

## LABORATORY REPORT

Client:	GEOSYNTEC CONSULTANTS, INC.	Date of Report:	06/14/04
Address:	2100 Main Street, Suite 150	Date Received:	05/21/04
	Huntington Beach, CA 92648	CAS Project No:	P2401075
Contact:	Mr. Mike Reardon	Purchase Order:	SB0202/31
Client Project ID: Ascon LF/SB0202/31			

Eighteen (18) Stainless Steel Summa Canisters labeled:

"AA-01-051704"	"AA-02-051704"	"AA-03-051704"	"AA-04-051704"
"AA-05-051704"	"AA-07-051704"	"AA-01-051804"	"AA-02-051804"
"AA-03-051804"	"AA-04-051804"	"AA-05-051804"	"AA-07-051804"
"AA-01-051904"	"AA-02-051904"	"AA-03-051904"	"AA-04-051904"
"AA-05-051904"	"AA-07-051904"		

The samples were received at the laboratory under chain of custody on May 21, 2004. The samples were received intact. Please refer to the sample acceptance check form for additional information. The results reported herein are applicable only to the condition of the samples at the time that they were received at the laboratory.

### C1 through C6 Hydrocarbon Analysis

The samples were analyzed per modified EPA Method TO-3 for C<sub>1</sub> through >C<sub>6</sub> hydrocarbons using a gas chromatograph equipped with a flame ionization detector (FID).

Reviewed and Approved:



Chris Parnell  
GCMS-VOA Team Leader  
Air Quality Laboratory

Reviewed and Approved:



Wade Henton  
GC-VOA Team Leader  
Air Quality Laboratory

CAS Project No: P2401075

Volatile Organic Compound Analysis

The samples were also analyzed by combined gas chromatography/mass spectrometry (GC/MS) for selected volatile organic compounds and tentatively identified compounds. The analyses were performed according to the methodology outlined in EPA Method TO-15. The analyses were performed by gas chromatography/mass spectrometry, utilizing a direct cryogenic trapping technique. The analytical systems used were comprised of Hewlett Packard Models 5972 GC/MS/DS and 5973 GC/MS/DS each interfaced to a Tekmar AutoCan Elite whole air inlet system/cryogenic concentrator. A 100% Dimethylpolysiloxane capillary column (RT<sub>x</sub>-1, Restek Corporation, Bellefonte, PA) was used to achieve chromatographic separation.

The results of analyses are given on the attached data sheets. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for utilization of less than the complete report.

# COLUMBIA ANALYTICAL SERVICES, INC.

## RESULTS OF ANALYSIS

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**Client:** GeoSyntec Consultants, Inc.  
**Client Sample ID:** AA-01-051704  
**Client Project ID:** Ascon LF/SB0202/31

CAS Project ID : P2401075  
CAS Sample ID : P2401075-001

**Test Code:** Modified EPA TO-3  
**Instrument ID:** HP5890II/GC8/FID  
**Analyst:** Wade Henton/Regan Lau  
**Sampling Media:** Summa Canister  
**Test Notes:**  
**Container ID:** AC00462

**Date Collected:** 5/17/04  
**Date Received:** 5/21/04  
**Date Analyzed:** 6/2/04  
**Volume(s) Analyzed:** 1.0 ml

Pi 1 = -4.2

Pf 1 = 3.5

D.F. = 1.73

Compound	Result ppmV	MRL ppmV	Data Qualifier
Methane	2.3	0.87	
C <sub>2</sub> as Ethane	ND	0.87	
C <sub>3</sub> as Propane	ND	0.87	
C <sub>4</sub> as n-Butane	ND	0.87	
C <sub>5</sub> as n-Pentane	ND	0.87	
C <sub>6</sub> as n-Hexane	ND	0.87	
C <sub>6</sub> + as n-Hexane	ND	1.7	

ND = Compound was analyzed for, but not detected above the **laboratory reporting limit**.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: KWH Date: 06/11/04

# COLUMBIA ANALYTICAL SERVICES, INC.

## RESULTS OF ANALYSIS

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**Client:** GeoSyntec Consultants, Inc.  
**Client Sample ID:** AA-02-051704  
**Client Project ID:** Ascon LF/SB0202/31

CAS Project ID : P2401075  
CAS Sample ID : P2401075-002

**Test Code:** Modified EPA TO-3  
**Instrument ID:** HP5890II/GC8/FID  
**Analyst:** Wade Henton/Regan Lau  
**Sampling Media:** Summa Canister  
**Test Notes:**  
**Container ID:** AC00319

**Date Collected:** 5/17/04  
**Date Received:** 5/21/04  
**Date Analyzed:** 6/2/04  
**Volume(s) Analyzed:** 1.0 ml

Pi 1 = -2.4      Pf 1 = 3.5

D.F. = 1.48

Compound	Result ppmV	MRL ppmV	Data Qualifier
Methane	2.2	0.74	
C <sub>2</sub> as Ethane	ND	0.74	
C <sub>3</sub> as Propane	ND	0.74	
C <sub>4</sub> as n-Butane	ND	0.74	
C <sub>5</sub> as n-Pentane	ND	0.74	
C <sub>6</sub> as n-Hexane	ND	0.74	
C <sub>6</sub> + as n-Hexane	ND	1.5	

ND = Compound was analyzed for, but not detected above the **laboratory reporting limit**.

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Verified By: KCH Date: 6/2/04

# COLUMBIA ANALYTICAL SERVICES, INC.

## RESULTS OF ANALYSIS

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**Client:** GeoSyntec Consultants, Inc.  
**Client Sample ID:** AA-03-051704  
**Client Project ID:** Ascon LF/SB0202/31

CAS Project ID : P2401075  
 CAS Sample ID : P2401075-003

**Test Code:** Modified EPA TO-3  
**Instrument ID:** HP5890II/GC8/FID  
**Analyst:** Wade Henton/Regan Lau  
**Sampling Media:** Summa Canister  
**Test Notes:**  
**Container ID:** AC00608

**Date Collected:** 5/17/04  
**Date Received:** 5/21/04  
**Date Analyzed:** 6/2/04  
**Volume(s) Analyzed:** 1.0 ml

Pi 1 = -4.4

Pf 1 = 3.5

D.F. = 1.77

Compound	Result ppmV	MRL ppmV	Data Qualifier
Methane	2.5	0.88	
C <sub>2</sub> as Ethane	ND	0.88	
C <sub>3</sub> as Propane	ND	0.88	
C <sub>4</sub> as n-Butane	ND	0.88	
C <sub>5</sub> as n-Pentane	ND	0.88	
C <sub>6</sub> as n-Hexane	ND	0.88	
C <sub>6</sub> <sup>+</sup> as n-Hexane	ND	1.8	

ND = Compound was analyzed for, but not detected above the **laboratory reporting limit**.

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Verified By: KLH Date: 6/11/04

# COLUMBIA ANALYTICAL SERVICES, INC.

## RESULTS OF ANALYSIS

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**Client:** GeoSyntec Consultants, Inc.  
**Client Sample ID:** AA-04-051704  
**Client Project ID:** Ascon LF/SB0202/31

CAS Project ID : P2401075  
CAS Sample ID : P2401075-004

**Test Code:** Modified EPA TO-3  
**Instrument ID:** HP5890II/GC8/FID  
**Analyst:** Wade Henton/Regan Lau  
**Sampling Media:** Summa Canister  
**Test Notes:**  
**Container ID:** AC00416

**Date Collected:** 5/17/04  
**Date Received:** 5/21/04  
**Date Analyzed:** 6/2/04  
**Volume(s) Analyzed:** 1.0 ml

Pi 1 = -3.2      Pf 1 = 3.5

D.F. = 1.58

Compound	Result ppmV	MRL ppmV	Data Qualifier
Methane	2.3	0.79	
C <sub>2</sub> as Ethane	ND	0.79	
C <sub>3</sub> as Propane	ND	0.79	
C <sub>4</sub> as n-Butane	ND	0.79	
C <sub>5</sub> as n-Pentane	ND	0.79	
C <sub>6</sub> as n-Hexane	ND	0.79	
C <sub>6</sub> + as n-Hexane	ND	1.6	

ND = Compound was analyzed for, but not detected above the **laboratory reporting limit**.

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Verified By: KUH Date: 6/2/04

# COLUMBIA ANALYTICAL SERVICES, INC.

## RESULTS OF ANALYSIS

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**Client:** GeoSyntec Consultants, Inc.  
**Client Sample ID:** AA-05-051704  
**Client Project ID:** Ascon LF/SB0202/31

CAS Project ID : P2401075  
CAS Sample ID : P2401075-005

**Test Code:** Modified EPA TO-3  
**Instrument ID:** HP5890II/GC8/FID  
**Analyst:** Wade Henton/Regan Lau  
**Sampling Media:** Summa Canister  
**Test Notes:**  
**Container ID:** AC00004

**Date Collected:** 5/17/04  
**Date Received:** 5/21/04  
**Date Analyzed:** 6/2/04  
**Volume(s) Analyzed:** 1.0 ml

Pi 1 = -4.6      Pf 1 = 3.5

D.F. = 1.80

Compound	Result ppmV	MRL ppmV	Data Qualifier
Methane	2.3	0.90	
C <sub>2</sub> as Ethane	ND	0.90	
C <sub>3</sub> as Propane	ND	0.90	
C <sub>4</sub> as n-Butane	ND	0.90	
C <sub>5</sub> as n-Pentane	ND	0.90	
C <sub>6</sub> as n-Hexane	ND	0.90	
C <sub>6</sub> <sup>+</sup> as n-Hexane	ND	1.8	

ND = Compound was analyzed for, but not detected above the **laboratory reporting limit**.

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Verified By:         KMH         Date: 6/2/04

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# COLUMBIA ANALYTICAL SERVICES, INC.

## RESULTS OF ANALYSIS

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**Client:** GeoSyntec Consultants, Inc.  
**Client Sample ID:** AA-07-051704  
**Client Project ID:** Ascon LF/SB0202/31

CAS Project ID : P2401075  
CAS Sample ID : P2401075-006

**Test Code:** Modified EPA TO-3  
**Instrument ID:** HP5890II/GC8/FID  
**Analyst:** Wade Henton/Regan Lau  
**Sampling Media:** Summa Canister  
**Test Notes:**  
**Container ID:** AC00357

**Date Collected:** 5/17/04  
**Date Received:** 5/21/04  
**Date Analyzed:** 6/2/04  
**Volume(s) Analyzed:** 1.0 ml

Pi 1 = -4.0      Pf 1 = 3.5

D.F. = 1.70

Compound	Result ppmV	MRL ppmV	Data Qualifier
Methane	2.6	0.85	
C <sub>2</sub> as Ethane	ND	0.85	
C <sub>3</sub> as Propane	ND	0.85	
C <sub>4</sub> as n-Butane	ND	0.85	
C <sub>5</sub> as n-Pentane	ND	0.85	
C <sub>6</sub> as n-Hexane	ND	0.85	
C <sub>6</sub> <sup>+</sup> as n-Hexane	ND	1.7	

ND = Compound was analyzed for, but not detected above the **laboratory reporting limit**.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: KLH Date: 6/11/04



# COLUMBIA ANALYTICAL SERVICES, INC.

## RESULTS OF ANALYSIS

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**Client:** GeoSyntec Consultants, Inc.  
**Client Sample ID:** AA-01-051804  
**Client Project ID:** Ascon LF/SB0202/31

CAS Project ID : P2401075  
CAS Sample ID : P2401075-007

**Test Code:** Modified EPA TO-3  
**Instrument ID:** HP5890II/GC8/FID  
**Analyst:** Wade Henton/Regan Lau  
**Sampling Media:** Summa Canister  
**Test Notes:**  
**Container ID:** AC00402

**Date Collected:** 5/18/04  
**Date Received:** 5/21/04  
**Date Analyzed:** 6/2/04  
**Volume(s) Analyzed:** 1.0 ml

Pi 1 = -8.1      Pf 1 = 1.0

D.F. = 2.38

Compound	Result ppmV	MRL ppmV	Data Qualifier
Methane	2.4	1.2	
C <sub>2</sub> as Ethane	ND	1.2	
C <sub>3</sub> as Propane	ND	1.2	
C <sub>4</sub> as n-Butane	ND	1.2	
C <sub>5</sub> as n-Pentane	ND	1.2	
C <sub>6</sub> as n-Hexane	ND	1.2	
C <sub>6</sub> + as n-Hexane	ND	2.4	

ND = Compound was analyzed for, but not detected above the **laboratory reporting limit**.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: KUH Date: 6/2/04

# COLUMBIA ANALYTICAL SERVICES, INC.

## RESULTS OF ANALYSIS

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**Client:** GeoSyntec Consultants, Inc.  
**Client Sample ID:** AA-02-051804  
**Client Project ID:** Ascon LF/SB0202/31

CAS Project ID : P2401075  
CAS Sample ID : P2401075-008

**Test Code:** Modified EPA TO-3  
**Instrument ID:** HP5890II/GC8/FID  
**Analyst:** Wade Henton/Regan Lau  
**Sampling Media:** Summa Canister  
**Test Notes:**  
**Container ID:** AC00546

**Date Collected:** 5/18/04  
**Date Received:** 5/21/04  
**Date Analyzed:** 6/2/04  
**Volume(s) Analyzed:** 1.0 ml

Pi 1 = -9.2      Pf 1 = 1.0

D.F. = 2.85

Compound	Result ppmV	MRL ppmV	Data Qualifier
Methane	2.7	1.4	
C <sub>2</sub> as Ethane	ND	1.4	
C <sub>3</sub> as Propane	ND	1.4	
C <sub>4</sub> as n-Butane	ND	1.4	
C <sub>5</sub> as n-Pentane	ND	1.4	
C <sub>6</sub> as n-Hexane	ND	1.4	
C <sub>6</sub> + as n-Hexane	ND	2.9	

ND = Compound was analyzed for, but not detected above the **laboratory reporting limit**.

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Verified By: KMH Date: 06/11/04

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# COLUMBIA ANALYTICAL SERVICES, INC.

## RESULTS OF ANALYSIS

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**Client:** GeoSyntec Consultants, Inc.  
**Client Sample ID:** AA-03-051804  
**Client Project ID:** Ascon LF/SB0202/31

CAS Project ID : P2401075  
CAS Sample ID : P2401075-009

**Test Code:** Modified EPA TO-3  
**Instrument ID:** HP5890II/GC8/FID  
**Analyst:** Wade Henton/Regan Lau  
**Sampling Media:** Summa Canister  
**Test Notes:**  
**Container ID:** AC00625

**Date Collected:** 5/18/04  
**Date Received:** 5/21/04  
**Date Analyzed:** 6/2/04  
**Volume(s) Analyzed:** 1.0 ml

Pi 1 = -11.1      Pf 1 = 1.0

D.F. = 4.36

Compound	Result ppmV	MRL ppmV	Data Qualifier
Methane	2.9	2.2	
C <sub>2</sub> as Ethane	ND	2.2	
C <sub>3</sub> as Propane	ND	2.2	
C <sub>4</sub> as n-Butane	ND	2.2	
C <sub>5</sub> as n-Pentane	ND	2.2	
C <sub>6</sub> as n-Hexane	ND	2.2	
C <sub>6</sub> + as n-Hexane	ND	4.4	

ND = Compound was analyzed for, but not detected above the **laboratory reporting limit**.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: KAH Date: 6/11/04

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# COLUMBIA ANALYTICAL SERVICES, INC.

## RESULTS OF ANALYSIS

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**Client:** GeoSyntec Consultants, Inc.  
**Client Sample ID:** AA-04-051804  
**Client Project ID:** Ascon LF/SB0202/31

CAS Project ID : P2401075  
CAS Sample ID : P2401075-010

**Test Code:** Modified EPA TO-3  
**Instrument ID:** HP5890II/GC8/FID  
**Analyst:** Wade Henton/Regan Lau  
**Sampling Media:** Summa Canister  
**Test Notes:**  
**Container ID:** AC00117

**Date Collected:** 5/18/04  
**Date Received:** 5/21/04  
**Date Analyzed:** 6/2/04  
**Volume(s) Analyzed:** 1.0 ml

Pi 1 = -7.0      Pf 1 = 1.0

D.F. = 2.04

Compound	Result ppmV	MRL ppmV	Data Qualifier
Methane	2.6	1.0	
C <sub>2</sub> as Ethane	ND	1.0	
C <sub>3</sub> as Propane	ND	1.0	
C <sub>4</sub> as n-Butane	ND	1.0	
C <sub>5</sub> as n-Pentane	ND	1.0	
C <sub>6</sub> as n-Hexane	ND	1.0	
C <sub>6</sub> + as n-Hexane	ND	2.0	

ND = Compound was analyzed for, but not detected above the **laboratory reporting limit**.

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Verified By: LSH Date: 06/11/04

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# COLUMBIA ANALYTICAL SERVICES, INC.

## RESULTS OF ANALYSIS

Page 1 of 1

**Client:** GeoSyntec Consultants, Inc.

**Client Sample ID:** AA-05-051804

**Client Project ID:** Ascon LF/SB0202/31

CAS Project ID : P2401075

CAS Sample ID : P2401075-011

**Test Code:** Modified EPA TO-3

**Instrument ID:** HP5890II/GC8/FID

**Analyst:** Wade Henton/Regan Lau

**Sampling Media:** Summa Canister

**Test Notes:**

**Container ID:** AC00149

Date Collected: 5/18/04

Date Received: 5/21/04

Date Analyzed: 6/2/04

Volume(s) Analyzed: 1.0 ml

Pi 1 = -10.6

Pf 1 = 1.0

D.F. = 3.83

Compound	Result ppmV	MRL ppmV	Data Qualifier
Methane	3.4	1.9	
C <sub>2</sub> as Ethane	ND	1.9	
C <sub>3</sub> as Propane	ND	1.9	
C <sub>4</sub> as n-Butane	ND	1.9	
C <sub>5</sub> as n-Pentane	ND	1.9	
C <sub>6</sub> as n-Hexane	ND	1.9	
C <sub>6</sub> <sup>+</sup> as n-Hexane	ND	3.8	

ND = Compound was analyzed for, but not detected above the **laboratory reporting limit**.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: KMH Date: 06/11/04

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# COLUMBIA ANALYTICAL SERVICES, INC.

## RESULTS OF ANALYSIS

Page 1 of 1

**Client:** GeoSyntec Consultants, Inc.  
**Client Sample ID:** AA-07-051804  
**Client Project ID:** Ascon LF/SB0202/31

CAS Project ID : P2401075  
CAS Sample ID : P2401075-012

**Test Code:** Modified EPA TO-3  
**Instrument ID:** HP5890II/GC8/FID  
**Analyst:** Wade Henton/Regan Lau  
**Sampling Media:** Summa Canister  
**Test Notes:**  
**Container ID:** AC00443

**Date Collected:** 5/18/04  
**Date Received:** 5/21/04  
**Date Analyzed:** 6/2/04  
**Volume(s) Analyzed:** 1.0 ml

Pi 1 = -11.2      Pf 1 = 1.0

D.F. = 4.49

Compound	Result ppmV	MRL ppmV	Data Qualifier
Methane	3.8	2.2	
C <sub>2</sub> as Ethane	ND	2.2	
C <sub>3</sub> as Propane	ND	2.2	
C <sub>4</sub> as n-Butane	ND	2.2	
C <sub>5</sub> as n-Pentane	ND	2.2	
C <sub>6</sub> as n-Hexane	ND	2.2	
C <sub>6</sub> + as n-Hexane	ND	4.5	

ND = Compound was analyzed for, but not detected above the **laboratory reporting limit**.

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Verified By: Ken Date: 06/11/04

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# COLUMBIA ANALYTICAL SERVICES, INC.

## RESULTS OF ANALYSIS

Page 1 of 1

**Client:** GeoSyntec Consultants, Inc.  
**Client Sample ID:** AA-01-051904  
**Client Project ID:** Ascon LF/SB0202/31

CAS Project ID : P2401075  
CAS Sample ID : P2401075-013

**Test Code:** Modified EPA TO-3  
**Instrument ID:** HP5890II/GC8/FID  
**Analyst:** Wade Henton/Regan Lau  
**Sampling Media:** Summa Canister  
**Test Notes:**  
**Container ID:** AC00202

**Date Collected:** 5/19/04  
**Date Received:** 5/21/04  
**Date Analyzed:** 6/2/04  
**Volume(s) Analyzed:** 1.0 ml

Pi 1 = 0.1

Pf 1 = 3.5

D.F. = 1.23

Compound	Result ppmV	MRL ppmV	Data Qualifier
Methane	2.3	0.61	
C <sub>2</sub> as Ethane	ND	0.61	
C <sub>3</sub> as Propane	ND	0.61	
C <sub>4</sub> as n-Butane	ND	0.61	
C <sub>5</sub> as n-Pentane	ND	0.61	
C <sub>6</sub> as n-Hexane	ND	0.61	
C <sub>6</sub> + as n-Hexane	ND	1.2	

ND = Compound was analyzed for, but not detected above the **laboratory reporting limit**.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: KUH Date: 6/2/04

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# COLUMBIA ANALYTICAL SERVICES, INC.

## RESULTS OF ANALYSIS

Page 1 of 1

**Client:** GeoSyntec Consultants, Inc.  
**Client Sample ID:** AA-01-051904  
**Client Project ID:** Ascon LF/SB0202/31

CAS Project ID : P2401075  
CAS Sample ID : P2401075-013DUP

**Test Code:** Modified EPA TO-3  
**Instrument ID:** HP5890II/GC8/FID  
**Analyst:** Wade Henton/Regan Lau  
**Sampling Media:** Summa Canister  
**Test Notes:**  
**Container ID:** AC00202

**Date Collected:** 5/19/04  
**Date Received:** 5/21/04  
**Date Analyzed:** 6/2/04  
**Volume(s) Analyzed:** 1.0 ml

Pi 1 = 0.1      Pf 1 = 3.5

D.F. = 1.23

Compound	Result ppmV	MRL ppmV	Data Qualifier
Methane	2.1	0.61	
C <sub>2</sub> as Ethane	ND	0.61	
C <sub>3</sub> as Propane	ND	0.61	
C <sub>4</sub> as n-Butane	ND	0.61	
C <sub>5</sub> as n-Pentane	ND	0.61	
C <sub>6</sub> as n-Hexane	ND	0.61	
C <sub>6</sub> + as n-Hexane	ND	1.2	

ND = Compound was analyzed for, but not detected above the **laboratory reporting limit**.

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Verified By: KLH Date: 6/1/04



# COLUMBIA ANALYTICAL SERVICES, INC.

## RESULTS OF ANALYSIS

Page 1 of 1

**Client:** GeoSyntec Consultants, Inc.  
**Client Sample ID:** AA-02-051904  
**Client Project ID:** Ascon LF/SB0202/31

CAS Project ID : P2401075  
CAS Sample ID : P2401075-014

**Test Code:** Modified EPA TO-3  
**Instrument ID:** HP5890II/GC8/FID  
**Analyst:** Wade Henton/Regan Lau  
**Sampling Media:** Summa Canister  
**Test Notes:**  
**Container ID:** AC00616

**Date Collected:** 5/19/04  
**Date Received:** 5/21/04  
**Date Analyzed:** 6/2/04  
**Volume(s) Analyzed:** 1.0 ml

Pi 1 = -3.7      Pf 1 = 3.6

D.F. = 1.66

Compound	Result ppmV	MRL ppmV	Data Qualifier
Methane	2.2	0.83	
C <sub>2</sub> as Ethane	ND	0.83	
C <sub>3</sub> as Propane	ND	0.83	
C <sub>4</sub> as n-Butane	ND	0.83	
C <sub>5</sub> as n-Pentane	ND	0.83	
C <sub>6</sub> as n-Hexane	ND	0.83	
C <sub>6</sub> + as n-Hexane	ND	1.7	

ND = Compound was analyzed for, but not detected above the **laboratory reporting limit**.

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Verified By: kuh Date: 6/2/04

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# COLUMBIA ANALYTICAL SERVICES, INC.

## RESULTS OF ANALYSIS

Page 1 of 1

**Client:** GeoSyntec Consultants, Inc.  
**Client Sample ID:** AA-03-051904  
**Client Project ID:** Ascon LF/SB0202/31

CAS Project ID : P2401075  
CAS Sample ID : P2401075-015

**Test Code:** Modified EPA TO-3  
**Instrument ID:** HP5890II/GC8/FID  
**Analyst:** Wade Henton/Regan Lau  
**Sampling Media:** Summa Canister  
**Test Notes:**  
**Container ID:** AC00201

**Date Collected:** 5/19/04  
**Date Received:** 5/21/04  
**Date Analyzed:** 6/2/04  
**Volume(s) Analyzed:** 1.0 ml

Pi 1 = -4.3

Pf 1 = 3.5

D.F. = 1.75

Compound	Result ppmV	MRL ppmV	Data Qualifier
Methane	2.6	0.88	
C <sub>2</sub> as Ethane	ND	0.88	
C <sub>3</sub> as Propane	ND	0.88	
C <sub>4</sub> as n-Butane	ND	0.88	
C <sub>5</sub> as n-Pentane	ND	0.88	
C <sub>6</sub> as n-Hexane	ND	0.88	
C <sub>6</sub> + as n-Hexane	ND	1.8	

ND = Compound was analyzed for, but not detected above the **laboratory reporting limit**.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: KUH Date: 6/1/04

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# COLUMBIA ANALYTICAL SERVICES, INC.

## RESULTS OF ANALYSIS

Page 1 of 1

**Client:** GeoSyntec Consultants, Inc.  
**Client Sample ID:** AA-04-051904  
**Client Project ID:** Ascon LF/SB0202/31

CAS Project ID : P2401075  
CAS Sample ID : P2401075-016

**Test Code:** Modified EPA TO-3  
**Instrument ID:** HP5890II/GC8/FID  
**Analyst:** Wade Henton/Regan Lau  
**Sampling Media:** Summa Canister  
**Test Notes:**  
**Container ID:** AC00297

**Date Collected:** 5/19/04  
**Date Received:** 5/21/04  
**Date Analyzed:** 6/2/04  
**Volume(s) Analyzed:** 1.0 ml

Pi 1 = -3.9      Pf 1 = 3.5

D.F. = 1.69

Compound	Result ppmV	MRL ppmV	Data Qualifier
Methane	2.4	0.84	
C <sub>2</sub> as Ethane	ND	0.84	
C <sub>3</sub> as Propane	ND	0.84	
C <sub>4</sub> as n-Butane	ND	0.84	
C <sub>5</sub> as n-Pentane	ND	0.84	
C <sub>6</sub> as n-Hexane	ND	0.84	
C <sub>6</sub> + as n-Hexane	ND	1.7	

ND = Compound was analyzed for, but not detected above the **laboratory reporting limit**.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: KUH Date: 6/2/04

# COLUMBIA ANALYTICAL SERVICES, INC.

## RESULTS OF ANALYSIS

Page 1 of 1

**Client:** GeoSyntec Consultants, Inc.  
**Client Sample ID:** AA-05-051904  
**Client Project ID:** Ascon LF/SB0202/31

CAS Project ID : P2401075  
CAS Sample ID : P2401075-017

**Test Code:** Modified EPA TO-3  
**Instrument ID:** HP5890II/GC8/FID  
**Analyst:** Wade Henton/Regan Lau  
**Sampling Media:** Summa Canister  
**Test Notes:**  
**Container ID:** AC00479

**Date Collected:** 5/19/04  
**Date Received:** 5/21/04  
**Date Analyzed:** 6/2/04  
**Volume(s) Analyzed:** 1.0 ml

Pi 1 = -4.0

Pf 1 = 3.5

D.F. = 1.70

Compound	Result ppmV	MRL ppmV	Data Qualifier
Methane	2.2	0.85	
C <sub>2</sub> as Ethane	ND	0.85	
C <sub>3</sub> as Propane	ND	0.85	
C <sub>4</sub> as n-Butane	ND	0.85	
C <sub>5</sub> as n-Pentane	ND	0.85	
C <sub>6</sub> as n-Hexane	ND	0.85	
C <sub>6</sub> <sup>+</sup> as n-Hexane	ND	1.7	

ND = Compound was analyzed for, but not detected above the **laboratory reporting limit**.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: KUH Date: 6/1/04

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# COLUMBIA ANALYTICAL SERVICES, INC.

## RESULTS OF ANALYSIS

Page 1 of 1

**Client:** GeoSyntec Consultants, Inc.  
**Client Sample ID:** AA-07-051904  
**Client Project ID:** Ascon LF/SB0202/31

CAS Project ID : P2401075  
CAS Sample ID : P2401075-018

**Test Code:** Modified EPA TO-3  
**Instrument ID:** HP5890II/GC8/FID  
**Analyst:** Wade Henton/Regan Lau  
**Sampling Media:** Summa Canister  
**Test Notes:**  
**Container ID:** AC00086

**Date Collected:** 5/19/04  
**Date Received:** 5/21/04  
**Date Analyzed:** 6/2/04  
**Volume(s) Analyzed:** 1.0 ml

Pi 1 = -4.4 Pf 1 = 3.5

D.F. = 1.77

Compound	Result ppmV	MRL ppmV	Data Qualifier
Methane	2.7	0.88	
C <sub>2</sub> as Ethane	ND	0.88	
C <sub>3</sub> as Propane	ND	0.88	
C <sub>4</sub> as n-Butane	ND	0.88	
C <sub>5</sub> as n-Pentane	ND	0.88	
C <sub>6</sub> as n-Hexane	ND	0.88	
C <sub>6</sub> + as n-Hexane	ND	1.8	

ND = Compound was analyzed for, but not detected above the **laboratory reporting limit**.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: Keith Date: 6/11/04

# COLUMBIA ANALYTICAL SERVICES, INC.

## RESULTS OF ANALYSIS

Page 1 of 1

**Client:** GeoSyntec Consultants, Inc.  
**Client Sample ID:** Method Blank  
**Client Project ID:** Ascon LF/SB0202/31

CAS Project ID : P2401075  
CAS Sample ID : P040602-MB

**Test Code:** Modified EPA TO-3  
**Instrument ID:** HP5890II/GC8/FID  
**Analyst:** Wade Henton/Regan Lau  
**Sampling Media:** Summa Canister  
**Test Notes:**

**Date Collected:** NA  
**Date Received:** NA  
**Date Analyzed:** 6/02/04  
**Volume(s) Analyzed:** 1.0 ml

D.F. = 1.00

Compound	Result ppmV	MRL ppmV	Data Qualifier
Methane	ND	0.50	
C <sub>2</sub> as Ethane	ND	0.50	
C <sub>3</sub> as Propane	ND	0.50	
C <sub>4</sub> as n-Butane	ND	0.50	
C <sub>5</sub> as n-Pentane	ND	0.50	
C <sub>6</sub> as n-Hexane	ND	0.50	
C <sub>6</sub> + as n-Hexane	ND	1.0	

ND = Compound was analyzed for, but not detected above the **laboratory reporting limit**.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: KLH Date: 6/2/04

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# COLUMBIA ANALYTICAL SERVICES, INC.

## RESULTS OF ANALYSIS

Page 1 of 3

**Client:** GeoSyntec Consultants, Inc.  
**Client Sample ID:** AA-01-051704  
**Client Project ID:** Ascon LF/SB0202/31

**CAS Project ID:** P2401075  
**CAS Sample ID:** P2401075-001

**Test Code:** EPA TO-15  
**Instrument ID:** Tekmar AUTOCAN/HP5973/HP6890/MS3  
**Analyst:** Chris Parnell/Aristotle Bragas  
**Sampling Media:** Summa Canister  
**Test Notes:**  
**Container ID:** AC00462

**Date Collected:** 5/17/04  
**Date Received:** 5/21/04  
**Date(s) Analyzed:** 6/5/04  
**Volume(s) Analyzed:** 1.00 Liter(s)

Pi 1 = -4.2      Pf 1 = 3.5

D.F. = 1.73

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
74-87-3	Chloromethane	ND	0.87	ND	0.42	
75-01-4	Vinyl Chloride	ND	0.87	ND	0.34	
106-99-0	1,3-Butadiene	ND	0.87	ND	0.39	
74-83-9	Bromomethane	ND	0.87	ND	0.22	
75-00-3	Chloroethane	ND	0.87	ND	0.33	
67-64-1	Acetone	19	8.7	7.9	3.6	
75-69-4	Trichlorofluoromethane	1.1	0.87	0.19	0.15	
107-13-1	Acrylonitrile	ND	0.87	ND	0.40	
75-35-4	1,1-Dichloroethene	ND	0.87	ND	0.22	
75-09-2	Methylene chloride	3.8	0.87	1.1	0.25	
76-13-1	Trichlorotrifluoroethane	ND	0.87	ND	0.11	
75-15-0	Carbon Disulfide	ND	0.87	ND	0.28	
156-60-5	trans-1,2-Dichloroethene	ND	0.87	ND	0.22	
75-34-3	1,1-Dichloroethane	ND	0.87	ND	0.21	
1634-04-4	Methyl tert-Butyl Ether	ND	0.87	ND	0.24	
108-05-4	Vinyl Acetate	5.1	0.87	1.4	0.25	
78-93-3	2-Butanone (MEK)	4.8	0.87	1.6	0.29	
156-59-2	cis-1,2-Dichloroethene	ND	0.87	ND	0.22	
67-66-3	Chloroform	ND	0.87	ND	0.18	
107-06-2	1,2-Dichloroethane	ND	0.87	ND	0.21	
71-55-6	1,1,1-Trichloroethane	ND	0.87	ND	0.16	
71-43-2	Benzene	ND	0.87	ND	0.27	
56-23-5	Carbon Tetrachloride	ND	0.87	ND	0.14	

ND = Compound was analyzed for, but not detected above the **laboratory reporting limit**.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: KUH Date: 6/11/04

# COLUMBIA ANALYTICAL SERVICES, INC.

## RESULTS OF ANALYSIS

Page 2 of 3

**Client:** GeoSyntec Consultants, Inc.

**Client Sample ID:** AA-01-051704

**Client Project ID:** Ascon LF/SB0202/31

CAS Project ID: P2401075

CAS Sample ID: P2401075-001

**Test Code:** EPA TO-15

**Instrument ID:** Tekmar AUTOCAN/HP5973/HP6890/MS3

**Analyst:** Chris Parnell/Aristotle Bragasin

**Sampling Media:** Summa Canister

**Test Notes:**

**Container ID:** AC00462

Date Collected: 5/17/04

Date Received: 5/21/04

Date(s) Analyzed: 6/5/04

Volume(s) Analyzed: 1.00 Liter(s)

Pi 1 = -4.2

Pf 1 = 3.5

D.F. = 1.73

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
78-87-5	1,2-Dichloropropane	ND	0.87	ND	0.19	
75-27-4	Bromodichloromethane	ND	0.87	ND	0.13	
79-01-6	Trichloroethene	ND	0.87	ND	0.16	
10061-01-5	cis-1,3-Dichloropropene	ND	0.87	ND	0.19	
108-10-1	4-Methyl-2-pentanone	ND	0.87	ND	0.21	
10061-02-6	trans-1,3-Dichloropropene	ND	0.87	ND	0.19	
79-00-5	1,1,2-Trichloroethane	ND	0.87	ND	0.16	
108-88-3	Toluene	5.9	0.87	1.6	0.23	
591-78-6	2-Hexanone	ND	0.87	ND	0.21	
124-48-1	Dibromochloromethane	ND	0.87	ND	0.10	
106-93-4	1,2-Dibromoethane	ND	0.87	ND	0.11	
127-18-4	Tetrachloroethene	ND	0.87	ND	0.13	
108-90-7	Chlorobenzene	ND	0.87	ND	0.19	
100-41-4	Ethylbenzene	ND	0.87	ND	0.20	
136777-61-2	m,p-Xylenes	ND	1.7	ND	0.40	
75-25-2	Bromoform	ND	0.87	ND	0.084	
100-42-5	Styrene	ND	0.87	ND	0.20	
95-47-6	o-Xylene	ND	0.87	ND	0.20	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.87	ND	0.13	
541-73-1	1,3-Dichlorobenzene	ND	0.87	ND	0.14	
106-46-7	1,4-Dichlorobenzene	ND	0.87	ND	0.14	
95-50-1	1,2-Dichlorobenzene	ND	0.87	ND	0.14	

ND = Compound was analyzed for, but not detected above the **laboratory reporting limit**.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: KLH Date: 6/1/04

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# COLUMBIA ANALYTICAL SERVICES, INC.

## RESULTS OF ANALYSIS

Page 3 of 3

**Client:** GeoSyntec Consultants, Inc.  
**Client Sample ID:** AA-01-051704  
**Client Project ID:** Ascon LF/SB0202/31

CAS Project ID: P2401075  
CAS Sample ID: P2401075-001

### Tentatively Identified Compounds

**Test Code:** EPA TO-15  
**Instrument ID:** Tekmar AUTOCAN/HP5973/HP6890/MS3  
**Analyst:** Chris Parnell/Aristotle Bragasin  
**Sampling Media:** Summa Canister  
**Test Notes:** T  
**Container ID:** AC00462

**Date Collected:** 5/17/04  
**Date Received:** 5/21/04  
**Date Analyzed:** 6/5/04  
**Volume(s) Analyzed:** 1.00 Liter(s)

Pi 1 = -4.2

Pf 1 = 3.5

D.F. = 1.73

GC / MS Ret. Time	Compound Identification	Concentration µg/m³	Data Qualifier
5.39	Acetaldehyde	7	
6.29	Ethanol	20	
9.57	Acetic Acid	10	
23.99	Unidentified Siloxane (Possible Artifact)	4	
27.19	Unidentified Siloxane (Possible Artifact)	5	

T = Analyte is a tentatively identified compound, result is estimated.

Verified By:                      Date: 06/11/04

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# COLUMBIA ANALYTICAL SERVICES, INC.

## RESULTS OF ANALYSIS

Page 1 of 3

**Client:** GeoSyntec Consultants, Inc.  
**Client Sample ID:** AA-02-051704  
**Client Project ID:** Ascon LF/SB0202/31

**CAS Project ID:** P2401075  
**CAS Sample ID:** P2401075-002

**Test Code:** EPA TO-15  
**Instrument ID:** Tekmar AUTOCAN/HP5973/HP6890/MS3  
**Analyst:** Chris Parnell/Aristotle Bragas  
**Sampling Media:** Summa Canister  
**Test Notes:**  
**Container ID:** AC00319

**Date Collected:** 5/17/04  
**Date Received:** 5/21/04  
**Date(s) Analyzed:** 6/5/04  
**Volume(s) Analyzed:** 1.00 Liter(s)

Pi 1 = -2.4

Pf 1 = 3.5

D.F. = 1.48

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
74-87-3	Chloromethane	0.75	0.74	0.37	0.36	
75-01-4	Vinyl Chloride	ND	0.74	ND	0.29	
106-99-0	1,3-Butadiene	ND	0.74	ND	0.33	
74-83-9	Bromomethane	ND	0.74	ND	0.19	
75-00-3	Chloroethane	ND	0.74	ND	0.28	
67-64-1	Acetone	8.9	7.4	3.7	3.1	
75-69-4	Trichlorofluoromethane	1.1	0.74	0.19	0.13	
107-13-1	Acrylonitrile	ND	0.74	ND	0.34	
75-35-4	1,1-Dichloroethene	ND	0.74	ND	0.19	
75-09-2	Methylene chloride	ND	0.74	ND	0.21	
76-13-1	Trichlorotrifluoroethane	ND	0.74	ND	0.10	
75-15-0	Carbon Disulfide	ND	0.74	ND	0.24	
156-60-5	trans-1,2-Dichloroethene	ND	0.74	ND	0.19	
75-34-3	1,1-Dichloroethane	ND	0.74	ND	0.18	
1634-04-4	Methyl tert-Butyl Ether	ND	0.74	ND	0.21	
108-05-4	Vinyl Acetate	2.9	0.74	0.82	0.21	
78-93-3	2-Butanone (MEK)	1.3	0.74	0.44	0.25	
156-59-2	cis-1,2-Dichloroethene	ND	0.74	ND	0.19	
67-66-3	Chloroform	ND	0.74	ND	0.15	
107-06-2	1,2-Dichloroethane	ND	0.74	ND	0.18	
71-55-6	1,1,1-Trichloroethane	ND	0.74	ND	0.14	
71-43-2	Benzene	ND	0.74	ND	0.23	
56-23-5	Carbon Tetrachloride	ND	0.74	ND	0.12	

ND = Compound was analyzed for, but not detected above the **laboratory reporting limit**.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: EMH Date: 6/11/04

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# COLUMBIA ANALYTICAL SERVICES, INC.

## RESULTS OF ANALYSIS

Page 2 of 3

**Client:** GeoSyntec Consultants, Inc.  
**Client Sample ID:** AA-02-051704  
**Client Project ID:** Ascon LF/SB0202/31

**CAS Project ID:** P2401075  
**CAS Sample ID:** P2401075-002

**Test Code:** EPA TO-15  
**Instrument ID:** Tekmar AUTOCAN/HP5973/HP6890/MS3  
**Analyst:** Chris Parnell/Aristotle Bragasin  
**Sampling Media:** Summa Canister  
**Test Notes:**  
**Container ID:** AC00319

**Date Collected:** 5/17/04  
**Date Received:** 5/21/04  
**Date(s) Analyzed:** 6/5/04  
**Volume(s) Analyzed:** 1.00 Liter(s)

Pi 1 = -2.4

Pf 1 = 3.5

D.F. = 1.48

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
78-87-5	1,2-Dichloropropane	ND	0.74	ND	0.16	
75-27-4	Bromodichloromethane	ND	0.74	ND	0.11	
79-01-6	Trichloroethene	ND	0.74	ND	0.14	
10061-01-5	cis-1,3-Dichloropropene	ND	0.74	ND	0.16	
108-10-1	4-Methyl-2-pentanone	ND	0.74	ND	0.18	
10061-02-6	trans-1,3-Dichloropropene	ND	0.74	ND	0.16	
79-00-5	1,1,2-Trichloroethane	ND	0.74	ND	0.14	
108-88-3	Toluene	1.2	0.74	0.31	0.20	
591-78-6	2-Hexanone	ND	0.74	ND	0.18	
124-48-1	Dibromochloromethane	ND	0.74	ND	0.09	
106-93-4	1,2-Dibromoethane	ND	0.74	ND	0.10	
127-18-4	Tetrachloroethene	ND	0.74	ND	0.11	
108-90-7	Chlorobenzene	ND	0.74	ND	0.16	
100-41-4	Ethylbenzene	ND	0.74	ND	0.17	
136777-61-2	m,p-Xylenes	ND	1.5	ND	0.34	
75-25-2	Bromoform	ND	0.74	ND	0.072	
100-42-5	Styrene	ND	0.74	ND	0.17	
95-47-6	o-Xylene	ND	0.74	ND	0.17	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.74	ND	0.11	
541-73-1	1,3-Dichlorobenzene	ND	0.74	ND	0.12	
106-46-7	1,4-Dichlorobenzene	ND	0.74	ND	0.12	
95-50-1	1,2-Dichlorobenzene	ND	0.74	ND	0.12	

ND = Compound was analyzed for, but not detected above the **laboratory reporting limit**.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: KMH Date: 6/10/04

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# COLUMBIA ANALYTICAL SERVICES, INC.

## RESULTS OF ANALYSIS

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**Client:** GeoSyntec Consultants, Inc.  
**Client Sample ID:** AA-02-051704  
**Client Project ID:** Ascon LF/SB0202/31

CAS Project ID: P2401075  
CAS Sample ID: P2401075-002

### Tentatively Identified Compounds

**Test Code:** EPA TO-15  
**Instrument ID:** Tekmar AUTOCAN/HP5973/HP6890/MS3  
**Analyst:** Chris Parnell/Aristotle Bragasin  
**Sampling Media:** Summa Canister  
**Test Notes:** T  
**Container ID:** AC00319

**Date Collected:** 5/17/04  
**Date Received:** 5/21/04  
**Date Analyzed:** 6/5/04  
**Volume(s) Analyzed:** 1.00 Liter(s)

Pi 1 = -2.4

Pf 1 = 3.5

D.F. = 1.48

GC / MS Ret. Time	Compound Identification	Concentration µg/m³	Data Qualifier
5.41	Acetaldehyde	4	
6.31	Ethanol	40	
23.99	Unidentified Siloxane (Possible Artifact)	5	
27.19	Unidentified Siloxane (Possible Artifact)	8	

T = Analyte is a tentatively identified compound, result is estimated.

Verified By: KCH Date: 06/11/04

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# COLUMBIA ANALYTICAL SERVICES, INC.

## RESULTS OF ANALYSIS

Page 1 of 3

**Client:** GeoSyntec Consultants, Inc.  
**Client Sample ID:** AA-03-051704  
**Client Project ID:** Ascon LF/SB0202/31

**CAS Project ID:** P2401075  
**CAS Sample ID:** P2401075-003

**Test Code:** EPA TO-15  
**Instrument ID:** Tekmar AUTOCAN/HP5973/HP6890/MS3  
**Analyst:** Chris Parnell/Aristotle Bragasin  
**Sampling Media:** Summa Canister  
**Test Notes:**  
**Container ID:** AC00608

**Date Collected:** 5/17/04  
**Date Received:** 5/21/04  
**Date(s) Analyzed:** 6/5/04  
**Volume(s) Analyzed:** 1.00 Liter(s)

Pi 1 = -4.4      Pf 1 = 3.5

D.F. = 1.77

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
74-87-3	Chloromethane	ND	0.89	ND	0.43	
75-01-4	Vinyl Chloride	ND	0.89	ND	0.35	
106-99-0	1,3-Butadiene	ND	0.89	ND	0.40	
74-83-9	Bromomethane	ND	0.89	ND	0.23	
75-00-3	Chloroethane	ND	0.89	ND	0.34	
67-64-1	Acetone	13	8.9	5.3	3.7	
75-69-4	Trichlorofluoromethane	1.0	0.89	0.18	0.16	
107-13-1	Acrylonitrile	ND	0.89	ND	0.41	
75-35-4	1,1-Dichloroethene	ND	0.89	ND	0.22	
75-09-2	Methylene chloride	ND	0.89	ND	0.25	
76-13-1	Trichlorotrifluoroethane	ND	0.89	ND	0.12	
75-15-0	Carbon Disulfide	ND	0.89	ND	0.28	
156-60-5	trans-1,2-Dichloroethene	ND	0.89	ND	0.22	
75-34-3	1,1-Dichloroethane	ND	0.89	ND	0.22	
1634-04-4	Methyl tert-Butyl Ether	ND	0.89	ND	0.25	
108-05-4	Vinyl Acetate	1.0	0.89	0.27	0.25	
78-93-3	2-Butanone (MEK)	1.8	0.89	0.62	0.30	
156-59-2	cis-1,2-Dichloroethene	ND	0.89	ND	0.22	
67-66-3	Chloroform	ND	0.89	ND	0.18	
107-06-2	1,2-Dichloroethane	ND	0.89	ND	0.22	
71-55-6	1,1,1-Trichloroethane	ND	0.89	ND	0.16	
71-43-2	Benzene	ND	0.89	ND	0.28	
56-23-5	Carbon Tetrachloride	ND	0.89	ND	0.14	

ND = Compound was analyzed for, but not detected above the **laboratory reporting limit**.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: KTH Date: 06/11/04

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# COLUMBIA ANALYTICAL SERVICES, INC.

## RESULTS OF ANALYSIS

Page 2 of 3

**Client:** GeoSyntec Consultants, Inc.

**Client Sample ID:** AA-03-051704

**Client Project ID:** Ascon LF/SB0202/31

**CAS Project ID:** P2401075

**CAS Sample ID:** P2401075-003

**Test Code:** EPA TO-15

**Instrument ID:** Tekmar AUTOCAN/HP5973/HP6890/MS3

**Analyst:** Chris Parnell/Aristotle Bragasin

**Sampling Media:** Summa Canister

**Test Notes:**

**Container ID:** AC00608

**Date Collected:** 5/17/04

**Date Received:** 5/21/04

**Date(s) Analyzed:** 6/5/04

**Volume(s) Analyzed:** 1.00 Liter(s)

Pi 1 = -4.4

Pf 1 = 3.5

D.F. = 1.77

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
78-87-5	1,2-Dichloropropane	ND	0.89	ND	0.19	
75-27-4	Bromodichloromethane	ND	0.89	ND	0.13	
79-01-6	Trichloroethene	ND	0.89	ND	0.16	
10061-01-5	cis-1,3-Dichloropropene	ND	0.89	ND	0.20	
108-10-1	4-Methyl-2-pentanone	ND	0.89	ND	0.22	
10061-02-6	trans-1,3-Dichloropropene	ND	0.89	ND	0.20	
79-00-5	1,1,2-Trichloroethane	ND	0.89	ND	0.16	
108-88-3	Toluene	ND	0.89	ND	0.23	
591-78-6	2-Hexanone	ND	0.89	ND	0.22	
124-48-1	Dibromochloromethane	ND	0.89	ND	0.10	
106-93-4	1,2-Dibromoethane	ND	0.89	ND	0.12	
127-18-4	Tetrachloroethene	ND	0.89	ND	0.13	
108-90-7	Chlorobenzene	ND	0.89	ND	0.19	
100-41-4	Ethylbenzene	ND	0.89	ND	0.20	
136777-61-2	m,p-Xylenes	ND	1.8	ND	0.41	
75-25-2	Bromoform	ND	0.89	ND	0.086	
100-42-5	Styrene	ND	0.89	ND	0.21	
95-47-6	o-Xylene	ND	0.89	ND	0.20	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.89	ND	0.13	
541-73-1	1,3-Dichlorobenzene	ND	0.89	ND	0.15	
106-46-7	1,4-Dichlorobenzene	ND	0.89	ND	0.15	
95-50-1	1,2-Dichlorobenzene	ND	0.89	ND	0.15	

ND = Compound was analyzed for, but not detected above the **laboratory reporting limit**.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: KUH Date: 06/10/04

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# COLUMBIA ANALYTICAL SERVICES, INC.

## RESULTS OF ANALYSIS

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**Client:** GeoSyntec Consultants, Inc.  
**Client Sample ID:** AA-03-051704  
**Client Project ID:** Ascon LF/SB0202/31

CAS Project ID: P2401075  
CAS Sample ID: P2401075-003

### Tentatively Identified Compounds

**Test Code:** EPA TO-15  
**Instrument ID:** Tekmar AUTOCAN/HP5973/HP6890/MS3  
**Analyst:** Chris Parnell/Aristotle Bragas  
**Sampling Media:** Summa Canister  
**Test Notes:** T  
**Container ID:** AC00608

**Date Collected:** 5/17/04  
**Date Received:** 5/21/04  
**Date Analyzed:** 6/5/04  
**Volume(s) Analyzed:** 1.00 Liter(s)

Pi 1 = -4.4

Pf 1 = 3.5

D.F. = 1.77

GC / MS Ret. Time	Compound Identification	Concentration µg/m³	Data Qualifier
5.39	Acetaldehyde	4	
6.29	Ethanol	10	
9.55	Acetic Acid	8	
17.20	Hexanal	4	
18.73	Hexamethylcyclotrisiloxane (Possible Artifact)	5	
20.94	Heptanal	6	
23.37	Methylheptenone Isomer	6	
23.85	Octanal	10	
23.99	Unidentified Siloxane (Possible Artifact)	5	
26.13	Nonanal	20	
27.00	Unidentified Siloxane (Possible Artifact)	10	
27.82	Decanal	5	

T = Analyte is a tentatively identified compound, result is estimated.

Verified By: KEH Date: 06/11/04

# COLUMBIA ANALYTICAL SERVICES, INC.

## RESULTS OF ANALYSIS

Page 1 of 3

**Client:** GeoSyntec Consultants, Inc.  
**Client Sample ID:** AA-04-051704  
**Client Project ID:** Ascon LF/SB0202/31

**CAS Project ID:** P2401075  
**CAS Sample ID:** P2401075-004

**Test Code:** EPA TO-15  
**Instrument ID:** Tekmar AUTOCAN/HP5973/HP6890/MS3  
**Analyst:** Chris Parnell/Aristotle Bragasin  
**Sampling Media:** Summa Canister  
**Test Notes:**  
**Container ID:** AC00416

**Date Collected:** 5/17/04  
**Date Received:** 5/21/04  
**Date(s) Analyzed:** 6/5/04  
**Volume(s) Analyzed:** 1.00 Liter(s)

Pi 1 = -3.2

Pf 1 = 3.5

D.F. = 1.58

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
74-87-3	Chloromethane	1.1	0.79	0.54	0.38	
75-01-4	Vinyl Chloride	ND	0.79	ND	0.31	
106-99-0	1,3-Butadiene	ND	0.79	ND	0.36	
74-83-9	Bromomethane	ND	0.79	ND	0.20	
75-00-3	Chloroethane	ND	0.79	ND	0.30	
67-64-1	Acetone	21	7.9	8.7	3.3	
75-69-4	Trichlorofluoromethane	1.0	0.79	0.18	0.14	
107-13-1	Acrylonitrile	ND	0.79	ND	0.36	
75-35-4	1,1-Dichloroethene	ND	0.79	ND	0.20	
75-09-2	Methylene chloride	ND	0.79	ND	0.23	
76-13-1	Trichlorotrifluoroethane	ND	0.79	ND	0.10	
75-15-0	Carbon Disulfide	1.2	0.79	0.39	0.25	
156-60-5	trans-1,2-Dichloroethene	ND	0.79	ND	0.20	
75-34-3	1,1-Dichloroethane	ND	0.79	ND	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	0.79	ND	0.22	
108-05-4	Vinyl Acetate	3.3	0.79	0.94	0.22	
78-93-3	2-Butanone (MEK)	3.1	0.79	1.1	0.27	
156-59-2	cis-1,2-Dichloroethene	ND	0.79	ND	0.20	
67-66-3	Chloroform	ND	0.79	ND	0.16	
107-06-2	1,2-Dichloroethane	ND	0.79	ND	0.20	
71-55-6	1,1,1-Trichloroethane	ND	0.79	ND	0.14	
71-43-2	Benzene	ND	0.79	ND	0.25	
56-23-5	Carbon Tetrachloride	ND	0.79	ND	0.13	

ND = Compound was analyzed for, but not detected above the **laboratory reporting limit**.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: KUH Date: 6/11/04

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## COLUMBIA ANALYTICAL SERVICES, INC.

## RESULTS OF ANALYSIS

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Client: GeoSyntec Consultants, Inc.

Client Sample ID: AA-04-051704

Client Project ID: Ascon LF/SB0202/31

CAS Project ID: P2401075

CAS Sample ID: P2401075-004

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3

Analyst: Chris Parnell/Aristotle Bragasin

Sampling Media: Summa Canister

Test Notes:

Container ID: AC00416

Date Collected: 5/17/04

Date Received: 5/21/04

Date(s) Analyzed: 6/5/04

Volume(s) Analyzed: 1.00 Liter(s)

Pi 1 = -3.2

Pf 1 = 3.5

D.F. = 1.58

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
78-87-5	1,2-Dichloropropane	ND	0.79	ND	0.17	
75-27-4	Bromodichloromethane	ND	0.79	ND	0.12	
79-01-6	Trichloroethene	ND	0.79	ND	0.15	
10061-01-5	cis-1,3-Dichloropropene	ND	0.79	ND	0.17	
108-10-1	4-Methyl-2-pentanone	ND	0.79	ND	0.19	
10061-02-6	trans-1,3-Dichloropropene	ND	0.79	ND	0.17	
79-00-5	1,1,2-Trichloroethane	ND	0.79	ND	0.14	
108-88-3	Toluene	0.81	0.79	0.21	0.21	
591-78-6	2-Hexanone	ND	0.79	ND	0.19	
124-48-1	Dibromochloromethane	ND	0.79	ND	0.09	
106-93-4	1,2-Dibromoethane	ND	0.79	ND	0.10	
127-18-4	Tetrachloroethene	ND	0.79	ND	0.12	
108-90-7	Chlorobenzene	ND	0.79	ND	0.17	
100-41-4	Ethylbenzene	ND	0.79	ND	0.18	
136777-61-2	m,p-Xylenes	ND	1.6	ND	0.36	
75-25-2	Bromoform	ND	0.79	ND	0.076	
100-42-5	Styrene	ND	0.79	ND	0.19	
95-47-6	o-Xylene	ND	0.79	ND	0.18	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.79	ND	0.12	
541-73-1	1,3-Dichlorobenzene	ND	0.79	ND	0.13	
106-46-7	1,4-Dichlorobenzene	ND	0.79	ND	0.13	
95-50-1	1,2-Dichlorobenzene	ND	0.79	ND	0.13	

ND = Compound was analyzed for, but not detected above the **laboratory reporting limit**.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: Kurt Date: 06/10/04

# COLUMBIA ANALYTICAL SERVICES, INC.

## RESULTS OF ANALYSIS

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**Client:** GeoSyntec Consultants, Inc.

**Client Sample ID:** AA-04-051704

**Client Project ID:** Ascon LF/SB0202/31

CAS Project ID: P2401075

CAS Sample ID: P2401075-004

### Tentatively Identified Compounds

**Test Code:** EPA TO-15  
**Instrument ID:** Tekmar AUTOCAN/HP5973/HP6890/MS3  
**Analyst:** Chris Parnell/Aristotle Bragas  
**Sampling Media:** Summa Canister  
**Test Notes:** T  
**Container ID:** AC00416

**Date Collected:** 5/17/04  
**Date Received:** 5/21/04  
**Date Analyzed:** 6/5/04  
**Volume(s) Analyzed:** 1.00 Liter(s)

Pi 1 = -3.2

Pf 1 = 3.5

D.F. = 1.58

GC / MS Ret. Time	Compound Identification	Concentration µg/m³	Data Qualifier
5.38	Acetaldehyde	6	
6.29	Ethanol	10	
18.22	Furfural	10	
18.73	Hexamethylcyclotrisiloxane (Possible Artifact)	5	
22.72	Benzaldehyde	4	
23.99	Unidentified Siloxane (Possible Artifact)	7	

T = Analyte is a tentatively identified compound, result is estimated.

Verified By:         KTH         Date: 06/11/04

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# COLUMBIA ANALYTICAL SERVICES, INC.

## RESULTS OF ANALYSIS

Page 1 of 3

**Client:** GeoSyntec Consultants, Inc.  
**Client Sample ID:** AA-05-051704  
**Client Project ID:** Ascon LF/SB0202/31

**CAS Project ID:** P2401075  
**CAS Sample ID:** P2401075-005

**Test Code:** EPA TO-15  
**Instrument ID:** Tekmar AUTOCAN/HP5973/HP6890/MS3  
**Analyst:** Chris Parnell/Aristotle Bragasin  
**Sampling Media:** Summa Canister  
**Test Notes:**  
**Container ID:** AC00004

**Date Collected:** 5/17/04  
**Date Received:** 5/21/04  
**Date(s) Analyzed:** 6/5/04  
**Volume(s) Analyzed:** 1.00 Liter(s)

Pi 1 = -4.6      Pf 1 = 3.5

D.F. = 1.80

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
74-87-3	Chloromethane	1.3	0.90	0.64	0.44	
75-01-4	Vinyl Chloride	ND	0.90	ND	0.35	
106-99-0	1,3-Butadiene	ND	0.90	ND	0.41	
74-83-9	Bromomethane	ND	0.90	ND	0.23	
75-00-3	Chloroethane	ND	0.90	ND	0.34	
67-64-1	Acetone	12	9.0	4.8	3.8	
75-69-4	Trichlorofluoromethane	1.0	0.90	0.18	0.16	
107-13-1	Acrylonitrile	ND	0.90	ND	0.41	
75-35-4	1,1-Dichloroethene	ND	0.90	ND	0.23	
75-09-2	Methylene chloride	ND	0.90	ND	0.26	
76-13-1	Trichlorotrifluoroethane	ND	0.90	ND	0.12	
75-15-0	Carbon Disulfide	ND	0.90	ND	0.29	
156-60-5	trans-1,2-Dichloroethene	ND	0.90	ND	0.23	
75-34-3	1,1-Dichloroethane	ND	0.90	ND	0.22	
1634-04-4	Methyl tert-Butyl Ether	ND	0.90	ND	0.25	
108-05-4	Vinyl Acetate	1.3	0.90	0.38	0.26	
78-93-3	2-Butanone (MEK)	1.4	0.90	0.48	0.31	
156-59-2	cis-1,2-Dichloroethene	ND	0.90	ND	0.23	
67-66-3	Chloroform	ND	0.90	ND	0.18	
107-06-2	1,2-Dichloroethane	ND	0.90	ND	0.22	
71-55-6	1,1,1-Trichloroethane	ND	0.90	ND	0.17	
71-43-2	Benzene	ND	0.90	ND	0.28	
56-23-5	Carbon Tetrachloride	ND	0.90	ND	0.14	

ND = Compound was analyzed for, but not detected above the **laboratory reporting limit**.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: KHH Date: 06/11/04

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# COLUMBIA ANALYTICAL SERVICES, INC.

## RESULTS OF ANALYSIS

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**Client:** GeoSyntec Consultants, Inc.  
**Client Sample ID:** AA-05-051704  
**Client Project ID:** Ascon LF/SB0202/31

CAS Project ID: P2401075  
CAS Sample ID: P2401075-005

**Test Code:** EPA TO-15  
**Instrument ID:** Tekmar AUTOCAN/HP5973/HP6890/MS3  
**Analyst:** Chris Parnell/Aristotle Bragasin  
**Sampling Media:** Summa Canister  
**Test Notes:**  
**Container ID:** AC00004

**Date Collected:** 5/17/04  
**Date Received:** 5/21/04  
**Date(s) Analyzed:** 6/5/04  
**Volume(s) Analyzed:** 1.00 Liter(s)

Pi 1 = -4.6      Pf 1 = 3.5

D.F. = 1.80

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
78-87-5	1,2-Dichloropropane	ND	0.90	ND	0.19	
75-27-4	Bromodichloromethane	ND	0.90	ND	0.13	
79-01-6	Trichloroethene	ND	0.90	ND	0.17	
10061-01-5	cis-1,3-Dichloropropene	ND	0.90	ND	0.20	
108-10-1	4-Methyl-2-pentanone	ND	0.90	ND	0.22	
10061-02-6	trans-1,3-Dichloropropene	ND	0.90	ND	0.20	
79-00-5	1,1,2-Trichloroethane	ND	0.90	ND	0.17	
108-88-3	Toluene	ND	0.90	ND	0.24	
591-78-6	2-Hexanone	ND	0.90	ND	0.22	
124-48-1	Dibromochloromethane	ND	0.90	ND	0.11	
106-93-4	1,2-Dibromoethane	ND	0.90	ND	0.12	
127-18-4	Tetrachloroethene	ND	0.90	ND	0.13	
108-90-7	Chlorobenzene	ND	0.90	ND	0.20	
100-41-4	Ethylbenzene	ND	0.90	ND	0.21	
136777-61-2	m,p-Xylenes	ND	1.8	ND	0.41	
75-25-2	Bromoform	ND	0.90	ND	0.087	
100-42-5	Styrene	ND	0.90	ND	0.21	
95-47-6	o-Xylene	ND	0.90	ND	0.21	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.90	ND	0.13	
541-73-1	1,3-Dichlorobenzene	ND	0.90	ND	0.15	
106-46-7	1,4-Dichlorobenzene	ND	0.90	ND	0.15	
95-50-1	1,2-Dichlorobenzene	ND	0.90	ND	0.15	

ND = Compound was analyzed for, but not detected above the **laboratory reporting limit**.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: EMH Date: 6/11/04

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# COLUMBIA ANALYTICAL SERVICES, INC.

## RESULTS OF ANALYSIS

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**Client:** GeoSyntec Consultants, Inc.  
**Client Sample ID:** AA-05-051704  
**Client Project ID:** Ascon LF/SB0202/31

CAS Project ID: P2401075  
CAS Sample ID: P2401075-005

### Tentatively Identified Compounds

**Test Code:** EPA TO-15  
**Instrument ID:** Tekmar AUTOCAN/HP5973/HP6890/MS3  
**Analyst:** Chris Parnell/Aristotle Bragas  
**Sampling Media:** Summa Canister  
**Test Notes:** T  
**Container ID:** AC00004

**Date Collected:** 5/17/04  
**Date Received:** 5/21/04  
**Date Analyzed:** 6/5/04  
**Volume(s) Analyzed:** 1.00 Liter(s)

Pi 1 = -4.6

Pf 1 = 3.5

D.F. = 1.80

GC / MS Ret. Time	Compound Identification	Concentration µg/m³	Data Qualifier
6.29	Ethanol	40	
9.33	Butanal	4	
18.73	Hexamethylcyclotrisiloxane (Possible Artifact)	20	
20.95	Heptanal	4	
23.36	Methylheptenone Isomer	5	
23.85	Octanal	4	
24.58	2-Ethyl-1-hexanol	10	

T = Analyte is a tentatively identified compound, result is estimated.

Verified By: KUH Date: 6/11/04

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# COLUMBIA ANALYTICAL SERVICES, INC.

## RESULTS OF ANALYSIS

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**Client:** GeoSyntec Consultants, Inc.  
**Client Sample ID:** AA-07-051704  
**Client Project ID:** Ascon LF/SB0202/31

**CAS Project ID:** P2401075  
**CAS Sample ID:** P2401075-006

**Test Code:** EPA TO-15  
**Instrument ID:** Tekmar AUTOCAN/HP5972/HP5890 II+/MS2  
**Analyst:** Chris Parnell/Aristotle Bragasin  
**Sampling Media:** Summa Canister  
**Test Notes:**  
**Container ID:** AC00357

**Date Collected:** 5/17/04  
**Date Received:** 5/21/04  
**Date(s) Analyzed:** 6/7/04  
**Volume(s) Analyzed:** 1.00 Liter(s)

Pi 1 = -4.0

Pf 1 = 3.5

D.F. = 1.70

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
74-87-3	Chloromethane	ND	0.85	ND	0.41	
75-01-4	Vinyl Chloride	ND	0.85	ND	0.33	
106-99-0	1,3-Butadiene	ND	0.85	ND	0.38	
74-83-9	Bromomethane	ND	0.85	ND	0.22	
75-00-3	Chloroethane	ND	0.85	ND	0.32	
67-64-1	Acetone	18	8.5	7.4	3.6	
75-69-4	Trichlorofluoromethane	1.3	0.85	0.22	0.15	
107-13-1	Acrylonitrile	ND	0.85	ND	0.39	
75-35-4	1,1-Dichloroethene	ND	0.85	ND	0.21	
75-09-2	Methylene chloride	ND	0.85	ND	0.24	
76-13-1	Trichlorotrifluoroethane	ND	0.85	ND	0.11	
75-15-0	Carbon Disulfide	ND	0.85	ND	0.27	
156-60-5	trans-1,2-Dichloroethene	ND	0.85	ND	0.21	
75-34-3	1,1-Dichloroethane	ND	0.85	ND	0.21	
1634-04-4	Methyl tert-Butyl Ether	ND	0.85	ND	0.24	
108-05-4	Vinyl Acetate	3.6	0.85	1.0	0.24	
78-93-3	2-Butanone (MEK)	1.3	0.85	0.44	0.29	
156-59-2	cis-1,2-Dichloroethene	ND	0.85	ND	0.21	
67-66-3	Chloroform	ND	0.85	ND	0.17	
107-06-2	1,2-Dichloroethane	ND	0.85	ND	0.21	
71-55-6	1,1,1-Trichloroethane	ND	0.85	ND	0.16	
71-43-2	Benzene	ND	0.85	ND	0.27	
56-23-5	Carbon Tetrachloride	ND	0.85	ND	0.14	

ND = Compound was analyzed for, but not detected above the **laboratory reporting limit**.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: KHH Date: 6/11/04

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# COLUMBIA ANALYTICAL SERVICES, INC.

## RESULTS OF ANALYSIS

Page 2 of 3

**Client:** GeoSyntec Consultants, Inc.  
**Client Sample ID:** AA-07-051704  
**Client Project ID:** Ascon LF/SB0202/31

CAS Project ID: P2401075  
CAS Sample ID: P2401075-006

**Test Code:** EPA TO-15  
**Instrument ID:** Tekmar AUTOCAN/HP5972/HP5890 II+/MS2  
**Analyst:** Chris Parnell/Aristotle Bragasin  
**Sampling Media:** Summa Canister  
**Test Notes:**  
**Container ID:** AC00357

**Date Collected:** 5/17/04  
**Date Received:** 5/21/04  
**Date(s) Analyzed:** 6/7/04  
**Volume(s) Analyzed:** 1.00 Liter(s)

Pi 1 = -4.0

Pf 1 = 3.5

D.F. = 1.70

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
78-87-5	1,2-Dichloropropane	ND	0.85	ND	0.18	
75-27-4	Bromodichloromethane	ND	0.85	ND	0.13	
79-01-6	Trichloroethene	ND	0.85	ND	0.16	
10061-01-5	cis-1,3-Dichloropropene	ND	0.85	ND	0.19	
108-10-1	4-Methyl-2-pentanone	ND	0.85	ND	0.21	
10061-02-6	trans-1,3-Dichloropropene	ND	0.85	ND	0.19	
79-00-5	1,1,2-Trichloroethane	ND	0.85	ND	0.16	
108-88-3	Toluene	ND	0.85	ND	0.23	
591-78-6	2-Hexanone	ND	0.85	ND	0.21	
124-48-1	Dibromochloromethane	ND	0.85	ND	0.10	
106-93-4	1,2-Dibromoethane	ND	0.85	ND	0.11	
127-18-4	Tetrachloroethene	ND	0.85	ND	0.13	
108-90-7	Chlorobenzene	ND	0.85	ND	0.18	
100-41-4	Ethylbenzene	ND	0.85	ND	0.20	
136777-61-2	m,p-Xylenes	ND	1.7	ND	0.39	
75-25-2	Bromoform	ND	0.85	ND	0.082	
100-42-5	Styrene	ND	0.85	ND	0.20	
95-47-6	o-Xylene	ND	0.85	ND	0.20	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.85	ND	0.12	
541-73-1	1,3-Dichlorobenzene	ND	0.85	ND	0.14	
106-46-7	1,4-Dichlorobenzene	ND	0.85	ND	0.14	
95-50-1	1,2-Dichlorobenzene	ND	0.85	ND	0.14	

ND = Compound was analyzed for, but not detected above the **laboratory reporting limit**.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: Kent Date: 6/10/04

Page No.:

# COLUMBIA ANALYTICAL SERVICES, INC.

## RESULTS OF ANALYSIS

Page 3 of 3

**Client:** GeoSyntec Consultants, Inc.

**Client Sample ID:** AA-07-051704

**Client Project ID:** Ascon LF/SB0202/31

CAS Project ID: P2401075

CAS Sample ID: P2401075-006

### Tentatively Identified Compounds

**Test Code:** EPA TO-15

**Instrument ID:** Tekmar AUTOCAN/HP5972/HP5890 II+/MS2

**Analyst:** Chris Parnell/Aristotle Bragasin

**Sampling Media:** Summa Canister

**Test Notes:** T

**Container ID:** AC00357

**Date Collected:** 5/17/04

**Date Received:** 5/21/04

**Date Analyzed:** 6/7/04

**Volume(s) Analyzed:** 1.00 Liter(s)

Pi 1 = -4.0

Pf 1 = 3.5

D.F. = 1.70

GC / MS Ret. Time	Compound Identification	Concentration µg/m³	Data Qualifier
6.19	Ethanol	40	
9.63	Acetic Acid	10	
12.47	1-Methoxy-2-propanol	6	
23.71	Benzaldehyde	40	
29.39	3-Phenylacrolein	4	

T = Analyte is a tentatively identified compound, result is estimated.

Verified By: KMH Date: 06/11/04



# COLUMBIA ANALYTICAL SERVICES, INC.

## RESULTS OF ANALYSIS

Page 1 of 3

**Client:** GeoSyntec Consultants, Inc.  
**Client Sample ID:** AA-07-051704  
**Client Project ID:** Ascon LF/SB0202/31

**CAS Project ID:** P2401075  
**CAS Sample ID:** P2401075-006DUP

**Test Code:** EPA TO-15  
**Instrument ID:** Tekmar AUTOCAN/HP5972/HP5890 II+/MS2  
**Analyst:** Chris Parnell/Aristotle Bragasin  
**Sampling Media:** Summa Canister  
**Test Notes:**  
**Container ID:** AC00357

**Date Collected:** 5/17/04  
**Date Received:** 5/21/04  
**Date(s) Analyzed:** 6/7/04  
**Volume(s) Analyzed:** 1.00 Liter(s)

Pi 1 = -4.0      Pf 1 = 3.5

D.F. = 1.70

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
74-87-3	Chloromethane	ND	0.85	ND	0.41	
75-01-4	Vinyl Chloride	ND	0.85	ND	0.33	
106-99-0	1,3-Butadiene	ND	0.85	ND	0.38	
74-83-9	Bromomethane	ND	0.85	ND	0.22	
75-00-3	Chloroethane	ND	0.85	ND	0.32	
67-64-1	Acetone	17	8.5	7.3	3.6	
75-69-4	Trichlorofluoromethane	1.2	0.85	0.21	0.15	
107-13-1	Acrylonitrile	ND	0.85	ND	0.39	
75-35-4	1,1-Dichloroethene	ND	0.85	ND	0.21	
75-09-2	Methylene chloride	ND	0.85	ND	0.24	
76-13-1	Trichlorotrifluoroethane	ND	0.85	ND	0.11	
75-15-0	Carbon Disulfide	ND	0.85	ND	0.27	
156-60-5	trans-1,2-Dichloroethene	ND	0.85	ND	0.21	
75-34-3	1,1-Dichloroethane	ND	0.85	ND	0.21	
1634-04-4	Methyl tert-Butyl Ether	ND	0.85	ND	0.24	
108-05-4	Vinyl Acetate	3.4	0.85	1.0	0.24	
78-93-3	2-Butanone (MEK)	1.3	0.85	0.43	0.29	
156-59-2	cis-1,2-Dichloroethene	ND	0.85	ND	0.21	
67-66-3	Chloroform	ND	0.85	ND	0.17	
107-06-2	1,2-Dichloroethane	ND	0.85	ND	0.21	
71-55-6	1,1,1-Trichloroethane	ND	0.85	ND	0.16	
71-43-2	Benzene	ND	0.85	ND	0.27	
56-23-5	Carbon Tetrachloride	ND	0.85	ND	0.14	

ND = Compound was analyzed for, but not detected above the **laboratory reporting limit**.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: KSH Date: 6/11/04

Page No.:

## COLUMBIA ANALYTICAL SERVICES, INC.

## RESULTS OF ANALYSIS

Page 2 of 3

Client: GeoSyntec Consultants, Inc.

Client Sample ID: AA-07-051704

Client Project ID: Ascon LF/SB0202/31

CAS Project ID: P2401075

CAS Sample ID: P2401075-006DUP

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/HP5972/HP5890 II+/MS2

Analyst: Chris Parnell/Aristotle Bragasin

Sampling Media: Summa Canister

Test Notes:

Container ID: AC00357

Date Collected: 5/17/04

Date Received: 5/21/04

Date(s) Analyzed: 6/7/04

Volume(s) Analyzed: 1.00 Liter(s)

Pi 1 = -4.0

Pf 1 = 3.5

D.F. = 1.70

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
78-87-5	1,2-Dichloropropane	ND	0.85	ND	0.18	
75-27-4	Bromodichloromethane	ND	0.85	ND	0.13	
79-01-6	Trichloroethene	ND	0.85	ND	0.16	
10061-01-5	cis-1,3-Dichloropropene	ND	0.85	ND	0.19	
108-10-1	4-Methyl-2-pentanone	ND	0.85	ND	0.21	
10061-02-6	trans-1,3-Dichloropropene	ND	0.85	ND	0.19	
79-00-5	1,1,2-Trichloroethane	ND	0.85	ND	0.16	
108-88-3	Toluene	ND	0.85	ND	0.23	
591-78-6	2-Hexanone	ND	0.85	ND	0.21	
124-48-1	Dibromochloromethane	ND	0.85	ND	0.10	
106-93-4	1,2-Dibromoethane	ND	0.85	ND	0.11	
127-18-4	Tetrachloroethene	ND	0.85	ND	0.13	
108-90-7	Chlorobenzene	ND	0.85	ND	0.18	
100-41-4	Ethylbenzene	ND	0.85	ND	0.20	
136777-61-2	m,p-Xylenes	ND	1.7	ND	0.39	
75-25-2	Bromoform	ND	0.85	ND	0.082	
100-42-5	Styrene	ND	0.85	ND	0.20	
95-47-6	o-Xylene	ND	0.85	ND	0.20	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.85	ND	0.12	
541-73-1	1,3-Dichlorobenzene	ND	0.85	ND	0.14	
106-46-7	1,4-Dichlorobenzene	ND	0.85	ND	0.14	
95-50-1	1,2-Dichlorobenzene	ND	0.85	ND	0.14	

ND = Compound was analyzed for, but not detected above the **laboratory reporting limit**.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: KTH Date: October

# COLUMBIA ANALYTICAL SERVICES, INC.

## RESULTS OF ANALYSIS

Page 3 of 3

**Client:** GeoSyntec Consultants, Inc.

**Client Sample ID:** AA-07-051704

**Client Project ID:** Ascon LF/SB0202/31

CAS Project ID: P2401075

CAS Sample ID: P2401075-006DUP

### Tentatively Identified Compounds

**Test Code:** EPA TO-15

**Instrument ID:** Tekmar AUTOCAN/HP5972/HP5890 II+/MS2

**Analyst:** Chris Parnell/Aristotle Bragasin

**Sampling Media:** Summa Canister

**Test Notes:** T

**Container ID:** AC00357

**Date Collected:** 5/17/04

**Date Received:** 5/21/04

**Date Analyzed:** 6/7/04

**Volume(s) Analyzed:** 1.00 Liter(s)

Pi 1 = -4.0

Pf 1 = 3.5

D.F. = 1.70

GC / MS Ret. Time	Compound Identification	Concentration µg/m³	Data Qualifier
6.19	Ethanol	30	
9.55	Acetic Acid	5	
12.47	1-Methoxy-2-propanol	4	
23.72	Benzaldehyde	40	

T = Analyte is a tentatively identified compound, result is estimated.

Verified By: KWH Date: 6/10/04

# COLUMBIA ANALYTICAL SERVICES, INC.

## RESULTS OF ANALYSIS

Page 1 of 3

**Client:** GeoSyntec Consultants, Inc.  
**Client Sample ID:** AA-01-051804  
**Client Project ID:** Ascon LF/SB0202/31

CAS Project ID: P2401075  
CAS Sample ID: P2401075-007

**Test Code:** EPA TO-15  
**Instrument ID:** Tekmar AUTOCAN/HP5972/HP5890 II+/MS2  
**Analyst:** Chris Parnell/Aristotle Bragasin  
**Sampling Media:** Summa Canister  
**Test Notes:**  
**Container ID:** AC00402

**Date Collected:** 5/18/04  
**Date Received:** 5/21/04  
**Date(s) Analyzed:** 6/7/04  
**Volume(s) Analyzed:** 1.00 Liter(s)

Pi 1 = -8.1      Pf 1 = 1.0

D.F. = 2.38

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
74-87-3	Chloromethane	ND	1.2	ND	0.58	
75-01-4	Vinyl Chloride	ND	1.2	ND	0.47	
106-99-0	1,3-Butadiene	ND	1.2	ND	0.54	
74-83-9	Bromomethane	ND	1.2	ND	0.31	
75-00-3	Chloroethane	ND	1.2	ND	0.45	
67-64-1	Acetone	ND	12	ND	5.0	
75-69-4	Trichlorofluoromethane	ND	1.2	ND	0.21	
107-13-1	Acrylonitrile	ND	1.2	ND	0.55	
75-35-4	1,1-Dichloroethene	ND	1.2	ND	0.30	
75-09-2	Methylene chloride	ND	1.2	ND	0.34	
76-13-1	Trichlorotrifluoroethane	ND	1.2	ND	0.16	
75-15-0	Carbon Disulfide	ND	1.2	ND	0.38	
156-60-5	trans-1,2-Dichloroethene	ND	1.2	ND	0.30	
75-34-3	1,1-Dichloroethane	ND	1.2	ND	0.29	
1634-04-4	Methyl tert-Butyl Ether	ND	1.2	ND	0.33	
108-05-4	Vinyl Acetate	2.3	1.2	0.64	0.34	
78-93-3	2-Butanone (MEK)	2.6	1.2	0.89	0.40	
156-59-2	cis-1,2-Dichloroethene	ND	1.2	ND	0.30	
67-66-3	Chloroform	ND	1.2	ND	0.24	
107-06-2	1,2-Dichloroethane	ND	1.2	ND	0.29	
71-55-6	1,1,1-Trichloroethane	ND	1.2	ND	0.22	
71-43-2	Benzene	ND	1.2	ND	0.37	
56-23-5	Carbon Tetrachloride	ND	1.2	ND	0.19	

ND = Compound was analyzed for, but not detected above the **laboratory reporting limit**.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: KUH Date: 06/11/04

Page No.:

# COLUMBIA ANALYTICAL SERVICES, INC.

## RESULTS OF ANALYSIS

Page 2 of 3

**Client:** GeoSyntec Consultants, Inc.  
**Client Sample ID:** AA-01-051804  
**Client Project ID:** Ascon LF/SB0202/31

**CAS Project ID:** P2401075  
**CAS Sample ID:** P2401075-007

**Test Code:** EPA TO-15  
**Instrument ID:** Tekmar AUTOCAN/HP5972/HP5890 II+/MS2  
**Analyst:** Chris Parnell/Aristotle Bragas  
**Sampling Media:** Summa Canister  
**Test Notes:**  
**Container ID:** AC00402

**Date Collected:** 5/18/04  
**Date Received:** 5/21/04  
**Date(s) Analyzed:** 6/7/04  
**Volume(s) Analyzed:** 1.00 Liter(s)

Pi 1 = -8.1      Pf 1 = 1.0

D.F. = 2.38

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
78-87-5	1,2-Dichloropropane	ND	1.2	ND	0.26	
75-27-4	Bromodichloromethane	ND	1.2	ND	0.18	
79-01-6	Trichloroethene	ND	1.2	ND	0.22	
10061-01-5	cis-1,3-Dichloropropene	ND	1.2	ND	0.26	
108-10-1	4-Methyl-2-pentanone	ND	1.2	ND	0.29	
10061-02-6	trans-1,3-Dichloropropene	ND	1.2	ND	0.26	
79-00-5	1,1,2-Trichloroethane	ND	1.2	ND	0.22	
108-88-3	Toluene	6.4	1.2	1.7	0.32	
591-78-6	2-Hexanone	ND	1.2	ND	0.29	
124-48-1	Dibromochloromethane	ND	1.2	ND	0.14	
106-93-4	1,2-Dibromoethane	ND	1.2	ND	0.15	
127-18-4	Tetrachloroethene	ND	1.2	ND	0.18	
108-90-7	Chlorobenzene	ND	1.2	ND	0.26	
100-41-4	Ethylbenzene	1.2	1.2	0.27	0.27	
136777-61-2	m,p-Xylenes	ND	2.4	ND	0.55	
75-25-2	Bromoform	ND	1.2	ND	0.12	
100-42-5	Styrene	ND	1.2	ND	0.28	
95-47-6	o-Xylene	ND	1.2	ND	0.27	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.2	ND	0.17	
541-73-1	1,3-Dichlorobenzene	ND	1.2	ND	0.20	
106-46-7	1,4-Dichlorobenzene	ND	1.2	ND	0.20	
95-50-1	1,2-Dichlorobenzene	ND	1.2	ND	0.20	

ND = Compound was analyzed for, but not detected above the **laboratory reporting limit**.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By:                      Date:

# COLUMBIA ANALYTICAL SERVICES, INC.

## RESULTS OF ANALYSIS

Page 3 of 3

**Client:** GeoSyntec Consultants, Inc.  
**Client Sample ID:** AA-01-051804  
**Client Project ID:** Ascon LF/SB0202/31

CAS Project ID: P2401075  
CAS Sample ID: P2401075-007

### Tentatively Identified Compounds

**Test Code:** EPA TO-15  
**Instrument ID:** Tekmar AUTOCAN/HP5972/HP5890 II+/MS2  
**Analyst:** Chris Parnell/Aristotle Bragasin  
**Sampling Media:** Summa Canister  
**Test Notes:** T  
**Container ID:** AC00402

**Date Collected:** 5/18/04  
**Date Received:** 5/21/04  
**Date Analyzed:** 6/7/04  
**Volume(s) Analyzed:** 1.00 Liter(s)

Pi 1 = -8.1

Pf 1 = 1.0

D.F. = 2.38

GC / MS Ret. Time	Compound Identification	Concentration µg/m³	Data Qualifier
6.17	Ethanol	10	
19.50	Hexamethylcyclotrisiloxane (Possible Artifact)	20	
21.88	Heptanal	6	
24.82	Octanal	6	
24.98	Unidentified Siloxane (Possible Artifact)	6	
25.51	2-Ethyl-1-hexanol	6	

T = Analyte is a tentatively identified compound, result is estimated.

Verified By: Kent Date: 6/11/04

## COLUMBIA ANALYTICAL SERVICES, INC.

## RESULTS OF ANALYSIS

Page 1 of 3

Client: **GeoSyntec Consultants, Inc.**  
 Client Sample ID: **AA-02-051804**  
 Client Project ID: **Ascon LF/SB0202/31**

CAS Project ID: P2401075  
 CAS Sample ID: P2401075-008

Test Code: EPA TO-15  
 Instrument ID: Tekmar AUTOCAN/HP5972/HP5890 II+/MS2  
 Analyst: Chris Parnell/Aristotle Bragasin  
 Sampling Media: Summa Canister  
 Test Notes:  
 Container ID: AC00546

Date Collected: 5/18/04  
 Date Received: 5/21/04  
 Date(s) Analyzed: 6/8/04  
 Volume(s) Analyzed: 1.00 Liter(s)

Pi 1 = -9.2 Pf 1 = 1.0

D.F. = 2.85

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
74-87-3	Chloromethane	ND	1.4	ND	0.69	
75-01-4	Vinyl Chloride	ND	1.4	ND	0.56	
106-99-0	1,3-Butadiene	ND	1.4	ND	0.64	
74-83-9	Bromomethane	ND	1.4	ND	0.37	
75-00-3	Chloroethane	ND	1.4	ND	0.54	
67-64-1	Acetone	29	14	12	6.0	
75-69-4	Trichlorofluoromethane	ND	1.4	ND	0.25	
107-13-1	Acrylonitrile	ND	1.4	ND	0.66	
75-35-4	1,1-Dichloroethene	ND	1.4	ND	0.36	
75-09-2	Methylene chloride	ND	1.4	ND	0.41	
76-13-1	Trichlorotrifluoroethane	ND	1.4	ND	0.19	
75-15-0	Carbon Disulfide	ND	1.4	ND	0.46	
156-60-5	trans-1,2-Dichloroethene	ND	1.4	ND	0.36	
75-34-3	1,1-Dichloroethane	ND	1.4	ND	0.35	
1634-04-4	Methyl tert-Butyl Ether	ND	1.4	ND	0.40	
108-05-4	Vinyl Acetate	4.4	1.4	1.3	0.40	
78-93-3	2-Butanone (MEK)	4.5	1.4	1.5	0.48	
156-59-2	cis-1,2-Dichloroethene	ND	1.4	ND	0.36	
67-66-3	Chloroform	ND	1.4	ND	0.29	
107-06-2	1,2-Dichloroethane	ND	1.4	ND	0.35	
71-55-6	1,1,1-Trichloroethane	ND	1.4	ND	0.26	
71-43-2	Benzene	ND	1.4	ND	0.45	
56-23-5	Carbon Tetrachloride	ND	1.4	ND	0.23	

ND = Compound was analyzed for, but not detected above the **laboratory reporting limit**.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: Kurt Date: 06/11/04

Page No.:

# COLUMBIA ANALYTICAL SERVICES, INC.

## RESULTS OF ANALYSIS

Page 2 of 3

**Client:** GeoSyntec Consultants, Inc.

**Client Sample ID:** AA-02-051804

**Client Project ID:** Ascon LF/SB0202/31

CAS Project ID: P2401075

CAS Sample ID: P2401075-008

**Test Code:** EPA TO-15

**Instrument ID:** Tekmar AUTOCAN/HP5972/HP5890 II+/MS2

**Analyst:** Chris Parnell/Aristotle Bragasin

**Sampling Media:** Summa Canister

**Test Notes:**

**Container ID:** AC00546

Date Collected: 5/18/04

Date Received: 5/21/04

Date(s) Analyzed: 6/8/04

Volume(s) Analyzed: 1.00 Liter(s)

Pi 1 = -9.2

Pf 1 = 1.0

D.F. = 2.85

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
78-87-5	1,2-Dichloropropane	ND	1.4	ND	0.31	
75-27-4	Bromodichloromethane	ND	1.4	ND	0.21	
79-01-6	Trichloroethene	ND	1.4	ND	0.27	
10061-01-5	cis-1,3-Dichloropropene	ND	1.4	ND	0.31	
108-10-1	4-Methyl-2-pentanone	ND	1.4	ND	0.35	
10061-02-6	trans-1,3-Dichloropropene	ND	1.4	ND	0.31	
79-00-5	1,1,2-Trichloroethane	ND	1.4	ND	0.26	
108-88-3	Toluene	6.5	1.4	1.7	0.38	
591-78-6	2-Hexanone	1.6	1.4	0.39	0.35	
124-48-1	Dibromochloromethane	ND	1.4	ND	0.17	
106-93-4	1,2-Dibromoethane	ND	1.4	ND	0.19	
127-18-4	Tetrachloroethene	ND	1.4	ND	0.21	
108-90-7	Chlorobenzene	ND	1.4	ND	0.31	
100-41-4	Ethylbenzene	ND	1.4	ND	0.33	
136777-61-2	<i>m,p</i> -Xylenes	ND	2.9	ND	0.66	
75-25-2	Bromoform	ND	1.4	ND	0.14	
100-42-5	Styrene	ND	1.4	ND	0.33	
95-47-6	<i>o</i> -Xylene	ND	1.4	ND	0.33	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.4	ND	0.21	
541-73-1	1,3-Dichlorobenzene	ND	1.4	ND	0.24	
106-46-7	1,4-Dichlorobenzene	ND	1.4	ND	0.24	
95-50-1	1,2-Dichlorobenzene	ND	1.4	ND	0.24	

ND = Compound was analyzed for, but not detected above the **laboratory reporting limit**.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By:                      Date: 06/11/04



# COLUMBIA ANALYTICAL SERVICES, INC.

## RESULTS OF ANALYSIS

Page 3 of 3

**Client:** GeoSyntec Consultants, Inc.  
**Client Sample ID:** AA-02-051804  
**Client Project ID:** Ascon LF/SB0202/31

CAS Project ID: P2401075  
CAS Sample ID: P2401075-008

### Tentatively Identified Compounds

**Test Code:** EPA TO-15  
**Instrument ID:** Tekmar AUTOCAN/HP5972/HP5890 II+/MS2  
**Analyst:** Chris Parnell/Aristotle Bragasin  
**Sampling Media:** Summa Canister  
**Test Notes:** T  
**Container ID:** AC00546

**Date Collected:** 5/18/04  
**Date Received:** 5/21/04  
**Date Analyzed:** 6/8/04  
**Volume(s) Analyzed:** 1.00 Liter(s)

Pi 1 = -9.2

Pf 1 = 1.0

D.F. = 2.85

GC / MS Ret. Time	Compound Identification	Concentration µg/m³	Data Qualifier
5.29	Acetaldehyde	10	
6.18	Ethanol	20	
9.16	Butanal	8	
9.57	Acetic Acid	10	
13.13	Pentanal	10	
17.81	Hexanal	10	
19.51	Hexamethylcyclotrisiloxane (Possible Artifact)	10	
21.88	Heptanal	20	
24.83	Octanal	20	
24.98	Unidentified Siloxane (Possible Artifact)	10	
26.90	Nonanal	8	
27.11	n-Undecane	7	
27.90	Unidentified Siloxane (Possible Artifact)	10	

T = Analyte is a tentatively identified compound, result is estimated.

Verified By: CHH Date: 6/8/04

Page No.:

# COLUMBIA ANALYTICAL SERVICES, INC.

## RESULTS OF ANALYSIS

Page 1 of 3

**Client:** GeoSyntec Consultants, Inc.  
**Client Sample ID:** AA-03-051804  
**Client Project ID:** Ascon LF/SB0202/31

**CAS Project ID:** P2401075  
**CAS Sample ID:** P2401075-009

**Test Code:** EPA TO-15  
**Instrument ID:** Tekmar AUTOCAN/HP5972/HP5890 II+/MS2  
**Analyst:** Chris Parnell/Aristotle Bragasini  
**Sampling Media:** Summa Canister  
**Test Notes:**  
**Container ID:** AC00625

**Date Collected:** 5/18/04  
**Date Received:** 5/21/04  
**Date(s) Analyzed:** 6/8/04  
**Volume(s) Analyzed:** 1.00 Liter(s)

Pi 1 = -11.1

Pf 1 = 1.0

D.F. = 4.36

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
74-87-3	Chloromethane	ND	2.2	ND	1.1	
75-01-4	Vinyl Chloride	ND	2.2	ND	0.85	
106-99-0	1,3-Butadiene	ND	2.2	ND	0.99	
74-83-9	Bromomethane	ND	2.2	ND	0.56	
75-00-3	Chloroethane	ND	2.2	ND	0.83	
67-64-1	Acetone	26	22	11	9.2	
75-69-4	Trichlorofluoromethane	ND	2.2	ND	0.39	
107-13-1	Acrylonitrile	ND	2.2	ND	1.0	
75-35-4	1,1-Dichloroethene	ND	2.2	ND	0.55	
75-09-2	Methylene chloride	ND	2.2	ND	0.63	
76-13-1	Trichlorotrifluoroethane	ND	2.2	ND	0.28	
75-15-0	Carbon Disulfide	ND	2.2	ND	0.70	
156-60-5	trans-1,2-Dichloroethene	ND	2.2	ND	0.55	
75-34-3	1,1-Dichloroethane	ND	2.2	ND	0.54	
1634-04-4	Methyl tert-Butyl Ether	ND	2.2	ND	0.60	
108-05-4	Vinyl Acetate	6.6	2.2	1.9	0.62	
78-93-3	2-Butanone (MEK)	5.4	2.2	1.8	0.74	
156-59-2	cis-1,2-Dichloroethene	ND	2.2	ND	0.55	
67-66-3	Chloroform	ND	2.2	ND	0.45	
107-06-2	1,2-Dichloroethane	ND	2.2	ND	0.54	
71-55-6	1,1,1-Trichloroethane	ND	2.2	ND	0.40	
71-43-2	Benzene	ND	2.2	ND	0.68	
56-23-5	Carbon Tetrachloride	ND	2.2	ND	0.35	

ND = Compound was analyzed for, but not detected above the **laboratory reporting limit**.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: KUH Date: 06/11/04

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# COLUMBIA ANALYTICAL SERVICES, INC.

## RESULTS OF ANALYSIS

Page 2 of 3

**Client:** GeoSyntec Consultants, Inc.  
**Client Sample ID:** AA-03-051804  
**Client Project ID:** Ascon LF/SB0202/31

CAS Project ID: P2401075  
CAS Sample ID: P2401075-009

**Test Code:** EPA TO-15  
**Instrument ID:** Tekmar AUTOCAN/HP5972/HP5890 II+/MS2  
**Analyst:** Chris Parnell/Aristotle Bragasin  
**Sampling Media:** Summa Canister  
**Test Notes:**  
**Container ID:** AC00625

**Date Collected:** 5/18/04  
**Date Received:** 5/21/04  
**Date(s) Analyzed:** 6/8/04  
**Volume(s) Analyzed:** 1.00 Liter(s)

Pi 1 = -11.1      Pf 1 = 1.0

D.F. = 4.36

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
78-87-5	1,2-Dichloropropane	ND	2.2	ND	0.47	
75-27-4	Bromodichloromethane	ND	2.2	ND	0.33	
79-01-6	Trichloroethene	ND	2.2	ND	0.41	
10061-01-5	cis-1,3-Dichloropropene	ND	2.2	ND	0.48	
108-10-1	4-Methyl-2-pentanone	ND	2.2	ND	0.53	
10061-02-6	trans-1,3-Dichloropropene	ND	2.2	ND	0.48	
79-00-5	1,1,2-Trichloroethane	ND	2.2	ND	0.40	
108-88-3	Toluene	9.0	2.2	2.4	0.58	
591-78-6	2-Hexanone	ND	2.2	ND	0.53	
124-48-1	Dibromochloromethane	ND	2.2	ND	0.26	
106-93-4	1,2-Dibromoethane	ND	2.2	ND	0.28	
127-18-4	Tetrachloroethene	ND	2.2	ND	0.32	
108-90-7	Chlorobenzene	ND	2.2	ND	0.47	
100-41-4	Ethylbenzene	2.5	2.2	0.57	0.50	
136777-61-2	m,p-Xylenes	ND	4.4	ND	1.0	
75-25-2	Bromoform	ND	2.2	ND	0.21	
100-42-5	Styrene	ND	2.2	ND	0.51	
95-47-6	o-Xylene	ND	2.2	ND	0.50	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.2	ND	0.32	
541-73-1	1,3-Dichlorobenzene	ND	2.2	ND	0.36	
106-46-7	1,4-Dichlorobenzene	ND	2.2	ND	0.36	
95-50-1	1,2-Dichlorobenzene	ND	2.2	ND	0.36	

ND = Compound was analyzed for, but not detected above the **laboratory reporting limit**.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: ELH Date: 06/10/04

Page No.:

# COLUMBIA ANALYTICAL SERVICES, INC.

## RESULTS OF ANALYSIS

Page 3 of 3

**Client:** GeoSyntec Consultants, Inc.  
**Client Sample ID:** AA-03-051804  
**Client Project ID:** Ascon LF/SB0202/31

CAS Project ID: P2401075  
 CAS Sample ID: P2401075-009

### Tentatively Identified Compounds

**Test Code:** EPA TO-15  
**Instrument ID:** Tekmar AUTOCAN/HP5972/HP5890 II+/MS2  
**Analyst:** Chris Parnell/Aristotle Bragasin  
**Sampling Media:** Summa Canister  
**Test Notes:** T  
**Container ID:** AC00625

**Date Collected:** 5/18/04  
**Date Received:** 5/21/04  
**Date Analyzed:** 6/8/04  
**Volume(s) Analyzed:** 1.00 Liter(s)

Pi 1 = -11.1

Pf 1 = 1.0

D.F. = 4.36

GC / MS Ret. Time	Compound Identification	Concentration µg/m³	Data Qualifier
19.50	Hexamethylcyclotrisiloxane (Possible Artifact)	10	

T = Analyte is a tentatively identified compound, result is estimated.

Verified By: KUH Date: 6/11/04

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