Atmospheric Analysis & Consulting, Inc.

CLIENT : SWAPE
PROJECT NAME : Bridgeton Sanitary Landfill Air Quality Assessment
AAC PROJECT NO. : 130559
REPORT DATE : 05/13/2013

On May 9, 2013, Atmospheric Analysis & Consulting, Inc. received eight (8) Six-Liter Summa Canisters for Fixed Gases analysis by EPA 3C and Total Reduced Sulfur analysis by ASTM D-5504. Upon receipt, the samples were assigned unique Laboratory ID numbers as follows:

Client ID	Lab No.	Return Pressure (mmHgA)
Trip Blank - Canister	130559-62851	1.2
BZ-2-Canister	130559-62852	544.9
U-1B-Canister	130559-62861	499.0
U-2-Canister	130559-62870	509.9
U-3-Canister	130559-62879	485.2
D-1-Canister	130559-62888	474.9
D-2-Canister	130559-62897	589.4
D-3-Canister	130559-62906	585.8

EPA 3C Analysis - An aliquot of the gaseous sample is injected into the GC/TCD for analysis following EPA 3C as specified in the SOW.

ASTM D-5504 Analysis - Up to a 1 mL aliquot of sample is injected into the GC/SCD for analysis following ASTM D-5504 as specified in the SOW.

No problems were encountered during receiving, preparation, and/ or analysis of these samples. The test results included in this report meet all requirements of the NELAC Standards and/or AAC SOP# AACI- EPA 3C and ASTM D-5504.

I certify that this data is technically accurate, complete, and in compliance with the terms and conditions of the contract. The Laboratory Director or his designee, as verified by the following signature, has authorized release of the data contained in this hardcopy data package.

If you have any questions or require further explanation of data results, please contact the undersigned.

Marcus Hueppe
Laboratory Director

ACCREDITED IN ACCORDANCE WITH nelac Certificate #E87837

This report consists of 94 pages.

1534 Eastman Ave., Ste. A • Ventura, • CA 93003 www.aaclab.com • (805) 650-1642 • FAX (805) 650-1644

Atmospheric Analysis & Consulting, Inc.

CANISTER PRESSURE LOG

Client: Soil Water Air Protection Ent Project No.: 130559

Date: 5/9/2013

Canister #	Sample #	Initial Pressure	Final Pressure
740	62851	1.2	1033.6
672	62852	544.9	1017.2
576	62861	499.0	1059.1
732	62870	509.9	1016.0
653	62879	485.2	1019.1
668	62888	474.9	1024.9
702	62897	589.4	1024.2
741	62906	585.8	1018.3

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AAC 130559

CHAIN OF CUSTODY RECORD / ANALYTICAL REQUEST FORM

Bridgeton Sanitary Landfill Air Quality Assessment

Client Name: SOIL / WATER AIR PROTECTION ENTERPRISE

Telephone No. / Fax No.: (310) 434-0110 / (310) 434-0011

Date:

Page of

Project Manager: PAUL ROSENFELD, PH.D.

Address: 1640 FIFTH STREET, SUITE 204, SANTA MONICA, CA 90401

Project Name and Location: BRIDGETON SANITARY LANDFILL AIR QUALITY ASSESSMENT

Sampled By: Paul Rosenfeld

Sampler Signature: Paul Rosenfeld

REQUESTED TESTS / ANALYSES

LAB ID	SAMPLE ID NUMBER	Type	Date	Time	VOCS - EPA TO-15	Reduced Sulfur Compounds - ASTM D5504	Aldehydes - EPA TO-11A	Carboxlyic Acids - Tube GC-MS	HCL - NIOSH 7903	Ammonia - OSHA ID-188	SO2 - OSHA ID-200	HCN - NIOSH 6010	Amines - NIOSH 2010M	Fixed Gases - EPA 3C	PAHs / Dioxins EPA TO-13A / 9A	Mercury - NIOSH 6009	Odor Evaluation	Special Instructions / Conditions of Receipt
62843	TRIP BLANK - DNPH						X											
62844	- ACIDS							X										
62845	- HCL								X									
62846	- AMMONIA									X								
62847	- SO2										X							
62848	- HCN											X						
62849	- AMINES												X					
62850	- MERCURY															X		
62851	- Canister				X	X								X				

Requested Turnaround Time: Standard turn-around for all analyses. If possible deliver report within 2 weeks.

QC Requirements: Provide Level IV QC Package for all Analyses.

Relinquished By:	Date:	Time:	Received By:	Date:	Time:
Rob Hesse	5/8/13	18:00			
Relinquished By:	Date:	Time:	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By:	Date: 5/9/13	Time: 0935

- FEDEX

SOIL / WATER / AIR PROTECTION ENTERPRISE

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Telephone No. / Fax No.: (310) 434-0110 / (310) 434-0011

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Address: 1640 FIFTH STREET, SUITE 204, SANTA MONICA, CA 90401

Project Name and Location: BRIDGETON SANITARY LANDFILL AIR QUALITY ASSESSMENT

Sampled By: PAUL ROSENFELD

Sampler Signature: Paul Rosenfeld

REQUESTED TESTS / ANALYSES

LAB ID	SAMPLE ID NUMBER	Type	Date	Time	VOCS - EPA TO-15	Reduced Sulfur Compounds - ASTM D5504	Aldehydes - EPA TO-11A	Carboxlyic Acids - Tube GC-MS	HCL - NIOSH 7903	Ammonia - OSHA ID-188	SO2 - OSHA ID-200	HCN - NIOSH 6010	Amines - NIOSH 2010M	Fixed Gases - EPA 3C	PAHs / Dioxins EPA TO-13A / 9A	Mercury - NIOSH 6009	Odor Evaluation	Special Instructions / Conditions of Receipt
62852	BZ-2-Canister	CAN	5/8/13	13:32	X	X								X				
62853	-DNPH	TUBE		13:22			X											
62854	-ACIDS			13:26				X										
62855	-HCL			13:24					X									
62856	-AMMONIA			13:20						X								
62857	-SO2			13:22							X							
62858	-HCN			13:29								X						
62859	-AMINES			13:31									X					
62860	-MERCURY			13:28												X		

Requested Turnaround Time: Standard turn-around for all analyses. If possible deliver report within 2 weeks.

QC Requirements: Provide Level IV QC Package for all Analyses.

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Rob Hesse	5/8/13	18:00			
Relinquished By:	Date:	Time:	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By:	Date: 5/9/13	Time: 0935

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SOIL / WATER / AIR PROTECTION ENTERPRISE

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Client Name: SOIL / WATER AIR PROTECTION ENTERPRISE

Telephone No. / Fax No.: (310) 434-0110 / (310) 434-0011

Date: 5/7/13 Page 1 of 1

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Project Name and Location: BRIDGETON SANITARY LANDFILL AIR QUALITY ASSESSMENT

Sampled By: PAUL ROSENFELD

Sampler Signature: Paul Rosenfeld

REQUESTED TESTS / ANALYSES

LAB ID	SAMPLE ID NUMBER	Type	Date	Time	VOCS - EPA TO-15	Reduced Sulfur Compounds - ASTM D5504	Aldehydes - EPA TO-11A	Carboxlyic Acids - Tube GC-MS	HCL - NIOSH 7903	Ammonia - OSHA ID-188	SO2 - OSHA ID-200	HCN - NIOSH 6010	Amines - NIOSH 2010M	Fixed Gases - EPA 3C	PAHs / Dioxins EPA TO-13A / 9A	Mercury - NIOSH 6009	Odor Evaluation	Special Instructions / Conditions of Receipt
void	U-1-Canister	CAN	5/7/13	11:17	~~X~~	~~X~~		~~X~~						~~X~~		~~X~~		NO ANALYSIS
62862	-DNPH	TUBE		12:47			X											
62863	-ACIDS			12:46				X										
62864	-HCL			12:49					X									
62865	-AMMONIA			12:54						X								
62866	-SO2			12:51							X							
62867	-HCN			12:52								X						
62868	-AMINES			12:53									X					
62869	-MERCURY			12:50												X		
62861	U-1B-Canister	CAN			X	X								X		~~X~~		

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QC Requirements: Provide Level IV QC Package for all Analyses.

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Rob Hesse	5/8/13	18:00			
				5/9/13	0935

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Project Name and Location: BRIDGETON SANITARY LANDFILL AIR QUALITY ASSESSMENT

Sampled By: PAUL ROSENFELD

Sampler Signature: Paul Rosenfeld

REQUESTED TESTS / ANALYSES

LAB ID	SAMPLE ID NUMBER	Type	Date	Time	VOCS - EPA TO-15	Reduced Sulfur Compounds - ASTM D5504	Aldehydes - EPA TO-11A	Carboxlyic Acids - Tube GC-MS	HCL - NIOSH 7903	Ammonia - OSHA ID-188	SO2 - OSHA ID-200	HCN - NIOSH 6010	Amines - NIOSH 2010M	Fixed Gases - EPA 3C	PAHs / Dioxins EPA TO-13A / 9A	Mercury - NIOSH 6009	Odor Evaluation	Special Instructions / Conditions of Receipt
62870	U-2-Canister	CAN	5/7/13	13:20	X	X								X				
62871	-DNPH	TUBE		13:17			X											
62872	-ACIDS			13:09				X										
62873	-HCL			13:14					X									
62874	-AMMONIA			13:18						X								
62875	-SO2			13:13							X							
62876	-HCN			13:15								X						
62877	-AMINES			13:10									X					
62878	-MERCURY			13:12												X		

Requested Turnaround Time: Standard turn-around for all analyses. If possible deliver report within 2 weeks.

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Ron Hesse	5/8/13	18:00			
			Received By:	5/9/13	0935

SOIL / WATER / AIR PROTECTION ENTERPRISE

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LAB ID	SAMPLE ID NUMBER	Type	Date	Time	VOCS - EPA TO-15	Reduced Sulfur Compounds - ASTM D5504	Aldehydes - EPA TO-11A	Carboxlyic Acids - Tube GC-MS	HCL - NIOSH 7903	Ammonia - OSHA ID-188	SO2 - OSHA ID-200	HCN - NIOSH 6010	Amines - NIOSH 2010M	Fixed Gases - EPA 3C	PAHs / Dioxins EPA TO-13A / 9A	Mercury - NIOSH 6009	Odor Evaluation	Special Instructions / Conditions of Receipt
62879	V-3 - CANISTER	CAN	5/8/13	12:14	X	X								X				
62880	- DNPH	TUBE		12:03			X											
62881	- ACIDS			12:06				X										
62882	- HCL			12:09					X									
62883	- AMMONIA			12:07						X								
62884	- SO2			12:11							X							
62885	- HCN			12:12								X						
62886	- AMINES			12:05									X					
62887	- MERCURY			11:22												X		

Requested Turnaround Time: Standard turn-around for all analyses. If possible deliver report within 2 weeks.

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Robert Rose	5/8/13	18:00			
Relinquished By:	Date:	Time:	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By:	Date: 5/9/13	Time: 0935

SOIL / WATER / AIR PROTECTION ENTERPRISE

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REQUESTED TESTS / ANALYSES

LAB ID	SAMPLE ID NUMBER	Type	Date	Time	VOCS - EPA TO-15	Reduced Sulfur Compounds - ASTM D5504	Aldehydes - EPA TO-11A	Carboxlyic Acids - Tube GC-MS	HCL - NIOSH 7903	Ammonia - OSHA ID-188	SO2 - OSHA ID-200	HCN - NIOSH 6010	Amines - NIOSH 2010M	Fixed Gases - EPA 3C	PAHs / Dioxins EPA TO-13A / 9A	Mercury - NIOSH 6009	Odor Evaluation	Special Instructions / Conditions of Receipt
62888	D-1-Canister	CAN	5/7/13	11:57	X	X								X				
62889	-DNPH	TUBE		11:55			X											
62890	-ACIDS			11:54				X										
62891	-HCL			11:46					X									
62892	-AMMONIA			11:49						X								
62893	-SO2			11:48							X							
62894	-HCN			11:42								X						
62895	-AMINES			11:52									X					
62896	-MERCURY			11:43												X		

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Rob Hesse	5/8/13	18:00			
				5/9/13	0935

SOIL / WATER / AIR PROTECTION ENTERPRISE

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CHAIN OF CUSTODY RECORD / ANALYTICAL REQUEST FORM

Bridgeton Sanitary Landfill Air Quality Assessment

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Date: 5/7/13 Page 1 of 1

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Project Name and Location: BRIDGETON SANITARY LANDFILL AIR QUALITY ASSESSMENT

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Sampler Signature: Paul Rosenfeld

REQUESTED TESTS / ANALYSES

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62897	D-2-Canister	CAN	5/7/13	12:22	X	X								X				
62898	-DNPH	TUBE		12:19			X											
62899	-ACIDS			12:21				X										
62900	-HCL			12:12					X									
62901	-AMMONIA			12:17						X								
62902	-SO2			12:15							X							
62903	-HCN			12:16								X						
62904	-AMINES			12:08									X					
62905	-MERCURY			12:10												X		

Requested Turnaround Time: Standard turn-around for all analyses. If possible deliver report within 2 weeks.

QC Requirements: Provide Level IV QC Package for all Analyses.

Relinquished By:	Date:	Time:	Received By:	Date:	Time:
Rob Hesse	5/8/13	18:00			
			Received By:	Date: 5/9/13	Time: 0935

SOIL / WATER / AIR PROTECTION ENTERPRISE

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CHAIN OF CUSTODY RECORD / ANALYTICAL REQUEST FORM

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Sampler Signature: Paul Rosenfeld

REQUESTED TESTS / ANALYSES

LAB ID	SAMPLE ID NUMBER	Type	Date	Time	VOCS - EPA TO-15	Reduced Sulfur Compounds - ASTM D5504	Aldehydes - EPA TO-11A	Carboxlyic Acids - Tube GC-MS	HCL - NIOSH 7903	Ammonia - OSHA ID-188	SO2 - OSHA ID-200	HCN - NIOSH 6010	Amines - NIOSH 2010M	Fixed Gases - EPA 3C	PAHs / Dioxins EPA TO-13A / 9A	Mercury - NIOSH 6009	Odor Evaluation	Special Instructions / Conditions of Receipt
62906	D-3 - Canister	CAN	5/8/13	13:00	X	X								X				
62907	- DNPH	TUBE		12:47			X											
62908	- ACIDS			12:58				X										
62909	- HCL			12:51					X									
62910	- AMMONIA			12:55						X								
62911	- SO2			12:57							X							
62912	- HCN			12:50								X						
62913	- AMINES			12:54									X					
62914	- MERCURY			12:48												X		

Requested Turnaround Time: Standard turn-around for all analyses. If possible deliver report within 2 weeks.

QC Requirements: Provide Level IV QC Package for all Analyses.

Relinquished By:	Date:	Time:	Received By:	Date:	Time:
Ron Hesse	5/8/13	18:00			
				5/9/13	0935

SOIL / WATER / AIR PROTECTION ENTERPRISE

- FEDEX

Atmospheric Analysis and Consulting Inc.
Canister Sampling Field Data Sheet

GENERAL INFORMATION

Project Name and/or ID No.: SWAPE Project: 601 Bridgeton Landfill

Site Address and/or ID No: Bridgeton Sanitary Landfill, Bridgeton, Missouri

Sample Name and/or ID No.: BZ-2 -Canister

AAC Batch ID: 130559 AAC Sample ID: 62852

SAMPLING INFORMATION

Start Date/Time: 5/8/13 9:39 Stop Date/Time: 5/8/13 13:32

Start Temp/Pressure*: 25.6°C / 30.06 Stop Temp/Pressure*: 27.2°C / 30.01

Initial Can Pressure**: -28.5 Final Can Pressure**: -7.5

** Ambient Barometric Reading where sample is being taken (C / inHg) ** Flow Controller Gauge Reading (inHg)*

Comments: Temp/pressure from Lambert Intl. Airport.

PAUL ROSENFELD — Paul Rosenfeld

Sampler Name (Print) — *Sampler Signature/Date*

LABORATORY INFORMATION

Canister Size: 6-Liter Sampling Period: 4-Hour

Canister Serial No.: 672 Flow Controller Serial No: 807

Initial Pressure: 0.5 Certified Flow Rate: 18.0

Return Pressure: 544.9 Certified By/Date: JZ 4/10/2013

Final Pressure: 1017.2 Flow Rate upon Return: 21.5

Date Shipped From Lab: 4/10/2013 Shipped By: JZ

Date Returned to Lab: 5/9/2013 Received By: JZ

Flow Controller Certification File ID: M503/04260305

Canister Certification File ID: M503/0405BR

Certification Type: SIM ____ SCAN ✓ NJLL ____ PAMS ____ Other ____

05/13/13 — 5/13/13

Chemist Signature/Date — *Lab Manager Signature/Date*

Sampler is required to fill out all highlighted sections during sampling. All remaining sections will be completed upon return by the laboratory.

Atmospheric Analysis and Consulting Inc.
Canister Sampling Field Data Sheet

GENERAL INFORMATION

Project Name and/or ID No.: SWAPE Project: 601 Bridgeton Landfill

Site Address and/or ID No: Bridgeton Sanitary Landfill, Bridgeton, Missouri

Sample Name and/or ID No.: U-1B-Canister

AAC Batch ID: 130559 AAC Sample ID: 62861

SAMPLING INFORMATION

Start Date/Time: 5/7/13 12:10 Stop Date/Time: 5/7/13 15:53

Start Temp/Pressure*: 24.4C/30.05 Stop Temp/Pressure*: 26.1C/29.99

Initial Can Pressure**: -30 Final Can Pressure**:

** Ambient Barometric Reading where sample is being taken (C / inHg) ** Flow Controller Gauge Reading (inHg)*

Comments: Temp/Pressure from Lambert Intl. Airport

PAUL ROSENFELD — Paul Rosenfeld

Sampler Name (Print) *Sampler Signature/Date*

LABORATORY INFORMATION

Canister Size: 6-Liter Sampling Period: 4-Hour

Canister Serial No.: 576 Flow Controller Serial No: 806

Initial Pressure: 1.6 Certified Flow Rate: 18.0

Return Pressure: 499.0 Certified By/Date: JZ 4/10/2013

Final Pressure: 1059.1 Flow Rate upon Return: 20.0

Date Shipped From Lab: 4/25/2013 Shipped By: JZ

Date Returned to Lab: 5/9/2013 Received By: JZ

Flow Controller Certification File ID: MS03/04091306

Canister Certification File ID: MS03/04051309

Certification Type: SIM ____ SCAN ✓ NJLL ____ PAMS ____ Other ____

05/13/13 — MK 5/13/13

Chemist Signature/Date *Lab Manager Signature/Date*

Sampler is required to fill out all highlighted sections during sampling. All remaining sections will be completed upon return by the laboratory.

Atmospheric Analysis and Consulting Inc.
Canister Sampling Field Data Sheet

GENERAL INFORMATION

Project Name and/or ID No.: SWAPE Project: 601 Bridgeton Landfill

Site Address and/or ID No: Bridgeton Sanitary Landfill, Bridgeton, Missouri

Sample Name and/or ID No.: V-2-Canister

AAC Batch ID: 130559 AAC Sample ID: 62870

SAMPLING INFORMATION

Start Date/Time: 5/7/13 9:07 Stop Date/Time: 5/7/13 1320

Start Temp/Pressure*: 20.6°C/30.01 Stop Temp/Pressure*: 23.9°C/20.01

Initial Can Pressure**: -30 Final Can Pressure**: -10

** Ambient Barometric Reading where sample is being taken (C / inHg) ** Flow Controller Gauge Reading (inHg)*

Comments: Temp./Pressure from Lambert Intl. Airport.

PAUL ROSENFELD — *Sampler Name (Print)*

Paul Rosenfeld — *Sampler Signature/Date*

LABORATORY INFORMATION

Canister Size: 6-Liter Sampling Period: 4-Hour

Canister Serial No.: 732 Flow Controller Serial No: 718

Initial Pressure: 0.6 Certified Flow Rate: 17.8

Return Pressure: 509.9 Certified By/Date: JZ 4/26/2013

Final Pressure: 1016.0 Flow Rate upon Return: 16.8

Date Shipped From Lab: 4/10/2013 Shipped By: JZ

Date Returned to Lab: 5/9/2013 Received By: JZ

Flow Controller Certification File ID: M603/04261305

Canister Certification File ID: M603/03913/8

Certification Type: SIM ____ SCAN ✓ NJLL ____ PAMS ____ Other ____

05/13/13 — *Chemist Signature/Date*

MB 5/13/13 — *Lab Manager Signature/Date*

Sampler is required to fill out all highlighted sections during sampling. All remaining sections will be completed upon return by the laboratory.

Atmospheric Analysis and Consulting Inc.
Canister Sampling Field Data Sheet

GENERAL INFORMATION

Project Name and/or ID No.: SWAPE Project: 601 Bridgeton Landfill

Site Address and/or ID No: Bridgeton Sanitary Landfill, Bridgeton, Missouri

Sample Name and/or ID No.: U-3-Canister

AAC Batch ID: 130559 AAC Sample ID: 62879

SAMPLING INFORMATION

Start Date/Time: 5-8-13/ 8:19 Stop Date/Time: 5/8/13 12:14

Start Temp/Pressure*: 23.98 / 30.05 Stop Temp/Pressure*: 27.8°C / 30.02

Initial Can Pressure**: -30 Final Can Pressure**: -11.3

** Ambient Barometric Reading where sample is being taken (C / inHg) ** Flow Controller Gauge Reading (inHg)*

Comments: Temp / pressure from Lambert Intl. Airport

PAUL ROSENFELD — Paul Rosenfeld

Sampler Name (Print) — *Sampler Signature/Date*

LABORATORY INFORMATION

Canister Size: 6-Liter Sampling Period: 4-Hour

Canister Serial No.: 653 Flow Controller Serial No: 808

Initial Pressure: 0.5 Certified Flow Rate: 18.1

Return Pressure: 485.2 Certified By/Date: JZ 4/10/2013

Final Pressure: 1019.1 Flow Rate upon Return: 16.9

Date Shipped From Lab: 4/10/2013 Shipped By: JZ

Date Returned to Lab: 5/9/2013 Received By: JZ

Flow Controller Certification File ID: MS03/04101305

Canister Certification File ID: MS03/03271317

Certification Type: SIM ____ SCAN ✓ NJLL ____ PAMS ____ Other ____

05/13/13 — 5/13/13

Chemist Signature/Date — *Lab Manager Signature/Date*

Sampler is required to fill out all highlighted sections during sampling. All remaining sections will be completed upon return by the laboratory.

Atmospheric Analysis and Consulting Inc.
Canister Sampling Field Data Sheet

GENERAL INFORMATION

Project Name and/or ID No.: SWAPE Project: 601 Bridgeton Landfill

Site Address and/or ID No: Bridgeton Sanitary Landfill, Bridgeton, Missouri

Sample Name and/or ID No.: D-1-Canister

AAC Batch ID: 130559 AAC Sample ID: 62888

SAMPLING INFORMATION

Start Date/Time: 5/7/13 7:39 Stop Date/Time: 5/7/13 11:57

Start Temp/Pressure*: 17.8°C / 30.04 Stop Temp/Pressure*: 24.4°C / 30.03

Initial Can Pressure**: 28.8 Final Can Pressure**: -10

** Ambient Barometric Reading where sample is being taken (C / inHg) ** Flow Controller Gauge Reading (inHg)*

Comments: Temp/pressure from Lambert Intl. Airport.

PAUL ROSENFELD — Paul Rosenfeld

Sampler Name (Print) — *Sampler Signature/Date*

LABORATORY INFORMATION

Canister Size: 6-Liter Sampling Period: 4-Hour

Canister Serial No.: 668 Flow Controller Serial No: 692

Initial Pressure: 0.6 Certified Flow Rate: 18.0

Return Pressure: 474.9 Certified By/Date: JZ 4/5/2013

Final Pressure: 1024.9 Flow Rate upon Return: 16.6

Date Shipped From Lab: 4/10/2013 Shipped By: JZ

Date Returned to Lab: 5/9/2013 Received By: JZ

Flow Controller Certification File ID: 4503/0328132

Canister Certification File ID: 4503/0325132

Certification Type: SIM ____ SCAN ✓ NJLL ____ PAMS ____ Other ____

05/13/13 — MM 5/13/13

Chemist Signature/Date — *Lab Manager Signature/Date*

Sampler is required to fill out all highlighted sections during sampling. All remaining sections will be completed upon return by the laboratory.

Atmospheric Analysis and Consulting Inc.
Canister Sampling Field Data Sheet

GENERAL INFORMATION

Project Name and/or ID No.: SWAPE Project: 601 Bridgeton Landfill

Site Address and/or ID No: Bridgeton Sanitary Landfill, Bridgeton, Missouri

Sample Name and/or ID No.: D-2-Canister

AAC Batch ID: 130559 AAC Sample ID: 62897

SAMPLING INFORMATION

Start Date/Time: 5/7/13 8:40 Stop Date/Time: 5/7/13 12:22

Start Temp/Pressure*: 17.8°C / 30.04 Stop Temp/Pressure*: 24.4°C / 30.03

Initial Can Pressure**: -29 Final Can Pressure**: -6

** Ambient Barometric Reading where sample is being taken (C / inHg) ** Flow Controller Gauge Reading (inHg)*

Comments: Temp/Pressure from Lambert Intl. Airport.

PAUL ROSENFELD — *Sampler Name (Print)*

Paul Rosenfeld — *Sampler Signature/Date*

LABORATORY INFORMATION

Canister Size: 6-Liter Sampling Period: 4-Hour

Canister Serial No.: 702 Flow Controller Serial No: 698

Initial Pressure: 0.6 Certified Flow Rate: 18.0

Return Pressure: 589.4 Certified By/Date: 4/5/2013 JZ

Final Pressure: 1024.2 Flow Rate upon Return: 18.8

Date Shipped From Lab: 4/10/2013 Shipped By: JZ

Date Returned to Lab: 5/9/2013 Received By: JZ

Flow Controller Certification File ID: MS02/0905,208

Canister Certification File ID: MS03/0307,317

Certification Type: SIM ____ SCAN ✓ NJLL ____ PAMS ____ Other ____

05/13/13 — *Chemist Signature/Date*

MV 5/13/13 — *Lab Manager Signature/Date*

Sampler is required to fill out all highlighted sections during sampling. All remaining sections will be completed upon return by the laboratory.

Atmospheric Analysis and Consulting Inc.
Canister Sampling Field Data Sheet

GENERAL INFORMATION

Project Name and/or ID No.: SWAPE Project: 601 Bridgeton Landfill

Site Address and/or ID No: Bridgeton Sanitary Landfill, Bridgeton, Missouri

Sample Name and/or ID No.: D-3 - Canister

AAC Batch ID: 130559 AAC Sample ID: 62906

SAMPLING INFORMATION

Start Date/Time: 5/8/13 8:51 Stop Date/Time: 5/8/13 13:00

Start Temp/Pressure*: 23.9C / 30.05 Stop Temp/Pressure*: 27.8C / 30.02

Initial Can Pressure**: -30 Final Can Pressure**: -8.1

** Ambient Barometric Reading where sample is being taken (C / inHg) ** Flow Controller Gauge Reading (inHg)*

Comments: Temp / pressure from Lambert Intl. Airport

PAUL ROSENFELD — *Sampler Name (Print)*

Paul Rosenfeld — *Sampler Signature/Date*

LABORATORY INFORMATION

Canister Size: 6-Liter Sampling Period: 4-Hour

Canister Serial No.: 741 Flow Controller Serial No: 711

Initial Pressure: 0.5 Certified Flow Rate: 18.1

Return Pressure: 585.8 Certified By/Date: JZ 4/26/2013

Final Pressure: 1018.3 Flow Rate upon Return: 19.5

Date Shipped From Lab: 4/10/2013 Shipped By: JZ

Date Returned to Lab: 5/9/2013 Received By: JZ

Flow Controller Certification File ID: MFC3/04261305

Canister Certification File ID: MFC3/03251314

Certification Type: SIM ____ SCAN ✓ NJLL ____ PAMS ____ Other ____

05/13/13 — *Chemist Signature/Date*

5/13/13 — *Lab Manager Signature/Date*

Sampler is required to fill out all highlighted sections during sampling. All remaining sections will be completed upon return by the laboratory.

Results

Atmospheric Analysis & Consulting, Inc.

Laboratory Analysis Report

CLIENT : **SWAPE**
PROJECT NO. : **130559**
MATRIX : **AIR**

SAMPLING DATE : **05/07,08/2013**
RECEIVING DATE : **05/09/2013**
ANALYSIS DATE : **05/10/2013**
REPORT DATE : **05/13/2013**

EPA 3C

Client ID	Trip Blank - Canister	BZ-2-Canister	U-1B-Canister	U-2-Canister
AAC ID	130559-62851	130559-62852	130559-62861	130559-62870
Can Dilution Factor	1.0	1.87	2.12	1.99
Analyte	Result	Result	Result	Result
H_2	< 1.0 %	< 1.9 %	< 2.1 %	< 2.0 %
O_2	< 0.1 %	**20.9 %**	**20.7 %**	**20.8 %**
N_2	**0.2 %**	**79.1 %**	**79.3 %**	**79.2 %**
CO	< 0.1 %	< 0.2 %	< 0.2 %	< 0.2 %
CO_2	< 0.1 %	< 0.2 %	< 0.2 %	< 0.2 %
CH_4	< 0.1 %	< 0.2 %	< 0.2 %	< 0.2 %

Client ID	U-3-Canister	D-1-Canister	D-2-Canister	D-3-Canister
AAC ID	130559-62879	130559-62888	130559-62897	130559-62906
Can Dilution Factor	2.10	2.16	1.74	1.74
Analyte	Result	Result	Result	Result
H_2	< 2.1 %	< 2.2 %	< 1.7 %	< 1.7 %
O_2	**20.8 %**	**20.8 %**	**20.9 %**	**20.9 %**
N_2	**79.2 %**	**79.2 %**	**79.1 %**	**79.1 %**
CO	< 0.2 %	< 0.2 %	< 0.2 %	< 0.2 %
CO_2	< 0.2 %	< 0.2 %	< 0.2 %	< 0.2 %
CH_4	< 0.2 %	< 0.2 %	< 0.2 %	< 0.2 %

All fixed gases have been normalized to 100% on a dry weight basis

Sample Reporting Limit (SRL) is equal to Reporting Limit x Canister Dil. Fac

Marcus Hueppe
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Atmospheric Analysis & Consulting, Inc.

LABORATORY ANALYSIS REPORT

CLIENT	: SWAPE	SAMPLING DATE	: 05/07,08/2013
PROJECT NO.	: 130559	RECEIVING DATE	: 05/09/2013
MATRIX	: AIR	ANALYSIS DATE	: 05/09/2013
UNITS	: ppbV	REPORT DATE	: 05/13/2013

Sulfur Compounds by ASTM D-5504

Client ID	Trip Blank - Canister	BZ-2-Canister	U-1B-Canister	U-2-Canister
AAC ID	130559-62851	130559-62852	130559-62861	130559-62870
Canister Dil. Fac.	1.00	1.87	2.12	1.99
Analyte	Result	Result	Result	Result
Hydrogen Sulfide	< 25.0	< 46.7	< 53.1	< 49.8
Carbonyl Sulfide	< 25.0	< 46.7	< 53.1	< 49.8
Sulfur Dioxide	< 25.0	< 46.7	< 53.1	< 49.8
Methyl Mercaptan	< 25.0	< 46.7	< 53.1	< 49.8
Ethyl Mercaptan	< 25.0	< 46.7	< 53.1	< 49.8
Dimethyl Sulfide	< 25.0	< 46.7	< 53.1	< 49.8
Carbon Disulfide	< 12.5	< 23.3	< 26.5	< 24.9
Isopropyl Mercaptan	< 25.0	< 46.7	< 53.1	< 49.8
tert-Butyl Mercaptan	< 25.0	< 46.7	< 53.1	< 49.8
n-Propyl Mercaptan	< 25.0	< 46.7	< 53.1	< 49.8
Methylethylsulfide	< 25.0	< 46.7	< 53.1	< 49.8
sec-Butyl Mercaptan	< 25.0	< 46.7	< 53.1	< 49.8
Thiophene	< 25.0	< 46.7	< 53.1	< 49.8
iso-Butyl Mercaptan	< 25.0	< 46.7	< 53.1	< 49.8
Diethyl Sulfide	< 25.0	< 46.7	< 53.1	< 49.8
n-Butyl Mercaptan	< 25.0	< 46.7	< 53.1	< 49.8
Dimethyl Disulfide	< 12.5	< 23.3	< 26.5	< 24.9
2-Methylthiophene	< 25.0	< 46.7	< 53.1	< 49.8
3-Methylthiophene	< 25.0	< 46.7	< 53.1	< 49.8
Tetrahydrothiophene	< 25.0	< 46.7	< 53.1	< 49.8
Bromothiophene	< 25.0	< 46.7	< 53.1	< 49.8
Thiophenol	< 25.0	< 46.7	< 53.1	< 49.8
Diethyl disulfide	< 12.5	< 23.3	< 26.5	< 24.9
Total Unidentified Sulfur	< 25.0	< 46.7	< 53.1	< 49.8

All unidentified sulfur compound's concentrations expressed in terms of H_2S
Sample Reporting Limit (SRL) is equal to Reporting Limit x Canister Dil. Fac. x Analysis Dil. Fac.

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Atmospheric Analysis & Consulting, Inc.

LABORATORY ANALYSIS REPORT

CLIENT	: SWAPE	SAMPLING DATE	: 05/07,08/2013
PROJECT NO.	: 130559	RECEIVING DATE	: 05/09/2013
MATRIX	: AIR	ANALYSIS DATE	: 05/09/2013
UNITS	: ug/m^3	REPORT DATE	: 05/13/2013

Sulfur Compounds by ASTM D-5504

Client ID	Trip Blank - Canister	BZ-2-Canister	U-1B-Canister	U-2-Canister
AAC ID	130559-62851	130559-62852	130559-62861	130559-62870
Canister Dil. Fac.	1.00	1.87	2.12	1.99
Analyte	Result	Result	Result	Result
Hydrogen Sulfide	< 34.8	< 65.1	< 74.0	< 69.4
Carbonyl Sulfide	< 61.4	< 115	< 130	< 122
Sulfur Dioxide	< 65.5	< 122	< 139	< 131
Methyl Mercaptan	< 49.2	< 91.8	< 104	< 98.0
Ethyl Mercaptan	< 63.5	< 119	< 135	< 127
Dimethyl Sulfide	< 63.5	< 119	< 135	< 127
Carbon Disulfide	< 38.9	< 72.7	< 82.6	< 77.6
Isopropyl Mercaptan	< 77.9	< 145	< 165	< 155
tert-Butyl Mercaptan	< 92.2	< 172	< 196	< 184
n-Propyl Mercaptan	< 77.9	< 145	< 165	< 155
Methylethylsulfide	< 77.9	< 145	< 165	< 155
sec-Butyl Mercaptan	< 92.2	< 172	< 196	< 184
Thiophene	< 86.0	< 161	< 183	< 171
iso-Butyl Mercaptan	< 92.2	< 172	< 196	< 184
Diethyl Sulfide	< 92.2	< 172	< 196	< 184
n-Butyl Mercaptan	< 92.2	< 172	< 196	< 184
Dimethyl Disulfide	< 48.2	< 89.9	< 102	< 96.0
2-Methylthiophene	< 100	< 187	< 213	< 200
3-Methylthiophene	< 100	< 187	< 213	< 200
Tetrahydrothiophene	< 90.2	< 168	< 191	< 180
Bromothiophene	< 167	< 311	< 354	< 332
Thiophenol	< 113	< 210	< 239	< 224
Diethyl disulfide	< 62.5	< 117	< 133	< 125
Total Unidentified Sulfur	< 34.8	< 65.1	< 74.0	< 69.4

All unidentified sulfur compound's concentrations expressed in terms of H_2S
Sample Reporting Limit (SRL) is equal to Reporting Limit x Canister Dil. Fac. x Analysis Dil. Fac.

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LABORATORY ANALYSIS REPORT

CLIENT	**: SWAPE**	**SAMPLING DATE**	**: 05/07,08/2013**
PROJECT NO.	**: 130559**	**RECEIVING DATE**	**: 05/09/2013**
MATRIX	**: AIR**	**ANALYSIS DATE**	**: 05/10/2013**
UNITS	**: ppbV**	**REPORT DATE**	**: 05/13/2013**

Sulfur Compounds by ASTM D-5504

Client ID	**U-3-Canister**	**D-1-Canister**	**D-2-Canister**	**D-3-Canister**
AAC ID	**130559-62879**	**130559-62888**	**130559-62897**	**130559-62906**
Canister Dil. Fac.	**2.10**	**2.16**	**1.74**	**1.74**
Analyte	**Result**	**Result**	**Result**	**Result**
Hydrogen Sulfide	< 52.5	< 54.0	< 43.4	< 43.5
Carbonyl Sulfide	< 52.5	< 54.0	< 43.4	< 43.5
Sulfur Dioxide	< 52.5	< 54.0	< 43.4	< 43.5
Methyl Mercaptan	< 52.5	< 54.0	< 43.4	< 43.5
Ethyl Mercaptan	< 52.5	< 54.0	< 43.4	< 43.5
Dimethyl Sulfide	< 52.5	< 54.0	< 43.4	< 43.5
Carbon Disulfide	< 26.3	< 27.0	< 21.7	< 21.7
Isopropyl Mercaptan	< 52.5	< 54.0	< 43.4	< 43.5
tert-Butyl Mercaptan	< 52.5	< 54.0	< 43.4	< 43.5
n-Propyl Mercaptan	< 52.5	< 54.0	< 43.4	< 43.5
Methylethylsulfide	< 52.5	< 54.0	< 43.4	< 43.5
sec-Butyl Mercaptan	< 52.5	< 54.0	< 43.4	< 43.5
Thiophene	< 52.5	< 54.0	< 43.4	< 43.5
iso-Butyl Mercaptan	< 52.5	< 54.0	< 43.4	< 43.5
Diethyl Sulfide	< 52.5	< 54.0	< 43.4	< 43.5
n-Butyl Mercaptan	< 52.5	< 54.0	< 43.4	< 43.5
Dimethyl Disulfide	< 26.3	< 27.0	< 21.7	< 21.7
2-Methylthiophene	< 52.5	< 54.0	< 43.4	< 43.5
3-Methylthiophene	< 52.5	< 54.0	< 43.4	< 43.5
Tetrahydrothiophene	< 52.5	< 54.0	< 43.4	< 43.5
Bromothiophene	< 52.5	< 54.0	< 43.4	< 43.5
Thiophenol	< 52.5	< 54.0	< 43.4	< 43.5
Diethyl disulfide	< 26.3	< 27.0	< 21.7	< 21.7
Total Unidentified Sulfur	< 52.5	< 54.0	< 43.4	< 43.5

All unidentified sulfur compound's concentrations expressed in terms of H_2S
Sample Reporting Limit (SRL) is equal to Reporting Limit x Canister Dil. Fac. x Analysis Dil. Fac.

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LABORATORY ANALYSIS REPORT

CLIENT	: SWAPE	SAMPLING DATE	: 05/07,08/2013
PROJECT NO.	: 130559	RECEIVING DATE	: 05/09/2013
MATRIX	: AIR	ANALYSIS DATE	: 05/10/2013
UNITS	: ug/m^3	REPORT DATE	: 05/13/2013

Sulfur Compounds by ASTM D-5504

Client ID	U-3-Canister	D-1-Canister	D-2-Canister	D-3-Canister
AAC ID	130559-62879	130559-62888	130559-62897	130559-62906
Canister Dil. Fac.	2.10	2.16	1.74	1.74
Analyte	Result	Result	Result	Result
Hydrogen Sulfide	< 73.2	< 75.2	< 60.6	< 60.6
Carbonyl Sulfide	< 129	< 133	< 107	< 107
Sulfur Dioxide	< 138	< 141	< 114	< 114
Methyl Mercaptan	< 103	< 106	< 85.5	< 85.5
Ethyl Mercaptan	< 133	< 137	< 110	< 110
Dimethyl Sulfide	< 133	< 137	< 110	< 110
Carbon Disulfide	< 81.8	< 84.0	< 67.6	< 67.7
Isopropyl Mercaptan	< 164	< 168	< 135	< 135
tert-Butyl Mercaptan	< 194	< 199	< 160	< 160
n-Propyl Mercaptan	< 164	< 168	< 135	< 135
Methylethylsulfide	< 164	< 168	< 135	< 135
sec-Butyl Mercaptan	< 194	< 199	< 160	< 160
Thiophene	< 181	< 186	< 149	< 150
iso-Butyl Mercaptan	< 194	< 199	< 160	< 160
Diethyl Sulfide	< 194	< 199	< 160	< 160
n-Butyl Mercaptan	< 194	< 199	< 160	< 160
Dimethyl Disulfide	< 101	< 104	< 83.7	< 83.7
2-Methylthiophene	< 211	< 217	< 174	< 174
3-Methylthiophene	< 211	< 217	< 174	< 174
Tetrahydrothiophene	< 189	< 195	< 157	< 157
Bromothiophene	< 350	< 360	< 290	< 290
Thiophenol	< 237	< 243	< 196	< 196
Diethyl disulfide	< 131	< 135	< 109	< 109
Total Unidentified Sulfur	< 73.2	< 75.2	< 60.6	< 60.6

All unidentified sulfur compound's concentrations expressed in terms of H_2S
Sample Reporting Limit (SRL) is equal to Reporting Limit x Canister Dil. Fac. x Analysis Dil. Fac.

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QA/QC Summary

Atmospheric Analysis & Consulting, Inc.

Quality Control/Quality Assurance Report

Date Analyzed : 05/10/2013
Analyst : ZG
Units : %

Instrument ID : TCD#1
Calb Date : 04/13/2012
Reporting Limit : 0.1%

I - Opening Continuing Calibration Verification - EPA 3C

AAC ID	Analyte	H_2	O_2	N_2	CO_2	CH_4	CO
CCV	Spike Conc	10.3	10.5	19.6	10.3	9.9	10.3
	Result	10.1	10.0	20.0	10.4	9.5	9.9
	% Rec *	98.1	95.9	102.1	101.4	95.8	95.8

II - Method Blank - EPA 3C

AAC ID	Analyte	H_2	O_2	N_2	CO_2	CH_4	CO
MB	Concentration	ND	ND	ND	ND	ND	ND

III-Laboratory Control Spike & Duplicate - EPA 3C

AAC ID	Analyte	H_2	O_2	N_2	CO_2	CH_4	CO
Lab Control Standards	Sample Conc	0.0	0.0	0.0	0.0	0.0	0.0
	Spike Conc	10.3	10.5	19.6	10.3	9.9	10.3
	LCS Result	11.0	10.4	21.1	10.6	10.0	10.4
	LCSD Result	11.2	10.9	21.9	10.8	10.5	10.9
	LCS % Rec *	107.1	99.9	107.5	103.4	100.9	100.5
	LCSD % Rec *	109.1	104.1	111.6	105.6	105.5	105.7
	% RPD ***	1.9	4.1	3.7	2.1	4.5	5.1

IV-Sample & Sample Duplicate - EPA 3C

AAC ID	Analyte	H_2	O_2	N_2	CO_2	CH_4	CO
130559-62851	Sample	0.0	0.0	0.3	0.0	0.0	0.0
	Sample Dup	0.0	0.0	0.2	0.0	0.0	0.0
	Mean	0.0	0.0	0.2	0.0	0.0	0.0
	% RPD ***	0.0	0.0	2.0	0.0	0.0	0.0

V-Matrix Spike & Duplicate - EPA 3C

AAC ID	Analyte	H_2	N_2	CO_2	CH_4	CO
130559-62851	Sample Conc	0.0	0.1	0.0	0.0	0.0
	Spike Conc	10.3	9.2	10.3	9.9	10.3
	MS Result	11.4	11.0	10.9	10.5	11.0
	MSD Result	11.2	10.6	10.6	10.0	10.5
	MS % Rec **	111.1	118.3	106.5	105.4	105.9
	MSD % Rec **	108.7	113.3	103.8	100.5	101.1
	% RPD ***	2.2	4.3	2.5	4.7	4.7

VI - Closing Continuing Calibration Verification - EPA 3C

AAC ID	Analyte	H_2	O_2	N_2	CO_2	CH_4	CO
CCV	Spike Conc	10.3	10.5	19.6	10.3	9.9	10.3
	Result	11.1	11.4	21.9	10.3	10.0	10.4
	% Rec *	108.1	109.5	111.4	100.4	100.5	100.9

** Must be 85-115%*
*** Must be 75-125%*
**** Must be < 25%*
ND = Not Detected
<RL = less than Reporting Limit

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Atmospheric Analysis & Consulting, Inc.

Quality Control/Quality Assurance Report
ASTM D-5504

Date Analyzed: 05/09/13
Analyst: DH

Instrument ID: SCD#10
Calb. Date: 11/19/2012

Opening Calibration Verification Standard

	Resp. (area)	Result (ppbV)	% Rec *	% RPD ****
Initial	11413	490	97.9	NA
Duplicate	11454	491	98.3	0.4
Triplicate	11541	495	99.0	1.1

Method Blank

Analyte	Result
H2S	ND

Matrix Spike & Duplicate **Sample ID 130559-62851 x2**

Analyte	Sample Conc.	Spike Added	MS Result	MSD Result	MS % Rec **	MSD % Rec **	% RPD ***
H2S	0	250	240	247	95.9	98.9	3.0

Duplicate Analysis **Sample ID 130559-62851**

Analyte	Sample Result	Duplicate Result	Mean	% RPD ***
H2S	0	0	0	0.0

Closing Calibration Verification Standard

Analyte	Std. Conc.	Result	%Recovery **
H2S	500	467.0	93.4

** Must be 95-105%*

*** Must be 90-110%*

**** Must be < 10%*

***** must be < 5% RPD from Initial result.*

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Atmospheric Analysis & Consulting, Inc.

Quality Control/Quality Assurance Report
ASTM D-5504

Date Analyzed: 05/10/13
Analyst: DH

Instrument ID: SCD#10
Calb. Date: 11/19/2013

Opening Calibration Verification Standard

	Resp. (area)	Result (ppbV)	% Rec *	% RPD ****
Initial	12122	520	104.0	NA
Duplicate	12165	522	104.4	0.4
Triplicate	12124	520	104.0	0.0

Method Blank

Analyte	Result
H2S	ND

Matrix Spike & Duplicate **Sample ID 130559-62879 x2**

Analyte	Sample Conc.	Spike Added	MS Result	MSD Result	MS % Rec **	MSD % Rec **	% RPD ***
H2S	0	250	269	266	107.4	106.5	0.9

Duplicate Analysis **Sample ID 130559-62879**

Analyte	Sample Result	Duplicate Result	Mean	% RPD ***
H2S	0	0	0	0.0

Closing Calibration Verification Standard

Analyte	Std. Conc.	Result	%Recovery **
H2S	500	485.7	97.1

** Must be 95-105%*

*** Must be 90-110%*

**** Must be < 10%*

***** must be < 5% RPD from Initial result.*

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Laboratory Director

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Calibration Summary

SCAQMD 307.91 / ASTM D-5504 INITIAL CALIBRATION SUMMARY

Analysis Date: 11/19/2012 **Analyst:** DH **Units:** ppbV

CALIBRATION CURVE RAW DATA:

Standard Concentration (ppbV)	Retention time (min)	Response (Area)	RPD from initial result (< 5%)	Std Deviation	Standard Concentration	Mean Response (Area)	Calculated Concentration (From Mean)	Mean % Recovery (+/- 5 %)
0.0	0.00	0						
0.0	0.00	0	0.0	0	0.0	0	0.0	0.0
0.0	0.00	0	0.0					
25.0	2.251	586						
25.0	2.276	589	0.5	5	25.0	590	25.3	101.3
25.0	2.236	596	1.7					
100.0	2.220	2317						
100.0	2.203	2251	2.9	36	100.0	2293	98.4	98.4
100.0	2.180	2310	0.3					
500.0	2.189	11840						
500.0	2.194	11892	0.4	42	500.0	11885	509.9	102.0
500.0	2.183	11923	0.7					
2500.0	2.190	56904						
2500.0	2.192	59185	3.9	1186	2500.0	58231	2498.1	99.9
2500.0	2.193	58605	2.9					
Avg. Ret.	2.209							

Calibration Verification Check Standards:

Check Standard Concentration: 500 ppbV

	Resp. (area)	Result (ppbV)	% Rec *	% RPD
Initial	11833	507.6	101.5	NA
Duplicate	11856	508.6	101.7	0.2
Triplicate	11630	498.9	99.8	1.7

** All CV's must have +/- 5 % Recovery and < 5% RPD from Initial result.*

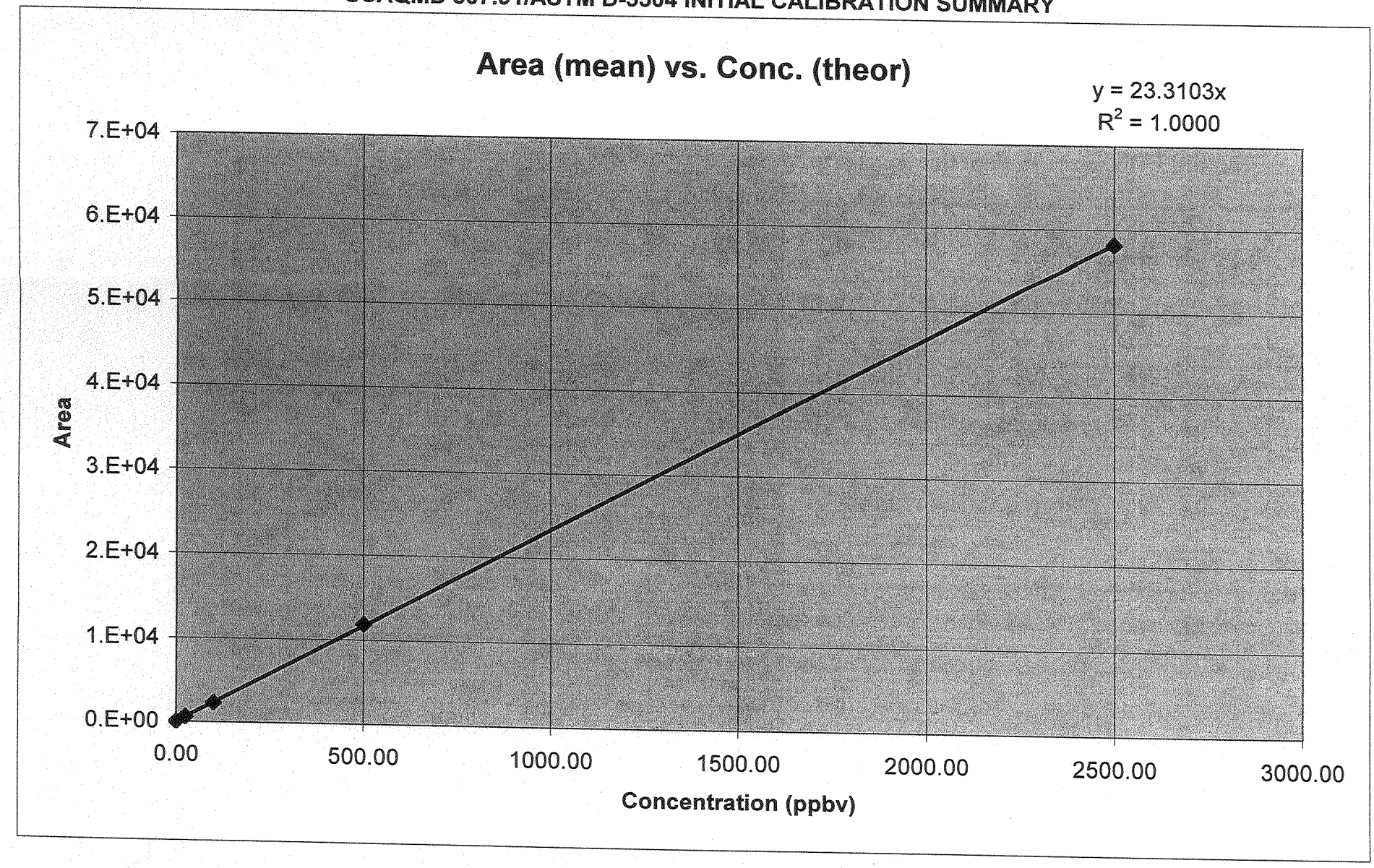
Linear Slope: X = Y/ 23.3103

R2 value: 1.0000 *Must be > 0.990*

11/19/12

Laboratory Director (signature/date)

SCAQMD 307.91/ASTM D-5504 INITIAL CALIBRATION SUMMARY



File Name: C:\Cpmethods\Inst #01\2012\D1945-D1946-3C-041312-standard.CAL
Version: 24

Creator: TT
Description:

Internal standard calibration
No injection volume correction
No sample weight correction
Area reject threshold: 150
Reference peak area reject threshold: 150
Amount units: percent
No default component

Method of calculating data point averages: Equal weight for all updates
No calibration update report

All levels are normal data points.

2 Hydrogen-MS5A

Expected retention time:	3.82 minutes
Search window:	0.2 minutes
No internal standard component	
No retention time reference component	
Group number:	0
High alarm limit:	0
Low alarm limit:	0
Component constant:	0

Single peak quantification by area

Y = 184.8704 X + 0

Linear fit with equal weighting, forced to origin

Coefficient of determination:	0.997054
Average error:	3.173%
Average CF:	184.361
RSD:	4.178%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	1.027	190	185.0049	0.073	Manual	6/5/2012 11:31:02 AM
2	1.027	193	187.926	1.653	Manual	6/5/2012 11:31:10 AM
3	2.566	495	192.9073	4.347	Manual	6/5/2012 11:31:39 AM
4	2.566	490	190.9587	3.293	Manual	6/5/2012 11:31:52 AM
5	5.133	911	177.4791	-3.998	Manual	6/5/2012 11:43:31 AM
6	5.133	966	188.194	1.798	Manual	6/5/2012 11:43:34 AM
7	10.265	1735	169.0209	-8.573	Manual	6/5/2012 11:44:10 AM
8	10.265	1809	176.2299	-4.674	Manual	6/5/2012 11:44:14 AM
9	20.53	3802	185.1924	0.174	Manual	6/5/2012 11:44:42 AM
10	20.53	3915	190.6965	3.151	Manual	6/5/2012 11:44:46 AM
11	(0)	(0)	--	--	Manual	4/9/2012 2:51:23 PM
12	(0)	(0)	--	--	Manual	4/9/2012 2:51:23 PM

6 Oxygen-MS5A

Expected retention time:	7.01 minutes
Search window:	0.2 minutes
No internal standard component	
No retention time reference component	
Group number:	0
High alarm limit:	0
Low alarm limit:	0
Component constant:	0

Single peak quantification by area

Y = 13702.82 X + 0

Linear fit with equal weighting, forced to origin

Coefficient of determination:	0.999071
Average error:	5.371%
Average CF:	13063.87
RSD:	5.782%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	0.1036	1259	12152.51	-11.314	Manual	6/5/2012 12:09:28 PM
2	0.1036	1206	11640.93	-15.047	Manual	6/5/2012 11:28:32 AM
3	1.036	13286	12824.32	-6.411	Manual	6/5/2012 12:09:39 PM
4	1.036	14062	13573.36	-0.945	Manual	6/5/2012 12:09:48 PM
5	5.18	66116	12763.71	-6.853	Manual	6/5/2012 12:10:31 PM
6	5.18	67996	13126.64	-4.205	Manual	6/5/2012 12:10:38 PM
7	10.36	127480	12305.02	-10.201	Manual	6/5/2012 12:10:57 PM
8	10.36	135683	13096.82	-4.422	Manual	6/5/2012 12:11:04 PM
9	20	281965	14098.25	2.886	Manual	6/5/2012 12:11:35 PM
10	20	274449	13722.45	0.143	Manual	6/5/2012 12:11:40 PM
11	40	543688	13592.2	-0.807	Manual	6/5/2012 12:11:44 PM
12	40	554808	13870.2	1.222	Manual	6/5/2012 11:29:03 AM

8 Nitrogen-MS5A

Expected retention time:	9.22 minutes
Search window:	0.4 minutes
No internal standard component	
No retention time reference component	
Group number:	0
High alarm limit:	0
Low alarm limit:	0
Component constant:	0

Single peak quantification by area

Y = 14574.06 X + 0

Linear fit with equal weighting, forced to origin

Coefficient of determination:	0.9994987
Average error:	4.726%
Average CF:	15042.66
RSD:	5.285%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	0.1041	1727	16589.82	13.831	Manual	6/5/2012 12:09:04 PM
2	0.1041	1459	14015.37	-3.833	Manual	6/5/2012 12:09:08 PM
3	1.041	16409	15762.73	8.156	Manual	6/5/2012 12:09:44 PM
4	1.041	16555	15902.98	9.118	Manual	6/5/2012 11:28:37 AM
5	5.21	76781	14737.24	1.120	Manual	6/5/2012 12:10:35 PM
6	5.21	78002	14971.59	2.728	Manual	6/5/2012 12:10:42 PM
7	10.41	160140	15383.29	5.553	Manual	6/5/2012 12:11:00 PM
8	10.41	161428	15507.01	6.401	Manual	6/5/2012 11:28:51 AM
9	25	352089	14083.56	-3.366	Manual	6/5/2012 12:11:16 PM
10	25	357559	14302.36	-1.864	Manual	6/5/2012 12:11:20 PM
11	50	733498	14669.96	0.658	Manual	6/5/2012 12:11:24 PM
12	50	729300	14586	0.082	Manual	6/5/2012 12:11:30 PM

9 CO2-Q bond

Expected retention time: 9.5 minutes
Search window: 0.2 minutes
No internal standard component
No retention time reference component
Group number: 0
High alarm limit: 0
Low alarm limit: 0
Component constant: 0

Single peak quantification by area

Y = 12006.17 X + 0

Linear fit with equal weighting, forced to origin
Coefficient of determination: 0.9968426
Average error: 13.133%
Average CF: 11408.35
RSD: 29.225%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	0.103	1049	10184.47	-15.173	Manual	6/5/2012 12:02:46 PM
2	1.03	1169	1134.952	-90.547	Manual	6/5/2012 12:02:48 PM
3	1.025	12910	12595.12	4.905	Manual	6/5/2012 12:02:54 PM
4	1.025	12823	12510.24	4.198	Manual	6/5/2012 12:02:55 PM
5	2.563	32364	12627.39	5.174	Manual	6/5/2012 12:03:02 PM
6	2.563	33810	13191.57	9.873	Manual	6/5/2012 12:03:03 PM
7	5.125	66272	12931.12	7.704	Manual	6/5/2012 12:03:11 PM
8	5.125	67517	13174.05	9.727	Manual	6/5/2012 12:03:12 PM
9	10.25	128043	12492	4.046	Manual	6/5/2012 12:03:18 PM
10	10.25	127116	12401.56	3.293	Manual	6/5/2012 12:03:19 PM
11	20.5	242402	11824.49	-1.513	Manual	6/5/2012 11:57:05 AM
12	20.5	242582	11833.27	-1.440	Manual	6/5/2012 11:57:06 AM

10 Methane-MS5A

Expected retention time:	10.54 minutes
Search window:	0.2 minutes
No internal standard component	
No retention time reference component	
Group number:	0
High alarm limit:	0
Low alarm limit:	0
Component constant:	0

Single peak quantification by area

Y = 11355.95 X + 0

Linear fit with equal weighting, forced to origin

Coefficient of determination:	0.9999504
Average error:	1.404%
Average CF:	11485.02
RSD:	1.852%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	0.099	1138	11494.95	1.224	Manual	6/5/2012 11:29:59 AM
2	0.099	1169	11808.08	3.981	Manual	6/5/2012 11:42:12 AM
3	0.994	11888	11959.76	5.317	Manual	6/5/2012 11:42:30 AM
4	0.994	11565	11634.81	2.456	Manual	6/5/2012 11:42:43 AM
5	2.484	28339	11408.62	0.464	Manual	6/5/2012 11:43:09 AM
6	2.484	28374	11422.71	0.588	Manual	6/5/2012 11:43:20 AM
7	4.968	56246	11321.66	-0.302	Manual	6/5/2012 11:43:48 AM
8	4.9688	56812	11433.75	0.685	Manual	6/5/2012 11:44:00 AM
9	9.935	111692	11242.27	-1.001	Manual	6/5/2012 11:44:20 AM
10	9.935	112877	11361.55	0.049	Manual	6/5/2012 11:44:29 AM
11	19.87	224961	11321.64	-0.302	Manual	6/5/2012 11:45:14 AM
12	19.87	226726	11410.47	0.480	Manual	6/5/2012 11:45:24 AM

11 Carbon Monoxide-MS5A

Expected retention time: 11.5 minutes
Search window: 0.2 minutes
No internal standard component
No retention time reference component
Group number: 0
High alarm limit: 0
Low alarm limit: 0
Component constant: 0

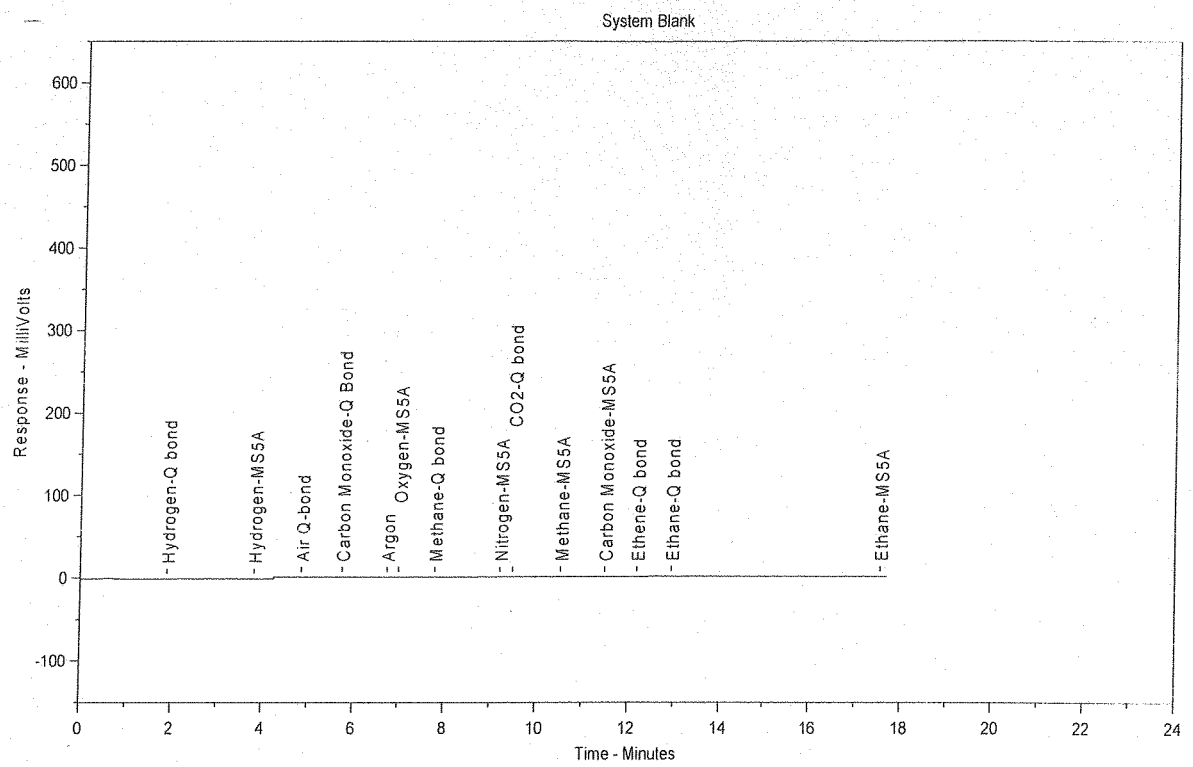
Single peak quantification by area

Y = 14397.51 X + 0

Linear fit with equal weighting, forced to origin
Coefficient of determination: 0.9999121
Average error: 3.135%
Average CF: 14181.2
RSD: 6.858%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	0.103	1538	14932.04	3.713	Manual	6/5/2012 11:30:06 AM
2	0.103	1156	11223.3	-22.047	Manual	6/5/2012 11:42:13 AM
3	1.035	15568	15041.55	4.473	Manual	6/5/2012 11:42:37 AM
4	1.035	14999	14491.79	0.655	Manual	6/5/2012 11:31:49 AM
5	2.586	36454	14096.67	-2.089	Manual	6/5/2012 11:43:13 AM
6	2.586	36908	14272.24	-0.870	Manual	6/5/2012 11:43:23 AM
7	5.173	73898	14285.33	-0.779	Manual	6/5/2012 11:43:51 AM
8	5.173	74701	14440.56	0.299	Manual	4/9/2012 3:05:32 PM
9	10.345	146680	14178.83	-1.519	Manual	6/5/2012 11:44:23 AM
10	10.345	148331	14338.42	-0.410	Manual	4/9/2012 3:05:58 PM
11	20.69	297551	14381.39	-0.112	Manual	6/5/2012 11:45:17 AM
12	20.69	299845	14492.27	0.658	Manual	4/9/2012 3:06:38 PM

Raw Data



Sample Name = **System Blank**

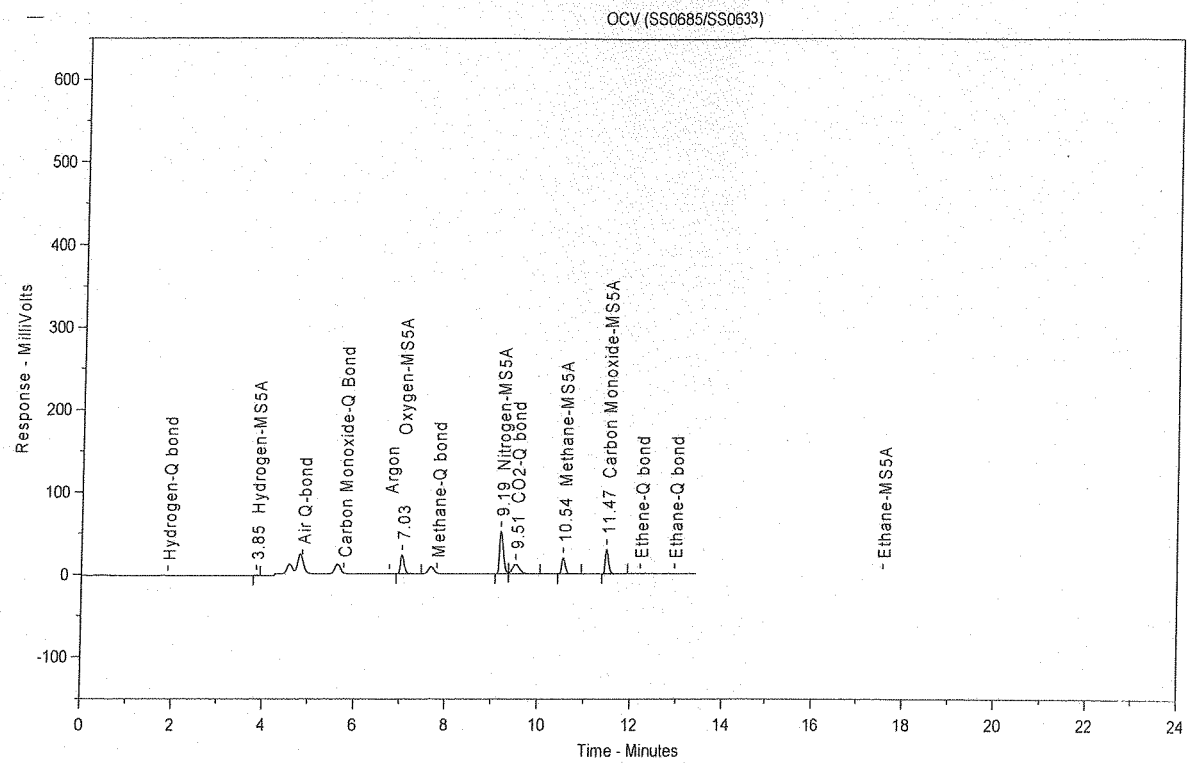
Instrument = TCD #1

Raw File Name = **C:\CPDATA\Inst#01\2013\051013.0001.raw** Date Taken (end) = 5/10/2013 5:44:48 AM
Method File Name = C:\Cpmethods\Inst #01\2012\D1945-D1946-3C.MET Dilution Factor = 1
Calibration File Name = C:\Cpmethods\Inst #01\2012\D1945-D1946-3C-041312-standard.CAL

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width

Total Area = 0 Total Height = 0 Total Amount = 0

CS
5/10/13



Sample Name = **OCV (SS0685/SS0633)**

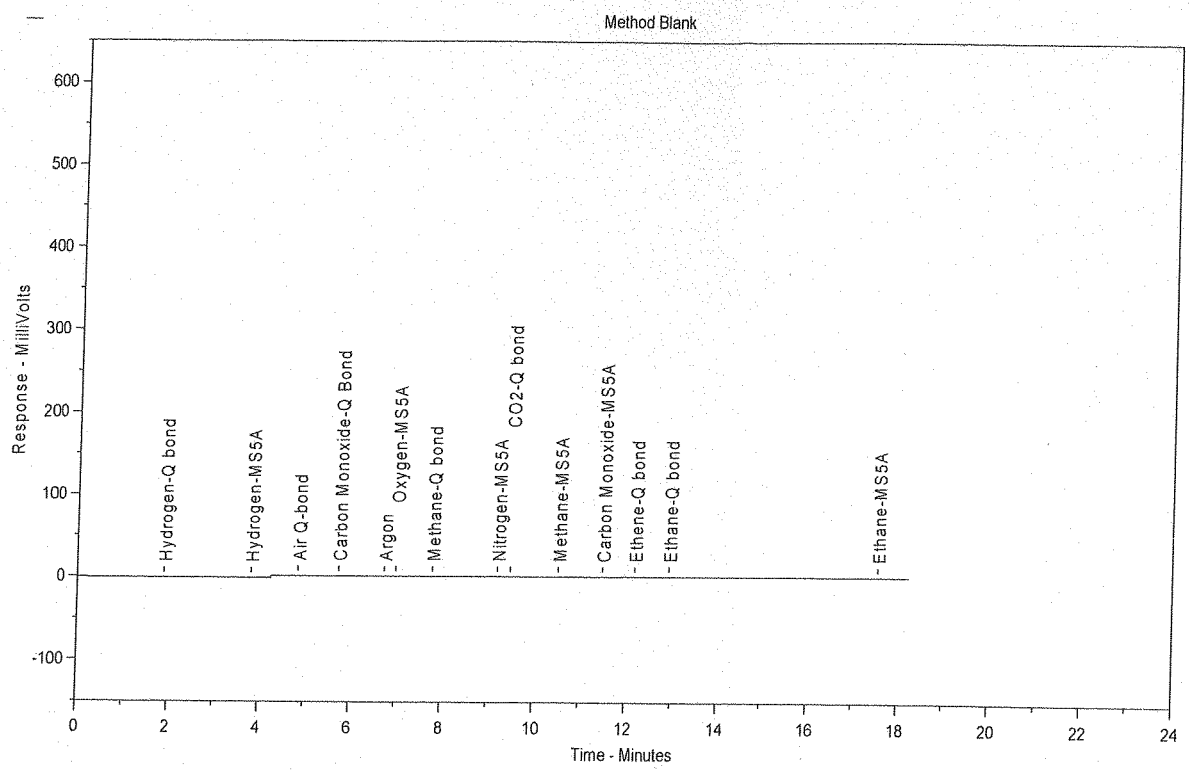
Instrument = TCD #1

Raw File Name = **C:\CPDATA\Inst#01\2013\051013.0002.raw** Date Taken (end) = 5/10/2013 6:02:18 AM
Method File Name = C:\Cpmethods\Inst #01\2012\D1945-D1946-3C.MET Dilution Factor = 1
Calibration File Name = C:\Cpmethods\Inst #01\2012\D1945-D1946-3C-041312-standard.CAL

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	3.85	Hydrogen-MS5A	10.074	14.403	1862	0.231	BB	0.06
2	7.03	Oxygen-MS5A	10.028	14.337	137416	17.035	BB	0.09
3	9.19	Nitrogen-MS5A	20.023	28.626	291817	36.177	BV	0.09
4	9.51	CO2-Q bond	10.398	14.866	124842	15.477	VB	0.17
5	10.54	Methane-MS5A	9.518	13.607	108082	13.399	BB	0.09
6	11.47	Carbon Monoxide-MS5A	9.906	14.163	142628	17.682	BB	0.07

Total Area = 806647.4 Total Height = 135486.4 Total Amount = 69.9479

LC
5/10/13



Sample Name = **Method Blank**

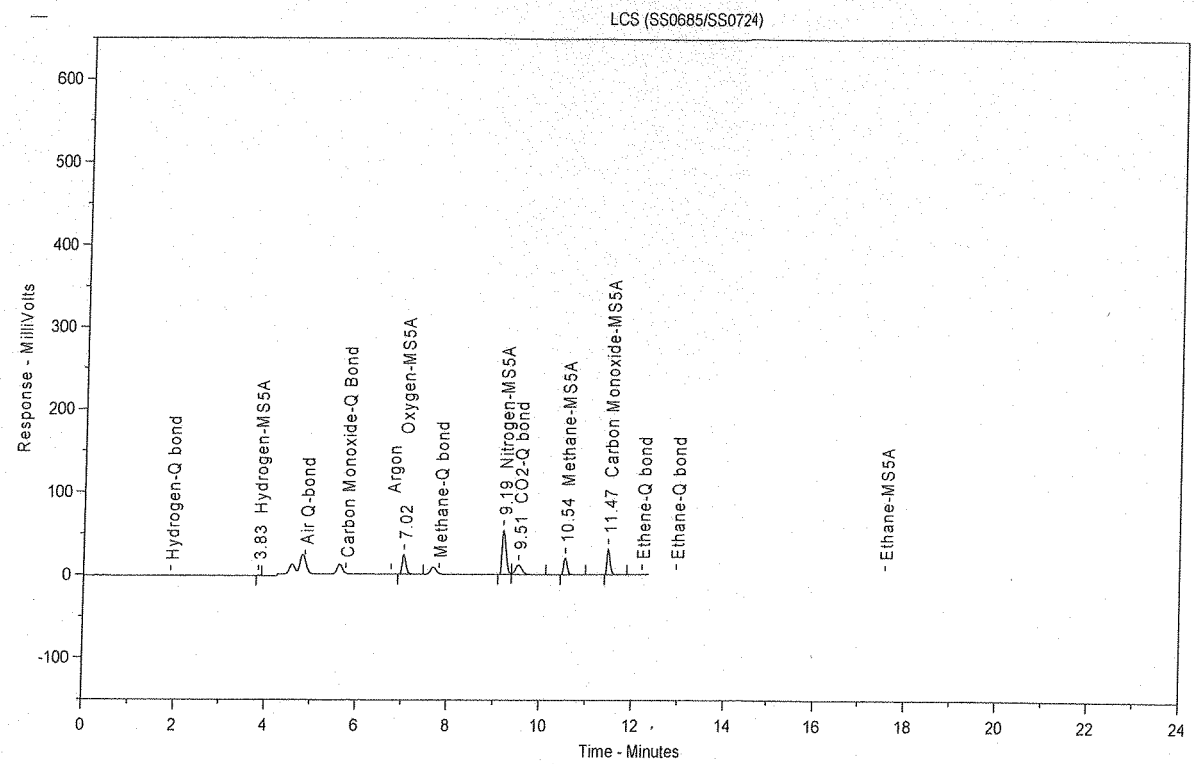
Instrument = TCD #1

Raw File Name = **C:\CPDATA\Inst#01\2013\051013.0003.RAW** Date Taken (end) = 5/10/2013 6:25:03 AM
Method File Name = C:\Cpmethods\Inst #01\2012\D1945-D1946-3C.MET Dilution Factor = 1
Calibration File Name = C:\Cpmethods\Inst #01\2012\D1945-D1946-3C-041312-standard.CAL

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width

Total Area = 0 Total Height = 0 Total Amount = 0

05/10/13



Sample Name = **LCS (SS0685/SS0724)**

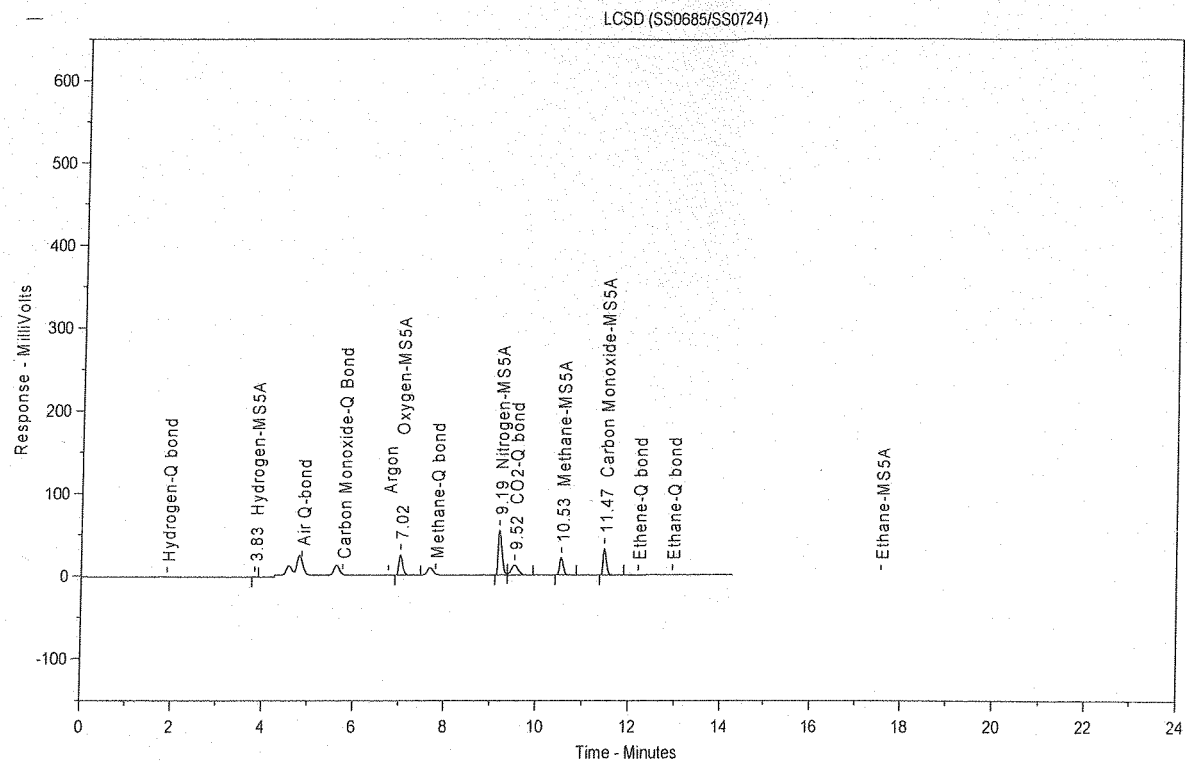
Instrument = TCD #1

Raw File Name = **C:\CPDATA\Inst#01\2013\051013.0004.RAW** Date Taken (end) = 5/10/2013 6:42:36 AM
Method File Name = C:\Cpmethods\Inst #01\2012\D1945-D1946-3C.MET Dilution Factor = 1
Calibration File Name = C:\Cpmethods\Inst #01\2012\D1945-D1946-3C-041312-standard.CAL

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	3.83	Hydrogen-MS5A	10.991	14.944	2032	0.241	BB	0.06
2	7.02	Oxygen-MS5A	10.444	14.200	143115	16.970	BB	0.09
3	9.19	Nitrogen-MS5A	21.097	28.684	307467	36.458	BV	0.09
4	9.51	CO2-Q bond	10.599	14.412	127259	15.090	VV	0.16
5	10.54	Methane-MS5A	10.024	13.629	113830	13.498	VB	0.09
6	11.47	Carbon Monoxide-MS5A	10.393	14.131	149633	17.743	BB	0.07

Total Area = 843336.6 Total Height = 141008.1 Total Amount = 73.54827

DH 5/10/13



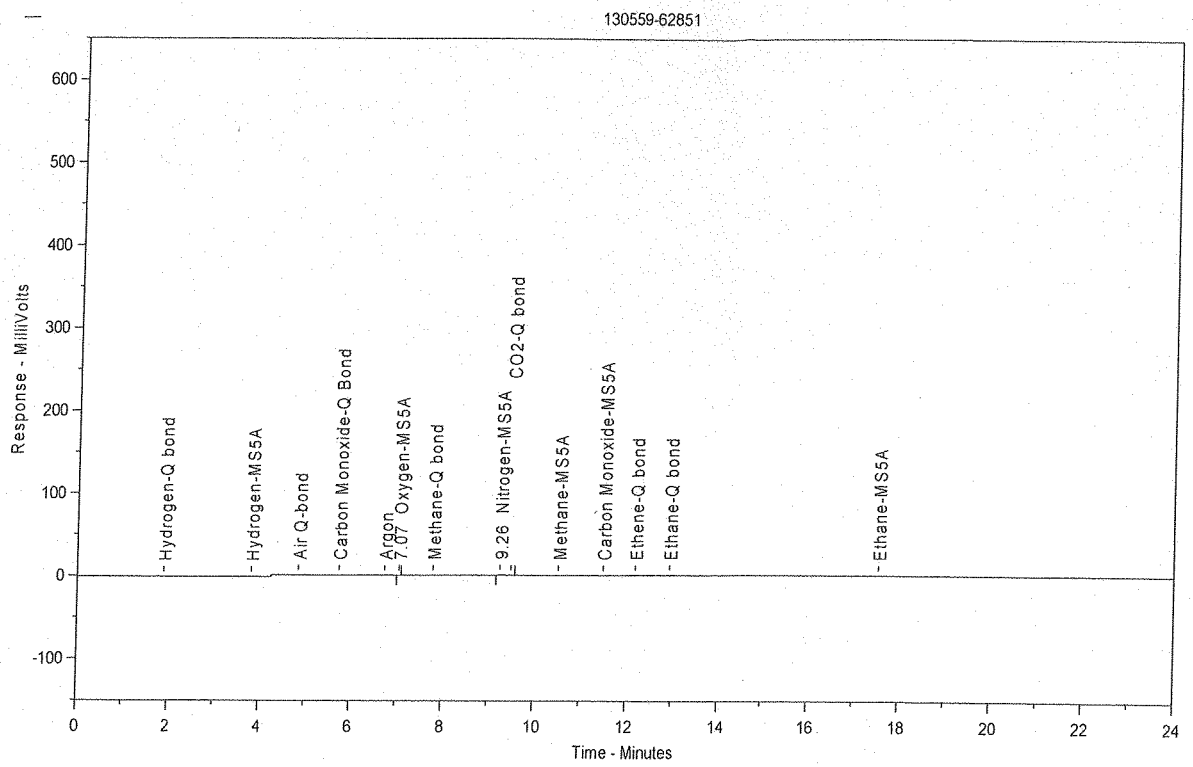
Sample Name = **LCSD (SS0685/SS0724)**

Instrument = TCD #1

Raw File Name = **C:\CPDATA\Inst#01\2013\051013.0005.RAW** Date Taken (end) = 5/10/2013 7:02:13 AM
Method File Name = C:\Cpmethods\Inst #01\2012\D1945-D1946-3C.MET Dilution Factor = 1
Calibration File Name = C:\Cpmethods\Inst #01\2012\D1945-D1946-3C-041312-standard.CAL

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	3.83	Hydrogen-MS5A	11.197	14.689	2070	0.236	BB	0.06
2	7.02	Oxygen-MS5A	10.886	14.280	149169	17.011	BB	0.09
3	9.19	Nitrogen-MS5A	21.900	28.729	319178	36.398	BV	0.09
4	9.52	CO2-Q bond	10.829	14.205	130010	14.826	VB	0.17
5	10.53	Methane-MS5A	10.483	13.752	119045	13.575	BB	0.09
6	11.47	Carbon Monoxide-MS5A	10.936	14.346	157449	17.955	BB	0.07

Total Area = 876921 Total Height = 145364.2 Total Amount = 76.23125



Sample Name = **130559-62851**

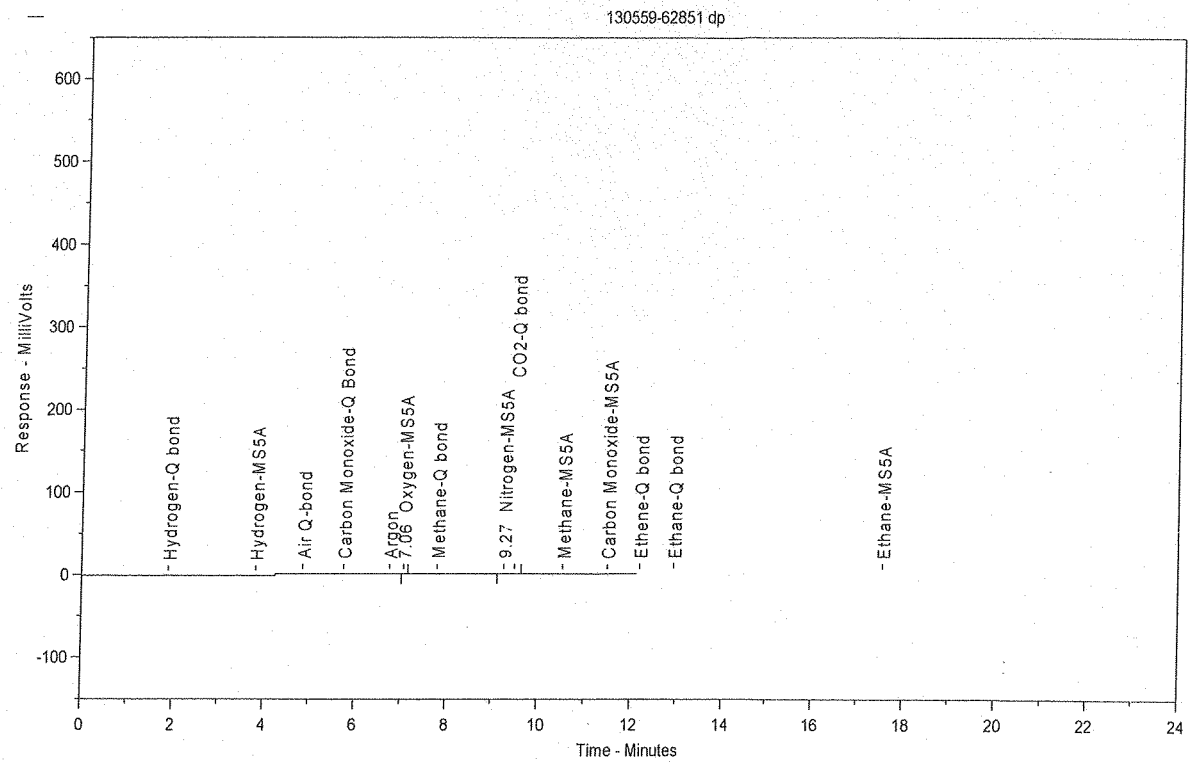
Instrument = TCD #1

Raw File Name = **C:\CPDATA\Inst#01\2013\051013.0006.raw** Date Taken (end) = 5/10/2013 7:32:25 AM
Method File Name = C:\Cpmethods\Inst #01\2012\D1945-D1946-3C.MET Dilution Factor = 1
Calibration File Name = C:\Cpmethods\Inst #01\2012\D1945-D1946-3C-041312-standard.CAL

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	7.07	Oxygen-MS5A	0.020	7.435	277	7.022	BB	0.08
2	9.26	Nitrogen-MS5A	0.252	92.565	3671	92.978	BB	0.07

Total Area = 3948.336 Total Height = 638.2599 Total Amount = 0.2721249

29/10/13



Sample Name = **130559-62851 dp**

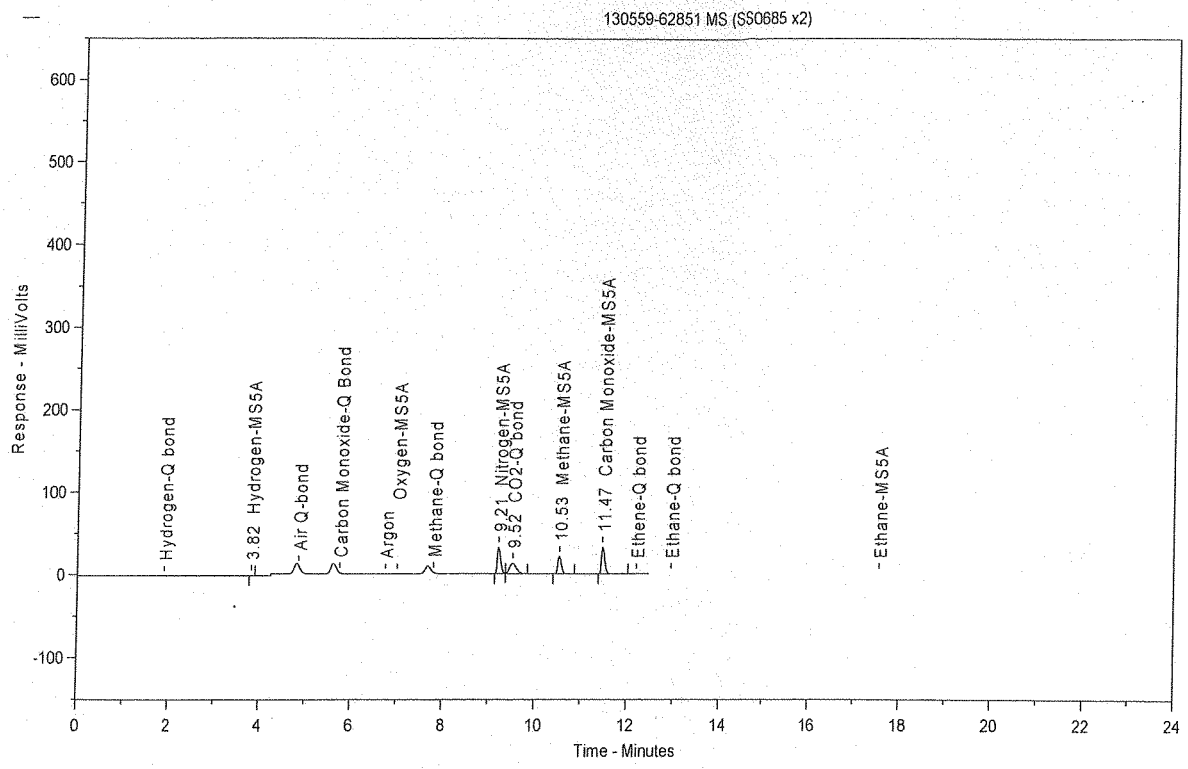
Instrument = TCD #1

Raw File Name = **C:\CPDATA\Inst#01\2013\051013.0007.raw** Date Taken (end) = 5/10/2013 7:49:16 AM
Method File Name = C:\Cpmethods\Inst #01\2012\D1945-D1946-3C.MET Dilution Factor = 1
Calibration File Name = C:\Cpmethods\Inst #01\2012\D1945-D1946-3C-041312-standard.CAL

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	7.06	Oxygen-MS5A	0.022	8.119	299	7.670	BB	0.09
2	9.27	Nitrogen-MS5A	0.247	91.881	3597	92.330	BB	0.08

Total Area = 3896.085 Total Height = 509.0303 Total Amount = 0.268634

Z95/10/13



Sample Name = **130559-62851 MS (SS0685 x2)**

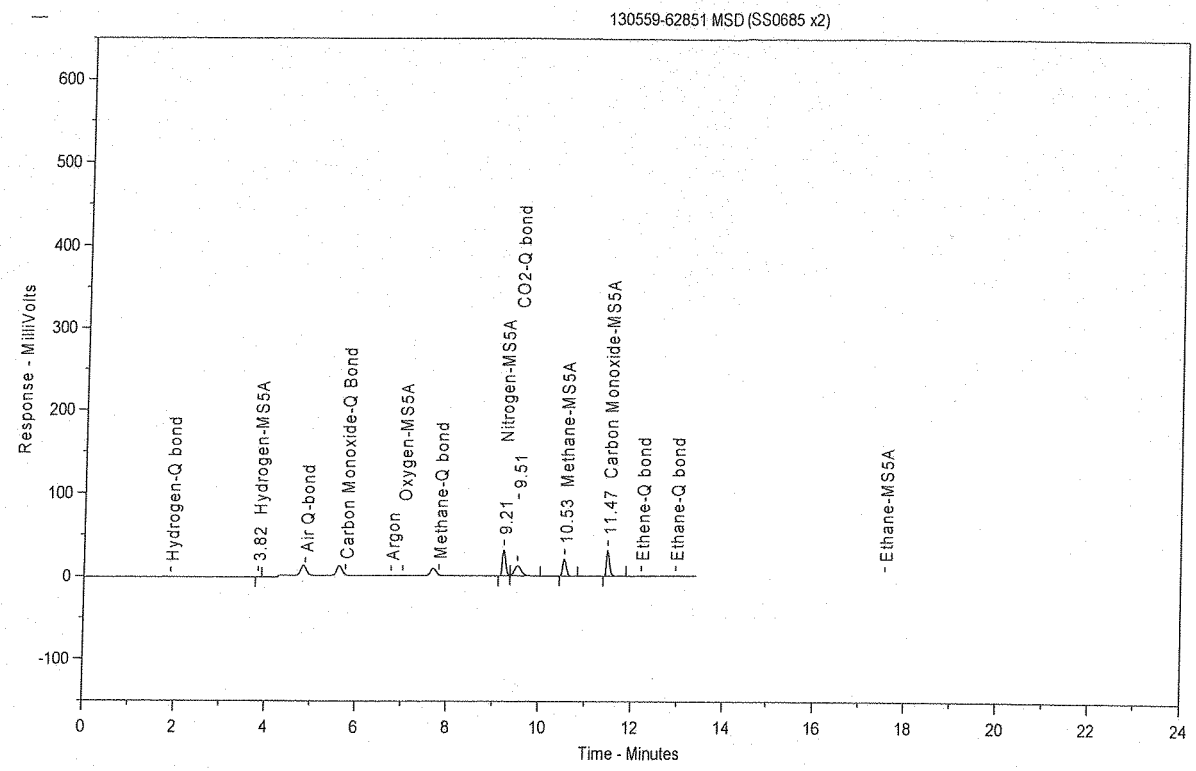
Instrument = TCD #1

Raw File Name = **C:\CPDATA\Inst#01\2013\051013.0008.raw** Date Taken (end) = 5/10/2013 8:13:57 AM
Method File Name = C:\Cpmethods\Inst #01\2012\D1945-D1946-3C.MET Dilution Factor = 1
Calibration File Name = C:\Cpmethods\Inst #01\2012\D1945-D1946-3C-041312-standard.CAL

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	3.82	Hydrogen-MS5A	11.404	20.829	2108	0.370	BB	0.06
2	9.21	Nitrogen-MS5A	11.011	20.111	160469	28.143	BV	0.08
3	9.52	CO2-Q bond	10.914	19.934	131035	22.981	VB	0.16
4	10.53	Methane-MS5A	10.468	19.119	118870	20.847	BB	0.09
5	11.47	Carbon Monoxide-MS5A	10.954	20.008	157715	27.660	BB	0.07

Total Area = 570197.1 Total Height = 98446.42 Total Amount = 54.75023

zgs/10/13



Sample Name = **130559-62851 MSD (SS0685 x2)**

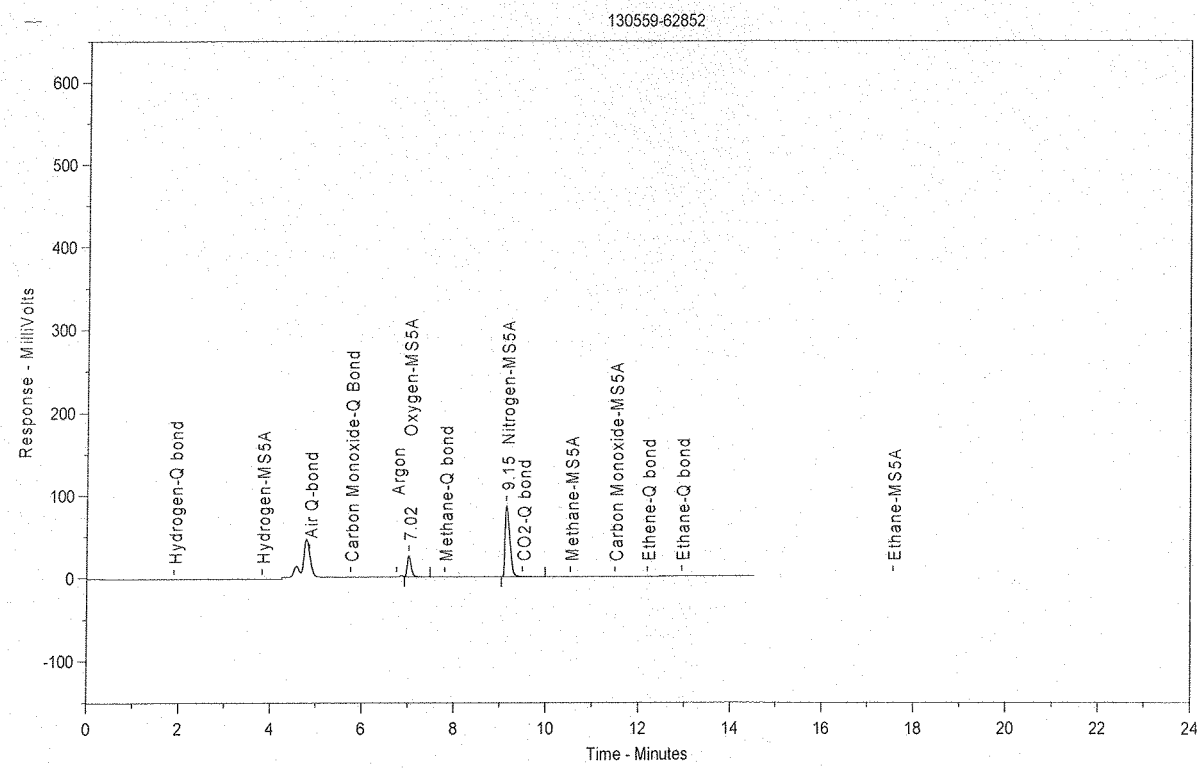
Instrument = TCD #1

Raw File Name = **C:\CPDATA\Inst#01\2013\051013.0009.raw** Date Taken (end) = 5/10/2013 8:32:34 AM
Method File Name = C:\Cpmethods\Inst #01\2012\D1945-D1946-3C.MET Dilution Factor = 1
Calibration File Name = C:\Cpmethods\Inst #01\2012\D1945-D1946-3C-041312-standard.CAL

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	3.82	Hydrogen-MS5A	11.153	21.126	2062	0.377	BB	0.06
2	9.21	Nitrogen-MS5A	10.557	19.997	153857	28.096	BV	0.08
3	9.51	CO2-Q bond	10.641	20.156	127758	23.330	VB	0.16
4	10.53	Methane-MS5A	9.987	18.917	113410	20.710	BB	0.09
5	11.47	Carbon Monoxide-MS5A	10.455	19.805	150532	27.488	BB	0.07

Total Area = 547618.4 Total Height = 94995.48 Total Amount = 52.79293

zg 5/10/13



Sample Name = **130559-62852**

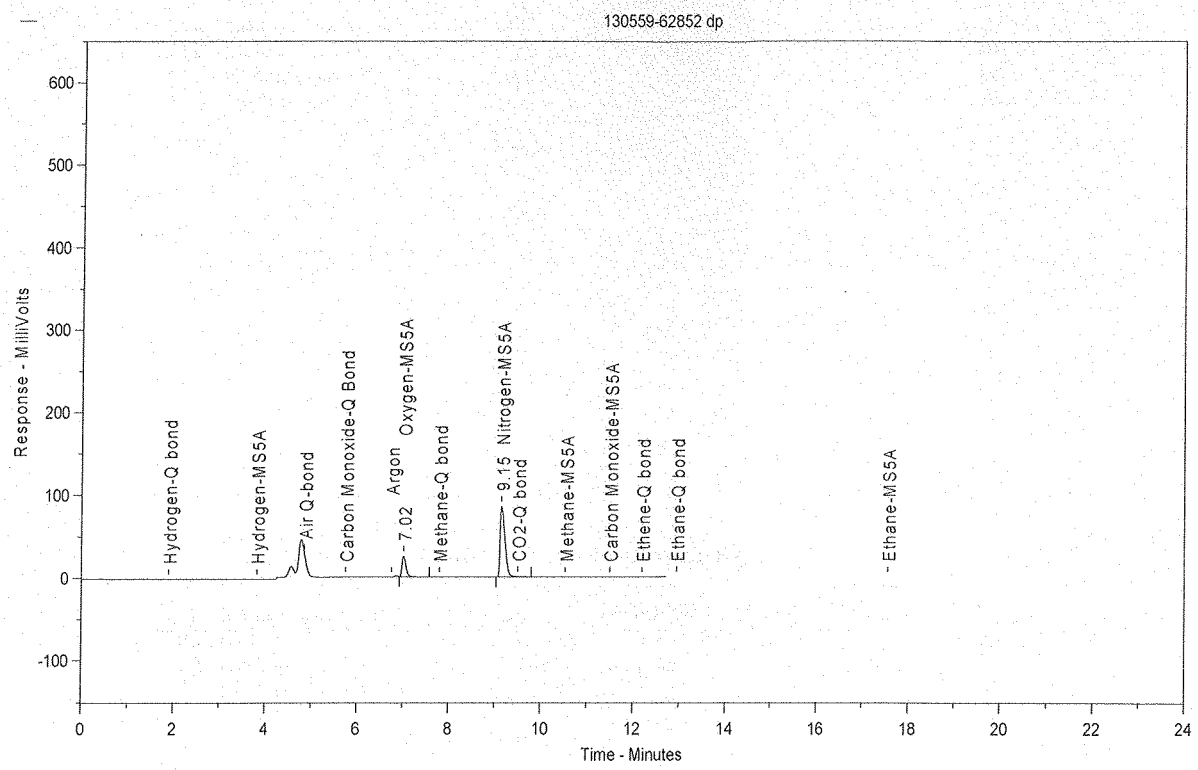
Instrument = TCD #1

Raw File Name = **C:\CPDATA\Inst#01\2013\051013.0010.raw** Date Taken (end) = 5/10/2013 8:51:47 AM
Method File Name = C:\Cpmethods\Inst #01\2012\D1945-D1946-3C.MET Dilution Factor = 1
Calibration File Name = C:\Cpmethods\Inst #01\2012\D1945-D1946-3C-041312-standard.CAL

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	7.02	Oxygen-MS5A	11.261	20.819	154309	19.821	BB	0.09
2	9.15	Nitrogen-MS5A	42.830	79.181	624212	80.179	BB	0.11

Total Area = 778521.3 Total Height = 111791.4 Total Amount = 54.09148

29 5/10/13



Sample Name = **130559-62852 dp**

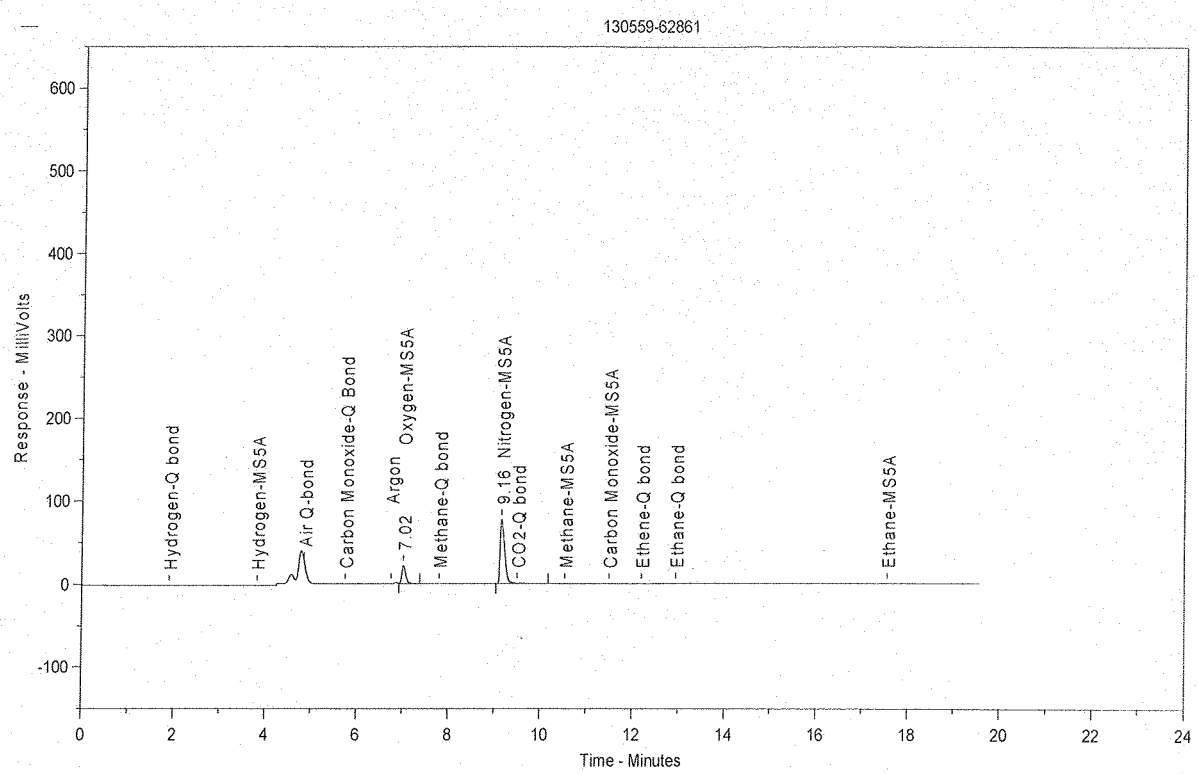
Instrument = TCD #1

Raw File Name = **C:\CPDATA\Inst#01\2013\051013.0011.raw** Date Taken (end) = 5/10/2013 9:09:13 AM
Method File Name = C:\Cpmethods\Inst #01\2012\D1945-D1946-3C.MET Dilution Factor = 1
Calibration File Name = C:\Cpmethods\Inst #01\2012\D1945-D1946-3C-041312-standard.CAL

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	7.02	Oxygen-MS5A	11.097	20.886	152056	19.886	BB	0.09
2	9.15	Nitrogen-MS5A	42.032	79.114	612584	80.114	BB	0.11

Total Area = 764639.6 Total Height = 110273.7 Total Amount = 53.12917

29/10/13



Sample Name = **130559-62861**

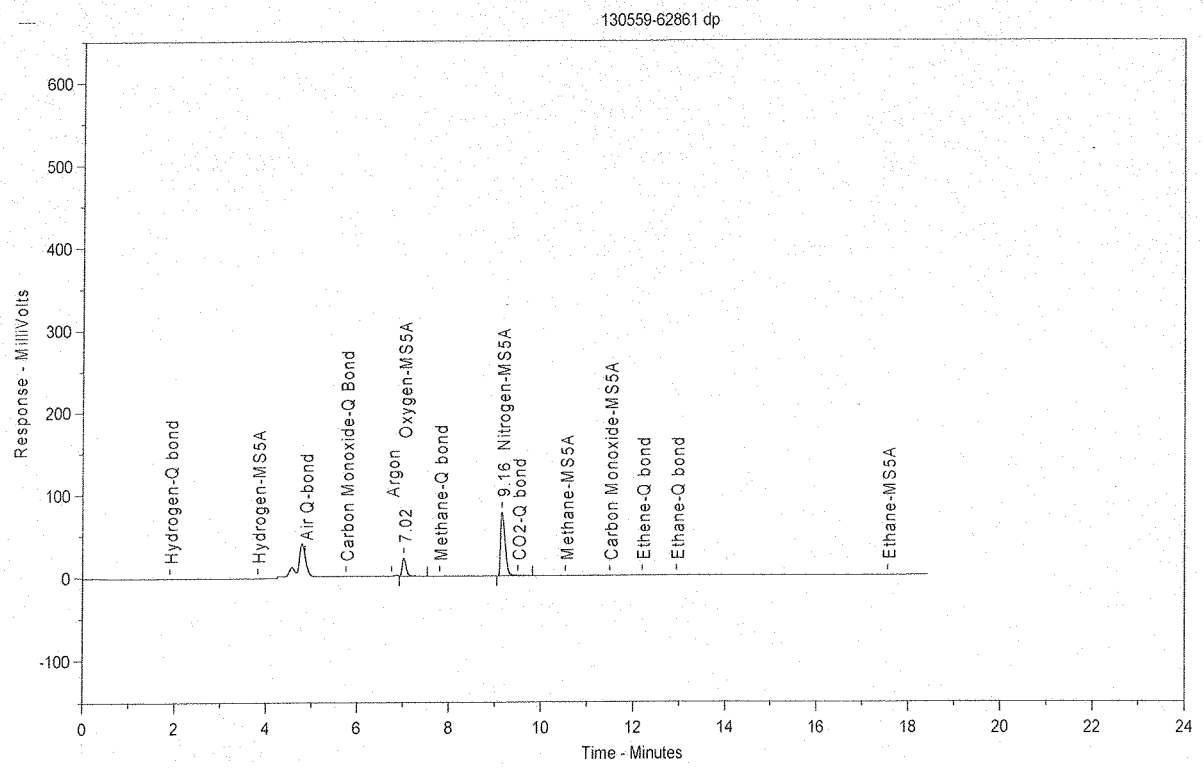
Instrument = TCD #1

Raw File Name = **C:\CPDATA\Inst#01\2013\051013.0012.raw** Date Taken (end) = 5/10/2013 9:41:42 AM
Method File Name = C:\Cpmethods\Inst #01\2012\D1945-D1946-3C.MET Dilution Factor = 1
Calibration File Name = C:\Cpmethods\Inst #01\2012\D1945-D1946-3C-041312-standard.CAL

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	7.02	Oxygen-MS5A	9.308	20.586	127540	19.596	BB	0.09
2	9.16	Nitrogen-MS5A	35.906	79.414	523297	80.404	BB	0.11

Total Area = 650837.3 Total Height = 97889.34 Total Amount = 45.21365

29/10/13



Sample Name = **130559-62861 dp**

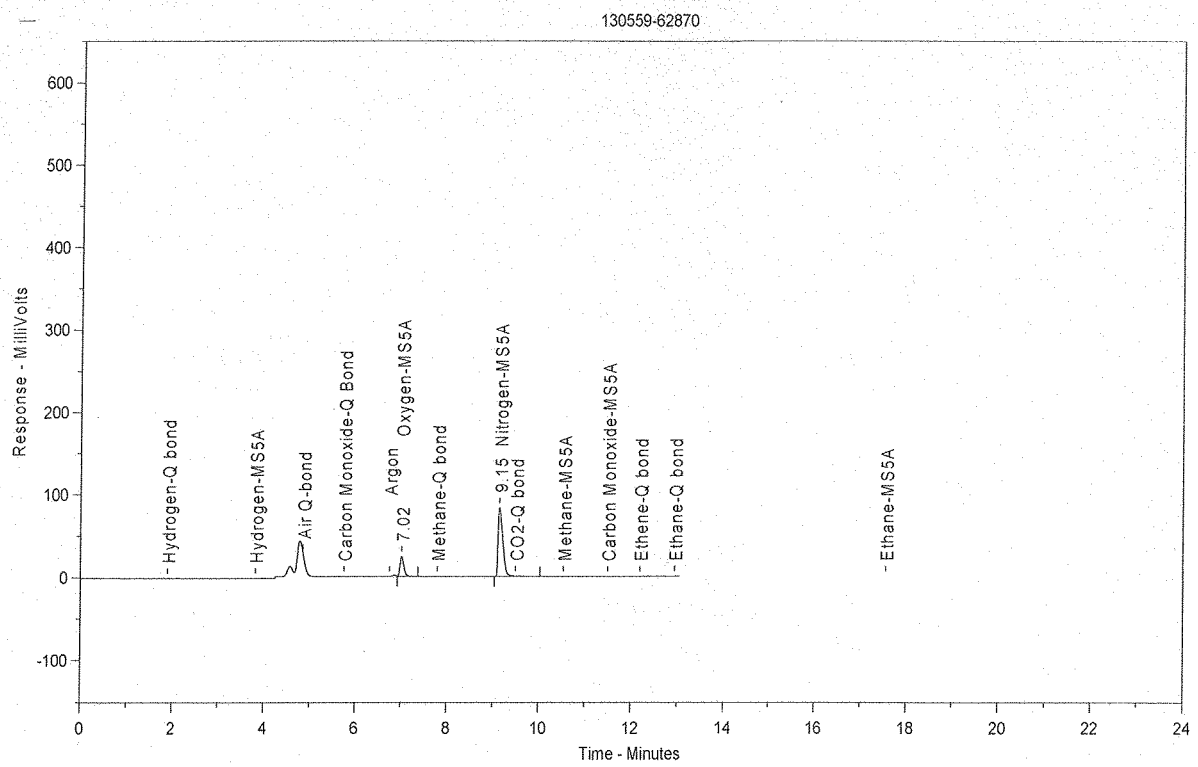
Instrument = TCD #1

Raw File Name = **C:\CPDATA\Inst#01\2013\051013.0013.raw** Date Taken (end) = 5/10/2013 10:05:35 AM
Method File Name = C:\Cpmethods\Inst #01\2012\D1945-D1946-3C.MET Dilution Factor = 1
Calibration File Name = C:\Cpmethods\Inst #01\2012\D1945-D1946-3C-041312-standard.CAL

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	7.02	Oxygen-MS5A	9.613	20.846	131721	19.847	BB	0.09
2	9.16	Nitrogen-MS5A	36.501	79.154	531971	80.153	BB	0.11

Total Area = 663691.9 Total Height = 99356.88 Total Amount = 46.11391

29s/10/13



Sample Name = **130559-62870**

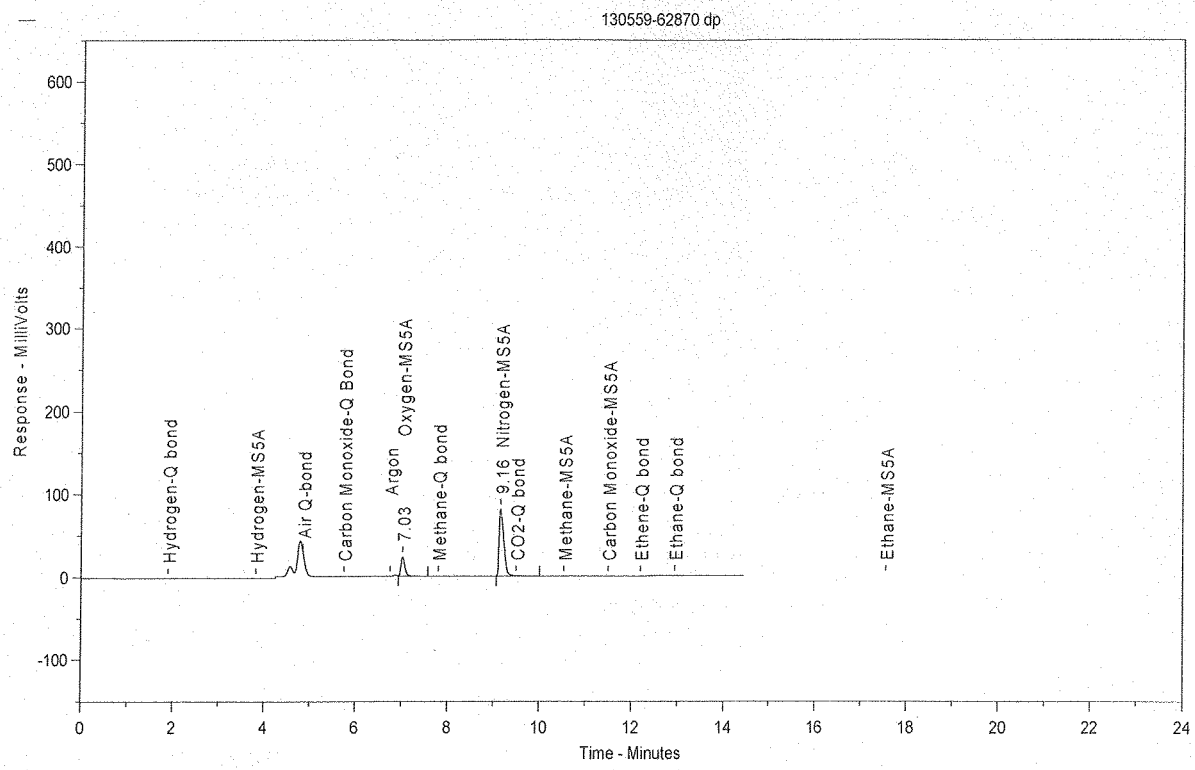
Instrument = TCD #1

Raw File Name = **C:\CPDATA\Inst#01\2013\051013.0014.raw** Date Taken (end) = 5/10/2013 10:24:11 AM
Method File Name = C:\Cpmethods\Inst #01\2012\D1945-D1946-3C.MET Dilution Factor = 1
Calibration File Name = C:\Cpmethods\Inst #01\2012\D1945-D1946-3C-041312-standard.CAL

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	7.02	Oxygen-MS5A	10.488	20.658	143712	19.666	BB	0.09
2	9.15	Nitrogen-MS5A	40.282	79.342	587070	80.334	BB	0.11

Total Area = 730781.4 Total Height = 106700.2 Total Amount = 50.76958

zgs/10/13



Sample Name = **130559-62870 dp**

Instrument = TCD #1

Raw File Name = **C:\CPDATA\Inst#01\2013\051013.0015.raw** Date Taken (end) = 5/10/2013 10:43:31 AM
Method File Name = C:\Cpmethods\Inst #01\2012\D1945-D1946-3C.MET Dilution Factor = 1
Calibration File Name = C:\Cpmethods\Inst #01\2012\D1945-D1946-3C-041312-standard.CAL

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	7.03	Oxygen-MS5A	10.213	20.855	139943	19.856	BB	0.09
2	9.16	Nitrogen-MS5A	38.757	79.145	564845	80.144	BB	0.11

Total Area = 704787.4 Total Height = 103908.4 Total Amount = 48.96955

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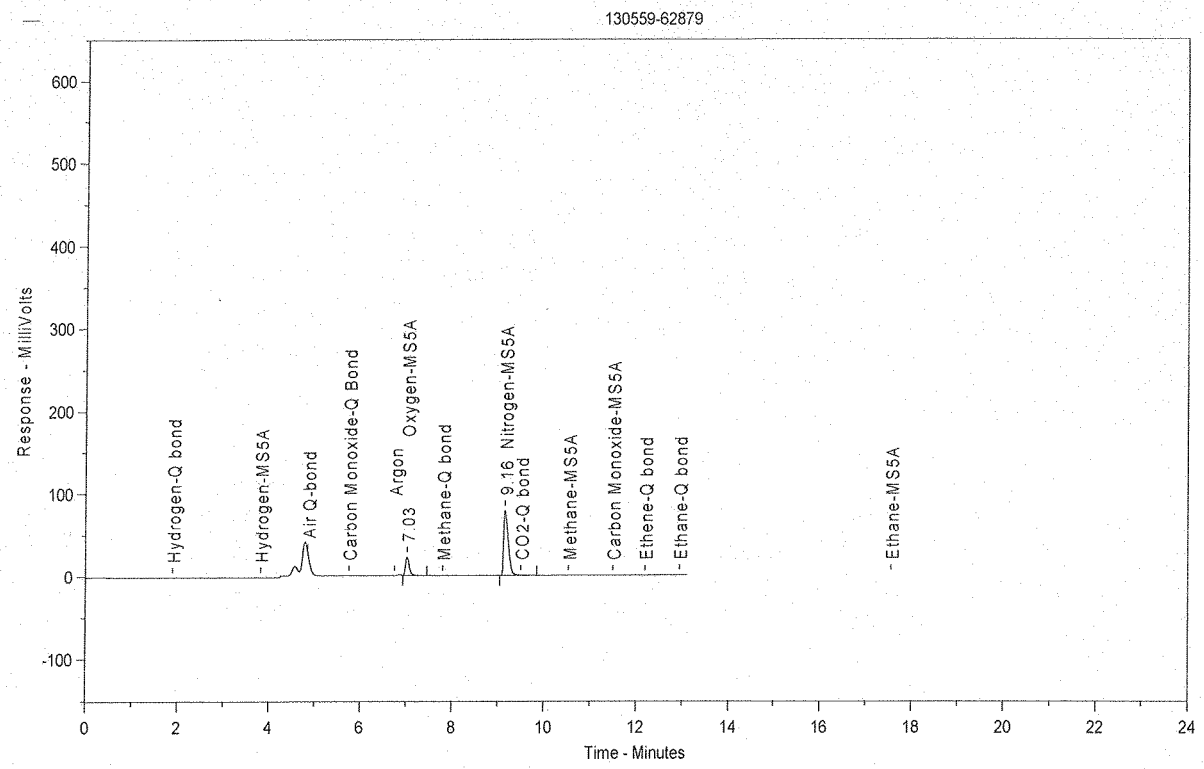


Sample Name = **130559-62879**

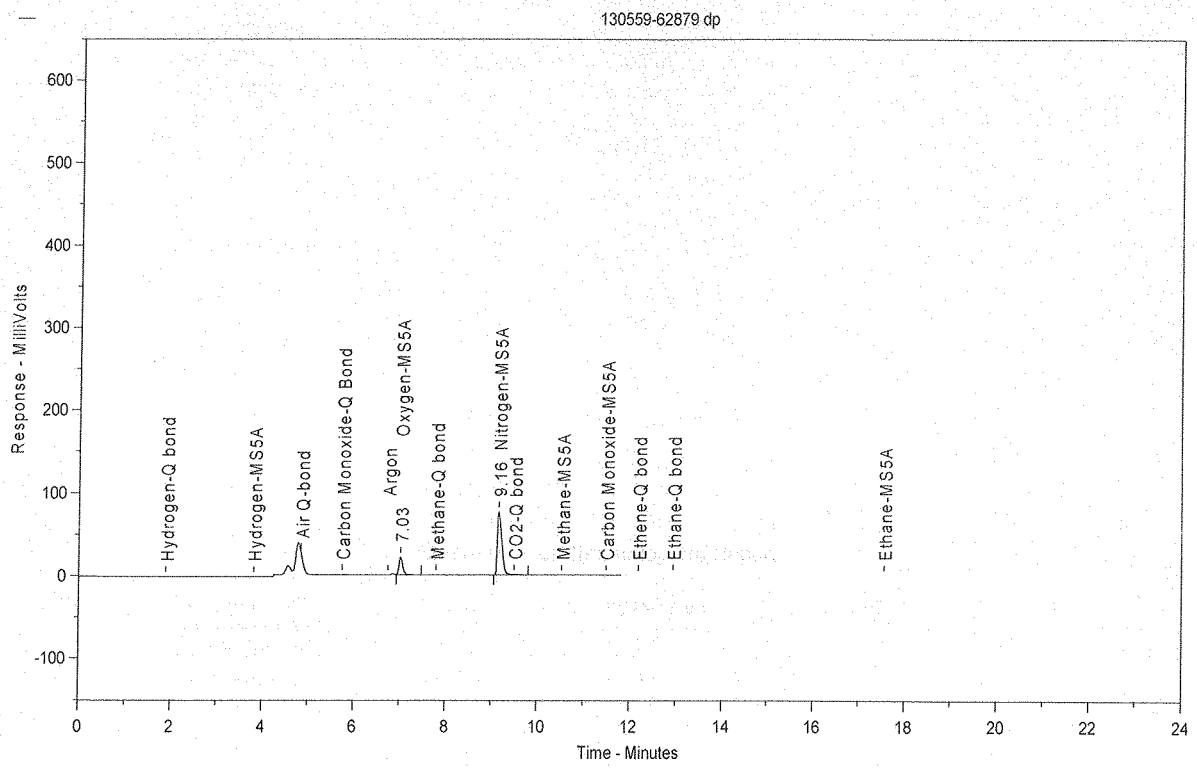
Instrument = TCD #1

Raw File Name = **C:\CPDATA\Inst#01\2013\051013.0016.raw** Date Taken (end) = 5/10/2013 11:01:49 AM
Method File Name = C:\Cpmethods\Inst #01\2012\D1945-D1946-3C.MET Dilution Factor = 1
Calibration File Name = C:\Cpmethods\Inst #01\2012\D1945-D1946-3C-041312-standard.CAL

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	7.03	Oxygen-MS5A	9.803	20.789	134331	19.792	BB	0.09
2	9.16	Nitrogen-MS5A	37.353	79.211	544382	80.208	BB	0.11

Total Area = 678713.6 Total Height = 101126.9 Total Amount = 47.15601

295140
5/10/13



Sample Name = **130559-62879 dp**

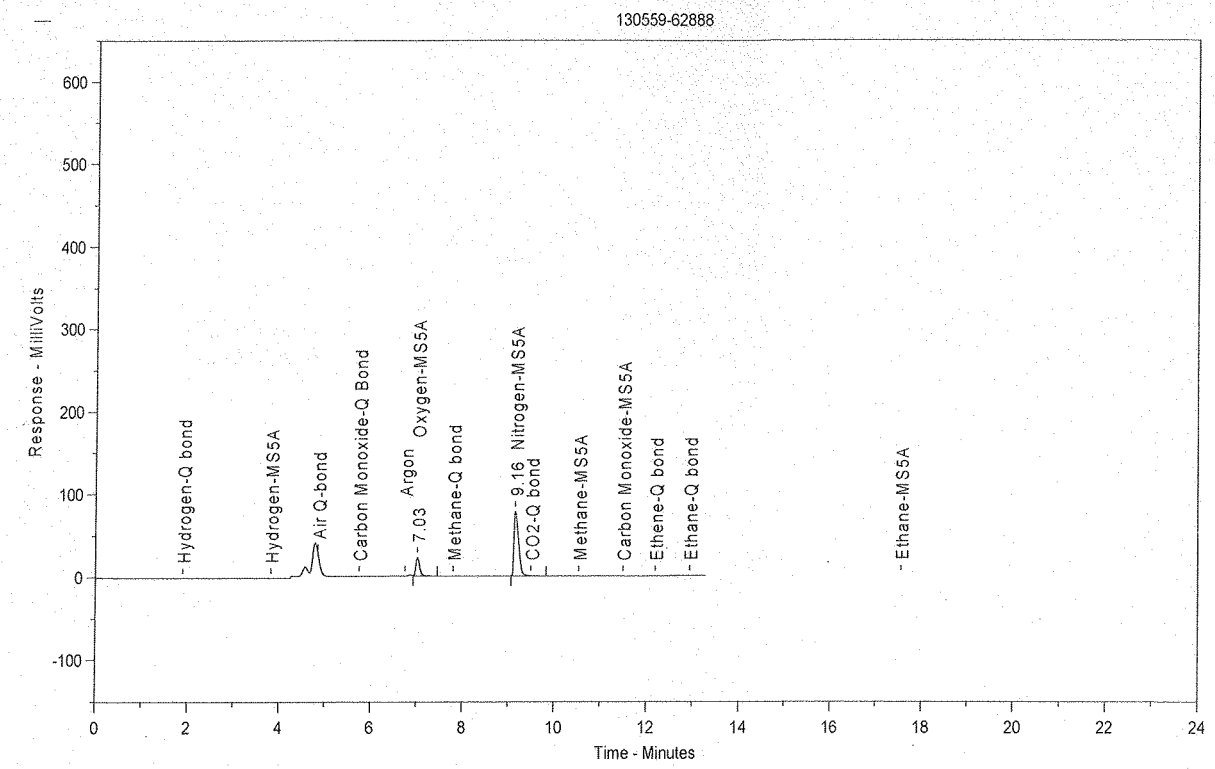
Instrument = TCD #1

Raw File Name = **C:\CPDATA\Inst#01\2013\051013.0017.raw** Date Taken (end) = 5/10/2013 11:18:45 AM
Method File Name = C:\Cpmethods\Inst #01\2012\D1945-D1946-3C.MET Dilution Factor = 1
Calibration File Name = C:\Cpmethods\Inst #01\2012\D1945-D1946-3C-041312-standard.CAL

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	7.03	Oxygen-MS5A	9.357	20.828	128219	19.830	BB	0.09
2	9.16	Nitrogen-MS5A	35.569	79.172	518387	80.170	BB	0.11

Total Area = 646605.8 Total Height = 97698.61 Total Amount = 44.92627

29/10/13



Sample Name = **130559-62888**

Instrument = TCD #1

Raw File Name = **C:\CPDATA\Inst#01\2013\051013.0018.raw** Date Taken (end) = 5/10/2013 11:36:48 AM
Method File Name = C:\Cpmethods\Inst #01\2012\D1945-D1946-3C.MET Dilution Factor = 1
Calibration File Name = C:\Cpmethods\Inst #01\2012\D1945-D1946-3C-041312-standard.CAL

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	7.03	Oxygen-MS5A	9.695	20.808	132847	19.810	BB	0.09
2	9.16	Nitrogen-MS5A	36.897	79.192	537742	80.190	BB	0.11

Total Area = 670588.1 Total Height = 100282.1 Total Amount = 46.59201

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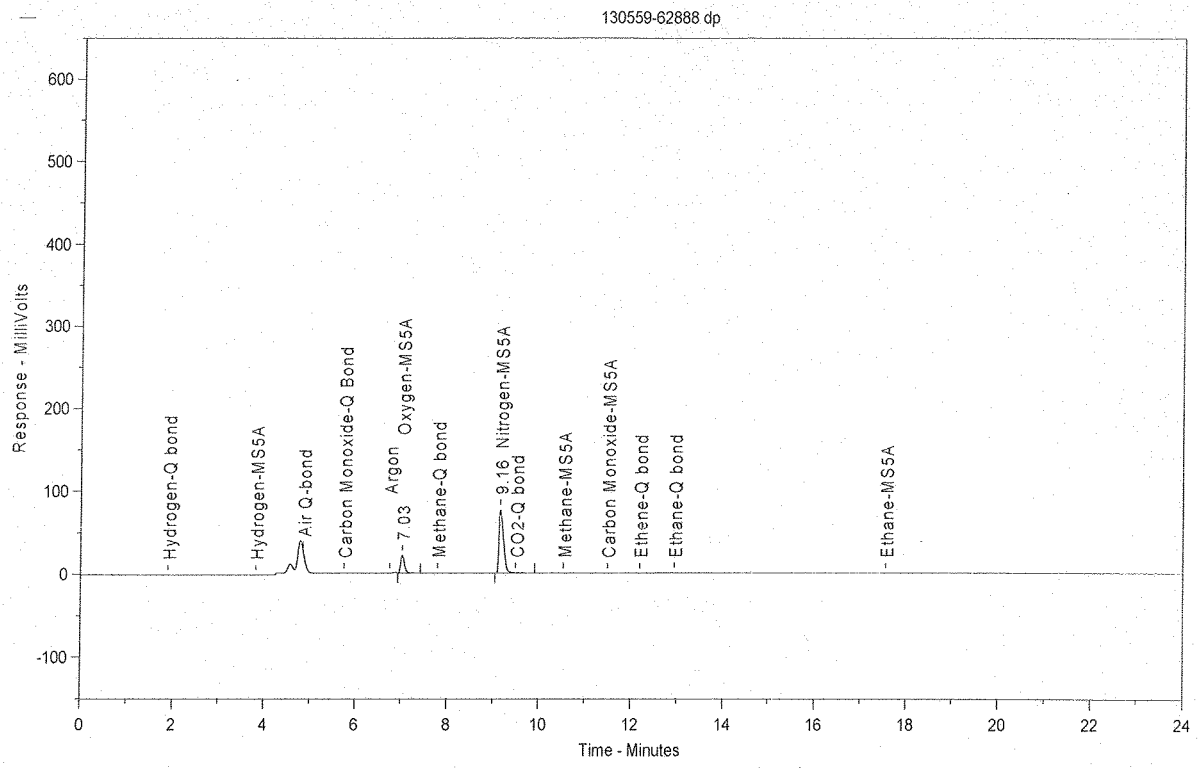


Sample Name = **130559-62888 dp**

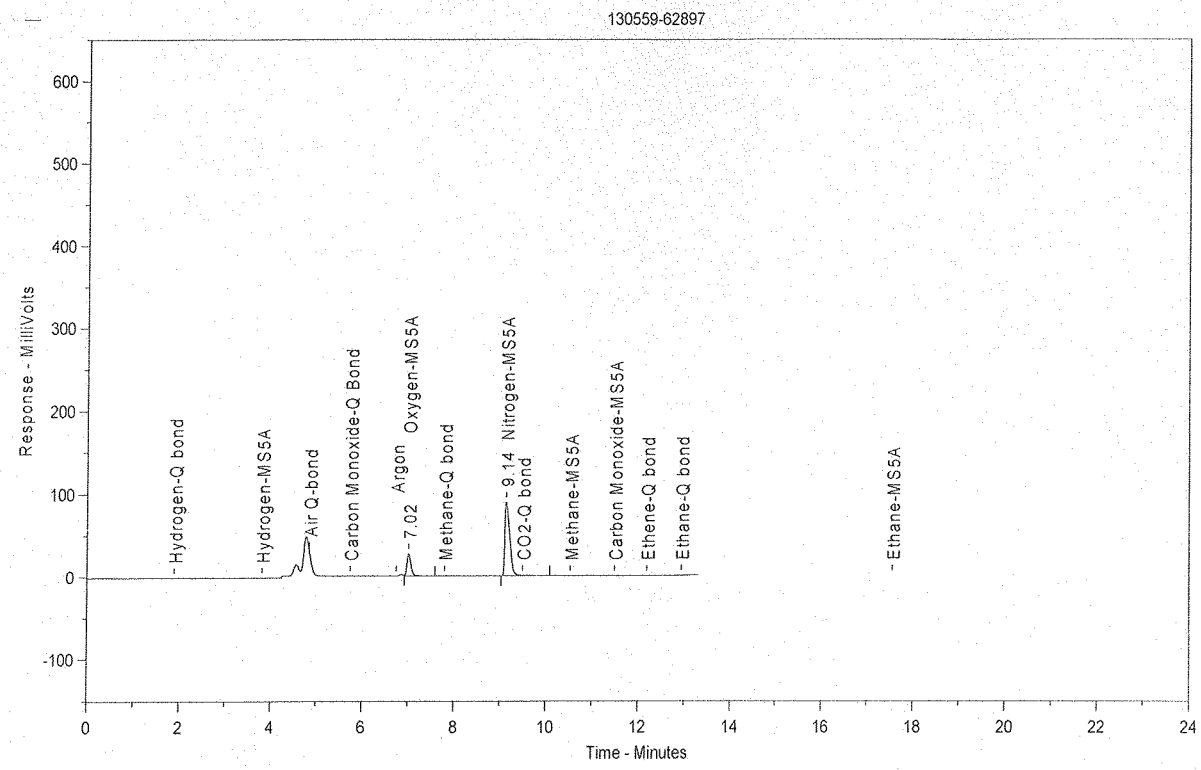
Instrument = TCD #1

Raw File Name = **C:\CPDATA\Inst#01\2013\051013.0019.raw** Date Taken (end) = 5/10/2013 12:05:23 PM
Method File Name = C:\Cpmethods\Inst #01\2012\D1945-D1946-3C.MET Dilution Factor = 1
Calibration File Name = C:\Cpmethods\Inst #01\2012\D1945-D1946-3C-041312-standard.CAL

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	7.03	Oxygen-MS5A	9.314	20.715	127632	19.721	BB	0.09
2	9.16	Nitrogen-MS5A	35.650	79.285	519562	80.279	BB	0.11

Total Area = 647193.9 Total Height = 97666.7 Total Amount = 44.96407

29/10/13



Sample Name = **130559-62897**

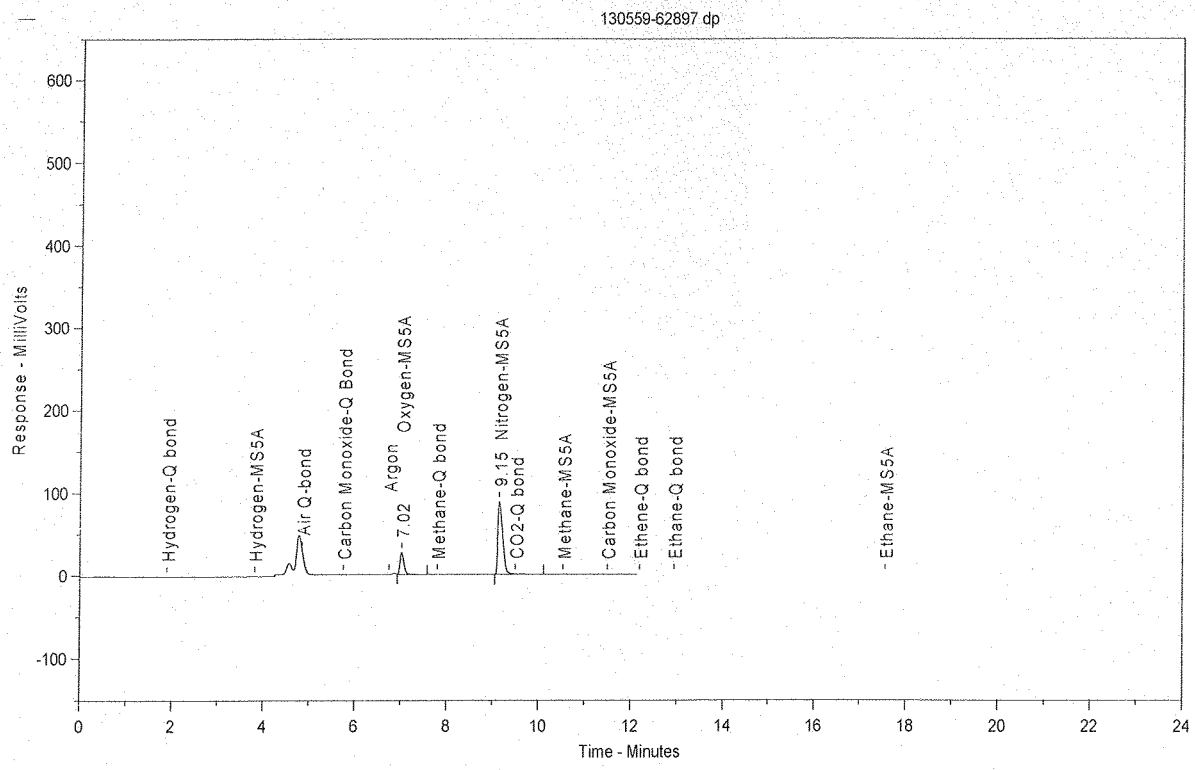
Instrument = TCD #1

Raw File Name = **C:\CPDATA\Inst#01\2013\051013.0020.raw** Date Taken (end) = 5/10/2013 1:08:49 PM
Method File Name = C:\Cpmethods\Inst #01\2012\D1945-D1946-3C.MET Dilution Factor = 1
Calibration File Name = C:\Cpmethods\Inst #01\2012\D1945-D1946-3C-041312-standard.CAL

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	7.02	Oxygen-MS5A	11.882	20.843	162823	19.845	BB	0.09
2	9.14	Nitrogen-MS5A	45.126	79.157	657664	80.155	BB	0.12

Total Area = 820486.8 Total Height = 115739.1 Total Amount = 57.00809

29/10/13



Sample Name = **130559-62897 dp**

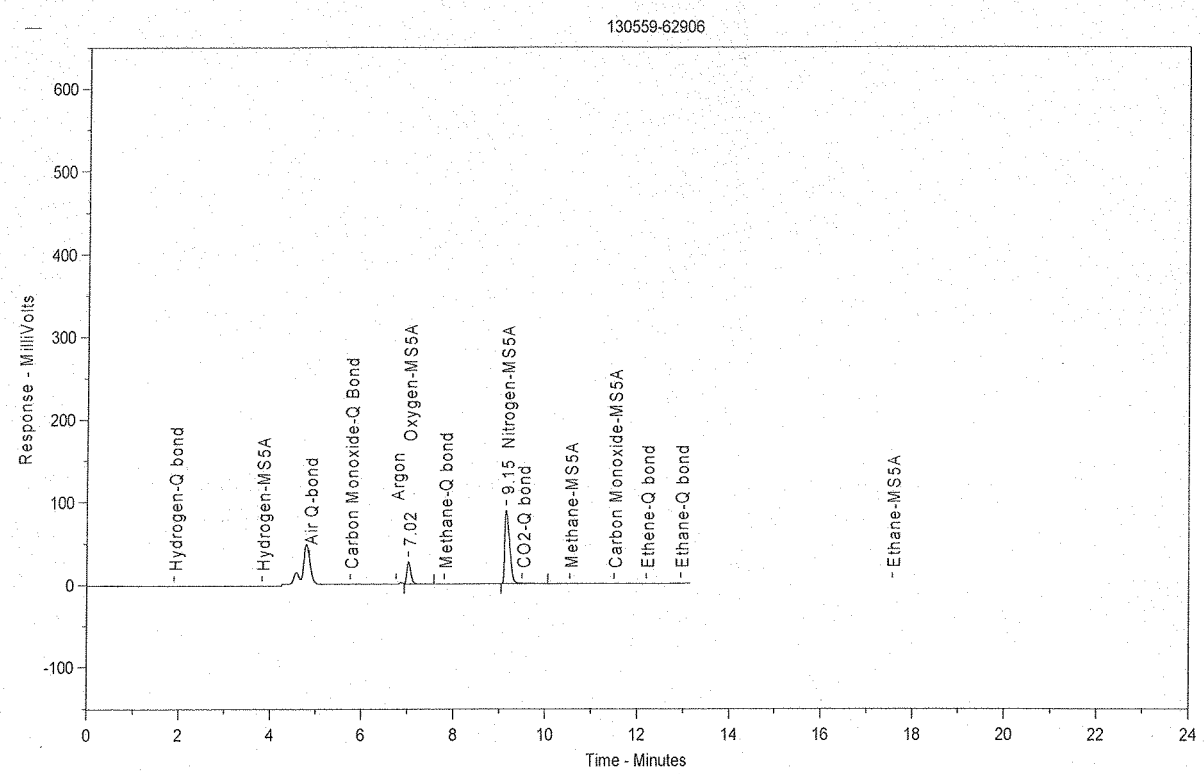
Instrument = TCD #1

Raw File Name = **C:\CPDATA\Inst#01\2013\051013.0021.raw** Date Taken (end) = 5/10/2013 1:24:57 PM
Method File Name = C:\Cpmethods\Inst #01\2012\D1945-D1946-3C.MET Dilution Factor = 1
Calibration File Name = C:\Cpmethods\Inst #01\2012\D1945-D1946-3C-041312-standard.CAL

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	7.02	Oxygen-MS5A	11.769	20.870	161274	19.870	BB	0.09
2	9.15	Nitrogen-MS5A	44.625	79.130	650361	80.130	BB	0.12

Total Area = 811634.8 Total Height = 114879.6 Total Amount = 56.39396

29/10/13



Sample Name = **130559-62906**

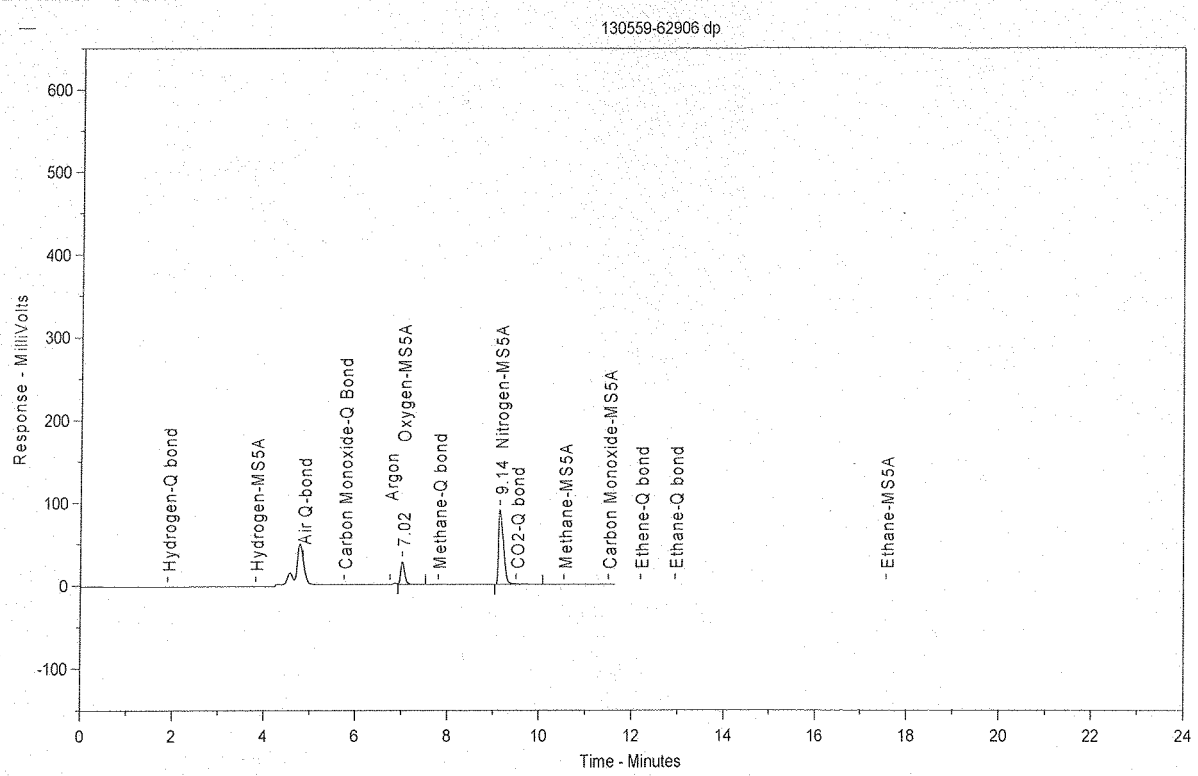
Instrument = TCD #1

Raw File Name = **C:\CPDATA\Inst#01\2013\051013.0022.raw** Date Taken (end) = 5/10/2013 1:42:01 PM
Method File Name = C:\Cpmethods\Inst #01\2012\D1945-D1946-3C.MET Dilution Factor = 1
Calibration File Name = C:\Cpmethods\Inst #01\2012\D1945-D1946-3C-041312-standard.CAL

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	7.02	Oxygen-MS5A	11.883	20.888	162831	19.888	BB	0.09
2	9.15	Nitrogen-MS5A	45.006	79.112	655917	80.112	BB	0.12

Total Area = 818748.6 Total Height = 115735.3 Total Amount = 56.88887

25/10/13



Sample Name = **130559-62906 dp**

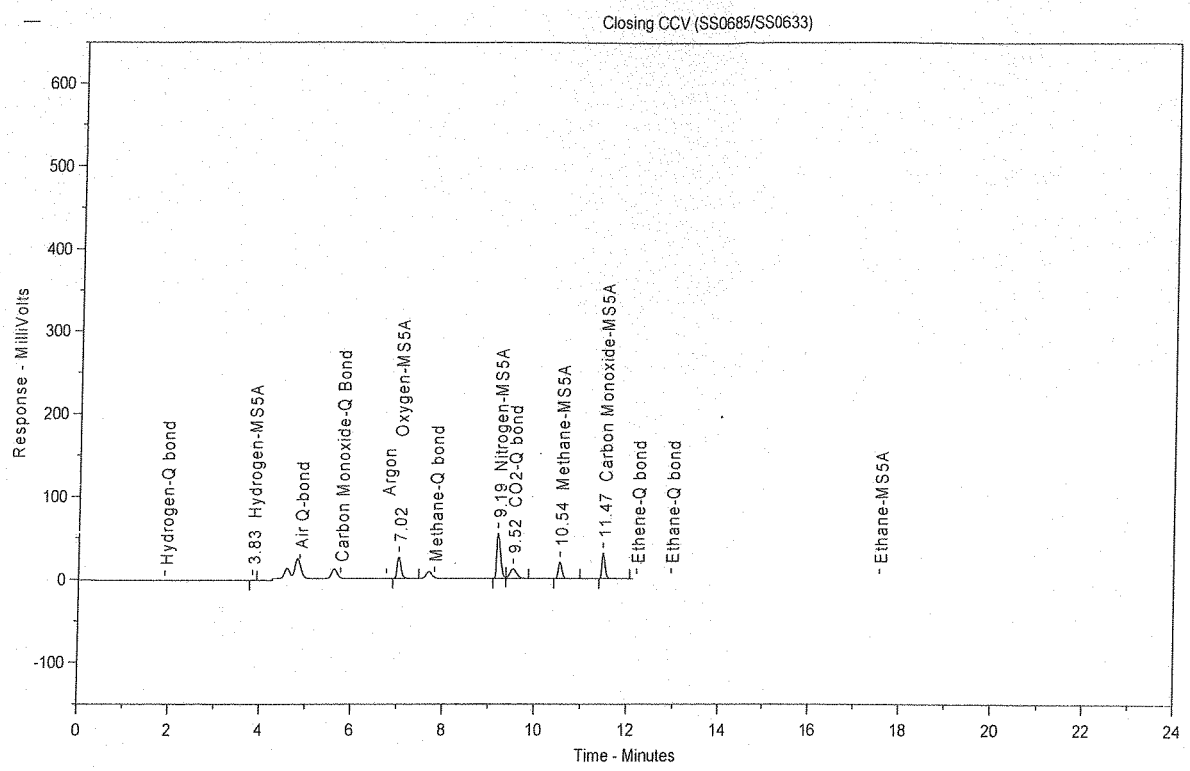
Instrument = TCD #1

Raw File Name = **C:\CPDATA\Inst#01\2013\051013.0023.raw** Date Taken (end) = 5/10/2013 1:57:53 PM
Method File Name = C:\Cpmethods\Inst #01\2012\D1945-D1946-3C.MET Dilution Factor = 1
Calibration File Name = C:\Cpmethods\Inst #01\2012\D1945-D1946-3C-041312-standard.CAL

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	7.02	Oxygen-MS5A	12.104	20.818	165864	19.820	BB	0.09
2	9.14	Nitrogen-MS5A	46.040	79.182	670985	80.180	BB	0.12

Total Area = 836848.8 Total Height = 117493.8 Total Amount = 58.14404

295/10/13



Sample Name = **Closing CCV (SS0685/SS0633)**

Instrument = TCD #1

Raw File Name = **C:\CPDATA\Inst#01\2013\051013.0032.raw** Date Taken (end) = 5/10/2013 4:25:53 PM
Method File Name = C:\Cpmethods\Inst #01\2012\D1945-D1946-3C.MET Dilution Factor = 1
Calibration File Name = C:\Cpmethods\Inst #01\2012\D1945-D1946-3C-041312-standard.CAL

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	3.83	Hydrogen-MS5A	11.100	14.778	2052	0.237	BB	0.06
2	7.02	Oxygen-MS5A	11.449	15.241	156882	18.144	BB	0.09
3	9.19	Nitrogen-MS5A	21.859	29.100	318571	36.843	BV	0.09
4	9.52	CO2-Q bond	10.286	13.693	123491	14.282	VB	0.16
5	10.54	Methane-MS5A	9.983	13.290	113369	13.111	BB	0.09
6	11.47	Carbon Monoxide-MS5A	10.440	13.898	150308	17.383	BB	0.07

Total Area = 864674.5 Total Height = 143510.2 Total Amount = 75.11694

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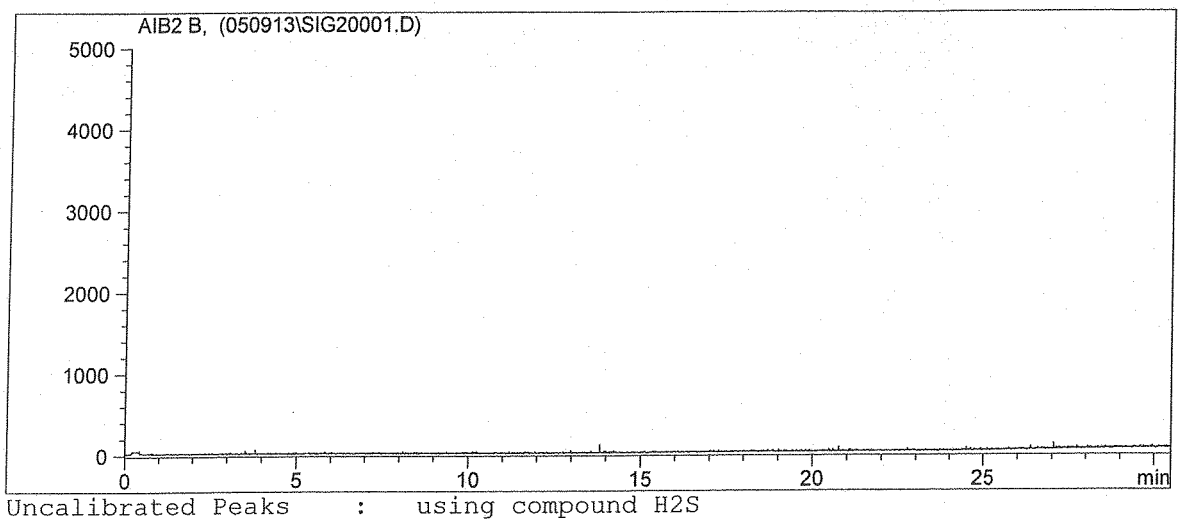
Customized Report: D5504

Injection Date : 5/9/2013 6:19:24 AM
Sample Name : System Blank
Multiplier : 1.00
Dilution : 1.00
Acq Operator : DH
Acq. Instrument : GC/SCD #10
Acq. Method : ASTM5504.M
Analysis Method : C:\HPCHEM\1\METHODS\D111912.M

Seq. Line : 1
Inj. Vol. :Manually



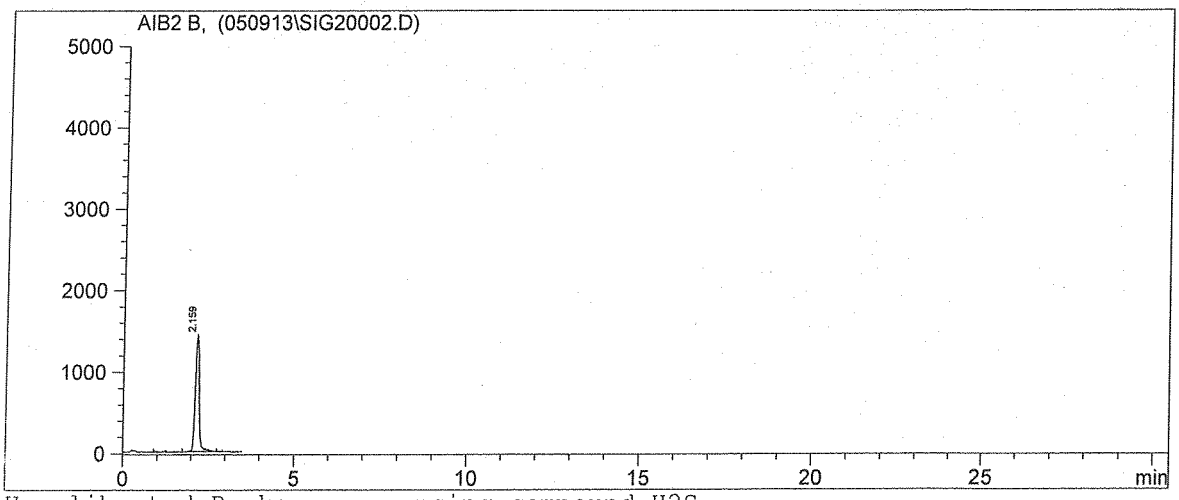
Uncalibrated Peaks : using compound H2S

Ret Time [min]	Area	Amount [ppbV]	Name
0.000	0	0.000	H2S
0.000	0	0.000	COS
0.000	0	0.000	Methyl Mercaptan
0.000	0	0.000	Ethyl Mercaptan
0.000	0	0.000	Dimethyl Sulfide
0.000	0	0.000	Carbon Disulfide
0.000	0	0.000	Iso-propyl Mercaptan
0.000	0	0.000	Tert-butyl Mercaptan
0.000	0	0.000	N-propyl Mercaptan
0.000	0	0.000	Ethyl Methyl Sulfide
0.000	0	0.000	Sec-butyl Mercaptan
0.000	0	0.000	Thiophene
0.000	0	0.000	Iso-butyl Mercaptan
0.000	0	0.000	Diethyl Sulfide
0.000	0	0.000	N-butyl Mercaptan
0.000	0	0.000	Dimethyl Disulfide
0.000	0	0.000	2-Methylthiophene
0.000	0	0.000	3-Methylthiophene
0.000	0	0.000	Tetrahydrothiophene
0.000	0	0.000	n-Pentyl Mercaptan
0.000	0	0.000	2-Ethylthiophene
0.000	0	0.000	2,5-Dimethylthiophene
0.000	0	0.000	Diethyl Disulfide
0.000	0	0.000	n-Hexyl Mercaptan
0.000	0	0.000	2-Propylthiophene
0.000	0	0.000	Dimethyl Trisulfide
0.000	0	0.000	n-Heptyl Mercaptan
0.000	0	0.000	2-Butylthiophene
0.000	0	0.000	Dipropyl Disulfide
0.000	0	0.000	n-Octyl Mercaptan
0.000	0	0.000	Dipropyl Trisulfide
Totals:		0.000	

*** End of Report ***

Customized Report: D5504

Injection Date : 5/9/2013 7:14:04 AM Seq. Line : 2
Sample Name : CCV 500ppbV SS0677 ->Inj. Vol. :Manually
Multiplier : 1.00
Dilution : 1.00
Acq Operator : DH
Acq. Instrument : GC/SCD #10
Acq. Method : ASTM5504.M
Analysis Method : C:\HPCHEM\1\METHODS\D111912.M



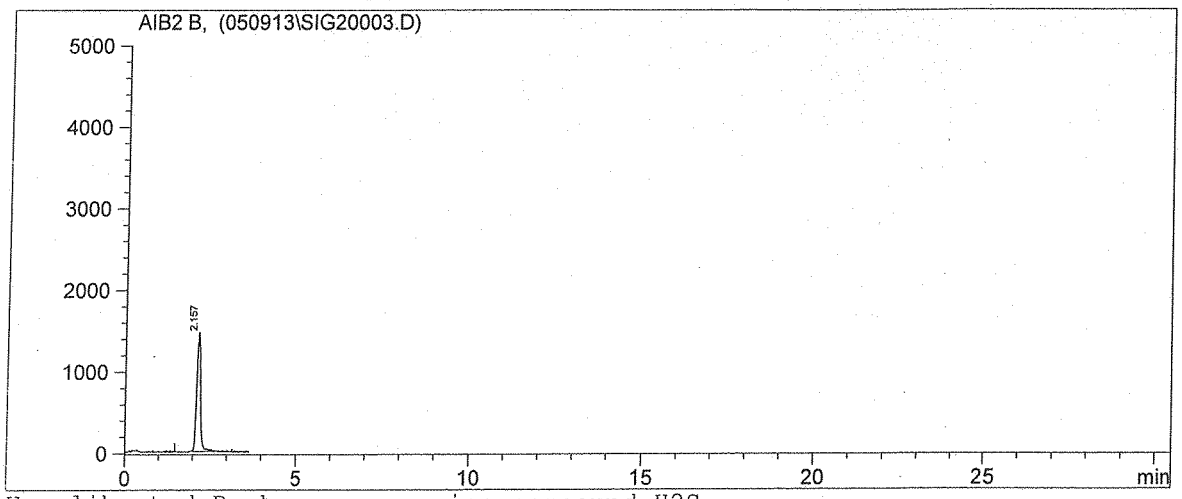
Uncalibrated Peaks : using compound H2S

Ret Time [min]	Area	Amount [ppbV]	Name
2.159	11413	489.627	
0.000	0	0.000	H2S
0.000	0	0.000	COS
0.000	0	0.000	Methyl Mercaptan
0.000	0	0.000	Ethyl Mercaptan
0.000	0	0.000	Dimethyl Sulfide
0.000	0	0.000	Carbon Disulfide
0.000	0	0.000	Iso-propyl Mercaptan
0.000	0	0.000	Tert-butyl Mercaptan
0.000	0	0.000	N-propyl Mercaptan
0.000	0	0.000	Ethyl Methyl Sulfide
0.000	0	0.000	Sec-butyl Mercaptan
0.000	0	0.000	Thiophene
0.000	0	0.000	Iso-butyl Mercaptan
0.000	0	0.000	Diethyl Sulfide
0.000	0	0.000	N-butyl Mercaptan
0.000	0	0.000	Dimethyl Disulfide
0.000	0	0.000	2-Methylthiophene
0.000	0	0.000	3-Methylthiophene
0.000	0	0.000	Tetrahydrothiophene
0.000	0	0.000	n-Pentyl Mercaptan
0.000	0	0.000	2-Ethylthiophene
0.000	0	0.000	2,5-Dimethylthiophene
0.000	0	0.000	Diethyl Disulfide
0.000	0	0.000	n-Hexyl Mercaptan
0.000	0	0.000	2-Propylthiophene
0.000	0	0.000	Dimethyl Trisulfide
0.000	0	0.000	n-Heptyl Mercaptan
0.000	0	0.000	2-Butylthiophene
0.000	0	0.000	Dipropyl Disulfide
0.000	0	0.000	n-Octyl Mercaptan
0.000	0	0.000	Dipropyl Trisulfide
Totals:		489.627	

*** End of Report ***

Customized Report: D5504

Injection Date : 5/9/2013 7:18:22 AM Seq. Line : 3
Sample Name : CCV 500ppbV dp SS0677 ->Inj. Vol. :Manually
Multiplier : 1.00
Dilution : 1.00
Acq Operator : DH
Acq. Instrument : GC/SCD #10
Acq. Method : ASTM5504.M
Analysis Method : C:\HPCHEM\1\METHODS\D111912.M



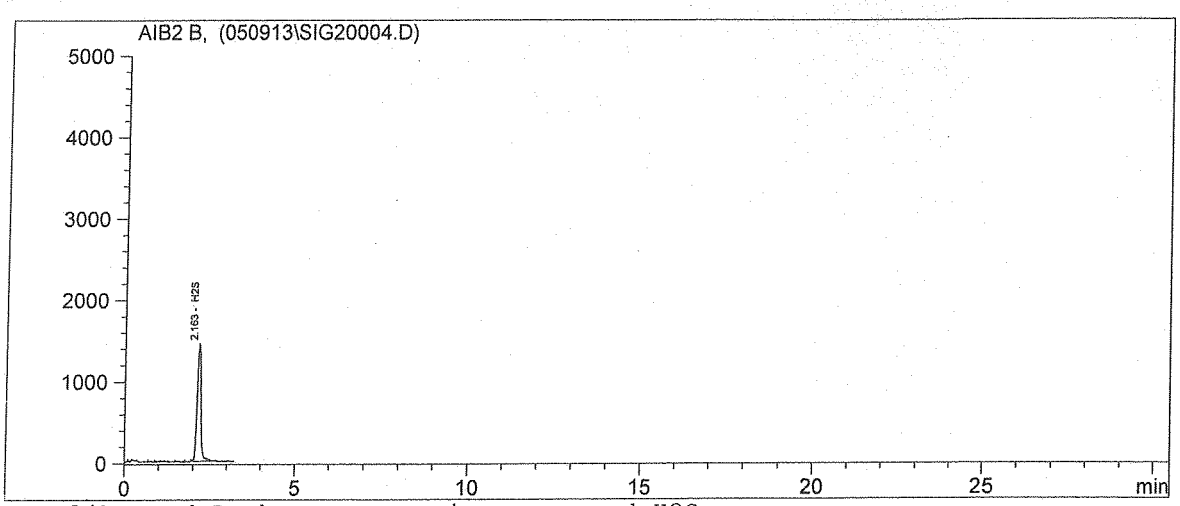
Uncalibrated Peaks : using compound H2S

Ret Time [min]	Area	Amount [ppbV]	Name
2.157	11454	491.359	
0.000	0	0.000	H2S
0.000	0	0.000	COS
0.000	0	0.000	Methyl Mercaptan
0.000	0	0.000	Ethyl Mercaptan
0.000	0	0.000	Dimethyl Sulfide
0.000	0	0.000	Carbon Disulfide
0.000	0	0.000	Iso-propyl Mercaptan
0.000	0	0.000	Tert-butyl Mercaptan
0.000	0	0.000	N-propyl Mercaptan
0.000	0	0.000	Ethyl Methyl Sulfide
0.000	0	0.000	Sec-butyl Mercaptan
0.000	0	0.000	Thiophene
0.000	0	0.000	Iso-butyl Mercaptan
0.000	0	0.000	Diethyl Sulfide
0.000	0	0.000	N-butyl Mercaptan
0.000	0	0.000	Dimethyl Disulfide
0.000	0	0.000	2-Methylthiophene
0.000	0	0.000	3-Methylthiophene
0.000	0	0.000	Tetrahydrothiophene
0.000	0	0.000	n-Pentyl Mercaptan
0.000	0	0.000	2-Ethylthiophene
0.000	0	0.000	2,5-Dimethylthiophene
0.000	0	0.000	Diethyl Disulfide
0.000	0	0.000	n-Hexyl Mercaptan
0.000	0	0.000	2-Propylthiophene
0.000	0	0.000	Dimethyl Trisulfide
0.000	0	0.000	n-Heptyl Mercaptan
0.000	0	0.000	2-Butylthiophene
0.000	0	0.000	Dipropyl Disulfide
0.000	0	0.000	n-Octyl Mercaptan
0.000	0	0.000	Dipropyl Trisulfide
Totals:		491.359	

*** End of Report ***

Customized Report: D5504

Injection Date : 5/9/2013 7:23:05 AM Seq. Line : 4
Sample Name : CCV 500ppbV tp SS0677 ->Inj. Vol. :Manually
Multiplier : 1.00
Dilution : 1.00
Acq Operator : DH
Acq. Instrument : GC/SCD #10
Acq. Method : ASTM5504.M
Analysis Method : C:\HPCHEM\1\METHODS\D111912.M



Uncalibrated Peaks : using compound H2S

Ret Time [min]	Area	Amount [ppbV]	Name
2.163	11541	495.107	H2S
0.000	0	0.000	COS
0.000	0	0.000	Methyl Mercaptan
0.000	0	0.000	Ethyl Mercaptan
0.000	0	0.000	Dimethyl Sulfide
0.000	0	0.000	Carbon Disulfide
0.000	0	0.000	Iso-propyl Mercaptan
0.000	0	0.000	Tert-butyl Mercaptan
0.000	0	0.000	N-propyl Mercaptan
0.000	0	0.000	Ethyl Methyl Sulfide
0.000	0	0.000	Sec-butyl Mercaptan
0.000	0	0.000	Thiophene
0.000	0	0.000	Iso-butyl Mercaptan
0.000	0	0.000	Diethyl Sulfide
0.000	0	0.000	N-butyl Mercaptan
0.000	0	0.000	Dimethyl Disulfide
0.000	0	0.000	2-Methylthiophene
0.000	0	0.000	3-Methylthiophene
0.000	0	0.000	Tetrahydrothiophene
0.000	0	0.000	n-Pentyl Mercaptan
0.000	0	0.000	2-Ethylthiophene
0.000	0	0.000	2,5-Dimethylthiophene
0.000	0	0.000	Diethyl Disulfide
0.000	0	0.000	n-Hexyl Mercaptan
0.000	0	0.000	2-Propylthiophene
0.000	0	0.000	Dimethyl Trisulfide
0.000	0	0.000	n-Heptyl Mercaptan
0.000	0	0.000	2-Butylthiophene
0.000	0	0.000	Dipropyl Disulfide
0.000	0	0.000	n-Octyl Mercaptan
0.000	0	0.000	Dipropyl Trisulfide
Totals:		495.107	

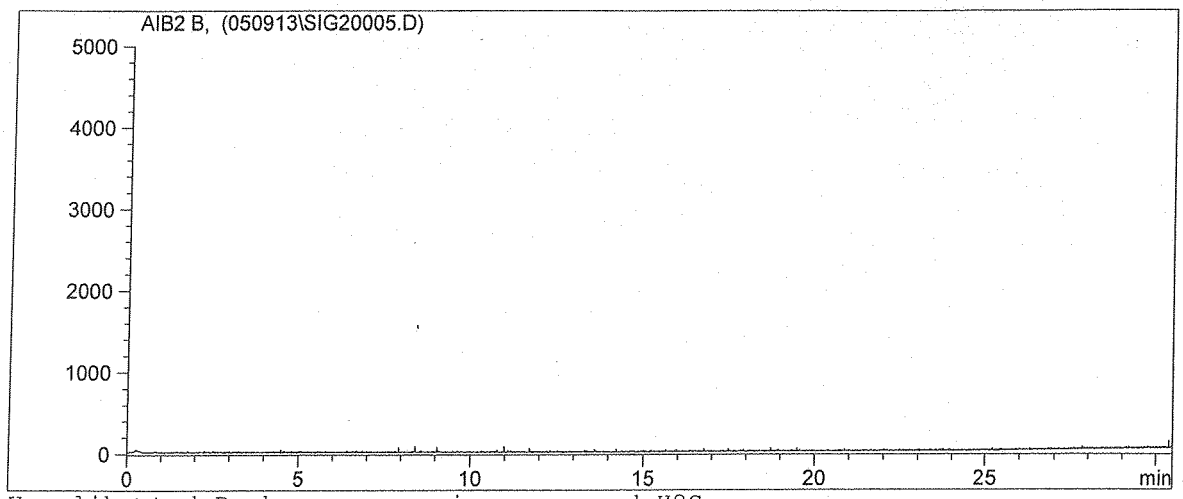
*** End of Report ***

DH 5/9/13

Customized Report: D5504

Injection Date : 5/9/2013 7:27:30 AM
Sample Name : Method Blank
Multiplier : 1.00
Dilution : 1.00
Acq Operator : DH
Acq. Instrument : GC/SCD #10
Acq. Method : ASTM5504.M
Analysis Method : C:\HPCHEM\1\METHODS\D111912.M

Seq. Line : 5
Inj. Vol. :Manually



Uncalibrated Peaks : using compound H2S

Ret Time [min]	Area	Amount [ppbV]	Name
0.000	0	0.000	H2S
0.000	0	0.000	COS
0.000	0	0.000	Methyl Mercaptan
0.000	0	0.000	Ethyl Mercaptan
0.000	0	0.000	Dimethyl Sulfide
0.000	0	0.000	Carbon Disulfide
0.000	0	0.000	Iso-propyl Mercaptan
0.000	0	0.000	Tert-butyl Mercaptan
0.000	0	0.000	N-propyl Mercaptan
0.000	0	0.000	Ethyl Methyl Sulfide
0.000	0	0.000	Sec-butyl Mercaptan
0.000	0	0.000	Thiophene
0.000	0	0.000	Iso-butyl Mercaptan
0.000	0	0.000	Diethyl Sulfide
0.000	0	0.000	N-butyl Mercaptan
0.000	0	0.000	Dimethyl Disulfide
0.000	0	0.000	2-Methylthiophene
0.000	0	0.000	3-Methylthiophene
0.000	0	0.000	Tetrahydrothiophene
0.000	0	0.000	n-Pentyl Mercaptan
0.000	0	0.000	2-Ethylthiophene
0.000	0	0.000	2,5-Dimethylthiophene
0.000	0	0.000	Diethyl Disulfide
0.000	0	0.000	n-Hexyl Mercaptan
0.000	0	0.000	2-Propylthiophene
0.000	0	0.000	Dimethyl Trisulfide
0.000	0	0.000	n-Heptyl Mercaptan
0.000	0	0.000	2-Butylthiophene
0.000	0	0.000	Dipropyl Disulfide
0.000	0	0.000	n-Octyl Mercaptan
0.000	0	0.000	Dipropyl Trisulfide
Totals:		0.000	

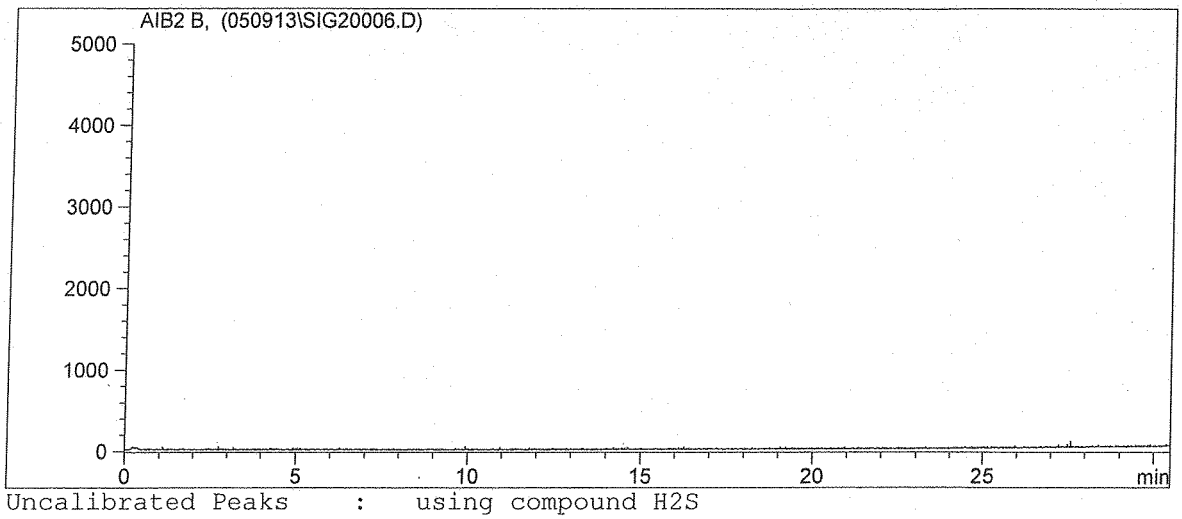
*** End of Report ***

DH 5/9/13

Customized Report: D5504

Injection Date : 5/9/2013 12:32:17 PM
Sample Name : 130559-62851
Multiplier : 1.00
Dilution : 1.00
Acq Operator : DH
Acq. Instrument : GC/SCD #10
Acq. Method : ASTM5504.M
Analysis Method : C:\HPCHEM\1\METHODS\D111912.M

Seq. Line : 6
Inj. Vol. :Manually



Uncalibrated Peaks : using compound H2S

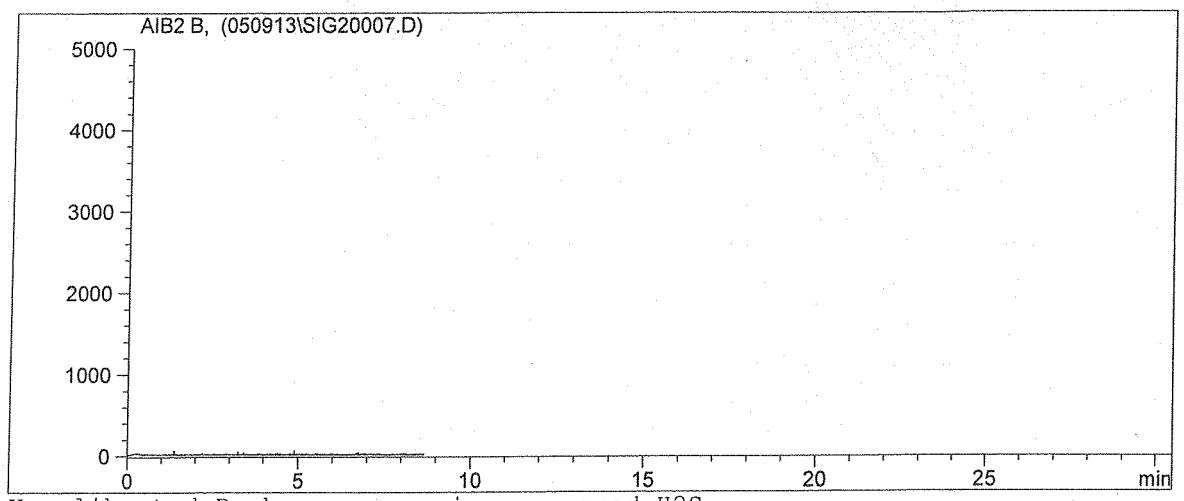
Ret Time [min]	Area	Amount [ppbV]	Name
0.000	0	0.000	H2S
0.000	0	0.000	COS
0.000	0	0.000	Methyl Mercaptan
0.000	0	0.000	Ethyl Mercaptan
0.000	0	0.000	Dimethyl Sulfide
0.000	0	0.000	Carbon Disulfide
0.000	0	0.000	Iso-propyl Mercaptan
0.000	0	0.000	Tert-butyl Mercaptan
0.000	0	0.000	N-propyl Mercaptan
0.000	0	0.000	Ethyl Methyl Sulfide
0.000	0	0.000	Sec-butyl Mercaptan
0.000	0	0.000	Thiophene
0.000	0	0.000	Iso-butyl Mercaptan
0.000	0	0.000	Diethyl Sulfide
0.000	0	0.000	N-butyl Mercaptan
0.000	0	0.000	Dimethyl Disulfide
0.000	0	0.000	2-Methylthiophene
0.000	0	0.000	3-Methylthiophene
0.000	0	0.000	Tetrahydrothiophene
0.000	0	0.000	n-Pentyl Mercaptan
0.000	0	0.000	2-Ethylthiophene
0.000	0	0.000	2,5-Dimethylthiophene
0.000	0	0.000	Diethyl Disulfide
0.000	0	0.000	n-Hexyl Mercaptan
0.000	0	0.000	2-Propylthiophene
0.000	0	0.000	Dimethyl Trisulfide
0.000	0	0.000	n-Heptyl Mercaptan
0.000	0	0.000	2-Butylthiophene
0.000	0	0.000	Dipropyl Disulfide
0.000	0	0.000	n-Octyl Mercaptan
0.000	0	0.000	Dipropyl Trisulfide
Totals:		0.000	

*** End of Report ***

5/9/13

Customized Report: D5504

Injection Date : 5/9/2013 1:08:43 PM Seq. Line : 7
Sample Name : 130559-62851 dp ->Inj. Vol. :Manually
Multiplier : 1.00
Dilution : 1.00
Acq Operator : DH
Acq. Instrument : GC/SCD #10
Acq. Method : ASTM5504.M
Analysis Method : C:\HPCHEM\1\METHODS\D111912.M



Uncalibrated Peaks : using compound H2S

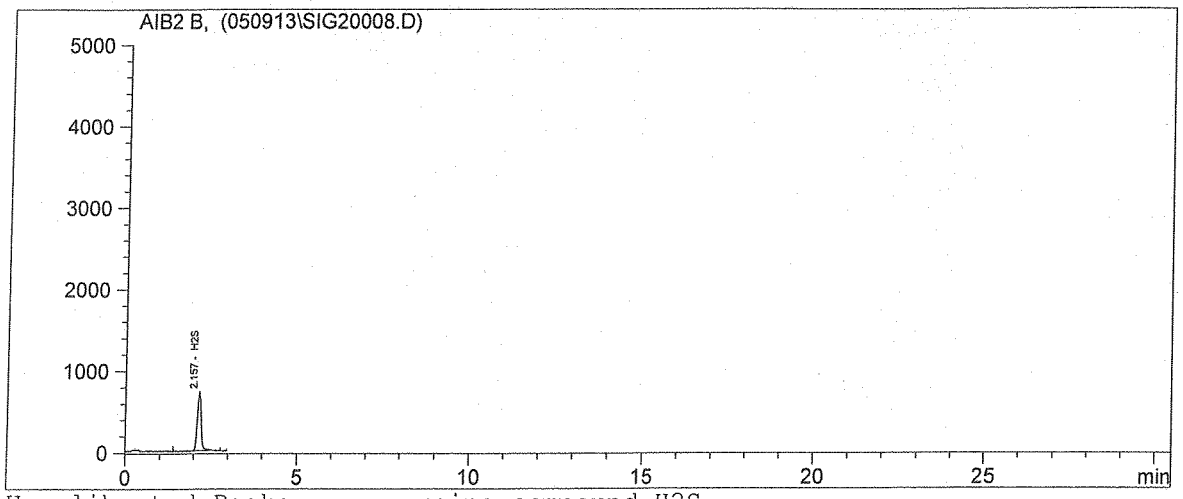
Ret Time [min]	Area	Amount [ppbV]	Name
0.000	0	0.000	H2S
0.000	0	0.000	COS
0.000	0	0.000	Methyl Mercaptan
0.000	0	0.000	Ethyl Mercaptan
0.000	0	0.000	Dimethyl Sulfide
0.000	0	0.000	Carbon Disulfide
0.000	0	0.000	Iso-propyl Mercaptan
0.000	0	0.000	Tert-butyl Mercaptan
0.000	0	0.000	N-propyl Mercaptan
0.000	0	0.000	Ethyl Methyl Sulfide
0.000	0	0.000	Sec-butyl Mercaptan
0.000	0	0.000	Thiophene
0.000	0	0.000	Iso-butyl Mercaptan
0.000	0	0.000	Diethyl Sulfide
0.000	0	0.000	N-butyl Mercaptan
0.000	0	0.000	Dimethyl Disulfide
0.000	0	0.000	2-Methylthiophene
0.000	0	0.000	3-Methylthiophene
0.000	0	0.000	Tetrahydrothiophene
0.000	0	0.000	n-Pentyl Mercaptan
0.000	0	0.000	2-Ethylthiophene
0.000	0	0.000	2,5-Dimethylthiophene
0.000	0	0.000	Diethyl Disulfide
0.000	0	0.000	n-Hexyl Mercaptan
0.000	0	0.000	2-Propylthiophene
0.000	0	0.000	Dimethyl Trisulfide
0.000	0	0.000	n-Heptyl Mercaptan
0.000	0	0.000	2-Butylthiophene
0.000	0	0.000	Dipropyl Disulfide
0.000	0	0.000	n-Octyl Mercaptan
0.000	0	0.000	Dipropyl Trisulfide
Totals:		0.000	

*** End of Report ***

MH 5/9/13

Customized Report: D5504

Injection Date : 5/9/2013 1:31:40 PM Seq. Line : 8
Sample Name : MS 62851 SS0677 ->Inj. Vol. :Manually
Multiplier : 1.00
Dilution : 1.00
Acq Operator : DH
Acq. Instrument : GC/SCD #10
Acq. Method : ASTM5504.M
Analysis Method : C:\HPCHEM\1\METHODS\D111912.M



Uncalibrated Peaks : using compound H2S

Ret Time [min]	Area	Amount [ppbV]	Name
2.157	5588	239.732	H2S
0.000	0	0.000	COS
0.000	0	0.000	Methyl Mercaptan
0.000	0	0.000	Ethyl Mercaptan
0.000	0	0.000	Dimethyl Sulfide
0.000	0	0.000	Carbon Disulfide
0.000	0	0.000	Iso-propyl Mercaptan
0.000	0	0.000	Tert-butyl Mercaptan
0.000	0	0.000	N-propyl Mercaptan
0.000	0	0.000	Ethyl Methyl Sulfide
0.000	0	0.000	Sec-butyl Mercaptan
0.000	0	0.000	Thiophene
0.000	0	0.000	Iso-butyl Mercaptan
0.000	0	0.000	Diethyl Sulfide
0.000	0	0.000	N-butyl Mercaptan
0.000	0	0.000	Dimethyl Disulfide
0.000	0	0.000	2-Methylthiophene
0.000	0	0.000	3-Methylthiophene
0.000	0	0.000	Tetrahydrothiophene
0.000	0	0.000	n-Pentyl Mercaptan
0.000	0	0.000	2-Ethylthiophene
0.000	0	0.000	2,5-Dimethylthiophene
0.000	0	0.000	Diethyl Disulfide
0.000	0	0.000	n-Hexyl Mercaptan
0.000	0	0.000	2-Propylthiophene
0.000	0	0.000	Dimethyl Trisulfide
0.000	0	0.000	n-Heptyl Mercaptan
0.000	0	0.000	2-Butylthiophene
0.000	0	0.000	Dipropyl Disulfide
0.000	0	0.000	n-Octyl Mercaptan
0.000	0	0.000	Dipropyl Trisulfide
Totals:		239.732	

*** End of Report ***

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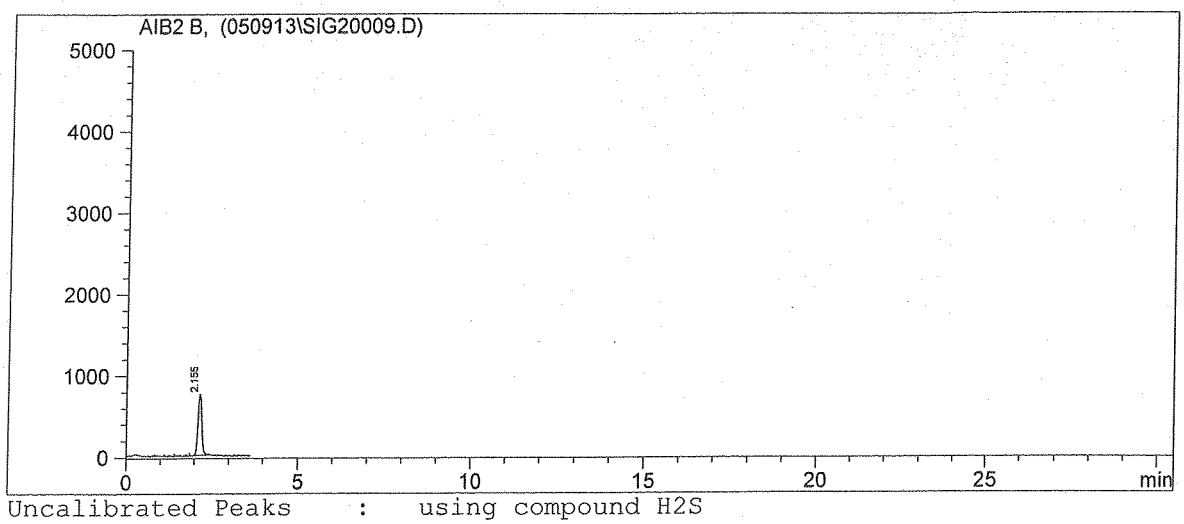
DD 5/9/13

Customized Report: D5504

Injection Date : 5/9/2013 1:27:14 PM Seq. Line : 9
Sample Name : MSD 62851 SS0677 ->Inj. Vol. :Manually
Multiplier : 1.00
Dilution : 1.00
Acq Operator : DH
Acq. Instrument : GC/SCD #10
Acq. Method : ASTM5504.M
Analysis Method : C:\HPCHEM\1\METHODS\D111912.M



Uncalibrated Peaks : using compound H2S

Ret Time [min]	Area	Amount [ppbV]	Name
2.155	5761	247.128	
0.000	0	0.000	H2S
0.000	0	0.000	COS
0.000	0	0.000	Methyl Mercaptan
0.000	0	0.000	Ethyl Mercaptan
0.000	0	0.000	Dimethyl Sulfide
0.000	0	0.000	Carbon Disulfide
0.000	0	0.000	Iso-propyl Mercaptan
0.000	0	0.000	Tert-butyl Mercaptan
0.000	0	0.000	N-propyl Mercaptan
0.000	0	0.000	Ethyl Methyl Sulfide
0.000	0	0.000	Sec-butyl Mercaptan
0.000	0	0.000	Thiophene
0.000	0	0.000	Iso-butyl Mercaptan
0.000	0	0.000	Diethyl Sulfide
0.000	0	0.000	N-butyl Mercaptan
0.000	0	0.000	Dimethyl Disulfide
0.000	0	0.000	2-Methylthiophene
0.000	0	0.000	3-Methylthiophene
0.000	0	0.000	Tetrahydrothiophene
0.000	0	0.000	n-Pentyl Mercaptan
0.000	0	0.000	2-Ethylthiophene
0.000	0	0.000	2,5-Dimethylthiophene
0.000	0	0.000	Diethyl Disulfide
0.000	0	0.000	n-Hexyl Mercaptan
0.000	0	0.000	2-Propylthiophene
0.000	0	0.000	Dimethyl Trisulfide
0.000	0	0.000	n-Heptyl Mercaptan
0.000	0	0.000	2-Butylthiophene
0.000	0	0.000	Dipropyl Disulfide
0.000	0	0.000	n-Octyl Mercaptan
0.000	0	0.000	Dipropyl Trisulfide
Totals:		247.128	

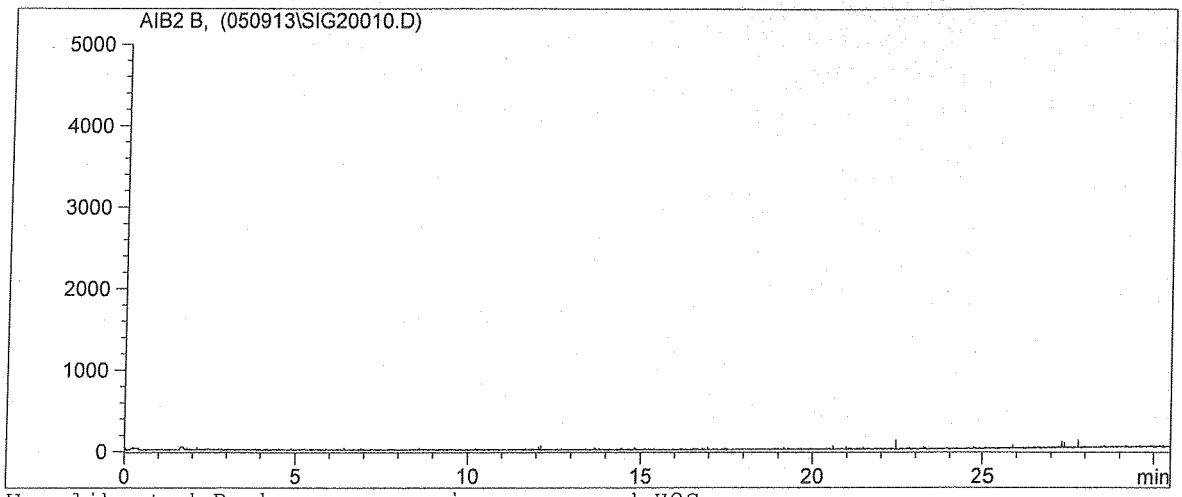
MJ 5/9/13

*** End of Report ***

Customized Report: D5504

Injection Date : 5/9/2013 1:36:55 PM
Sample Name : 130559-62852
Multiplier : 1.00
Dilution : 1.00
Acq Operator : DH
Acq. Instrument : GC/SCD #10
Acq. Method : ASTM5504.M
Analysis Method : C:\HPCHEM\1\METHODS\D111912.M

Seq. Line : 10
Inj. Vol. :Manually



Uncalibrated Peaks : using compound H2S

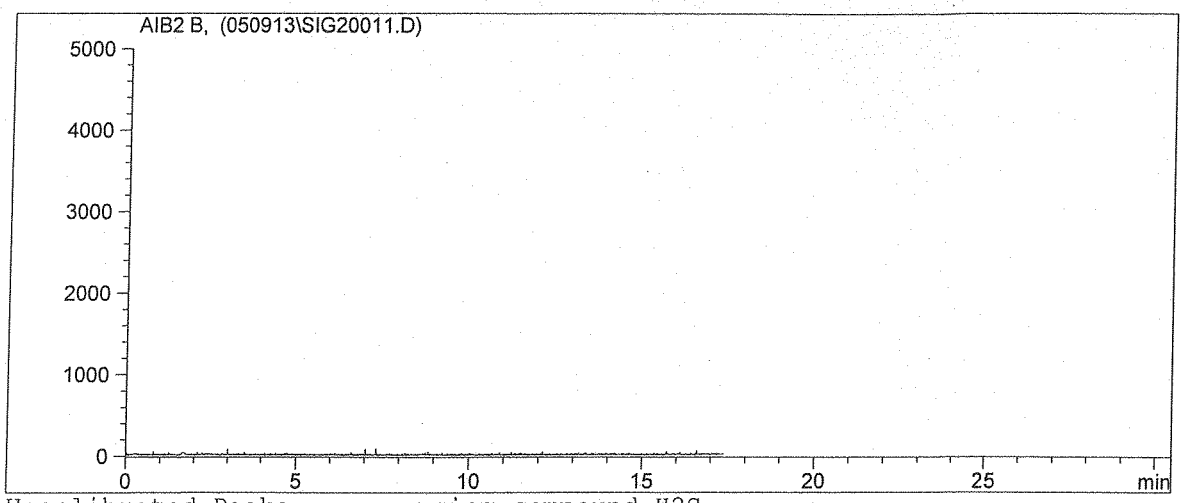
Ret Time [min]	Area	Amount [ppbV]	Name
0.000	0	0.000	H2S
0.000	0	0.000	COS
0.000	0	0.000	Methyl Mercaptan
0.000	0	0.000	Ethyl Mercaptan
0.000	0	0.000	Dimethyl Sulfide
0.000	0	0.000	Carbon Disulfide
0.000	0	0.000	Iso-propyl Mercaptan
0.000	0	0.000	Tert-butyl Mercaptan
0.000	0	0.000	N-propyl Mercaptan
0.000	0	0.000	Ethyl Methyl Sulfide
0.000	0	0.000	Sec-butyl Mercaptan
0.000	0	0.000	Thiophene
0.000	0	0.000	Iso-butyl Mercaptan
0.000	0	0.000	Diethyl Sulfide
0.000	0	0.000	N-butyl Mercaptan
0.000	0	0.000	Dimethyl Disulfide
0.000	0	0.000	2-Methylthiophene
0.000	0	0.000	3-Methylthiophene
0.000	0	0.000	Tetrahydrothiophene
0.000	0	0.000	n-Pentyl Mercaptan
0.000	0	0.000	2-Ethylthiophene
0.000	0	0.000	2,5-Dimethylthiophene
0.000	0	0.000	Diethyl Disulfide
0.000	0	0.000	n-Hexyl Mercaptan
0.000	0	0.000	2-Propylthiophene
0.000	0	0.000	Dimethyl Trisulfide
0.000	0	0.000	n-Heptyl Mercaptan
0.000	0	0.000	2-Butylthiophene
0.000	0	0.000	Dipropyl Disulfide
0.000	0	0.000	n-Octyl Mercaptan
0.000	0	0.000	Dipropyl Trisulfide
Totals:		0.000	

*** End of Report ***

RB 5/9/13

Customized Report: D5504

Injection Date : 5/9/2013 2:14:08 PM Seq. Line : 11
Sample Name : 130559-62852 dp ->Inj. Vol. :Manually
Multiplier : 1.00
Dilution : 1.00
Acq Operator : DH
Acq. Instrument : GC/SCD #10
Acq. Method : ASTM5504.M
Analysis Method : C:\HPCHEM\1\METHODS\D111912.M



Uncalibrated Peaks : using compound H2S

Ret Time [min]	Area	Amount [ppbV]	Name
0.000	0	0.000	H2S
0.000	0	0.000	COS
0.000	0	0.000	Methyl Mercaptan
0.000	0	0.000	Ethyl Mercaptan
0.000	0	0.000	Dimethyl Sulfide
0.000	0	0.000	Carbon Disulfide
0.000	0	0.000	Iso-propyl Mercaptan
0.000	0	0.000	Tert-butyl Mercaptan
0.000	0	0.000	N-propyl Mercaptan
0.000	0	0.000	Ethyl Methyl Sulfide
0.000	0	0.000	Sec-butyl Mercaptan
0.000	0	0.000	Thiophene
0.000	0	0.000	Iso-butyl Mercaptan
0.000	0	0.000	Diethyl Sulfide
0.000	0	0.000	N-butyl Mercaptan
0.000	0	0.000	Dimethyl Disulfide
0.000	0	0.000	2-Methylthiophene
0.000	0	0.000	3-Methylthiophene
0.000	0	0.000	Tetrahydrothiophene
0.000	0	0.000	n-Pentyl Mercaptan
0.000	0	0.000	2-Ethylthiophene
0.000	0	0.000	2,5-Dimethylthiophene
0.000	0	0.000	Diethyl Disulfide
0.000	0	0.000	n-Hexyl Mercaptan
0.000	0	0.000	2-Propylthiophene
0.000	0	0.000	Dimethyl Trisulfide
0.000	0	0.000	n-Heptyl Mercaptan
0.000	0	0.000	2-Butylthiophene
0.000	0	0.000	Dipropyl Disulfide
0.000	0	0.000	n-Octyl Mercaptan
0.000	0	0.000	Dipropyl Trisulfide
Totals:		0.000	

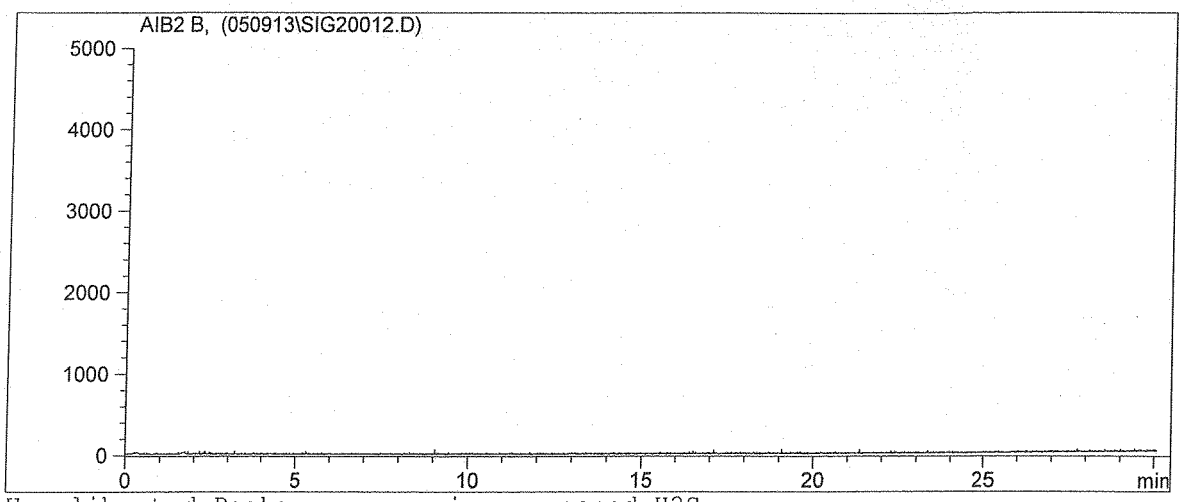
*** End of Report ***

5/9/13

Customized Report: D5504

Injection Date : 5/9/2013 2:33:52 PM
Sample Name : 130559-62861
Multiplier : 1.00
Dilution : 1.00
Acq Operator : DH
Acq. Instrument : GC/SCD #10
Acq. Method : ASTM5504.M
Analysis Method : C:\HPCHEM\1\METHODS\D111912.M

Seq. Line : 12
Inj. Vol. :Manually



Uncalibrated Peaks : using compound H2S

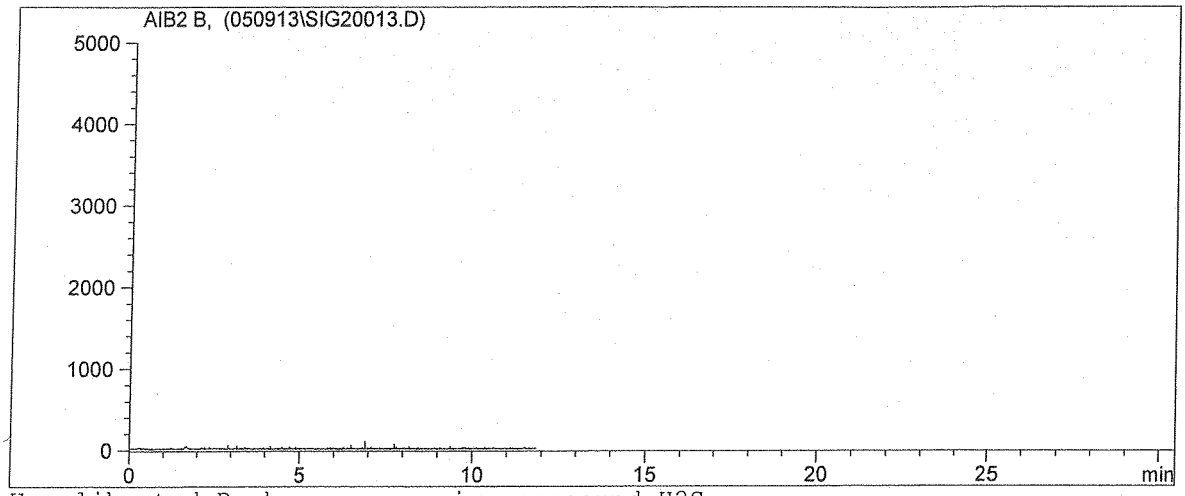
Ret Time [min]	Area	Amount [ppbV]	Name
0.000	0	0.000	H2S
0.000	0	0.000	COS
0.000	0	0.000	Methyl Mercaptan
0.000	0	0.000	Ethyl Mercaptan
0.000	0	0.000	Dimethyl Sulfide
0.000	0	0.000	Carbon Disulfide
0.000	0	0.000	Iso-propyl Mercaptan
0.000	0	0.000	Tert-butyl Mercaptan
0.000	0	0.000	N-propyl Mercaptan
0.000	0	0.000	Ethyl Methyl Sulfide
0.000	0	0.000	Sec-butyl Mercaptan
0.000	0	0.000	Thiophene
0.000	0	0.000	Iso-butyl Mercaptan
0.000	0	0.000	Diethyl Sulfide
0.000	0	0.000	N-butyl Mercaptan
0.000	0	0.000	Dimethyl Disulfide
0.000	0	0.000	2-Methylthiophene
0.000	0	0.000	3-Methylthiophene
0.000	0	0.000	Tetrahydrothiophene
0.000	0	0.000	n-Pentyl Mercaptan
0.000	0	0.000	2-Ethylthiophene
0.000	0	0.000	2,5-Dimethylthiophene
0.000	0	0.000	Diethyl Disulfide
0.000	0	0.000	n-Hexyl Mercaptan
0.000	0	0.000	2-Propylthiophene
0.000	0	0.000	Dimethyl Trisulfide
0.000	0	0.000	n-Heptyl Mercaptan
0.000	0	0.000	2-Butylthiophene
0.000	0	0.000	Dipropyl Disulfide
0.000	0	0.000	n-Octyl Mercaptan
0.000	0	0.000	Dipropyl Trisulfide
Totals:		0.000	

*** End of Report ***

NK 5/9/13

Customized Report: D5504

Injection Date : 5/9/2013 3:18:54 PM Seq. Line : 13
Sample Name : 130559-62861 dp ->Inj. Vol. :Manually
Multiplier : 1.00
Dilution : 1.00
Acq Operator : DH
Acq. Instrument : GC/SCD #10
Acq. Method : ASTM5504.M
Analysis Method : C:\HPCHEM\1\METHODS\D111912.M



Uncalibrated Peaks : using compound H2S

Ret Time [min]	Area	Amount [ppbV]	Name
0.000	0	0.000	H2S
0.000	0	0.000	COS
0.000	0	0.000	Methyl Mercaptan
0.000	0	0.000	Ethyl Mercaptan
0.000	0	0.000	Dimethyl Sulfide
0.000	0	0.000	Carbon Disulfide
0.000	0	0.000	Iso-propyl Mercaptan
0.000	0	0.000	Tert-butyl Mercaptan
0.000	0	0.000	N-propyl Mercaptan
0.000	0	0.000	Ethyl Methyl Sulfide
0.000	0	0.000	Sec-butyl Mercaptan
0.000	0	0.000	Thiophene
0.000	0	0.000	Iso-butyl Mercaptan
0.000	0	0.000	Diethyl Sulfide
0.000	0	0.000	N-butyl Mercaptan
0.000	0	0.000	Dimethyl Disulfide
0.000	0	0.000	2-Methylthiophene
0.000	0	0.000	3-Methylthiophene
0.000	0	0.000	Tetrahydrothiophene
0.000	0	0.000	n-Pentyl Mercaptan
0.000	0	0.000	2-Ethylthiophene
0.000	0	0.000	2,5-Dimethylthiophene
0.000	0	0.000	Diethyl Disulfide
0.000	0	0.000	n-Hexyl Mercaptan
0.000	0	0.000	2-Propylthiophene
0.000	0	0.000	Dimethyl Trisulfide
0.000	0	0.000	n-Heptyl Mercaptan
0.000	0	0.000	2-Butylthiophene
0.000	0	0.000	Dipropyl Disulfide
0.000	0	0.000	n-Octyl Mercaptan
0.000	0	0.000	Dipropyl Trisulfide
Totals:		0.000	

*** End of Report ***

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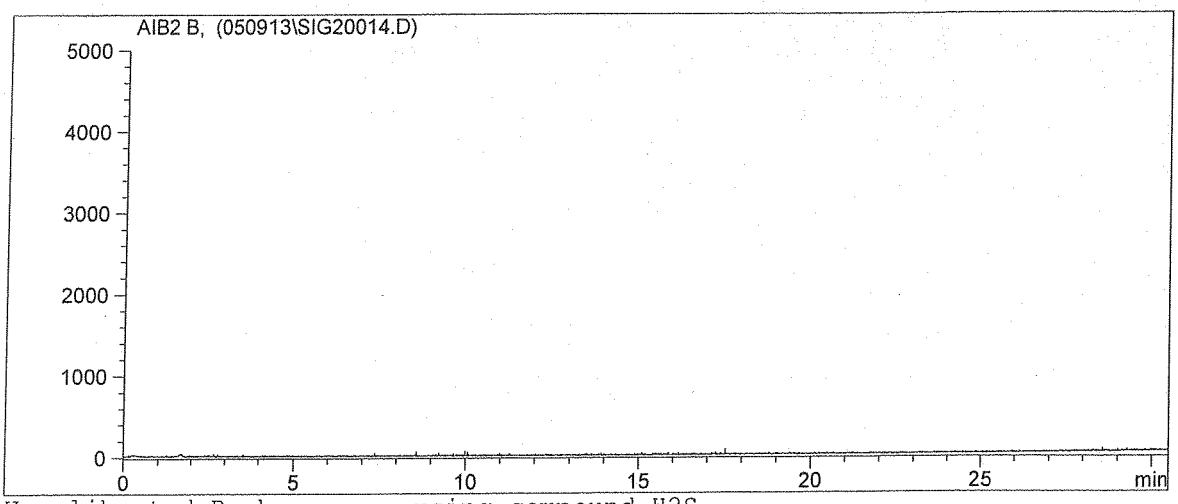
NB 5/9/13

Customized Report: D5504

Injection Date : 5/9/2013 3:31:56 PM
Sample Name : 130559-62870
Multiplier : 1.00
Dilution : 1.00
Acq Operator : DH
Acq. Instrument : GC/SCD #10
Acq. Method : ASTM5504.M
Analysis Method : C:\HPCHEM\1\METHODS\D111912.M

Seq. Line : 14
Inj. Vol. :Manually



Uncalibrated Peaks : using compound H2S

Ret Time [min]	Area	Amount [ppbV]	Name
0.000	0	0.000	H2S
0.000	0	0.000	COS
0.000	0	0.000	Methyl Mercaptan
0.000	0	0.000	Ethyl Mercaptan
0.000	0	0.000	Dimethyl Sulfide
0.000	0	0.000	Carbon Disulfide
0.000	0	0.000	Iso-propyl Mercaptan
0.000	0	0.000	Tert-butyl Mercaptan
0.000	0	0.000	N-propyl Mercaptan
0.000	0	0.000	Ethyl Methyl Sulfide
0.000	0	0.000	Sec-butyl Mercaptan
0.000	0	0.000	Thiophene
0.000	0	0.000	Iso-butyl Mercaptan
0.000	0	0.000	Diethyl Sulfide
0.000	0	0.000	N-butyl Mercaptan
0.000	0	0.000	Dimethyl Disulfide
0.000	0	0.000	2-Methylthiophene
0.000	0	0.000	3-Methylthiophene
0.000	0	0.000	Tetrahydrothiophene
0.000	0	0.000	n-Pentyl Mercaptan
0.000	0	0.000	2-Ethylthiophene
0.000	0	0.000	2,5-Dimethylthiophene
0.000	0	0.000	Diethyl Disulfide
0.000	0	0.000	n-Hexyl Mercaptan
0.000	0	0.000	2-Propylthiophene
0.000	0	0.000	Dimethyl Trisulfide
0.000	0	0.000	n-Heptyl Mercaptan
0.000	0	0.000	2-Butylthiophene
0.000	0	0.000	Dipropyl Disulfide
0.000	0	0.000	n-Octyl Mercaptan
0.000	0	0.000	Dipropyl Trisulfide
Totals:		0.000	

*** End of Report ***

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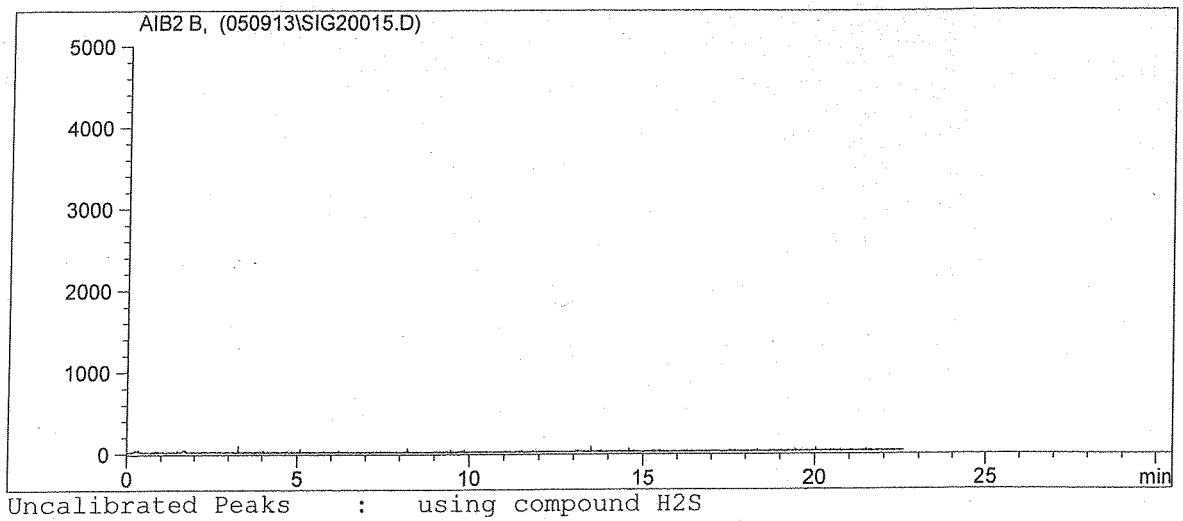
MB 5/9/13

Customized Report: D5504

Injection Date : 5/9/2013 4:06:34 PM Seq. Line : 15
Sample Name : 130559-62870 dp ->Inj. Vol. :Manually
Multiplier : 1.00
Dilution : 1.00
Acq Operator : DH
Acq. Instrument : GC/SCD #10
Acq. Method : ASTM5504.M
Analysis Method : C:\HPCHEM\1\METHODS\D111912.M



Uncalibrated Peaks : using compound H2S

Ret Time [min]	Area	Amount [ppbV]	Name
0.000	0	0.000	H2S
0.000	0	0.000	COS
0.000	0	0.000	Methyl Mercaptan
0.000	0	0.000	Ethyl Mercaptan
0.000	0	0.000	Dimethyl Sulfide
0.000	0	0.000	Carbon Disulfide
0.000	0	0.000	Iso-propyl Mercaptan
0.000	0	0.000	Tert-butyl Mercaptan
0.000	0	0.000	N-propyl Mercaptan
0.000	0	0.000	Ethyl Methyl Sulfide
0.000	0	0.000	Sec-butyl Mercaptan
0.000	0	0.000	Thiophene
0.000	0	0.000	Iso-butyl Mercaptan
0.000	0	0.000	Diethyl Sulfide
0.000	0	0.000	N-butyl Mercaptan
0.000	0	0.000	Dimethyl Disulfide
0.000	0	0.000	2-Methylthiophene
0.000	0	0.000	3-Methylthiophene
0.000	0	0.000	Tetrahydrothiophene
0.000	0	0.000	n-Pentyl Mercaptan
0.000	0	0.000	2-Ethylthiophene
0.000	0	0.000	2,5-Dimethylthiophene
0.000	0	0.000	Diethyl Disulfide
0.000	0	0.000	n-Hexyl Mercaptan
0.000	0	0.000	2-Propylthiophene
0.000	0	0.000	Dimethyl Trisulfide
0.000	0	0.000	n-Heptyl Mercaptan
0.000	0	0.000	2-Butylthiophene
0.000	0	0.000	Dipropyl Disulfide
0.000	0	0.000	n-Octyl Mercaptan
0.000	0	0.000	Dipropyl Trisulfide
Totals:		0.000	

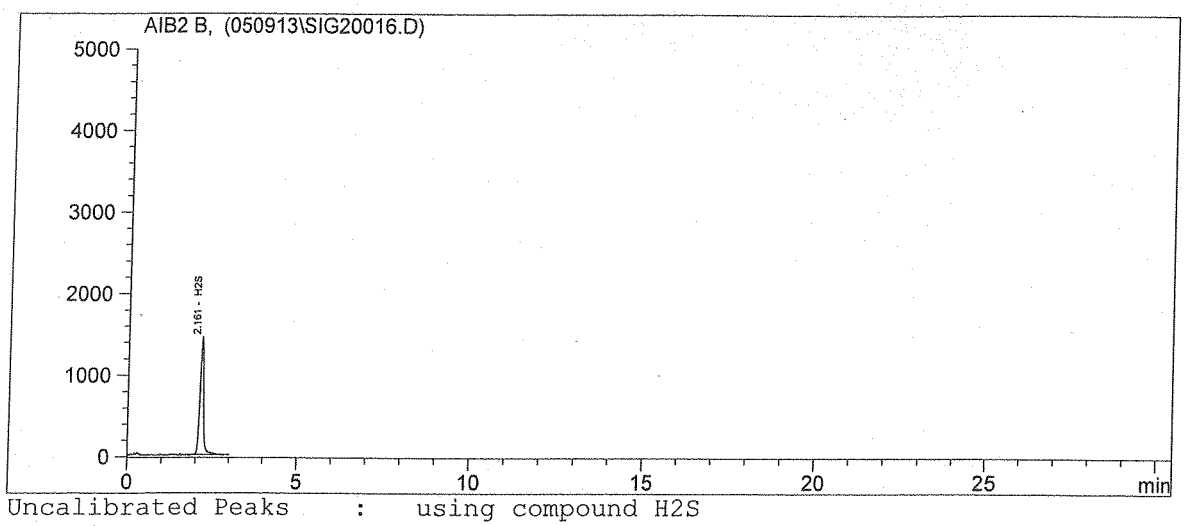
*** End of Report ***

NK 5/2/13

Customized Report: D5504

Injection Date : 5/9/2013 4:31:49 PM
Sample Name : CCV 500ppbV
Multiplier : 1.00
Dilution : 1.00
Acq Operator : DH
Acq. Instrument : GC/SCD #10
Acq. Method : ASTM5504.M
Analysis Method : C:\HPCHEM\1\METHODS\D111912.M

Seq. Line : 16
Inj. Vol. :Manually



Uncalibrated Peaks : using compound H2S

Ret Time [min]	Area	Amount [ppbV]	Name
2.161	10898	467.521	H2S
0.000	0	0.000	COS
0.000	0	0.000	Methyl Mercaptan
0.000	0	0.000	Ethyl Mercaptan
0.000	0	0.000	Dimethyl Sulfide
0.000	0	0.000	Carbon Disulfide
0.000	0	0.000	Iso-propyl Mercaptan
0.000	0	0.000	Tert-butyl Mercaptan
0.000	0	0.000	N-propyl Mercaptan
0.000	0	0.000	Ethyl Methyl Sulfide
0.000	0	0.000	Sec-butyl Mercaptan
0.000	0	0.000	Thiophene
0.000	0	0.000	Iso-butyl Mercaptan
0.000	0	0.000	Diethyl Sulfide
0.000	0	0.000	N-butyl Mercaptan
0.000	0	0.000	Dimethyl Disulfide
0.000	0	0.000	2-Methylthiophene
0.000	0	0.000	3-Methylthiophene
0.000	0	0.000	Tetrahydrothiophene
0.000	0	0.000	n-Pentyl Mercaptan
0.000	0	0.000	2-Ethylthiophene
0.000	0	0.000	2,5-Dimethylthiophene
0.000	0	0.000	Diethyl Disulfide
0.000	0	0.000	n-Hexyl Mercaptan
0.000	0	0.000	2-Propylthiophene
0.000	0	0.000	Dimethyl Trisulfide
0.000	0	0.000	n-Heptyl Mercaptan
0.000	0	0.000	2-Butylthiophene
0.000	0	0.000	Dipropyl Disulfide
0.000	0	0.000	n-Octyl Mercaptan
0.000	0	0.000	Dipropyl Trisulfide
Totals:		467.521	

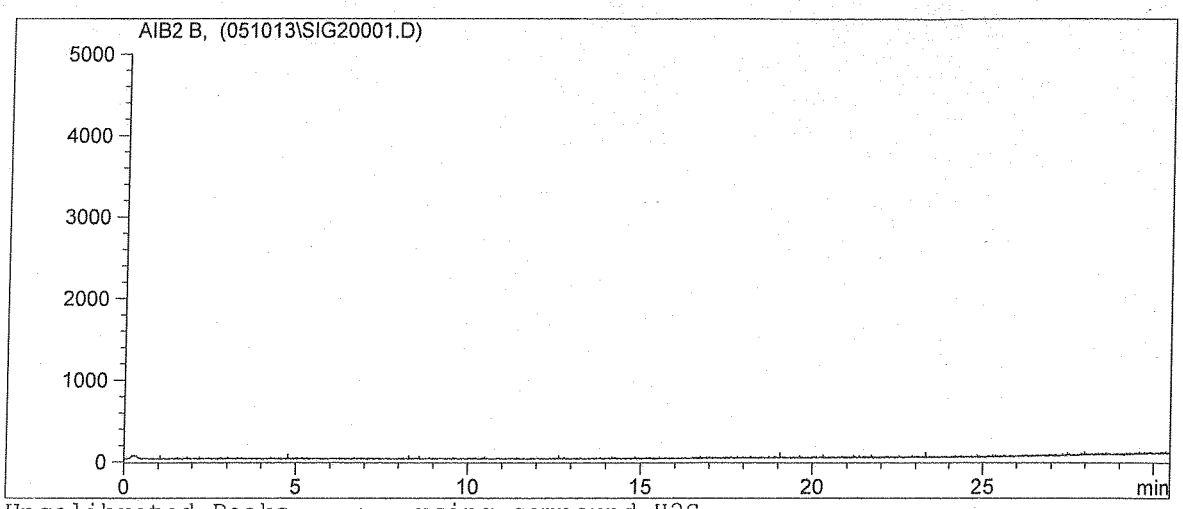
*** End of Report ***

JH 5/9/13

Customized Report: D5504

Injection Date : 5/10/2013 6:14:18 AM
Sample Name : System Blank
Multiplier : 1.00
Dilution : 1.00
Acq Operator : DH
Acq. Instrument : GC/SCD #10
Acq. Method : ASTM5504.M
Analysis Method : C:\HPCHEM\1\METHODS\D111912.M

Seq. Line : 1
Inj. Vol. :Manually



Uncalibrated Peaks : using compound H2S

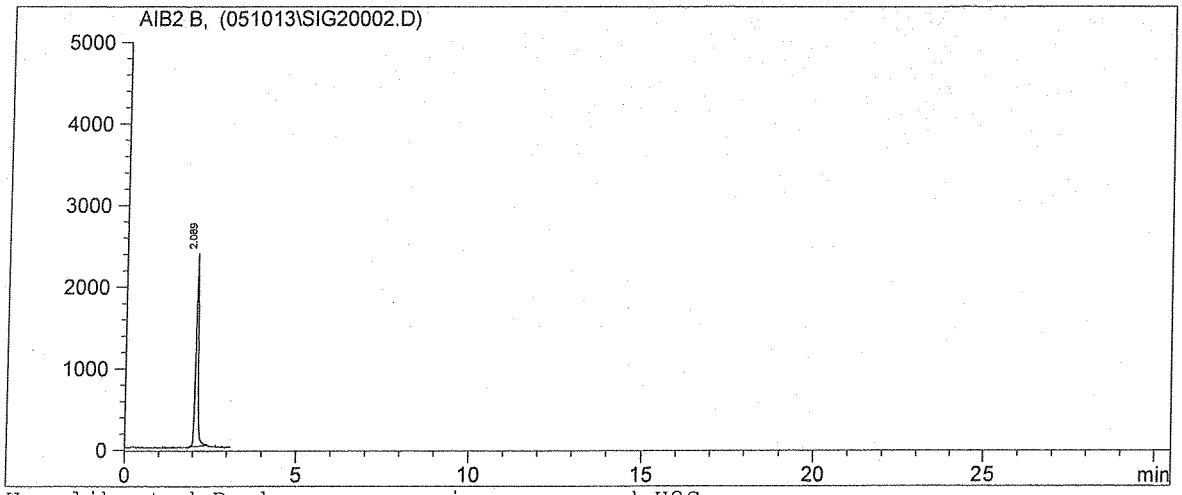
Ret Time [min]	Area	Amount [ppbV]	Name
0.000	0	0.000	H2S
0.000	0	0.000	COS
0.000	0	0.000	Methyl Mercaptan
0.000	0	0.000	Ethyl Mercaptan
0.000	0	0.000	Dimethyl Sulfide
0.000	0	0.000	Carbon Disulfide
0.000	0	0.000	Iso-propyl Mercaptan
0.000	0	0.000	Tert-butyl Mercaptan
0.000	0	0.000	N-propyl Mercaptan
0.000	0	0.000	Ethyl Methyl Sulfide
0.000	0	0.000	Sec-butyl Mercaptan
0.000	0	0.000	Thiophene
0.000	0	0.000	Iso-butyl Mercaptan
0.000	0	0.000	Diethyl Sulfide
0.000	0	0.000	N-butyl Mercaptan
0.000	0	0.000	Dimethyl Disulfide
0.000	0	0.000	2-Methylthiophene
0.000	0	0.000	3-Methylthiophene
0.000	0	0.000	Tetrahydrothiophene
0.000	0	0.000	n-Pentyl Mercaptan
0.000	0	0.000	2-Ethylthiophene
0.000	0	0.000	2,5-Dimethylthiophene
0.000	0	0.000	Diethyl Disulfide
0.000	0	0.000	n-Hexyl Mercaptan
0.000	0	0.000	2-Propylthiophene
0.000	0	0.000	Dimethyl Trisulfide
0.000	0	0.000	n-Heptyl Mercaptan
0.000	0	0.000	2-Butylthiophene
0.000	0	0.000	Dipropyl Disulfide
0.000	0	0.000	n-Octyl Mercaptan
0.000	0	0.000	Dipropyl Trisulfide
Totals:		0.000	

*** End of Report ***

NW 5/20/13

Customized Report: D5504

Injection Date : 5/10/2013 7:17:25 AM Seq. Line : 2
Sample Name : CCV 500ppbV SS0677 ->Inj. Vol. :Manually
Multiplier : 1.00
Dilution : 1.00
Acq Operator : DH
Acq. Instrument : GC/SCD #10
Acq. Method : ASTM5504.M
Analysis Method : C:\HPCHEM\1\METHODS\D111912.M



Uncalibrated Peaks : using compound H2S

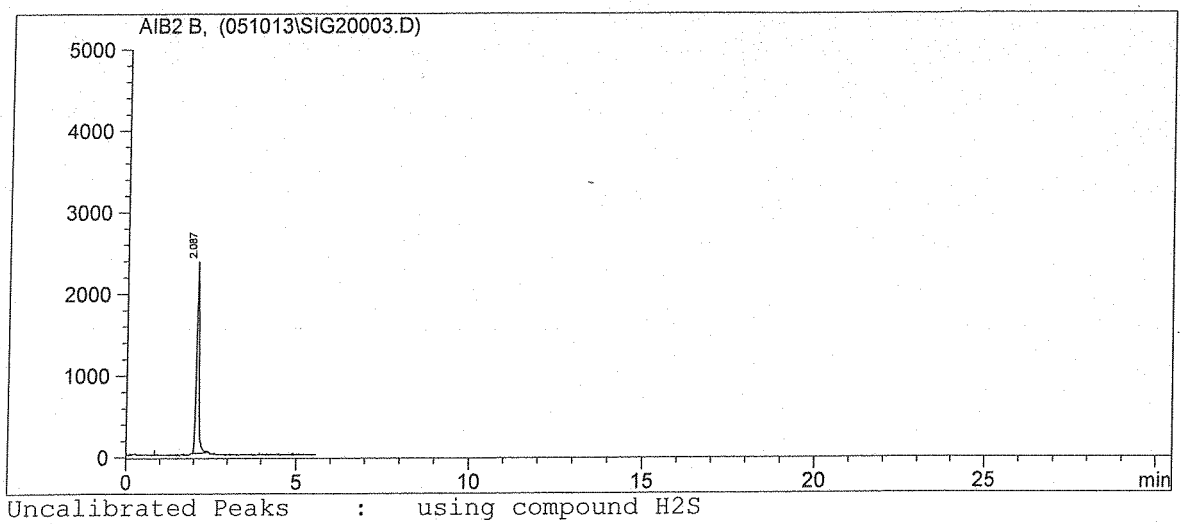
Ret Time [min]	Area	Amount [ppbV]	Name
2.089	12122	520.018	
0.000	0	0.000	H2S
0.000	0	0.000	COS
0.000	0	0.000	Methyl Mercaptan
0.000	0	0.000	Ethyl Mercaptan
0.000	0	0.000	Dimethyl Sulfide
0.000	0	0.000	Carbon Disulfide
0.000	0	0.000	Iso-propyl Mercaptan
0.000	0	0.000	Tert-butyl Mercaptan
0.000	0	0.000	N-propyl Mercaptan
0.000	0	0.000	Ethyl Methyl Sulfide
0.000	0	0.000	Sec-butyl Mercaptan
0.000	0	0.000	Thiophene
0.000	0	0.000	Iso-butyl Mercaptan
0.000	0	0.000	Diethyl Sulfide
0.000	0	0.000	N-butyl Mercaptan
0.000	0	0.000	Dimethyl Disulfide
0.000	0	0.000	2-Methylthiophene
0.000	0	0.000	3-Methylthiophene
0.000	0	0.000	Tetrahydrothiophene
0.000	0	0.000	n-Pentyl Mercaptan
0.000	0	0.000	2-Ethylthiophene
0.000	0	0.000	2,5-Dimethylthiophene
0.000	0	0.000	Diethyl Disulfide
0.000	0	0.000	n-Hexyl Mercaptan
0.000	0	0.000	2-Propylthiophene
0.000	0	0.000	Dimethyl Trisulfide
0.000	0	0.000	n-Heptyl Mercaptan
0.000	0	0.000	2-Butylthiophene
0.000	0	0.000	Dipropyl Disulfide
0.000	0	0.000	n-Octyl Mercaptan
0.000	0	0.000	Dipropyl Trisulfide
Totals:		520.018	

*** End of Report ***

MH 5/10/13

Customized Report: D5504

Injection Date : 5/10/2013 7:21:33 AM Seq. Line : 3
Sample Name : CCV 500ppbV dp SS0677 ->Inj. Vol. :Manually
Multiplier : 1.00
Dilution : 1.00
Acq Operator : DH
Acq. Instrument : GC/SCD #10
Acq. Method : ASTM5504.M
Analysis Method : C:\HPCHEM\1\METHODS\D111912.M



Uncalibrated Peaks : using compound H2S

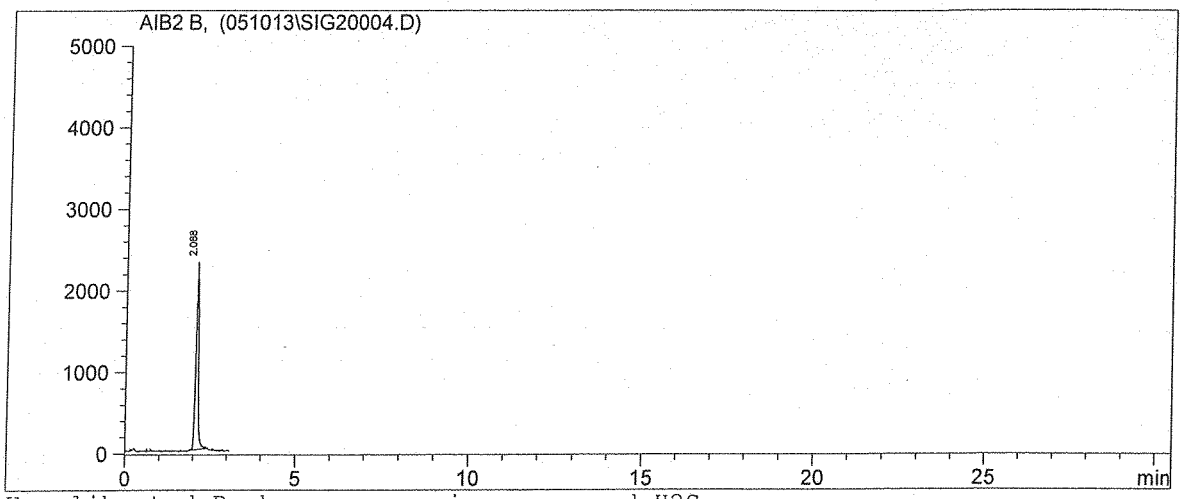
Ret Time [min]	Area	Amount [ppbV]	Name
2.087	12164	521.851	
0.000	0	0.000	H2S
0.000	0	0.000	COS
0.000	0	0.000	Methyl Mercaptan
0.000	0	0.000	Ethyl Mercaptan
0.000	0	0.000	Dimethyl Sulfide
0.000	0	0.000	Carbon Disulfide
0.000	0	0.000	Iso-propyl Mercaptan
0.000	0	0.000	Tert-butyl Mercaptan
0.000	0	0.000	N-propyl Mercaptan
0.000	0	0.000	Ethyl Methyl Sulfide
0.000	0	0.000	Sec-butyl Mercaptan
0.000	0	0.000	Thiophene
0.000	0	0.000	Iso-butyl Mercaptan
0.000	0	0.000	Diethyl Sulfide
0.000	0	0.000	N-butyl Mercaptan
0.000	0	0.000	Dimethyl Disulfide
0.000	0	0.000	2-Methylthiophene
0.000	0	0.000	3-Methylthiophene
0.000	0	0.000	Tetrahydrothiophene
0.000	0	0.000	n-Pentyl Mercaptan
0.000	0	0.000	2-Ethylthiophene
0.000	0	0.000	2,5-Dimethylthiophene
0.000	0	0.000	Diethyl Disulfide
0.000	0	0.000	n-Hexyl Mercaptan
0.000	0	0.000	2-Propylthiophene
0.000	0	0.000	Dimethyl Trisulfide
0.000	0	0.000	n-Heptyl Mercaptan
0.000	0	0.000	2-Butylthiophene
0.000	0	0.000	Dipropyl Disulfide
0.000	0	0.000	n-Octyl Mercaptan
0.000	0	0.000	Dipropyl Trisulfide
Totals:		521.851	

*** End of Report ***

MH 5/14/13

Customized Report: D5504

Injection Date : 5/10/2013 7:28:34 AM Seq. Line : 4
Sample Name : CCV 500ppbV tp SS0677 ->Inj. Vol. :Manually
Multiplier : 1.00
Dilution : 1.00
Acq Operator : DH
Acq. Instrument : GC/SCD #10
Acq. Method : ASTM5504.M
Analysis Method : C:\HPCHEM\1\METHODS\D111912.M



Uncalibrated Peaks : using compound H2S

Ret Time [min]	Area	Amount [ppbV]	Name
2.088	12124	520.115	
0.000	0	0.000	H2S
0.000	0	0.000	COS
0.000	0	0.000	Methyl Mercaptan
0.000	0	0.000	Ethyl Mercaptan
0.000	0	0.000	Dimethyl Sulfide
0.000	0	0.000	Carbon Disulfide
0.000	0	0.000	Iso-propyl Mercaptan
0.000	0	0.000	Tert-butyl Mercaptan
0.000	0	0.000	N-propyl Mercaptan
0.000	0	0.000	Ethyl Methyl Sulfide
0.000	0	0.000	Sec-butyl Mercaptan
0.000	0	0.000	Thiophene
0.000	0	0.000	Iso-butyl Mercaptan
0.000	0	0.000	Diethyl Sulfide
0.000	0	0.000	N-butyl Mercaptan
0.000	0	0.000	Dimethyl Disulfide
0.000	0	0.000	2-Methylthiophene
0.000	0	0.000	3-Methylthiophene
0.000	0	0.000	Tetrahydrothiophene
0.000	0	0.000	n-Pentyl Mercaptan
0.000	0	0.000	2-Ethylthiophene
0.000	0	0.000	2,5-Dimethylthiophene
0.000	0	0.000	Diethyl Disulfide
0.000	0	0.000	n-Hexyl Mercaptan
0.000	0	0.000	2-Propylthiophene
0.000	0	0.000	Dimethyl Trisulfide
0.000	0	0.000	n-Heptyl Mercaptan
0.000	0	0.000	2-Butylthiophene
0.000	0	0.000	Dipropyl Disulfide
0.000	0	0.000	n-Octyl Mercaptan
0.000	0	0.000	Dipropyl Trisulfide
Totals:		520.115	

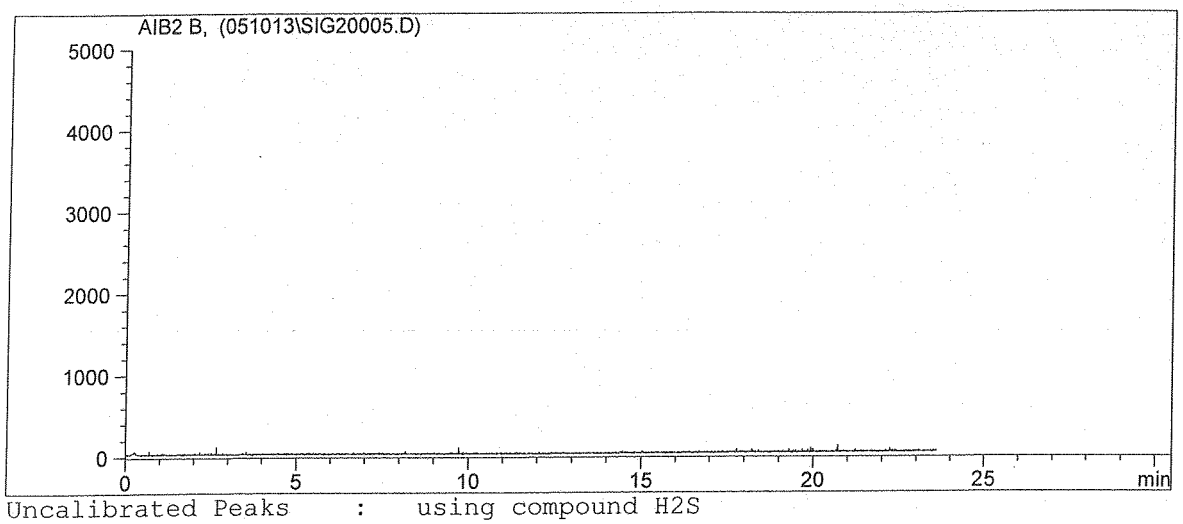
*** End of Report ***

5/10/13

Customized Report: D5504

Injection Date : 5/10/2013 7:33:35 AM
Sample Name : Method Blank
Multiplier : 1.00
Dilution : 1.00
Acq Operator : DH
Acq. Instrument : GC/SCD #10
Acq. Method : ASTM5504.M
Analysis Method : C:\HPCHEM\1\METHODS\D111912.M

Seq. Line : 5
Inj. Vol. :Manually



Uncalibrated Peaks : using compound H2S

Ret Time [min]	Area	Amount [ppbV]	Name
0.000	0	0.000	H2S
0.000	0	0.000	COS
0.000	0	0.000	Methyl Mercaptan
0.000	0	0.000	Ethyl Mercaptan
0.000	0	0.000	Dimethyl Sulfide
0.000	0	0.000	Carbon Disulfide
0.000	0	0.000	Iso-propyl Mercaptan
0.000	0	0.000	Tert-butyl Mercaptan
0.000	0	0.000	N-propyl Mercaptan
0.000	0	0.000	Ethyl Methyl Sulfide
0.000	0	0.000	Sec-butyl Mercaptan
0.000	0	0.000	Thiophene
0.000	0	0.000	Iso-butyl Mercaptan
0.000	0	0.000	Diethyl Sulfide
0.000	0	0.000	N-butyl Mercaptan
0.000	0	0.000	Dimethyl Disulfide
0.000	0	0.000	2-Methylthiophene
0.000	0	0.000	3-Methylthiophene
0.000	0	0.000	Tetrahydrothiophene
0.000	0	0.000	n-Pentyl Mercaptan
0.000	0	0.000	2-Ethylthiophene
0.000	0	0.000	2,5-Dimethylthiophene
0.000	0	0.000	Diethyl Disulfide
0.000	0	0.000	n-Hexyl Mercaptan
0.000	0	0.000	2-Propylthiophene
0.000	0	0.000	Dimethyl Trisulfide
0.000	0	0.000	n-Heptyl Mercaptan
0.000	0	0.000	2-Butylthiophene
0.000	0	0.000	Dipropyl Disulfide
0.000	0	0.000	n-Octyl Mercaptan
0.000	0	0.000	Dipropyl Trisulfide
Totals:		0.000	

*** End of Report ***

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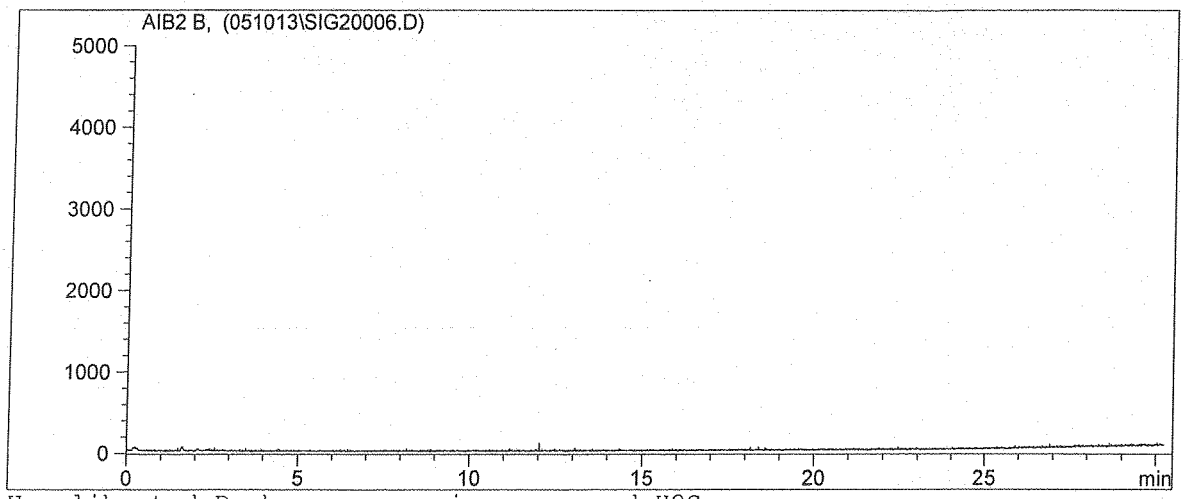
NH 5/10/13

Customized Report: D5504

Injection Date : 5/10/2013 7:59:10 AM
Sample Name : 130559-62879
Multiplier : 1.00
Dilution : 1.00
Acq Operator : DH
Acq. Instrument : GC/SCD #10
Acq. Method : ASTM5504.M
Analysis Method : C:\HPCHEM\1\METHODS\D111912.M

Seq. Line : 6
Inj. Vol. :Manually



Uncalibrated Peaks : using compound H2S

Ret Time [min]	Area	Amount [ppbV]	Name
0.000	0	0.000	H2S
0.000	0	0.000	COS
0.000	0	0.000	Methyl Mercaptan
0.000	0	0.000	Ethyl Mercaptan
0.000	0	0.000	Dimethyl Sulfide
0.000	0	0.000	Carbon Disulfide
0.000	0	0.000	Iso-propyl Mercaptan
0.000	0	0.000	Tert-butyl Mercaptan
0.000	0	0.000	N-propyl Mercaptan
0.000	0	0.000	Ethyl Methyl Sulfide
0.000	0	0.000	Sec-butyl Mercaptan
0.000	0	0.000	Thiophene
0.000	0	0.000	Iso-butyl Mercaptan
0.000	0	0.000	Diethyl Sulfide
0.000	0	0.000	N-butyl Mercaptan
0.000	0	0.000	Dimethyl Disulfide
0.000	0	0.000	2-Methylthiophene
0.000	0	0.000	3-Methylthiophene
0.000	0	0.000	Tetrahydrothiophene
0.000	0	0.000	n-Pentyl Mercaptan
0.000	0	0.000	2-Ethylthiophene
0.000	0	0.000	2,5-Dimethylthiophene
0.000	0	0.000	Diethyl Disulfide
0.000	0	0.000	n-Hexyl Mercaptan
0.000	0	0.000	2-Propylthiophene
0.000	0	0.000	Dimethyl Trisulfide
0.000	0	0.000	n-Heptyl Mercaptan
0.000	0	0.000	2-Butylthiophene
0.000	0	0.000	Dipropyl Disulfide
0.000	0	0.000	n-Octyl Mercaptan
0.000	0	0.000	Dipropyl Trisulfide
Totals:		0.000	

*** End of Report ***

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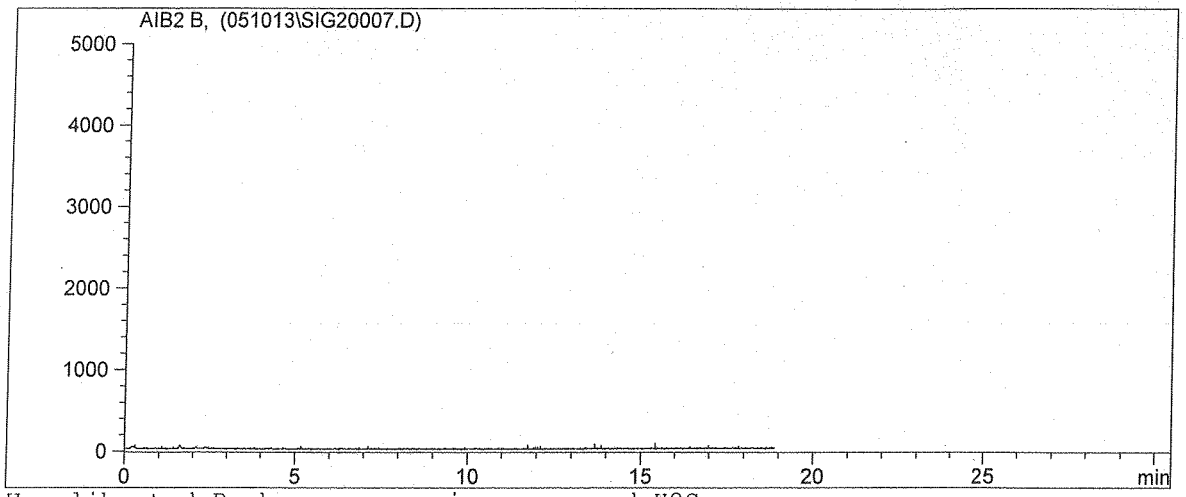
MM 5/10/13

Customized Report: D5504

Injection Date : 5/10/2013 8:33:36 AM Seq. Line : 7
Sample Name : 130559-62879 dp ->Inj. Vol. :Manually
Multiplier : 1.00
Dilution : 1.00
Acq Operator : DH
Acq. Instrument : GC/SCD #10
Acq. Method : ASTM5504.M
Analysis Method : C:\HPCHEM\1\METHODS\D111912.M



Uncalibrated Peaks : using compound H2S

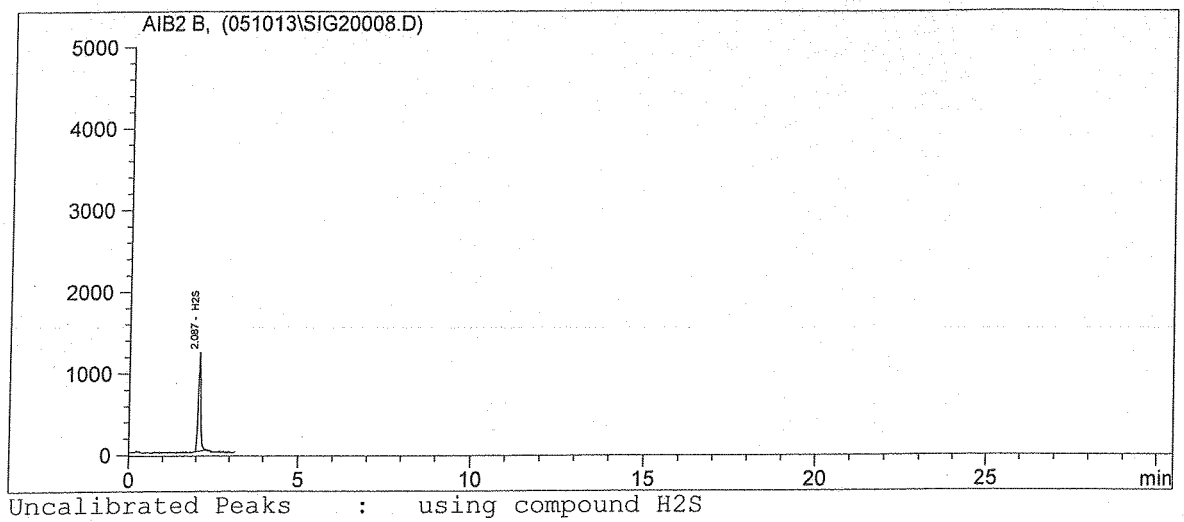
Ret Time [min]	Area	Amount [ppbV]	Name
0.000	0	0.000	H2S
0.000	0	0.000	COS
0.000	0	0.000	Methyl Mercaptan
0.000	0	0.000	Ethyl Mercaptan
0.000	0	0.000	Dimethyl Sulfide
0.000	0	0.000	Carbon Disulfide
0.000	0	0.000	Iso-propyl Mercaptan
0.000	0	0.000	Tert-butyl Mercaptan
0.000	0	0.000	N-propyl Mercaptan
0.000	0	0.000	Ethyl Methyl Sulfide
0.000	0	0.000	Sec-butyl Mercaptan
0.000	0	0.000	Thiophene
0.000	0	0.000	Iso-butyl Mercaptan
0.000	0	0.000	Diethyl Sulfide
0.000	0	0.000	N-butyl Mercaptan
0.000	0	0.000	Dimethyl Disulfide
0.000	0	0.000	2-Methylthiophene
0.000	0	0.000	3-Methylthiophene
0.000	0	0.000	Tetrahydrothiophene
0.000	0	0.000	n-Pentyl Mercaptan
0.000	0	0.000	2-Ethylthiophene
0.000	0	0.000	2,5-Dimethylthiophene
0.000	0	0.000	Diethyl Disulfide
0.000	0	0.000	n-Hexyl Mercaptan
0.000	0	0.000	2-Propylthiophene
0.000	0	0.000	Dimethyl Trisulfide
0.000	0	0.000	n-Heptyl Mercaptan
0.000	0	0.000	2-Butylthiophene
0.000	0	0.000	Dipropyl Disulfide
0.000	0	0.000	n-Octyl Mercaptan
0.000	0	0.000	Dipropyl Trisulfide
Totals:		0.000	

*** End of Report ***

5/10/13

Customized Report: D5504

Injection Date : 5/10/2013 8:55:15 AM Seq. Line : 8
Sample Name : MS 62851 SS0677 ->Inj. Vol. :Manually
Multiplier : 1.00
Dilution : 1.00
Acq Operator : DH
Acq. Instrument : GC/SCD #10
Acq. Method : ASTM5504.M
Analysis Method : C:\HPCHEM\1\METHODS\D111912.M



Uncalibrated Peaks : using compound H2S

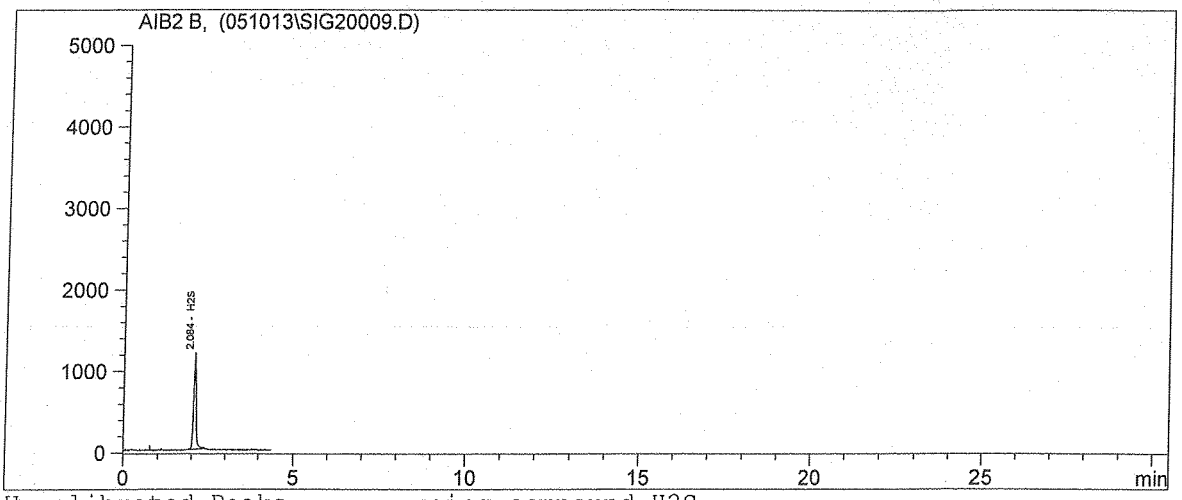
Ret Time [min]	Area	Amount [ppbV]	Name
2.087	6261	268.605	H2S
0.000	0	0.000	COS
0.000	0	0.000	Methyl Mercaptan
0.000	0	0.000	Ethyl Mercaptan
0.000	0	0.000	Dimethyl Sulfide
0.000	0	0.000	Carbon Disulfide
0.000	0	0.000	Iso-propyl Mercaptan
0.000	0	0.000	Tert-butyl Mercaptan
0.000	0	0.000	N-propyl Mercaptan
0.000	0	0.000	Ethyl Methyl Sulfide
0.000	0	0.000	Sec-butyl Mercaptan
0.000	0	0.000	Thiophene
0.000	0	0.000	Iso-butyl Mercaptan
0.000	0	0.000	Diethyl Sulfide
0.000	0	0.000	N-butyl Mercaptan
0.000	0	0.000	Dimethyl Disulfide
0.000	0	0.000	2-Methylthiophene
0.000	0	0.000	3-Methylthiophene
0.000	0	0.000	Tetrahydrothiophene
0.000	0	0.000	n-Pentyl Mercaptan
0.000	0	0.000	2-Ethylthiophene
0.000	0	0.000	2,5-Dimethylthiophene
0.000	0	0.000	Diethyl Disulfide
0.000	0	0.000	n-Hexyl Mercaptan
0.000	0	0.000	2-Propylthiophene
0.000	0	0.000	Dimethyl Trisulfide
0.000	0	0.000	n-Heptyl Mercaptan
0.000	0	0.000	2-Butylthiophene
0.000	0	0.000	Dipropyl Disulfide
0.000	0	0.000	n-Octyl Mercaptan
0.000	0	0.000	Dipropyl Trisulfide
Totals:		268.605	

*** End of Report ***

MD 5/10/13

Customized Report: D5504

Injection Date : 5/10/2013 9:00:32 AM Seq. Line : 9
Sample Name : MSD 62851 SS0677 ->Inj. Vol. :Manually
Multiplier : 1.00
Dilution : 1.00
Acq Operator : DH
Acq. Instrument : GC/SCD #10
Acq. Method : ASTM5504.M
Analysis Method : C:\HPCHEM\1\METHODS\D111912.M



Uncalibrated Peaks : using compound H2S

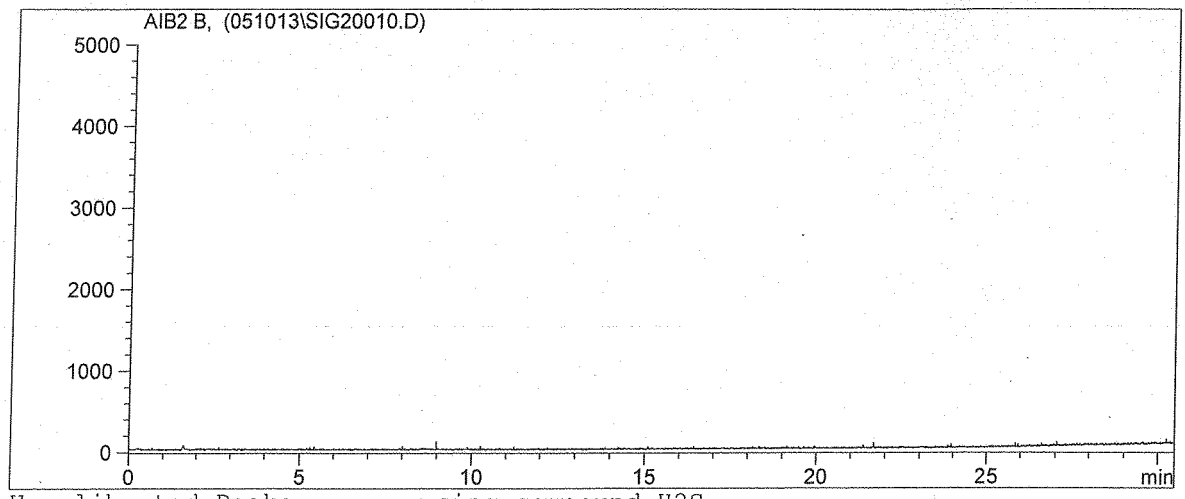
Ret Time [min]	Area	Amount [ppbV]	Name
2.084	6206	266.233	H2S
0.000	0	0.000	COS
0.000	0	0.000	Methyl Mercaptan
0.000	0	0.000	Ethyl Mercaptan
0.000	0	0.000	Dimethyl Sulfide
0.000	0	0.000	Carbon Disulfide
0.000	0	0.000	Iso-propyl Mercaptan
0.000	0	0.000	Tert-butyl Mercaptan
0.000	0	0.000	N-propyl Mercaptan
0.000	0	0.000	Ethyl Methyl Sulfide
0.000	0	0.000	Sec-butyl Mercaptan
0.000	0	0.000	Thiophene
0.000	0	0.000	Iso-butyl Mercaptan
0.000	0	0.000	Diethyl Sulfide
0.000	0	0.000	N-butyl Mercaptan
0.000	0	0.000	Dimethyl Disulfide
0.000	0	0.000	2-Methylthiophene
0.000	0	0.000	3-Methylthiophene
0.000	0	0.000	Tetrahydrothiophene
0.000	0	0.000	n-Pentyl Mercaptan
0.000	0	0.000	2-Ethylthiophene
0.000	0	0.000	2,5-Dimethylthiophene
0.000	0	0.000	Diethyl Disulfide
0.000	0	0.000	n-Hexyl Mercaptan
0.000	0	0.000	2-Propylthiophene
0.000	0	0.000	Dimethyl Trisulfide
0.000	0	0.000	n-Heptyl Mercaptan
0.000	0	0.000	2-Butylthiophene
0.000	0	0.000	Dipropyl Disulfide
0.000	0	0.000	n-Octyl Mercaptan
0.000	0	0.000	Dipropyl Trisulfide
Totals:		266.233	

*** End of Report ***

Customized Report: D5504

Injection Date : 5/10/2013 9:06:34 AM
Sample Name : 130559-62888
Multiplier : 1.00
Dilution : 1.00
Acq Operator : DH
Acq. Instrument : GC/SCD #10
Acq. Method : ASTM5504.M
Analysis Method : C:\HPCHEM\1\METHODS\D111912.M

Seq. Line : 10
Inj. Vol. :Manually



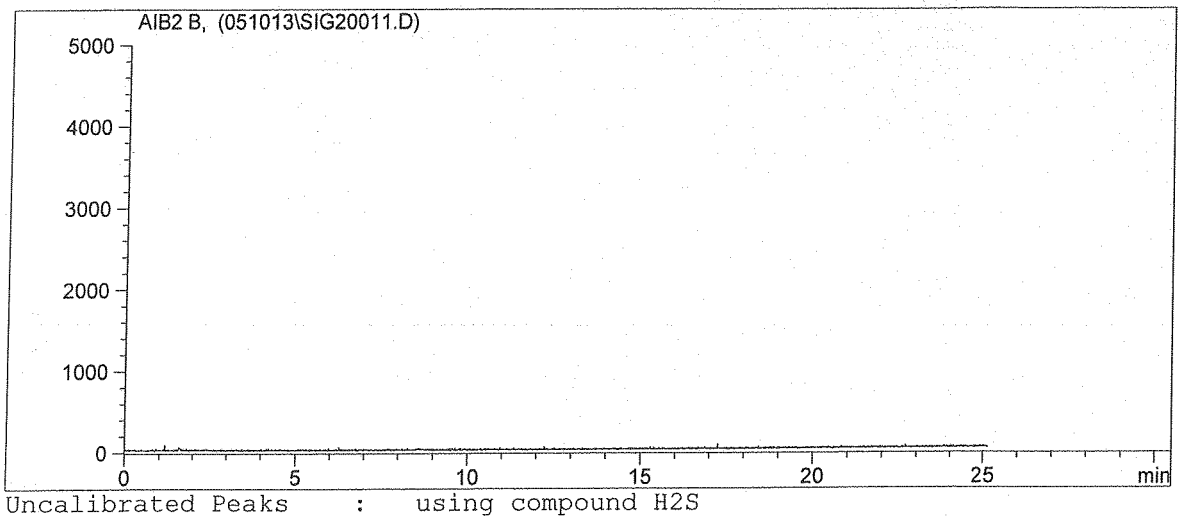
Uncalibrated Peaks : using compound H2S

Ret Time [min]	Area	Amount [ppbV]	Name
0.000	0	0.000	H2S
0.000	0	0.000	COS
0.000	0	0.000	Methyl Mercaptan
0.000	0	0.000	Ethyl Mercaptan
0.000	0	0.000	Dimethyl Sulfide
0.000	0	0.000	Carbon Disulfide
0.000	0	0.000	Iso-propyl Mercaptan
0.000	0	0.000	Tert-butyl Mercaptan
0.000	0	0.000	N-propyl Mercaptan
0.000	0	0.000	Ethyl Methyl Sulfide
0.000	0	0.000	Sec-butyl Mercaptan
0.000	0	0.000	Thiophene
0.000	0	0.000	Iso-butyl Mercaptan
0.000	0	0.000	Diethyl Sulfide
0.000	0	0.000	N-butyl Mercaptan
0.000	0	0.000	Dimethyl Disulfide
0.000	0	0.000	2-Methylthiophene
0.000	0	0.000	3-Methylthiophene
0.000	0	0.000	Tetrahydrothiophene
0.000	0	0.000	n-Pentyl Mercaptan
0.000	0	0.000	2-Ethylthiophene
0.000	0	0.000	2,5-Dimethylthiophene
0.000	0	0.000	Diethyl Disulfide
0.000	0	0.000	n-Hexyl Mercaptan
0.000	0	0.000	2-Propylthiophene
0.000	0	0.000	Dimethyl Trisulfide
0.000	0	0.000	n-Heptyl Mercaptan
0.000	0	0.000	2-Butylthiophene
0.000	0	0.000	Dipropyl Disulfide
0.000	0	0.000	n-Octyl Mercaptan
0.000	0	0.000	Dipropyl Trisulfide
Totals:		0.000	

*** End of Report ***

Customized Report: D5504

Injection Date : 5/10/2013 9:46:34 AM Seq. Line : 11
Sample Name : 130559-62888 dp ->Inj. Vol. :Manually
Multiplier : 1.00
Dilution : 1.00
Acq Operator : DH
Acq. Instrument : GC/SCD #10
Acq. Method : ASTM5504.M
Analysis Method : C:\HPCHEM\1\METHODS\D111912.M



Uncalibrated Peaks : using compound H2S

Ret Time [min]	Area	Amount [ppbV]	Name
0.000	0	0.000	H2S
0.000	0	0.000	COS
0.000	0	0.000	Methyl Mercaptan
0.000	0	0.000	Ethyl Mercaptan
0.000	0	0.000	Dimethyl Sulfide
0.000	0	0.000	Carbon Disulfide
0.000	0	0.000	Iso-propyl Mercaptan
0.000	0	0.000	Tert-butyl Mercaptan
0.000	0	0.000	N-propyl Mercaptan
0.000	0	0.000	Ethyl Methyl Sulfide
0.000	0	0.000	Sec-butyl Mercaptan
0.000	0	0.000	Thiophene
0.000	0	0.000	Iso-butyl Mercaptan
0.000	0	0.000	Diethyl Sulfide
0.000	0	0.000	N-butyl Mercaptan
0.000	0	0.000	Dimethyl Disulfide
0.000	0	0.000	2-Methylthiophene
0.000	0	0.000	3-Methylthiophene
0.000	0	0.000	Tetrahydrothiophene
0.000	0	0.000	n-Pentyl Mercaptan
0.000	0	0.000	2-Ethylthiophene
0.000	0	0.000	2,5-Dimethylthiophene
0.000	0	0.000	Diethyl Disulfide
0.000	0	0.000	n-Hexyl Mercaptan
0.000	0	0.000	2-Propylthiophene
0.000	0	0.000	Dimethyl Trisulfide
0.000	0	0.000	n-Heptyl Mercaptan
0.000	0	0.000	2-Butylthiophene
0.000	0	0.000	Dipropyl Disulfide
0.000	0	0.000	n-Octyl Mercaptan
0.000	0	0.000	Dipropyl Trisulfide
Totals:		0.000	

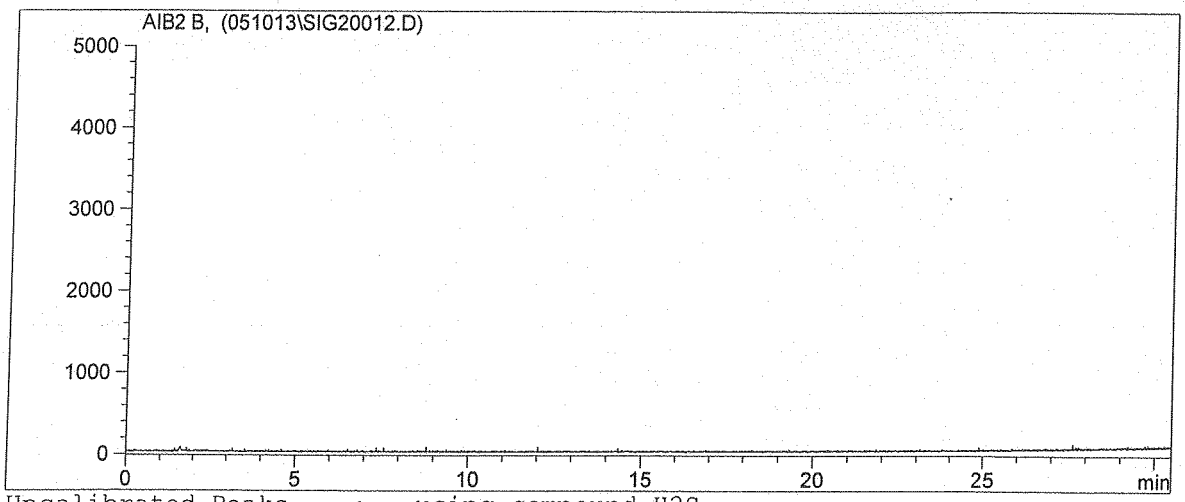
*** End of Report ***

NG 5/14/13

Customized Report: D5504

Injection Date : 5/10/2013 10:19:50 AM
Sample Name : 130559-62897
Multiplier : 1.00
Dilution : 1.00
Acq Operator : DH
Acq. Instrument : GC/SCD #10
Acq. Method : ASTM5504.M
Analysis Method : C:\HPCHEM\1\METHODS\D111912.M

Seq. Line : 12
Inj. Vol. :Manually



Uncalibrated Peaks : using compound H2S

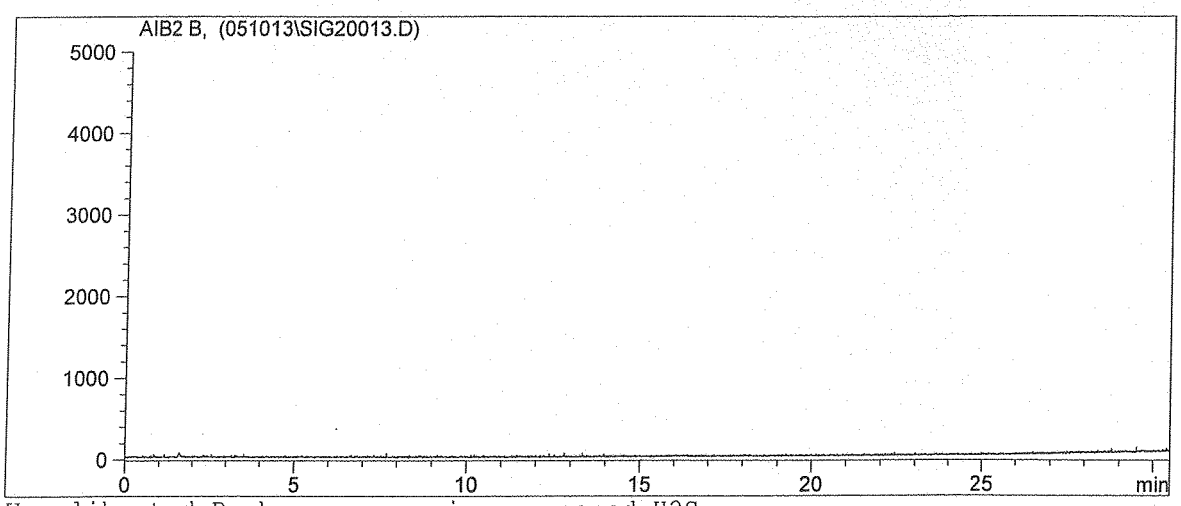
Ret Time [min]	Area	Amount [ppbV]	Name
0.000	0	0.000	H2S
0.000	0	0.000	COS
0.000	0	0.000	Methyl Mercaptan
0.000	0	0.000	Ethyl Mercaptan
0.000	0	0.000	Dimethyl Sulfide
0.000	0	0.000	Carbon Disulfide
0.000	0	0.000	Iso-propyl Mercaptan
0.000	0	0.000	Tert-butyl Mercaptan
0.000	0	0.000	N-propyl Mercaptan
0.000	0	0.000	Ethyl Methyl Sulfide
0.000	0	0.000	Sec-butyl Mercaptan
0.000	0	0.000	Thiophene
0.000	0	0.000	Iso-butyl Mercaptan
0.000	0	0.000	Diethyl Sulfide
0.000	0	0.000	N-butyl Mercaptan
0.000	0	0.000	Dimethyl Disulfide
0.000	0	0.000	2-Methylthiophene
0.000	0	0.000	3-Methylthiophene
0.000	0	0.000	Tetrahydrothiophene
0.000	0	0.000	n-Pentyl Mercaptan
0.000	0	0.000	2-Ethylthiophene
0.000	0	0.000	2,5-Dimethylthiophene
0.000	0	0.000	Diethyl Disulfide
0.000	0	0.000	n-Hexyl Mercaptan
0.000	0	0.000	2-Propylthiophene
0.000	0	0.000	Dimethyl Trisulfide
0.000	0	0.000	n-Heptyl Mercaptan
0.000	0	0.000	2-Butylthiophene
0.000	0	0.000	Dipropyl Disulfide
0.000	0	0.000	n-Octyl Mercaptan
0.000	0	0.000	Dipropyl Trisulfide
Totals:		0.000	

*** End of Report ***

MP 5/10/13

Customized Report: D5504

Injection Date : 5/10/2013 10:58:40 AM Seq. Line : 13
Sample Name : 130559-62897 dp ->Inj. Vol. :Manually
Multiplier : 1.00
Dilution : 1.00
Acq Operator : DH
Acq. Instrument : GC/SCD #10
Acq. Method : ASTM5504.M
Analysis Method : C:\HPCHEM\1\METHODS\D111912.M



Uncalibrated Peaks : using compound H2S

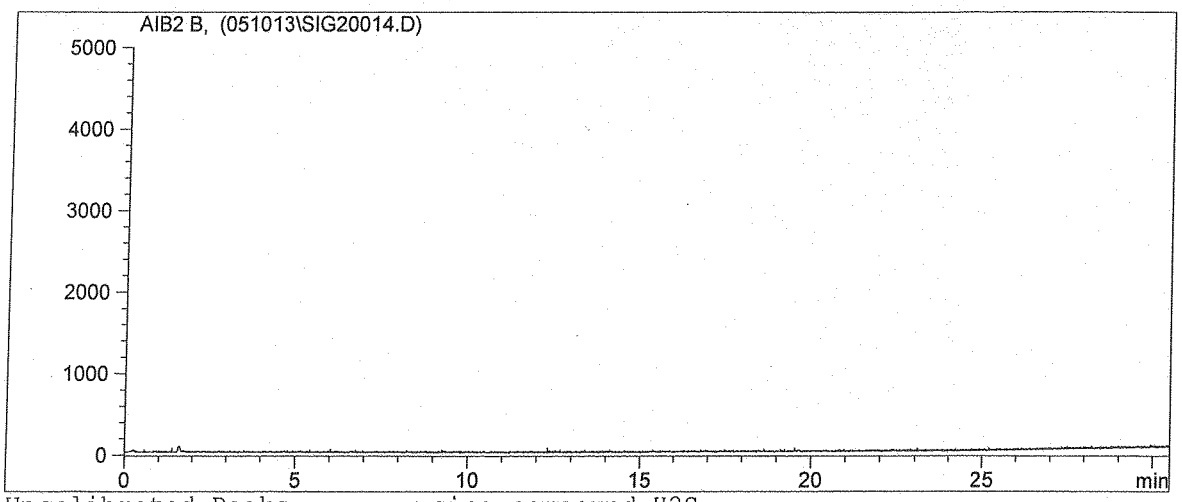
Ret Time [min]	Area	Amount [ppbV]	Name
0.000	0	0.000	H2S
0.000	0	0.000	COS
0.000	0	0.000	Methyl Mercaptan
0.000	0	0.000	Ethyl Mercaptan
0.000	0	0.000	Dimethyl Sulfide
0.000	0	0.000	Carbon Disulfide
0.000	0	0.000	Iso-propyl Mercaptan
0.000	0	0.000	Tert-butyl Mercaptan
0.000	0	0.000	N-propyl Mercaptan
0.000	0	0.000	Ethyl Methyl Sulfide
0.000	0	0.000	Sec-butyl Mercaptan
0.000	0	0.000	Thiophene
0.000	0	0.000	Iso-butyl Mercaptan
0.000	0	0.000	Diethyl Sulfide
0.000	0	0.000	N-butyl Mercaptan
0.000	0	0.000	Dimethyl Disulfide
0.000	0	0.000	2-Methylthiophene
0.000	0	0.000	3-Methylthiophene
0.000	0	0.000	Tetrahydrothiophene
0.000	0	0.000	n-Pentyl Mercaptan
0.000	0	0.000	2-Ethylthiophene
0.000	0	0.000	2,5-Dimethylthiophene
0.000	0	0.000	Diethyl Disulfide
0.000	0	0.000	n-Hexyl Mercaptan
0.000	0	0.000	2-Propylthiophene
0.000	0	0.000	Dimethyl Trisulfide
0.000	0	0.000	n-Heptyl Mercaptan
0.000	0	0.000	2-Butylthiophene
0.000	0	0.000	Dipropyl Disulfide
0.000	0	0.000	n-Octyl Mercaptan
0.000	0	0.000	Dipropyl Trisulfide
Totals:		0.000	

*** End of Report ***

Customized Report: D5504

Injection Date : 5/10/2013 12:35:49 PM
Sample Name : 130559-62906
Multiplier : 1.00
Dilution : 1.00
Acq Operator : DH
Acq. Instrument : GC/SCD #10
Acq. Method : ASTM5504.M
Analysis Method : C:\HPCHEM\1\METHODS\D111912.M

Seq. Line : 14
Inj. Vol. :Manually



Uncalibrated Peaks : using compound H2S

Ret Time [min]	Area	Amount [ppbV]	Name
0.000	0	0.000	H2S
0.000	0	0.000	COS
0.000	0	0.000	Methyl Mercaptan
0.000	0	0.000	Ethyl Mercaptan
0.000	0	0.000	Dimethyl Sulfide
0.000	0	0.000	Carbon Disulfide
0.000	0	0.000	Iso-propyl Mercaptan
0.000	0	0.000	Tert-butyl Mercaptan
0.000	0	0.000	N-propyl Mercaptan
0.000	0	0.000	Ethyl Methyl Sulfide
0.000	0	0.000	Sec-butyl Mercaptan
0.000	0	0.000	Thiophene
0.000	0	0.000	Iso-butyl Mercaptan
0.000	0	0.000	Diethyl Sulfide
0.000	0	0.000	N-butyl Mercaptan
0.000	0	0.000	Dimethyl Disulfide
0.000	0	0.000	2-Methylthiophene
0.000	0	0.000	3-Methylthiophene
0.000	0	0.000	Tetrahydrothiophene
0.000	0	0.000	n-Pentyl Mercaptan
0.000	0	0.000	2-Ethylthiophene
0.000	0	0.000	2,5-Dimethylthiophene
0.000	0	0.000	Diethyl Disulfide
0.000	0	0.000	n-Hexyl Mercaptan
0.000	0	0.000	2-Propylthiophene
0.000	0	0.000	Dimethyl Trisulfide
0.000	0	0.000	n-Heptyl Mercaptan
0.000	0	0.000	2-Butylthiophene
0.000	0	0.000	Dipropyl Disulfide
0.000	0	0.000	n-Octyl Mercaptan
0.000	0	0.000	Dipropyl Trisulfide
Totals:		0.000	

*** End of Report ***

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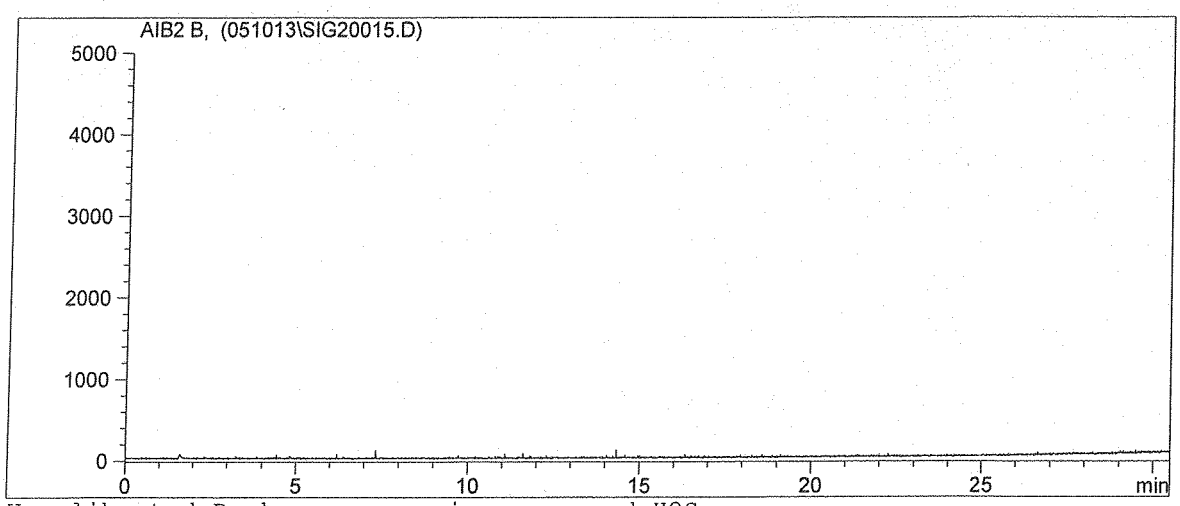
Customized Report: D5504

Injection Date : 5/10/2013 1:17:21 PM Seq. Line : 15
Sample Name : 130559-62906 dp ->Inj. Vol. :Manually
Multiplier : 1.00
Dilution : 1.00
Acq Operator : DH
Acq. Instrument : GC/SCD #10
Acq. Method : ASTM5504.M
Analysis Method : C:\HPCHEM\1\METHODS\D111912.M



Uncalibrated Peaks : using compound H2S

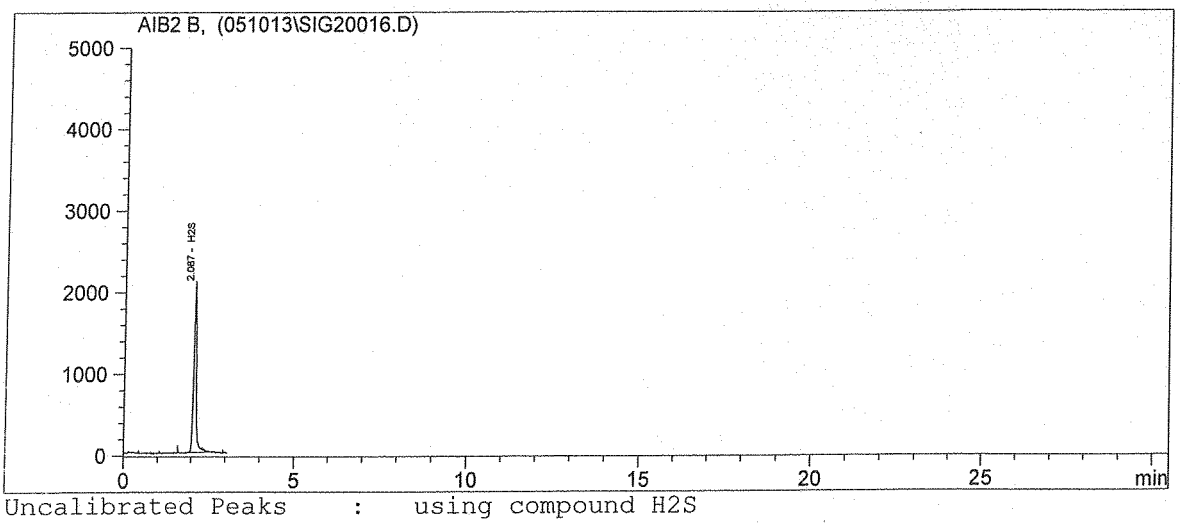
Ret Time [min]	Area	Amount [ppbV]	Name
0.000	0	0.000	H2S
0.000	0	0.000	COS
0.000	0	0.000	Methyl Mercaptan
0.000	0	0.000	Ethyl Mercaptan
0.000	0	0.000	Dimethyl Sulfide
0.000	0	0.000	Carbon Disulfide
0.000	0	0.000	Iso-propyl Mercaptan
0.000	0	0.000	Tert-butyl Mercaptan
0.000	0	0.000	N-propyl Mercaptan
0.000	0	0.000	Ethyl Methyl Sulfide
0.000	0	0.000	Sec-butyl Mercaptan
0.000	0	0.000	Thiophene
0.000	0	0.000	Iso-butyl Mercaptan
0.000	0	0.000	Diethyl Sulfide
0.000	0	0.000	N-butyl Mercaptan
0.000	0	0.000	Dimethyl Disulfide
0.000	0	0.000	2-Methylthiophene
0.000	0	0.000	3-Methylthiophene
0.000	0	0.000	Tetrahydrothiophene
0.000	0	0.000	n-Pentyl Mercaptan
0.000	0	0.000	2-Ethylthiophene
0.000	0	0.000	2,5-Dimethylthiophene
0.000	0	0.000	Diethyl Disulfide
0.000	0	0.000	n-Hexyl Mercaptan
0.000	0	0.000	2-Propylthiophene
0.000	0	0.000	Dimethyl Trisulfide
0.000	0	0.000	n-Heptyl Mercaptan
0.000	0	0.000	2-Butylthiophene
0.000	0	0.000	Dipropyl Disulfide
0.000	0	0.000	n-Octyl Mercaptan
0.000	0	0.000	Dipropyl Trisulfide
Totals:		0.000	

*** End of Report ***

Customized Report: D5504

Injection Date : 5/10/2013 2:08:35 PM
Sample Name : CCV 500ppbV
Multiplier : 1.00
Dilution : 1.00
Acq Operator : DH
Acq. Instrument : GC/SCD #10
Acq. Method : ASTM5504.M
Analysis Method : C:\HPCHEM\1\METHODS\D111912.M

Seq. Line : 16
Inj. Vol. :Manually



Uncalibrated Peaks : using compound H2S

Ret Time [min]	Area	Amount [ppbV]	Name
2.087	11322	485.711	H2S
0.000	0	0.000	COS
0.000	0	0.000	Methyl Mercaptan
0.000	0	0.000	Ethyl Mercaptan
0.000	0	0.000	Dimethyl Sulfide
0.000	0	0.000	Carbon Disulfide
0.000	0	0.000	Iso-propyl Mercaptan
0.000	0	0.000	Tert-butyl Mercaptan
0.000	0	0.000	N-propyl Mercaptan
0.000	0	0.000	Ethyl Methyl Sulfide
0.000	0	0.000	Sec-butyl Mercaptan
0.000	0	0.000	Thiophene
0.000	0	0.000	Iso-butyl Mercaptan
0.000	0	0.000	Diethyl Sulfide
0.000	0	0.000	N-butyl Mercaptan
0.000	0	0.000	Dimethyl Disulfide
0.000	0	0.000	2-Methylthiophene
0.000	0	0.000	3-Methylthiophene
0.000	0	0.000	Tetrahydrothiophene
0.000	0	0.000	n-Pentyl Mercaptan
0.000	0	0.000	2-Ethylthiophene
0.000	0	0.000	2,5-Dimethylthiophene
0.000	0	0.000	Diethyl Disulfide
0.000	0	0.000	n-Hexyl Mercaptan
0.000	0	0.000	2-Propylthiophene
0.000	0	0.000	Dimethyl Trisulfide
0.000	0	0.000	n-Heptyl Mercaptan
0.000	0	0.000	2-Butylthiophene
0.000	0	0.000	Dipropyl Disulfide
0.000	0	0.000	n-Octyl Mercaptan
0.000	0	0.000	Dipropyl Trisulfide
Totals:		485.711	

*** End of Report ***

5/10/13