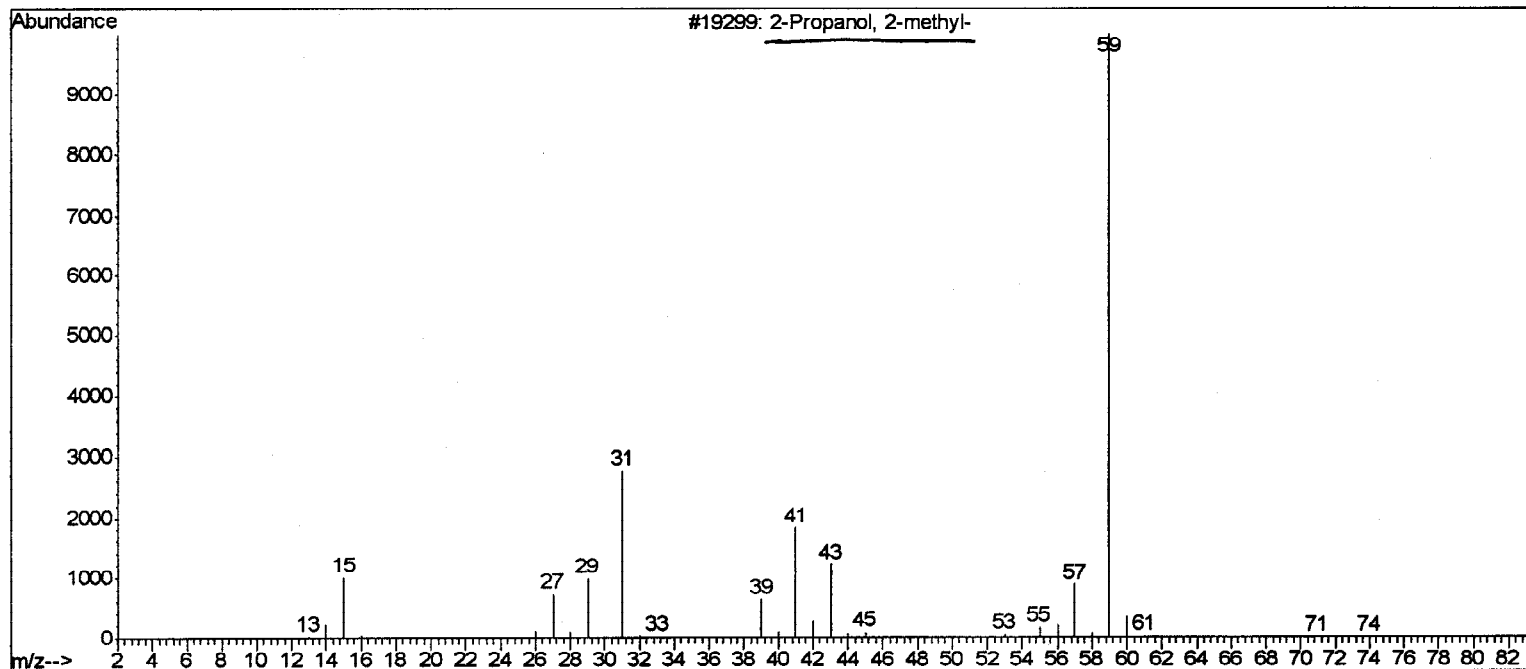
1. Iodomethane ✓
2. Methyl iodide
3. CH₃I
4. Halon 10001
5. Iodometano
6. Iodure de methyle
7. Jod-methan
8. Joodmethaan
9. Methyljodid
10. Methyljodide
11. Metylu jodek
12. Monoioduro di metile
13. Rcra waste number U138
14. UN 2644



2-Propanol, 2-methyl-

Entry Number 19299 from C:\Database\NIST98.L
CAS 000075-65-0
Melting Point -300
Boiling Point -300
Retention Index 0
Mol Formula C4H10O
Mol Weight 74.073
Company ID NIST 1998

Miscellaneous Information
NIST MS# 19161, Seq# M19299



No structure available for 000075-65-0

2-Propanol, 2-methyl-

Formula: C₄H₁₀O

MW: 74 CAS#: 75-65-0 NIST#: 19161 ID#: 19299 DB: mainlib

Other DBs: Fine, EPA, USP, HODOC, NIH, EINECS

10 Largest Peaks

59	999	41	183	15	100	57	87	39	63
31	277	43	121	29	98	27	72	60	34

31 Masses and Abundances

12	1	16	5	29	98	33	2	42	27	53	5	57	87	61	2
13	3	26	13	30	3	39	63	43	121	54	1	58	8	71	1
14	21	27	72	31	277	40	10	44	7	55	16	59	999	74	1
15	100	28	10	32	5	41	183	45	8	56	19	60	34		

Synonyms:

1. tert-Butyl Alcohol
2. tert-Butanol ✓
3. Ethanol, 1,1-Dimethyl-
4. Trimethylcarbinol
5. Trimethylmethanol
6. 1,1-Dimethylethanol
7. 2-Methyl-2-propanol
8. tert-C₄H₉OH
9. t-Butanol ✓
10. tert-Butyl hydroxide
11. 2-Methylpropanol-2
12. t-Butyl alcohol
13. 2-Methylpropan-2-ol
14. Alcool butylique tertiaire
15. Butanol tertiaire
16. t-Butyl hydroxide
17. Methanol, trimethyl-
18. NCI-C55367
19. UN 1120

