CE Schmidt, Ph.D.
Environmental Consultant

ATTACHMENT C

LABORATORY REPORTS

Phase II- Bucket Control/Control Agent Testing

19200 Live Oak Road Red Bluff, CA 96080 (530) 529-4256 Fax- 4878

2665 Park Center Drive, Suite D Simi Valley, California 93065 (805) 526-7161 ph (805) 526-7270 fax

Columbia Analytical Services INC
An Employee - Owned Company

LABORATORY REPORT

Client:	GEOSYNTEC CONSULTANTS, INC.	Date of Report:	06/14/04
Address:	2100 Main Street, Suite 150	Date Received:	05/17/04
	Huntington Beach, CA 92648	CAS Project No:	P2401046
Contact:	Mr. Mike Reardon	Purchase Order:	SB0202/31

Client Project ID: Ascon/SB0202/31

Two (2) 1.0 Liter Canister Samples labeled: "PNL-100-100-SF" and "PNLBA8-17-SFU"

One (1) Silco Canister labeled: "PNLBA3-X-SFU"

Nineteen (19) Stainless Steel Summa Canisters labeled:

"PNLBA1-17-SFU"	"PNLBA8-17-SFC1"	"PNLBA8-17-SFC2"	"PNLBA8-17-SFC3"
"PNLBA8-17-SFC4"	"PNLBA8-17-SFC5"	"PNLBA8-17-SFC6"	"PNLBA8-17-SFC7"
"PNLBA1-17-SFC1"	"PNLBA3-X-SFU1"	"PNLBA3-X-SFC"	"PNLBA11-X-SFU"
"PNLBA11-X-SFC"	"PNLBA13-X-SFU"	"PNLBA13-X-SFC"	"PNLBA06-X-SFU"
"PNLBA06-X-SFC"	"PNLBA07-X-SFU"	"PNLBA07-X-SFC"	

The samples were received at the laboratory under chain of custody on May 17, 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_1 through $>C_6$ hydrocarbons using a gas chromatograph equipped with a flame ionization detector (FID).

Reviewed and Approved:

Michelle H. Sakamoto

Michelle Sakamoto
Analytical Chemist
Air Quality Laboratory

Reviewed and Approved:

Wade Henton
GC-VOA Team Leader
Air Quality Laboratory

2665 Park Center Drive, Suite D Simi Valley, California 93065 (805) 526-7161 ph (805) 526-7270 fax

Columbia Analytical Services INC.
An Employee - Owned Company

CAS Project No: P2401046

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_x-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

Client: **GeoSyntec Consultants, Inc.**
Client Sample ID: **PNL-100-100-SF**
Client Project ID: **Ascon/SB0202/31**

CAS Project ID : P2401046
CAS Sample ID : P2401046-001

Test Code: Modified EPA TO-3
Instrument ID: HP5890II/GC8/FID
Analyst: Wade Henton
Sampling Media: 1.0 Liter Canister
Test Notes:
Container ID: ISC00005

Date Collected: 5/10/04
Date Received: 5/17/04
Date Analyzed: 5/19/04
Volume(s) Analyzed: 1.0 ml

Pi 1 = 0.3 Pf 1 = 10.2

D.F. = 1.66

Compound	**Result** ppmV	MRL ppmV	Data Qualifier
Methane	ND	0.83	
C_2 as Ethane	ND	0.83	
C_3 as Propane	ND	0.83	
C_4 as n-Butane	ND	0.83	
C_5 as n-Pentane	ND	0.83	
C_6 as n-Hexane	ND	0.83	
C_6+ 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: RC Date: 6/10/04

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **GeoSyntec Consultants, Inc.**
Client Sample ID: **PNLBA1-17-SFU**
Client Project ID: **Ascon/SB0202/31**

CAS Project ID : P2401046
CAS Sample ID : P2401046-002

Test Code: Modified EPA TO-3
Instrument ID: HP5890II/GC8/FID
Analyst: Wade Henton
Sampling Media: Summa Canister
Test Notes:
Container ID: SC00524

Date Collected: 5/10/04
Date Received: 5/17/04
Date Analyzed: 5/19/04
Volume(s) Analyzed: 1.0 ml

Pi 1 = 0.0 Pf 1 = 3.5

D.F. = 1.24

Compound	**Result** ppmV	MRL ppmV	Data Qualifier
Methane	**16**	0.62	
C_2 as Ethane	ND	0.62	
C_3 as Propane	ND	0.62	
C_4 as n-Butane	ND	0.62	
C_5 as n-Pentane	ND	0.62	
C_6 as n-Hexane	ND	0.62	
C_6+ as n-Hexane	**3.3**	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: DG Date: 6/10/04

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **GeoSyntec Consultants, Inc.**
Client Sample ID: **PNLBA8-17-SFU**
Client Project ID: **Ascon/SB0202/31**

CAS Project ID : P2401046
CAS Sample ID : P2401046-003

Test Code: Modified EPA TO-3
Instrument ID: HP5890II/GC8/FID
Analyst: Wade Henton
Sampling Media: 1.0 Liter Canister
Test Notes:
Container ID: ISC00015

Date Collected: 5/11/04
Date Received: 5/17/04
Date Analyzed: 5/19/04
Volume(s) Analyzed: 1.0 ml

Pi 1 = 0.4 Pf 1 = 10.1

D.F. = 1.64

Compound	**Result** ppmV	MRL ppmV	Data Qualifier
Methane	**84**	0.82	
C_2 as Ethane	ND	0.82	
C_3 as Propane	ND	0.82	
C_4 as n-Butane	**0.99**	0.82	
C_5 as n-Pentane	**3.2**	0.82	
C_6 as n-Hexane	**4.2**	0.82	
C_6+ as n-Hexane	**140**	1.6	

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: RC Date: 6/10/04

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **GeoSyntec Consultants, Inc.**
Client Sample ID: **PNLBA8-17-SFC1**
Client Project ID: **Ascon/SB0202/31**

CAS Project ID : P2401046
CAS Sample ID : P2401046-004

Test Code: Modified EPA TO-3
Instrument ID: HP5890II/GC8/FID
Analyst: Wade Henton
Sampling Media: Summa Canister
Test Notes:
Container ID: SC00544

Date Collected: 5/11/04
Date Received: 5/17/04
Date Analyzed: 5/19/04
Volume(s) Analyzed: 1.0 ml

Pi 1 = 0.3 Pf 1 = 3.5

D.F. = 1.21

Compound	**Result** ppmV	MRL ppmV	Data Qualifier
Methane	**56**	0.61	
C_2 as Ethane	ND	0.61	
C_3 as Propane	ND	0.61	
C_4 as n-Butane	**0.79**	0.61	
C_5 as n-Pentane	**2.3**	0.61	
C_6 as n-Hexane	**3.5**	0.61	
C_6+ as n-Hexane	**150**	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: RL Date: 6/10/04

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **GeoSyntec Consultants, Inc.**
Client Sample ID: **PNLBA8-17-SFC2**
Client Project ID: **Ascon/SB0202/31**

CAS Project ID : P2401046
CAS Sample ID : P2401046-005

Test Code: Modified EPA TO-3
Instrument ID: HP5890II/GC8/FID
Analyst: Wade Henton
Sampling Media: Summa Canister
Test Notes:
Container ID: SC00075

Date Collected: 5/11/04
Date Received: 5/17/04
Date Analyzed: 5/19/04
Volume(s) Analyzed: 1.0 ml

Pi 1 = 0.2 Pf 1 = 3.5

D.F. = 1.22

Compound	**Result** ppmV	MRL ppmV	Data Qualifier
Methane	**48**	0.61	
C_2 as Ethane	ND	0.61	
C_3 as Propane	ND	0.61	
C_4 as n-Butane	**0.64**	0.61	
C_5 as n-Pentane	**1.9**	0.61	
C_6 as n-Hexane	**2.8**	0.61	
C_6+ as n-Hexane	**120**	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: RC Date: 6/10/04

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **GeoSyntec Consultants, Inc.**
Client Sample ID: **PNLBA8-17-SFC3**
Client Project ID: **Ascon/SB0202/31**

CAS Project ID : P2401046
CAS Sample ID : P2401046-006

Test Code: Modified EPA TO-3
Instrument ID: HP5890II/GC8/FID
Analyst: Wade Henton
Sampling Media: Summa Canister
Test Notes:
Container ID: SC00219

Date Collected: 5/11/04
Date Received: 5/17/04
Date Analyzed: 5/19/04
Volume(s) Analyzed: 1.0 ml

Pi 1 = 0.2 Pf 1 = 3.5

D.F. = 1.22

Compound	Result ppmV	MRL ppmV	Data Qualifier
Methane	**58**	0.61	
C_2 as Ethane	ND	0.61	
C_3 as Propane	ND	0.61	
C_4 as n-Butane	**0.75**	0.61	
C_5 as n-Pentane	**1.8**	0.61	
C_6 as n-Hexane	**2.7**	0.61	
C_6+ as n-Hexane	**130**	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: RC Date: 6/10/04

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **GeoSyntec Consultants, Inc.**
Client Sample ID: **PNLBA8-17-SFC3**
Client Project ID: **Ascon/SB0202/31**

CAS Project ID : P2401046
CAS Sample ID : P2401046-006DUP

Test Code: Modified EPA TO-3
Instrument ID: HP5890II/GC8/FID
Analyst: Wade Henton
Sampling Media: Summa Canister
Test Notes:
Container ID: SC00219

Date Collected: 5/11/04
Date Received: 5/17/04
Date Analyzed: 5/19/04
Volume(s) Analyzed: 1.0 ml

Pi 1 = 0.2 Pf 1 = 3.5

D.F. = 1.22

Compound	**Result** ppmV	MRL ppmV	Data Qualifier
Methane	**57**	0.61	
C_2 as Ethane	ND	0.61	
C_3 as Propane	ND	0.61	
C_4 as n-Butane	**0.75**	0.61	
C_5 as n-Pentane	**1.8**	0.61	
C_6 as n-Hexane	**2.7**	0.61	
C_6+ as n-Hexane	**140**	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: RC Date: 6/10/04

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **GeoSyntec Consultants, Inc.**
Client Sample ID: **PNLBA8-17-SFC4**
Client Project ID: **Ascon/SB0202/31**

CAS Project ID : P2401046
CAS Sample ID : P2401046-007

Test Code: Modified EPA TO-3
Instrument ID: HP5890II/GC8/FID
Analyst: Wade Henton
Sampling Media: Summa Canister
Test Notes:
Container ID: SC00067

Date Collected: 5/11/04
Date Received: 5/17/04
Date Analyzed: 5/19/04
Volume(s) Analyzed: 1.0 ml

Pi 1 = 0.0 Pf 1 = 3.5

D.F. = 1.24

Compound	**Result** ppmV	MRL ppmV	Data Qualifier
Methane	**49**	0.62	
C_2 as Ethane	ND	0.62	
C_3 as Propane	ND	0.62	
C_4 as n-Butane	**0.82**	0.62	
C_5 as n-Pentane	**2.3**	0.62	
C_6 as n-Hexane	**3.4**	0.62	
C_6+ as n-Hexane	**130**	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: RG Date: 6/10/04

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **GeoSyntec Consultants, Inc.**
Client Sample ID: **PNLBA8-17-SFC5**
Client Project ID: **Ascon/SB0202/31**

CAS Project ID : P2401046
CAS Sample ID : P2401046-008

Test Code: Modified EPA TO-3
Instrument ID: HP5890II/GC8/FID
Analyst: Wade Henton
Sampling Media: Summa Canister
Test Notes:
Container ID: SC00073

Date Collected: 5/11/04
Date Received: 5/17/04
Date Analyzed: 5/19/04
Volume(s) Analyzed: 1.0 ml

Pi 1 = 0.0 Pf 1 = 3.5

D.F. = 1.24

Compound	**Result** ppmV	MRL ppmV	Data Qualifier
Methane	**29**	0.62	
C_2 as Ethane	ND	0.62	
C_3 as Propane	ND	0.62	
C_4 as n-Butane	ND	0.62	
C_5 as n-Pentane	**1.3**	0.62	
C_6 as n-Hexane	**1.7**	0.62	
C_6+ as n-Hexane	**68**	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: RC Date: 6/10/04

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **GeoSyntec Consultants, Inc.**
Client Sample ID: **PNLBA8-17-SFC6**
Client Project ID: **Ascon/SB0202/31**

CAS Project ID : P2401046
CAS Sample ID : P2401046-009

Test Code: Modified EPA TO-3
Instrument ID: HP5890II/GC8/FID
Analyst: Wade Henton
Sampling Media: Summa Canister
Test Notes:
Container ID: SC00520

Date Collected: 5/12/04
Date Received: 5/17/04
Date Analyzed: 5/19/04
Volume(s) Analyzed: 1.0 ml

Pi 1 = 0.2 Pf 1 = 3.5

D.F. = 1.22

Compound	**Result** ppmV	MRL ppmV	Data Qualifier
Methane	**15**	0.61	
C_2 as Ethane	ND	0.61	
C_3 as Propane	ND	0.61	
C_4 as n-Butane	ND	0.61	
C_5 as n-Pentane	**0.65**	0.61	
C_6 as n-Hexane	**0.89**	0.61	
C_6+ as n-Hexane	**26**	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: RG Date: 6/10/04

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **GeoSyntec Consultants, Inc.**
Client Sample ID: **PNLBA8-17-SFC7**
Client Project ID: **Ascon/SB0202/31**

CAS Project ID : P2401046
CAS Sample ID : P2401046-010

Test Code: Modified EPA TO-3
Instrument ID: HP5890II/GC8/FID
Analyst: Wade Henton
Sampling Media: Summa Canister
Test Notes:
Container ID: SC00094

Date Collected: 5/13/04
Date Received: 5/17/04
Date Analyzed: 5/19/04
Volume(s) Analyzed: 1.0 ml

Pi 1 = 0.2 Pf 1 = 3.5

D.F. = 1.22

Compound	**Result** ppmV	MRL ppmV	Data Qualifier
Methane	**17**	0.61	
C_2 as Ethane	ND	0.61	
C_3 as Propane	ND	0.61	
C_4 as n-Butane	ND	0.61	
C_5 as n-Pentane	ND	0.61	
C_6 as n-Hexane	**0.64**	0.61	
C_6+ as n-Hexane	**12**	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: RG Date: 6/10/04

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **GeoSyntec Consultants, Inc.**
Client Sample ID: **PNLBA1-17-SFC1**
Client Project ID: **Ascon/SB0202/31**

CAS Project ID : P2401046
CAS Sample ID : P2401046-011

Test Code: Modified EPA TO-3
Instrument ID: HP5890II/GC8/FID
Analyst: Wade Henton
Sampling Media: Summa Canister
Test Notes:
Container ID: SC00418

Date Collected: 5/13/04
Date Received: 5/17/04
Date Analyzed: 5/19/04
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	**1.3**	0.61	
C_2 as Ethane	ND	0.61	
C_3 as Propane	ND	0.61	
C_4 as n-Butane	ND	0.61	
C_5 as n-Pentane	ND	0.61	
C_6 as n-Hexane	ND	0.61	
C_6+ 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: RC Date: 6/10/04

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **GeoSyntec Consultants, Inc.**
Client Sample ID: **PNLBA3-X-SFU**
Client Project ID: **Ascon/SB0202/31**

CAS Project ID : P2401046
CAS Sample ID : P2401046-012

Test Code: Modified EPA TO-3
Instrument ID: HP5890II/GC8/FID
Analyst: Wade Henton
Sampling Media: Silco Canister
Test Notes:
Container ID: SLC00012

Date Collected: 5/13/04
Date Received: 5/17/04
Date Analyzed: 5/19/04
Volume(s) Analyzed: 1.0 ml

Pi 1 = 0.0 Pf 1 = 3.5

D.F. = 1.24

Compound	**Result** ppmV	MRL ppmV	Data Qualifier
Methane	**32**	0.62	
C_2 as Ethane	ND	0.62	
C_3 as Propane	ND	0.62	
C_4 as n-Butane	**1.7**	0.62	
C_5 as n-Pentane	**2.3**	0.62	
C_6 as n-Hexane	**2.7**	0.62	
C_6+ as n-Hexane	**63**	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: RG Date: 6/10/04

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **GeoSyntec Consultants, Inc.**
Client Sample ID: **PNLBA3-X-SFU1**
Client Project ID: **Ascon/SB0202/31**

CAS Project ID : P2401046
CAS Sample ID : P2401046-013

Test Code: Modified EPA TO-3
Instrument ID: HP5890II/GC8/FID
Analyst: Wade Henton
Sampling Media: Summa Canister
Test Notes:
Container ID: SC00523

Date Collected: 5/13/04
Date Received: 5/17/04
Date Analyzed: 5/19/04
Volume(s) Analyzed: 1.0 ml

Pi 1 = 0.0 Pf 1 = 3.5

D.F. = 1.24

Compound	**Result** ppmV	MRL ppmV	Data Qualifier
Methane	**31**	0.62	
C_2 as Ethane	ND	0.62	
C_3 as Propane	ND	0.62	
C_4 as n-Butane	**1.7**	0.62	
C_5 as n-Pentane	**2.3**	0.62	
C_6 as n-Hexane	**2.7**	0.62	
C_6+ as n-Hexane	**59**	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: RG Date: 6/10/04

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **GeoSyntec Consultants, Inc.**
Client Sample ID: **PNLBA3-X-SFC**
Client Project ID: **Ascon/SB0202/31**

CAS Project ID : P2401046
CAS Sample ID : P2401046-014

Test Code: Modified EPA TO-3
Instrument ID: HP5890II/GC8/FID
Analyst: Wade Henton
Sampling Media: Summa Canister
Test Notes:
Container ID: SC00211

Date Collected: 5/13/04
Date Received: 5/17/04
Date Analyzed: 5/19/04
Volume(s) Analyzed: 1.0 ml

Pi 1 = 0.0 Pf 1 = 3.5

D.F. = 1.24

Compound	**Result** ppmV	MRL ppmV	Data Qualifier
Methane	**20**	0.62	
C_2 as Ethane	ND	0.62	
C_3 as Propane	ND	0.62	
C_4 as n-Butane	**1.0**	0.62	
C_5 as n-Pentane	**0.94**	0.62	
C_6 as n-Hexane	**0.88**	0.62	
C_6+ as n-Hexane	**11**	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: Rc Date: 6/10/04

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **GeoSyntec Consultants, Inc.**
Client Sample ID: **PNLBA11-X-SFU**
Client Project ID: **Ascon/SB0202/31**

CAS Project ID : P2401046
CAS Sample ID : P2401046-015

Test Code: Modified EPA TO-3
Instrument ID: HP5890II/GC8/FID
Analyst: Wade Henton
Sampling Media: Summa Canister
Test Notes:
Container ID: SC00257

Date Collected: 5/14/04
Date Received: 5/17/04
Date Analyzed: 5/19/04
Volume(s) Analyzed: 1.0 ml

Pi 1 = 0.3 Pf 1 = 3.5

D.F. = 1.21

Compound	**Result** ppmV	MRL ppmV	Data Qualifier
Methane	**2.1**	0.61	
C_2 as Ethane	ND	0.61	
C_3 as Propane	ND	0.61	
C_4 as n-Butane	ND	0.61	
C_5 as n-Pentane	ND	0.61	
C_6 as n-Hexane	ND	0.61	
C_6+ as n-Hexane	**60**	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: RC Date: 6/10/04

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **GeoSyntec Consultants, Inc.**
Client Sample ID: **PNLBA11-X-SFC**
Client Project ID: **Ascon/SB0202/31**

CAS Project ID : P2401046
CAS Sample ID : P2401046-016

Test Code: Modified EPA TO-3
Instrument ID: HP5890II/GC8/FID
Analyst: Wade Henton
Sampling Media: Summa Canister
Test Notes:
Container ID: SC00519

Date Collected: 5/14/04
Date Received: 5/17/04
Date Analyzed: 5/20/04
Volume(s) Analyzed: 1.0 ml

Pi 1 = 0.3 Pf 1 = 3.5

D.F. = 1.21

Compound	**Result** ppmV	MRL ppmV	Data Qualifier
Methane	**1.0**	0.61	
C_2 as Ethane	ND	0.61	
C_3 as Propane	ND	0.61	
C_4 as n-Butane	ND	0.61	
C_5 as n-Pentane	ND	0.61	
C_6 as n-Hexane	ND	0.61	
C_6+ as n-Hexane	**28**	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: RG Date: 6/10/04

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **GeoSyntec Consultants, Inc.**
Client Sample ID: **PNLBA13-X-SFU**
Client Project ID: **Ascon/SB0202/31**

CAS Project ID : P2401046
CAS Sample ID : P2401046-017

Test Code: Modified EPA TO-3
Instrument ID: HP5890II/GC8/FID
Analyst: Wade Henton
Sampling Media: Summa Canister
Test Notes:
Container ID: SC00602

Date Collected: 5/14/04
Date Received: 5/17/04
Date Analyzed: 5/20/04
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	**15**	0.61	
C_2 as Ethane	ND	0.61	
C_3 as Propane	ND	0.61	
C_4 as n-Butane	**2.3**	0.61	
C_5 as n-Pentane	**6.4**	0.61	
C_6 as n-Hexane	**9.8**	0.61	
C_6+ as n-Hexane	**530**	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: RG Date: 6/10/04

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **GeoSyntec Consultants, Inc.**
Client Sample ID: **PNLBA13-X-SFC**
Client Project ID: **Ascon/SB0202/31**

CAS Project ID : P2401046
CAS Sample ID : P2401046-018

Test Code: Modified EPA TO-3
Instrument ID: HP5890II/GC8/FID
Analyst: Wade Henton
Sampling Media: Summa Canister
Test Notes:
Container ID: SC00275

Date Collected: 5/14/04
Date Received: 5/17/04
Date Analyzed: 5/20/04
Volume(s) Analyzed: 1.0 ml

Pi 1 = 0.0 Pf 1 = 3.5

D.F. = 1.24

Compound	**Result** ppmV	MRL ppmV	Data Qualifier
Methane	**0.63**	0.62	
C_2 as Ethane	ND	0.62	
C_3 as Propane	ND	0.62	
C_4 as n-Butane	ND	0.62	
C_5 as n-Pentane	ND	0.62	
C_6 as n-Hexane	ND	0.62	
C_6+ as n-Hexane	**3.5**	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: RG Date: 6/10/04

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **GeoSyntec Consultants, Inc.**
Client Sample ID: **PNLBA06-X-SFU**
Client Project ID: **Ascon/SB0202/31**

CAS Project ID : P2401046
CAS Sample ID : P2401046-019

Test Code: Modified EPA TO-3
Instrument ID: HP5890II/GC8/FID
Analyst: Wade Henton
Sampling Media: Summa Canister
Test Notes:
Container ID: SC00063

Date Collected: 5/14/04
Date Received: 5/17/04
Date Analyzed: 5/20/04
Volume(s) Analyzed: 1.0 ml

Pi 1 = 0.0 Pf 1 = 3.5

D.F. = 1.24

Compound	**Result** ppmV	MRL ppmV	Data Qualifier
Methane	**23**	0.62	
C_2 as Ethane	ND	0.62	
C_3 as Propane	ND	0.62	
C_4 as n-Butane	ND	0.62	
C_5 as n-Pentane	ND	0.62	
C_6 as n-Hexane	ND	0.62	
C_6+ as n-Hexane	**11**	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: RG Date: 6/10/04

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **GeoSyntec Consultants, Inc.**
Client Sample ID: **PNLBA06-X-SFU**
Client Project ID: **Ascon/SB0202/31**

CAS Project ID : P2401046
CAS Sample ID : P2401046-019DUP

Test Code: Modified EPA TO-3
Instrument ID: HP5890II/GC8/FID
Analyst: Wade Henton
Sampling Media: Summa Canister
Test Notes:
Container ID: SC00063

Date Collected: 5/14/04
Date Received: 5/17/04
Date Analyzed: 5/20/04
Volume(s) Analyzed: 1.0 ml

Pi 1 = 0.0 Pf 1 = 3.5

D.F. = 1.24

Compound	**Result** ppmV	MRL ppmV	Data Qualifier
Methane	**23**	0.62	
C_2 as Ethane	ND	0.62	
C_3 as Propane	ND	0.62	
C_4 as n-Butane	ND	0.62	
C_5 as n-Pentane	ND	0.62	
C_6 as n-Hexane	ND	0.62	
C_6+ as n-Hexane	**12**	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: RC Date: 6/10/04

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **GeoSyntec Consultants, Inc.**
Client Sample ID: **PNLBA06-X-SFC**
Client Project ID: **Ascon/SB0202/31**

CAS Project ID : P2401046
CAS Sample ID : P2401046-020

Test Code: Modified EPA TO-3
Instrument ID: HP5890II/GC8/FID
Analyst: Wade Henton
Sampling Media: Summa Canister
Test Notes:
Container ID: SC00264

Date Collected: 5/14/04
Date Received: 5/17/04
Date Analyzed: 5/20/04
Volume(s) Analyzed: 1.0 ml

Pi 1 = 0.0 Pf 1 = 3.5

D.F. = 1.24

Compound	**Result** ppmV	MRL ppmV	Data Qualifier
Methane	**0.98**	0.62	
C_2 as Ethane	ND	0.62	
C_3 as Propane	ND	0.62	
C_4 as n-Butane	ND	0.62	
C_5 as n-Pentane	ND	0.62	
C_6 as n-Hexane	ND	0.62	
C_6+ 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: RG Date: 6/10/04

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **GeoSyntec Consultants, Inc.**
Client Sample ID: **PNLBA07-X-SFU**
Client Project ID: **Ascon/SB0202/31**

CAS Project ID : P2401046
CAS Sample ID : P2401046-021

Test Code: Modified EPA TO-3
Instrument ID: HP5890II/GC8/FID
Analyst: Wade Henton
Sampling Media: Summa Canister
Test Notes:
Container ID: SC00256

Date Collected: 5/14/04
Date Received: 5/17/04
Date Analyzed: 5/20/04
Volume(s) Analyzed: 1.0 ml

Pi 1 = -0.3 Pf 1 = 3.5

D.F. = 1.26

Compound	**Result** ppmV	MRL ppmV	Data Qualifier
Methane	**11**	0.63	
C_2 as Ethane	ND	0.63	
C_3 as Propane	ND	0.63	
C_4 as n-Butane	ND	0.63	
C_5 as n-Pentane	ND	0.63	
C_6 as n-Hexane	ND	0.63	
C_6+ as n-Hexane	**19**	1.3	

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: RG Date: 6/10/04

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **GeoSyntec Consultants, Inc.**
Client Sample ID: **PNLBA07-X-SFC**
Client Project ID: **Ascon/SB0202/31**

CAS Project ID : P2401046
CAS Sample ID : P2401046-022

Test Code: Modified EPA TO-3
Instrument ID: HP5890II/GC8/FID
Analyst: Wade Henton
Sampling Media: Summa Canister
Test Notes:
Container ID: SC00262

Date Collected: 5/14/04
Date Received: 5/17/04
Date Analyzed: 5/20/04
Volume(s) Analyzed: 1.0 ml

Pi 1 = -0.1 Pf 1 = 3.5

D.F. = 1.25

Compound	**Result** ppmV	MRL ppmV	Data Qualifier
Methane	**12**	0.62	
C_2 as Ethane	ND	0.62	
C_3 as Propane	ND	0.62	
C_4 as n-Butane	ND	0.62	
C_5 as n-Pentane	ND	0.62	
C_6 as n-Hexane	ND	0.62	
C_6+ as n-Hexane	**10**	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: RG Date: 6/10/04

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

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

CAS Project ID : P2401046
CAS Sample ID : P040519-MB

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

Date Collected: NA
Date Received: NA
Date Analyzed: 5/19/04
Volume(s) Analyzed: 1.0 ml

D.F. = 1.00

Compound	**Result** ppmV	MRL ppmV	Data Qualifier
Methane	ND	0.50	
C_2 as Ethane	ND	0.50	
C_3 as Propane	ND	0.50	
C_4 as n-Butane	ND	0.50	
C_5 as n-Pentane	ND	0.50	
C_6 as n-Hexane	ND	0.50	
C_6+ 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: RC Date: 6/10/04

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

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

CAS Project ID : P2401046
CAS Sample ID : P040520-MB

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

Date Collected: NA
Date Received: NA
Date Analyzed: 5/20/04
Volume(s) Analyzed: 1.0 ml

D.F. = 1.00

Compound	**Result** ppmV	MRL ppmV	Data Qualifier
Methane	ND	0.50	
C_2 as Ethane	ND	0.50	
C_3 as Propane	ND	0.50	
C_4 as n-Butane	ND	0.50	
C_5 as n-Pentane	ND	0.50	
C_6 as n-Hexane	ND	0.50	
C_6+ 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: RC Date: 6/10/04

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **GeoSyntec Consultants, Inc.**
Client Sample ID: **PNL-100-100-SF**
Client Project ID: **Ascon/SB0202/31**

CAS Project ID: P2401046
CAS Sample ID: P2401046-001

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3
Analyst: Rusty Bravo/Michelle Sakamoto
Sampling Media: 1.0 Liter Canister
Test Notes:
Container ID: ISC00005

Date Collected: 5/10/04
Date Received: 5/17/04
Date(s) Analyzed: 5/26/04
Volume(s) Analyzed: 0.40 Liter(s)

Pi 1 = 0.3 Pf 1 = 10.2

D.F. = 1.66

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
74-87-3	Chloromethane	ND	2.1	ND	1.0	
75-01-4	Vinyl Chloride	ND	2.1	ND	0.81	
106-99-0	1,3-Butadiene	ND	2.1	ND	0.94	
74-83-9	Bromomethane	ND	2.1	ND	0.53	
75-00-3	Chloroethane	ND	2.1	ND	0.79	
67-64-1	Acetone	ND	21	ND	8.7	
75-69-4	Trichlorofluoromethane	ND	2.1	ND	0.37	
107-13-1	Acrylonitrile	ND	2.1	ND	0.96	
75-35-4	1,1-Dichloroethene	ND	2.1	ND	0.52	
75-09-2	Methylene chloride	ND	2.1	ND	0.60	
76-13-1	Trichlorotrifluoroethane	ND	2.1	ND	0.27	
75-15-0	Carbon Disulfide	ND	2.1	ND	0.67	
156-60-5	trans-1,2-Dichloroethene	ND	2.1	ND	0.52	
75-34-3	1,1-Dichloroethane	ND	2.1	ND	0.51	
1634-04-4	Methyl tert-Butyl Ether	ND	2.1	ND	0.58	
108-05-4	Vinyl Acetate	ND	2.1	ND	0.59	
78-93-3	2-Butanone (MEK)	**5.2**	2.1	**1.8**	0.70	
156-59-2	cis-1,2-Dichloroethene	ND	2.1	ND	0.52	
67-66-3	Chloroform	ND	2.1	ND	0.43	
107-06-2	1,2-Dichloroethane	ND	2.1	ND	0.51	
71-55-6	1,1,1-Trichloroethane	ND	2.1	ND	0.38	
71-43-2	Benzene	ND	2.1	ND	0.65	
56-23-5	Carbon Tetrachloride	ND	2.1	ND	0.33	

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: RC Date: 6/10/04

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **GeoSyntec Consultants, Inc.**
Client Sample ID: **PNL-100-100-SF**
Client Project ID: **Ascon/SB0202/31**

CAS Project ID: P2401046
CAS Sample ID: P2401046-001

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3
Analyst: Rusty Bravo/Michelle Sakamoto
Sampling Media: 1.0 Liter Canister
Test Notes:
Container ID: ISC00005

Date Collected: 5/10/04
Date Received: 5/17/04
Date(s) Analyzed: 5/26/04
Volume(s) Analyzed: 0.40 Liter(s)

Pi 1 = 0.3 Pf 1 = 10.2

D.F. = 1.66

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
78-87-5	1,2-Dichloropropane	ND	2.1	ND	0.45	
75-27-4	Bromodichloromethane	ND	2.1	ND	0.31	
79-01-6	Trichloroethene	ND	2.1	ND	0.39	
10061-01-5	cis-1,3-Dichloropropene	ND	2.1	ND	0.46	
108-10-1	4-Methyl-2-pentanone	ND	2.1	ND	0.51	
10061-02-6	trans-1,3-Dichloropropene	ND	2.1	ND	0.46	
79-00-5	1,1,2-Trichloroethane	ND	2.1	ND	0.38	
108-88-3	Toluene	**2.4**	2.1	**0.65**	0.55	
591-78-6	2-Hexanone	ND	2.1	ND	0.51	
124-48-1	Dibromochloromethane	ND	2.1	ND	0.24	
106-93-4	1,2-Dibromoethane	ND	2.1	ND	0.27	
127-18-4	Tetrachloroethene	ND	2.1	ND	0.31	
108-90-7	Chlorobenzene	ND	2.1	ND	0.45	
100-41-4	Ethylbenzene	ND	2.1	ND	0.48	
136777-61-2	*m,p*-Xylenes	ND	4.2	ND	0.96	
75-25-2	Bromoform	ND	2.1	ND	0.20	
100-42-5	Styrene	ND	2.1	ND	0.49	
95-47-6	o-Xylene	ND	2.1	ND	0.48	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.1	ND	0.30	
541-73-1	1,3-Dichlorobenzene	ND	2.1	ND	0.35	
106-46-7	1,4-Dichlorobenzene	ND	2.1	ND	0.35	
95-50-1	1,2-Dichlorobenzene	ND	2.1	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: RC Date: 6/10/04

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **GeoSyntec Consultants, Inc.**
Client Sample ID: **PNL-100-100-SF**
Client Project ID: **Ascon/SB0202/31**

CAS Project ID: P2401046
CAS Sample ID: P2401046-001

Tentatively Identified Compounds

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3
Analyst: Rusty Bravo/Michelle Sakamoto
Sampling Media: 1.0 Liter Canister
Test Notes:
Container ID: ISC00005

Date Collected: 5/10/04
Date Received: 5/17/04
Date Analyzed: 5/26/04
Volume(s) Analyzed: 0.40 Liter(s)

Pi 1 = 0.3 Pf 1 = 10.2

D.F. = 1.66

GC / MS Ret. Time	Compound Identification	Concentration µg/m³	Data Qualifier
	No Compounds Detected		

Verified By: KG Date: 6/10/04

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **GeoSyntec Consultants, Inc.**
Client Sample ID: **PNLBA1-17-SFU**
Client Project ID: **Ascon/SB0202/31**

CAS Project ID: P2401046
CAS Sample ID: P2401046-002

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3
Analyst: Rusty Bravo/Michelle Sakamoto
Sampling Media: Summa Canister
Test Notes:
Container ID: SC00524

Date Collected: 5/10/04
Date Received: 5/17/04
Date(s) Analyzed: 5/26/04 & 6/3/04
Volume(s) Analyzed: 0.50 Liter(s)
0.020 Liter(s)

Pi 1 = 0.0 Pf 1 = 3.5

D.F. = 1.24

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
74-87-3	Chloromethane	ND	1.2	ND	0.60	
75-01-4	Vinyl Chloride	ND	1.2	ND	0.49	
106-99-0	1,3-Butadiene	ND	1.2	ND	0.56	
74-83-9	Bromomethane	ND	1.2	ND	0.32	
75-00-3	Chloroethane	ND	1.2	ND	0.47	
67-64-1	Acetone	**33**	12	**14**	5.2	
75-69-4	Trichlorofluoromethane	ND	1.2	ND	0.22	
107-13-1	Acrylonitrile	ND	1.2	ND	0.57	
75-35-4	1,1-Dichloroethene	ND	1.2	ND	0.31	
75-09-2	Methylene chloride	**8.2**	1.2	**2.3**	0.36	
76-13-1	Trichlorotrifluoroethane	ND	1.2	ND	0.16	
75-15-0	Carbon Disulfide	**19**	1.2	**6.2**	0.40	
156-60-5	trans-1,2-Dichloroethene	ND	1.2	ND	0.31	
75-34-3	1,1-Dichloroethane	ND	1.2	ND	0.31	
1634-04-4	Methyl tert-Butyl Ether	ND	1.2	ND	0.34	
108-05-4	Vinyl Acetate	ND	1.2	ND	0.35	
78-93-3	2-Butanone (MEK)	**3.4**	1.2	**1.2**	0.42	
156-59-2	cis-1,2-Dichloroethene	**1.2**	1.2	**0.31**	0.31	
67-66-3	Chloroform	**1.6**	1.2	**0.33**	0.25	
107-06-2	1,2-Dichloroethane	ND	1.2	ND	0.31	
71-55-6	1,1,1-Trichloroethane	ND	1.2	ND	0.23	
71-43-2	Benzene	**110**	1.2	**34**	0.39	
56-23-5	Carbon Tetrachloride	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: Rc Date: 6/10/04

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **GeoSyntec Consultants, Inc.**
Client Sample ID: **PNLBA1-17-SFU**
Client Project ID: **Ascon/SB0202/31**

CAS Project ID: P2401046
CAS Sample ID: P2401046-002

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3
Analyst: Rusty Bravo/Michelle Sakamoto
Sampling Media: Summa Canister
Test Notes:
Container ID: SC00524

Date Collected: 5/10/04
Date Received: 5/17/04
Date(s) Analyzed: 5/26/04 & 6/3/04
Volume(s) Analyzed: 0.50 Liter(s)
0.020 Liter(s)

Pi 1 = 0.0 Pf 1 = 3.5

D.F. = 1.24

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
78-87-5	1,2-Dichloropropane	ND	1.2	ND	0.27	
75-27-4	Bromodichloromethane	ND	1.2	ND	0.19	
79-01-6	Trichloroethene	**300**	1.2	**55**	0.23	
10061-01-5	cis-1,3-Dichloropropene	ND	1.2	ND	0.27	
108-10-1	4-Methyl-2-pentanone	ND	1.2	ND	0.30	
10061-02-6	trans-1,3-Dichloropropene	ND	1.2	ND	0.27	
79-00-5	1,1,2-Trichloroethane	ND	1.2	ND	0.23	
108-88-3	Toluene	**39**	1.2	**10**	0.33	
591-78-6	2-Hexanone	ND	1.2	ND	0.30	
124-48-1	Dibromochloromethane	ND	1.2	ND	0.15	
106-93-4	1,2-Dibromoethane	ND	1.2	ND	0.16	
127-18-4	Tetrachloroethene	**670**	1.2	**98**	0.18	
108-90-7	Chlorobenzene	ND	1.2	ND	0.27	
100-41-4	Ethylbenzene	**6.0**	1.2	**1.4**	0.29	
136777-61-2	*m,p*-Xylenes	**4.9**	2.5	**1.1**	0.57	
75-25-2	Bromoform	ND	1.2	ND	0.12	
100-42-5	Styrene	ND	1.2	ND	0.29	
95-47-6	o-Xylene	**1.5**	1.2	**0.35**	0.29	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.2	ND	0.18	
541-73-1	1,3-Dichlorobenzene	ND	1.2	ND	0.21	
106-46-7	1,4-Dichlorobenzene	ND	1.2	ND	0.21	
95-50-1	1,2-Dichlorobenzene	ND	1.2	ND	0.21	

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: RG Date: 6/10/04

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **GeoSyntec Consultants, Inc.**
Client Sample ID: **PNLBA1-17-SFU**
Client Project ID: **Ascon/SB0202/31**

CAS Project ID: P2401046
CAS Sample ID: P2401046-002

Tentatively Identified Compounds

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3
Analyst: Rusty Bravo/Michelle Sakamoto
Sampling Media: Summa Canister
Test Notes: **T**
Container ID: SC00524

Date Collected: 5/10/04
Date Received: 5/17/04
Date Analyzed: 5/26/04 & 6/3/04
Volume(s) Analyzed: 0.50 Liter(s)
0.020 Liter(s)

Pi 1 = 0.0 Pf 1 = 3.5

D.F. = 1.24

GC / MS Ret. Time	Compound Identification	Concentration µg/m³	Data Qualifier
5.74	n-Butane	**800**	
7.39	n-Pentane	**1,000**	
9.17	Cyclopentane	**700**	
9.27	2-Methylpentane	**600**	
9.73	3-Methylpentane	**500**	
10.30	n-Hexane	**700**	
11.35	Methylcyclopentane	**2,000**	
12.65	Cyclohexane	**1,000**	
13.53	Dimethylcyclopentane Isomer	**1,000**	
13.65	Dimethylcyclopentane Isomer	**1,000**	
13.77	Dimethylcyclopentane Isomer	**2,000**	
15.15	Methylcyclohexane	**2,000**	
15.84	Trimethylcyclopentane Isomer	**400**	
16.15	Trimethylcyclopentane Isomer	**900**	
17.40	Dimethylcyclohexane Isomer	**400**	

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

Verified By: RC Date: 6/10/04

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **GeoSyntec Consultants, Inc.**
Client Sample ID: **PNLBA8-17-SFU**
Client Project ID: **Ascon/SB0202/31**

CAS Project ID: P2401046
CAS Sample ID: P2401046-003

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3
Analyst: Rusty Bravo/Michelle Sakamoto
Sampling Media: 1.0 Liter Canister
Test Notes:
Container ID: ISC00015

Date Collected: 5/11/04
Date Received: 5/17/04
Date(s) Analyzed: 5/26/04
Volume(s) Analyzed: 0.0070 Liter(s)

Pi 1 = 0.4 Pf 1 = 10.1

D.F. = 1.64

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
74-87-3	Chloromethane	ND	120	ND	57	
75-01-4	Vinyl Chloride	ND	120	ND	46	
106-99-0	1,3-Butadiene	ND	120	ND	53	
74-83-9	Bromomethane	ND	120	ND	30	
75-00-3	Chloroethane	ND	120	ND	44	
67-64-1	Acetone	ND	1,200	ND	490	
75-69-4	Trichlorofluoromethane	ND	120	ND	21	
107-13-1	Acrylonitrile	ND	120	ND	54	
75-35-4	1,1-Dichloroethene	ND	120	ND	30	
75-09-2	Methylene chloride	ND	120	ND	34	
76-13-1	Trichlorotrifluoroethane	ND	120	ND	15	
75-15-0	Carbon Disulfide	ND	120	ND	38	
156-60-5	trans-1,2-Dichloroethene	ND	120	ND	30	
75-34-3	1,1-Dichloroethane	ND	120	ND	29	
1634-04-4	Methyl tert-Butyl Ether	ND	120	ND	33	
108-05-4	Vinyl Acetate	ND	120	ND	33	
78-93-3	2-Butanone (MEK)	ND	120	ND	40	
156-59-2	cis-1,2-Dichloroethene	ND	120	ND	30	
67-66-3	Chloroform	ND	120	ND	24	
107-06-2	1,2-Dichloroethane	ND	120	ND	29	
71-55-6	1,1,1-Trichloroethane	ND	120	ND	21	
71-43-2	Benzene	**1,500**	120	**470**	37	
56-23-5	Carbon Tetrachloride	ND	120	ND	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: RC. Date: 6/10/04

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **GeoSyntec Consultants, Inc.**
Client Sample ID: **PNLBA8-17-SFU**
Client Project ID: **Ascon/SB0202/31**

CAS Project ID: P2401046
CAS Sample ID: P2401046-003

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3
Analyst: Rusty Bravo/Michelle Sakamoto
Sampling Media: 1.0 Liter Canister
Test Notes:
Container ID: ISC00015

Date Collected: 5/11/04
Date Received: 5/17/04
Date(s) Analyzed: 5/26/04
Volume(s) Analyzed: 0.0070 Liter(s)

Pi 1 = 0.4 Pf 1 = 10.1

D.F. = 1.64

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
78-87-5	1,2-Dichloropropane	ND	120	ND	25	
75-27-4	Bromodichloromethane	ND	120	ND	17	
79-01-6	Trichloroethene	ND	120	ND	22	
10061-01-5	cis-1,3-Dichloropropene	ND	120	ND	26	
108-10-1	4-Methyl-2-pentanone	ND	120	ND	29	
10061-02-6	trans-1,3-Dichloropropene	ND	120	ND	26	
79-00-5	1,1,2-Trichloroethane	ND	120	ND	21	
108-88-3	Toluene	**1,200**	120	**310**	31	
591-78-6	2-Hexanone	ND	120	ND	29	
124-48-1	Dibromochloromethane	ND	120	ND	14	
106-93-4	1,2-Dibromoethane	ND	120	ND	15	
127-18-4	Tetrachloroethene	ND	120	ND	17	
108-90-7	Chlorobenzene	ND	120	ND	25	
100-41-4	Ethylbenzene	**1,600**	120	**370**	27	
136777-61-2	*m,p*-Xylenes	**2,500**	230	**580**	54	
75-25-2	Bromoform	ND	120	ND	11	
100-42-5	Styrene	**250**	120	**58**	28	
95-47-6	o-Xylene	**1,200**	120	**270**	27	
79-34-5	1,1,2,2-Tetrachloroethane	ND	120	ND	17	
541-73-1	1,3-Dichlorobenzene	ND	120	ND	19	
106-46-7	1,4-Dichlorobenzene	ND	120	ND	19	
95-50-1	1,2-Dichlorobenzene	ND	120	ND	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: RG Date: 6/10/04

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **GeoSyntec Consultants, Inc.**
Client Sample ID: **PNLBA8-17-SFU**
Client Project ID: **Ascon/SB0202/31**

CAS Project ID: P2401046
CAS Sample ID: P2401046-003

Tentatively Identified Compounds

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3
Analyst: Rusty Bravo/Michelle Sakamoto
Sampling Media: 1.0 Liter Canister
Test Notes: **T**
Container ID: ISC00015

Date Collected: 5/11/04
Date Received: 5/17/04
Date Analyzed: 5/26/04
Volume(s) Analyzed: 0.0070 Liter(s)

Pi 1 = 0.4 Pf 1 = 10.1

D.F. = 1.64

GC / MS Ret. Time	Compound Identification	Concentration µg/m³	Data Qualifier
7.37	n-Pentane	**6,000**	
10.25	n-Hexane	**5,000**	
11.31	Methylcyclopentane	**10,000**	
13.48	Dimethylcyclopentane Isomer	**6,000**	
13.51	Dimethylcyclopentane Isomer	**6,000**	
13.70	Dimethylcyclopentane Isomer	**10,000**	
15.08	Methylcyclohexane	**10,000**	
16.10	Trimethylcyclopentane Isomer	**9,000**	
17.36	Dimethylcyclohexane Isomer	**6,000**	
19.70	Trimethylcyclohexane Isomer	**10,000**	
22.38	C_9H_{16} Compound	**6,000**	
24.05	1,2,4-Trimethylbenzene	**2,000**	
24.79	1,2,3-Trimethylbenzene + $C_{11}H_{24}$ Branched Alkane	**8,000**	
26.35	n-Undecane	**5,000**	
27.92	Naphthalene	**3,000**	

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

Verified By: RG Date: 6/10/04

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **GeoSyntec Consultants, Inc.**
Client Sample ID: **PNLBA8-17-SFC1**
Client Project ID: **Ascon/SB0202/31**

CAS Project ID: P2401046
CAS Sample ID: P2401046-004

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3
Analyst: Rusty Bravo/Michelle Sakamoto
Sampling Media: Summa Canister
Test Notes:
Container ID: SC00544

Date Collected: 5/11/04
Date Received: 5/17/04
Date(s) Analyzed: 5/26/04
Volume(s) Analyzed: 0.0040 Liter(s)

Pi 1 = 0.3 Pf 1 = 3.5

D.F. = 1.21

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
74-87-3	Chloromethane	ND	150	ND	73	
75-01-4	Vinyl Chloride	ND	150	ND	59	
106-99-0	1,3-Butadiene	ND	150	ND	68	
74-83-9	Bromomethane	ND	150	ND	39	
75-00-3	Chloroethane	ND	150	ND	57	
67-64-1	Acetone	ND	1,500	ND	640	
75-69-4	Trichlorofluoromethane	ND	150	ND	27	
107-13-1	Acrylonitrile	ND	150	ND	70	
75-35-4	1,1-Dichloroethene	ND	150	ND	38	
75-09-2	Methylene chloride	ND	150	ND	44	
76-13-1	Trichlorotrifluoroethane	ND	150	ND	20	
75-15-0	Carbon Disulfide	ND	150	ND	49	
156-60-5	trans-1,2-Dichloroethene	ND	150	ND	38	
75-34-3	1,1-Dichloroethane	ND	150	ND	37	
1634-04-4	Methyl tert-Butyl Ether	ND	150	ND	42	
108-05-4	Vinyl Acetate	ND	150	ND	43	
78-93-3	2-Butanone (MEK)	ND	150	ND	51	
156-59-2	cis-1,2-Dichloroethene	ND	150	ND	38	
67-66-3	Chloroform	ND	150	ND	31	
107-06-2	1,2-Dichloroethane	ND	150	ND	37	
71-55-6	1,1,1-Trichloroethane	ND	150	ND	28	
71-43-2	Benzene	**2,700**	150	**830**	47	
56-23-5	Carbon Tetrachloride	ND	150	ND	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: RG Date: 6/10/04

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **GeoSyntec Consultants, Inc.**
Client Sample ID: **PNLBA8-17-SFC1**
Client Project ID: **Ascon/SB0202/31**

CAS Project ID: P2401046
CAS Sample ID: P2401046-004

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3
Analyst: Rusty Bravo/Michelle Sakamoto
Sampling Media: Summa Canister
Test Notes:
Container ID: SC00544

Date Collected: 5/11/04
Date Received: 5/17/04
Date(s) Analyzed: 5/26/04
Volume(s) Analyzed: 0.0040 Liter(s)

Pi 1 = 0.3 Pf 1 = 3.5

D.F. = 1.21

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
78-87-5	1,2-Dichloropropane	ND	150	ND	33	
75-27-4	Bromodichloromethane	ND	150	ND	23	
79-01-6	Trichloroethene	ND	150	ND	28	
10061-01-5	cis-1,3-Dichloropropene	ND	150	ND	33	
108-10-1	4-Methyl-2-pentanone	ND	150	ND	37	
10061-02-6	trans-1,3-Dichloropropene	ND	150	ND	33	
79-00-5	1,1,2-Trichloroethane	ND	150	ND	28	
108-88-3	Toluene	**2,400**	150	**640**	40	
591-78-6	2-Hexanone	ND	150	ND	37	
124-48-1	Dibromochloromethane	ND	150	ND	18	
106-93-4	1,2-Dibromoethane	ND	150	ND	20	
127-18-4	Tetrachloroethene	ND	150	ND	22	
108-90-7	Chlorobenzene	ND	150	ND	33	
100-41-4	Ethylbenzene	**3,200**	150	**740**	35	
136777-61-2	*m,p* -Xylenes	**3,800**	300	**870**	70	
75-25-2	Bromoform	ND	150	ND	15	
100-42-5	Styrene	**530**	150	**120**	36	
95-47-6	o-Xylene	**2,100**	150	**470**	35	
79-34-5	1,1,2,2-Tetrachloroethane	ND	150	ND	22	
541-73-1	1,3-Dichlorobenzene	ND	150	ND	25	
106-46-7	1,4-Dichlorobenzene	ND	150	ND	25	
95-50-1	1,2-Dichlorobenzene	ND	150	ND	25	

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: RG Date: 6/10/04

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **GeoSyntec Consultants, Inc.**
Client Sample ID: **PNLBA8-17-SFC1**
Client Project ID: **Ascon/SB0202/31**

CAS Project ID: P2401046
CAS Sample ID: P2401046-004

Tentatively Identified Compounds

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3
Analyst: Rusty Bravo/Michelle Sakamoto
Sampling Media: Summa Canister
Test Notes: **T**
Container ID: SC00544

Date Collected: 5/11/04
Date Received: 5/17/04
Date Analyzed: 5/26/04
Volume(s) Analyzed: 0.0040 Liter(s)

Pi 1 = 0.3 Pf 1 = 3.5

D.F. = 1.21

GC / MS Ret. Time	Compound Identification	Concentration µg/m³	Data Qualifier
11.31	Methylcyclopentane	10,000	
13.48	Dimethylcyclopentane Isomer	8,000	
13.70	Dimethylcyclopentane Isomer	10,000	
15.09	Methylcyclohexane	10,000	
16.11	Trimethylcyclopentane Isomer	10,000	
17.36	Dimethylcyclohexane Isomer	8,000	
19.70	Trimethylcyclohexane Isomer	20,000	
21.20	2-Butoxyethanol	10,000	
22.39	C_9H_{16} Compound	8,000	
23.51	$C_{10}H_{20}$ Compound	8,000	
24.05	1,2,4-Trimethylbenzene	3,000	
24.79	1,2,3-Trimethylbenzene + $C_{11}H_{24}$ Branched Alkane	10,000	
25.13	$C_{10}H_{12}$ Compound	8,000	
25.28	C_9H_8 Compound	8,000	
27.92	Naphthalene	5,000	

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

Verified By: RLC Date: 6/10/04

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **GeoSyntec Consultants, Inc.**
Client Sample ID: **PNLBA8-17-SFC2**
Client Project ID: **Ascon/SB0202/31**

CAS Project ID: P2401046
CAS Sample ID: P2401046-005

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3
Analyst: Rusty Bravo/Michelle Sakamoto
Sampling Media: Summa Canister
Test Notes:
Container ID: SC00075

Date Collected: 5/11/04
Date Received: 5/17/04
Date(s) Analyzed: 6/4/04
Volume(s) Analyzed: 0.0070 Liter(s)

Pi 1 = 0.2 Pf 1 = 3.5

D.F. = 1.22

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
74-87-3	Chloromethane	ND	87	ND	42	
75-01-4	Vinyl Chloride	ND	87	ND	34	
106-99-0	1,3-Butadiene	ND	87	ND	39	
74-83-9	Bromomethane	ND	87	ND	22	
75-00-3	Chloroethane	ND	87	ND	33	
67-64-1	Acetone	ND	870	ND	370	
75-69-4	Trichlorofluoromethane	ND	87	ND	16	
107-13-1	Acrylonitrile	ND	87	ND	40	
75-35-4	1,1-Dichloroethene	ND	87	ND	22	
75-09-2	Methylene chloride	ND	87	ND	25	
76-13-1	Trichlorotrifluoroethane	ND	87	ND	11	
75-15-0	Carbon Disulfide	ND	87	ND	28	
156-60-5	trans-1,2-Dichloroethene	ND	87	ND	22	
75-34-3	1,1-Dichloroethane	ND	87	ND	22	
1634-04-4	Methyl tert-Butyl Ether	ND	87	ND	24	
108-05-4	Vinyl Acetate	ND	87	ND	25	
78-93-3	2-Butanone (MEK)	ND	87	ND	30	
156-59-2	cis-1,2-Dichloroethene	ND	87	ND	22	
67-66-3	Chloroform	ND	87	ND	18	
107-06-2	1,2-Dichloroethane	ND	87	ND	22	
71-55-6	1,1,1-Trichloroethane	ND	87	ND	16	
71-43-2	Benzene	**2,200**	87	**680**	27	
56-23-5	Carbon Tetrachloride	ND	87	ND	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: RG Date: 6/11/04

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **GeoSyntec Consultants, Inc.**
Client Sample ID: **PNLBA8-17-SFC2**
Client Project ID: **Ascon/SB0202/31**

CAS Project ID: P2401046
CAS Sample ID: P2401046-005

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3
Analyst: Rusty Bravo/Michelle Sakamoto
Sampling Media: Summa Canister
Test Notes:
Container ID: SC00075

Date Collected: 5/11/04
Date Received: 5/17/04
Date(s) Analyzed: 6/4/04
Volume(s) Analyzed: 0.0070 Liter(s)

Pi 1 = 0.2 Pf 1 = 3.5

D.F. = 1.22

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
78-87-5	1,2-Dichloropropane	ND	87	ND	19	
75-27-4	Bromodichloromethane	ND	87	ND	13	
79-01-6	Trichloroethene	ND	87	ND	16	
10061-01-5	cis-1,3-Dichloropropene	ND	87	ND	19	
108-10-1	4-Methyl-2-pentanone	ND	87	ND	21	
10061-02-6	trans-1,3-Dichloropropene	ND	87	ND	19	
79-00-5	1,1,2-Trichloroethane	ND	87	ND	16	
108-88-3	Toluene	**2,000**	87	**530**	23	
591-78-6	2-Hexanone	ND	87	ND	21	
124-48-1	Dibromochloromethane	ND	87	ND	10	
106-93-4	1,2-Dibromoethane	ND	87	ND	11	
127-18-4	Tetrachloroethene	ND	87	ND	13	
108-90-7	Chlorobenzene	ND	87	ND	19	
100-41-4	Ethylbenzene	**2,600**	87	**600**	20	
136777-61-2	*m,p* -Xylenes	**2,400**	170	**560**	40	
75-25-2	Bromoform	ND	87	ND	8.4	
100-42-5	Styrene	**550**	87	**130**	20	
95-47-6	o-Xylene	**1,300**	87	**310**	20	
79-34-5	1,1,2,2-Tetrachloroethane	ND	87	ND	13	
541-73-1	1,3-Dichlorobenzene	ND	87	ND	15	
106-46-7	1,4-Dichlorobenzene	ND	87	ND	15	
95-50-1	1,2-Dichlorobenzene	ND	87	ND	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: RG Date: 6/10/04

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **GeoSyntec Consultants, Inc.**
Client Sample ID: **PNLBA8-17-SFC2**
Client Project ID: **Ascon/SB0202/31**

CAS Project ID: P2401046
CAS Sample ID: P2401046-005

Tentatively Identified Compounds

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3
Analyst: Rusty Bravo/Michelle Sakamoto
Sampling Media: Summa Canister
Test Notes: **T**
Container ID: SC00075

Date Collected: 5/11/04
Date Received: 5/17/04
Date Analyzed: 6/4/04
Volume(s) Analyzed: 0.0070 Liter(s)

Pi 1 = 0.2 Pf 1 = 3.5

D.F. = 1.22

GC / MS Ret. Time	Compound Identification	Concentration µg/m³	Data Qualifier
11.30	Methylcyclopentane	**9,000**	
13.47	Dimethylcyclopentane Isomer	**6,000**	
13.58	Dimethylcyclopentane Isomer	**5,000**	
13.69	Dimethylcyclopentane Isomer	**9,000**	
15.07	Methylcyclohexane	**8,000**	
16.09	Trimethylcyclopentane Isomer	**8,000**	
17.35	Dimethylcyclohexane Isomer	**5,000**	
19.69	Trimethylcyclohexane Isomer	**10,000**	
22.38	C_9H_{16} Compound	**5,000**	
23.50	$C_{10}H_{20}$ Compound	**5,000**	
24.04	1,2,4-Trimethylbenzene	**2,000**	
24.77	1,2,3-Trimethylbenzene + $C_{11}H_{24}$ Branched Alkane	**6,000**	
25.11	$C_{10}H_{12}$ Compound	**6,000**	
25.27	C_9H_8 Compound	**6,000**	
27.91	Naphthalene	**5,000**	

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

Verified By: RC Date: 6/10/04

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **GeoSyntec Consultants, Inc.**
Client Sample ID: **PNLBA8-17-SFC3**
Client Project ID: **Ascon/SB0202/31**

CAS Project ID: P2401046
CAS Sample ID: P2401046-006

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3
Analyst: Rusty Bravo/Michelle Sakamoto
Sampling Media: Summa Canister
Test Notes:
Container ID: SC00219

Date Collected: 5/11/04
Date Received: 5/17/04
Date(s) Analyzed: 6/4/04
Volume(s) Analyzed: 0.0070 Liter(s)

Pi 1 = 0.2 Pf 1 = 3.5

D.F. = 1.22

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
74-87-3	Chloromethane	ND	87	ND	42	
75-01-4	Vinyl Chloride	ND	87	ND	34	
106-99-0	1,3-Butadiene	ND	87	ND	39	
74-83-9	Bromomethane	ND	87	ND	22	
75-00-3	Chloroethane	ND	87	ND	33	
67-64-1	Acetone	ND	870	ND	370	
75-69-4	Trichlorofluoromethane	ND	87	ND	16	
107-13-1	Acrylonitrile	ND	87	ND	40	
75-35-4	1,1-Dichloroethene	ND	87	ND	22	
75-09-2	Methylene chloride	ND	87	ND	25	
76-13-1	Trichlorotrifluoroethane	ND	87	ND	11	
75-15-0	Carbon Disulfide	ND	87	ND	28	
156-60-5	trans-1,2-Dichloroethene	ND	87	ND	22	
75-34-3	1,1-Dichloroethane	ND	87	ND	22	
1634-04-4	Methyl tert-Butyl Ether	ND	87	ND	24	
108-05-4	Vinyl Acetate	ND	87	ND	25	
78-93-3	2-Butanone (MEK)	ND	87	ND	30	
156-59-2	cis-1,2-Dichloroethene	ND	87	ND	22	
67-66-3	Chloroform	ND	87	ND	18	
107-06-2	1,2-Dichloroethane	ND	87	ND	22	
71-55-6	1,1,1-Trichloroethane	ND	87	ND	16	
71-43-2	Benzene	**2,400**	87	**740**	27	
56-23-5	Carbon Tetrachloride	ND	87	ND	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: RG Date: 6/10/04 RG

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **GeoSyntec Consultants, Inc.**
Client Sample ID: **PNLBA8-17-SFC3**
Client Project ID: **Ascon/SB0202/31**

CAS Project ID: P2401046
CAS Sample ID: P2401046-006

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3
Analyst: Rusty Bravo/Michelle Sakamoto
Sampling Media: Summa Canister
Test Notes:
Container ID: SC00219

Date Collected: 5/11/04
Date Received: 5/17/04
Date(s) Analyzed: 6/4/04
Volume(s) Analyzed: 0.0070 Liter(s)

Pi 1 = 0.2 Pf 1 = 3.5

D.F. = 1.22

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
78-87-5	1,2-Dichloropropane	ND	87	ND	19	
75-27-4	Bromodichloromethane	ND	87	ND	13	
79-01-6	Trichloroethene	ND	87	ND	16	
10061-01-5	cis-1,3-Dichloropropene	ND	87	ND	19	
108-10-1	4-Methyl-2-pentanone	ND	87	ND	21	
10061-02-6	trans-1,3-Dichloropropene	ND	87	ND	19	
79-00-5	1,1,2-Trichloroethane	ND	87	ND	16	
108-88-3	Toluene	**2,000**	87	**520**	23	
591-78-6	2-Hexanone	ND	87	ND	21	
124-48-1	Dibromochloromethane	ND	87	ND	10	
106-93-4	1,2-Dibromoethane	ND	87	ND	11	
127-18-4	Tetrachloroethene	ND	87	ND	13	
108-90-7	Chlorobenzene	ND	87	ND	19	
100-41-4	Ethylbenzene	**2,400**	87	**550**	20	
136777-61-2	*m,p* -Xylenes	**2,800**	170	**650**	40	
75-25-2	Bromoform	ND	87	ND	8.4	
100-42-5	Styrene	**570**	87	**130**	20	
95-47-6	o-Xylene	**1,500**	87	**340**	20	
79-34-5	1,1,2,2-Tetrachloroethane	ND	87	ND	13	
541-73-1	1,3-Dichlorobenzene	ND	87	ND	15	
106-46-7	1,4-Dichlorobenzene	ND	87	ND	15	
95-50-1	1,2-Dichlorobenzene	ND	87	ND	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: RG Date: 6/10/04

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **GeoSyntec Consultants, Inc.**
Client Sample ID: **PNLBA8-17-SFC3**
Client Project ID: **Ascon/SB0202/31**

CAS Project ID: P2401046
CAS Sample ID: P2401046-006

Tentatively Identified Compounds

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3
Analyst: Rusty Bravo/Michelle Sakamoto
Sampling Media: Summa Canister
Test Notes: **T**
Container ID: SC00219

Date Collected: 5/11/04
Date Received: 5/17/04
Date Analyzed: 6/4/04
Volume(s) Analyzed: 0.0070 Liter(s)

Pi 1 = 0.2 Pf 1 = 3.5
D.F. = 1.22

GC / MS Ret. Time	Compound Identification	Concentration µg/m³	Data Qualifier
10.24	n-Hexane	**3,000**	
11.31	Methylcyclopentane	**10,000**	
13.47	Dimethylcyclopentane Isomer	**6,000**	
13.58	Dimethylcyclopentane Isomer	**6,000**	
13.70	Dimethylcyclopentane Isomer	**10,000**	
15.08	Methylcyclohexane	**10,000**	
15.81	Trimethylcyclopentane Isomer	**5,000**	
16.10	Trimethylcyclopentane Isomer	**10,000**	
17.36	Dimethylcyclohexane Isomer	**6,000**	
19.70	Trimethylcyclohexane Isomer	**10,000**	
20.22	Trimethylcyclohexane Isomer	**5,000**	
22.39	C_9H_{16} Compound	**5,000**	
23.51	$C_{10}H_{20}$ Compound	**5,000**	
24.79	1,2,3-Trimethylbenzene + $C_{11}H_{24}$ Branched Alkane	**6,000**	
27.92	Naphthalene	**3,000**	

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

Verified By: RG Date: 6/10/04

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **GeoSyntec Consultants, Inc.**
Client Sample ID: **PNLBA8-17-SFC4**
Client Project ID: **Ascon/SB0202/31**

CAS Project ID: P2401046
CAS Sample ID: P2401046-007

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3
Analyst: Rusty Bravo/Michelle Sakamoto
Sampling Media: Summa Canister
Test Notes:
Container ID: SC00067

Date Collected: 5/11/04
Date Received: 5/17/04
Date(s) Analyzed: 5/26/04
Volume(s) Analyzed: 0.020 Liter(s)

Pi 1 = 0.0 Pf 1 = 3.5

D.F. = 1.24

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
74-87-3	Chloromethane	ND	31	ND	15	
75-01-4	Vinyl Chloride	ND	31	ND	12	
106-99-0	1,3-Butadiene	ND	31	ND	14	
74-83-9	Bromomethane	ND	31	ND	8.0	
75-00-3	Chloroethane	ND	31	ND	12	
67-64-1	Acetone	ND	310	ND	130	
75-69-4	Trichlorofluoromethane	ND	31	ND	5.5	
107-13-1	Acrylonitrile	ND	31	ND	14	
75-35-4	1,1-Dichloroethene	ND	31	ND	7.8	
75-09-2	Methylene chloride	ND	31	ND	8.9	
76-13-1	Trichlorotrifluoroethane	ND	31	ND	4.0	
75-15-0	Carbon Disulfide	ND	31	ND	10	
156-60-5	trans-1,2-Dichloroethene	ND	31	ND	7.8	
75-34-3	1,1-Dichloroethane	ND	31	ND	7.7	
1634-04-4	Methyl tert-Butyl Ether	ND	31	ND	8.6	
108-05-4	Vinyl Acetate	ND	31	ND	8.8	
78-93-3	2-Butanone (MEK)	ND	31	ND	11	
156-59-2	cis-1,2-Dichloroethene	ND	31	ND	7.8	
67-66-3	Chloroform	ND	31	ND	6.4	
107-06-2	1,2-Dichloroethane	ND	31	ND	7.7	
71-55-6	1,1,1-Trichloroethane	ND	31	ND	5.7	
71-43-2	Benzene	**2,000**	31	**640**	9.7	
56-23-5	Carbon Tetrachloride	ND	31	ND	4.9	

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: RG Date: 6/10/04

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **GeoSyntec Consultants, Inc.**
Client Sample ID: **PNLBA8-17-SFC4**
Client Project ID: **Ascon/SB0202/31**

CAS Project ID: P2401046
CAS Sample ID: P2401046-007

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3
Analyst: Rusty Bravo/Michelle Sakamoto
Sampling Media: Summa Canister
Test Notes:
Container ID: SC00067

Date Collected: 5/11/04
Date Received: 5/17/04
Date(s) Analyzed: 5/26/04
Volume(s) Analyzed: 0.020 Liter(s)

Pi 1 = 0.0 Pf 1 = 3.5

D.F. = 1.24

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
78-87-5	1,2-Dichloropropane	ND	31	ND	6.7	
75-27-4	Bromodichloromethane	ND	31	ND	4.6	
79-01-6	Trichloroethene	ND	31	ND	5.8	
10061-01-5	cis-1,3-Dichloropropene	ND	31	ND	6.8	
108-10-1	4-Methyl-2-pentanone	ND	31	ND	7.6	
10061-02-6	trans-1,3-Dichloropropene	ND	31	ND	6.8	
79-00-5	1,1,2-Trichloroethane	ND	31	ND	5.7	
108-88-3	Toluene	**1,400**	31	**380**	8.2	
591-78-6	2-Hexanone	ND	31	ND	7.6	
124-48-1	Dibromochloromethane	ND	31	ND	3.6	
106-93-4	1,2-Dibromoethane	ND	31	ND	4.0	
127-18-4	Tetrachloroethene	ND	31	ND	4.6	
108-90-7	Chlorobenzene	ND	31	ND	6.7	
100-41-4	Ethylbenzene	**1,800**	31	**420**	7.1	
136777-61-2	*m,p* -Xylenes	**2,700**	62	**620**	14	
75-25-2	Bromoform	ND	31	ND	3.0	
100-42-5	Styrene	**320**	31	**76**	7.3	
95-47-6	o-Xylene	**1,300**	31	**310**	7.1	
79-34-5	1,1,2,2-Tetrachloroethane	ND	31	ND	4.5	
541-73-1	1,3-Dichlorobenzene	ND	31	ND	5.2	
106-46-7	1,4-Dichlorobenzene	ND	31	ND	5.2	
95-50-1	1,2-Dichlorobenzene	ND	31	ND	5.2	

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: RG Date: 6/10/04

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **GeoSyntec Consultants, Inc.**
Client Sample ID: **PNLBA8-17-SFC4**
Client Project ID: **Ascon/SB0202/31**

CAS Project ID: P2401046
CAS Sample ID: P2401046-007

Tentatively Identified Compounds

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3
Analyst: Rusty Bravo/Michelle Sakamoto
Sampling Media: Summa Canister
Test Notes: **T**
Container ID: SC00067

Date Collected: 5/11/04
Date Received: 5/17/04
Date Analyzed: 5/26/04
Volume(s) Analyzed: 0.020 Liter(s)

Pi 1 = 0.0 Pf 1 = 3.5

D.F. = 1.24

GC / MS Ret. Time	Compound Identification	Concentration µg/m³	Data Qualifier
10.27	n-Hexane	**3,000**	
13.49	Dimethylcyclopentane Isomer	**3,000**	
13.61	Dimethylcyclopentane Isomer	**3,000**	
13.71	Dimethylcyclopentane Isomer	**5,000**	
15.11	Methylcyclohexane	**5,000**	
16.12	Trimethylcyclopentane Isomer	**5,000**	
17.37	Dimethylcyclohexane Isomer	**3,000**	
19.71	Trimethylcyclohexane Isomer	**8,000**	
20.23	Trimethylcyclohexane Isomer	**3,000**	
22.39	C_9H_{16} Compound	**3,000**	
23.52	$C_{10}H_{20}$ Compound	**3,000**	
24.06	1,2,4-Trimethylbenzene	**2,000**	
24.24	$C_{12}H_{26}$ Branched Alkane	**2,000**	
24.80	1,2,3-Trimethylbenzene + $C_{11}H_{24}$ Branched Alkane	**5,000**	
27.94	Naphthalene	**3,000**	

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

Verified By: RL Date: 6/10/04

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **GeoSyntec Consultants, Inc.**
Client Sample ID: **PNLBA8-17-SFC5**
Client Project ID: **Ascon/SB0202/31**

CAS Project ID: P2401046
CAS Sample ID: P2401046-008

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3
Analyst: Rusty Bravo/Michelle Sakamoto
Sampling Media: Summa Canister
Test Notes:
Container ID: SC00073

Date Collected: 5/11/04
Date Received: 5/17/04
Date(s) Analyzed: 6/7/04
Volume(s) Analyzed: 0.010 Liter(s)

Pi 1 = 0.0 Pf 1 = 3.5

D.F. = 1.24

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
74-87-3	Chloromethane	ND	62	ND	30	
75-01-4	Vinyl Chloride	ND	62	ND	24	
106-99-0	1,3-Butadiene	ND	62	ND	28	
74-83-9	Bromomethane	ND	62	ND	16	
75-00-3	Chloroethane	ND	62	ND	24	
67-64-1	Acetone	ND	620	ND	260	
75-69-4	Trichlorofluoromethane	ND	62	ND	11	
107-13-1	Acrylonitrile	ND	62	ND	29	
75-35-4	1,1-Dichloroethene	ND	62	ND	16	
75-09-2	Methylene chloride	ND	62	ND	18	
76-13-1	Trichlorotrifluoroethane	ND	62	ND	8.1	
75-15-0	Carbon Disulfide	ND	62	ND	20	
156-60-5	trans-1,2-Dichloroethene	ND	62	ND	16	
75-34-3	1,1-Dichloroethane	ND	62	ND	15	
1634-04-4	Methyl tert-Butyl Ether	ND	62	ND	17	
108-05-4	Vinyl Acetate	ND	62	ND	18	
78-93-3	2-Butanone (MEK)	ND	62	ND	21	
156-59-2	cis-1,2-Dichloroethene	ND	62	ND	16	
67-66-3	Chloroform	ND	62	ND	13	
107-06-2	1,2-Dichloroethane	ND	62	ND	15	
71-55-6	1,1,1-Trichloroethane	ND	62	ND	11	
71-43-2	Benzene	**1,500**	62	**460**	19	
56-23-5	Carbon Tetrachloride	ND	62	ND	9.9	

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: KG Date: 6/10/04

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **GeoSyntec Consultants, Inc.**
Client Sample ID: **PNLBA8-17-SFC5**
Client Project ID: **Ascon/SB0202/31**

CAS Project ID: P2401046
CAS Sample ID: P2401046-008

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3
Analyst: Rusty Bravo/Michelle Sakamoto
Sampling Media: Summa Canister
Test Notes:
Container ID: SC00073

Date Collected: 5/11/04
Date Received: 5/17/04
Date(s) Analyzed: 6/7/04
Volume(s) Analyzed: 0.010 Liter(s)

Pi 1 = 0.0 Pf 1 = 3.5

D.F. = 1.24

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
78-87-5	1,2-Dichloropropane	ND	62	ND	13	
75-27-4	Bromodichloromethane	ND	62	ND	9.3	
79-01-6	Trichloroethene	ND	62	ND	12	
10061-01-5	cis-1,3-Dichloropropene	ND	62	ND	14	
108-10-1	4-Methyl-2-pentanone	ND	62	ND	15	
10061-02-6	trans-1,3-Dichloropropene	ND	62	ND	14	
79-00-5	1,1,2-Trichloroethane	ND	62	ND	11	
108-88-3	Toluene	**1,200**	62	**320**	16	
591-78-6	2-Hexanone	ND	62	ND	15	
124-48-1	Dibromochloromethane	ND	62	ND	7.3	
106-93-4	1,2-Dibromoethane	ND	62	ND	8.1	
127-18-4	Tetrachloroethene	ND	62	ND	9.1	
108-90-7	Chlorobenzene	ND	62	ND	13	
100-41-4	Ethylbenzene	**1,600**	62	**360**	14	
136777-61-2	*m,p* -Xylenes	**2,100**	120	**490**	29	
75-25-2	Bromoform	ND	62	ND	6.0	
100-42-5	Styrene	**290**	62	**68**	15	
95-47-6	o-Xylene	**1,200**	62	**270**	14	
79-34-5	1,1,2,2-Tetrachloroethane	ND	62	ND	9.0	
541-73-1	1,3-Dichlorobenzene	ND	62	ND	10	
106-46-7	1,4-Dichlorobenzene	ND	62	ND	10	
95-50-1	1,2-Dichlorobenzene	ND	62	ND	10	

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: RC Date: 6/10/04

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **GeoSyntec Consultants, Inc.**
Client Sample ID: **PNLBA8-17-SFC5**
Client Project ID: **Ascon/SB0202/31**

CAS Project ID: P2401046
CAS Sample ID: P2401046-008

Tentatively Identified Compounds

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3
Analyst: Rusty Bravo/Michelle Sakamoto
Sampling Media: Summa Canister
Test Notes: **T**
Container ID: SC00073

Date Collected: 5/11/04
Date Received: 5/17/04
Date Analyzed: 6/7/04
Volume(s) Analyzed: 0.010 Liter(s)

Pi 1 = 0.0 Pf 1 = 3.5

D.F. = 1.24

GC / MS Ret. Time	Compound Identification	Concentration µg/m³	Data Qualifier
11.29	Methylcyclopentane	6,000	
13.46	Dimethylcyclopentane Isomer	3,000	
13.57	Dimethylcyclopentane Isomer	3,000	
13.68	Dimethylcyclopentane Isomer	5,000	
15.06	Methylcyclohexane	5,000	
16.08	Trimethylcyclopentane Isomer	3,000	
17.34	Dimethylcyclohexane Isomer	3,000	
19.68	Trimethylcyclohexane Isomer	7,000	
22.37	C_9H_{16} Compound	3,000	
23.50	$C_{10}H_{20}$ Compound	3,000	
24.04	1,2,4-Trimethylbenzene	2,000	
24.78	1,2,3-Trimethylbenzene + $C_{11}H_{24}$ Branched Alkane	5,000	
25.12	$C_{10}H_{12}$ Compound	3,000	
25.28	C_9H_8 Compound	3,000	
27.91	Naphthalene	3,000	

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

Verified By: RC Date: 6/10/04

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **GeoSyntec Consultants, Inc.**
Client Sample ID: **PNLBA8-17-SFC6**
Client Project ID: **Ascon/SB0202/31**

CAS Project ID: P2401046
CAS Sample ID: P2401046-009

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5972/HP5890 II+/MS2
Analyst: Michelle Sakamoto/Aristotle Bragasin
Sampling Media: Summa Canister
Test Notes:
Container ID: SC00520

Date Collected: 5/12/04
Date Received: 5/17/04
Date(s) Analyzed: 6/7/04
Volume(s) Analyzed: 0.015 Liter(s)

Pi 1 = 0.2 Pf 1 = 3.5

D.F. = 1.22

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
74-87-3	Chloromethane	ND	41	ND	20	
75-01-4	Vinyl Chloride	ND	41	ND	16	
106-99-0	1,3-Butadiene	ND	41	ND	18	
74-83-9	Bromomethane	ND	41	ND	10	
75-00-3	Chloroethane	ND	41	ND	15	
67-64-1	Acetone	ND	410	ND	170	
75-69-4	Trichlorofluoromethane	ND	41	ND	7.2	
107-13-1	Acrylonitrile	ND	41	ND	19	
75-35-4	1,1-Dichloroethene	ND	41	ND	10	
75-09-2	Methylene chloride	ND	41	ND	12	
76-13-1	Trichlorotrifluoroethane	ND	41	ND	5.3	
75-15-0	Carbon Disulfide	ND	41	ND	13	
156-60-5	trans-1,2-Dichloroethene	ND	41	ND	10	
75-34-3	1,1-Dichloroethane	ND	41	ND	10	
1634-04-4	Methyl tert-Butyl Ether	ND	41	ND	11	
108-05-4	Vinyl Acetate	ND	41	ND	12	
78-93-3	2-Butanone (MEK)	ND	41	ND	14	
156-59-2	cis-1,2-Dichloroethene	ND	41	ND	10	
67-66-3	Chloroform	ND	41	ND	8.3	
107-06-2	1,2-Dichloroethane	ND	41	ND	10	
71-55-6	1,1,1-Trichloroethane	ND	41	ND	7.5	
71-43-2	Benzene	**660**	41	**210**	13	
56-23-5	Carbon Tetrachloride	ND	41	ND	6.5	

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: RG Date: 6/10/04

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **GeoSyntec Consultants, Inc.**
Client Sample ID: **PNLBA8-17-SFC6**
Client Project ID: **Ascon/SB0202/31**

CAS Project ID: P2401046
CAS Sample ID: P2401046-009

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5972/HP5890 II+/MS2
Analyst: Michelle Sakamoto/Aristotle Bragasin
Sampling Media: Summa Canister
Test Notes:
Container ID: SC00520

Date Collected: 5/12/04
Date Received: 5/17/04
Date(s) Analyzed: 6/7/04
Volume(s) Analyzed: 0.015 Liter(s)

Pi 1 = 0.2 Pf 1 = 3.5

D.F. = 1.22

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
78-87-5	1,2-Dichloropropane	ND	41	ND	8.8	
75-27-4	Bromodichloromethane	ND	41	ND	6.1	
79-01-6	Trichloroethene	ND	41	ND	7.6	
10061-01-5	cis-1,3-Dichloropropene	ND	41	ND	9.0	
108-10-1	4-Methyl-2-pentanone	ND	41	ND	9.9	
10061-02-6	trans-1,3-Dichloropropene	ND	41	ND	9.0	
79-00-5	1,1,2-Trichloroethane	ND	41	ND	7.5	
108-88-3	Toluene	**720**	41	**190**	11	
591-78-6	2-Hexanone	ND	41	ND	9.9	
124-48-1	Dibromochloromethane	ND	41	ND	4.8	
106-93-4	1,2-Dibromoethane	ND	41	ND	5.3	
127-18-4	Tetrachloroethene	ND	41	ND	6.0	
108-90-7	Chlorobenzene	ND	41	ND	8.8	
100-41-4	Ethylbenzene	**840**	41	**190**	9.4	
136777-61-2	*m,p*-Xylenes	**1,100**	81	**250**	19	
75-25-2	Bromoform	ND	41	ND	3.9	
100-42-5	Styrene	**220**	41	**51**	9.6	
95-47-6	o-Xylene	**630**	41	**140**	9.4	
79-34-5	1,1,2,2-Tetrachloroethane	ND	41	ND	5.9	
541-73-1	1,3-Dichlorobenzene	ND	41	ND	6.8	
106-46-7	1,4-Dichlorobenzene	ND	41	ND	6.8	
95-50-1	1,2-Dichlorobenzene	ND	41	ND	6.8	

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: R.C. Date: 6/10/04

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **GeoSyntec Consultants, Inc.**
Client Sample ID: **PNLBA8-17-SFC6**
Client Project ID: **Ascon/SB0202/31**

CAS Project ID: P2401046
CAS Sample ID: P2401046-009

Tentatively Identified Compounds

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5972/HP5890 II+/MS2
Analyst: Michelle Sakamoto/Aristotle Bragasin
Sampling Media: Summa Canister
Test Notes: **T**
Container ID: SC00520

Date Collected: 5/12/04
Date Received: 5/17/04
Date Analyzed: 6/7/04
Volume(s) Analyzed: 0.015 Liter(s)

Pi 1 = 0.2 Pf 1 = 3.5

D.F. = 1.22

GC / MS Ret. Time	Compound Identification	Concentration µg/m³	Data Qualifier
10.09	n-Hexane	700	
11.19	Methylcyclopentane	3,000	
13.55	Dimethylcyclopentane Isomer	1,000	
13.68	Dimethylcyclopentane Isomer	1,000	
13.80	Dimethylcyclopentane Isomer	2,000	
15.34	Methylcyclohexane	2,000	
16.52	Trimethylcyclopentane Isomer	2,000	
17.95	Dimethylcyclohexane Isomer	1,000	
20.48	Trimethylcyclohexane Isomer	2,000	
23.36	C_9H_{16} Compound	1,000	
25.00	1,2,4-Trimethylbenzene	1,000	
25.66	1,2,3-Trimethylbenzene	2,000	
25.96	$C_{10}H_{12}$ Compound	1,000	
26.11	C_9H_8 Compound	2,000	
28.59	Naphthalene	3,000	

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

Verified By: RC Date: 6/10/04

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **GeoSyntec Consultants, Inc.**
Client Sample ID: **PNLBA8-17-SFC7**
Client Project ID: **Ascon/SB0202/31**

CAS Project ID: P2401046
CAS Sample ID: P2401046-010

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3
Analyst: Rusty Bravo/Michelle Sakamoto
Sampling Media: Summa Canister
Test Notes:
Container ID: SC00094

Date Collected: 5/13/04
Date Received: 5/17/04
Date(s) Analyzed: 6/3/04
Volume(s) Analyzed: 0.025 Liter(s)

Pi 1 = 0.2 Pf 1 = 3.5

D.F. = 1.22

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
74-87-3	Chloromethane	ND	24	ND	12	
75-01-4	Vinyl Chloride	ND	24	ND	9.5	
106-99-0	1,3-Butadiene	ND	24	ND	11	
74-83-9	Bromomethane	ND	24	ND	6.3	
75-00-3	Chloroethane	ND	24	ND	9.3	
67-64-1	Acetone	ND	240	ND	100	
75-69-4	Trichlorofluoromethane	ND	24	ND	4.3	
107-13-1	Acrylonitrile	ND	24	ND	11	
75-35-4	1,1-Dichloroethene	ND	24	ND	6.2	
75-09-2	Methylene chloride	ND	24	ND	7.0	
76-13-1	Trichlorotrifluoroethane	ND	24	ND	3.2	
75-15-0	Carbon Disulfide	**37**	24	**12**	7.8	
156-60-5	trans-1,2-Dichloroethene	ND	24	ND	6.2	
75-34-3	1,1-Dichloroethane	ND	24	ND	6.0	
1634-04-4	Methyl tert-Butyl Ether	ND	24	ND	6.8	
108-05-4	Vinyl Acetate	ND	24	ND	6.9	
78-93-3	2-Butanone (MEK)	ND	24	ND	8.3	
156-59-2	cis-1,2-Dichloroethene	ND	24	ND	6.2	
67-66-3	Chloroform	ND	24	ND	5.0	
107-06-2	1,2-Dichloroethane	ND	24	ND	6.0	
71-55-6	1,1,1-Trichloroethane	ND	24	ND	4.5	
71-43-2	Benzene	**1,600**	24	**500**	7.6	
56-23-5	Carbon Tetrachloride	ND	24	ND	3.9	

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: PC Date: 6/10/04

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **GeoSyntec Consultants, Inc.**
Client Sample ID: **PNLBA8-17-SFC7**
Client Project ID: **Ascon/SB0202/31**

CAS Project ID: P2401046
CAS Sample ID: P2401046-010

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3
Analyst: Rusty Bravo/Michelle Sakamoto
Sampling Media: Summa Canister
Test Notes:
Container ID: SC00094

Date Collected: 5/13/04
Date Received: 5/17/04
Date(s) Analyzed: 6/3/04
Volume(s) Analyzed: 0.025 Liter(s)

Pi 1 = 0.2 Pf 1 = 3.5

D.F. = 1.22

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
78-87-5	1,2-Dichloropropane	ND	24	ND	5.3	
75-27-4	Bromodichloromethane	ND	24	ND	3.6	
79-01-6	Trichloroethene	ND	24	ND	4.5	
10061-01-5	cis-1,3-Dichloropropene	ND	24	ND	5.4	
108-10-1	4-Methyl-2-pentanone	ND	24	ND	6.0	
10061-02-6	trans-1,3-Dichloropropene	ND	24	ND	5.4	
79-00-5	1,1,2-Trichloroethane	ND	24	ND	4.5	
108-88-3	Toluene	**1,400**	24	**360**	6.5	
591-78-6	2-Hexanone	ND	24	ND	6.0	
124-48-1	Dibromochloromethane	ND	24	ND	2.9	
106-93-4	1,2-Dibromoethane	ND	24	ND	3.2	
127-18-4	Tetrachloroethene	ND	24	ND	3.6	
108-90-7	Chlorobenzene	ND	24	ND	5.3	
100-41-4	Ethylbenzene	**1,200**	24	**280**	5.6	
136777-61-2	*m,p*-Xylenes	**1,300**	49	**300**	11	
75-25-2	Bromoform	ND	24	ND	2.4	
100-42-5	Styrene	**230**	24	**54**	5.7	
95-47-6	o-Xylene	**700**	24	**160**	5.6	
79-34-5	1,1,2,2-Tetrachloroethane	ND	24	ND	3.6	
541-73-1	1,3-Dichlorobenzene	ND	24	ND	4.1	
106-46-7	1,4-Dichlorobenzene	ND	24	ND	4.1	
95-50-1	1,2-Dichlorobenzene	ND	24	ND	4.1	

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: RG Date: 6/10/04

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **GeoSyntec Consultants, Inc.**
Client Sample ID: **PNLBA8-17-SFC7**
Client Project ID: **Ascon/SB0202/31**

CAS Project ID: P2401046
CAS Sample ID: P2401046-010

Tentatively Identified Compounds

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3
Analyst: Rusty Bravo/Michelle Sakamoto
Sampling Media: Summa Canister
Test Notes: **T**
Container ID: SC00094

Date Collected: 5/13/04
Date Received: 5/17/04
Date Analyzed: 6/3/04
Volume(s) Analyzed: 0.025 Liter(s)

Pi 1 = 0.2 Pf 1 = 3.5

D.F. = 1.22

GC / MS Ret. Time	Compound Identification	Concentration µg/m³	Data Qualifier
6.82	Isopentane	800	
7.35	n-Pentane	900	
10.25	n-Hexane	700	
11.30	Methylcyclopentane	2,000	
13.47	Dimethylcyclopentane Isomer	800	
13.59	Dimethylcyclopentane Isomer	800	
13.69	Dimethylcyclopentane Isomer	1,000	
15.08	Methylcyclohexane	1,000	
16.10	Trimethylcyclopentane Isomer	1,000	
19.69	Trimethylcyclohexane Isomer	1,000	
24.05	1,2,4-Trimethylbenzene	800	
24.79	1,2,3-Trimethylbenzene + $C_{11}H_{24}$ Branched Alkane	1,000	
25.13	$C_{10}H_{12}$ Compound	800	
25.29	C_9H_8 Compound	2,000	
27.94	Naphthalene	2,000	

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

Verified By: RG Date: 6/10/04

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **GeoSyntec Consultants, Inc.**
Client Sample ID: **PNLBA8-17-SFC7**
Client Project ID: **Ascon/SB0202/31**

CAS Project ID: P2401046
CAS Sample ID: P2401046-010DUP

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3
Analyst: Rusty Bravo/Michelle Sakamoto
Sampling Media: Summa Canister
Test Notes:
Container ID: SC00094

Date Collected: 5/13/04
Date Received: 5/17/04
Date(s) Analyzed: 6/3/04
Volume(s) Analyzed: 0.025 Liter(s)

Pi 1 = 0.2 Pf 1 = 3.5

D.F. = 1.22

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
74-87-3	Chloromethane	ND	24	ND	12	
75-01-4	Vinyl Chloride	ND	24	ND	9.5	
106-99-0	1,3-Butadiene	ND	24	ND	11	
74-83-9	Bromomethane	ND	24	ND	6.3	
75-00-3	Chloroethane	ND	24	ND	9.3	
67-64-1	Acetone	ND	240	ND	100	
75-69-4	Trichlorofluoromethane	ND	24	ND	4.3	
107-13-1	Acrylonitrile	ND	24	ND	11	
75-35-4	1,1-Dichloroethene	ND	24	ND	6.2	
75-09-2	Methylene chloride	ND	24	ND	7.0	
76-13-1	Trichlorotrifluoroethane	ND	24	ND	3.2	
75-15-0	Carbon Disulfide	**37**	24	**12**	7.8	
156-60-5	trans-1,2-Dichloroethene	ND	24	ND	6.2	
75-34-3	1,1-Dichloroethane	ND	24	ND	6.0	
1634-04-4	Methyl tert-Butyl Ether	ND	24	ND	6.8	
108-05-4	Vinyl Acetate	ND	24	ND	6.9	
78-93-3	2-Butanone (MEK)	ND	24	ND	8.3	
156-59-2	cis-1,2-Dichloroethene	ND	24	ND	6.2	
67-66-3	Chloroform	ND	24	ND	5.0	
107-06-2	1,2-Dichloroethane	ND	24	ND	6.0	
71-55-6	1,1,1-Trichloroethane	ND	24	ND	4.5	
71-43-2	Benzene	**1,600**	24	**500**	7.6	
56-23-5	Carbon Tetrachloride	ND	24	ND	3.9	

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: RC Date: 6/10/04

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **GeoSyntec Consultants, Inc.**
Client Sample ID: **PNLBA8-17-SFC7**
Client Project ID: **Ascon/SB0202/31**

CAS Project ID: P2401046
CAS Sample ID: P2401046-010DUP

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3
Analyst: Rusty Bravo/Michelle Sakamoto
Sampling Media: Summa Canister
Test Notes:
Container ID: SC00094

Date Collected: 5/13/04
Date Received: 5/17/04
Date(s) Analyzed: 6/3/04
Volume(s) Analyzed: 0.025 Liter(s)

Pi 1 = 0.2 Pf 1 = 3.5

D.F. = 1.22

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
78-87-5	1,2-Dichloropropane	ND	24	ND	5.3	
75-27-4	Bromodichloromethane	ND	24	ND	3.6	
79-01-6	Trichloroethene	ND	24	ND	4.5	
10061-01-5	cis-1,3-Dichloropropene	ND	24	ND	5.4	
108-10-1	4-Methyl-2-pentanone	ND	24	ND	6.0	
10061-02-6	trans-1,3-Dichloropropene	ND	24	ND	5.4	
79-00-5	1,1,2-Trichloroethane	ND	24	ND	4.5	
108-88-3	Toluene	**1,400**	24	**360**	6.5	
591-78-6	2-Hexanone	ND	24	ND	6.0	
124-48-1	Dibromochloromethane	ND	24	ND	2.9	
106-93-4	1,2-Dibromoethane	ND	24	ND	3.2	
127-18-4	Tetrachloroethene	ND	24	ND	3.6	
108-90-7	Chlorobenzene	ND	24	ND	5.3	
100-41-4	Ethylbenzene	**1,200**	24	**290**	5.6	
136777-61-2	*m,p* -Xylenes	**1,300**	49	**300**	11	
75-25-2	Bromoform	ND	24	ND	2.4	
100-42-5	Styrene	**230**	24	**55**	5.7	
95-47-6	o-Xylene	**720**	24	**170**	5.6	
79-34-5	1,1,2,2-Tetrachloroethane	ND	24	ND	3.6	
541-73-1	1,3-Dichlorobenzene	ND	24	ND	4.1	
106-46-7	1,4-Dichlorobenzene	ND	24	ND	4.1	
95-50-1	1,2-Dichlorobenzene	ND	24	ND	4.1	

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: RC Date: 6/10/04

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **GeoSyntec Consultants, Inc.**
Client Sample ID: **PNLBA8-17-SFC7**
Client Project ID: **Ascon/SB0202/31**

CAS Project ID: P2401046
CAS Sample ID: P2401046-010DUP

Tentatively Identified Compounds

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3
Analyst: Rusty Bravo/Michelle Sakamoto
Sampling Media: Summa Canister
Test Notes: **T**
Container ID: SC00094

Date Collected: 5/13/04
Date Received: 5/17/04
Date Analyzed: 6/3/04
Volume(s) Analyzed: 0.025 Liter(s)

Pi 1 = 0.2 Pf 1 = 3.5

D.F. = 1.22

GC / MS Ret. Time	Compound Identification	Concentration µg/m³	Data Qualifier
6.82	Isopentane	**800**	
6.20	n-Pentane	**1,000**	
10.24	n-Hexane	**700**	
11.31	Methylcyclopentane	**2,000**	
13.45	Dimethylcyclopentane Isomer	**800**	
13.58	Dimethylcyclopentane Isomer	**800**	
13.70	Dimethylcyclopentane Isomer	**1,000**	
15.08	Methylcyclohexane	**1,000**	
16.11	Trimethylcyclopentane Isomer	**1,000**	
19.70	Trimethylcyclohexane Isomer	**1,000**	
24.05	1,2,4-Trimethylbenzene	**900**	
24.79	1,2,3-Trimethylbenzene + $C_{11}H_{24}$ Branched Alkane	**2,000**	
25.13	$C_{10}H_{12}$ Compound	**900**	
25.29	C_9H_8 Compound	**2,000**	
27.92	Naphthalene	**2,000**	

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

Verified By: RC Date: 6/10/04

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **GeoSyntec Consultants, Inc.**
Client Sample ID: **PNLBA1-17-SFC1**
Client Project ID: **Ascon/SB0202/31**

CAS Project ID: P2401046
CAS Sample ID: P2401046-011

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3
Analyst: Rusty Bravo/Michelle Sakamoto
Sampling Media: Summa Canister
Test Notes:
Container ID: SC00418

Date Collected: 5/13/04
Date Received: 5/17/04
Date(s) Analyzed: 6/3/04 & 6/5/04
Volume(s) Analyzed: 1.00 Liter(s)
0.050 Liter(s)

Pi 1 = 0.1 Pf 1 = 3.5

D.F. = 1.23

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
74-87-3	Chloromethane	ND	0.62	ND	0.30	
75-01-4	Vinyl Chloride	ND	0.62	ND	0.24	
106-99-0	1,3-Butadiene	ND	0.62	ND	0.28	
74-83-9	Bromomethane	ND	0.62	ND	0.16	
75-00-3	Chloroethane	ND	0.62	ND	0.23	
67-64-1	Acetone	**65**	6.2	**27**	2.6	**M**
75-69-4	Trichlorofluoromethane	ND	0.62	ND	0.11	
107-13-1	Acrylonitrile	ND	0.62	ND	0.28	
75-35-4	1,1-Dichloroethene	ND	0.62	ND	0.16	
75-09-2	Methylene chloride	ND	0.62	ND	0.18	
76-13-1	Trichlorotrifluoroethane	ND	0.62	ND	0.080	
75-15-0	Carbon Disulfide	**28**	0.62	**8.8**	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	0.62	ND	0.16	
75-34-3	1,1-Dichloroethane	ND	0.62	ND	0.15	
1634-04-4	Methyl tert-Butyl Ether	ND	0.62	ND	0.17	
108-05-4	Vinyl Acetate	ND	0.62	ND	0.17	
78-93-3	2-Butanone (MEK)	**2.1**	0.62	**0.70**	0.21	
156-59-2	cis-1,2-Dichloroethene	ND	0.62	ND	0.16	
67-66-3	Chloroform	**3.7**	0.62	**0.75**	0.13	
107-06-2	1,2-Dichloroethane	ND	0.62	ND	0.15	
71-55-6	1,1,1-Trichloroethane	ND	0.62	ND	0.11	
71-43-2	Benzene	**72**	0.62	**22**	0.19	
56-23-5	Carbon Tetrachloride	ND	0.62	ND	0.098	

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.
M = Matrix interference; results may be biased high.

Verified By: RG Date: 6/10/04

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **GeoSyntec Consultants, Inc.**
Client Sample ID: **PNLBA1-17-SFC1**
Client Project ID: **Ascon/SB0202/31**

CAS Project ID: P2401046
CAS Sample ID: P2401046-011

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3
Analyst: Rusty Bravo/Michelle Sakamoto
Sampling Media: Summa Canister
Test Notes:
Container ID: SC00418

Date Collected: 5/13/04
Date Received: 5/17/04
Date(s) Analyzed: 6/3/04 & 6/5/04
Volume(s) Analyzed: 1.00 Liter(s)
0.050 Liter(s)

Pi 1 = 0.1 Pf 1 = 3.5

D.F. = 1.23

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
78-87-5	1,2-Dichloropropane	ND	0.62	ND	0.13	
75-27-4	Bromodichloromethane	ND	0.62	ND	0.092	
79-01-6	Trichloroethene	**20**	0.62	**3.8**	0.11	
10061-01-5	cis-1,3-Dichloropropene	ND	0.62	ND	0.14	
108-10-1	4-Methyl-2-pentanone	**1.1**	0.62	**0.27**	0.15	
10061-02-6	trans-1,3-Dichloropropene	ND	0.62	ND	0.14	
79-00-5	1,1,2-Trichloroethane	ND	0.62	ND	0.11	
108-88-3	Toluene	**73**	0.62	**19**	0.16	
591-78-6	2-Hexanone	ND	0.62	ND	0.15	
124-48-1	Dibromochloromethane	ND	0.62	ND	0.072	
106-93-4	1,2-Dibromoethane	ND	0.62	ND	0.080	
127-18-4	Tetrachloroethene	**540**	0.62	**80**	0.091	
108-90-7	Chlorobenzene	ND	0.62	ND	0.13	
100-41-4	Ethylbenzene	**28**	0.62	**6.4**	0.14	
136777-61-2	*m,p* -Xylenes	**30**	1.2	**6.9**	0.28	
75-25-2	Bromoform	ND	0.62	ND	0.060	
100-42-5	Styrene	ND	0.62	ND	0.14	
95-47-6	o-Xylene	**9.3**	0.62	**2.1**	0.14	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.62	ND	0.090	
541-73-1	1,3-Dichlorobenzene	ND	0.62	ND	0.10	
106-46-7	1,4-Dichlorobenzene	ND	0.62	ND	0.10	
95-50-1	1,2-Dichlorobenzene	ND	0.62	ND	0.10	

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: RC Date: 6/10/04

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **GeoSyntec Consultants, Inc.**
Client Sample ID: **PNLBA1-17-SFC1**
Client Project ID: **Ascon/SB0202/31**

CAS Project ID: P2401046
CAS Sample ID: P2401046-011

Tentatively Identified Compounds

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3
Analyst: Rusty Bravo/Michelle Sakamoto
Sampling Media: Summa Canister
Test Notes: **T**
Container ID: SC00418

Date Collected: 5/13/04
Date Received: 5/17/04
Date Analyzed: 6/3/04 & 6/5/04
Volume(s) Analyzed: 1.00 Liter(s)
0.050 Liter(s)

Pi 1 = 0.1 Pf 1 = 3.5
D.F. = 1.23

GC / MS Ret. Time	Compound Identification	Concentration µg/m³	Data Qualifier
5.72	n-Butane	40	
6.84	Isopentane	50	
7.37	n-Pentane	50	
9.24	2-Methylpentane	30	
10.25	n-Hexane	40	
11.32	Methylcyclopentane	100	
12.62	Cyclohexane	40	
13.48	Dimethylcyclopentane Isomer	60	
13.59	Dimethylcyclopentane Isomer	60	
13.70	Dimethylcyclopentane Isomer	100	
15.09	Methylcyclohexane	80	
15.81	Trimethylcyclopentane Isomer	30	
16.10	Trimethylcyclopentane Isomer	60	
17.36	Dimethylcyclohexane Isomer	40	
19.70	Trimethylcyclohexane Isomer	60	

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

Verified By: RC Date: 6/10/04

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **GeoSyntec Consultants, Inc.**
Client Sample ID: **PNLBA3-X-SFU**
Client Project ID: **Ascon/SB0202/31**

CAS Project ID: P2401046
CAS Sample ID: P2401046-012

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3
Analyst: Rusty Bravo/Michelle Sakamoto
Sampling Media: Silco Canister
Test Notes:
Container ID: SLC00012

Date Collected: 5/13/04
Date Received: 5/17/04
Date(s) Analyzed: 6/7/04
Volume(s) Analyzed: 0.0070 Liter(s)

Pi 1 = 0.0 Pf 1 = 3.5

D.F. = 1.24

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
74-87-3	Chloromethane	ND	89	ND	43	
75-01-4	Vinyl Chloride	ND	89	ND	35	
106-99-0	1,3-Butadiene	ND	89	ND	40	
74-83-9	Bromomethane	ND	89	ND	23	
75-00-3	Chloroethane	ND	89	ND	34	
67-64-1	Acetone	ND	890	ND	370	
75-69-4	Trichlorofluoromethane	ND	89	ND	16	
107-13-1	Acrylonitrile	ND	89	ND	41	
75-35-4	1,1-Dichloroethene	ND	89	ND	22	
75-09-2	Methylene chloride	ND	89	ND	26	
76-13-1	Trichlorotrifluoroethane	ND	89	ND	12	
75-15-0	Carbon Disulfide	ND	89	ND	28	
156-60-5	trans-1,2-Dichloroethene	ND	89	ND	22	
75-34-3	1,1-Dichloroethane	ND	89	ND	22	
1634-04-4	Methyl tert-Butyl Ether	ND	89	ND	25	
108-05-4	Vinyl Acetate	ND	89	ND	25	
78-93-3	2-Butanone (MEK)	ND	89	ND	30	
156-59-2	cis-1,2-Dichloroethene	ND	89	ND	22	
67-66-3	Chloroform	ND	89	ND	18	
107-06-2	1,2-Dichloroethane	ND	89	ND	22	
71-55-6	1,1,1-Trichloroethane	ND	89	ND	16	
71-43-2	Benzene	**560**	89	**180**	28	
56-23-5	Carbon Tetrachloride	ND	89	ND	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: RC Date: 6/10/04

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **GeoSyntec Consultants, Inc.**
Client Sample ID: **PNLBA3-X-SFU**
Client Project ID: **Ascon/SB0202/31**

CAS Project ID: P2401046
CAS Sample ID: P2401046-012

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3
Analyst: Rusty Bravo/Michelle Sakamoto
Sampling Media: Silco Canister
Test Notes:
Container ID: SLC00012

Date Collected: 5/13/04
Date Received: 5/17/04
Date(s) Analyzed: 6/7/04
Volume(s) Analyzed: 0.0070 Liter(s)

Pi 1 = 0.0 Pf 1 = 3.5

D.F. = 1.24

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
78-87-5	1,2-Dichloropropane	ND	89	ND	19	
75-27-4	Bromodichloromethane	ND	89	ND	13	
79-01-6	Trichloroethene	ND	89	ND	16	
10061-01-5	cis-1,3-Dichloropropene	ND	89	ND	20	
108-10-1	4-Methyl-2-pentanone	ND	89	ND	22	
10061-02-6	trans-1,3-Dichloropropene	ND	89	ND	20	
79-00-5	1,1,2-Trichloroethane	ND	89	ND	16	
108-88-3	Toluene	**130**	89	**35**	24	
591-78-6	2-Hexanone	ND	89	ND	22	
124-48-1	Dibromochloromethane	ND	89	ND	10	
106-93-4	1,2-Dibromoethane	ND	89	ND	12	
127-18-4	Tetrachloroethene	ND	89	ND	13	
108-90-7	Chlorobenzene	ND	89	ND	19	
100-41-4	Ethylbenzene	**780**	89	**180**	20	
136777-61-2	*m,p*-Xylenes	**1,900**	180	**440**	41	
75-25-2	Bromoform	ND	89	ND	8.6	
100-42-5	Styrene	ND	89	ND	21	
95-47-6	o-Xylene	**780**	89	**180**	20	
79-34-5	1,1,2,2-Tetrachloroethane	ND	89	ND	13	
541-73-1	1,3-Dichlorobenzene	ND	89	ND	15	
106-46-7	1,4-Dichlorobenzene	ND	89	ND	15	
95-50-1	1,2-Dichlorobenzene	ND	89	ND	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: RG Date: 6/10/04

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **GeoSyntec Consultants, Inc.**
Client Sample ID: **PNLBA3-X-SFU**
Client Project ID: **Ascon/SB0202/31**

CAS Project ID: P2401046
CAS Sample ID: P2401046-012

Tentatively Identified Compounds

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3
Analyst: Rusty Bravo/Michelle Sakamoto
Sampling Media: Silco Canister
Test Notes: **T**
Container ID: SLC00012

Date Collected: 5/13/04
Date Received: 5/17/04
Date Analyzed: 6/7/04
Volume(s) Analyzed: 0.0070 Liter(s)

Pi 1 = 0.0 Pf 1 = 3.5

D.F. = 1.24

GC / MS Ret. Time	Compound Identification	Concentration µg/m³	Data Qualifier
6.80	Isopentane	3,000	
7.34	n-Pentane	3,000	
11.28	Methylcyclopentane	10,000	
12.59	Cyclohexane	4,000	
13.45	Dimethylcyclopentane Isomer	6,000	
13.56	Dimethylcyclopentane Isomer	5,000	
13.67	Dimethylcyclopentane Isomer	9,000	
15.06	Methylcyclohexane	7,000	
15.78	Trimethylcyclopentane Isomer	4,000	
16.09	Trimethylcyclopentane Isomer	7,000	
17.34	Dimethylcyclohexane Isomer	4,000	
19.68	Trimethylcyclohexane Isomer	9,000	
20.20	Trimethylcyclohexane Isomer	3,000	
22.37	C_9H_{16} Compound	3,000	
24.78	1,2,3-Trimethylbenzene + $C_{11}H_{24}$ Branched Alkane	3,000	

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

Verified By: RG Date: 6/10/04

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **GeoSyntec Consultants, Inc.**
Client Sample ID: **PNLBA3-X-SFU1**
Client Project ID: **Ascon/SB0202/31**

CAS Project ID: P2401046
CAS Sample ID: P2401046-013

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5972/HP5890 II+/MS2
Analyst: Michelle Sakamoto/Aristotle Bragasin
Sampling Media: Summa Canister
Test Notes:
Container ID: SC00523

Date Collected: 5/13/04
Date Received: 5/17/04
Date(s) Analyzed: 6/7/04
Volume(s) Analyzed: 0.0070 Liter(s)

Pi 1 = 0.0 Pf 1 = 3.5

D.F. = 1.24

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
74-87-3	Chloromethane	ND	89	ND	43	
75-01-4	Vinyl Chloride	ND	89	ND	35	
106-99-0	1,3-Butadiene	ND	89	ND	40	
74-83-9	Bromomethane	ND	89	ND	23	
75-00-3	Chloroethane	ND	89	ND	34	
67-64-1	Acetone	ND	890	ND	370	
75-69-4	Trichlorofluoromethane	ND	89	ND	16	
107-13-1	Acrylonitrile	ND	89	ND	41	
75-35-4	1,1-Dichloroethene	ND	89	ND	22	
75-09-2	Methylene chloride	ND	89	ND	26	
76-13-1	Trichlorotrifluoroethane	ND	89	ND	12	
75-15-0	Carbon Disulfide	ND	89	ND	28	
156-60-5	trans-1,2-Dichloroethene	ND	89	ND	22	
75-34-3	1,1-Dichloroethane	ND	89	ND	22	
1634-04-4	Methyl tert-Butyl Ether	ND	89	ND	25	
108-05-4	Vinyl Acetate	**200**	89	**56**	25	
78-93-3	2-Butanone (MEK)	ND	89	ND	30	
156-59-2	cis-1,2-Dichloroethene	ND	89	ND	22	
67-66-3	Chloroform	ND	89	ND	18	
107-06-2	1,2-Dichloroethane	ND	89	ND	22	
71-55-6	1,1,1-Trichloroethane	ND	89	ND	16	
71-43-2	Benzene	**440**	89	**140**	28	
56-23-5	Carbon Tetrachloride	ND	89	ND	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: RG Date: 6/10/04

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **GeoSyntec Consultants, Inc.**
Client Sample ID: **PNLBA3-X-SFU1**
Client Project ID: **Ascon/SB0202/31**

CAS Project ID: P2401046
CAS Sample ID: P2401046-013

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5972/HP5890 II+/MS2
Analyst: Michelle Sakamoto/Aristotle Bragasin
Sampling Media: Summa Canister
Test Notes:
Container ID: SC00523

Date Collected: 5/13/04
Date Received: 5/17/04
Date(s) Analyzed: 6/7/04
Volume(s) Analyzed: 0.0070 Liter(s)

Pi 1 = 0.0 Pf 1 = 3.5

D.F. = 1.24

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
78-87-5	1,2-Dichloropropane	ND	89	ND	19	
75-27-4	Bromodichloromethane	ND	89	ND	13	
79-01-6	Trichloroethene	ND	89	ND	16	
10061-01-5	cis-1,3-Dichloropropene	ND	89	ND	20	
108-10-1	4-Methyl-2-pentanone	ND	89	ND	22	
10061-02-6	trans-1,3-Dichloropropene	ND	89	ND	20	
79-00-5	1,1,2-Trichloroethane	ND	89	ND	16	
108-88-3	Toluene	**130**	89	**35**	24	
591-78-6	2-Hexanone	ND	89	ND	22	
124-48-1	Dibromochloromethane	ND	89	ND	10	
106-93-4	1,2-Dibromoethane	ND	89	ND	12	
127-18-4	Tetrachloroethene	ND	89	ND	13	
108-90-7	Chlorobenzene	ND	89	ND	19	
100-41-4	Ethylbenzene	**760**	89	**180**	20	
136777-61-2	*m,p* -Xylenes	**1,900**	180	**450**	41	
75-25-2	Bromoform	ND	89	ND	8.6	
100-42-5	Styrene	ND	89	ND	21	
95-47-6	o-Xylene	**810**	89	**190**	20	
79-34-5	1,1,2,2-Tetrachloroethane	ND	89	ND	13	
541-73-1	1,3-Dichlorobenzene	ND	89	ND	15	
106-46-7	1,4-Dichlorobenzene	ND	89	ND	15	
95-50-1	1,2-Dichlorobenzene	ND	89	ND	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: R.C. Date: 6/10/04

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **GeoSyntec Consultants, Inc.**
Client Sample ID: **PNLBA3-X-SFU1**
Client Project ID: **Ascon/SB0202/31**

CAS Project ID: P2401046
CAS Sample ID: P2401046-013

Tentatively Identified Compounds

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5972/HP5890 II+/MS2
Analyst: Michelle Sakamoto/Aristotle Bragasin
Sampling Media: Summa Canister
Test Notes: **T**
Container ID: SC00523

Date Collected: 5/13/04
Date Received: 5/17/04
Date Analyzed: 6/7/04
Volume(s) Analyzed: 0.0070 Liter(s)

Pi 1 = 0.0 Pf 1 = 3.5

D.F. = 1.24

GC / MS Ret. Time	Compound Identification	Concentration µg/m³	Data Qualifier
6.66	Isopentane	**4,000**	
7.17	n-Pentane	**3,000**	
10.10	n-Hexane	**2,000**	
11.20	Methylcyclopentane	**9,000**	
12.59	Cyclohexane	**3,000**	
13.56	Dimethylcyclopentane Isomer	**6,000**	
13.68	Dimethylcyclopentane Isomer	**5,000**	
13.81	Dimethylcyclopentane Isomer	**8,000**	
15.35	Methylcyclohexane	**7,000**	
16.18	Trimethylcyclopentane Isomer	**4,000**	
16.52	Trimethylcyclopentane Isomer	**7,000**	
17.95	Dimethylcyclohexane Isomer	**4,000**	
20.48	Trimethylcyclohexane Isomer	**8,000**	
23.36	C_9H_{16} Compound	**3,000**	
25.65	1,2,3-Trimethylbenzene	**3,000**	

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

Verified By: RG Date: 6/10/04

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **GeoSyntec Consultants, Inc.**
Client Sample ID: **PNLBA3-X-SFC**
Client Project ID: **Ascon/SB0202/31**

CAS Project ID: P2401046
CAS Sample ID: P2401046-014

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3
Analyst: Rusty Bravo/Michelle Sakamoto
Sampling Media: Summa Canister
Test Notes:
Container ID: SC00211

Date Collected: 5/13/04
Date Received: 5/17/04
Date(s) Analyzed: 5/26/04 & 6/3/04
Volume(s) Analyzed: 0.20 Liter(s)
0.020 Liter(s)

Pi 1 = 0.0 Pf 1 = 3.5

D.F. = 1.24

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
74-87-3	Chloromethane	ND	3.1	ND	1.5	
75-01-4	Vinyl Chloride	ND	3.1	ND	1.2	
106-99-0	1,3-Butadiene	ND	3.1	ND	1.4	
74-83-9	Bromomethane	ND	3.1	ND	0.80	
75-00-3	Chloroethane	ND	3.1	ND	1.2	
67-64-1	Acetone	ND	31	ND	13	
75-69-4	Trichlorofluoromethane	ND	3.1	ND	0.55	
107-13-1	Acrylonitrile	**28**	3.1	**13**	1.4	
75-35-4	1,1-Dichloroethene	ND	3.1	ND	0.78	
75-09-2	Methylene chloride	ND	3.1	ND	0.89	
76-13-1	Trichlorotrifluoroethane	ND	3.1	ND	0.40	
75-15-0	Carbon Disulfide	**86**	3.1	**28**	1.0	
156-60-5	trans-1,2-Dichloroethene	ND	3.1	ND	0.78	
75-34-3	1,1-Dichloroethane	ND	3.1	ND	0.77	
1634-04-4	Methyl tert-Butyl Ether	ND	3.1	ND	0.86	
108-05-4	Vinyl Acetate	ND	3.1	ND	0.88	
78-93-3	2-Butanone (MEK)	**70**	3.1	**24**	1.1	
156-59-2	cis-1,2-Dichloroethene	ND	3.1	ND	0.78	
67-66-3	Chloroform	ND	3.1	ND	0.64	
107-06-2	1,2-Dichloroethane	ND	3.1	ND	0.77	
71-55-6	1,1,1-Trichloroethane	ND	3.1	ND	0.57	
71-43-2	Benzene	**500**	3.1	**160**	0.97	
56-23-5	Carbon Tetrachloride	ND	3.1	ND	0.49	

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: RG Date: 6/10/04

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **GeoSyntec Consultants, Inc.**
Client Sample ID: **PNLBA3-X-SFC**
Client Project ID: **Ascon/SB0202/31**

CAS Project ID: P2401046
CAS Sample ID: P2401046-014

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3
Analyst: Rusty Bravo/Michelle Sakamoto
Sampling Media: Summa Canister
Test Notes:
Container ID: SC00211

Date Collected: 5/13/04
Date Received: 5/17/04
Date(s) Analyzed: 5/26/04 & 6/3/04
Volume(s) Analyzed: 0.20 Liter(s)
0.020 Liter(s)

Pi 1 = 0.0 Pf 1 = 3.5

D.F. = 1.24

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
78-87-5	1,2-Dichloropropane	ND	3.1	ND	0.67	
75-27-4	Bromodichloromethane	ND	3.1	ND	0.46	
79-01-6	Trichloroethene	ND	3.1	ND	0.58	
10061-01-5	cis-1,3-Dichloropropene	ND	3.1	ND	0.68	
108-10-1	4-Methyl-2-pentanone	**4.6**	3.1	**1.1**	0.76	
10061-02-6	trans-1,3-Dichloropropene	ND	3.1	ND	0.68	
79-00-5	1,1,2-Trichloroethane	ND	3.1	ND	0.57	
108-88-3	Toluene	**95**	3.1	**25**	0.82	
591-78-6	2-Hexanone	ND	3.1	ND	0.76	
124-48-1	Dibromochloromethane	ND	3.1	ND	0.36	
106-93-4	1,2-Dibromoethane	ND	3.1	ND	0.40	
127-18-4	Tetrachloroethene	ND	3.1	ND	0.46	
108-90-7	Chlorobenzene	ND	3.1	ND	0.67	
100-41-4	Ethylbenzene	**530**	3.1	**120**	0.71	
136777-61-2	*m,p* -Xylenes	**1,000**	6.2	**230**	1.4	
75-25-2	Bromoform	ND	3.1	ND	0.30	
100-42-5	Styrene	ND	3.1	ND	0.73	
95-47-6	o-Xylene	**620**	3.1	**140**	0.71	
79-34-5	1,1,2,2-Tetrachloroethane	ND	3.1	ND	0.45	
541-73-1	1,3-Dichlorobenzene	ND	3.1	ND	0.52	
106-46-7	1,4-Dichlorobenzene	ND	3.1	ND	0.52	
95-50-1	1,2-Dichlorobenzene	ND	3.1	ND	0.52	

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: RU Date: 6/10/04

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **GeoSyntec Consultants, Inc.**
Client Sample ID: **PNLBA3-X-SFC**
Client Project ID: **Ascon/SB0202/31**

CAS Project ID: P2401046
CAS Sample ID: P2401046-014

Tentatively Identified Compounds

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3
Analyst: Rusty Bravo/Michelle Sakamoto
Sampling Media: Summa Canister
Test Notes: **T**
Container ID: SC00211

Date Collected: 5/13/04
Date Received: 5/17/04
Date Analyzed: 5/26/04 & 6/3/04
Volume(s) Analyzed: 0.20 Liter(s)
0.020 Liter(s)

Pi 1 = 0.0 Pf 1 = 3.5
D.F. = 1.24

GC / MS Ret. Time	Compound Identification	Concentration µg/m³	Data Qualifier
5.72	n-Butane	**700**	
6.84	Isopentane	**900**	
7.37	n-Pentane	**800**	
10.26	n-Hexane	**700**	
11.32	Methylcyclopentane	**2,000**	
12.62	Cyclohexane	**600**	
13.49	Dimethylcyclopentane Isomer	**900**	
13.60	Dimethylcyclopentane Isomer	**800**	
13.72	Dimethylcyclopentane Isomer	**1,000**	
15.10	Methylcyclohexane	**1,000**	
16.13	Trimethylcyclopentane Isomer	**900**	
19.71	Trimethylcyclohexane Isomer	**800**	
23.34	Dimethyltrisulfide	**700**	
24.06	1,2,4-Trimethylbenzene	**700**	
24.80	1,2,3-Trimethylbenzene	**800**	

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

Verified By: RC Date: 6/10/04

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **GeoSyntec Consultants, Inc.**
Client Sample ID: **PNLBA11-X-SFU**
Client Project ID: **Ascon/SB0202/31**

CAS Project ID: P2401046
CAS Sample ID: P2401046-015

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3
Analyst: Rusty Bravo/Michelle Sakamoto
Sampling Media: Summa Canister
Test Notes:
Container ID: SC00257

Date Collected: 5/14/04
Date Received: 5/17/04
Date(s) Analyzed: 6/7/04
Volume(s) Analyzed: 0.0050 Liter(s)
0.0010 Liter(s)

Pi 1 = 0.3 Pf 1 = 3.5

D.F. = 1.21

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
74-87-3	Chloromethane	ND	120	ND	59	
75-01-4	Vinyl Chloride	ND	120	ND	47	
106-99-0	1,3-Butadiene	ND	120	ND	55	
74-83-9	Bromomethane	ND	120	ND	31	
75-00-3	Chloroethane	ND	120	ND	46	
67-64-1	Acetone	ND	1,200	ND	510	
75-69-4	Trichlorofluoromethane	ND	120	ND	22	
107-13-1	Acrylonitrile	ND	120	ND	56	
75-35-4	1,1-Dichloroethene	ND	120	ND	31	
75-09-2	Methylene chloride	ND	120	ND	35	
76-13-1	Trichlorotrifluoroethane	ND	120	ND	16	
75-15-0	Carbon Disulfide	ND	120	ND	39	
156-60-5	trans-1,2-Dichloroethene	ND	120	ND	31	
75-34-3	1,1-Dichloroethane	ND	120	ND	30	
1634-04-4	Methyl tert-Butyl Ether	ND	120	ND	34	
108-05-4	Vinyl Acetate	ND	120	ND	34	
78-93-3	2-Butanone (MEK)	ND	120	ND	41	
156-59-2	cis-1,2-Dichloroethene	ND	120	ND	31	
67-66-3	Chloroform	ND	120	ND	25	
107-06-2	1,2-Dichloroethane	ND	120	ND	30	
71-55-6	1,1,1-Trichloroethane	ND	120	ND	22	
71-43-2	Benzene	**330**	120	**100**	38	
56-23-5	Carbon Tetrachloride	ND	120	ND	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: RC Date: 6/10/04

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **GeoSyntec Consultants, Inc.**
Client Sample ID: **PNLBA11-X-SFU**
Client Project ID: **Ascon/SB0202/31**

CAS Project ID: P2401046
CAS Sample ID: P2401046-015

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3
Analyst: Rusty Bravo/Michelle Sakamoto
Sampling Media: Summa Canister
Test Notes:
Container ID: SC00257

Date Collected: 5/14/04
Date Received: 5/17/04
Date(s) Analyzed: 6/7/04
Volume(s) Analyzed: 0.0050 Liter(s)
0.0010 Liter(s)

Pi 1 = 0.3 Pf 1 = 3.5

D.F. = 1.21

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
78-87-5	1,2-Dichloropropane	ND	120	ND	26	
75-27-4	Bromodichloromethane	ND	120	ND	18	
79-01-6	Trichloroethene	ND	120	ND	23	
10061-01-5	cis-1,3-Dichloropropene	ND	120	ND	27	
108-10-1	4-Methyl-2-pentanone	ND	120	ND	30	
10061-02-6	trans-1,3-Dichloropropene	ND	120	ND	27	
79-00-5	1,1,2-Trichloroethane	ND	120	ND	22	
108-88-3	Toluene	**1,400**	120	**380**	32	
591-78-6	2-Hexanone	ND	120	ND	30	
124-48-1	Dibromochloromethane	ND	120	ND	14	
106-93-4	1,2-Dibromoethane	ND	120	ND	16	
127-18-4	Tetrachloroethene	ND	120	ND	18	
108-90-7	Chlorobenzene	ND	120	ND	26	
100-41-4	Ethylbenzene	**19,000**	120	**4,400**	28	
136777-61-2	*m,p*-Xylenes	ND	240	ND	56	
75-25-2	Bromoform	ND	120	ND	12	
100-42-5	Styrene	**39,000**	120	**9,200**	28	
95-47-6	o-Xylene	ND	120	ND	28	
79-34-5	1,1,2,2-Tetrachloroethane	ND	120	ND	18	
541-73-1	1,3-Dichlorobenzene	ND	120	ND	20	
106-46-7	1,4-Dichlorobenzene	ND	120	ND	20	
95-50-1	1,2-Dichlorobenzene	ND	120	ND	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: RC. Date: 6/10/04

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **GeoSyntec Consultants, Inc.**
Client Sample ID: **PNLBA11-X-SFU**
Client Project ID: **Ascon/SB0202/31**

CAS Project ID: P2401046
CAS Sample ID: P2401046-015

Tentatively Identified Compounds

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3
Analyst: Rusty Bravo/Michelle Sakamoto
Sampling Media: Summa Canister
Test Notes: **T**
Container ID: SC00257

Date Collected: 5/14/04
Date Received: 5/17/04
Date Analyzed: 6/7/04
Volume(s) Analyzed: 0.0050 Liter(s)
0.0010 Liter(s)

Pi 1 = 0.3 Pf 1 = 3.5
D.F. = 1.21

GC / MS Ret. Time	Compound Identification	Concentration µg/m³	Data Qualifier
22.14	Cumene	9,000	
22.73	Benzaldehyde	600	
22.98	Propylbenzene	2,000	
23.17	3-Ethyltoluene	1,000	
23.64	alpha-Methylstyrene	60,000	
24.44	Isobutylbenzene	2,000	
24.51	sec-Butylbenzene	10,000	
24.75	C_9H_{10} Compound	20,000	
25.31	Diethylbenzene Isomer	10,000	
25.47	Diethylbenzene Isomer	7,000	
25.63	Diethylbenzene Isomer	2,000	
26.59	$C_{10}H_{12}$ Compound	4,000	
27.93	Naphthalene	2,000	
28.00	Unidentified Compound	800	
28.21	Triethylbenzene Isomer	1,000	

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

Verified By: RG Date: 6/10/04

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **GeoSyntec Consultants, Inc.**
Client Sample ID: **PNLBA11-X-SFC**
Client Project ID: **Ascon/SB0202/31**

CAS Project ID: P2401046
CAS Sample ID: P2401046-016

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5972/HP5890 II+/MS2
Analyst: Michelle Sakamoto/Aristotle Bragasin
Sampling Media: Summa Canister
Test Notes:
Container ID: SC00519

Date Collected: 5/14/04
Date Received: 5/17/04
Date(s) Analyzed: 6/7/04
Volume(s) Analyzed: 0.0025 Liter(s)

Pi 1 = 0.3 Pf 1 = 3.5

D.F. = 1.21

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
74-87-3	Chloromethane	ND	240	ND	120	
75-01-4	Vinyl Chloride	ND	240	ND	95	
106-99-0	1,3-Butadiene	ND	240	ND	110	
74-83-9	Bromomethane	ND	240	ND	62	
75-00-3	Chloroethane	ND	240	ND	92	
67-64-1	Acetone	ND	2,400	ND	1,000	
75-69-4	Trichlorofluoromethane	ND	240	ND	43	
107-13-1	Acrylonitrile	ND	240	ND	110	
75-35-4	1,1-Dichloroethene	ND	240	ND	61	
75-09-2	Methylene chloride	ND	240	ND	70	
76-13-1	Trichlorotrifluoroethane	ND	240	ND	32	
75-15-0	Carbon Disulfide	ND	240	ND	78	
156-60-5	trans-1,2-Dichloroethene	ND	240	ND	61	
75-34-3	1,1-Dichloroethane	ND	240	ND	60	
1634-04-4	Methyl tert-Butyl Ether	ND	240	ND	67	
108-05-4	Vinyl Acetate	ND	240	ND	69	
78-93-3	2-Butanone (MEK)	ND	240	ND	82	
156-59-2	cis-1,2-Dichloroethene	ND	240	ND	61	
67-66-3	Chloroform	ND	240	ND	50	
107-06-2	1,2-Dichloroethane	ND	240	ND	60	
71-55-6	1,1,1-Trichloroethane	ND	240	ND	44	
71-43-2	Benzene	ND	240	ND	76	
56-23-5	Carbon Tetrachloride	ND	240	ND	38	

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: Ro Date: 6/10/04

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **GeoSyntec Consultants, Inc.**
Client Sample ID: **PNLBA11-X-SFC**
Client Project ID: **Ascon/SB0202/31**

CAS Project ID: P2401046
CAS Sample ID: P2401046-016

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5972/HP5890 II+/MS2
Analyst: Michelle Sakamoto/Aristotle Bragasin
Sampling Media: Summa Canister
Test Notes:
Container ID: SC00519

Date Collected: 5/14/04
Date Received: 5/17/04
Date(s) Analyzed: 6/7/04
Volume(s) Analyzed: 0.0025 Liter(s)

Pi 1 = 0.3 Pf 1 = 3.5

D.F. = 1.21

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
78-87-5	1,2-Dichloropropane	ND	240	ND	52	
75-27-4	Bromodichloromethane	ND	240	ND	36	
79-01-6	Trichloroethene	ND	240	ND	45	
10061-01-5	cis-1,3-Dichloropropene	ND	240	ND	53	
108-10-1	4-Methyl-2-pentanone	ND	240	ND	59	
10061-02-6	trans-1,3-Dichloropropene	ND	240	ND	53	
79-00-5	1,1,2-Trichloroethane	ND	240	ND	44	
108-88-3	Toluene	**760**	240	**200**	64	
591-78-6	2-Hexanone	ND	240	ND	59	
124-48-1	Dibromochloromethane	ND	240	ND	28	
106-93-4	1,2-Dibromoethane	ND	240	ND	32	
127-18-4	Tetrachloroethene	ND	240	ND	36	
108-90-7	Chlorobenzene	ND	240	ND	53	
100-41-4	Ethylbenzene	**11,000**	240	**2,400**	56	
136777-61-2	*m,p*-Xylenes	ND	480	ND	110	
75-25-2	Bromoform	ND	240	ND	23	
100-42-5	Styrene	**28,000**	240	**6,700**	57	
95-47-6	o-Xylene	ND	240	ND	56	
79-34-5	1,1,2,2-Tetrachloroethane	ND	240	ND	35	
541-73-1	1,3-Dichlorobenzene	ND	240	ND	40	
106-46-7	1,4-Dichlorobenzene	ND	240	ND	40	
95-50-1	1,2-Dichlorobenzene	ND	240	ND	40	

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: RG Date: 6/10/04

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **GeoSyntec Consultants, Inc.**
Client Sample ID: **PNLBA11-X-SFC**
Client Project ID: **Ascon/SB0202/31**

CAS Project ID: P2401046
CAS Sample ID: P2401046-016

Tentatively Identified Compounds

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5972/HP5890 II+/MS2
Analyst: Michelle Sakamoto/Aristotle Bragasin
Sampling Media: Summa Canister
Test Notes: **T**
Container ID: SC00519

Date Collected: 5/14/04
Date Received: 5/17/04
Date Analyzed: 6/7/04
Volume(s) Analyzed: 0.0025 Liter(s)

Pi 1 = 0.3 Pf 1 = 3.5

D.F. = 1.21

GC / MS Ret. Time	Compound Identification	Concentration µg/m³	Data Qualifier
23.12	Cumene	**2,000**	
24.59	alpha-Methylstyrene	**10,000**	
25.41	sec-Butylbenzene	**2,000**	
25.63	C_9H_{10} Compound	**9,000**	
26.14	Diethylbenzene Isomer	**2,000**	
26.28	Diethylbenzene Isomer	**1,000**	
28.58	Naphthalene	**900**	

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

Verified By: Ru Date: 6/10/04

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **GeoSyntec Consultants, Inc.**
Client Sample ID: **PNLBA13-X-SFU**
Client Project ID: **Ascon/SB0202/31**

CAS Project ID: P2401046
CAS Sample ID: P2401046-017

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5972/HP5890 II+/MS2
Analyst: Michelle Sakamoto/Aristotle Bragasin
Sampling Media: Summa Canister
Test Notes:
Container ID: SC00602

Date Collected: 5/14/04
Date Received: 5/17/04
Date(s) Analyzed: 6/7/04
Volume(s) Analyzed: 0.0015 Liter(s)

Pi 1 = 0.1 Pf 1 = 3.5

D.F. = 1.23

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
74-87-3	Chloromethane	ND	410	ND	200	
75-01-4	Vinyl Chloride	ND	410	ND	160	
106-99-0	1,3-Butadiene	ND	410	ND	190	
74-83-9	Bromomethane	ND	410	ND	110	
75-00-3	Chloroethane	ND	410	ND	160	
67-64-1	Acetone	ND	4,100	ND	1,700	
75-69-4	Trichlorofluoromethane	ND	410	ND	73	
107-13-1	Acrylonitrile	ND	410	ND	190	
75-35-4	1,1-Dichloroethene	ND	410	ND	100	
75-09-2	Methylene chloride	ND	410	ND	120	
76-13-1	Trichlorotrifluoroethane	ND	410	ND	54	
75-15-0	Carbon Disulfide	ND	410	ND	130	
156-60-5	trans-1,2-Dichloroethene	ND	410	ND	100	
75-34-3	1,1-Dichloroethane	ND	410	ND	100	
1634-04-4	Methyl tert-Butyl Ether	ND	410	ND	110	
108-05-4	Vinyl Acetate	ND	410	ND	120	
78-93-3	2-Butanone (MEK)	ND	410	ND	140	
156-59-2	cis-1,2-Dichloroethene	ND	410	ND	100	
67-66-3	Chloroform	ND	410	ND	84	
107-06-2	1,2-Dichloroethane	ND	410	ND	100	
71-55-6	1,1,1-Trichloroethane	ND	410	ND	75	
71-43-2	Benzene	**1,300**	410	**410**	130	
56-23-5	Carbon Tetrachloride	ND	410	ND	65	

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: RC Date: 6/10/04

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **GeoSyntec Consultants, Inc.**
Client Sample ID: **PNLBA13-X-SFU**
Client Project ID: **Ascon/SB0202/31**

CAS Project ID: P2401046
CAS Sample ID: P2401046-017

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5972/HP5890 II+/MS2
Analyst: Michelle Sakamoto/Aristotle Bragasin
Sampling Media: Summa Canister
Test Notes:
Container ID: SC00602

Date Collected: 5/14/04
Date Received: 5/17/04
Date(s) Analyzed: 6/7/04
Volume(s) Analyzed: 0.0015 Liter(s)

Pi 1 = 0.1 Pf 1 = 3.5

D.F. = 1.23

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
78-87-5	1,2-Dichloropropane	ND	410	ND	89	
75-27-4	Bromodichloromethane	ND	410	ND	61	
79-01-6	Trichloroethene	ND	410	ND	76	
10061-01-5	cis-1,3-Dichloropropene	ND	410	ND	90	
108-10-1	4-Methyl-2-pentanone	ND	410	ND	100	
10061-02-6	trans-1,3-Dichloropropene	ND	410	ND	90	
79-00-5	1,1,2-Trichloroethane	ND	410	ND	75	
108-88-3	Toluene	**3,700**	410	**970**	110	
591-78-6	2-Hexanone	ND	410	ND	100	
124-48-1	Dibromochloromethane	ND	410	ND	48	
106-93-4	1,2-Dibromoethane	ND	410	ND	53	
127-18-4	Tetrachloroethene	ND	410	ND	60	
108-90-7	Chlorobenzene	ND	410	ND	89	
100-41-4	Ethylbenzene	**3,200**	410	**750**	94	
136777-61-2	*m,p* -Xylenes	**7,200**	820	**1,700**	190	
75-25-2	Bromoform	ND	410	ND	40	
100-42-5	Styrene	ND	410	ND	96	
95-47-6	o-Xylene	**5,100**	410	**1,200**	94	
79-34-5	1,1,2,2-Tetrachloroethane	ND	410	ND	60	
541-73-1	1,3-Dichlorobenzene	ND	410	ND	68	
106-46-7	1,4-Dichlorobenzene	ND	410	ND	68	
95-50-1	1,2-Dichlorobenzene	ND	410	ND	68	

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: RG Date: 6/10/04

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **GeoSyntec Consultants, Inc.**
Client Sample ID: **PNLBA13-X-SFU**
Client Project ID: **Ascon/SB0202/31**

CAS Project ID: P2401046
CAS Sample ID: P2401046-017

Tentatively Identified Compounds

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5972/HP5890 II+/MS2
Analyst: Michelle Sakamoto/Aristotle Bragasin
Sampling Media: Summa Canister
Test Notes: **T**
Container ID: SC00602

Date Collected: 5/14/04
Date Received: 5/17/04
Date Analyzed: 6/7/04
Volume(s) Analyzed: 0.0015 Liter(s)

Pi 1 = 0.1 Pf 1 = 3.5

D.F. = 1.23

GC / MS Ret. Time	Compound Identification	Concentration µg/m³	Data Qualifier
11.19	Methylcyclopentane	30,000	
13.55	Dimethylcyclopentane Isomer	20,000	
13.80	Dimethylcyclopentane Isomer	30,000	
15.35	Methylcyclohexane	30,000	
16.52	Trimethylcyclopentane Isomer	30,000	
17.95	Dimethylcyclohexane Isomer	20,000	
20.48	Trimethylcyclohexane Isomer	40,000	
23.36	C_9H_{16} Compound	20,000	
23.60	$C_{10}H_{22}$ Branched Alkane	20,000	
24.15	3-Ethyltoluene	7,000	
24.46	$C_{10}H_{20}$ Compound	20,000	
24.99	1,2,4-Trimethylbenzene	9,000	
25.18	n-Decane	10,000	
25.66	1,2,3-Trimethylbenzene	20,000	
27.11	n-Undecane	8,000	

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

Verified By: RC Date: 6/10/04

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **GeoSyntec Consultants, Inc.**
Client Sample ID: **PNLBA13-X-SFC**
Client Project ID: **Ascon/SB0202/31**

CAS Project ID: P2401046
CAS Sample ID: P2401046-018

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3
Analyst: Rusty Bravo/Michelle Sakamoto
Sampling Media: Summa Canister
Test Notes:
Container ID: SC00275

Date Collected: 5/14/04
Date Received: 5/17/04
Date(s) Analyzed: 5/26/04
Volume(s) Analyzed: 0.30 Liter(s)

Pi 1 = 0.0 Pf 1 = 3.5

D.F. = 1.24

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
74-87-3	Chloromethane	ND	2.1	ND	1.0	
75-01-4	Vinyl Chloride	ND	2.1	ND	0.81	
106-99-0	1,3-Butadiene	ND	2.1	ND	0.93	
74-83-9	Bromomethane	ND	2.1	ND	0.53	
75-00-3	Chloroethane	ND	2.1	ND	0.78	
67-64-1	Acetone	**48**	21	**20**	8.7	
75-69-4	Trichlorofluoromethane	ND	2.1	ND	0.37	
107-13-1	Acrylonitrile	ND	2.1	ND	0.95	
75-35-4	1,1-Dichloroethene	ND	2.1	ND	0.52	
75-09-2	Methylene chloride	ND	2.1	ND	0.60	
76-13-1	Trichlorotrifluoroethane	ND	2.1	ND	0.27	
75-15-0	Carbon Disulfide	**69**	2.1	**22**	0.66	
156-60-5	trans-1,2-Dichloroethene	ND	2.1	ND	0.52	
75-34-3	1,1-Dichloroethane	ND	2.1	ND	0.51	
1634-04-4	Methyl tert-Butyl Ether	ND	2.1	ND	0.57	
108-05-4	Vinyl Acetate	**11**	2.1	**3.3**	0.59	**M**
78-93-3	2-Butanone (MEK)	**11**	2.1	**3.6**	0.70	
156-59-2	cis-1,2-Dichloroethene	**2.5**	2.1	**0.64**	0.52	
67-66-3	Chloroform	**28**	2.1	**5.7**	0.42	
107-06-2	1,2-Dichloroethane	ND	2.1	ND	0.51	
71-55-6	1,1,1-Trichloroethane	ND	2.1	ND	0.38	
71-43-2	Benzene	**140**	2.1	**42**	0.65	
56-23-5	Carbon Tetrachloride	ND	2.1	ND	0.33	

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.
M = Matrix interference; results may be biased high.

Verified By: RC Date: 6/10/04

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **GeoSyntec Consultants, Inc.**
Client Sample ID: **PNLBA13-X-SFC**
Client Project ID: **Ascon/SB0202/31**

CAS Project ID: P2401046
CAS Sample ID: P2401046-018

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3
Analyst: Rusty Bravo/Michelle Sakamoto
Sampling Media: Summa Canister
Test Notes:
Container ID: SC00275

Date Collected: 5/14/04
Date Received: 5/17/04
Date(s) Analyzed: 5/26/04
Volume(s) Analyzed: 0.30 Liter(s)

Pi 1 = 0.0 Pf 1 = 3.5

D.F. = 1.24

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
78-87-5	1,2-Dichloropropane	ND	2.1	ND	0.45	
75-27-4	Bromodichloromethane	ND	2.1	ND	0.31	
79-01-6	Trichloroethene	ND	2.1	ND	0.38	
10061-01-5	cis-1,3-Dichloropropene	ND	2.1	ND	0.46	
108-10-1	4-Methyl-2-pentanone	**2.1**	2.1	**0.50**	0.50	
10061-02-6	trans-1,3-Dichloropropene	ND	2.1	ND	0.46	
79-00-5	1,1,2-Trichloroethane	ND	2.1	ND	0.38	
108-88-3	Toluene	**380**	2.1	**100**	0.55	
591-78-6	2-Hexanone	**3.2**	2.1	**0.79**	0.50	
124-48-1	Dibromochloromethane	ND	2.1	ND	0.24	
106-93-4	1,2-Dibromoethane	ND	2.1	ND	0.27	
127-18-4	Tetrachloroethene	**2.1**	2.1	**0.31**	0.30	
108-90-7	Chlorobenzene	ND	2.1	ND	0.45	
100-41-4	Ethylbenzene	**170**	2.1	**40**	0.48	
136777-61-2	*m,p*-Xylenes	**430**	4.1	**99**	0.95	
75-25-2	Bromoform	ND	2.1	ND	0.20	
100-42-5	Styrene	**15**	2.1	**3.6**	0.49	
95-47-6	o-Xylene	**320**	2.1	**73**	0.48	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.1	ND	0.30	
541-73-1	1,3-Dichlorobenzene	ND	2.1	ND	0.34	
106-46-7	1,4-Dichlorobenzene	**4.2**	2.1	**0.69**	0.34	
95-50-1	1,2-Dichlorobenzene	**9.2**	2.1	**1.5**	0.34	

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: RC Date: 6/10/04

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **GeoSyntec Consultants, Inc.**
Client Sample ID: **PNLBA13-X-SFC**
Client Project ID: **Ascon/SB0202/31**

CAS Project ID: P2401046
CAS Sample ID: P2401046-018

Tentatively Identified Compounds

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3
Analyst: Rusty Bravo/Michelle Sakamoto
Sampling Media: Summa Canister
Test Notes: **T**
Container ID: SC00275

Date Collected: 5/14/04
Date Received: 5/17/04
Date Analyzed: 5/26/04
Volume(s) Analyzed: 0.30 Liter(s)

Pi 1 = 0.0 Pf 1 = 3.5

D.F. = 1.24

GC / MS Ret. Time	Compound Identification	Concentration µg/m³	Data Qualifier
7.07	Isopropyl Alcohol	200	
22.99	Propylbenzene	300	
23.17	3-Ethyltoluene	600	
23.24	4-Ethyltoluene	200	
23.27	1,3,5-Trimethylbenzene	90	
24.07	1,2,4-Trimethylbenzene	500	
24.80	1,2,3-Trimethylbenzene	700	
25.14	C_9H_{10} Compound	200	
26.09	$C_{10}H_{14}$ Aromatic Compound	200	
27.37	$C_{10}H_{14}$ Aromatic Compound + $C_{10}H_{12}$ Compound	500	
27.92	Naphthalene	100	
29.51	Methylnaphthalene Isomer	400	
29.76	Methylnaphthalene Isomer	200	
30.41	$C_{14}H_{28}$ Compound	200	
30.54	$C_{14}H_{28}$ Compound	200	

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

Verified By: RG Date: 6/10/04

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **GeoSyntec Consultants, Inc.**
Client Sample ID: **PNLBA06-X-SFU**
Client Project ID: **Ascon/SB0202/31**

CAS Project ID: P2401046
CAS Sample ID: P2401046-019

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3
Analyst: Rusty Bravo/Michelle Sakamoto
Sampling Media: Summa Canister
Test Notes:
Container ID: SC00063

Date Collected: 5/14/04
Date Received: 5/17/04
Date(s) Analyzed: 6/3/04
Volume(s) Analyzed: 0.25 Liter(s)

Pi 1 = 0.0 Pf 1 = 3.5

D.F. = 1.24

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
74-87-3	Chloromethane	ND	2.5	ND	1.2	
75-01-4	Vinyl Chloride	ND	2.5	ND	0.97	
106-99-0	1,3-Butadiene	ND	2.5	ND	1.1	
74-83-9	Bromomethane	ND	2.5	ND	0.64	
75-00-3	Chloroethane	ND	2.5	ND	0.94	
67-64-1	Acetone	**64**	25	**27**	10	
75-69-4	Trichlorofluoromethane	ND	2.5	ND	0.44	
107-13-1	Acrylonitrile	ND	2.5	ND	1.1	
75-35-4	1,1-Dichloroethene	ND	2.5	ND	0.63	
75-09-2	Methylene chloride	ND	2.5	ND	0.71	
76-13-1	Trichlorotrifluoroethane	ND	2.5	ND	0.32	
75-15-0	Carbon Disulfide	**12**	2.5	**3.7**	0.80	
156-60-5	trans-1,2-Dichloroethene	ND	2.5	ND	0.63	
75-34-3	1,1-Dichloroethane	ND	2.5	ND	0.61	
1634-04-4	Methyl tert-Butyl Ether	ND	2.5	ND	0.69	
108-05-4	Vinyl Acetate	ND	2.5	ND	0.70	
78-93-3	2-Butanone (MEK)	**20**	2.5	**6.6**	0.84	
156-59-2	cis-1,2-Dichloroethene	ND	2.5	ND	0.63	
67-66-3	Chloroform	ND	2.5	ND	0.51	
107-06-2	1,2-Dichloroethane	ND	2.5	ND	0.61	
71-55-6	1,1,1-Trichloroethane	ND	2.5	ND	0.45	
71-43-2	Benzene	**180**	2.5	**57**	0.78	
56-23-5	Carbon Tetrachloride	ND	2.5	ND	0.39	

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: RC Date: 6/10/04

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **GeoSyntec Consultants, Inc.**
Client Sample ID: **PNLBA06-X-SFU**
Client Project ID: **Ascon/SB0202/31**

CAS Project ID: P2401046
CAS Sample ID: P2401046-019

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3
Analyst: Rusty Bravo/Michelle Sakamoto
Sampling Media: Summa Canister
Test Notes:
Container ID: SC00063

Date Collected: 5/14/04
Date Received: 5/17/04
Date(s) Analyzed: 6/3/04
Volume(s) Analyzed: 0.25 Liter(s)

Pi 1 = 0.0 Pf 1 = 3.5

D.F. = 1.24

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
78-87-5	1,2-Dichloropropane	ND	2.5	ND	0.54	
75-27-4	Bromodichloromethane	ND	2.5	ND	0.37	
79-01-6	Trichloroethene	ND	2.5	ND	0.46	
10061-01-5	cis-1,3-Dichloropropene	ND	2.5	ND	0.55	
108-10-1	4-Methyl-2-pentanone	ND	2.5	ND	0.61	
10061-02-6	trans-1,3-Dichloropropene	ND	2.5	ND	0.55	
79-00-5	1,1,2-Trichloroethane	ND	2.5	ND	0.45	
108-88-3	Toluene	**11**	2.5	**2.9**	0.66	
591-78-6	2-Hexanone	ND	2.5	ND	0.61	
124-48-1	Dibromochloromethane	ND	2.5	ND	0.29	
106-93-4	1,2-Dibromoethane	ND	2.5	ND	0.32	
127-18-4	Tetrachloroethene	**16**	2.5	**2.3**	0.37	
108-90-7	Chlorobenzene	ND	2.5	ND	0.54	
100-41-4	Ethylbenzene	**450**	2.5	**100**	0.57	
136777-61-2	*m,p* -Xylenes	**220**	5.0	**51**	1.1	
75-25-2	Bromoform	ND	2.5	ND	0.24	
100-42-5	Styrene	**7.5**	2.5	**1.8**	0.58	
95-47-6	o-Xylene	**59**	2.5	**13**	0.57	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.5	ND	0.36	
541-73-1	1,3-Dichlorobenzene	ND	2.5	ND	0.41	
106-46-7	1,4-Dichlorobenzene	**3.1**	2.5	**0.52**	0.41	
95-50-1	1,2-Dichlorobenzene	**13**	2.5	**2.2**	0.41	

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: RG Date: 6/10/04

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **GeoSyntec Consultants, Inc.**
Client Sample ID: **PNLBA06-X-SFU**
Client Project ID: **Ascon/SB0202/31**

CAS Project ID: P2401046
CAS Sample ID: P2401046-019

Tentatively Identified Compounds

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3
Analyst: Rusty Bravo/Michelle Sakamoto
Sampling Media: Summa Canister
Test Notes: **T**
Container ID: SC00063

Date Collected: 5/14/04
Date Received: 5/17/04
Date Analyzed: 6/3/04
Volume(s) Analyzed: 0.25 Liter(s)

Pi 1 = 0.0 Pf 1 = 3.5

D.F. = 1.24

GC / MS Ret. Time	Compound Identification	Concentration µg/m³	Data Qualifier
11.32	Methylcyclopentane	2,000	
12.62	Cyclohexane	900	
13.49	Dimethylcyclopentane Isomer	1,000	
13.62	Dimethylcyclopentane Isomer	1,000	
13.72	Dimethylcyclopentane Isomer	2,000	
15.12	Methylcyclohexane	2,000	
15.82	Trimethylcyclopentane Isomer	800	
16.13	Trimethylcyclopentane Isomer	2,000	
17.38	Dimethylcyclohexane Isomer	1,000	
19.72	Trimethylcyclohexane Isomer	2,000	
22.40	C_9H_{16} Compound	900	
24.06	1,2,4-Trimethylbenzene	300	
24.70	1,2,3-Trimethylbenzene	1,000	
27.37	$C_{10}H_{14}$ Aromatic Compound + $C_{10}H_{12}$ Compound	1,000	
27.93	Naphthalene	200	

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

Verified By: RG Date: 6/10/04

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **GeoSyntec Consultants, Inc.**
Client Sample ID: **PNLBA06-X-SFC**
Client Project ID: **Ascon/SB0202/31**

CAS Project ID: P2401046
CAS Sample ID: P2401046-020

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3
Analyst: Rusty Bravo/Michelle Sakamoto
Sampling Media: Summa Canister
Test Notes:
Container ID: SC00264

Date Collected: 5/14/04
Date Received: 5/17/04
Date(s) Analyzed: 6/4/04
Volume(s) Analyzed: 1.00 Liter(s)
0.10 Liter(s)

Pi 1 = 0.0 Pf 1 = 3.5

D.F. = 1.24

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
74-87-3	Chloromethane	ND	0.62	ND	0.30	
75-01-4	Vinyl Chloride	ND	0.62	ND	0.24	
106-99-0	1,3-Butadiene	ND	0.62	ND	0.28	
74-83-9	Bromomethane	ND	0.62	ND	0.16	
75-00-3	Chloroethane	ND	0.62	ND	0.24	
67-64-1	Acetone	**25**	6.2	**10**	2.6	
75-69-4	Trichlorofluoromethane	ND	0.62	ND	0.11	
107-13-1	Acrylonitrile	ND	0.62	ND	0.29	
75-35-4	1,1-Dichloroethene	ND	0.62	ND	0.16	
75-09-2	Methylene chloride	ND	0.62	ND	0.18	
76-13-1	Trichlorotrifluoroethane	ND	0.62	ND	0.081	
75-15-0	Carbon Disulfide	**42**	0.62	**13**	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	0.62	ND	0.16	
75-34-3	1,1-Dichloroethane	ND	0.62	ND	0.15	
1634-04-4	Methyl tert-Butyl Ether	ND	0.62	ND	0.17	
108-05-4	Vinyl Acetate	ND	0.62	ND	0.18	
78-93-3	2-Butanone (MEK)	**3.8**	0.62	**1.3**	0.21	
156-59-2	cis-1,2-Dichloroethene	ND	0.62	ND	0.16	
67-66-3	Chloroform	**0.99**	0.62	**0.20**	0.13	
107-06-2	1,2-Dichloroethane	ND	0.62	ND	0.15	
71-55-6	1,1,1-Trichloroethane	ND	0.62	ND	0.11	
71-43-2	Benzene	**93**	0.62	**29**	0.19	
56-23-5	Carbon Tetrachloride	ND	0.62	ND	0.099	

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: RG Date: 6/10/04

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **GeoSyntec Consultants, Inc.**
Client Sample ID: **PNLBA06-X-SFC**
Client Project ID: **Ascon/SB0202/31**

CAS Project ID: P2401046
CAS Sample ID: P2401046-020

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3
Analyst: Rusty Bravo/Michelle Sakamoto
Sampling Media: Summa Canister
Test Notes:
Container ID: SC00264

Date Collected: 5/14/04
Date Received: 5/17/04
Date(s) Analyzed: 6/4/04
Volume(s) Analyzed: 1.00 Liter(s)
0.10 Liter(s)

Pi 1 = 0.0 Pf 1 = 3.5

D.F. = 1.24

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
78-87-5	1,2-Dichloropropane	ND	0.62	ND	0.13	
75-27-4	Bromodichloromethane	ND	0.62	ND	0.093	
79-01-6	Trichloroethene	ND	0.62	ND	0.12	
10061-01-5	cis-1,3-Dichloropropene	ND	0.62	ND	0.14	
108-10-1	4-Methyl-2-pentanone	ND	0.62	ND	0.15	
10061-02-6	trans-1,3-Dichloropropene	ND	0.62	ND	0.14	
79-00-5	1,1,2-Trichloroethane	ND	0.62	ND	0.11	
108-88-3	Toluene	**1.6**	0.62	**0.43**	0.16	
591-78-6	2-Hexanone	**1.4**	0.62	**0.33**	0.15	
124-48-1	Dibromochloromethane	ND	0.62	ND	0.073	
106-93-4	1,2-Dibromoethane	ND	0.62	ND	0.081	
127-18-4	Tetrachloroethene	ND	0.62	ND	0.091	
108-90-7	Chlorobenzene	**3.7**	0.62	**0.81**	0.13	
100-41-4	Ethylbenzene	**190**	0.62	**44**	0.14	
136777-61-2	*m,p*-Xylenes	**92**	1.2	**21**	0.29	
75-25-2	Bromoform	ND	0.62	ND	0.060	
100-42-5	Styrene	**6.7**	0.62	**1.6**	0.15	
95-47-6	o-Xylene	**22**	0.62	**5.0**	0.14	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.62	ND	0.090	
541-73-1	1,3-Dichlorobenzene	ND	0.62	ND	0.10	
106-46-7	1,4-Dichlorobenzene	**1.4**	0.62	**0.23**	0.10	
95-50-1	1,2-Dichlorobenzene	**6.6**	0.62	**1.1**	0.10	

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: RG Date: 6/10/04

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **GeoSyntec Consultants, Inc.**
Client Sample ID: **PNLBA06-X-SFC**
Client Project ID: **Ascon/SB0202/31**

CAS Project ID: P2401046
CAS Sample ID: P2401046-020

Tentatively Identified Compounds

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3
Analyst: Rusty Bravo/Michelle Sakamoto
Sampling Media: Summa Canister
Test Notes: **T**
Container ID: SC00264

Date Collected: 5/14/04
Date Received: 5/17/04
Date Analyzed: 6/4/04
Volume(s) Analyzed: 1.00 Liter(s)
0.10 Liter(s)

Pi 1 = 0.0 Pf 1 = 3.5
D.F. = 1.24

GC / MS Ret. Time	Compound Identification	Concentration µg/m³	Data Qualifier
7.05	Isopropyl Alcohol	100	
15.09	Methylcyclohexane	60	
22.99	Propylbenzene	100	
24.07	1,2,4-Trimethylbenzene	100	
24.80	1,2,3-Trimethylbenzene	300	
25.13	C_9H_{10} Compound	80	
26.10	$C_{10}H_{14}$ Aromatic Compound + $C_{10}H_{12}$ Compound	100	
26.21	C10H12 Compound	100	
26.73	Tetramethylbenzene Isomer	70	
27.16	$C_{10}H_{12}$ Compound + $C_{11}H_{14}$ Compound	60	
27.37	$C_{10}H_{14}$ Aromatic Compound + $C_{10}H_{12}$ Compound	300	
27.93	Naphthalene	100	
29.51	Methylnaphthalene Isomer	100	
30.42	$C_{14}H_{28}$ Compound	100	
30.53	$C_{14}H_{28}$ Compound	70	

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

Verified By: RC Date: 6/10/04

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **GeoSyntec Consultants, Inc.**
Client Sample ID: **PNLBA07-X-SFU**
Client Project ID: **Ascon/SB0202/31**

CAS Project ID: P2401046
CAS Sample ID: P2401046-021

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3
Analyst: Rusty Bravo/Michelle Sakamoto
Sampling Media: Summa Canister
Test Notes:
Container ID: SC00256

Date Collected: 5/14/04
Date Received: 5/17/04
Date(s) Analyzed: 6/4/04
Volume(s) Analyzed: 0.20 Liter(s)

Pi 1 = -0.3 Pf 1 = 3.5

D.F. = 1.26

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
74-87-3	Chloromethane	ND	3.2	ND	1.5	
75-01-4	Vinyl Chloride	ND	3.2	ND	1.2	
106-99-0	1,3-Butadiene	ND	3.2	ND	1.4	
74-83-9	Bromomethane	ND	3.2	ND	0.81	
75-00-3	Chloroethane	ND	3.2	ND	1.2	
67-64-1	Acetone	**130**	32	**55**	13	**M**
75-69-4	Trichlorofluoromethane	ND	3.2	ND	0.56	
107-13-1	Acrylonitrile	ND	3.2	ND	1.5	
75-35-4	1,1-Dichloroethene	ND	3.2	ND	0.79	
75-09-2	Methylene chloride	ND	3.2	ND	0.91	
76-13-1	Trichlorotrifluoroethane	ND	3.2	ND	0.41	
75-15-0	Carbon Disulfide	**36**	3.2	**12**	1.0	
156-60-5	trans-1,2-Dichloroethene	ND	3.2	ND	0.79	
75-34-3	1,1-Dichloroethane	ND	3.2	ND	0.78	
1634-04-4	Methyl tert-Butyl Ether	ND	3.2	ND	0.87	
108-05-4	Vinyl Acetate	ND	3.2	ND	0.89	
78-93-3	2-Butanone (MEK)	**28**	3.2	**9.5**	1.1	
156-59-2	cis-1,2-Dichloroethene	ND	3.2	ND	0.79	
67-66-3	Chloroform	ND	3.2	ND	0.65	
107-06-2	1,2-Dichloroethane	ND	3.2	ND	0.78	
71-55-6	1,1,1-Trichloroethane	ND	3.2	ND	0.58	
71-43-2	Benzene	**27**	3.2	**8.3**	0.99	
56-23-5	Carbon Tetrachloride	ND	3.2	ND	0.50	

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: RC Date: 6/10/04

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **GeoSyntec Consultants, Inc.**
Client Sample ID: **PNLBA07-X-SFU**
Client Project ID: **Ascon/SB0202/31**

CAS Project ID: P2401046
CAS Sample ID: P2401046-021

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3
Analyst: Rusty Bravo/Michelle Sakamoto
Sampling Media: Summa Canister
Test Notes:
Container ID: SC00256

Date Collected: 5/14/04
Date Received: 5/17/04
Date(s) Analyzed: 6/4/04
Volume(s) Analyzed: 0.20 Liter(s)

Pi 1 = -0.3 Pf 1 = 3.5

D.F. = 1.26

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
78-87-5	1,2-Dichloropropane	ND	3.2	ND	0.68	
75-27-4	Bromodichloromethane	ND	3.2	ND	0.47	
79-01-6	Trichloroethene	ND	3.2	ND	0.59	
10061-01-5	cis-1,3-Dichloropropene	ND	3.2	ND	0.69	
108-10-1	4-Methyl-2-pentanone	ND	3.2	ND	0.77	
10061-02-6	trans-1,3-Dichloropropene	ND	3.2	ND	0.69	
79-00-5	1,1,2-Trichloroethane	ND	3.2	ND	0.58	
108-88-3	Toluene	**7.2**	3.2	**1.9**	0.84	
591-78-6	2-Hexanone	ND	3.2	ND	0.77	
124-48-1	Dibromochloromethane	ND	3.2	ND	0.37	
106-93-4	1,2-Dibromoethane	ND	3.2	ND	0.41	
127-18-4	Tetrachloroethene	ND	3.2	ND	0.46	
108-90-7	Chlorobenzene	ND	3.2	ND	0.68	
100-41-4	Ethylbenzene	**220**	3.2	**52**	0.73	
136777-61-2	*m,p*-Xylenes	**130**	6.3	**29**	1.5	
75-25-2	Bromoform	ND	3.2	ND	0.30	
100-42-5	Styrene	**5.4**	3.2	**1.3**	0.74	
95-47-6	o-Xylene	**69**	3.2	**16**	0.73	
79-34-5	1,1,2,2-Tetrachloroethane	ND	3.2	ND	0.46	
541-73-1	1,3-Dichlorobenzene	ND	3.2	ND	0.52	
106-46-7	1,4-Dichlorobenzene	**4.0**	3.2	**0.67**	0.52	
95-50-1	1,2-Dichlorobenzene	**15**	3.2	**2.4**	0.52	

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: RG Date: 6/10/04

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **GeoSyntec Consultants, Inc.**
Client Sample ID: **PNLBA07-X-SFU**
Client Project ID: **Ascon/SB0202/31**

CAS Project ID: P2401046
CAS Sample ID: P2401046-021

Tentatively Identified Compounds

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3
Analyst: Rusty Bravo/Michelle Sakamoto
Sampling Media: Summa Canister
Test Notes: **T**
Container ID: SC00256

Date Collected: 5/14/04
Date Received: 5/17/04
Date Analyzed: 6/4/04
Volume(s) Analyzed: 0.20 Liter(s)

Pi 1 = -0.3 Pf 1 = 3.5
D.F. = 1.26

GC / MS Ret. Time	Compound Identification	Concentration µg/m³	Data Qualifier
13.50	Dimethylcyclopentane Isomer	**1,000**	
13.61	Dimethylcyclopentane Isomer	**1,000**	
13.72	Dimethylcyclopentane Isomer	**2,000**	
15.11	Methylcyclohexane	**2,000**	
15.83	Trimethylcyclopentane Isomer	**1,000**	
16.13	Trimethylcyclopentane Isomer	**2,000**	
17.39	Dimethylcyclohexane Isomer	**2,000**	
19.73	Trimethylcyclohexane Isomer	**4,000**	
20.08	Dimethylcyclopentane Isomer	**1,000**	
20.24	Trimethylcyclohexane Isomer	**900**	
22.40	C_9H_{16} Compound	**2,000**	
23.52	$C_{10}H_{20}$ Compound	**1,000**	
24.80	1,2,3-Trimethylbenzene + $C_{11}H_{24}$ Branched Alkane	**1,000**	
27.38	$C_{10}H_{14}$ Aromatic Compound + $C_{10}H_{12}$ Compound	**2,000**	
27.93	Naphthalene	**300**	

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

Verified By: RG Date: 6/10/04

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **GeoSyntec Consultants, Inc.**
Client Sample ID: **PNLBA07-X-SFC**
Client Project ID: **Ascon/SB0202/31**

CAS Project ID: P2401046
CAS Sample ID: P2401046-022

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3
Analyst: Rusty Bravo/Michelle Sakamoto
Sampling Media: Summa Canister
Test Notes:
Container ID: SC00262

Date Collected: 5/14/04
Date Received: 5/17/04
Date(s) Analyzed: 6/4/04
Volume(s) Analyzed: 0.20 Liter(s)

Pi 1 = -0.1 Pf 1 = 3.5

D.F. = 1.25

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
74-87-3	Chloromethane	ND	3.1	ND	1.5	
75-01-4	Vinyl Chloride	ND	3.1	ND	1.2	
106-99-0	1,3-Butadiene	ND	3.1	ND	1.4	
74-83-9	Bromomethane	ND	3.1	ND	0.81	
75-00-3	Chloroethane	ND	3.1	ND	1.2	
67-64-1	Acetone	**37**	31	**16**	13	
75-69-4	Trichlorofluoromethane	ND	3.1	ND	0.56	
107-13-1	Acrylonitrile	ND	3.1	ND	1.4	
75-35-4	1,1-Dichloroethene	ND	3.1	ND	0.79	
75-09-2	Methylene chloride	ND	3.1	ND	0.90	
76-13-1	Trichlorotrifluoroethane	ND	3.1	ND	0.41	
75-15-0	Carbon Disulfide	**55**	3.1	**18**	1.0	
156-60-5	trans-1,2-Dichloroethene	ND	3.1	ND	0.79	
75-34-3	1,1-Dichloroethane	ND	3.1	ND	0.77	
1634-04-4	Methyl tert-Butyl Ether	ND	3.1	ND	0.87	
108-05-4	Vinyl Acetate	ND	3.1	ND	0.89	
78-93-3	2-Butanone (MEK)	**6.1**	3.1	**2.1**	1.1	
156-59-2	cis-1,2-Dichloroethene	ND	3.1	ND	0.79	
67-66-3	Chloroform	**4.9**	3.1	**1.0**	0.64	
107-06-2	1,2-Dichloroethane	ND	3.1	ND	0.77	
71-55-6	1,1,1-Trichloroethane	ND	3.1	ND	0.57	
71-43-2	Benzene	**18**	3.1	**5.5**	0.98	
56-23-5	Carbon Tetrachloride	ND	3.1	ND	0.50	

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: RG Date: 6/10/04

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **GeoSyntec Consultants, Inc.**
Client Sample ID: **PNLBA07-X-SFC**
Client Project ID: **Ascon/SB0202/31**

CAS Project ID: P2401046
CAS Sample ID: P2401046-022

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3
Analyst: Rusty Bravo/Michelle Sakamoto
Sampling Media: Summa Canister
Test Notes:
Container ID: SC00262

Date Collected: 5/14/04
Date Received: 5/17/04
Date(s) Analyzed: 6/4/04
Volume(s) Analyzed: 0.20 Liter(s)

Pi 1 = -0.1 Pf 1 = 3.5

D.F. = 1.25

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
78-87-5	1,2-Dichloropropane	ND	3.1	ND	0.68	
75-27-4	Bromodichloromethane	ND	3.1	ND	0.47	
79-01-6	Trichloroethene	ND	3.1	ND	0.58	
10061-01-5	cis-1,3-Dichloropropene	ND	3.1	ND	0.69	
108-10-1	4-Methyl-2-pentanone	ND	3.1	ND	0.76	
10061-02-6	trans-1,3-Dichloropropene	ND	3.1	ND	0.69	
79-00-5	1,1,2-Trichloroethane	ND	3.1	ND	0.57	
108-88-3	Toluene	**4.6**	3.1	**1.2**	0.83	
591-78-6	2-Hexanone	ND	3.1	ND	0.76	
124-48-1	Dibromochloromethane	ND	3.1	ND	0.37	
106-93-4	1,2-Dibromoethane	ND	3.1	ND	0.41	
127-18-4	Tetrachloroethene	**19**	3.1	**2.8**	0.46	
108-90-7	Chlorobenzene	ND	3.1	ND	0.68	
100-41-4	Ethylbenzene	**120**	3.1	**28**	0.72	
136777-61-2	*m,p* -Xylenes	**99**	6.3	**23**	1.4	
75-25-2	Bromoform	ND	3.1	ND	0.30	
100-42-5	Styrene	**3.8**	3.1	**0.90**	0.73	
95-47-6	o-Xylene	**40**	3.1	**9.2**	0.72	
79-34-5	1,1,2,2-Tetrachloroethane	ND	3.1	ND	0.46	
541-73-1	1,3-Dichlorobenzene	ND	3.1	ND	0.52	
106-46-7	1,4-Dichlorobenzene	ND	3.1	ND	0.52	
95-50-1	1,2-Dichlorobenzene	**4.4**	3.1	**0.74**	0.52	

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: RG Date: 6/10/04

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **GeoSyntec Consultants, Inc.**
Client Sample ID: **PNLBA07-X-SFC**
Client Project ID: **Ascon/SB0202/31**

CAS Project ID: P2401046
CAS Sample ID: P2401046-022

Tentatively Identified Compounds

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3
Analyst: Rusty Bravo/Michelle Sakamoto
Sampling Media: Summa Canister
Test Notes: **T**
Container ID: SC00262

Date Collected: 5/14/04
Date Received: 5/17/04
Date Analyzed: 6/4/04
Volume(s) Analyzed: 0.20 Liter(s)

Pi 1 = -0.1 Pf 1 = 3.5

D.F. = 1.25

GC / MS Ret. Time	Compound Identification	Concentration µg/m³	Data Qualifier
11.32	Methylcyclopentane	**1,000**	
12.61	Cyclohexane	**800**	
13.49	Dimethylcyclopentane Isomer	**1,000**	
13.61	Dimethylcyclopentane Isomer	**1,000**	
13.72	Dimethylcyclopentane Isomer	**3,000**	
15.12	Methylcyclohexane	**2,000**	
15.82	Trimethylcyclopentane Isomer	**1,000**	
16.13	Trimethylcyclopentane Isomer	**2,000**	
17.38	Dimethylcyclohexane Isomer	**1,000**	
17.91	C_8H_{16} Compound	**800**	
18.31	C_9H_{18} Compound	**700**	
19.72	Trimethylcyclohexane Isomer	**3,000**	
20.01	Dimethylcyclopentane Isomer	**700**	
20.24	Trimethylcyclohexane Isomer	**700**	
22.40	C_9H_{16} Compound	**700**	

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

Verified By: RC Date: 6/10/04

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

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

CAS Project ID: P2401046
CAS Sample ID: P040526-MB

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3
Analyst: Rusty Bravo/Michelle Sakamoto
Sampling Media: Summa Canister
Test Notes:

Date Collected: NA
Date Received: NA
Date(s) Analyzed: 5/26/04
Volume(s) Analyzed: 1.00 Liter(s)

D.F. = 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
74-87-3	Chloromethane	ND	0.50	ND	0.24	
75-01-4	Vinyl Chloride	ND	0.50	ND	0.20	
106-99-0	1,3-Butadiene	ND	0.50	ND	0.23	
74-83-9	Bromomethane	ND	0.50	ND	0.13	
75-00-3	Chloroethane	ND	0.50	ND	0.19	
67-64-1	Acetone	ND	5.0	ND	2.1	
75-69-4	Trichlorofluoromethane	ND	0.50	ND	0.089	
107-13-1	Acrylonitrile	ND	0.50	ND	0.23	
75-35-4	1,1-Dichloroethene	ND	0.50	ND	0.13	
75-09-2	Methylene chloride	ND	0.50	ND	0.14	
76-13-1	Trichlorotrifluoroethane	ND	0.50	ND	0.065	
75-15-0	Carbon Disulfide	ND	0.50	ND	0.16	
156-60-5	trans-1,2-Dichloroethene	ND	0.50	ND	0.13	
75-34-3	1,1-Dichloroethane	ND	0.50	ND	0.12	
1634-04-4	Methyl tert-Butyl Ether	ND	0.50	ND	0.14	
108-05-4	Vinyl Acetate	ND	0.50	ND	0.14	
78-93-3	2-Butanone (MEK)	ND	0.50	ND	0.17	
156-59-2	cis-1,2-Dichloroethene	ND	0.50	ND	0.13	
67-66-3	Chloroform	ND	0.50	ND	0.10	
107-06-2	1,2-Dichloroethane	ND	0.50	ND	0.12	
71-55-6	1,1,1-Trichloroethane	ND	0.50	ND	0.092	
71-43-2	Benzene	ND	0.50	ND	0.16	
56-23-5	Carbon Tetrachloride	ND	0.50	ND	0.080	

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: RG Date: 6/10/04

01046VOA RD1 - MBlank

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

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

CAS Project ID: P2401046
CAS Sample ID: P040526-MB

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3
Analyst: Rusty Bravo/Michelle Sakamoto
Sampling Media: Summa Canister
Test Notes:

Date Collected: NA
Date Received: NA
Date(s) Analyzed: 5/26/04
Volume(s) Analyzed: 1.00 Liter(s)

D.F. = 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
78-87-5	1,2-Dichloropropane	ND	0.50	ND	0.11	
75-27-4	Bromodichloromethane	ND	0.50	ND	0.075	
79-01-6	Trichloroethene	ND	0.50	ND	0.093	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ND	0.11	
108-10-1	4-Methyl-2-pentanone	ND	0.50	ND	0.12	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ND	0.11	
79-00-5	1,1,2-Trichloroethane	ND	0.50	ND	0.092	
108-88-3	Toluene	ND	0.50	ND	0.13	
591-78-6	2-Hexanone	ND	0.50	ND	0.12	
124-48-1	Dibromochloromethane	ND	0.50	ND	0.059	
106-93-4	1,2-Dibromoethane	ND	0.50	ND	0.065	
127-18-4	Tetrachloroethene	ND	0.50	ND	0.074	
108-90-7	Chlorobenzene	ND	0.50	ND	0.11	
100-41-4	Ethylbenzene	ND	0.50	ND	0.12	
136777-61-2	*m,p*-Xylenes	ND	1.0	ND	0.23	
75-25-2	Bromoform	ND	0.50	ND	0.048	
100-42-5	Styrene	ND	0.50	ND	0.12	
95-47-6	o-Xylene	ND	0.50	ND	0.12	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	ND	0.073	
541-73-1	1,3-Dichlorobenzene	ND	0.50	ND	0.083	
106-46-7	1,4-Dichlorobenzene	ND	0.50	ND	0.083	
95-50-1	1,2-Dichlorobenzene	ND	0.50	ND	0.083	

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: RL Date: 6/10/04

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

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

CAS Project ID: P2401046
CAS Sample ID: P040526-MB

Tentatively Identified Compounds

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3
Analyst: Rusty Bravo/Michelle Sakamoto
Sampling Media: Summa Canister
Test Notes:

Date Collected: NA
Date Received: NA
Date Analyzed: 5/26/04
Volume(s) Analyzed: 1.00 Liter(s)

D.F. = 1.00

GC / MS Ret. Time	Compound Identification	Concentration µg/m³	Data Qualifier
	No Compounds Detected		

Verified By: RG Date: 6/10/04

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

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

CAS Project ID: P2401046
CAS Sample ID: P040603-MB

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3
Analyst: Rusty Bravo/Michelle Sakamoto
Sampling Media: Summa Canister
Test Notes:

Date Collected: NA
Date Received: NA
Date(s) Analyzed: 6/3/04
Volume(s) Analyzed: 1.00 Liter(s)

D.F. = 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
74-87-3	Chloromethane	ND	0.50	ND	0.24	
75-01-4	Vinyl Chloride	ND	0.50	ND	0.20	
106-99-0	1,3-Butadiene	ND	0.50	ND	0.23	
74-83-9	Bromomethane	ND	0.50	ND	0.13	
75-00-3	Chloroethane	ND	0.50	ND	0.19	
67-64-1	Acetone	ND	5.0	ND	2.1	
75-69-4	Trichlorofluoromethane	ND	0.50	ND	0.089	
107-13-1	Acrylonitrile	ND	0.50	ND	0.23	
75-35-4	1,1-Dichloroethene	ND	0.50	ND	0.13	
75-09-2	Methylene chloride	ND	0.50	ND	0.14	
76-13-1	Trichlorotrifluoroethane	ND	0.50	ND	0.065	
75-15-0	Carbon Disulfide	ND	0.50	ND	0.16	
156-60-5	trans-1,2-Dichloroethene	ND	0.50	ND	0.13	
75-34-3	1,1-Dichloroethane	ND	0.50	ND	0.12	
1634-04-4	Methyl tert-Butyl Ether	ND	0.50	ND	0.14	
108-05-4	Vinyl Acetate	ND	0.50	ND	0.14	
78-93-3	2-Butanone (MEK)	ND	0.50	ND	0.17	
156-59-2	cis-1,2-Dichloroethene	ND	0.50	ND	0.13	
67-66-3	Chloroform	ND	0.50	ND	0.10	
107-06-2	1,2-Dichloroethane	ND	0.50	ND	0.12	
71-55-6	1,1,1-Trichloroethane	ND	0.50	ND	0.092	
71-43-2	Benzene	ND	0.50	ND	0.16	
56-23-5	Carbon Tetrachloride	ND	0.50	ND	0.080	

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: RC Date: 6/10/04

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

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

CAS Project ID: P2401046
CAS Sample ID: P040603-MB

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3
Analyst: Rusty Bravo/Michelle Sakamoto
Sampling Media: Summa Canister
Test Notes:

Date Collected: NA
Date Received: NA
Date(s) Analyzed: 6/3/04
Volume(s) Analyzed: 1.00 Liter(s)

D.F. = 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
78-87-5	1,2-Dichloropropane	ND	0.50	ND	0.11	
75-27-4	Bromodichloromethane	ND	0.50	ND	0.075	
79-01-6	Trichloroethene	ND	0.50	ND	0.093	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ND	0.11	
108-10-1	4-Methyl-2-pentanone	ND	0.50	ND	0.12	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ND	0.11	
79-00-5	1,1,2-Trichloroethane	ND	0.50	ND	0.092	
108-88-3	Toluene	ND	0.50	ND	0.13	
591-78-6	2-Hexanone	ND	0.50	ND	0.12	
124-48-1	Dibromochloromethane	ND	0.50	ND	0.059	
106-93-4	1,2-Dibromoethane	ND	0.50	ND	0.065	
127-18-4	Tetrachloroethene	ND	0.50	ND	0.074	
108-90-7	Chlorobenzene	ND	0.50	ND	0.11	
100-41-4	Ethylbenzene	ND	0.50	ND	0.12	
136777-61-2	*m,p*-Xylenes	ND	1.0	ND	0.23	
75-25-2	Bromoform	ND	0.50	ND	0.048	
100-42-5	Styrene	ND	0.50	ND	0.12	
95-47-6	o-Xylene	ND	0.50	ND	0.12	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	ND	0.073	
541-73-1	1,3-Dichlorobenzene	ND	0.50	ND	0.083	
106-46-7	1,4-Dichlorobenzene	ND	0.50	ND	0.083	
95-50-1	1,2-Dichlorobenzene	ND	0.50	ND	0.083	

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: RG Date: 6/10/04

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

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

CAS Project ID: P2401046
CAS Sample ID: P040603-MB

Tentatively Identified Compounds

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3
Analyst: Rusty Bravo/Michelle Sakamoto
Sampling Media: Summa Canister
Test Notes:

Date Collected: NA
Date Received: NA
Date Analyzed: 6/3/04
Volume(s) Analyzed: 1.00 Liter(s)

D.F. = 1.00

GC / MS Ret. Time	Compound Identification	Concentration µg/m³	Data Qualifier
	No Compounds Detected		

Verified By: RG Date: 6/10/04

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

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

CAS Project ID: P2401046
CAS Sample ID: P070604-MB

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3
Analyst: Rusty Bravo/Michelle Sakamoto
Sampling Media: Summa Canister
Test Notes:

Date Collected: NA
Date Received: NA
Date(s) Analyzed: 6/4/07
Volume(s) Analyzed: 1.00 Liter(s)

D.F. = 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
74-87-3	Chloromethane	ND	0.50	ND	0.24	
75-01-4	Vinyl Chloride	ND	0.50	ND	0.20	
106-99-0	1,3-Butadiene	ND	0.50	ND	0.23	
74-83-9	Bromomethane	ND	0.50	ND	0.13	
75-00-3	Chloroethane	ND	0.50	ND	0.19	
67-64-1	Acetone	ND	5.0	ND	2.1	
75-69-4	Trichlorofluoromethane	ND	0.50	ND	0.089	
107-13-1	Acrylonitrile	ND	0.50	ND	0.23	
75-35-4	1,1-Dichloroethene	ND	0.50	ND	0.13	
75-09-2	Methylene chloride	ND	0.50	ND	0.14	
76-13-1	Trichlorotrifluoroethane	ND	0.50	ND	0.065	
75-15-0	Carbon Disulfide	ND	0.50	ND	0.16	
156-60-5	trans-1,2-Dichloroethene	ND	0.50	ND	0.13	
75-34-3	1,1-Dichloroethane	ND	0.50	ND	0.12	
1634-04-4	Methyl tert-Butyl Ether	ND	0.50	ND	0.14	
108-05-4	Vinyl Acetate	ND	0.50	ND	0.14	
78-93-3	2-Butanone (MEK)	ND	0.50	ND	0.17	
156-59-2	cis-1,2-Dichloroethene	ND	0.50	ND	0.13	
67-66-3	Chloroform	ND	0.50	ND	0.10	
107-06-2	1,2-Dichloroethane	ND	0.50	ND	0.12	
71-55-6	1,1,1-Trichloroethane	ND	0.50	ND	0.092	
71-43-2	Benzene	ND	0.50	ND	0.16	
56-23-5	Carbon Tetrachloride	ND	0.50	ND	0.080	

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: Rc Date: 6/6/07

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

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

CAS Project ID: P2401046
CAS Sample ID: P070604-MB

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3
Analyst: Rusty Bravo/Michelle Sakamoto
Sampling Media: Summa Canister
Test Notes:

Date Collected: NA
Date Received: NA
Date(s) Analyzed: 6/4/07
Volume(s) Analyzed: 1.00 Liter(s)

D.F. = 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
78-87-5	1,2-Dichloropropane	ND	0.50	ND	0.11	
75-27-4	Bromodichloromethane	ND	0.50	ND	0.075	
79-01-6	Trichloroethene	ND	0.50	ND	0.093	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ND	0.11	
108-10-1	4-Methyl-2-pentanone	ND	0.50	ND	0.12	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ND	0.11	
79-00-5	1,1,2-Trichloroethane	ND	0.50	ND	0.092	
108-88-3	Toluene	ND	0.50	ND	0.13	
591-78-6	2-Hexanone	ND	0.50	ND	0.12	
124-48-1	Dibromochloromethane	ND	0.50	ND	0.059	
106-93-4	1,2-Dibromoethane	ND	0.50	ND	0.065	
127-18-4	Tetrachloroethene	ND	0.50	ND	0.074	
108-90-7	Chlorobenzene	ND	0.50	ND	0.11	
100-41-4	Ethylbenzene	ND	0.50	ND	0.12	
136777-61-2	*m,p*-Xylenes	ND	1.0	ND	0.23	
75-25-2	Bromoform	ND	0.50	ND	0.048	
100-42-5	Styrene	ND	0.50	ND	0.12	
95-47-6	o-Xylene	ND	0.50	ND	0.12	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	ND	0.073	
541-73-1	1,3-Dichlorobenzene	ND	0.50	ND	0.083	
106-46-7	1,4-Dichlorobenzene	ND	0.50	ND	0.083	
95-50-1	1,2-Dichlorobenzene	ND	0.50	ND	0.083	

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: RG Date: 6/10/04

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

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

CAS Project ID: P2401046
CAS Sample ID: P070604-MB

Tentatively Identified Compounds

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3
Analyst: Rusty Bravo/Michelle Sakamoto
Sampling Media: Summa Canister
Test Notes:

Date Collected: NA
Date Received: NA
Date Analyzed: 6/4/07
Volume(s) Analyzed: 1.00 Liter(s)

D.F. = 1.00

GC / MS Ret. Time	Compound Identification	Concentration µg/m³	Data Qualifier
	No Compounds Detected		

Verified By: RC Date: 6/11/07

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

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

CAS Project ID: P2401046
CAS Sample ID: P040607-MB

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3
Analyst: Rusty Bravo/Michelle Sakamoto
Sampling Media: Summa Canister
Test Notes:

Date Collected: NA
Date Received: NA
Date(s) Analyzed: 6/7/04
Volume(s) Analyzed: 1.00 Liter(s)

D.F. = 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
74-87-3	Chloromethane	ND	0.50	ND	0.24	
75-01-4	Vinyl Chloride	ND	0.50	ND	0.20	
106-99-0	1,3-Butadiene	ND	0.50	ND	0.23	
74-83-9	Bromomethane	ND	0.50	ND	0.13	
75-00-3	Chloroethane	ND	0.50	ND	0.19	
67-64-1	Acetone	ND	5.0	ND	2.1	
75-69-4	Trichlorofluoromethane	ND	0.50	ND	0.089	
107-13-1	Acrylonitrile	ND	0.50	ND	0.23	
75-35-4	1,1-Dichloroethene	ND	0.50	ND	0.13	
75-09-2	Methylene chloride	ND	0.50	ND	0.14	
76-13-1	Trichlorotrifluoroethane	ND	0.50	ND	0.065	
75-15-0	Carbon Disulfide	ND	0.50	ND	0.16	
156-60-5	trans-1,2-Dichloroethene	ND	0.50	ND	0.13	
75-34-3	1,1-Dichloroethane	ND	0.50	ND	0.12	
1634-04-4	Methyl tert-Butyl Ether	ND	0.50	ND	0.14	
108-05-4	Vinyl Acetate	ND	0.50	ND	0.14	
78-93-3	2-Butanone (MEK)	ND	0.50	ND	0.17	
156-59-2	cis-1,2-Dichloroethene	ND	0.50	ND	0.13	
67-66-3	Chloroform	ND	0.50	ND	0.10	
107-06-2	1,2-Dichloroethane	ND	0.50	ND	0.12	
71-55-6	1,1,1-Trichloroethane	ND	0.50	ND	0.092	
71-43-2	Benzene	ND	0.50	ND	0.16	
56-23-5	Carbon Tetrachloride	ND	0.50	ND	0.080	

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: RB Date: 6/10/04

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

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

CAS Project ID: P2401046
CAS Sample ID: P040607-MB

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3
Analyst: Rusty Bravo/Michelle Sakamoto
Sampling Media: Summa Canister
Test Notes:

Date Collected: NA
Date Received: NA
Date(s) Analyzed: 6/7/04
Volume(s) Analyzed: 1.00 Liter(s)

D.F. = 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
78-87-5	1,2-Dichloropropane	ND	0.50	ND	0.11	
75-27-4	Bromodichloromethane	ND	0.50	ND	0.075	
79-01-6	Trichloroethene	ND	0.50	ND	0.093	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ND	0.11	
108-10-1	4-Methyl-2-pentanone	ND	0.50	ND	0.12	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ND	0.11	
79-00-5	1,1,2-Trichloroethane	ND	0.50	ND	0.092	
108-88-3	Toluene	ND	0.50	ND	0.13	
591-78-6	2-Hexanone	ND	0.50	ND	0.12	
124-48-1	Dibromochloromethane	ND	0.50	ND	0.059	
106-93-4	1,2-Dibromoethane	ND	0.50	ND	0.065	
127-18-4	Tetrachloroethene	ND	0.50	ND	0.074	
108-90-7	Chlorobenzene	ND	0.50	ND	0.11	
100-41-4	Ethylbenzene	ND	0.50	ND	0.12	
136777-61-2	*m,p* -Xylenes	ND	1.0	ND	0.23	
75-25-2	Bromoform	ND	0.50	ND	0.048	
100-42-5	Styrene	ND	0.50	ND	0.12	
95-47-6	o-Xylene	ND	0.50	ND	0.12	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	ND	0.073	
541-73-1	1,3-Dichlorobenzene	ND	0.50	ND	0.083	
106-46-7	1,4-Dichlorobenzene	ND	0.50	ND	0.083	
95-50-1	1,2-Dichlorobenzene	ND	0.50	ND	0.083	

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: RG Date: 6/10/04

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

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

CAS Project ID: P2401046
CAS Sample ID: P040607-MB

Tentatively Identified Compounds

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3
Analyst: Rusty Bravo/Michelle Sakamoto
Sampling Media: Summa Canister
Test Notes:

Date Collected: NA
Date Received: NA
Date Analyzed: 6/7/04
Volume(s) Analyzed: 1.00 Liter(s)

D.F. = 1.00

GC / MS Ret. Time	Compound Identification	Concentration µg/m³	Data Qualifier
	No Compounds Detected		

Verified By: R.C. Date: 6/10/04

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

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

CAS Project ID: P2401046
CAS Sample ID: P040607-MB

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

Date Collected: NA
Date Received: NA
Date(s) Analyzed: 6/7/04
Volume(s) Analyzed: 1.00 Liter(s)

D.F. = 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
74-87-3	Chloromethane	ND	0.50	ND	0.24	
75-01-4	Vinyl Chloride	ND	0.50	ND	0.20	
106-99-0	1,3-Butadiene	ND	0.50	ND	0.23	
74-83-9	Bromomethane	ND	0.50	ND	0.13	
75-00-3	Chloroethane	ND	0.50	ND	0.19	
67-64-1	Acetone	ND	5.0	ND	2.1	
75-69-4	Trichlorofluoromethane	ND	0.50	ND	0.089	
107-13-1	Acrylonitrile	ND	0.50	ND	0.23	
75-35-4	1,1-Dichloroethene	ND	0.50	ND	0.13	
75-09-2	Methylene chloride	ND	0.50	ND	0.14	
76-13-1	Trichlorotrifluoroethane	ND	0.50	ND	0.065	
75-15-0	Carbon Disulfide	ND	0.50	ND	0.16	
156-60-5	trans-1,2-Dichloroethene	ND	0.50	ND	0.13	
75-34-3	1,1-Dichloroethane	ND	0.50	ND	0.12	
1634-04-4	Methyl tert-Butyl Ether	ND	0.50	ND	0.14	
108-05-4	Vinyl Acetate	ND	0.50	ND	0.14	
78-93-3	2-Butanone (MEK)	ND	0.50	ND	0.17	
156-59-2	cis-1,2-Dichloroethene	ND	0.50	ND	0.13	
67-66-3	Chloroform	ND	0.50	ND	0.10	
107-06-2	1,2-Dichloroethane	ND	0.50	ND	0.12	
71-55-6	1,1,1-Trichloroethane	ND	0.50	ND	0.092	
71-43-2	Benzene	ND	0.50	ND	0.16	
56-23-5	Carbon Tetrachloride	ND	0.50	ND	0.080	

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: Re Date: 6/10/04

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

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

CAS Project ID: P2401046
CAS Sample ID: P040607-MB

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

Date Collected: NA
Date Received: NA
Date(s) Analyzed: 6/7/04
Volume(s) Analyzed: 1.00 Liter(s)

D.F. = 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
78-87-5	1,2-Dichloropropane	ND	0.50	ND	0.11	
75-27-4	Bromodichloromethane	ND	0.50	ND	0.075	
79-01-6	Trichloroethene	ND	0.50	ND	0.093	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ND	0.11	
108-10-1	4-Methyl-2-pentanone	ND	0.50	ND	0.12	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ND	0.11	
79-00-5	1,1,2-Trichloroethane	ND	0.50	ND	0.092	
108-88-3	Toluene	ND	0.50	ND	0.13	
591-78-6	2-Hexanone	ND	0.50	ND	0.12	
124-48-1	Dibromochloromethane	ND	0.50	ND	0.059	
106-93-4	1,2-Dibromoethane	ND	0.50	ND	0.065	
127-18-4	Tetrachloroethene	ND	0.50	ND	0.074	
108-90-7	Chlorobenzene	ND	0.50	ND	0.11	
100-41-4	Ethylbenzene	ND	0.50	ND	0.12	
136777-61-2	*m,p*-Xylenes	ND	1.0	ND	0.23	
75-25-2	Bromoform	ND	0.50	ND	0.048	
100-42-5	Styrene	ND	0.50	ND	0.12	
95-47-6	o-Xylene	ND	0.50	ND	0.12	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	ND	0.073	
541-73-1	1,3-Dichlorobenzene	ND	0.50	ND	0.083	
106-46-7	1,4-Dichlorobenzene	ND	0.50	ND	0.083	
95-50-1	1,2-Dichlorobenzene	ND	0.50	ND	0.083	

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: RC Date: 6/10/04

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

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

CAS Project ID: P2401046
CAS Sample ID: P040607-MB

Tentatively Identified Compounds

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

Date Collected: NA
Date Received: NA
Date Analyzed: 6/7/04
Volume(s) Analyzed: 1.00 Liter(s)

D.F. = 1.00

GC / MS Ret. Time	Compound Identification	Concentration µg/m³	Data Qualifier
	No Compounds Detected		

Verified By: RC Date: 6/10/04

Columbia Analytical Services, Inc.
Sample Acceptance Check Form

Client: GeoSyntec Consultants, Inc. Work order: P2401046

Project: Ascon/SB0202/31

Sample(s) received on: 5/17/04 Date opened: 5/17/04 by: SM

Note: This form is used for all samples received by CAS. The use of this form for custody seals is strictly meant to indicate presence/absence and not as an indication of compliance or nonconformity. Thermal preservation and pH will only be evaluated either at the request of the client or as required by the method/SOP.

		Yes	No	N/A
1	Were **custody seals** on outside of cooler/Box?	☐	☒	☐
	Location of seal(s)? _____ Sealing Lid?	☐	☐	☒
	Were signature and date included?	☐	☐	☒
	Were seals intact?	☐	☐	☒
	Were custody seals on outside of sample container?	☐	☒	☐
	Location of seal(s)? _____ Sealing Lid?	☐	☐	☒
	Were signature and date included?	☐	☐	☒
	Were seals intact?	☐	☐	☒
2	Were **sample containers** properly marked with client sample ID?	☒	☐	☐
3	Did **sample containers** arrive in good condition?	☒	☐	☐
4	Were **chain-of-custody** papers used and filled out?	☒	☐	☐
5	Did **sample container labels** and/or tags agree with custody papers?	☐	☒	☐
6	Was **sample volume** received adequate for analysis?	☒	☐	☐
7	Are samples within specified holding times?	☒	☐	☐
8	Was proper **temperature** (thermal preservation) of cooler at receipt adhered to?	☐	☐	☒
	Cooler Temperature NA °C			
	Blank Temperature NA °C			
9	Is pH (acid) **preservation** necessary, according to method/SOP or Client specified information?	☐	☒	☐
	Is there a client indication that the submitted samples are **pH** (acid) preserved?	☐	☐	☒
	Were **VOA vials** checked for presence/absence of air bubbles?	☐	☐	☒
	Does the client/method/SOP require that the analyst check the sample pH and if necessary alter it?	☐	☐	☒
10	**Tubes:** Are the tubes capped and intact?	☐	☐	☒
	Do they contain moisture?	☐	☐	☒
11	**Badges:** Are the badges properly capped and intact?	☐	☐	☒
	Are dual bed badges separated and individually capped and intact?	☐	☐	☒

Lab Sample ID	Required pH	pH (as received, if required)	VOA Headspace (Presence/Absence)	Receipt / Preservation Comments
P2401046-001			NA	
P2401046-002			NA	
P2401046-003			NA	
P2401046-004			NA	
P2401046-005			NA	
P2401046-006			NA	
P2401046-007			NA	
P2401046-008			NA	
P2401046-009			NA	
P2401046-010			NA	

Explain any discrepancies: (include lab sample ID numbers):

P2401046-001: SAMPLE ID ON THE CANISTER: PNL-L5-100-SFU

Columbia Analytical Services, Inc.
Sample Acceptance Check Form

Client: GeoSyntec Consultants, Inc. Work order: P2401046

Project: Ascon/SB0202/31

Sample(s) received on: 5/17/04 Date opened: 5/17/04 by: SM

Lab Sample ID	Required pH	pH (as received, if required)	VOA Headspace (Presence/Absence)	Receipt / Preservation Comments
P2401046-011			NA	
P2401046-012			NA	
P2401046-013			NA	
P2401046-014			NA	
P2401046-015			NA	
P2401046-016			NA	
P2401046-017			NA	
P2401046-018			NA	
P2401046-019			NA	
P2401046-020			NA	
P2401046-021			NA	
P2401046-022			NA	
P2401046-023			NA	
P2401046-024			NA	
P2401046-025			NA	
P2401046-026			NA	

Columbia Analytical Services INC.
An Employee - Owned Company

Air Quality Laboratory
2665 Park Center Drive, Suite D
Simi Valley, California 93065
Phone (805) 526-7161
Fax (805) 526-7270

Chain of Custody Record
Analytical Service Request

Client/Address: GeoSyntec, 2100 Main St. #150, HB, CA 92648

Project Name: ASCON

Project Number: SB0202/31

Sampling Location: Magnolia & Hamilton

P.O. #/Billing Information: SB0202/31

Phone: (714) 9690800 Fax: (714) 9690820

Email: mreardon@geosyntec.com

Contact: Mike Reardon

Sampler (Signature): [signature]

CAS Project No.: P2401046

Analysis: TO-3 & TO-15 Project List

Expected Turnaround Time: 24 Hr 48Hr 3Day 4Day 5Day Standard (10 Business Days)

Cooler / Blank: Temp_____

Comments (e.g., preservative or specific instructions)

Client Sample ID	Date Collected	Time Collected	Lab Sample No.	Type of Sample	Container ID (Serial #)	Flow Controller (Serial #)	Sample Volume (Liters)	TO-3 & TO-15 Project List					Comments
PNL-100-100-SF	05-10-04	10:26	-1	Soil Flux	06762	—	1	X					[illegible]
PNLBA1-17-SFU	05-10-04	16:30	-2	"	SC00524	—	6						
PNLBA8-17-SFU	05-11-04	11:48	-3	"	06772	—	1						[illegible]
PNLBA8-17-SFC1	"	12:34	-4	"	00552 / SC00544		6						
PNLBA8-17-SFC2	"	13:45	-5	"	0547 / SC00075		6						
PNLBA8-17-SFC3	"	14:44	-6	"	0170 / SC00219		6						
PNLBA8-17-SFC4	"	15:44	-7	"	0544 / SC00067		6						
PNLBA8-17-SFC5	"	16:35	-8	"	00451 / SC00073		6						
PNLBA8-17-SFC6	05-12-04	10:07	-9	"	01157 / SC00520		6						
PNLBA8-17-SFC7	05-13-04	12:06	-10	"	044 / SC00094		6						
PNLBA1-17-SFC1	"	14:07	-11	"	0536 / SC00412		6						
PNLBA3-x-SFU	"	14:58	-12	"	1372 / SC012 ~~[illegible]~~		6				Subcontract		CONISTER - ZERO BEFORE USE -22" " -25"Hg
PNLBA3-x-SFU1	"	15:05	-13	"	0512 / SC00523 ~~[illegible]~~		6						
PNLBA3-x-SFC	"	15:53	-14	"	00315 / SC00211		6	X					

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
[signature]	05.13.04	1633	Lynn Page	5/13/04	1633
Lynn Page	5-17-04	0940	[signature]	5-17-04	0940
[signature]	5-17-04	1130	Sharon Malone	5/17/04	1130

Additional Comments

White Copy Accompanies Samples — Yellow Copy Remains with Client

Columbia Analytical Services INC.
An Employee - Owned Company

Air Quality Laboratory
2665 Park Center Drive, Suite D
Simi Valley, California 93065
Phone (805) 526-7161
Fax (805) 526-7270

Chain of Custody Record
Analytical Service Request

Client/Address: ~~Lawre~~ GeoSyntec, 2100 MAIN ST #150

Project Name: ASCON

CAS Project No.: P2401046

Project Number: SB0202/31

Phone: (714) 969-0800 Fax: (714) 969-0820

Sampling Location: Magnolia & Hamilton

Email: mreardon@geosyntec.com

P.O. #/Billing Information: SB0202/31

Contact: Mike Reardon

Sampler (Signature): [signature]

Analysis: TO-15 / 1.03 PROJECT LIST

Expected Turnaround Time: 24 Hr-48Hr-3Day-4Day-5Day Standard (10 Business Days)

Cooler / Blank: Temp_____

Comments (e.g., preservative or specific instructions)

Client Sample ID	Date Collected	Time Collected	Lab Sample No.	Type of Sample	Container ID (Serial #)	~~Flow Controller~~ (Serial #)	Sample Volume (Liters)	TO-15 / 1.03 PROJECT LIST					Comments
PNLBA11-X-SFU	05-14-04	8:06	-15	SOIL FLUX	00539	/ SC00257	6	X					
PNLBA11-X-SFC	"	09:04	-16	"	00485	/ SC00519	6	X					
PNLBA13-X-SFU	"	10:07	-17	"	01163	/ SC00602	6	X					
PNLBA13-X-SFC	"	11:05	-18	"	00202	/ SC00275	6	X					
PNLBA06-X-SFU	"	12:13	-19	"	00235	/ SC00063	6	X					
PNLBA06-X-SFC	"	13:01	-20	"	00034	/ SC00264	6	X					
PNLBA07-X-SFU	"	13:58	-21	"	00430	/ SC00256	6	X					
PNLBA07-X-SFC	"	14:49	-22	"	0310	/ SC00262	6	X					
						SC00269							
						SC00469							

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
[signature]	05-14-04	1541	[signature]	5/14/04	1541
[signature]	5-17-04	0940	[signature]	5-17-04	0940
[signature]	5-17-04	1130	[signature]	5/17/04	1130

Additional Comments

White Copy: Accompanies Samples — Yellow Copy: Retained by Client — COC #13-7/03

CE Schmidt, Ph.D.
Environmental Consultant

ATTACHMENT C

LABORATORY REPORTS

Phase IV- Lagoon Testing/Control Agent Testing

19200 Live Oak Road Red Bluff, CA 96080 (530) 529-4256 Fax- 4878

2665 Park Center Drive, Suite D Simi Valley, California 93065 (805) 526-7161 ph (805) 526-7270 fax

Columbia Analytical Services
An Employee - Owned Company

LABORATORY REPORT

Client:	GEOSYNTEC CONSULTANTS, INC.	Date of Report:	06/14/04
Address:	2100 Main Street, Suite 150	Date Received:	05/25/04
	Huntington Beach, CA 92648	CAS Project No:	P2401090
Contact:	Mr. Mike Reardon	Purchase Order:	SB0202 / 31

Client Project ID: Ascon Landfill/SB0202 / 31

Nine (9) Tedlar Bag Samples labeled:

"PNL-L5A-SFUS"	"PNL-L5A-SFC1S"	"PNL-L5A-SFC2S"
"PNL-L4B-SFUS"	"PNL-L4B-SFC1S"	"PNL-L4B-SFC2S"
"PNL-L4A-SFUS"	"PNL-L4A-SFC1S"	"PNL-L4A-SFC2S"

The samples were received at the laboratory under chain of custody on May 25, 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.

Sulfur Analysis

The samples were analyzed for twenty sulfur compounds per modified methods SCAQMD Method 307-91 and ASTM D 5504-01 using a gas chromatograph equipped with a sulfur chemiluminescence detector (SCD). All compounds with the exception of hydrogen sulfide and carbonyl sulfide are quantitated against the initial calibration curve for methyl mercaptan.

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.

Reviewed and Approved:

Zheng Wang
Analytical Chemist
Air Quality Laboratory

Reviewed and Approved:

Wade Henton
GC-VOA Team Leader
Air Quality Laboratory

NELAP Accredited ACIL Seal of Excellence Award

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **GeoSyntec Consultants, Inc.**
Client Sample ID: **PNL-L5A-SFUS**
Client Project ID: **Ascon Landfill/SB0202 / 31**

CAS Project ID: P2401090
CAS Sample ID: P2401090-001

Test Code: ASTM D 5504-01
Instrument ID: Agilent 6890A/GC13/SCD
Analyst: Zheng Wang/Wade Henton
Sampling Media: Tedlar Bag
Test Notes:

Date Collected: 5/24/04
Time Collected: 11:16
Date Received: 5/25/04
Date Analyzed: 5/25/04
Time Analyzed: 10:14
Volume(s) Analyzed: 1.0 ml(s)

D.F.= 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
7783-06-4	Hydrogen Sulfide	**12.1**	7.00	**8.70**	5.00	
463-58-1	Carbonyl Sulfide	ND	12.0	ND	5.00	
74-93-1	Methyl Mercaptan	ND	9.80	ND	5.00	
75-08-1	Ethyl Mercaptan	ND	13.0	ND	5.00	
75-18-3	Dimethyl Sulfide	ND	13.0	ND	5.00	
75-15-0	Carbon Disulfide	**11.2**	7.80	**3.59**	2.50	
75-33-2	Isopropyl Mercaptan	ND	16.0	ND	5.00	
75-66-1	tert-Butyl Mercaptan	ND	18.0	ND	5.00	
107-03-9	n-Propyl Mercaptan	ND	16.0	ND	5.00	
624-89-5	Ethyl Methyl Sulfide	ND	16.0	ND	5.00	
110-02-1	Thiophene	ND	17.0	ND	5.00	
513-44-0	Isobutyl Mercaptan	ND	18.0	ND	5.00	
352-93-2	Diethyl Sulfide	ND	18.0	ND	5.00	
109-79-5	n-Butyl Mercaptan	ND	18.0	ND	5.00	
624-92-0	Dimethyl Disulfide	ND	9.60	ND	2.50	
616-44-4	3-Methylthiophene	ND	20.0	ND	5.00	
110-01-0	Tetrahydrothiophene	ND	18.0	ND	5.00	
638-02-8	2,5-Dimethylthiophene	ND	23.0	ND	5.00	
872-55-9	2-Ethylthiophene	ND	23.0	ND	5.00	
110-81-6	Diethyl Disulfide	ND	12.0	ND	2.50	

ND = Compound was analyzed for, but not detected above the **laboratory detection 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: 06/09/04

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **GeoSyntec Consultants, Inc.**
Client Sample ID: **PNL-L5A-SFC1S**
Client Project ID: **Ascon Landfill/SB0202 / 31**

CAS Project ID: P2401090
CAS Sample ID: P2401090-002

Test Code: ASTM D 5504-01
Instrument ID: Agilent 6890A/GC13/SCD
Analyst: Zheng Wang/Wade Henton
Sampling Media: Tedlar Bag
Test Notes:

Date Collected: 5/24/04
Time Collected: 11:19
Date Received: 5/25/04
Date Analyzed: 5/25/04
Time Analyzed: 10:37
Volume(s) Analyzed: 1.0 ml(s)

D.F.= 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
7783-06-4	Hydrogen Sulfide	**6.63**	7.00	**4.76**	5.00	**J**
463-58-1	Carbonyl Sulfide	ND	12.0	ND	5.00	
74-93-1	Methyl Mercaptan	ND	9.80	ND	5.00	
75-08-1	Ethyl Mercaptan	ND	13.0	ND	5.00	
75-18-3	Dimethyl Sulfide	ND	13.0	ND	5.00	
75-15-0	Carbon Disulfide	**10.4**	7.80	**3.34**	2.50	
75-33-2	Isopropyl Mercaptan	ND	16.0	ND	5.00	
75-66-1	tert-Butyl Mercaptan	ND	18.0	ND	5.00	
107-03-9	n-Propyl Mercaptan	ND	16.0	ND	5.00	
624-89-5	Ethyl Methyl Sulfide	ND	16.0	ND	5.00	
110-02-1	Thiophene	ND	17.0	ND	5.00	
513-44-0	Isobutyl Mercaptan	ND	18.0	ND	5.00	
352-93-2	Diethyl Sulfide	ND	18.0	ND	5.00	
109-79-5	n-Butyl Mercaptan	ND	18.0	ND	5.00	
624-92-0	Dimethyl Disulfide	ND	9.60	ND	2.50	
616-44-4	3-Methylthiophene	ND	20.0	ND	5.00	
110-01-0	Tetrahydrothiophene	ND	18.0	ND	5.00	
638-02-8	2,5-Dimethylthiophene	ND	23.0	ND	5.00	
872-55-9	2-Ethylthiophene	ND	23.0	ND	5.00	
110-81-6	Diethyl Disulfide	ND	12.0	ND	2.50	

ND = Compound was analyzed for, but not detected above the **laboratory detection limit**.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
J = The analyte was positively identified below the laboratory method reporting limit;
the associated numerical value is considered estimated.

Verified By: KLH Date: 06/09/04

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **GeoSyntec Consultants, Inc.**
Client Sample ID: **PNL-L5A-SFC2S**
Client Project ID: **Ascon Landfill/SB0202 / 31**

CAS Project ID: P2401090
CAS Sample ID: P2401090-003

Test Code: ASTM D 5504-01
Instrument ID: Agilent 6890A/GC13/SCD
Analyst: Zheng Wang/Wade Henton
Sampling Media: Tedlar Bag
Test Notes:

Date Collected: 5/24/04
Time Collected: 12:10
Date Received: 5/25/04
Date Analyzed: 5/25/04
Time Analyzed: 10:59
Volume(s) Analyzed: 1.0 ml(s)

D.F.= 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
7783-06-4	Hydrogen Sulfide	**5.39**	7.00	**3.87**	5.00	J
463-58-1	Carbonyl Sulfide	ND	12.0	ND	5.00	
74-93-1	Methyl Mercaptan	ND	9.80	ND	5.00	
75-08-1	Ethyl Mercaptan	ND	13.0	ND	5.00	
75-18-3	Dimethyl Sulfide	ND	13.0	ND	5.00	
75-15-0	Carbon Disulfide	**15.5**	7.80	**4.97**	2.50	
75-33-2	Isopropyl Mercaptan	ND	16.0	ND	5.00	
75-66-1	tert-Butyl Mercaptan	ND	18.0	ND	5.00	
107-03-9	n-Propyl Mercaptan	ND	16.0	ND	5.00	
624-89-5	Ethyl Methyl Sulfide	ND	16.0	ND	5.00	
110-02-1	Thiophene	ND	17.0	ND	5.00	
513-44-0	Isobutyl Mercaptan	ND	18.0	ND	5.00	
352-93-2	Diethyl Sulfide	ND	18.0	ND	5.00	
109-79-5	n-Butyl Mercaptan	ND	18.0	ND	5.00	
624-92-0	Dimethyl Disulfide	ND	9.60	ND	2.50	
616-44-4	3-Methylthiophene	ND	20.0	ND	5.00	
110-01-0	Tetrahydrothiophene	ND	18.0	ND	5.00	
638-02-8	2,5-Dimethylthiophene	ND	23.0	ND	5.00	
872-55-9	2-Ethylthiophene	ND	23.0	ND	5.00	
110-81-6	Diethyl Disulfide	ND	12.0	ND	2.50	

ND = Compound was analyzed for, but not detected above the **laboratory detection limit**.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
J = The analyte was positively identified below the laboratory method reporting limit;
the associated numerical value is considered estimated.

Verified By: KLH Date: 06/09/04

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **GeoSyntec Consultants, Inc.**
Client Sample ID: **PNL-L4B-SFUS**
Client Project ID: **Ascon Landfill/SB0202 / 31**

CAS Project ID: P2401090
CAS Sample ID: P2401090-004

Test Code: ASTM D 5504-01
Instrument ID: Agilent 6890A/GC13/SCD
Analyst: Zheng Wang/Wade Henton
Sampling Media: Tedlar Bag
Test Notes:

Date Collected: 5/24/04
Time Collected: 13:19
Date Received: 5/25/04
Date Analyzed: 5/25/04
Time Analyzed: 11:21
Volume(s) Analyzed: 1.0 ml(s)

D.F.= 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
7783-06-4	Hydrogen Sulfide	**3.80**	7.00	**2.73**	5.00	J
463-58-1	Carbonyl Sulfide	ND	12.0	ND	5.00	
74-93-1	Methyl Mercaptan	ND	9.80	ND	5.00	
75-08-1	Ethyl Mercaptan	ND	13.0	ND	5.00	
75-18-3	Dimethyl Sulfide	ND	13.0	ND	5.00	
75-15-0	Carbon Disulfide	**12.8**	7.80	**4.10**	2.50	
75-33-2	Isopropyl Mercaptan	ND	16.0	ND	5.00	
75-66-1	tert-Butyl Mercaptan	ND	18.0	ND	5.00	
107-03-9	n-Propyl Mercaptan	ND	16.0	ND	5.00	
624-89-5	Ethyl Methyl Sulfide	ND	16.0	ND	5.00	
110-02-1	Thiophene	ND	17.0	ND	5.00	
513-44-0	Isobutyl Mercaptan	ND	18.0	ND	5.00	
352-93-2	Diethyl Sulfide	ND	18.0	ND	5.00	
109-79-5	n-Butyl Mercaptan	ND	18.0	ND	5.00	
624-92-0	Dimethyl Disulfide	ND	9.60	ND	2.50	
616-44-4	3-Methylthiophene	ND	20.0	ND	5.00	
110-01-0	Tetrahydrothiophene	ND	18.0	ND	5.00	
638-02-8	2,5-Dimethylthiophene	ND	23.0	ND	5.00	
872-55-9	2-Ethylthiophene	ND	23.0	ND	5.00	
110-81-6	Diethyl Disulfide	ND	12.0	ND	2.50	

ND = Compound was analyzed for, but not detected above the **laboratory detection limit**.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
J = The analyte was positively identified below the laboratory method reporting limit;
the associated numerical value is considered estimated.

Verified By: KMH Date: 06/09/04

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **GeoSyntec Consultants, Inc.**
Client Sample ID: **PNL-L4B-SFC1S**
Client Project ID: **Ascon Landfill/SB0202 / 31**

CAS Project ID: P2401090
CAS Sample ID: P2401090-005

Test Code: ASTM D 5504-01
Instrument ID: Agilent 6890A/GC13/SCD
Analyst: Zheng Wang/Wade Henton
Sampling Media: Tedlar Bag
Test Notes:

Date Collected: 5/24/04
Time Collected: 14:19
Date Received: 5/25/04
Date Analyzed: 5/25/04
Time Analyzed: 12:06
Volume(s) Analyzed: 1.0 ml(s)

D.F.= 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
7783-06-4	Hydrogen Sulfide	ND	7.00	ND	5.00	
463-58-1	Carbonyl Sulfide	**19.2**	12.0	**7.81**	5.00	
74-93-1	Methyl Mercaptan	ND	9.80	ND	5.00	
75-08-1	Ethyl Mercaptan	ND	13.0	ND	5.00	
75-18-3	Dimethyl Sulfide	ND	13.0	ND	5.00	
75-15-0	Carbon Disulfide	**19.5**	7.80	**6.28**	2.50	
75-33-2	Isopropyl Mercaptan	ND	16.0	ND	5.00	
75-66-1	tert-Butyl Mercaptan	ND	18.0	ND	5.00	
107-03-9	n-Propyl Mercaptan	ND	16.0	ND	5.00	
624-89-5	Ethyl Methyl Sulfide	ND	16.0	ND	5.00	
110-02-1	Thiophene	ND	17.0	ND	5.00	
513-44-0	Isobutyl Mercaptan	ND	18.0	ND	5.00	
352-93-2	Diethyl Sulfide	ND	18.0	ND	5.00	
109-79-5	n-Butyl Mercaptan	ND	18.0	ND	5.00	
624-92-0	Dimethyl Disulfide	ND	9.60	ND	2.50	
616-44-4	3-Methylthiophene	ND	20.0	ND	5.00	
110-01-0	Tetrahydrothiophene	ND	18.0	ND	5.00	
638-02-8	2,5-Dimethylthiophene	ND	23.0	ND	5.00	
872-55-9	2-Ethylthiophene	ND	23.0	ND	5.00	
110-81-6	Diethyl Disulfide	ND	12.0	ND	2.50	

ND = Compound was analyzed for, but not detected above the **laboratory detection 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: 06/09/04

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **GeoSyntec Consultants, Inc.**
Client Sample ID: **PNL-L4B-SFC2S**
Client Project ID: **Ascon Landfill/SB0202 / 31**

CAS Project ID: P2401090
CAS Sample ID: P2401090-006

Test Code: ASTM D 5504-01
Instrument ID: Agilent 6890A/GC13/SCD
Analyst: Zheng Wang/Wade Henton
Sampling Media: Tedlar Bag
Test Notes:

Date Collected: 5/24/04
Time Collected: 13:51
Date Received: 5/25/04
Date Analyzed: 5/25/04
Time Analyzed: 11:43
Volume(s) Analyzed: 1.0 ml(s)

D.F.= 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
7783-06-4	Hydrogen Sulfide	**3.93**	7.00	**2.82**	5.00	**J**
463-58-1	Carbonyl Sulfide	**14.5**	12.0	**5.90**	5.00	
74-93-1	Methyl Mercaptan	ND	9.80	ND	5.00	
75-08-1	Ethyl Mercaptan	ND	13.0	ND	5.00	
75-18-3	Dimethyl Sulfide	ND	13.0	ND	5.00	
75-15-0	Carbon Disulfide	**13.7**	7.80	**4.39**	2.50	
75-33-2	Isopropyl Mercaptan	ND	16.0	ND	5.00	
75-66-1	tert-Butyl Mercaptan	ND	18.0	ND	5.00	
107-03-9	n-Propyl Mercaptan	ND	16.0	ND	5.00	
624-89-5	Ethyl Methyl Sulfide	ND	16.0	ND	5.00	
110-02-1	Thiophene	ND	17.0	ND	5.00	
513-44-0	Isobutyl Mercaptan	ND	18.0	ND	5.00	
352-93-2	Diethyl Sulfide	ND	18.0	ND	5.00	
109-79-5	n-Butyl Mercaptan	ND	18.0	ND	5.00	
624-92-0	Dimethyl Disulfide	ND	9.60	ND	2.50	
616-44-4	3-Methylthiophene	ND	20.0	ND	5.00	
110-01-0	Tetrahydrothiophene	ND	18.0	ND	5.00	
638-02-8	2,5-Dimethylthiophene	ND	23.0	ND	5.00	
872-55-9	2-Ethylthiophene	ND	23.0	ND	5.00	
110-81-6	Diethyl Disulfide	ND	12.0	ND	2.50	

ND = Compound was analyzed for, but not detected above the **laboratory detection limit**.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
J = The analyte was positively identified below the laboratory method reporting limit;
the associated numerical value is considered estimated.

Verified By: KMH Date: 06/09/04

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **GeoSyntec Consultants, Inc.**
Client Sample ID: **PNL-L4A-SFUS**
Client Project ID: **Ascon Landfill/SB0202 / 31**

CAS Project ID: P2401090
CAS Sample ID: P2401090-007

Test Code: ASTM D 5504-01
Instrument ID: Agilent 6890A/GC13/SCD
Analyst: Zheng Wang/Wade Henton
Sampling Media: Tedlar Bag
Test Notes:

Date Collected: 5/24/04
Time Collected: 15:21
Date Received: 5/25/04
Date Analyzed: 5/25/04
Time Analyzed: 12:29
Volume(s) Analyzed: 1.0 ml(s)

D.F.= 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
7783-06-4	Hydrogen Sulfide	**10.9**	7.00	**7.81**	5.00	
463-58-1	Carbonyl Sulfide	**17.6**	12.0	**7.15**	5.00	
74-93-1	Methyl Mercaptan	ND	9.80	ND	5.00	
75-08-1	Ethyl Mercaptan	ND	13.0	ND	5.00	
75-18-3	Dimethyl Sulfide	ND	13.0	ND	5.00	
75-15-0	Carbon Disulfide	**16.1**	7.80	**5.16**	2.50	
75-33-2	Isopropyl Mercaptan	ND	16.0	ND	5.00	
75-66-1	tert-Butyl Mercaptan	ND	18.0	ND	5.00	
107-03-9	n-Propyl Mercaptan	ND	16.0	ND	5.00	
624-89-5	Ethyl Methyl Sulfide	ND	16.0	ND	5.00	
110-02-1	Thiophene	ND	17.0	ND	5.00	
513-44-0	Isobutyl Mercaptan	ND	18.0	ND	5.00	
352-93-2	Diethyl Sulfide	ND	18.0	ND	5.00	
109-79-5	n-Butyl Mercaptan	ND	18.0	ND	5.00	
624-92-0	Dimethyl Disulfide	ND	9.60	ND	2.50	
616-44-4	3-Methylthiophene	ND	20.0	ND	5.00	
110-01-0	Tetrahydrothiophene	ND	18.0	ND	5.00	
638-02-8	2,5-Dimethylthiophene	ND	23.0	ND	5.00	
872-55-9	2-Ethylthiophene	ND	23.0	ND	5.00	
110-81-6	Diethyl Disulfide	ND	12.0	ND	2.50	

ND = Compound was analyzed for, but not detected above the **laboratory detection 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: 06/09/04

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **GeoSyntec Consultants, Inc.**
Client Sample ID: **PNL-L4A-SFC1S**
Client Project ID: **Ascon Landfill/SB0202 / 31**

CAS Project ID: P2401090
CAS Sample ID: P2401090-008

Test Code: ASTM D 5504-01
Instrument ID: Agilent 6890A/GC13/SCD
Analyst: Zheng Wang/Wade Henton
Sampling Media: Tedlar Bag
Test Notes:

Date Collected: 5/24/04
Time Collected: 16:15
Date Received: 5/25/04
Date Analyzed: 5/25/04
Time Analyzed: 12:50
Volume(s) Analyzed: 1.0 ml(s)

D.F.= 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
7783-06-4	Hydrogen Sulfide	**7.32**	7.00	**5.25**	5.00	
463-58-1	Carbonyl Sulfide	ND	12.0	ND	5.00	
74-93-1	Methyl Mercaptan	ND	9.80	ND	5.00	
75-08-1	Ethyl Mercaptan	ND	13.0	ND	5.00	
75-18-3	Dimethyl Sulfide	ND	13.0	ND	5.00	
75-15-0	Carbon Disulfide	**13.4**	7.80	**4.30**	2.50	
75-33-2	Isopropyl Mercaptan	ND	16.0	ND	5.00	
75-66-1	tert-Butyl Mercaptan	ND	18.0	ND	5.00	
107-03-9	n-Propyl Mercaptan	ND	16.0	ND	5.00	
624-89-5	Ethyl Methyl Sulfide	ND	16.0	ND	5.00	
110-02-1	Thiophene	ND	17.0	ND	5.00	
513-44-0	Isobutyl Mercaptan	ND	18.0	ND	5.00	
352-93-2	Diethyl Sulfide	ND	18.0	ND	5.00	
109-79-5	n-Butyl Mercaptan	ND	18.0	ND	5.00	
624-92-0	Dimethyl Disulfide	ND	9.60	ND	2.50	
616-44-4	3-Methylthiophene	ND	20.0	ND	5.00	
110-01-0	Tetrahydrothiophene	ND	18.0	ND	5.00	
638-02-8	2,5-Dimethylthiophene	ND	23.0	ND	5.00	
872-55-9	2-Ethylthiophene	ND	23.0	ND	5.00	
110-81-6	Diethyl Disulfide	ND	12.0	ND	2.50	

ND = Compound was analyzed for, but not detected above the **laboratory detection 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: 06/09/04

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **GeoSyntec Consultants, Inc.**
Client Sample ID: **PNL-L4A-SFC2S**
Client Project ID: **Ascon Landfill/SB0202 / 31**

CAS Project ID: P2401090
CAS Sample ID: P2401090-009

Test Code: ASTM D 5504-01
Instrument ID: Agilent 6890A/GC13/SCD
Analyst: Zheng Wang/Wade Henton
Sampling Media: Tedlar Bag
Test Notes:

Date Collected: 5/24/04
Time Collected: 16:20
Date Received: 5/25/04
Date Analyzed: 5/25/04
Time Analyzed: 13:13
Volume(s) Analyzed: 1.0 ml(s)

D.F.= 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
7783-06-4	Hydrogen Sulfide	**11.9**	7.00	**8.56**	5.00	
463-58-1	Carbonyl Sulfide	**35.7**	12.0	**14.5**	5.00	
74-93-1	Methyl Mercaptan	ND	9.80	ND	5.00	
75-08-1	Ethyl Mercaptan	ND	13.0	ND	5.00	
75-18-3	Dimethyl Sulfide	ND	13.0	ND	5.00	
75-15-0	Carbon Disulfide	**20.5**	7.80	**6.57**	2.50	
75-33-2	Isopropyl Mercaptan	ND	16.0	ND	5.00	
75-66-1	tert-Butyl Mercaptan	ND	18.0	ND	5.00	
107-03-9	n-Propyl Mercaptan	ND	16.0	ND	5.00	
624-89-5	Ethyl Methyl Sulfide	ND	16.0	ND	5.00	
110-02-1	Thiophene	ND	17.0	ND	5.00	
513-44-0	Isobutyl Mercaptan	ND	18.0	ND	5.00	
352-93-2	Diethyl Sulfide	ND	18.0	ND	5.00	
109-79-5	n-Butyl Mercaptan	ND	18.0	ND	5.00	
624-92-0	Dimethyl Disulfide	ND	9.60	ND	2.50	
616-44-4	3-Methylthiophene	ND	20.0	ND	5.00	
110-01-0	Tetrahydrothiophene	ND	18.0	ND	5.00	
638-02-8	2,5-Dimethylthiophene	ND	23.0	ND	5.00	
872-55-9	2-Ethylthiophene	ND	23.0	ND	5.00	
110-81-6	Diethyl Disulfide	ND	12.0	ND	2.50	

ND = Compound was analyzed for, but not detected above the **laboratory detection 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: 6/09/04

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **GeoSyntec Consultants, Inc.**
Client Sample ID: **PNL-L4A-SFC2S**
Client Project ID: **Ascon Landfill/SB0202 / 31**

CAS Project ID: P2401090
CAS Sample ID: P2401090-009DUP

Test Code: ASTM D 5504-01
Instrument ID: Agilent 6890A/GC13/SCD
Analyst: Zheng Wang/Wade Henton
Sampling Media: Tedlar Bag
Test Notes:

Date Collected: 5/24/04
Time Collected: 16:20
Date Received: 5/25/04
Date Analyzed: 5/25/04
Time Analyzed: 13:34
Volume(s) Analyzed: 1.0 ml(s)

D.F.= 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
7783-06-4	Hydrogen Sulfide	**9.95**	7.00	**7.14**	5.00	
463-58-1	Carbonyl Sulfide	**36.1**	12.0	**14.7**	5.00	
74-93-1	Methyl Mercaptan	ND	9.80	ND	5.00	
75-08-1	Ethyl Mercaptan	ND	13.0	ND	5.00	
75-18-3	Dimethyl Sulfide	ND	13.0	ND	5.00	
75-15-0	Carbon Disulfide	**22.0**	7.80	**7.08**	2.50	
75-33-2	Isopropyl Mercaptan	ND	16.0	ND	5.00	
75-66-1	tert-Butyl Mercaptan	ND	18.0	ND	5.00	
107-03-9	n-Propyl Mercaptan	ND	16.0	ND	5.00	
624-89-5	Ethyl Methyl Sulfide	ND	16.0	ND	5.00	
110-02-1	Thiophene	ND	17.0	ND	5.00	
513-44-0	Isobutyl Mercaptan	ND	18.0	ND	5.00	
352-93-2	Diethyl Sulfide	ND	18.0	ND	5.00	
109-79-5	n-Butyl Mercaptan	ND	18.0	ND	5.00	
624-92-0	Dimethyl Disulfide	ND	9.60	ND	2.50	
616-44-4	3-Methylthiophene	ND	20.0	ND	5.00	
110-01-0	Tetrahydrothiophene	ND	18.0	ND	5.00	
638-02-8	2,5-Dimethylthiophene	ND	23.0	ND	5.00	
872-55-9	2-Ethylthiophene	ND	23.0	ND	5.00	
110-81-6	Diethyl Disulfide	ND	12.0	ND	2.50	

ND = Compound was analyzed for, but not detected above the **laboratory detection 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: 06/09/04

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

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

CAS Project ID: P2401090
CAS Sample ID: P040525-MB

Test Code: ASTM D 5504-01
Instrument ID: Agilent 6890A/GC13/SCD
Analyst: Zheng Wang/Wade Henton
Sampling Media: Tedlar Bag
Test Notes:

Date Collected: NA
Time Collected: NA
Date Received: NA
Date Analyzed: 5/25/04
Time Analyzed: 09:43
Volume(s) Analyzed: 1.0 ml(s)

D.F.= 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
7783-06-4	Hydrogen Sulfide	ND	7.00	ND	5.00	
463-58-1	Carbonyl Sulfide	ND	12.0	ND	5.00	
74-93-1	Methyl Mercaptan	ND	9.80	ND	5.00	
75-08-1	Ethyl Mercaptan	ND	13.0	ND	5.00	
75-18-3	Dimethyl Sulfide	ND	13.0	ND	5.00	
75-15-0	Carbon Disulfide	ND	7.80	ND	2.50	
75-33-2	Isopropyl Mercaptan	ND	16.0	ND	5.00	
75-66-1	tert-Butyl Mercaptan	ND	18.0	ND	5.00	
107-03-9	n-Propyl Mercaptan	ND	16.0	ND	5.00	
624-89-5	Ethyl Methyl Sulfide	ND	16.0	ND	5.00	
110-02-1	Thiophene	ND	17.0	ND	5.00	
513-44-0	Isobutyl Mercaptan	ND	18.0	ND	5.00	
352-93-2	Diethyl Sulfide	ND	18.0	ND	5.00	
109-79-5	n-Butyl Mercaptan	ND	18.0	ND	5.00	
624-92-0	Dimethyl Disulfide	ND	9.60	ND	2.50	
616-44-4	3-Methylthiophene	ND	20.0	ND	5.00	
110-01-0	Tetrahydrothiophene	ND	18.0	ND	5.00	
638-02-8	2,5-Dimethylthiophene	ND	23.0	ND	5.00	
872-55-9	2-Ethylthiophene	ND	23.0	ND	5.00	
110-81-6	Diethyl Disulfide	ND	12.0	ND	2.50	

ND = Compound was analyzed for, but not detected above the **laboratory detection 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: 06/09/04

Columbia Analytical Services, Inc.
Sample Acceptance Check Form

Client: GeoSyntec Consultants, Inc. Work order: P2401090

Project: Ascon Landfill/SB0202 / 31

Sample(s) received on: 5/25/04 Date opened: 5/25/04 by: SM

Note: This form is used for all samples received by CAS. The use of this form for custody seals is strictly meant to indicate presence/absence and not as an indication of compliance or nonconformity. Thermal preservation and pH will only be evaluated either at the request of the client or as required by the method/SOP.

		Yes	No	N/A
1	Were **custody seals** on outside of cooler/Box?	☐	☒	☐
	Location of seal(s)? _____ Sealing Lid?	☐	☐	☒
	Were signature and date included?	☐	☐	☒
	Were seals intact?	☐	☐	☒
	Were custody seals on outside of sample container?	☐	☒	☐
	Location of seal(s)? _____ Sealing Lid?	☐	☐	☒
	Were signature and date included?	☐	☐	☒
	Were seals intact?	☐	☐	☒
2	Were **sample containers** properly marked with client sample ID?	☒	☐	☐
3	Did **sample containers** arrive in good condition?	☒	☐	☐
4	Were **chain-of-custody** papers used and filled out?	☒	☐	☐
5	Did **sample container labels** and/or tags agree with custody papers?	☐	☒	☐
6	Was **sample volume** received adequate for analysis?	☒	☐	☐
7	Are samples within specified holding times?	☒	☐	☐
8	Was proper **temperature** (thermal preservation) of cooler at receipt adhered to?	☐	☐	☒
	Cooler Temperature NA °C			
	Blank Temperature NA °C			
9	Is pH (acid) **preservation** necessary, according to method/SOP or Client specified information?	☐	☒	☐
	Is there a client indication that the submitted samples are **pH** (acid) preserved?	☐	☐	☒
	Were **VOA vials** checked for presence/absence of air bubbles?	☐	☐	☒
	Does the client/method/SOP require that the analyst check the sample pH and if necessary alter it?	☐	☐	☒
10	**Tubes:** Are the tubes capped and intact?	☐	☐	☒
	Do they contain moisture?	☐	☐	☒
11	**Badges:** Are the badges properly capped and intact?	☐	☐	☒
	Are dual bed badges separated and individually capped and intact?	☐	☐	☒

Lab Sample ID	Required pH	pH (as received, if required)	VOA Headspace (Presence/Absence)	Receipt / Preservation Comments
P2401090-001			NA	
P2401090-002			NA	
P2401090-003			NA	
P2401090-004			NA	
P2401090-005			NA	
P2401090-006			NA	
P2401090-007			NA	
P2401090-008			NA	
P2401090-009			NA	

Explain any discrepancies: (include lab sample ID numbers):
P2401090-001: TIME ON BAG: 11:19 -002: TIME ON BAG: 12:05 -004: ID ON BAG: PNL-L4B-SFU -007, -008 & -009: THE LAST "S" ON THE END OF EACH ID IS NOT ON THE SAMPLE ID ON EACH BAG.

13

5/25/04 10:09 AM

Columbia Analytical Services INC.
An Employee - Owned Company

Air Quality Laboratory
2665 Park Center Drive, Suite D
Simi Valley, California 93065
Phone (805) 526-7161
Fax (805) 526-7270

Chain of Custody Record
Analytical Service Request

EW 5/25

Client/Address: GeoSyntec Consultants, 2100 Mainst. #150, Huntington Beach, CA 92648

Project Name: ASCON LANDFILL

Project Number: SB0202/31

Sampling Location: Huntington Beach

P.O. #/Billing Information: SB0202/31 GeoSyntec

CAS Project No. 9 P2401080

Phone (714)969-0800 Fax (714)969-0820

Email mreardon@geosyntec.com

Contact: Mike Reardon

Sampler (Signature): [signature]

Analysis: REDUCED SULFUR SPECIES

Expected Turnaround Time: 24 Hr 48Hr 3Day 4Day 5Day Standard (10 Business Days)

Cooler / Blank: Temp_____

Client Sample ID	Date Collected	Time Collected	Lab Sample No.	Type of Sample	Container ID (Serial #)	Flow Controller (Serial #)	Sample Volume (Liters)	REDUCED SULFUR SPECIES				Expected Turnaround Time	Comments (e.g., preservative or specific instructions)
PNL-L5A-SFUS	05-24-04	11:16	-1	SOIL FLUX	BAG		1	X				10	11:19
PNL-L5A-SFC1S	"	11:19	-2	"	"		1	X					12:05
PNL-L5A-SFC2S	"	12:05	-3	"	"		1	X					
PNL-L4B-SFUS	"	13:19	-4	"	"		1	X					(SFU)
PNL-L4B-SFC1S	"	14:19	-5	"	"		1	X					
PNL-L4B-SFC2S	"	13:51	-6	"	"		1	X					
PNL-L4A-SFUS	"	15:21	-7	"	"		1	X					(S)
PNL-L4A-SFC1S	"	16:15	-8	"	"		1	X				X	(S)
PNL-L4A-SFC2S	"	16:20	-9	"	"		1	X				X	(S)

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
[signature]	05/24/04	16:25	[signature]	5/24/04	1625
[signature]	5/24/04	1640	[signature]	5/25/04	0950

Additional Comments

14

White Copy: Accompanies Samples — Yellow Copy: Retained by Client — COC #13 7/03

2665 Park Center Drive, Suite D Simi Valley, California 93065 (805) 526-7161 ph (805) 526-7270 fax

Columbia Analytical Services Inc.
An Employee - Owned Company

LABORATORY REPORT

Client:	GEOSYNTEC CONSULTANTS, INC.	Date of Report:	06/14/04
Address:	2100 Main Street, Suite 150	Date Received:	05/25/04
	Huntington Beach, CA 92648	CAS Project No:	P2401094
Contact:	Mr. Mike Reardon	Purchase Order:	SB0202 / 31

Client Project ID: Ascon LF/SB0202 / 31

Five (5) Tedlar Bag Samples labeled:

"PNL-L5B-SFUS" "PNL-L5B-SFC1S" "PNL-L5B-SFC2S"
"PNL-L3B-SFU" "PNL-L3B-SFC2"

The samples were received at the laboratory under chain of custody on May 25, 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.

Sulfur Analysis

The samples were analyzed for twenty sulfur compounds per modified methods SCAQMD Method 307-91 and ASTM D 5504-01 using a gas chromatograph equipped with a sulfur chemiluminescence detector (SCD). All compounds with the exception of hydrogen sulfide and carbonyl sulfide are quantitated against the initial calibration curve for methyl mercaptan.

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.

Reviewed and Approved:

Zheng Wang
Analytical Chemist
Air Quality Laboratory

Reviewed and Approved:

Wade Henton
GC-VOA Team Leader
Air Quality Laboratory

NELAP Accredited ACIL Seal of Excellence Award

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **GeoSyntec Consultants, Inc.**
Client Sample ID: **PNL-L5B-SFUS**
Client Project ID: **Ascon LF/SB0202 / 31**

CAS Project ID: P2401094
CAS Sample ID: P2401094-001

Test Code: ASTM D 5504-01
Instrument ID: Agilent 6890A/GC13/SCD
Analyst: Zheng Wang/Wade Henton
Sampling Media: Tedlar Bag
Test Notes:

Date Collected: 5/25/04
Time Collected: 09:08
Date Received: 5/25/04
Date Analyzed: 5/25/04
Time Analyzed: 14:39
Volume(s) Analyzed: 1.0 ml(s)

D.F.= 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
7783-06-4	Hydrogen Sulfide	**351**	7.00	**252**	5.00	
463-58-1	Carbonyl Sulfide	**26.8**	12.0	**10.9**	5.00	
74-93-1	Methyl Mercaptan	ND	9.80	ND	5.00	
75-08-1	Ethyl Mercaptan	ND	13.0	ND	5.00	
75-18-3	Dimethyl Sulfide	ND	13.0	ND	5.00	
75-15-0	Carbon Disulfide	**8.13**	7.80	**2.61**	2.50	
75-33-2	Isopropyl Mercaptan	ND	16.0	ND	5.00	
75-66-1	tert-Butyl Mercaptan	ND	18.0	ND	5.00	
107-03-9	n-Propyl Mercaptan	ND	16.0	ND	5.00	
624-89-5	Ethyl Methyl Sulfide	ND	16.0	ND	5.00	
110-02-1	Thiophene	ND	17.0	ND	5.00	
513-44-0	Isobutyl Mercaptan	ND	18.0	ND	5.00	
352-93-2	Diethyl Sulfide	ND	18.0	ND	5.00	
109-79-5	n-Butyl Mercaptan	ND	18.0	ND	5.00	
624-92-0	Dimethyl Disulfide	ND	9.60	ND	2.50	
616-44-4	3-Methylthiophene	ND	20.0	ND	5.00	
110-01-0	Tetrahydrothiophene	ND	18.0	ND	5.00	
638-02-8	2,5-Dimethylthiophene	ND	23.0	ND	5.00	
872-55-9	2-Ethylthiophene	ND	23.0	ND	5.00	
110-81-6	Diethyl Disulfide	ND	12.0	ND	2.50	

ND = Compound was analyzed for, but not detected above the **laboratory detection 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: 06/09/04

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **GeoSyntec Consultants, Inc.**
Client Sample ID: **PNL-L5B-SFC1S**
Client Project ID: **Ascon LF/SB0202 / 31**

CAS Project ID: P2401094
CAS Sample ID: P2401094-002

Test Code: ASTM D 5504-01
Instrument ID: Agilent 6890A/GC13/SCD
Analyst: Zheng Wang/Wade Henton
Sampling Media: Tedlar Bag
Test Notes:

Date Collected: 5/25/04
Time Collected: 10:45
Date Received: 5/25/04
Date Analyzed: 5/25/04
Time Analyzed: 15:02
Volume(s) Analyzed: 1.0 ml(s)

D.F.= 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
7783-06-4	Hydrogen Sulfide	**303**	7.00	**218**	5.00	
463-58-1	Carbonyl Sulfide	**23.0**	12.0	**9.36**	5.00	
74-93-1	Methyl Mercaptan	ND	9.80	ND	5.00	
75-08-1	Ethyl Mercaptan	ND	13.0	ND	5.00	
75-18-3	Dimethyl Sulfide	ND	13.0	ND	5.00	
75-15-0	Carbon Disulfide	**8.78**	7.80	**2.82**	2.50	
75-33-2	Isopropyl Mercaptan	ND	16.0	ND	5.00	
75-66-1	tert-Butyl Mercaptan	ND	18.0	ND	5.00	
107-03-9	n-Propyl Mercaptan	ND	16.0	ND	5.00	
624-89-5	Ethyl Methyl Sulfide	ND	16.0	ND	5.00	
110-02-1	Thiophene	ND	17.0	ND	5.00	
513-44-0	Isobutyl Mercaptan	ND	18.0	ND	5.00	
352-93-2	Diethyl Sulfide	ND	18.0	ND	5.00	
109-79-5	n-Butyl Mercaptan	ND	18.0	ND	5.00	
624-92-0	Dimethyl Disulfide	ND	9.60	ND	2.50	
616-44-4	3-Methylthiophene	ND	20.0	ND	5.00	
110-01-0	Tetrahydrothiophene	ND	18.0	ND	5.00	
638-02-8	2,5-Dimethylthiophene	ND	23.0	ND	5.00	
872-55-9	2-Ethylthiophene	ND	23.0	ND	5.00	
110-81-6	Diethyl Disulfide	ND	12.0	ND	2.50	

ND = Compound was analyzed for, but not detected above the **laboratory detection 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: 06/09/04

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **GeoSyntec Consultants, Inc.**
Client Sample ID: **PNL-L5B-SFC2S**
Client Project ID: **Ascon LF/SB0202 / 31**

CAS Project ID: P2401094
CAS Sample ID: P2401094-003

Test Code: ASTM D 5504-01
Instrument ID: Agilent 6890A/GC13/SCD
Analyst: Zheng Wang/Wade Henton
Sampling Media: Tedlar Bag
Test Notes:

Date Collected: 5/25/04
Time Collected: 10:01
Date Received: 5/25/04
Date Analyzed: 5/25/04
Time Analyzed: 15:24
Volume(s) Analyzed: 1.0 ml(s)

D.F.= 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
7783-06-4	Hydrogen Sulfide	**46.8**	7.00	**33.6**	5.00	
463-58-1	Carbonyl Sulfide	**24.7**	12.0	**10.1**	5.00	
74-93-1	Methyl Mercaptan	ND	9.80	ND	5.00	
75-08-1	Ethyl Mercaptan	ND	13.0	ND	5.00	
75-18-3	Dimethyl Sulfide	ND	13.0	ND	5.00	
75-15-0	Carbon Disulfide	**12.0**	7.80	**3.85**	2.50	
75-33-2	Isopropyl Mercaptan	ND	16.0	ND	5.00	
75-66-1	tert-Butyl Mercaptan	ND	18.0	ND	5.00	
107-03-9	n-Propyl Mercaptan	ND	16.0	ND	5.00	
624-89-5	Ethyl Methyl Sulfide	ND	16.0	ND	5.00	
110-02-1	Thiophene	ND	17.0	ND	5.00	
513-44-0	Isobutyl Mercaptan	ND	18.0	ND	5.00	
352-93-2	Diethyl Sulfide	ND	18.0	ND	5.00	
109-79-5	n-Butyl Mercaptan	ND	18.0	ND	5.00	
624-92-0	Dimethyl Disulfide	ND	9.60	ND	2.50	
616-44-4	3-Methylthiophene	ND	20.0	ND	5.00	
110-01-0	Tetrahydrothiophene	ND	18.0	ND	5.00	
638-02-8	2,5-Dimethylthiophene	ND	23.0	ND	5.00	
872-55-9	2-Ethylthiophene	ND	23.0	ND	5.00	
110-81-6	Diethyl Disulfide	ND	12.0	ND	2.50	

ND = Compound was analyzed for, but not detected above the **laboratory detection 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: 06/09/04

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **GeoSyntec Consultants, Inc.**
Client Sample ID: **PNL-L3B-SFU**
Client Project ID: **Ascon LF/SB0202 / 31**

CAS Project ID: P2401094
CAS Sample ID: P2401094-004

Test Code: ASTM D 5504-01
Instrument ID: Agilent 6890A/GC13/SCD
Analyst: Zheng Wang/Wade Henton
Sampling Media: Tedlar Bag
Test Notes:

Date Collected: 5/25/04
Time Collected: 11:05
Date Received: 5/25/04
Date Analyzed: 5/25/04
Time Analyzed: 15:47
Volume(s) Analyzed: 1.0 ml(s)

D.F.= 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
7783-06-4	Hydrogen Sulfide	**6.30**	7.00	**4.52**	5.00	J
463-58-1	Carbonyl Sulfide	ND	12.0	ND	5.00	
74-93-1	Methyl Mercaptan	ND	9.80	ND	5.00	
75-08-1	Ethyl Mercaptan	ND	13.0	ND	5.00	
75-18-3	Dimethyl Sulfide	ND	13.0	ND	5.00	
75-15-0	Carbon Disulfide	**10.6**	7.80	**3.42**	2.50	
75-33-2	Isopropyl Mercaptan	ND	16.0	ND	5.00	
75-66-1	tert-Butyl Mercaptan	ND	18.0	ND	5.00	
107-03-9	n-Propyl Mercaptan	ND	16.0	ND	5.00	
624-89-5	Ethyl Methyl Sulfide	ND	16.0	ND	5.00	
110-02-1	Thiophene	ND	17.0	ND	5.00	
513-44-0	Isobutyl Mercaptan	ND	18.0	ND	5.00	
352-93-2	Diethyl Sulfide	ND	18.0	ND	5.00	
109-79-5	n-Butyl Mercaptan	ND	18.0	ND	5.00	
624-92-0	Dimethyl Disulfide	ND	9.60	ND	2.50	
616-44-4	3-Methylthiophene	ND	20.0	ND	5.00	
110-01-0	Tetrahydrothiophene	ND	18.0	ND	5.00	
638-02-8	2,5-Dimethylthiophene	ND	23.0	ND	5.00	
872-55-9	2-Ethylthiophene	ND	23.0	ND	5.00	
110-81-6	Diethyl Disulfide	ND	12.0	ND	2.50	

ND = Compound was analyzed for, but not detected above the **laboratory detection limit**.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
J = The analyte was positively identified below the laboratory method reporting limit;
the associated numerical value is considered estimated.

Verified By: KHH Date: 06/09/04

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **GeoSyntec Consultants, Inc.**
Client Sample ID: **PNL-L3B-SFC2**
Client Project ID: **Ascon LF/SB0202 / 31**

CAS Project ID: P2401094
CAS Sample ID: P2401094-005

Test Code: ASTM D 5504-01
Instrument ID: Agilent 6890A/GC13/SCD
Analyst: Zheng Wang/Wade Henton
Sampling Media: Tedlar Bag
Test Notes:

Date Collected: 5/25/04
Time Collected: 11:43
Date Received: 5/25/04
Date Analyzed: 5/25/04
Time Analyzed: 16:32
Volume(s) Analyzed: 1.0 ml(s)

D.F.= 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
7783-06-4	Hydrogen Sulfide	**10.3**	7.00	**7.41**	5.00	
463-58-1	Carbonyl Sulfide	ND	12.0	ND	5.00	
74-93-1	Methyl Mercaptan	ND	9.80	ND	5.00	
75-08-1	Ethyl Mercaptan	ND	13.0	ND	5.00	
75-18-3	Dimethyl Sulfide	ND	13.0	ND	5.00	
75-15-0	Carbon Disulfide	ND	7.80	ND	2.50	
75-33-2	Isopropyl Mercaptan	ND	16.0	ND	5.00	
75-66-1	tert-Butyl Mercaptan	ND	18.0	ND	5.00	
107-03-9	n-Propyl Mercaptan	ND	16.0	ND	5.00	
624-89-5	Ethyl Methyl Sulfide	ND	16.0	ND	5.00	
110-02-1	Thiophene	ND	17.0	ND	5.00	
513-44-0	Isobutyl Mercaptan	ND	18.0	ND	5.00	
352-93-2	Diethyl Sulfide	ND	18.0	ND	5.00	
109-79-5	n-Butyl Mercaptan	ND	18.0	ND	5.00	
624-92-0	Dimethyl Disulfide	ND	9.60	ND	2.50	
616-44-4	3-Methylthiophene	ND	20.0	ND	5.00	
110-01-0	Tetrahydrothiophene	ND	18.0	ND	5.00	
638-02-8	2,5-Dimethylthiophene	ND	23.0	ND	5.00	
872-55-9	2-Ethylthiophene	ND	23.0	ND	5.00	
110-81-6	Diethyl Disulfide	ND	12.0	ND	2.50	

ND = Compound was analyzed for, but not detected above the **laboratory detection 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: 06/09/04

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

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

CAS Project ID: P2401094
CAS Sample ID: P040525-MB

Test Code: ASTM D 5504-01
Instrument ID: Agilent 6890A/GC13/SCD
Analyst: Zheng Wang/Wade Henton
Sampling Media: Tedlar Bag
Test Notes:

Date Collected: NA
Time Collected: NA
Date Received: NA
Date Analyzed: 5/25/04
Time Analyzed: 09:43
Volume(s) Analyzed: 1.0 ml(s)

D.F.= 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
7783-06-4	Hydrogen Sulfide	ND	7.00	ND	5.00	
463-58-1	Carbonyl Sulfide	ND	12.0	ND	5.00	
74-93-1	Methyl Mercaptan	ND	9.80	ND	5.00	
75-08-1	Ethyl Mercaptan	ND	13.0	ND	5.00	
75-18-3	Dimethyl Sulfide	ND	13.0	ND	5.00	
75-15-0	Carbon Disulfide	ND	7.80	ND	2.50	
75-33-2	Isopropyl Mercaptan	ND	16.0	ND	5.00	
75-66-1	tert-Butyl Mercaptan	ND	18.0	ND	5.00	
107-03-9	n-Propyl Mercaptan	ND	16.0	ND	5.00	
624-89-5	Ethyl Methyl Sulfide	ND	16.0	ND	5.00	
110-02-1	Thiophene	ND	17.0	ND	5.00	
513-44-0	Isobutyl Mercaptan	ND	18.0	ND	5.00	
352-93-2	Diethyl Sulfide	ND	18.0	ND	5.00	
109-79-5	n-Butyl Mercaptan	ND	18.0	ND	5.00	
624-92-0	Dimethyl Disulfide	ND	9.60	ND	2.50	
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110-01-0	Tetrahydrothiophene	ND	18.0	ND	5.00	
638-02-8	2,5-Dimethylthiophene	ND	23.0	ND	5.00	
872-55-9	2-Ethylthiophene	ND	23.0	ND	5.00	
110-81-6	Diethyl Disulfide	ND	12.0	ND	2.50	

ND = Compound was analyzed for, but not detected above the **laboratory detection 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: 06/09/04

Columbia Analytical Services, Inc.
Sample Acceptance Check Form

Client: GeoSyntec Consultants, Inc. Work order: P2401094

Project: Ascon LF/SB0202 / 31

Sample(s) received on: 5/25/04 Date opened: 5/25/04 by: SM

Note: This form is used for all samples received by CAS. The use of this form for custody seals is strictly meant to indicate presence/absence and not as an indication of compliance or nonconformity. Thermal preservation and pH will only be evaluated either at the request of the client or as required by the method/SOP.

		Yes	No	N/A
1	Were **custody seals** on outside of cooler/Box?	☐	☒	☐
	Location of seal(s)? _____ Sealing Lid?	☐	☐	☒
	Were signature and date included?	☐	☐	☒
	Were seals intact?	☐	☒	☐
	Were custody seals on outside of sample container?	☐	☐	☒
	Location of seal(s)? _____ Sealing Lid?	☐	☐	☒
	Were signature and date included?	☐	☐	☒
	Were seals intact?	☐	☐	☒
2	Were **sample containers** properly marked with client sample ID?	☒	☐	☐
3	Did **sample containers** arrive in good condition?	☒	☐	☐
4	Were **chain-of-custody** papers used and filled out?	☒	☐	☐
5	Did **sample container labels** and/or tags agree with custody papers?	☒	☐	☐
6	Was **sample volume** received adequate for analysis?	☐	☒	☐
7	Are samples within specified holding times?	☒	☐	☐
8	Was proper **temperature** (thermal preservation) of cooler at receipt adhered to?	☐	☐	☒
	Cooler Temperature NA °C			
	Blank Temperature NA °C			
9	Is pH (acid) **preservation** necessary, according to method/SOP or Client specified information?	☐	☒	☐
	Is there a client indication that the submitted samples are **pH** (acid) preserved?	☐	☐	☒
	Were **VOA vials** checked for presence/absence of air bubbles?	☐	☐	☒
	Does the client/method/SOP require that the analyst check the sample pH and if necessary alter it?	☐	☐	☒
10	**Tubes:** Are the tubes capped and intact?	☐	☐	☒
	Do they contain moisture?	☐	☐	☒
11	**Badges:** Are the badges properly capped and intact?	☐	☐	☒
	Are dual bed badges separated and individually capped and intact?	☐	☐	☒

Lab Sample ID	Required pH	pH (as received, if required)	VOA Headspace (Presence/Absence)	Receipt / Preservation Comments
P2401094-001			NA	
P2401094-002			NA	
P2401094-003			NA	
P2401094-004			NA	
P2401094-005			NA	

Explain any discrepancies: (include lab sample ID numbers):
P2401094-004: ID ON THE SAMPLE: PNL-L3B-SFUS -005: PNL-L3B-SFC2S

8

5/25/04 1:47 PM

Columbia Analytical Services INC.
An Employee - Owned Company

Air Quality Laboratory
2665 Park Center Drive, Suite D
Simi Valley, California 93065
Phone (805) 526-7161
Fax (805) 526-7270

Chain of Custody Record
Analytical Service Request

Client/Address: GeoSyntec 2100 Main St. #150 HB, CA 92648

Project Name: Ascon LF

Project Number: SB0202/31

Sampling Location: HB, CA

P.O. #/Billing Information: SB0202/31

Phone: (714) 969-0800 Fax: (714) 969-0820

Email: mizandon@geosyntec.com

Contact: Mike Rowden

Sampler (Signature): [signature]

CAS Project No.: P2401094

Analysis: SULFUR SPECIES

Expected Turnaround Time: 24 Hr 48Hr 3Day 4Day 5Day Standard (10 Business Days)

Cooler / Blank: Temp_____

Comments (e.g., preservative or specific instructions)

Client Sample ID	Date Collected	Time Collected	Lab Sample No.	Type of Sample	~~Container ID~~ (Serial #)	~~Flow Controller~~ (Serial #)	Sample Volume (Liters)	SULFUR SPECIES
PNL-LSB-SFUS	05/25/04	0908	-1	Tedlar	Bag		1	x
PNL-LSB-SFC1S	05/25/04	10:45	-2				1	
PNL-LSB-SFC2S	"	10:01	-3				1	
PNL-LSB-SFU	"	11:05	-4				1	
PNL-LSB-SFC2	"	11:43	-5				1	

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
[signature]	05/25/04	11:50	[signature]	5/25/04	1150
[signature]	5/25/04	1315	[signature]	5/25/04	13:15
[signature]			[signature]		

Additional Comments

White Copy: Accompanies Samples

Yellow Copy: Retained by Client

COC #13-7/03