

An Employee - Owned Company

#### LABORATORY REPORT

Client:

GEOSYNTEC CONSULTANTS, INC.

Date of Report:

06/21/04

Address:

2100 Main Street, Suite 150

Date Received:

05/27/04

Huntington Beach, CA 92648

CAS Project No:

P2401137

Contact:

Mr. Mike Reardon

Purchase Order:

SB0202/31

Client Project ID: Ascon LF/SB0202 / 31

Thirteen (13) Stainless Steel Summa Canisters labeled:

"AA-01-052504"

"AA-02-052504"

"AA-03-052504"

"AA-04-052504"

"AA-05-052504"

"AA-07-052504"

"AA-01-052604"

"AA-02-052604"

"AA-03-052604"

"AA-04-052604"

"AA-05-052604"

"AA-07-052604"

"PNL-L3B-SFU"

The samples were received at the laboratory under chain of custody on May 27, 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

One of the samples was 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:

Charle Sugar

Analytical Chemist
Air Quality Laboratory

Aristotle Bragasin

Reviewed and Approved:

Wade Henton GC-VOA Team Leader Air Quality Laboratory

Page 1 of <u>5/</u>



CAS Project No:

P2401137

## Volatile Organic Compound Analysis

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

The laboratory control sample recovery was not within specified limits on the Hewlett Packard Model 5973 GC/MS/DS on June 11, 2004. Methyl tert-Butyl Ether was biased high. Methyl tert-Butyl Ether was not detected in the samples labeled "AA-04-052604", "AA-05-052604" and "AA-07-052604. The samples were not significantly affected.

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.

### RESULTS OF ANALYSIS

Page 1 of 1

**Client:** 

GeoSyntec Consultants, Inc.

Client Sample ID:

PNL-L3B-SFU

**Client Project ID:** 

Ascon LF/SB0202 / 31

CAS Project ID: P2401137

CAS Sample ID: P2401137-013

Test Code:

Modified EPA TO-3

Instrument ID:

HP5890II/GC8/FID

Analyst:

Regan Lau

Sampling Media: Test Notes:

Summa Canister

SC00333

Container ID:

Pi 1 =

0.6

Pf 1 =

3.7

Date Collected: 5/25/04

Date Received: 5/27/04

Date Analyzed: 6/8/04

Volume(s) Analyzed:

D.F. = 1.20

1.0 ml

	Result	MRL	Data
Compound	ppmV	ppmV	Qualifier
Methane	34	0.60	
C <sub>2</sub> as Ethane	ND	0.60	
C <sub>3</sub> as Propane	ND	0.60	
C <sub>4</sub> as n-Butane	ND	0.60	
C <sub>5</sub> as n-Pentane	ND	0.60	
C <sub>6</sub> as n-Hexane	ND	0.60	
C <sub>6</sub> + as n-Hexane	22	1.2	<u></u>

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.

#### RESULTS OF ANALYSIS Page 1 of 1

Client:

GeoSyntec Consultants, Inc.

**Client Sample ID:** 

Method Blank

**Client Project ID:** 

Ascon LF/SB0202 / 31

CAS Project ID: P2401137

CAS Sample ID: P040607-MB

Test Code:

Modified EPA TO-3

Instrument ID:

HP5890II/GC8/FID

Analyst:

Regan Lau

Sampling Media:

Summa Canister

Date Collected: NA Date Received: NA

Date Analyzed: 6/07/04

Volume(s) Analyzed:

1.0 ml

Test Notes:

D.F. = 1.00

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

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

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

# RESULTS OF ANALYSIS

Page 1 of 1

Client:

GeoSyntec Consultants, Inc.

Client Sample ID:

Method Blank

Client Project ID:

Ascon LF/SB0202 / 31

CAS Project ID: P2401137

CAS Sample ID: P040608-MB

Test Code:

Modified EPA TO-3

Instrument ID:

HP5890II/GC8/FID

Analyst:

Sampling Media:

Regan Lau

Summa Canister

Date Collected: NA

Date Received: NA Date Analyzed: 6/08/04

Volume(s) Analyzed:

1.0 ml

Test Notes:

D.F. = 1.00

	Result	MRL	Data Qualifier
Compound	ppmV	ppmV	
Methane	ND	0.50	
C <sub>2</sub> as Ethane	ND	0.50	
C <sub>3</sub> as Propane	ND	0.50	
C <sub>4</sub> as n-Butane	ND	0.50	
C <sub>5</sub> as n-Pentane	ND	0.50	
C <sub>6</sub> as n-Hexane	ND	0.50	
$C_6$ 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: Re Date: 617104

## RESULTS OF ANALYSIS

Page 1 of 3

GeoSyntec Consultants, Inc. Client:

CAS Project ID: P2401137 Client Sample ID: AA-01-052504 CAS Sample ID: P2401137-001 Client Project ID: Ascon LF/SB0202 / 31

Test Code:

**EPA TO-15** 

Instrument ID:

Tekmar AUTOCAN/HP5972/HP5890 II+/MS2

Analyst:

Aristotle Bragasin Summa Canister

Sampling Media:

Test Notes:

AC00574 Container ID:

Date Collected: 5/25/04

Date Received: 5/27/04

Date(s) Analyzed: 6/10/04

Volume(s) Analyzed:

1.00 Liter(s)

Pf 1 = 3.5-2.7 Pi 1 =

D.F. = 1.52

CAS#	Compound	Result µg/m³	MRL μg/m³	Result ppbV	MRL ppbV	Data Qualifier
74-87-3	Chloromethane	ND	0.76	ND	0.37	
75-01-4	Vinyl Chloride	ND	0.76	ND	0.30	
106-99-0	1,3-Butadiene	ND	0.76	ND	0.34	
74-83-9	Bromomethane	ND	0.76	ND	0.20	
75-00-3	Chloroethane	ND	0.76	ND	0.29	
67-64-1	Acetone	ND	7.6	ND	3.2	
75-69-4	Trichlorofluoromethane	1.3	0.76	0.24	0.14	
107-13-1	Acrylonitrile	ND	0.76	ND	0.35	
75-35-4	1,1-Dichloroethene	ND	0.76	ND	0.19	
75-09-2	Methylene chloride	0.81	0.76	0.23	0.22	<u> </u>
76-13-1	Trichlorotrifluoroethane	ND	0.76	ND	0.099	
75-15-0	Carbon Disulfide	ND	0.76	ND	0.24	
156-60-5	trans-1,2-Dichloroethene	ND	0.76	ND	0.19	
75-34-3	1,1-Dichloroethane	ND	0.76	ND	0.19	
1634-04-4	Methyl tert-Butyl Ether	ND	0.76	ND	0.21	<u> </u>
108-05-4	Vinyl Acetate	ND	0.76	ND	0.22	<u> </u>
78-93-3	2-Butanone (MEK)	1.5	0.76	0.52	0.26	<b></b>
156-59-2	cis-1,2-Dichloroethene	ND	0.76	ND	0.19	<b></b>
67-66-3	Chloroform	ND	0.76	ND	0.16	
107-06-2	1,2-Dichloroethane	ND	0.76	ND	0.19	<u> </u>
71-55-6	1,1,1-Trichloroethane	ND	0.76	ND	0.14	
71-43-2	Benzene	ND	0.76	ND	0.24	<u> </u>
56-23-5	Carbon Tetrachloride	ND	0.76	NDND_	0.12	<u></u>

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.

Date: 6110 Verified By: 126

#### RESULTS OF ANALYSIS

Page 2 of 3

GeoSyntec Consultants, Inc. Client:

CAS Project ID: P2401137 Client Sample ID: AA-01-052504 CAS Sample ID: P2401137-001 Client Project ID: Ascon LF/SB0202 / 31

Test Code:

EPA TO-15

Instrument ID:

Tekmar AUTOCAN/HP5972/HP5890 II+/MS2

Analyst:

Aristotle Bragasin

Sampling Media:

Summa Canister

Test Notes:

Container ID:

AC00574

Date Collected: 5/25/04

Date Received: 5/27/04

Date(s) Analyzed: 6/10/04

Volume(s) Analyzed:

1.00 Liter(s)

Pf 1 = 3.5Pi 1 =-2.7

D.F. = 1.52

CAS#	Compound	Result µg/m³	MRL μg/m³	Result ppbV	MRL ppbV	Data Qualifier
78-87-5	1,2-Dichloropropane	ND	0.76	ND	0.16	
75-27-4	Bromodichloromethane	ND	0.76	ND	0.11	
79-01-6	Trichloroethene	ND	0.76	ND	0.14	
10061-01-5	cis-1,3-Dichloropropene	ND	0.76	ND	0.17	
108-10-1	4-Methyl-2-pentanone	ND	0.76	ND	0.19	
10061-02-6	trans-1,3-Dichloropropene	ND	0.76	ND	0.17	
79-00-5	1,1,2-Trichloroethane	ND	0.76	ND	0.14	
108-88-3	Toluene	2.3	0.76	0.62	0.20	
591-78-6	2-Hexanone	ND	0.76	ND	0.19	ļ
124-48-1	Dibromochloromethane	ND	0.76	ND	0.089	
106-93-4	1,2-Dibromoethane	ND	0.76	ND	0.099	
127-18-4	Tetrachloroethene	ND	0.76	ND	0.11	<u> </u>
108-90-7	Chlorobenzene	ND	0.76	ND	0.17	ļ
100-41-4	Ethylbenzene	ND	0.76	ND	0.18	
136777-61-2	m,p-Xylenes	ND	1.5	ND	0.35	<u> </u>
75-25-2	Bromoform	ND	0.76	ND	0.074	
100-42-5	Styrene	ND	0.76	ND	0.18	
95-47-6	o-Xylene	ND	0.76	ND	0.18	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.76	ND	0.11	
541-73-1	1,3-Dichlorobenzene	ND	0.76	ND	0.13	
106-46-7	1,4-Dichlorobenzene	ND	0.76	ND	0.13	<u> </u>
95-50-1	1,2-Dichlorobenzene	ND	0.76	ND	0.13	<u> </u>

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: QC Date: 6/17/04

# RESULTS OF ANALYSIS Page 3 of 3

Client: GeoSyntec Consultants, Inc.

 Client Sample ID:
 AA-01-052504
 CAS Project ID: P2401137

 Client Project ID:
 Ascon LF/SB0202 / 31
 CAS Sample ID: P2401137-001

## **Tentatively Identified Compounds**

Test Code: EPA TO-15 Date Collected: 5/25/04
Instrument ID: Tekmar AUTOCAN/HP5972/HP5890 II+/MS2 Date Received: 5/27/04

Analyst: Aristotle Bragasin

Date Analyzed: 6/10/04

Sampling Media: Summa Canister Volume(s) Analyzed: 1.00 Liter(s)

Test Notes: T

Container ID: AC00574

Pi 1 = -2.7 Pf 1 = 3.5

D.F. = 1.52

GC / MS Ret. Time	Compound Identification	Concentration µg/m³	Data Qualifier
	Paleonal	20	
6.17	Ethanol Hexamethylcyclotrisiloxane (Possible Artifact)	50	
19.49 21.86	Heptanal	3	
24.80	Octanal	7	
24.97	Unidentified Siloxane (Possible Artifact)	10	
25.49	2-Ethyl-1-hexanol	6	
25.79	C <sub>12</sub> H <sub>26</sub> Branched Alkane	5	
26.14	C <sub>12</sub> H <sub>26</sub> Branched Alkane	5	
26.52	C <sub>12</sub> H <sub>26</sub> Branched Alkane	4	
26.58	C <sub>12</sub> H <sub>26</sub> Branched Alkane	4	
26.89	Nonanal	10	
27.89	Unidentified Siloxane (Possible Artifact)	7	
28.48	Decanal	6	

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

Verified By: Date: Ol7104
Page No.

### RESULTS OF ANALYSIS Page 1 of 3

Client:

GeoSyntec Consultants, Inc.

Client Sample ID: AA-01-052504

Client Project ID: Ascon LF/SB0202 / 31

CAS Project ID: P2401137

CAS Sample ID: P2401137-001DUP

Test Code:

EPA TO-15

Instrument ID:

Tekmar AUTOCAN/HP5972/HP5890 II+/MS2

Analyst:

Aristotle Bragasin

Sampling Media:

Summa Canister

Test Notes:

Container ID:

AC00574

Date Collected: 5/25/04

Date Received: 5/27/04

Date(s) Analyzed: 6/10/04

Volume(s) Analyzed:

1.00 Liter(s)

Pf 1 = 3.5-2.7 Pi 1 =

D.F. = 1.52

CAS#	Compound	Result µg/m³	MRL μg/m³	Result ppbV	MRL ppbV 0.37	Data Qualifie
74-87-3	Chloromethane	ND	0.76	ND	0.37	<b> </b>
75-01-4	Vinyl Chloride	ND	0.76	ND ND	0.34	1
106-99-0	1,3-Butadiene	ND	0.76	ND	0.20	<b> </b>
74-83-9	Bromomethane	ND	0.76	ND ND	0.29	<b>∦</b>
75-00-3	Chloroethane	ND	0.76		3.2	1
67-64-1	Acetone	ND	7.6	ND	0.14	1
75-69-4	Trichlorofluoromethane	1.2	0.76	0.21 ND	0.35	<b> </b>
107-13-1	Acrylonitrile	ND	0.76	ND ND	0.19	1
75-35-4	1,1-Dichloroethene	ND	0.76	0.23	0.15	1
75-09-2	Methylene chloride	0.79	0.76	0.23 ND	0.099	
76-13-1	Trichlorotrifluoroethane	ND	0.76	ND ND	0.24	1
75-15-0	Carbon Disulfide	ND	0.76	ND ND	0.19	1
156-60-5	trans-1,2-Dichloroethene	ND	0.76	ND	0.19	
75-34-3	1,1-Dichloroethane	ND	0.76	ND	0.21	1
1634-04-4	Methyl tert-Butyl Ether	ND	0.76	ND	0.22	-
108-05-4	Vinyl Acetate	ND	0.76	0.50	0.26	1
78-93-3	2-Butanone (MEK)	1.5	0.76	ND	0.19	1
156-59-2	cis-1,2-Dichloroethene	ND	0.76	ND ND	0.16	1
67-66-3	Chloroform	ND_	0.76	ND ND	0.19	-
107-06-2	1,2-Dichloroethane	ND	0.76	ND ND	0.14	1
71-55-6	1,1,1-Trichloroethane	ND	0.76	ND	0.14	1
71-43-2	Benzene	ND	0.76	ND	0.12	1
56-23-5	Carbon Tetrachloride	ND	0.76			

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: Gliptou

#### RESULTS OF ANALYSIS Page 2 of 3

Client:

GeoSyntec Consultants, Inc.

Client Sample ID: AA-01-052504

Client Project ID: Ascon LF/SB0202 / 31

CAS Project ID: P2401137

CAS Sample ID: P2401137-001DUP

Test Code:

EPA TO-15

Instrument ID:

Tekmar AUTOCAN/HP5972/HP5890 II+/MS2

Analyst:

Aristotle Bragasin

Sampling Media:

Summa Canister

Test Notes:

Container ID:

AC00574

Date Collected: 5/25/04

Date Received: 5/27/04

Date(s) Analyzed: 6/10/04

Volume(s) Analyzed:

1.00 Liter(s)

Pi 1 =-2.7 Pf 1 = 3.5

D.F. = 1.52

CAS#	Compound	Result µg/m³	MRL μg/m³	Result ppbV	MRL ppbV	Data Qualifier
78-87-5	1,2-Dichloropropane	ND	0.76	ND	0.16	
75-27-4	Bromodichloromethane	ND	0.76	ND	0.11	
79-01-6	Trichloroethene	ND	0.76	ND	0.14	
10061-01-5	cis-1,3-Dichloropropene	ND	0.76	ND	0.17	
108-10-1	4-Methyl-2-pentanone	ND	0.76	ND	0.19	
10061-02-6	trans-1,3-Dichloropropene	ND	0.76	ND	0.17	<u> </u>
79-00-5	1,1,2-Trichloroethane	ND	0.76	ND	0.14	<u> </u>
108-88-3	Toluene	2.3	0.76	0.62	0.20	
591-78-6	2-Hexanone	ND	0.76	ND	0.19	<u> </u>
124-48-1	Dibromochloromethane	ND	0.76	ND	0.089	ļ
106-93-4	1,2-Dibromoethane	ND	0.76	ND	0.099	
127-18-4	Tetrachloroethene	ND	0.76	ND_	0.11	
108-90-7	Chlorobenzene	ND	0.76	ND	0.17	<b></b>
100-41-4	Ethylbenzene	ND	0.76	ND	0.18	<b></b>
136777-61-2	m,p-Xylenes	ND	1.5	ND	0.35	
75-25-2	Bromoform	ND	0.76	ND	0.074	<u> </u>
100-42-5	Styrene	ND	0.76	ND	0.18	
95-47-6	o-Xylene	ND	0.76	ND	0.18	<u> </u>
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.76	ND	0.11	<u> </u>
541-73-1	1,3-Dichlorobenzene	ND	0.76	ND	0.13	
106-46-7	1,4-Dichlorobenzene	ND	0.76	ND	0.13	<b></b>
95-50-1	1,2-Dichlorobenzene	ND	0.76	ND	0.13	

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

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

Verified By: Re Date: 617104

## RESULTS OF ANALYSIS

Page 3 of 3

Client:

GeoSyntec Consultants, Inc.

Client Sample ID: Client Project ID: AA-01-052504

Ascon LF/SB0202 / 31

CAS Project ID: P2401137

CAS Sample ID: P2401137-001DUP

### **Tentatively Identified Compounds**

Test Code:

EPA TO-15

Date Collected: 5/25/04

Instrument ID:

Tekmar AUTOCAN/HP5972/HP5890 II+/MS2

Date Received: 5/27/04

Analyst:

Aristotle Bragasin

Date Analyzed: 6/10/04

Sampling Media:

Summa Canister

Volume(s) Analyzed:

1.00 Liter(s)

Test Notes:

T

Container ID:

AC00574

Pi 1 = -2.7

Pf 1 = 3.5

D.F. = 1.52

GC / MS	Compound Identification	Concentration	Data Qualifier
Ret. Time		μg/m³	Quanner
6.16	Ethanol	20	
19.49	Hexamethylcyclotrisiloxane (Possible Artifact)	50	_
21.85	Heptanal	5	
24.80	Octanal	7	
24.96	Unidentified Siloxane (Possible Artifact)	10	_
25.49	2-Ethyl-1-hexanol	5	
25.79	C <sub>12</sub> H <sub>26</sub> Branched Alkane	5	
26.14	C <sub>12</sub> H <sub>26</sub> Branched Alkane	5	
26.51	C <sub>12</sub> H <sub>26</sub> Branched Alkane	3	
26.58	C <sub>12</sub> H <sub>26</sub> Branched Alkane	2	
26.88	Nonanal	10	
27.88	Unidentified Siloxane (Possible Artifact)	7	
28.48	Decanal	6	_L

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

## RESULTS OF ANALYSIS

Page 1 of 3

Client:

GeoSyntec Consultants, Inc.

Client Sample ID: AA-02-052504

Client Project ID: Ascon LF/SB0202 / 31

CAS Project ID: P2401137

CAS Sample ID: P2401137-002

Test Code:

**EPA TO-15** 

Instrument ID:

Tekmar AUTOCAN/HP5972/HP5890 II+/MS2

Analyst:

Aristotle Bragasin Summa Canister

Sampling Media: Test Notes:

Container ID:

AC00634

Date Collected: 5/25/04 Date Received: 5/27/04

Date(s) Analyzed: 6/10/04

Volume(s) Analyzed:

1.00 Liter(s)

Pi 1 = -3.2 Pf 1 = 3.7

D.F. = 1.60

CAS#	Compound	Result μg/m³	MRL μg/m³	Result ppbV	MRL ppbV	Data Qualifier
74-87-3	Chloromethane	ND	0.80	ND	0.39	
75-01-4	Vinyl Chloride	ND	0.80	ND	0.31	
106-99-0	1,3-Butadiene	ND	0.80	ND	0.36	
74-83-9	Bromomethane	ND	0.80	ND	0.21	<u> </u>
75-00-3	Chloroethane	ND	0.80	ND	0.30	
67-64-1	Acetone	22	8.0	9.1	3.4	
75-69-4	Trichlorofluoromethane	1.2	0.80	0.21	0.14	<u> </u>
107-13-1	Acrylonitrile	ND	0.80	ND	0.37	<b></b>
75-35-4	1,1-Dichloroethene	ND	0.80	ND_	0.20	
75-09-2	Methylene chloride	ND	0.80	ND	0.23	
76-13-1	Trichlorotrifluoroethane	ND	0.80	ND	0.10	
75-15-0	Carbon Disulfide	ND	0.80	ND	0.26	1
156-60-5	trans-1,2-Dichloroethene	ND	0.80	ND	0.20	
75-34-3	1,1-Dichloroethane	ND	0.80	ND	0.20	<b></b>
1634-04-4	Methyl tert-Butyl Ether	ND	0.80	ND	0.22	_
108-05-4	Vinyl Acetate	2.4	0.80	0.69	0.23	
78-93-3	2-Butanone (MEK)	4.0	0.80	1.4	0.27	
156-59-2	cis-1,2-Dichloroethene	ND	0.80	ND	0.20	
67-66-3	Chloroform	ND	0.80	ND	0.16	
107-06-2	1,2-Dichloroethane	ND	0.80	ND	0.20	
71-55-6	1,1,1-Trichloroethane	ND	0.80	ND	0.15	
71-43-2	Benzene	ND	0.80	ND	0.25	
56-23-5	Carbon Tetrachloride	ND	0.80	ND	0.13	

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

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

Verified By: RG Date: 617104

#### RESULTS OF ANALYSIS

Page 2 of 3

Client:

GeoSyntec Consultants, Inc.

Client Sample ID: AA-02-052504

Client Project ID: Ascon LF/SB0202 / 31

CAS Project ID: P2401137

CAS Sample ID: P2401137-002

Test Code:

EPA TO-15

Instrument ID:

Tekmar AUTOCAN/HP5972/HP5890 II+/MS2

Analyst:

Aristotle Bragasin

Sampling Media:

Summa Canister

Test Notes:

Container ID:

AC00634

Date Collected: 5/25/04

Date Received: 5/27/04

Date(s) Analyzed: 6/10/04

Volume(s) Analyzed:

1.00 Liter(s)

Pi 1 =

-3.2

Pf 1 = 3.7

D.F. = 1.60

78-87-5 75-27-4 79-01-6 10061-01-5	1,2-Dichloropropane Bromodichloromethane Trichloroethene	μg/m³  ND  ND  ND  ND	0.80	ND	0.17	17
75-27-4 79-01-6	Bromodichloromethane Trichloroethene		0.80		0.10	<b></b>
79-01-6	Trichloroethene	NID	0.60	ND	0.12	
		IND I	0.80	ND	0.15	
10001-01-5	cis-1,3-Dichloropropene	ND	0.80	ND	0.18	
108-10-1	4-Methyl-2-pentanone	ND	0.80	ND	0.20	<u> </u>
10061-02-6	trans-1,3-Dichloropropene	ND	0.80	ND	0.18	<u> </u>
79-00-5	1,1,2-Trichloroethane	ND	0.80	ND	0.15	ļ <u> </u>
108-88-3	Toluene	ND	0.80	ND	0.21	ļ
591-78-6	2-Hexanone	1.4	0.80	0.35	0.20	<b> </b>
124-48-1	Dibromochloromethane	ND	0.80	ND	0.094	ļ
106-93-4	1,2-Dibromoethane	ND	0.80	ND	0.10	
127-18-4	Tetrachloroethene	ND	0.80	ND	0.12	<u> </u>
108-90-7	Chlorobenzene	ND	0.80	ND	0.17	<u> </u>
108-90-7	Ethylbenzene	ND	0.80	ND	0.18	
136777-61-2	m,p-Xylenes	ND	1.6	ND	0.37	
	Bromoform	ND	0.80	ND	0.077	
75-25-2		ND	0.80	ND	0.19	
100-42-5	Styrene	ND	0.80	ND	0.18	
95-47-6	0-Xylene	ND	0.80	ND	0.12	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.80	ND	0.13	
541-73-1	1,3-Dichlorobenzene	ND	0.80	ND	0.13	
106-46-7 95-50-1	1,4-Dichlorobenzene 1.2-Dichlorobenzene	ND	0.80	ND	0.13	

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

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

Date: 6/17/04 Verified By: KG

## RESULTS OF ANALYSIS

Page 3 of 3

Client:

GeoSyntec Consultants, Inc.

Client Sample ID:

AA-02-052504

CAS Project ID: P2401137

Client Project ID:

Ascon LF/SB0202 / 31

CAS Sample ID: P2401137-002

#### **Tentatively Identified Compounds**

Test Code:

EPA TO-15

Date Collected: 5/25/04

Instrument ID:

Tekmar AUTOCAN/HP5972/HP5890 II+/MS2

Date Received: 5/27/04

Analyst:

Aristotle Bragasin

Date Analyzed: 6/10/04

Sampling Media:

Summa Canister

Volume(s) Analyzed:

-3.2

1.00 Liter(s)

Test Notes:

T

Container ID:

AC00634 Pi 1 =

Pf 1 = 3.7

D.F. = 1.60

GC/MS	Compound Identification	Concentration	Data
Ret. Time		μg/m³	Qualifier
5.27	Acetaldehyde	7	
6.16	Ethanol	20	
9.13	Butanal	5	
13.10	Pentanal	8	
14.71	Diisobutene	10	
17.77	Hexanal	10	
19.49	Hexamethylcyclotrisiloxane (Possible Artifact)	200	
21.85	Heptanal	20	
23.58	Unidentified Oxygenated Compound	10	
24.80	Octanal	30	
24.96	Unidentified Siloxane (Possible Artifact)	30	
25.49	2-Ethyl-1-hexanol	20	
26.88	Nonanal	40	
27.88	Unidentified Siloxane (Possible Artifact)	10	
28.47	Decanal	9	<u> </u>

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

Verified By: Co Date: 617104
Page No.

# RESULTS OF ANALYSIS

Page 1 of 3

Client:

GeoSyntec Consultants, Inc.

Client Sample ID: AA-03-052504

Client Project ID: Ascon LF/SB0202 / 31

CAS Project ID: P2401137

CAS Sample ID: P2401137-003

Test Code:

EPA TO-15

Instrument ID:

Tekmar AUTOCAN/HP5972/HP5890 II+/MS2

Analyst:

Aristotle Bragasin Summa Canister

Sampling Media: Test Notes:

Container ID:

AC00187

Date Collected: 5/25/04 Date Received: 5/27/04

Date(s) Analyzed: 6/11/04

Volume(s) Analyzed:

1.00 Liter(s)

Pi 1 =

-3.0

Pf 1 = 3.5

D.F. = 1.56

CAS#	Compound	Result	MRL	Result	MRL	Data
CAS#	Compound	μg/m³	μg/m³	ppbV	ppbV	Qualifier
74-87-3	Chloromethane	ND	0.78	ND	0.38	
75-01-4	Vinyl Chloride	ND	0.78	ND	0.31	
106-99-0	1,3-Butadiene	ND	0.78	ND	0.35	<u> </u>
74-83-9	Bromomethane	ND	0.78	ND	0.20	
75-00-3	Chloroethane	ND_	0.78	ND	0.30	
67-64-1	Acetone	ND	7.8	ND	3.3	<u> </u>
75-69-4	Trichlorofluoromethane	1.3	0.78	0.22	0.14	<u> </u>
107-13-1	Acrylonitrile	ND	0.78	ND	0.36	<b> </b>
75-35-4	1,1-Dichloroethene	ND	0.78	ND	0.20	ļ
75-09-2	Methylene chloride	ND	0.78	ND	0.22	<u> </u>
76-13-1	Trichlorotrifluoroethane	ND	0.78	ND	0.10	<b> </b>
75-15-0	Carbon Disulfide	ND	0.78	ND	0.25	<u> </u>
156-60-5	trans-1,2-Dichloroethene	ND	0.78	ND	0.20	<u> </u>
75-34-3	1,1-Dichloroethane	ND	0.78	ND	0.19	
1634-04-4	Methyl tert-Butyl Ether	ND	0.78	ND	0.22	<b> </b>
108-05-4	Vinyl Acetate	2.3	0.78	0.64	0.22	<b></b>
78-93-3	2-Butanone (MEK)	2.9	0.78	1.0	0.26	<u> </u>
156-59-2	cis-1,2-Dichloroethene	ND	0.78	ND	0.20	ļ
67-66-3	Chloroform	ND	0.78	ND	0.16	
107-06-2	1,2-Dichloroethane	ND	0.78	ND	0.19	1
71-55-6	1,1,1-Trichloroethane	ND	0.78	ND	0.14	<u> </u>
71-43-2	Benzene	ND	0.78	ND	0.24	
56-23-5	Carbon Tetrachloride	ND	0.78	ND	0.12	

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

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

Verified By:

### RESULTS OF ANALYSIS Page 2 of 3

Client:

GeoSyntec Consultants, Inc.

Client Sample ID: AA-03-052504

Client Project ID: Ascon LF/SB0202 / 31

CAS Project ID: P2401137

CAS Sample ID: P2401137-003

Test Code:

EPA TO-15

Instrument ID:

Tekmar AUTOCAN/HP5972/HP5890 II+/MS2

Analyst:

Aristotle Bragasin

Sampling Media:

Summa Canister

Test Notes:

Container ID:

AC00187

Date Collected: 5/25/04

Date Received: 5/27/04

Date(s) Analyzed: 6/11/04

Volume(s) Analyzed:

1.00 Liter(s)

-3.0Pi 1 =

Pf 1 = 3.5

D.F. = 1.56

CAS#	Compound	Result µg/m³	MRL μg/m³	Result ppbV	MRL ppbV	Data Qualifier
78-87-5	1,2-Dichloropropane	ND	0.78	ND	0.17	
75-27-4	Bromodichloromethane	ND	0.78	ND	0.12	
79-01-6	Trichloroethene	ND	0.78	ND	0.15	
10061-01-5	cis-1,3-Dichloropropene	ND	0.78	ND	0.17	
108-10-1	4-Methyl-2-pentanone	ND	0.78	ND	0.19	
10061-02-6	trans-1,3-Dichloropropene	ND	0.78	ND	0.17	<u> </u>
79-00-5	1,1,2-Trichloroethane	ND	0.78	ND	0.14	
108-88-3	Toluene	3.8	0.78	1.0	0.21	<b> </b>
591-78-6	2-Hexanone	ND	0.78	ND	0.19	<b> </b>
124-48-1	Dibromochloromethane	ND	0.78	ND	0.092	<b> </b>
106-93-4	1,2-Dibromoethane	ND	0.78	ND	0.10	
127-18-4	Tetrachloroethene	ND	0.78	ND	0.12	
108-90-7	Chlorobenzene	ND	0.78	ND	0.17	<b></b>
100-41-4	Ethylbenzene	ND	0.78	ND	0.18	<u> </u>
136777-61-2	m,p-Xylenes	ND	1.6	ND	0.36	ļ
75-25-2	Bromoform	ND	0.78	ND	0.075	<u> </u>
100-42-5	Styrene	ND	0.78	ND	0.18	<b></b>
95-47-6	o-Xylene	ND	0.78	ND	0.18	<u> </u>
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.78	ND	0.11	<u> </u>
541-73-1	1,3-Dichlorobenzene	ND	0.78	ND	0.13	<b></b>
106-46-7	1,4-Dichlorobenzene	ND	0.78	ND	0.13	
95-50-1	1,2-Dichlorobenzene	ND	0.78	ND	0.13	ــــــــــــــــــــــــــــــــــــــ

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: 617/04

### RESULTS OF ANALYSIS Page 3 of 3

Client:

GeoSyntec Consultants, Inc.

Client Sample ID: Client Project ID:

AA-03-052504

Ascon LF/SB0202 / 31

CAS Project ID: P2401137

CAS Sample ID: P2401137-003

#### **Tentatively Identified Compounds**

Test Code:

**EPA TO-15** 

Date Collected: 5/25/04

Instrument ID:

Tekmar AUTOCAN/HP5972/HP5890 II+/MS2

Date Received: 5/27/04

Analyst:

Aristotle Bragasin

Date Analyzed: 6/11/04

Sampling Media:

Summa Canister

Volume(s) Analyzed:

1.00 Liter(s)

Test Notes:

T

Container ID:

AC00187

Pi 1 = -3.0 Pf 1 = 3.5

D.F. = 1.56

GC / MS Ret. Time	Compound Identification	Concentration μg/m³	Data Qualifier
6.16	Ethanol	10	
8.75	Trimethylsilanol	4	_
9.54	Acetic Acid	8	
19.48	Hexamethylcyclotrisiloxane (Possible Artifact)	20	
23.70	Benzaldehyde	6	
24.96	Unidentified Siloxane (Possible Artifact)	7	
25.49	2-Ethyl-1-hexanol	4	
26.89	Unidentified Oxygenated Compound	4	

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

#### RESULTS OF ANALYSIS Page 1 of 3

Client:

GeoSyntec Consultants, Inc.

Client Sample ID: AA-04-052504

Client Project ID: Ascon LF/SB0202 / 31

CAS Project ID: P2401137

CAS Sample ID: P2401137-004

Test Code:

EPA TO-15

Tekmar AUTOCAN/HP5972/HP5890 II+/MS2

Analyst:

Aristotle Bragasin

Sampling Media:

Instrument ID:

Summa Canister

Test Notes:

Container ID:

AC00355

Date Collected: 5/25/04

Date Received: 5/27/04

Date(s) Analyzed: 6/11/04

Volume(s) Analyzed:

1.00 Liter(s)

Pf 1 = 3.5Pi 1 =-2.9

D.F. = 1.54

CAS#	Compound	Result	MRL μg/m³	Result ppbV	MRL ppbV	Data Qualifier
		μg/m³	<u>μg/III</u> 0.77	ND	0.37	
74-87-3	Chloromethane	ND		ND ND	0.30	
75-01-4	Vinyl Chloride	ND	0.77		0.35	
106-99-0	1,3-Butadiene	ND	0.77	ND		<b> </b>
74-83-9	Bromomethane	ND_	0.77	ND	0.20	
75-00-3	Chloroethane	ND	0.77	ND	0.29	ļ
67-64-1	Acetone	12	7.7	4.9	3.2	
75-69-4	Trichlorofluoromethane	1.3	0.77	0.23	0.14	<u> </u>
107-13-1	Acrylonitrile	ND	0.77	ND	0.35	<u> </u>
75-35-4	1,1-Dichloroethene	ND	0.77	ND	0.19	ļ
75-09-2	Methylene chloride	ND	0.77	ND	0.22	ļ
76-13-1	Trichlorotrifluoroethane	ND	0.77	ND	0.10	<u> </u>
75-15-0	Carbon Disulfide	ND	0.77	ND	0.25	<b> </b>
156-60-5	trans-1,2-Dichloroethene	ND	0.77	ND	0.19	<b></b>
75-34-3	1,1-Dichloroethane	ND	0.77	ND	0.19	<u> </u>
1634-04-4	Methyl tert-Butyl Ether	ND	0.77	ND	0.21	
108-05-4	Vinyl Acetate	3.2	0.77	0.91	0.22	
78-93-3	2-Butanone (MEK)	3.8	0.77	1.3	0.26	<b> </b>
156-59-2	cis-1,2-Dichloroethene	ND	0.77	ND	0.19	
67-66-3	Chloroform	ND	0.77	ND	0.16	
107-06-2	1,2-Dichloroethane	ND	0.77	ND	0.19	
71-55-6	1,1,1-Trichloroethane	ND	0.77	ND	0.14	
71-33-0	Benzene	ND	0.77	ND	0.24	
56-23-5	Carbon Tetrachloride	ND ND	0.77	ND	0.12	

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

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

Date: 6 11104 

# **RESULTS OF ANALYSIS**

Page 2 of 3

Client:

GeoSyntec Consultants, Inc.

Client Sample ID: AA-04-052504

Client Project ID: Ascon LF/SB0202 / 31

CAS Project ID: P2401137

Date Collected: 5/25/04

Date Received: 5/27/04

Date(s) Analyzed: 6/11/04

CAS Sample ID: P2401137-004

Test Code:

**EPA TO-15** 

Instrument ID:

Tekmar AUTOCAN/HP5972/HP5890 II+/MS2

Analyst:

Aristotle Bragasin

Sampling Media:

Summa Canister

Volume(s) Analyzed:

1.00 Liter(s)

Test Notes:

Container ID:

AC00355

Pi 1 =-2.9 Pf 1 = 3.5

D.F. = 1.54

CAS#	Compound	Result μg/m³	MRL μg/m³	Result ppbV	MRL ppbV	Data Qualifier
78-87-5	1,2-Dichloropropane	ND	0.77	ND	0.17	
75-27-4	Bromodichloromethane	ND	0.77	ND	0.11	
79-01-6	Trichloroethene	ND	0.77	ND	0.14	
10061-01-5	cis-1,3-Dichloropropene	ND	0.77	ND	0.17	
108-10-1	4-Methyl-2-pentanone	ND	0.77	ND	0.19	
10061-02-6	trans-1,3-Dichloropropene	ND	0.77	ND	0.17	
79-00-5	1,1,2-Trichloroethane	ND	0.77	ND	0.14	ļ
108-88-3	Toluene	5.0	0.77	1.3	0.20	
591-78-6	2-Hexanone	ND	0.77	ND	0.19	
124-48-1	Dibromochloromethane	ND	0.77	ND	0.090	
106-93-4	1,2-Dibromoethane	ND	0.77	ND	0.10	ļ
127-18-4	Tetrachloroethene	ND	0.77	ND	0.11	<b> </b>
108-90-7	Chlorobenzene	ND	0.77	ND	0.17	<u> </u>
100-41-4	Ethylbenzene	ND	0.77	ND	0.18	<u> </u>
136777-61-2	m,p-Xylenes	ND	1.5	ND	0.35	
75-25-2	Bromoform	ND	0.77	ND	0.075	<b></b>
100-42-5	Styrene	ND	0.77	ND	0.18	<u> </u>
95-47-6	o-Xylene	ND	0.77	ND	0.18	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.77	ND	0.11	<u> </u>
541-73-1	1,3-Dichlorobenzene	ND	0.77	ND	0.13	<b></b>
106-46-7	1,4-Dichlorobenzene	ND	0.77	ND	0.13	-
95-50-1	1,2-Dichlorobenzene	ND	0.77	ND	0.13	<u> </u>

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.

Date: 6/17/04 Verified By: RU

### RESULTS OF ANALYSIS Page 3 of 3

Client:

GeoSyntec Consultants, Inc.

Client Sample ID:

AA-04-052504

**Client Project ID:** 

Ascon LF/SB0202 / 31

CAS Project ID: P2401137

CAS Sample ID: P2401137-004

# **Tentatively Identified Compounds**

Test Code:

EPA TO-15

Date Collected: 5/25/04

Instrument ID:

Tekmar AUTOCAN/HP5972/HP5890 II+/MS2

Date Received: 5/27/04

Analyst:

Aristotle Bragasin

Date Analyzed: 6/11/04 1.00 Liter(s)

Sampling Media:

Summa Canister

Volume(s) Analyzed:

Test Notes:

T

Container ID:

AC00355

Pi 1 = -2.9

Pf 1 = 3.5

D.F. = 1.54

GC / MS Ret. Time	Compound Identification	Concentration  µg/m³	Data Qualifier
6.16	Ethanol	20	
9.56	Acetic Acid	10	
23.70	Benzaldehyde	6	

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

Date: 6/17/04 Verified By: Ro

#### **RESULTS OF ANALYSIS** Page 1 of 3

Client:

GeoSyntec Consultants, Inc.

Client Sample ID: AA-05-052504

Client Project ID:

Ascon LF/SB0202 / 31

CAS Project ID: P2401137

CAS Sample ID: P2401137-005

Test Code:

**EPA TO-15** 

Instrument ID:

Tekmar AUTOCAN/HP5972/HP5890 II+/MS2

Analyst:

Aristotle Bragasin

Sampling Media:

Summa Canister

Test Notes:

Container ID:

AC00537

Date Collected: 5/25/04

Date Received: 5/27/04

Date(s) Analyzed: 6/11/04 Volume(s) Analyzed:

1.00 Liter(s)

Pi 1 =-2.4

Pf 1 = 3.5

D.F. = 1.48

CAS#	Compound	Result µg/m³	MRL μg/m³	Result ppbV	MRL ppbV	Data Qualifier
74-87-3	Chloromethane	ND	0.74	ND	0.36	
75-01-4	Vinyl Chloride	ND	0.74	ND	0.29	
106-99-0	1,3-Butadiene	ND	0.74	ND	0.33	
74-83-9	Bromomethane	ND	0.74	ND	0.19	
75-00-3	Chloroethane	ND	0.74	ND	0.28	ļ
67-64-1	Acetone	18	7.4	7.7	3.1	
75-69-4	Trichlorofluoromethane	1.3	0.74	0.22	0.13	
107-13-1	Acrylonitrile	ND	0.74	ND	0.34	<u> </u>
75-35-4	1,1-Dichloroethene	ND	0.74	ND	0.19	
75-09-2	Methylene chloride	ND	0.74	ND	0.21	
76-13-1	Trichlorotrifluoroethane	ND	0.74	ND	0.097	
75-15-0	Carbon Disulfide	ND	0.74	ND	0.24	<u> </u>
156-60-5	trans-1,2-Dichloroethene	ND	0.74	ND	0.19	
75-34-3	1,1-Dichloroethane	ND	0.74	ND	0.18	ļ
1634-04-4	Methyl tert-Butyl Ether	ND	0.74	ND	0.21	
108-05-4	Vinyl Acetate	6.4	0.74	1.8	0.21	<b> </b>
78-93-3	2-Butanone (MEK)	3.2	0.74	1.1	0.25	<u> </u>
156-59-2	cis-1,2-Dichloroethene	ND	0.74	ND	0.19	
67-66-3	Chloroform	ND	0.74	ND	0.15	<u> </u>
107-06-2	1,2-Dichloroethane	ND	0.74	ND	0.18	<b></b>
71-55-6	1,1,1-Trichloroethane	ND	0.74	ND	0.14	
71-43-2	Benzene	ND	0.74	ND	0.23	
56-23-5	Carbon Tetrachloride	ND	0.74	ND	0.12	

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

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

Verified By: Ru Date: 617104

#### RESULTS OF ANALYSIS

Page 2 of 3

GeoSyntec Consultants, Inc. Client:

CAS Project ID: P2401137 Client Sample ID: AA-05-052504 CAS Sample ID: P2401137-005

Client Project ID: Ascon LF/SB0202 / 31

Test Code:

EPA TO-15

Instrument ID:

Tekmar AUTOCAN/HP5972/HP5890 II+/MS2

Analyst:

Aristotle Bragasin

Sampling Media:

Summa Canister

Test Notes: AC00537 Container ID:

Date Collected: 5/25/04 Date Received: 5/27/04

Date(s) Analyzed: 6/11/04

Volume(s) Analyzed:

1.00 Liter(s)

Pf 1 = 3.5Pi 1 = -2.4

D.F. = 1.48

CAS#	Compound	Result µg/m³	MRL μg/m³	Result ppbV	MRL ppbV	Data Qualifier
78-87-5	1,2-Dichloropropane	ND	0.74	ND	0.16	ļ
75-27-4	Bromodichloromethane	ND	0.74	ND	0.11	
79-01-6	Trichloroethene	ND	0.74	ND	0.14	
10061-01-5	cis-1,3-Dichloropropene	ND	0.74	ND	0.16	
108-10-1	4-Methyl-2-pentanone	ND	0.74	ND	0.18	
10061-02-6	trans-1,3-Dichloropropene	ND	0.74	ND	0.16	
79-00-5	1,1,2-Trichloroethane	ND	0.74	ND	0.14	ļ
108-88-3	Toluene	6.1	0.74	1.6	0.20	
591-78-6	2-Hexanone	ND	0.74	ND	0.18	
124-48-1	Dibromochloromethane	ND	0.74	ND	0.087	
106-93-4	1,2-Dibromoethane	ND	0.74	ND	0.096	
127-18-4	Tetrachloroethene	ND	0.74	ND	0.11	<u> </u>
108-90-7	Chlorobenzene	ND	0.74	ND	0.16	
100-41-4	Ethylbenzene	ND	0.74	ND	0.17	
136777-61-2	m,p-Xylenes	ND	1.5	ND	0.34	<b></b>
75-25-2	Bromoform	ND	0.74	ND	0.072	<u> </u>
100-42-5	Styrene	ND	0.74	ND	0.17	
95-47-6	o-Xylene	ND	0.74	ND	0.17	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.74	ND	0.11	
541-73-1	1,3-Dichlorobenzene	ND	0.74	ND	0.12	
106-46-7	1,4-Dichlorobenzene	ND	0.74	ND	0.12	
95-50-1	1,2-Dichlorobenzene	ND	0.74	ND	0.12	<u> </u>

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 7 04

#### RESULTS OF ANALYSIS Page 3 of 3

GeoSyntec Consultants, Inc. Client:

CAS Project ID: P2401137 AA-05-052504 Client Sample ID: CAS Sample ID: P2401137-005 Ascon LF/SB0202 / 31 **Client Project ID:** 

## **Tentatively Identified Compounds**

Date Collected: 5/25/04 Test Code: **EPA TO-15** Date Received: 5/27/04 Tekmar AUTOCAN/HP5972/HP5890 II+/MS2 Instrument ID:

Date Analyzed: 6/11/04 Aristotle Bragasin Analyst:

Volume(s) Analyzed: 1.00 Liter(s) Summa Canister Sampling Media:

Test Notes: Т

AC00537 Container ID:

Pf 1 = 3.5Pi 1 = -2.4

D.F. = 1.48

GC / MS Ret. Time	Compound Identification	Concentration µg/m³	Data Qualifier
5.27	Acetaldehyde	6	
6.16	Ethanol	10	
9.59	Acetic Acid	8	
19.48	Hexamethylcyclotrisiloxane (Possible Artifact)	4	
24.97	Unidentified Siloxane (Possible Artifact)	20	
27.88	Unidentified Siloxane (Possible Artifact)	10	1

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

Verified By: Date: Date: Page No.:

#### RESULTS OF ANALYSIS

Page 1 of 3

Client:

GeoSyntec Consultants, Inc.

Client Sample ID: AA-07-052504

Client Project ID: Ascon LF/SB0202 / 31

CAS Project ID: P2401137

CAS Sample ID: P2401137-006

Test Code:

**EPA TO-15** 

Instrument ID:

Analyst:

Aristotle Bragasin Summa Canister

Sampling Media: Test Notes:

Container ID:

AC00622

Tekmar AUTOCAN/HP5972/HP5890 II+/MS2

Date Collected: 5/25/04 Date Received: 5/27/04

Date(s) Analyzed: 6/11/04

Volume(s) Analyzed:

1.00 Liter(s)

Pi 1 =

-2.6

Pf 1 = 3.5

D.F. = 1.50

CAS#	Compound	Result µg/m³	MRL μg/m³	Result ppbV	MRL ppbV	Data Qualifier
74-87-3	Chloromethane	ND	0.75	ND	0.36	ļ
75-01-4	Vinyl Chloride	ND	0.75	ND	0.29	
106-99-0	1,3-Butadiene	ND	0.75	ND	0.34	
74-83-9	Bromomethane	ND	0.75	ND	0.19	
75-00-3	Chloroethane	ND	0.75	ND	0.28	
67-64-1	Acetone	16	7.5	6.7	3.2	
75-69-4	Trichlorofluoromethane	1.3	0.75	0.22	0.13	<b> </b>
107-13-1	Acrylonitrile	ND	0.75	ND	0.35	<b> </b>
75-35-4	1,1-Dichloroethene	ND	0.75	ND	0.19	<b> </b>
75-09-2	Methylene chloride	ND	0.75	ND	0.22	<u> </u>
	Trichlorotrifluoroethane	ND	0.75	ND	0.098	
76-13-1	Carbon Disulfide	ND	0.75	ND	0.24	
75-15-0	trans-1,2-Dichloroethene	ND	0.75	ND	0.19	<b></b>
156-60-5	1.1-Dichloroethane	ND	0.75	ND	0.19	
75-34-3	Methyl tert-Butyl Ether	ND	0.75	ND	0.21	
1634-04-4		2.5	0.75	0.71	0.21	
108-05-4	Vinyl Acetate  2-Butanone (MEK)	2.4	0.75	0.81	0.25	
78-93-3		ND	0.75	ND	0.19	
156-59-2	cis-1,2-Dichloroethene	ND	0.75	ND	0.15	
67-66-3	Chloroform	ND ND	0.75	ND	0.19	
107-06-2	1,2-Dichloroethane	ND	0.75	ND	0.14	
71-55-6	1,1,1-Trichloroethane	ND ND	0.75	ND	0.23	
71-43-2	Benzene	ND ND	0.75	ND	0.12	
56-23-5	Carbon Tetrachloride		1 0.75	<u> </u>		

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: 61004

#### RESULTS OF ANALYSIS Page 2 of 3

Client:

GeoSyntec Consultants, Inc.

Client Sample ID: AA-07-052504

Client Project ID: Ascon LF/SB0202 / 31

CAS Project ID: P2401137

CAS Sample ID: P2401137-006

Test Code:

**EPA TO-15** 

Instrument ID:

Tekmar AUTOCAN/HP5972/HP5890 II+/MS2

Analyst:

Aristotle Bragasin

Sampling Media:

Summa Canister

Test Notes:

Container ID:

AC00622

Date Collected: 5/25/04

Date Received: 5/27/04

Date(s) Analyzed: 6/11/04

Volume(s) Analyzed:

1.00 Liter(s)

Pi 1 = -2.6 Pf 1 = 3.5

D.F. = 1.50

CAS#	Compound	Result	MRL	Result	MRL	Data Qualifier
		μg/m³	μg/m³	ppbV	ppbV	Quanner
78-87-5	1,2-Dichloropropane	ND	0.75	ND	0.16	
75-27-4	Bromodichloromethane	ND	0.75	ND	0.11	
79-01-6	Trichloroethene	ND	0.75	ND	0.14	
10061-01-5	cis-1,3-Dichloropropene	ND	0.75	ND	0.17	
108-10-1	4-Methyl-2-pentanone	ND	0.75	ND	0.18	
10061-02-6	trans-1,3-Dichloropropene	ND	0.75	ND	0.17	
79-00-5	1,1,2-Trichloroethane	ND	0.75	ND	0.14	
108-88-3	Toluene	3.0	0.75	0.79	0.20	
591-78-6	2-Hexanone	ND	0.75	ND	0.18	
124-48-1	Dibromochloromethane	ND	0.75	ND	0.088	
106-93-4	1,2-Dibromoethane	ND	0.75	ND	0.098	
127-18-4	Tetrachloroethene	ND	0.75	ND	0.11	
108-90-7	Chlorobenzene	ND	0.75	ND	0.16	
100-41-4	Ethylbenzene	ND	0.75	ND	0.17	
136777-61-2	m,p-Xylenes	ND	1.5	ND	0.35	
75-25-2	Bromoform	ND	0.75	ND	0.073	<u> </u>
100-42-5	Styrene	ND	0.75	ND	0.18	
95-47-6	o-Xylene	ND	0.75	ND	0.17	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.75	ND	0.11	
541-73-1	1,3-Dichlorobenzene	ND	0.75	ND	0.12	
106-46-7	1,4-Dichlorobenzene	ND	0.75	ND	0.12	
95-50-1	1,2-Dichlorobenzene	ND	0.75	ND	0.12	

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

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

Verified By: RG Date: 6/17/04

#### RESULTS OF ANALYSIS Page 3 of 3

**Client:** 

GeoSyntec Consultants, Inc.

Client Sample ID: AA-07-052504

CAS Project ID: P2401137

Client Project ID:

Ascon LF/SB0202 / 31

CAS Sample ID: P2401137-006

### **Tentatively Identified Compounds**

Test Code:

EPA TO-15

Date Collected: 5/25/04

Instrument ID:

Tekmar AUTOCAN/HP5972/HP5890 II+/MS2

Date Received: 5/27/04

Analyst:

Aristotle Bragasin

Date Analyzed: 6/11/04

Sampling Media:

Summa Canister

Volume(s) Analyzed:

1.00 Liter(s)

Test Notes:

T

Container ID:

AC00622

Pi 1 = -2.6

Pf 1 = 3.5

D.F. = 1.50

GC / MS Ret. Time	Compound Identification	Concentration μg/m³	Data Qualifier
5.27	Acetaldehyde	6	
9.58	Acetic Acid	3	
17.78	Hexanal	5	
19.48	Hexamethylcyclotrisiloxane (Possible Artifact)	7	
21.86	Heptanal	7	
24.81	Octanal	10	
24.97	Unidentified Siloxane (Possible Artifact)	4	
26.88	Nonanal	7	
27.89	Unidentified Siloxane (Possible Artifact)	5	

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

Verified By: Rec Date: 617104
Page No.:

#### **RESULTS OF ANALYSIS** Page 1 of 3

Client:

GeoSyntec Consultants, Inc.

Client Sample ID: AA-01-052604

Client Project ID: Ascon LF/SB0202 / 31

CAS Project ID: P2401137

CAS Sample ID: P2401137-007

Test Code:

**EPA TO-15** 

Tekmar AUTOCAN/HP5972/HP5890 II+/MS2

Date Collected: 5/26/04

Date Received: 5/27/04

Instrument ID: Analyst:

Aristotle Bragasin

Date(s) Analyzed: 6/11/04

Sampling Media:

Summa Canister

Volume(s) Analyzed:

1.00 Liter(s)

Test Notes:

Container ID:

AC00584

-5.6 Pi 1 =

Pf 1 = 3.5

D.F. = 2.00

CAS#	Compound	Result µg/m³	MRL μg/m³	Result ppbV	MRL ppbV	Data Qualifier
74-87-3	Chloromethane	ND	1.0	ND	0.48	
75-01-4	Vinyl Chloride	ND	1.0	ND	0.39	
106-99-0	1,3-Butadiene	ND	1.0	ND	0.45	
74-83-9	Bromomethane	ND	1.0	ND	0.26	
75-00-3	Chloroethane	ND	1.0	ND	0.38	
67-64-1	Acetone	ND	10	ND	4.2	
75-69-4	Trichlorofluoromethane	ND	1.0	ND	0.18	
107-13-1	Acrylonitrile	ND	1.0	ND	0.46	
75-35-4	1,1-Dichloroethene	ND	1.0	ND	0.25	
75-09-2	Methylene chloride	1.0	1.0	0.30	0.29	<b></b>
76-13-1	Trichlorotrifluoroethane	ND	1.0	ND	0.13	
75-15-0	Carbon Disulfide	ND	1.0	ND	0.32	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ND	0.25	<b> </b>
75-34-3	1,1-Dichloroethane	ND	1.0	ND	0.25	
1634-04-4	Methyl tert-Butyl Ether	ND	1.0	ND	0.28	
108-05-4	Vinyl Acetate	1.7	1.0	0.48	0.28	
78-93-3	2-Butanone (MEK)	2.7	1.0	0.92	0.34	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ND	0.25	
67-66-3	Chloroform	ND	1.0	ND	0.20	<u> </u>
107-06-2	1,2-Dichloroethane	ND	1.0	ND	0.25	ļ
71-55-6	1,1,1-Trichloroethane	ND	1.0	ND	0.18	
71-43-2	Benzene	ND	1.0	ND	0.31	<u> </u>
56-23-5	Carbon Tetrachloride	ND	1.0	ND	0.16	<u> L</u>

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.

#### RESULTS OF ANALYSIS

Page 2 of 3

Client:

GeoSyntec Consultants, Inc.

Client Sample ID: AA-01-052604

Client Project ID:

Ascon LF/SB0202 / 31

CAS Project ID: P2401137

CAS Sample ID: P2401137-007

Test Code:

**EPA TO-15** 

Instrument ID:

Tekmar AUTOCAN/HP5972/HP5890 II+/MS2

Analyst:

Aristotle Bragasin

Sampling Media:

Summa Canister

Test Notes:

Container ID:

AC00584

Date Collected: 5/26/04

Date Received: 5/27/04

Date(s) Analyzed: 6/11/04

Volume(s) Analyzed:

1.00 Liter(s)

Pi 1 = -5.6

Pf 1 = 3.5

D.F. = 2.00

CAS#	Compound	Result	MRL	Result	MRL	Data
		μg/m³	μg/m³	ppbV	ppbV	Qualifier
78-87-5	1,2-Dichloropropane	ND	1.0	ND	0.22	
75-27-4	Bromodichloromethane	ND	1.0	ND	0.15	
79-01-6	Trichloroethene	ND	1.0	ND	0.19	<u> </u>
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	ND	0.22	
108-10-1	4-Methyl-2-pentanone	ND	1.0	ND	0.24	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	ND	0.22	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ND	0.18	
108-88-3	Toluene	4.1	1.0	1.1	0.27	
591-78-6	2-Hexanone	ND	1.0	ND	0.24	ļ
124-48-1	Dibromochloromethane	ND	1.0	ND	0.12	<u> </u>
106-93-4	1,2-Dibromoethane	ND	1.0	ND	0.13	
127-18-4	Tetrachloroethene	ND	1.0	ND	0.15	<u> </u>
108-90-7	Chlorobenzene	ND	1.0	ND	0.22	<b> </b>
100-41-4	Ethylbenzene	ND	1.0	ND	0.23	
136777-61-2	m,p-Xylenes	ND	2.0	ND	0.46	
75-25-2	Bromoform	ND	1.0	ND	0.097	
100-42-5	Styrene	ND	1.0	ND	0.23	<u> </u>
95-47-6	o-Xylene	ND	1.0	ND	0.23	<u> </u>
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ND	0.15	<b></b>
541-73-1	1,3-Dichlorobenzene	ND	1.0	ND	0.17	<u> </u>
106-46-7	1,4-Dichlorobenzene	ND	1.0	ND	0.17	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ND	0.17	JL

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.

### RESULTS OF ANALYSIS Page 3 of 3

**Client:** 

GeoSyntec Consultants, Inc.

Client Sample ID:

AA-01-052604

Client Project ID:

Ascon LF/SB0202 / 31

CAS Project ID: P2401137

Date Collected: 5/26/04

Date Received: 5/27/04

Date Analyzed: 6/11/04

CAS Sample ID: P2401137-007

# **Tentatively Identified Compounds**

Test Code:

**EPA TO-15** 

Tekmar AUTOCAN/HP5972/HP5890 II+/MS2

Instrument ID: Analyst:

Aristotle Bragasin

Sampling Media:

Summa Canister

Test Notes:

Container ID:

T AC00584

Pi 1 = -5.6

Pf 1 = 3.5

Volume(s) Analyzed:

D.F. = 2.00

1.00 Liter(s)

GC / MS Ret. Time	Compound Identification	Concentration μg/m³	Data Qualifier
	3-Heptanone	10	
21.36	Unidentified Oxygenated Compound	9	
23.37		20	
23.59	Unidentified Oxygenated Compound	20	
23.68	2-Ethylhexanal + Benzaldehyde	50	
25.49	2-Ethyl-1-hexanol	30	_
26.88	Nonanal	4	
29.37	C₀H₅O Compound		

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

Verified By: Ro Date: 6/17/04

#### RESULTS OF ANALYSIS Page 1 of 3

GeoSyntec Consultants, Inc. Client:

CAS Project ID: P2401137 Client Sample ID: AA-02-052604 CAS Sample ID: P2401137-008 Client Project ID: Ascon LF/SB0202 / 31

Test Code: EPA TO-15

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

Date Received: 5/27/04 Date(s) Analyzed: 6/11/04 Aristotle Bragasin Analyst:

Volume(s) Analyzed: 1.00 Liter(s) Summa Canister Sampling Media:

Test Notes:

Container ID: AC00518

Pf 1 = 3.5Pi 1 = -3.6

Date Collected: 5/26/04

D.F. = 1.64

CAS#	Compound	Result µg/m³	MRL μg/m³	Result ppbV	MRL ppbV	Data Qualifier
74-87-3	Chloromethane	ND	0.82	ND	0.40	
75-01-4	Vinyl Chloride	ND	0.82	ND_	0.32	
106-99-0	1,3-Butadiene	ND	0.82	ND	0.37	
74-83-9	Bromomethane	ND	0.82	ND	0.21	
75-00-3	Chloroethane	ND	0.82	ND	0.31	
67-64-1	Acetone	15	8.2	6.2	3.5	
75-69-4	Trichlorofluoromethane	1.3	0.82	0.23	0.15	
107-13-1	Acrylonitrile	ND	0.82	ND	0.38	L
75-35-4	1,1-Dichloroethene	ND	0.82	ND	0.21	
75-09-2	Methylene chloride	ND	0.82	ND	0.24	<u> </u>
76-13-1	Trichlorotrifluoroethane	ND	0.82	ND	0.11	
75-15-0	Carbon Disulfide	ND	0.82	ND	0.26	
156-60-5	trans-1,2-Dichloroethene	ND	0.82	ND	0.21	
75-34-3	1,1-Dichloroethane	ND	0.82	ND	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	0.82	ND	0.23	
108-05-4	Vinyl Acetate	5.6	0.82	1.6	0.23	<u> </u>
78-93-3	2-Butanone (MEK)	2.8	0.82	0.95	0.28	
156-59-2	cis-1,2-Dichloroethene	ND	0.82	ND	0.21	
67-66-3	Chloroform	ND	0.82	ND	0.17	
107-06-2	1,2-Dichloroethane	ND	0.82	ND	0.20	
71-55-6	1,1,1-Trichloroethane	ND	0.82	ND	0.15	
71-43-2	Benzene	ND	0.82	ND	0.26	
56-23-5	Carbon Tetrachloride	ND	0.82	ND	0.13	<u> </u>

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: 617104

### RESULTS OF ANALYSIS

Page 2 of 3

Client:

GeoSyntec Consultants, Inc.

Client Sample ID: AA-02-052604

Client Project ID: Ascon LF/SB0202 / 31

CAS Project ID: P2401137

CAS Sample ID: P2401137-008

Test Code:

**EPA TO-15** 

Instrument ID:

Tekmar AUTOCAN/HP5972/HP5890 II+/MS2

Analyst:

Aristotle Bragasin

Sampling Media: Test Notes:

Container ID:

Summa Canister

AC00518

Pi 1 =

-3.6

Date Received: 5/27/04

Date Collected: 5/26/04

Date(s) Analyzed: 6/11/04

Volume(s) Analyzed:

Pf 1 = 3.5

1.00 Liter(s)

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	0.82	ND	0.18	
75-27-4	Bromodichloromethane	ND	0.82	ND	0.12	
79-01-6	Trichloroethene	ND	0.82	ND	0.15	
10061-01-5	cis-1,3-Dichloropropene	ND	0.82	ND	0.18	
108-10-1	4-Methyl-2-pentanone	ND	0.82	ND	0.20	
10061-02-6	trans-1,3-Dichloropropene	ND	0.82	ND	0.18	<b> </b>
79-00-5	1,1,2-Trichloroethane	ND	0.82	ND	0.15	<b></b>
108-88-3	Toluene	4.2	0.82	1.1	0.22	
	2-Hexanone	ND	0.82	ND	0.20	
591-78-6	Dibromochloromethane	ND	0.82	ND	0.096	
124-48-1	1,2-Dibromoethane	ND	0.82	ND	0.11	_
106-93-4	Tetrachloroethene	ND	0.82	ND	0.12	
127-18-4		ND	0.82	ND	0.18	
108-90-7	Chlorobenzene	ND	0.82	ND	0.19	
100-41-4	Ethylbenzene	ND	1.6	ND	0.38	
136777-61-2	m,p-Xylenes	ND	0.82	ND	0.079	
75-25-2	Bromoform	ND ND	0.82	ND	0.19	
100-42-5	Styrene		0.82	ND	0.19	
95-47-6	o-Xylene	ND		ND	0.12	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.82	ND ND	0.14	
541-73-1	1,3-Dichlorobenzene	ND	0.82	ND	0.14	1
106-46-7	1,4-Dichlorobenzene	ND	0.82	ND	0.14	-
95-50-1	1,2-Dichlorobenzene	NDND_	0.82	ND ND	1 0.17	

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.

#### RESULTS OF ANALYSIS Page 3 of 3

**Client:** 

GeoSyntec Consultants, Inc.

Client Sample ID: AA-02-052604

Client Project ID:

Ascon LF/SB0202 / 31

CAS Project ID: P2401137

CAS Sample ID: P2401137-008

## **Tentatively Identified Compounds**

Test Code:

EPA TO-15

Date Collected: 5/26/04

Instrument ID:

Tekmar AUTOCAN/HP5972/HP5890 II+/MS2

Date Received: 5/27/04

Analyst:

Aristotle Bragasin

Date Analyzed: 6/11/04

Sampling Media:

Summa Canister

1.00 Liter(s) Volume(s) Analyzed:

T

Test Notes: Container ID:

AC00518

Pi 1 = -3.6

Pf 1 = 3.5

D.F. = 1.64

GC / MS Ret. Time	Compound Identification	Concentration μg/m³	Data Qualifier
5.26	Acetaldehyde	8	
9.53	Acetic Acid	40	
13.10	Pentanal	4	
17.78	Hexanal	5	
19.48	Hexamethylcyclotrisiloxane (Possible Artifact)	9	<b> </b>
21.49	Cyclohexanone	5	
21.85	Heptanal	5	
24.80	Octanal	4	
24.97	Unidentified Siloxane (Possible Artifact)	9	
27.09	n-Undecane	6	
27.89	Unidentified Siloxane (Possible Artifact)	5	
28.59	n-Dodecane	4	1

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

Verified By: RC+ Date: 6/17/04

#### RESULTS OF ANALYSIS Page 1 of 3

Client:

GeoSyntec Consultants, Inc.

Client Sample ID: AA-03-052604

Client Project ID: Ascon LF/SB0202 / 31

CAS Project ID: P2401137

CAS Sample ID: P2401137-009

Test Code:

**EPA TO-15** 

Instrument ID:

Tekmar AUTOCAN/HP5972/HP5890 II+/MS2

Analyst:

Aristotle Bragasin

Sampling Media:

Summa Canister

Test Notes:

Container ID:

AC00592

Date Collected: 5/26/04

Date Received: 5/27/04

Date(s) Analyzed: 6/11/04 Volume(s) Analyzed:

1.00 Liter(s)

-4.8 Pi 1 =

Pf 1 = 3.5

D.F. = 1.84

	Compound	Result μg/m³	MRL μg/m³	Result ppbV	MRL ppbV	Data Qualifier
74-87-3	Chloromethane	ND	0.92	ND	0.45	ļ
75-01-4	Vinyl Chloride	ND	0.92	ND	0.36	ļ
106-99-0	1,3-Butadiene	ND	0.92	ND	0.42	
74-83-9	Bromomethane	ND	0.92	ND	0.24	
75-00-3	Chloroethane	ND	0.92	ND	0.35	<u> </u>
67-64-1	Acetone	16	9.2	6.6	3.9	<b> </b>
75-69-4	Trichlorofluoromethane	1.2	0.92	0.22	0.16	ļ
107-13-1	Acrylonitrile	ND	0.92	ND	0.42	ļ
75-35-4	1,1-Dichloroethene	ND	0.92	ND	0.23	
75-09-2	Methylene chloride	ND	0.92	ND	0.26	
76-13-1	Trichlorotrifluoroethane	ND	0.92	ND	0.12	
75-15-0	Carbon Disulfide	ND	0.92	ND	0.30	<b></b>
156-60-5	trans-1,2-Dichloroethene	ND	0.92	ND	0.23	
75-34-3	1,1-Dichloroethane	ND	0.92	ND	0.23	
1634-04-4	Methyl tert-Butyl Ether	ND	0.92	ND	0.26	
	Vinyl Acetate	3.4	0.92	1.0	0.26	
108-05-4	2-Butanone (MEK)	2.4	0.92	0.80	0.31	
78-93-3	cis-1,2-Dichloroethene	ND	0.92	ND	0.23	
156-59-2	Chloroform	ND	0.92	ND	0.19	
67-66-3		ND	0.92	ND	0.23	
107-06-2	1,2-Dichloroethane	ND	0.92	ND	0.17	
71-55-6	1,1,1-Trichloroethane	ND	0.92	ND	0.29	
71-43-2 56-23-5	Benzene  Carbon Tetrachloride	ND ND	0.92	ND	0.15	

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

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

Verified By: 20 Date: 6/17/04

#### RESULTS OF ANALYSIS Page 2 of 3

Client:

GeoSyntec Consultants, Inc.

Client Sample ID: AA-03-052604

Client Project ID: Ascon LF/SB0202 / 31

CAS Project ID: P2401137

CAS Sample ID: P2401137-009

Test Code:

Analyst:

**EPA TO-15** 

Instrument ID:

Tekmar AUTOCAN/HP5972/HP5890 II+/MS2

Aristotle Bragasin

Sampling Media:

Summa Canister

Test Notes:

Container ID:

AC00592

Date Collected: 5/26/04

Date Received: 5/27/04

Date(s) Analyzed: 6/11/04

Volume(s) Analyzed:

1.00 Liter(s)

Pf 1 = 3.5Pi 1 = -4.8

D.F. = 1.84

CAS#	Compound	Result µg/m³	MRL μg/m³	Result ppbV	MRL ppbV	Data Qualifier
78-87-5	1,2-Dichloropropane	ND	0.92	ND	0.20	
75-27-4	Bromodichloromethane	ND	0.92	ND	0.14	
79-01-6	Trichloroethene	ND	0.92	ND	0.17	
10061-01-5	cis-1,3-Dichloropropene	ND	0.92	ND	0.20	
108-10-1	4-Methyl-2-pentanone	ND	0.92	ND	0.22	
10061-02-6	trans-1,3-Dichloropropene	ND	0.92	ND	0.20	
79-00-5	1,1,2-Trichloroethane	ND	0.92	ND	0.17	
108-88-3	Toluene	1.5	0.92	0.41	0.24	
591-78-6	2-Hexanone	ND	0.92	ND	0.22	
124-48-1	Dibromochloromethane	ND	0.92	ND	0.11	
106-93-4	1,2-Dibromoethane	ND	0.92	ND	0.12	
127-18-4	Tetrachloroethene	ND	0.92	ND	0.14	
108-90-7	Chlorobenzene	ND	0.92	ND	0.20	
100-41-4	Ethylbenzene	ND	0.92	ND	0.21	
136777-61-2	m,p-Xylenes	ND	1.8	ND	0.42	
75-25-2	Bromoform	ND	0.92	ND	0.089	
100-42-5	Styrene	ND	0.92	ND	0.22	
95-47-6	o-Xylene	ND	0.92	ND	0.21	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.92	ND	0.13	
541-73-1	1,3-Dichlorobenzene	ND	0.92	ND	0.15	<b></b>
106-46-7	1,4-Dichlorobenzene	ND	0.92	ND	0.15	<u> </u>
95-50-1	1,2-Dichlorobenzene	ND	0.92	ND	0.15	<u> </u>

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.

## RESULTS OF ANALYSIS

Page 3 of 3

**Client:** 

GeoSyntec Consultants, Inc.

**Client Sample ID:** 

AA-03-052604

CAS Project ID: P2401137

**Client Project ID:** 

Ascon LF/SB0202 / 31

CAS Sample ID: P2401137-009

## **Tentatively Identified Compounds**

Test Code:

EPA TO-15

Date Collected: 5/26/04

Instrument ID:

Tekmar AUTOCAN/HP5972/HP5890 II+/MS2

Date Received: 5/27/04

Analyst:

Aristotle Bragasin

Date Analyzed: 6/11/04

Sampling Media:

Summa Canister

Volume(s) Analyzed:

Test Notes:

Container ID:

AC00592

Pi 1 = -4.8

Pf 1 = 3.5

D.F. = 1.84

1.00 Liter(s)

GC / MS Ret. Time	Compound Identification	Concentration μg/m³	Data Qualifier
9.53	Acetic Acid	8	
27.09	n-Undecane	4	

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

Verified By: Re Date: 6/17/04

#### **RESULTS OF ANALYSIS** Page 1 of 3

Client:

GeoSyntec Consultants, Inc.

Client Sample ID: AA-04-052604

Client Project ID: Ascon LF/SB0202 / 31

CAS Project ID: P2401137

CAS Sample ID: P2401137-010

Test Code:

**EPA TO-15** 

Tekmar AUTOCAN/HP5973/HP6890/MS3

Analyst:

Aristotle Bragasin

Sampling Media:

Instrument ID:

Summa Canister

Test Notes:

Container ID:

AC00596

Date Collected: 5/26/04

Date Received: 5/27/04

Date(s) Analyzed: 6/12/04

Volume(s) Analyzed:

1.00 Liter(s)

Pf 1 = 3.5-3.6 Pi 1 =

D.F. = 1.64

CAS#	Compound	Result	MRL	Result	MRL	Data
		μg/m³	μg/m³	ppbV	ppbV	Qualifier
74-87-3	Chloromethane	ND	0.82	ND	0.40	
75-01-4	Vinyl Chloride	ND	0.82	ND	0.32	
106-99-0	1,3-Butadiene	ND	0.82	ND	0.37	
74-83-9	Bromomethane	ND	0.82	ND	0.21	
75-00-3	Chloroethane	ND	0.82	ND	0.31	<u> </u>
67-64-1	Acetone	10	8.2	4.2	3.5	
75-69-4	Trichlorofluoromethane	1.2	0.82	0.22	0.15	
107-13-1	Acrylonitrile	ND	0.82	ND	0.38	
75-35-4	1,1-Dichloroethene	ND	0.82	ND	0.21	ļ
75-09-2	Methylene chloride	ND	0.82	ND	0.24	<u> </u>
76-13-1	Trichlorotrifluoroethane	ND	0.82	ND	0.11	ļ
75-15-0	Carbon Disulfide	ND	0.82	ND	0.26	
156-60-5	trans-1,2-Dichloroethene	ND	0.82	ND	0.21	<u> </u>
75-34-3	1,1-Dichloroethane	ND	0.82	ND	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	0.82	ND	0.23	LL
108-05-4	Vinyl Acetate	ND	0.82	ND	0.23	<u> </u>
78-93-3	2-Butanone (MEK)	1.7	0.82	0.57	0.28	
156-59-2	cis-1,2-Dichloroethene	ND	0.82	ND	0.21	
67-66-3	Chloroform	ND	0.82	ND	0.17	
107-06-2	1,2-Dichloroethane	ND	0.82	ND	0.20	
71-55-6	1,1,1-Trichloroethane	ND	0.82	ND	0.15	<u> </u>
71-43-2	Benzene	ND	0.82	ND	0.26	
56-23-5	Carbon Tetrachloride	ND	0.82	ND	0.13	<u> </u>

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.

L = Laboratory control sample recovery not within specified limits.

Verified By: KG Date: 6/7/04

### RESULTS OF ANALYSIS

Page 2 of 3

Client:

GeoSyntec Consultants, Inc.

Client Sample ID: AA-04-052604

Client Project ID: Ascon LF/SB0202 / 31

CAS Project ID: P2401137

CAS Sample ID: P2401137-010

Test Code:

EPA TO-15

Instrument ID:

Tekmar AUTOCAN/HP5973/HP6890/MS3

Analyst:

Aristotle Bragasin Summa Canister

Sampling Media: Test Notes:

Container ID:

AC00596

Date Collected: 5/26/04 Date Received: 5/27/04

Date(s) Analyzed: 6/12/04

Volume(s) Analyzed:

1.00 Liter(s)

Pi1 =

-3.6

Pf 1 = 3.5

D.F. = 1.64

						F
CAS#	Compound	Result	MRL	Result	MRL	Data
CAS #	Compound	μg/m³	μg/m³	ppbV	ppbV	Qualifier
78-87-5	1,2-Dichloropropane	ND	0.82	ND	0.18	
75-27-4	Bromodichloromethane	ND	0.82	ND	0.12	
79-01-6	Trichloroethene	ND	0.82	ND	0.15	
10061-01-5	cis-1,3-Dichloropropene	ND	0.82	ND	0.18	
108-10-1	4-Methyl-2-pentanone	ND	0.82	ND	0.20	
10061-02-6	trans-1,3-Dichloropropene	ND	0.82	ND	0.18	
79-00-5	1,1,2-Trichloroethane	ND	0.82	ND	0.15	
108-88-3	Toluene	ND	0.82	ND	0.22	
591-78-6	2-Hexanone	ND	0.82	ND	0.20	
124-48-1	Dibromochloromethane	ND	0.82	ND	0.096	ļ
106-93-4	1,2-Dibromoethane	ND	0.82	ND	0.11	<b> </b>
127-18-4	Tetrachloroethene	ND	0.82	ND	0.12	<b> </b>
108-90-7	Chlorobenzene	ND	0.82	ND	0.18	<b> </b>
100-41-4	Ethylbenzene	ND	0.82	ND	0.19	<b></b>
136777-61-2	m,p-Xylenes	ND	1.6	ND	0.38	<b></b>
75-25-2	Bromoform	ND	0.82	ND	0.079	<u> </u>
100-42-5	Styrene	ND	0.82	ND	0.19	<b></b>
95-47-6	o-Xylene	ND	0.82	ND	0.19	<u> </u>
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.82	ND	0.12	
541-73-1	1,3-Dichlorobenzene	ND	0.82	ND	0.14	
106-46-7	1,4-Dichlorobenzene	ND	0.82	ND	0.14	<b></b>
95-50-1	1,2-Dichlorobenzene	ND	0.82	ND	0.14	<u> </u>

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.

### **RESULTS OF ANALYSIS** Page 3 of 3

Client:

GeoSyntec Consultants, Inc.

Client Sample ID:

AA-04-052604

Ascon LF/SB0202 / 31 Client Project ID:

CAS Project ID: P2401137

CAS Sample ID: P2401137-010

# **Tentatively Identified Compounds**

Test Code:

**EPA TO-15** 

Date Collected: 5/26/04

Instrument ID:

Tekmar AUTOCAN/HP5973/HP6890/MS3

Date Received: 5/27/04

Analyst:

Aristotle Bragasin

Date Analyzed: 6/12/04 Volume(s) Analyzed:

1.00 Liter(s)

Sampling Media: Test Notes:

Summa Canister T

Container ID:

AC00596

Pi 1 = -3.6

Pf 1 = 3.5

D.F. = 1.64

GC / MS Ret. Time	Compound Identification	Concentration μg/m³	Data Qualifier
5.39	Acetaldehyde	4	
9.53	Acetic Acid	7	
17.21	Hexanal	4	
18.73	Hexamethylcyclotrisiloxane (Possible Artifact)	10	
20.95	Heptanal	7	
22.73	Benzaldehyde	10	
23.85	Octanal	10	
23.99	Unidentified Siloxane (Possible Artifact)	10	
26.13	Nonanal	20	
27.19	Unidentified Siloxane (Possible Artifact)	8	
28.73	C₃H₃O Compound	4	

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

Verified By: QC Date: 617104

### RESULTS OF ANALYSIS Page 1 of 3

GeoSyntec Consultants, Inc. Client:

CAS Project ID: P2401137 Client Sample ID: AA-05-052604 CAS Sample ID: P2401137-011 Client Project ID: Ascon LF/SB0202 / 31

Test Code:

**EPA TO-15** 

Instrument ID:

Tekmar AUTOCAN/HP5973/HP6890/MS3

Analyst:

Aristotle Bragasin

Sampling Media:

Summa Canister

Test Notes:

Container ID:

AC00594

Date Collected: 5/26/04

Date Received: 5/27/04

Date(s) Analyzed: 6/12/04

Volume(s) Analyzed:

1.00 Liter(s)

Pf 1 = 3.5Pi 1 = -1.7

D.F. = 1.40

	Company	Result	MRL	Result	MRL	Data
CAS#	Compound	μg/m³	μg/m³	ppbV	ppbV	Qualifier
74-87-3	Chloromethane	0.84	0.70	0.41	0.34	
75-01-4	Vinyl Chloride	ND	0.70	ND	0.27	
106-99-0	1,3-Butadiene	ND	0.70	ND	0.32	
74-83-9	Bromomethane	ND	0.70	ND	0.18	
75-00-3	Chloroethane	ND	0.70	ND	0.27	
67-64-1	Acetone	8.8	7.0	3.7	2.9	
75-69-4	Trichlorofluoromethane	1.3	0.70	0.23	0.12	<b></b>
107-13-1	Acrylonitrile	ND	0.70	ND	0.32	
75-35-4	1,1-Dichloroethene	ND	0.70	ND	0.18	
75-09-2	Methylene chloride	ND	0.70	ND	0.20	
76-13-1	Trichlorotrifluoroethane	ND	0.70	ND	0.091	<u> </u>
75-15-0	Carbon Disulfide	ND	0.70	ND	0.22	
156-60-5	trans-1,2-Dichloroethene	ND	0.70	ND	0.18	<b></b>
75-34-3	1,1-Dichloroethane	ND	0.70	ND	0.17	<u> </u>
1634-04-4	Methyl tert-Butyl Ether	ND	0.70	ND	0.19	L
108-05-4	Vinyl Acetate	0.87	0.70	0.25	0.20	
78-93-3	2-Butanone (MEK)	1.5	0.70	0.51	0.24	
156-59-2	cis-1,2-Dichloroethene	ND	0.70	ND	0.18	
67-66-3	Chloroform	ND	0.70	ND	0.14	
107-06-2	1,2-Dichloroethane	ND	0.70	ND	0.17	
71-55-6	1,1,1-Trichloroethane	ND	0.70	ND	0.13	
71-43-2	Benzene	ND	0.70	ND	0.22	
56-23-5	Carbon Tetrachloride	ND	0.70	ND	0.11	<u> </u>

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. L = Laboratory control sample recovery not within specified limits.

### RESULTS OF ANALYSIS

Page 2 of 3

GeoSyntec Consultants, Inc. Client:

CAS Project ID: P2401137 AA-05-052604 Client Sample ID: CAS Sample ID: P2401137-011 Ascon LF/SB0202 / 31 Client Project ID:

Test Code:

EPA TO-15

Tekmar AUTOCAN/HP5973/HP6890/MS3

Instrument ID: Analyst:

Aristotle Bragasin

Sampling Media:

Summa Canister

Test Notes:

Container ID:

AC00594

Date Collected: 5/26/04

Date Received: 5/27/04

Date(s) Analyzed: 6/12/04 Volume(s) Analyzed:

1.00 Liter(s)

Pf 1 = 3.5-1.7 Pi 1 =

D.F. = 1.40

CAS#	Compound	Result μg/m³	MRL μg/m³	Result ppbV	MRL ppbV	Data Qualifier
78-87-5	1,2-Dichloropropane	ND	0.70	ND	0.15	
75-27-4	Bromodichloromethane	ND	0.70	ND	0.10	
79-01-6	Trichloroethene	ND	0.70	ND	0.13	
10061-01-5	cis-1,3-Dichloropropene	ND	0.70	ND	0.15	ļ
108-10-1	4-Methyl-2-pentanone	ND	0.70	ND	0.17	
10061-02-6	trans-1,3-Dichloropropene	ND	0.70	ND	0.15	
79-00-5	1,1,2-Trichloroethane	ND	0.70	ND	0.13	
108-88-3	Toluene	0.76	0.70	0.20	0.19	
591-78-6	2-Hexanone	ND	0.70	ND	0.17	
124-48-1	Dibromochloromethane	ND	0.70	ND	0.082	
106-93-4	1,2-Dibromoethane	ND	0.70	ND	0.091	
127-18-4	Tetrachloroethene	ND	0.70	ND	0.10	
108-90-7	Chlorobenzene	ND	0.70	ND	0.15	
100-41-4	Ethylbenzene	ND	0.70	ND	0.16	
136777-61-2	m,p-Xylenes	ND	1.4	ND	0.32	
75-25-2	Bromoform	ND	0.70	ND	0.068	
100-42-5	Styrene	ND	0.70	ND	0.16	
95-47-6	o-Xylene	ND	0.70	ND	0.16	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.70	ND	0.10	
	1,3-Dichlorobenzene	ND	0.70	ND	0.12	
541-73-1	1,4-Dichlorobenzene	ND	0.70	ND	0.12	
106-46-7 95-50-1	1,4-Dichlorobenzene	ND	0.70	ND	0.12	

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

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

Verified By: RG Date: 617104

# RESULTS OF ANALYSIS Page 3 of 3

Client:

GeoSyntec Consultants, Inc.

Client Sample ID:

AA-05-052604

Client Project ID:

Ascon LF/SB0202 / 31

CAS Project ID: P2401137

CAS Sample ID: P2401137-011

# **Tentatively Identified Compounds**

Test Code:

**EPA TO-15** 

Date Collected: 5/26/04

Instrument ID:

Tekmar AUTOCAN/HP5973/HP6890/MS3

Date Received: 5/27/04

Analyst:

Aristotle Bragasin

Date Analyzed: 6/12/04

Sampling Media:

Summa Canister

Volume(s) Analyzed:

Test Notes:

T

Container ID:

AC00594

Pi 1 = -1.7

Pf 1 = 3.5

D.F. = 1.40

1.00 Liter(s)

GC / MS Ret. Time	Compound Identification	Concentration μg/m³	Data Qualifier
5.39	Acetaldehyde	4	
9.57	Acetic Acid	10	
17.20	Hexanal	4	
18.73	Hexamethylcyclotrisiloxane (Possible Artifact)	8	
20.95	Heptanal	7	
22.72	Benzaldehyde	7	
23.85	Octanal	10	
23.99	Unidentified Siloxane (Possible Artifact)	4	
26.13	Nonanal	20	
	Unidentified Siloxane (Possible Artifact)	7	
27.19	Decanal	5	
27.82	C₃H₃O Compound	6	

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

### **RESULTS OF ANALYSIS** Page 1 of 3

**Client:** 

GeoSyntec Consultants, Inc.

Client Sample ID: AA-07-052604

Client Project ID: Ascon LF/SB0202 / 31

CAS Project ID: P2401137

CAS Sample ID: P2401137-012

Test Code:

EPA TO-15

Date Collected: 5/26/04

Instrument ID:

Tekmar AUTOCAN/HP5973/HP6890/MS3

Date Received: 5/27/04

Analyst: Sampling Media: Aristotle Bragasin Summa Canister

Date(s) Analyzed: 6/12/04 Volume(s) Analyzed:

1.00 Liter(s)

Test Notes:

Container ID:

AC00324

Pi 1 =-3.5 Pf 1 = 3.5

D.F. = 1.63

CAS#	Compound	Result μg/m³	MRL μg/m³	Result ppbV	MRL ppbV	Data Qualifier
74-87-3	Chloromethane	0.95	0.82	0.46	0.39	
75-01-4	Vinyl Chloride	ND	0.82	ND	0.32	
106-99-0	1,3-Butadiene	ND	0.82	ND	0.37	
74-83-9	Bromomethane	ND	0.82	ND	0.21	
75-00-3	Chloroethane	ND	0.82	ND	0.31	
67-64-1	Acetone	ND	8.2	ND	3.4	
75-69-4	Trichlorofluoromethane	1.2	0.82	0.22	0.15	
107-13-1	Acrylonitrile	ND	0.82	ND	0.38	
75-35-4	1,1-Dichloroethene	ND	0.82	ND	0.21	
75-09-2	Methylene chloride	ND	0.82	ND	0.23	
76-13-1	Trichlorotrifluoroethane	ND	0.82	ND	0.11	
75-15-0	Carbon Disulfide	ND	0.82	ND	0.26	
156-60-5	trans-1,2-Dichloroethene	ND	0.82	ND	0.21	
75-34-3	1,1-Dichloroethane	ND	0.82	ND	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	0.82	ND	0.23	L
108-05-4	Vinyl Acetate	ND	0.82	ND	0.23	
78-93-3	2-Butanone (MEK)	0.90	0.82	0.30	0.28	<u> </u>
156-59-2	cis-1,2-Dichloroethene	ND	0.82	ND_	0.21	
67-66-3	Chloroform	ND	0.82	ND	0.17	
107-06-2	1,2-Dichloroethane	ND	0.82	ND	0.20	
71-55-6	1,1,1-Trichloroethane	ND	0.82	ND	0.15	
71-43-2	Benzene	ND	0.82	ND	0.26	<b></b>
56-23-5	Carbon Tetrachloride	ND	0.82	ND	0.13	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. L = Laboratory control sample recovery not within specified limits.

Verified By: Rt- Date: 617104 42

#### **RESULTS OF ANALYSIS**

Page 2 of 3

Client:

GeoSyntec Consultants, Inc.

Client Sample ID:

AA-07-052604

Client Project ID:

Ascon LF/SB0202 / 31

CAS Project ID: P2401137

CAS Sample ID: P2401137-012

Test Code:

EPA TO-15

Instrument ID:

Tekmar AUTOCAN/HP5973/HP6890/MS3

Aristotle Bragasin

Analyst: Sampling Media:

Summa Canister

Test Notes:

Container ID:

AC00324

Date Collected: 5/26/04

Date Received: 5/27/04

Date(s) Analyzed: 6/12/04

Volume(s) Analyzed:

1.00 Liter(s)

-3.5 Pi 1 =

Pf 1 = 3.5

D.F. = 1.63

CAS#	Compound	Result μg/m³	MRL μg/m³	Result ppbV	MRL ppbV	Data Qualifier
78-87-5	1,2-Dichloropropane	ND	0.82	ND	0.18	
75-27-4	Bromodichloromethane	ND	0.82	ND	0.12	
79-01-6	Trichloroethene	ND	0.82	ND	0.15	
10061-01-5	cis-1,3-Dichloropropene	ND	0.82	ND	0.18	
108-10-1	4-Methyl-2-pentanone	ND	0.82	ND	0.20	
10061-02-6	trans-1,3-Dichloropropene	ND	0.82	ND	0.18	
79-00-5	1,1,2-Trichloroethane	ND	0.82	ND	0.15	
108-88-3	Toluene	ND	0.82	ND	0.22	
591-78-6	2-Hexanone	ND	0.82	ND	0.20	
124-48-1	Dibromochloromethane	ND	0.82	ND	0.096	
106-93-4	1,2-Dibromoethane	ND	0.82	ND	0.11	
127-18-4	Tetrachloroethene	ND	0.82	ND	0.12	
108-90-7	Chlorobenzene	ND	0.82	ND	0.18	<u> </u>
100-41-4	Ethylbenzene	ND	0.82	ND	0.19	
136777-61-2	m,p-Xylenes	ND	1.6	ND	0.38	
75-25-2	Bromoform	ND	0.82	ND	0.079	
100-42-5	Styrene	ND	0.82	ND	0.19	
95-47-6	o-Xylene	ND	0.82	ND	0.19	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.82	ND	0.12	ļ
541-73-1	1,3-Dichlorobenzene	ND	0.82	ND	0.14	<b></b>
106-46-7	1,4-Dichlorobenzene	ND	0.82	ND	0.14	<b></b>
95-50-1	1,2-Dichlorobenzene	ND	0.82	ND	0.14	<u> </u>

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: 6/17/04

# RESULTS OF ANALYSIS

Page 3 of 3

**Client:** 

GeoSyntec Consultants, Inc.

**Client Sample ID:** 

AA-07-052604

**Client Project ID:** 

Ascon LF/SB0202 / 31

CAS Project ID: P2401137

CAS Sample ID: P2401137-012

# **Tentatively Identified Compounds**

Test Code:

**EPA TO-15** 

Date Collected: 5/26/04

Instrument ID:

Tekmar AUTOCAN/HP5973/HP6890/MS3

Date Received: 5/27/04

Analyst:

Aristotle Bragasin

Date Analyzed: 6/12/04

Sampling Media:

Summa Canister

Volume(s) Analyzed: 1.00 Liter(s)

Test Notes:

T

Container ID:

AC00324

Pi 1 = -3.5

Pf 1 = 3.5

D.F. = 1.63

GC / MS Ret. Time	Compound Identification	Concentration μg/m³	Data Qualifier
6.28	Ethanol	20	
18.73	Hexamethylcyclotrisiloxane (Possible Artifact)	30	
23.85	Octanal	5	
23.98	Unidentified Siloxane (Possible Artifact)	10	
24.58	2-Ethyl-1-hexanol	4	
26.13	Nonanal	10	_
27.19	Unidentified Siloxane (Possible Artifact)	20	
27.83	Decanal	7	_
29.59	Unidentified Siloxane (Possible Artifact)	5	

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

Verified By: Ru Date: 17104

### RESULTS OF ANALYSIS Page 1 of 3

**Client:** 

GeoSyntec Consultants, Inc.

Client Sample ID: PNL-L3B-SFU

Client Project ID: Ascon LF/SB0202 / 31

CAS Project ID: P2401137

CAS Sample ID: P2401137-013

Test Code:

EPA TO-15

Tekmar AUTOCAN/HP5972/HP5890 II+/MS2

Analyst:

Instrument ID:

Aristotle Bragasin Summa Canister

Sampling Media:

Test Notes:

Container ID:

SC00333

Date Collected: 5/25/04

Date Received: 5/27/04 Date(s) Analyzed: 6/11/04

Volume(s) Analyzed:

0.050 Liter(s)

Pi 1 =0.6 Pf 1 = 3.7

D.F. = 1.20

CAS#	Compound	Result µg/m³	MRL μg/m³	Result ppbV	MRL ppbV	Data Qualifier
74-87-3	Chloromethane	ND	12	ND	5.8	
75-01-4	Vinyl Chloride	ND	12	ND	4.7	
106-99-0	1,3-Butadiene	ND	12	ND	5.4	
74-83-9	Bromomethane	ND	12	ND	3.1	
75-00-3	Chloroethane	ND	12	ND	4.5	
67-64-1	Acetone	ND	120	ND	51	
75-69-4	Trichlorofluoromethane	ND	12	ND	2.1	
107-13-1	Acrylonitrile	ND	12	ND	5.5	
75-35-4	1,1-Dichloroethene	ND	12	ND	3.0	
75-09-2	Methylene chloride	ND	12	ND	3.5	
76-13-1	Trichlorotrifluoroethane	ND	12	ND	1.6	<u> </u>
75-15-0	Carbon Disulfide	ND	12	ND	3.9	
156-60-5	trans-1,2-Dichloroethene	ND	12	ND	3.0	
75-34-3	1,1-Dichloroethane	ND	12	ND	3.0	
1634-04-4	Methyl tert-Butyl Ether	ND	12	ND	3.3	
108-05-4	Vinyl Acetate	ND	12	ND	3.4	
78-93-3	2-Butanone (MEK)	ND	12	ND	4.1	
156-59-2	cis-1,2-Dichloroethene	ND	12	ND	3.0	
67-66-3	Chloroform	ND	12	ND	2.5	
107-06-2	1,2-Dichloroethane	ND	12	ND	3.0	
71-55-6	1,1,1-Trichloroethane	ND	12	ND	2.2	
71-43-2	Benzene	140	12	43	3.8	
56-23-5	Carbon Tetrachloride	ND	12	ND	1.9	

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: 61704

### RESULTS OF ANALYSIS Page 2 of 3

**Client:** 

GeoSyntec Consultants, Inc.

Client Sample ID: PNL-L3B-SFU

Client Project ID: Ascon LF/SB0202 / 31

CAS Project ID: P2401137

CAS Sample ID: P2401137-013

Test Code:

**EPA TO-15** 

Instrument ID:

Tekmar AUTOCAN/HP5972/HP5890 II+/MS2

Analyst:

Aristotle Bragasin Summa Canister

Sampling Media:

Test Notes:

Container ID:

SC00333

Date Collected: 5/25/04

Date Received: 5/27/04 Date(s) Analyzed: 6/11/04

Volume(s) Analyzed:

0.050 Liter(s)

Pf 1 = 3.70.6 Pi 1 =

D.F. = 1.20

CAS#	Compound	Result µg/m³	MRL μg/m³	Result ppbV	MRL ppbV	Data Qualifier
78-87-5	1,2-Dichloropropane	η μg/m ND	12	ND	2.6	
75-27-4	Bromodichloromethane	ND	12	ND	1.8	
79-01-6	Trichloroethene	ND	12	ND	2.2	
10061-01-5	cis-1,3-Dichloropropene	ND	12	ND	2.6	
108-10-1	4-Methyl-2-pentanone	ND	12	ND	2.9	
10061-02-6	trans-1,3-Dichloropropene	ND	12	ND	2.6	
79-00-5	1,1,2-Trichloroethane	ND	12	ND	2.2	
108-88-3	Toluene	200	12	53	3.2	
591-78-6	2-Hexanone	ND	12	ND	2.9	
124-48-1	Dibromochloromethane	ND	12	ND	1.4	
106-93-4	1,2-Dibromoethane	ND	12	ND	1.6	<u> </u>
127-18-4	Tetrachloroethene	ND	12	ND	1.8	
108-90-7	Chlorobenzene	ND	12	ND	2.6	
100-41-4	Ethylbenzene	650	12	150	2.8	
136777-61-2	m,p-Xylenes	620	24	140	5.5	
75-25-2	Bromoform	ND	12	ND	1.2	
100-42-5	Styrene	ND	12	ND	2.8	
95-47-6	o-Xylene	390	12	90	2.8	
79-34-5	1,1,2,2-Tetrachloroethane	ND	12	ND	1.7	
541-73-1	1,3-Dichlorobenzene	ND	12	ND	2.0	
106-46-7	1,4-Dichlorobenzene	ND	12	ND	2.0	
95-50-1	1,2-Dichlorobenzene	ND	12	ND	2.0	<u></u>

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: 61704 46

#### RESULTS OF ANALYSIS

Page 3 of 3

**Client:** GeoSyntec Consultants, Inc.

CAS Project ID: P2401137 PNL-L3B-SFU Client Sample ID: CAS Sample ID: P2401137-013 Client Project ID: Ascon LF/SB0202 / 31

### **Tentatively Identified Compounds**

Test Code:

**EPA TO-15** 

Date Collected: 5/25/04

Instrument ID:

Tekmar AUTOCAN/HP5972/HP5890 II+/MS2

Date Received: 5/27/04

Analyst:

Aristotle Bragasin

Date Analyzed: 6/11/04

Sampling Media:

Summa Canister

Volume(s) Analyzed: 0.050 Liter(s)

Test Notes:

T

Container ID:

SC00333

Pf 1 = 3.7Pi 1 = 0.6

D.F. = 1.20

GC/MS	Compound Identification	Concentration	Data
Ret. Time		μg/m³	Qualifier
11.17	Methylcyclopentane	50	
13.53	Dimethylcyclopentane Isomer	50	
13.65	Dimethylcyclopentane Isomer	40	
13.77	Dimethylcyclopentane Isomer	60	
15.32	Methylcyclohexane	70	
16.50	Trimethylcyclopentane Isomer	60	
17.92	Dimethylcyclohexane Isomer	50	
20.46	Trimethylcyclohexane Isomer	90	
23.34	C <sub>9</sub> H <sub>16</sub> Compound	50	
23.58	C <sub>10</sub> H <sub>22</sub> Branched Alkane + Unidentified Oxygenated Compound	50	
24.14	3-Ethyltoluene	50	
24.98	1,2,4-Trimethylbenzene	50	
25.64	1,2,3-Trimethylbenzene	70	
28.57	Naphthalene	40	
29.55	C <sub>14</sub> H <sub>30</sub> Branched Alkane	40	IL

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

Verified By: RC Date: 617104

### RESULTS OF ANALYSIS Page 1 of 3

Client:

GeoSyntec Consultants, Inc.

Client Sample ID: Method Blank

Client Project ID:

Ascon LF/SB0202 / 31

CAS Project ID: P2401137 CAS Sample ID: P040610-MB

Test Code:

**EPA TO-15** 

Instrument ID:

Tekmar AUTOCAN/HP5972/HP5890 II+/MS2

Analyst:

Test Notes:

Michelle Sakamoto/Aristotle Bragasin

Sampling Media:

Summa Canister

Date Collected: NA Date Received: NA Date(s) Analyzed: 6/10/04

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	<u> </u>
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	<u> </u>
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	<u> </u>
107-06-2	1,2-Dichloroethane	ND	0.50	ND	0.12	
	1,1,1-Trichloroethane	ND	0.50	ND	0.092	
71-55-6	Benzene	ND	0.50	ND	0.16	
71-43-2 56-23-5	Carbon Tetrachloride	ND 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: 6/17/04

### RESULTS OF ANALYSIS Page 2 of 3

GeoSyntec Consultants, Inc. Client:

CAS Project ID: P2401137 **Method Blank** Client Sample ID: CAS Sample ID: P040610-MB Client Project ID: Ascon LF/SB0202 / 31

Test Code:

EPA TO-15

Instrument ID:

Tekmar AUTOCAN/HP5972/HP5890 II+/MS2

Analyst:

Michelle Sakamoto/Aristotle Bragasin

Sampling Media:

Summa Canister

Date Collected: NA

Date Received: NA

Date(s) Analyzed: 6/10/04

Volume(s) Analyzed:

1.00 Liter(s)

Test Notes:

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	<u> </u>
95-47-6	o-Xylene	ND	0.50	ND	0.12	ļ
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	<u> </u>
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: 6/17/04

### RESULTS OF ANALYSIS

Page 3 of 3

**Client:** 

GeoSyntec Consultants, Inc.

Client Sample ID:

Method Blank

Client Project ID:

Ascon LF/SB0202 / 31

CAS Project ID: P2401137

CAS Sample ID: P040610-MB

### **Tentatively Identified Compounds**

Test Code:

**EPA TO-15** 

Instrument ID:

Tekmar AUTOCAN/HP5972/HP5890 II+/MS2

Analyst:

Test Notes:

Michelle Sakamoto/Aristotle Bragasin

Sampling Media:

Summa Canister

Date Collected: NA

Date Received: NA

Date Analyzed: 6/10/04

Volume(s) Analyzed:

1.00 Liter(s)

D.F. = 1.00

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

# RESULTS OF ANALYSIS

Page 1 of 3

Client:

GeoSyntec Consultants, Inc.

Client Sample ID: Method Blank

Client Project ID: Ascon LF/SB0202 / 31

CAS Project ID: P2401137 CAS Sample ID: P040611-MB

Test Code:

**EPA TO-15** 

Instrument ID:

Tekmar AUTOCAN/HP5973/HP6890/MS3

Analyst:

Rusty Bravo/Wade Henton

Sampling Media:

Summa Canister

Test Notes:

Date Collected: NA Date Received: NA Date(s) Analyzed: 6/11/04

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	2.1	<b> </b>
67-64-1	Acetone	ND	5.0	ND	0.089	1
75-69-4	Trichlorofluoromethane	ND	0.50	ND ND	0.03	
107-13-1	Acrylonitrile	ND	0.50	ND	0.13	<b> </b>
75-35-4	1,1-Dichloroethene	ND	0.50	ND	0.13	1
75-09-2	Methylene chloride	ND	0.50	ND	0.065	┨───
76-13-1	Trichlorotrifluoroethane	ND	0.50	ND	0.003	╫
75-15-0	Carbon Disulfide	ND_	0.50	ND	0.10	-
156-60-5	trans-1,2-Dichloroethene	ND_	0.50	ND ND	0.13	<del> </del>
75-34-3	1,1-Dichloroethane	ND ND	0.50	ND ND	0.12	L
1634-04-4	Methyl tert-Butyl Ether	ND	0.50	ND	0.14	<del> </del>
108-05-4	Vinyl Acetate	ND_	0.50	ND ND	0.17	
78-93-3	2-Butanone (MEK)	ND	0.50		0.17	<u> </u>
156-59-2	cis-1,2-Dichloroethene	ND_	0.50	ND ND	0.10	<u> </u>
67-66-3	Chloroform	ND	0.50	ND ND	0.10	_
107-06-2	1,2-Dichloroethane	ND_	0.50	ND ND	0.092	_
71-55-6	1,1,1-Trichloroethane	ND	0.50	_	0.16	-}
71-43-2	Benzene	ND_	0.50	ND ND	0.080	-
56-23-5	Carbon Tetrachloride	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.

L = Laboratory control sample recovery not within specified limits.

Verified By: Real Date: Date:

# RESULTS OF ANALYSIS

Page 2 of 3

GeoSyntec Consultants, Inc. **Client:** 

Method Blank Client Sample ID:

Ascon LF/SB0202 / 31 Client Project ID:

CAS Project ID: P2401137 CAS Sample ID: P040611-MB

Test Code:

**EPA TO-15** 

Instrument ID:

Tekmar AUTOCAN/HP5973/HP6890/MS3

Analyst:

Rusty Bravo/Wade Henton

Sampling Media:

Summa Canister

Test Notes:

Date Collected: NA Date Received: NA Date(s) Analyzed: 6/11/04

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 <b>-</b> 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	<b> </b>
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ND	0.11	<b></b>
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	<b> </b>
79-00-5	1,1,2-Trichloroethane	ND	0.50	ND	0.092	<b></b>
108-88-3	Toluene	ND	0.50	ND	0.13	<b>1</b>
591-78-6	2-Hexanone	ND	0.50	ND	0.12	<u> </u>
124-48-1	Dibromochloromethane	ND	0.50	ND	0.059	<b>↓</b>
106-93-4	1,2-Dibromoethane	ND	0.50	ND	0.065	<u> </u>
127-18-4	Tetrachloroethene	ND	0.50	ND	0.074	<u> </u>
108-90-7	Chlorobenzene	ND	0.50	ND	0.11	
108-90-7	Ethylbenzene	ND	0.50	ND	0.12	<u> </u>
	m,p-Xylenes	ND	1.0	ND	0.23	<b></b>
136777-61-2	Bromoform	ND	0.50	ND	0.048	<b></b>
75-25-2	Styrene	ND	0.50	ND	0.12	<b></b>
100-42-5		ND	0.50	ND	0.12	
95-47-6	o-Xylene 1,1,2,2-Tetrachloroethane	ND	0.50	ND	0.073	
79-34-5	1,3-Dichlorobenzene	ND	0.50	ND	0.083	
541-73-1		ND	0.50	ND	0.083	
106-46-7 95-50-1	1,4-Dichlorobenzene 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: Ro Date: 617104

# RESULTS OF ANALYSIS Page 3 of 3

**Client:** 

GeoSyntec Consultants, Inc.

**Client Sample ID:** 

Method Blank

**Client Project ID:** 

Ascon LF/SB0202 / 31

CAS Project ID: P2401137

CAS Sample ID: P040611-MB

## **Tentatively Identified Compounds**

Test Code:

EPA TO-15

Instrument ID:

Tekmar AUTOCAN/HP5973/HP6890/MS3

Analyst:

Test Notes:

Rusty Bravo/Wade Henton

Sampling Media:

Summa Canister

Date Collected: NA

Date Received: NA

Date Analyzed: 6/11/04

Volume(s) Analyzed:

1.00 Liter(s)

D.F. = 1.00

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

## Columbia Analytical Services, Inc. Sample Acceptance Check Form

			2	Sample Acceptance						
Client	: GeoSyntec Con	sultant	s, Inc.		Work	order: P2	2401137			<del></del>
Project	Ascon LF/SB02	202 / 31								<del></del>
5	Sample(s) receive	ed on:	5/27/04	Date ope		5/27/04	by:	SM		
<i>lote:</i> This	form is used for all sar	nples rece	eived by CAS. The us	se of this form for custody	seals is strictly	meant to indicate pr	resence/absenc	e and not as a	n indication	on of
ompliance	e or nonconformity. Th	ermal pre	eservation and pH wil	l only be evaluated either	at the request o	f the client or as requ	aired by the me	ethod/SOP.	NI.	INT / A
								Yes	No	<u>N/A</u>
1	Were custody sea	als on o	outside of cooler/E	Box?					$\boxtimes$	
	Location of sea	l(s)?				Se	aling Lid?			X
	Were signature	and da	te included?							X
	Were seals inta									X
	Were custody sea	als on o	utside of sample o	container?					$\boxtimes$	
	Location of sea					Se	ealing Lid?			X
	Were signature	-	te included?							X
	Were seals inta									X
2			s properly marked	d with client sample I	D?			X		
3			arrive in good cor					$\boxtimes$		
4			papers used and f					$\boxtimes$		
5				agree with custody pa	apers?			X		
6			ceived adequate fo					X		
7			cified holding time					X		
8				vation) of cooler at re	eceipt adhere	ed to?				X
			Cooler Temperatu		°C					
			Blank Temperatu		°C					
9	Is pH (acid) <b>pre</b>	servatio	on necessary, acc	ording to method/SO	P or Client s	pecified informa	tion?		X	
•				itted samples are <b>pH</b> (						$\boxtimes$
				bsence of air bubbles						$\boxtimes$
				t the analyst check the		and if necessary	alter it?			X
10	Tubes:		he tubes capped a							X
			ney contain moist							$\boxtimes$
11	Badges:			ly capped and intact?						X
				eparated and individu		and intact?				$\boxtimes$
			1				D.	ceipt / Prese	ryation	
	Lab Sample ID		Required	pH (as received, if requ		A Headspace esence/Absence)	Re	Commer		
			pН	(as received, in requ	anca)   Crit		<del></del>			
P24011						NA NA		<del></del>		
P24011 P24011						NA				
	137-003		<del>                                     </del>			NA				
IL	137-005					NA				
1	137-006					NA				
ii	137-007					NA NA				
1L	137-008 137-009		<del> </del>			NA NA				
	137-009					NA				
14										

401137SR.XLS - cooler - Page 1 of 2 5/28/04 5:17 PM

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

# Columbia Analytical Services, Inc. Sample Acceptance Check Form

Client: GeoSyntec Consultants, Inc.	Work order:	<u>P</u>	2401137		
Project: Ascon LF/SB0202 / 31	5 107	1/0.4	lar ii	CM	M-2
Sample(s) received on: 5/27/04	Date opened: 5/27	704	by:	21/1	····

Lab Sample ID	Required pH	pH (as received, if required)	VOA Headspace (Presence/Absence)	Receipt / Preservation Comments
D2401127 011			NA	
P2401137-011			NA	
P2401137-012 P2401137-013			NA	

Simi Valley, California 93065 Air Quality Laboratory (805) 526-7270 Phone (805) 526-7161 Services Analytical Columbia

Fax

An Employee - Owned Company

2665 Park Center Drive, Suite D

Analytical Service Request Chain of Custody Record

CAS Project No.

ための なてな かとな 27 C 201 726 90 なるの 0 <u>و</u> 35 Additional Comments Payoust specific instructions) (e.g., preservative or Cooler / Blank Comments Temp\_ Supposed 10 mostices Days (10 mostices Days)

At H. 18th John Days (10 mostices Days) 15 J 0 100/100 Analysis Date: -01 × 21-0X La Vona X Sample Volume (Liters) 2 ي Beach 01865 PUTIO 01612 01180/ISCUCB33 Oldard 01678 01655 09610 0159 いない 01316 トニカロ Flow Controller (Serial #) 01321 010 Received by: (Signature) Received py: (Signature) Received by: (Signature) SBOLOZ/31 Sampling Location + 1712 ferra 147 Project Number SBC1202 [31 1707G 27043 01577 Container ID (Serial #) 00034 99810 01530 00070 90070 0.005 22020 37HB 19 24 19 24 Project Name Ascen P.O. #/Billing Information Sall Flux Sunna Type of Sample Time: Time: Culme Date: 5127 Lab Sample No. 6 0 Huntrayton Bouch, CAUTOUS Fax (714) 969-0820 V  $\mathcal{C}$ Date: Email Mreundon (a) Grosyntec, com . Sampler (Signature) Clien/Address GeoSyntec St. #150 7:30-3:30 5/25/04 730-3:30 Time Collected 050 512504 5/26/04 Date Collected Phone (714)969-0800 Relinquished by (Senature) 44-04-062604 44-05-052604 40-02-052604 44-03-052604 AA-05-052504 409250-10-114 44-04-0526-04 AR-04-052504 44-07-052504 Relinquished by: (Signature) OM - L3B3-SFW AA-03-052504 AA-02-052504 Relinquished by: (Signature Contact mike くろうろ 49-01-052504 Client Sample ID

### ATTACHMENT C

## LABORATORY REPORTS

Phase VIII- Pit F Downhole Flux Testing/Control Agent Testing



## LABORATORY REPORT

Client:

GEOSYNTEC CONSULTANTS, INC.

Date of Report:

07/15/04

Address:

2100 Main Street, Suite 150

Date Received:

06/28/04

Huntington Beach, CA 92648

CAS Project No:

P2401374

Contact:

Mr Mike Reardon

Purchase Order:

SB0202-31H

Client Project ID: Ascon LF/SB0202-31H

One (1) Tedlar Bag Sample labeled:

"PNL-F5-13.5-S"

The sample was received at the laboratory under chain of custody on June 28, 2004. The sample was 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 sample at the time that it was received at the laboratory.

# Sulfur Analysis

The sample was analyzed for twenty sulfur compounds per modified 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

GC-VOA Team Leader

Reviewed and Approved:

Wade Henton Air Quality Laboratory

1/1/2

### RESULTS OF ANALYSIS Page 1 of 1

Client:

GeoSyntec Consultants, Inc.

Client Sample ID:

PNL-F5-13.5-S

Client Project ID:

Ascon LF/SB0202-31H

CAS Project ID: P2401374

CAS Sample ID: P2401374-001

Test Code:

ASTM D 5504-01

Instrument ID:

Analyst:

Zheng Wang/Wade Henton

Sampling Media:

Tedlar Bag

Test Notes:

HP5890 II/GC5/SCD

Date Received: 6/28/04 Date Analyzed: 6/28/04

Date Collected: 6/28/04

Time Collected: 09:28

Time Analyzed: 15:53

Volume(s) Analyzed:

1.0 ml(s)

D.F.=1.00

		Result	MRL	Result	MRL	Data
C	Compound					Qualifier
CAS#	Compound	μg/m³	$\mu g/m^3$	ppbV	ppbV	
7783-06-4	Hydrogen Sulfide	10.0	7.00	7.18	5.00	
463-58-1	Carbonyl Sulfide	82.0	12.0	33.4	5.00	<u> </u>
74-93-1	Methyl Mercaptan	ND	9.80	ND	5.00	<b> </b>
	Ethyl Mercaptan	ND	13.0	ND	5.00	<b></b>
75-08-1	Dimethyl Sulfide	ND	13.0	ND	5.00	<b> </b>
75-18-3	Carbon Disulfide	14.4	7.80	4.62	2.50	<b></b>
75-15-0	Isopropyl Mercaptan	ND	16.0	ND	5.00	
75-33-2	tert-Butyl Mercaptan	ND	18.0	ND	5.00	<u> </u>
75-66-1		ND	16.0	ND	5.00	<u> </u>
107-03-9	n-Propyl Mercaptan	ND	16.0	ND	5.00	
624-89-5	Ethyl Methyl Sulfide	ND	17.0	ND	5.00	
110-02-1	Thiophene	ND	18.0	ND	5.00	<u> </u>
513-44-0	Isobutyl Mercaptan	ND	18.0	ND	5.00	l
352-93-2	Diethyl Sulfide	ND	18.0	ND	5.00	
109-79-5	n-Butyl Mercaptan	ND	9.60	ND	2.50	
624-92-0	Dimethyl Disulfide	ND	20.0	ND	5.00	
616-44-4	3-Methylthiophene		18.0	ND	5.00	
110-01-0	Tetrahydrothiophene	ND ND	23.0	ND	5.00	
638-02-8	2,5-Dimethylthiophene	ND ND	23.0	ND	5.00	
872-55-9	2-Ethylthiophene	ND ND		ND	2.50	-
110-81-6	Diethyl Disulfide	ND	12.0	IL ND	1 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:	KuH	Date:Date	Page No.:
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### RESULTS OF ANALYSIS

Page 1 of 1

Client:

GeoSyntec Consultants, Inc.

Client Sample ID:

Method Blank

Client Project ID:

Ascon LF/SB0202-31H

CAS Project ID: P2401374

CAS Sample ID: P040628-MB

Test Code:

ASTM D 5504-01

Instrument ID:

HP5890 II/GC5/SCD

Analyst:

Zheng Wang/Wade Henton

Sampling Media:

Tedlar Bag

Test Notes:

Date Collected: NA Time Collected: NA

Date Received: NA Date Analyzed: 6/28/04

Time Analyzed: 10:46

Volume(s) Analyzed:

 $1.0 \, \text{ml(s)}$ 

D.F.=1.00

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

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:	KuH	Date:	7113104 Page No.:
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# Columbia Analytical Services, Inc.

			mpia Analytical Scivic						
			nple Acceptance Check	ork order:	P240137	<b>'</b> 4			
Client: <u>GeoSy</u>	yntec Consultants	i, Inc.	***	ork order.					
oject: Ascon	LF/SB0202-31H	1	Date opened:	6/28/0	)4 by:		SM		
Sample	(s) received on:	6/28/04	f this form for custody seals is st	rictly meant to ind	icate presence/	- absence :	and not as a	n indicatio	n of
<u>te:</u> This form is u	sed for all samples rece	ived by CAS. The use o	ly be evaluated either at the requ	est of the client or	as required by	the meth	nod/SOP.		
npliance or nonce	onformity. Thermal pre-	servation and pri will on	Ty be evaluated evilles as ,				<u>Yes</u>	<u>No</u>	N/A
		( ide of applor/Roy	.9					$\boxtimes$	
		utside of cooler/Box	::		Sealing l	Lid?			X
	ation of seal(s)?	10			<del></del>				X
	e signature and dat	te included?							$\boxtimes$
Wei	re seals intact?		tainari)					$\boxtimes$	
		utside of sample cor	namer:		Sealing	Lid?			X
	ation of seal(s)?								X
	re signature and da	te included?							$\times$
We	re seals intact?	, , , , ,	with aliant cample ID?				$\times$		
2 Were	sample container	s properly marked v	vith client sample ID?				$\boxtimes$		
3 Did $s$	ample containers	arrive in good cond	ition?				$\times$		
4 Were	chain-of-custody	papers used and fill	ed out?				$\boxtimes$		
5 Did s	sample container l	abels and/or tags ag	ree with custody papers?				$\boxtimes$		
6 Was	sample volume red	ceived adequate for	analysis?				$\times$		
7 Are s	samples within spec	cified holding times	/	dhered to <sup>9</sup>					$\times$
8 Was	proper temperatu	re (thermal preserva	tion) of cooler at receipt a	C					
	,	Cooler Temperature		°C					
		Blank Temperature	1 12 %	-	nformation?			X	
9 Is pł	H (acid) <b>preservati</b>	on necessary, accor	ding to method/SOP or Cl	reserved)					$\times$
Is tl	nere a client indicat	tion that the submitte	ed samples are <b>pH</b> (acid) p	710001 ( 0 0 1					X
We	re <u>VOA vials</u> chec	ked for presence/abs	sence of air bubbles?	e nH and if neo	cessary alter	it'?			$\boxtimes$
Doe	es the client/method	d/SOP require that the	he analyst check the samp	e pri une <u>mane</u>					$\times$
10 <b>Tub</b>		the tubes capped and							$\times$
		hey contain moistur							$\times$
11 Bad	lges: Are	the badges properly	capped and intact:	nned and intac	t?				$\boxtimes$
	Are	dual bed badges sep	parated and individually ca	pped dire iii					
Lab	Sample ID	Required	рН	VOA Headsp	State and the state of the stat	Re	ceipt / Pre Comm	servatioi •nts	
		pН	(as received, if required)	(Presence/Abso	ence)				
P2401374-00	1			NA		<u></u>			
				+					
				1					

6/28/04 3:47 PM

Page

Air Quality Laboratory

2665 Park Center Drive, Suite D

Simi Valley, California 93065 (805) 526-7270 Phone (805) 526-7161

Columbia Analytical Services<sup>nc.</sup>

Analytical Service Request Chain of Custody Record

Additional Comments htsiohed (e.g., preservative or specific instructions) Cooler / Blank Comments Temp\_ CAS Project No. State All Survey of Tunamound Tune Species Tunes (10 Houselest Tunes Species (10 Houselest Tunes Species Tunes (10 Houselest T 0/5/ ho/86/ 70/2 Time: 10-88-01 Analysis 53,23 ds Harry Malmal Sample Volume (Liters) TUMOS Sumpling Location for Beach, CA Flow Controller (Serial #) Received by: (Signature Received by: (Signati グランシン Container ID (Serial #) 38020 - 31H SP200-317 Geo-Syryed P.O. #/Billing Information Ascon UF 6-28-04 120J Project Number DOWN LAND Project Name 1555 Type of Sample かって Time: Lab Sample No. Fax (THH) 964-0920 Date: Cleosyntee Consulternis Huntington Beachs (A Fax geosyntec. Corry Time Collected 9:28 2100 main 4. #180 Sampley (Signature) 56 22 34 Date / Collected 1918-10000 ナジグス NI Ke Reardon An Employee - Owned Company GA TRANSTA Email Myreagan (W Relinquished by: (Signature) PUL. FF. 135.5 Relimposhed by: (Signature) Client Sample ID THE Client/Address



### LABORATORY REPORT

Client:

GEOSYNTEC CONSULTANTS, INC.

Date of Report:

07/15/04

Address:

2100 Main Street, Suite 150

Date Received:

06/28/04

Huntington Beach, CA 92648

CAS Project No:

P2401376

Contact:

Mr. Mike Reardon

Purchase Order:

SB0202-31H

Client Project ID: Ascon LF/SB0202-31H

One (1) 1.0 Liter Canister Sample labeled:

"PNL-F5-13.5-T"

The sample was received at the laboratory under chain of custody on June 28, 2004. The sample was 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 sample at the time that it was received at the laboratory.

## C1 through C6 Hydrocarbon Analysis

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

# Volatile Organic Compound Analysis

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

Reviewed and Approved:

Spell Bragion

Wade Henton GC-VOA Team Leader

Reviewed and Approved:

Air Quality Laboratory

Aristotle Bragasin **Analytical Chemist** Air Quality Laboratory CAS Project No:

P2401376

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

#### RESULTS OF ANALYSIS

Page 1 of 1

Client:

GeoSyntec Consultants, Inc.

**Client Sample ID:** 

PNL-F5-13.5-T

Client Project ID:

Ascon LF/SB0202-31H

CAS Project ID: P2401376

CAS Sample ID: P2401376-001

Test Code:

Modified EPA TO-3

Instrument ID:

HP5890II/GC8/FID

Analyst:

Wade Henton/Regan Lau

Sampling Media:

1.0 Liter Canister

Date Collected: 6/28/04

Date Received: 6/28/04 Date Analyzed: 6/30/04

Volume(s) Analyzed:

10.0

1.0 ml

Test Notes:

Pi 1 =

0.5

Pf 1 =

D.F. = 1.63

	Result	MRL	Data
Compound	ppmV	ppmV	Qualifier
Methane	59	0.81	
C <sub>2</sub> as Ethane	ND	0.81	
C <sub>3</sub> as Propane	ND	0.81	
C <sub>4</sub> as n-Butane	ND	0.81	
C <sub>5</sub> as n-Pentane	ND	0.81	
C <sub>6</sub> as n-Hexane	ND	0.81	
C <sub>6</sub> + as n-Hexane	22	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: RG Date: 113/04

#### **RESULTS OF ANALYSIS**

Page 1 of 1

Client:

GeoSyntec Consultants, Inc.

**Client Sample ID:** 

PNL-F5-13.5-T

Client Project ID:

Ascon LF/SB0202-31H

CAS Project ID: P2401376

CAS Sample ID: P2401376-001DUP

Test Code:

Modified EPA TO-3

Instrument ID:

HP5890II/GC8/FID

Analyst:

Wade Henton/Regan Lau

Sampling Media:

1.0 Liter Canister

Date Received: 6/28/04

Date Analyzed: 6/30/04

Date Collected: 6/28/04

Volume(s) Analyzed:

1.0 ml

Test Notes:

Pi 1 =

0.5

Pf 1 =

10.0

D.F. = 1.63

	Result	MRL	Data Qualifier
Compound	ppmV	ppmV	Quantitor
Methane	59	0.81	
C <sub>2</sub> as Ethane	ND	0.81	
C <sub>3</sub> as Propane	ND	0.81	
C <sub>4</sub> as n-Butane	ND	0.81	
C <sub>5</sub> as n-Pentane	ND	0.81	
C <sub>6</sub> as n-Hexane	ND	0.81	
C <sub>6</sub> + as n-Hexane	24	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.

# RESULTS OF ANALYSIS Page 1 of 1

Client:

GeoSyntec Consultants, Inc.

Client Sample ID:

Method Blank

Client Project ID:

Ascon LF/SB0202-31H

CAS Project ID: P2401376

CAS Sample ID: P040630-MB

Test Code:

Modified EPA TO-3

Instrument ID:

HP5890II/GC8/FID

Analyst:

Wade Henton/Regan Lau

Sampling Media:

1.0 Liter Canister

Date Collected: NA
Date Received: NA

Date Analyzed: 6/30/04

Volume(s) Analyzed:

1.0 ml

Test Notes:

D.F. = 1.00

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

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

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

### **RESULTS OF ANALYSIS** Page 1 of 3

Client:

GeoSyntec Consultants, Inc.

Client Sample ID: PNL-F5-13.5-T

Client Project ID: Ascon LF/SB0202-31H

CAS Project ID: P2401376

CAS Sample ID: P2401376-001

Test Code:

Modified EPA TO-15

Instrument ID:

Tekmar AUTOCAN/HP5972/HP5890 II+/MS2

Analyst:

Aristotle Bragasin

Sampling Media:

1.0 Liter Canister

Test Notes:

Container ID:

ISC00001

Date Collected: 6/28/04

Date Received: 6/28/04

Date(s) Analyzed: 6/30/04

Volume(s) Analyzed:

0.10 Liter(s)

Pi 1 =0.5 Pf 1 = 10.0

D.F. = 1.63

CAS#	Compound	Result µg/m³	MRL μg/m³	Result ppbV	MRL ppbV	Data Qualifier
74-87-3	Chloromethane	ND	8.2	ND	3.9	
75-01-4	Vinyl Chloride	ND	8.2	ND	3.2	
106-99-0	1,3-Butadiene	ND	8.2	ND	3.7	
74-83-9	Bromomethane	ND	8.2	ND	2.1	
75-00-3	Chloroethane	ND	8.2	ND	3.1	
67-64-1	Acetone	ND	82	ND	34	
75-69-4	Trichlorofluoromethane	ND	8.2	ND	1.5	
107-13-1	Acrylonitrile	ND	8.2	ND	3.8	
75-35-4	1,1-Dichloroethene	ND	8.2	ND	2.1	
75-09-2	Methylene chloride	ND	8.2	ND	2.3	
76-13-1	Trichlorotrifluoroethane	ND	8.2	ND	1.1	
75-15-0	Carbon Disulfide	ND	8.2	ND	2.6	ļ
156-60-5	trans-1,2-Dichloroethene	ND	8.2	ND	2.1	<b> </b>
75-34-3	1,1-Dichloroethane	ND	8.2	ND	2.0	<u> </u>
1634-04-4	Methyl tert-Butyl Ether	ND	8.2	ND	2.3	<b> </b>
108-05-4	Vinyl Acetate	ND	16	ND	4.6	<b> </b>
78-93-3	2-Butanone (MEK)	ND	8.2	ND	2.8	
156-59-2	cis-1,2-Dichloroethene	ND	8.2	ND	2.1	<u> </u>
67-66-3	Chloroform	ND	8.2	ND	1.7	ļ
107-06-2	1,2-Dichloroethane	ND	8.2	ND	2.0	<u> </u>
71-55-6	1,1,1-Trichloroethane	ND	8.2	ND	1.5	<b></b>
71-43-2	Benzene	ND	8.2	ND	2.6	<u> </u>
56-23-5	Carbon Tetrachloride	ND	8.2	ND	1.3	<u></u>

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: 71131

# **RESULTS OF ANALYSIS**

Page 2 of 3

**Client:** 

GeoSyntec Consultants, Inc.

Client Sample ID: PNL-F5-13.5-T

Client Project ID: Ascon LF/SB0202-31H

CAS Project ID: P2401376

CAS Sample ID: P2401376-001

Test Code:

Instrument ID:

Analyst:

Aristotle Bragasin 1.0 Liter Canister

Sampling Media: Test Notes:

Container ID:

ISC00001

Modified EPA TO-15

Tekmar AUTOCAN/HP5972/HP5890 II+/MS2

Date Received: 6/28/04

Date(s) Analyzed: 6/30/04 Volume(s) Analyzed:

Date Collected: 6/28/04

0.10 Liter(s)

0.5 Pi 1 =

Pf 1 = 10.0

D.F. = 1.63

CAS#	Compound	Result µg/m³	MRL μg/m³	Result ppbV	MRL ppbV	Data Qualifier
78-87-5	1,2-Dichloropropane	ND	8.2	ND	1.8	
75-27-4	Bromodichloromethane	ND	8.2	ND	1.2	
79-01-6	Trichloroethene	ND	8.2	ND	1.5	
10061-01-5	cis-1,3-Dichloropropene	ND	8.2	ND	1.8	<b></b>
108-10-1	4-Methyl-2-pentanone	ND	8.2	ND	2.0	
10061-02-6	trans-1,3-Dichloropropene	ND	8.2	ND	1.8	<u> </u>
79-00-5	1,1,2-Trichloroethane	ND	8.2	ND	1.5	<u> </u>
108-88-3	Toluene	ND	8.2	ND	2.2	
591-78-6	2-Hexanone	ND	8.2	ND	2.0	
124-48-1	Dibromochloromethane	ND	8.2	ND	0.96	ļ
106-93-4	1,2-Dibromoethane	ND	8.2	ND	1.1	<u> </u>
127-18-4	Tetrachloroethene	ND	8.2	ND	1.2	
108-90-7	Chlorobenzene	ND	8.2	ND	1.8	
100-41-4	Ethylbenzene	ND	8.2	ND	1.9	<u> </u>
136777-61-2	m,p-Xylenes	ND	16	ND	3.8	_
75-25-2	Bromoform	ND	8.2	ND	0.79	<u> </u>
100-42-5	Styrene	ND	8.2	ND	1.9	<b>.</b>
95-47-6	o-Xylene	ND	8.2	ND	1.9	<b></b>
79-34-5	1,1,2,2-Tetrachloroethane	ND	8.2	ND	1.2	<b></b>
541-73-1	1,3-Dichlorobenzene	ND	8.2	ND	1.4	
106-46-7	1,4-Dichlorobenzene	ND	8.2	ND	1.4	<b></b>
95-50-1	1,2-Dichlorobenzene	ND	8.2	ND	1.4	<u> </u>

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: 7/13/00

### RESULTS OF ANALYSIS Page 3 of 3

Client:

GeoSyntec Consultants, Inc.

Client Sample ID: PNL-F5-13.5-T

CAS Project ID: P2401376

Ascon LF/SB0202-31H Client Project ID:

CAS Sample ID: P2401376-001

## **Tentatively Identified Compounds**

Test Code:

Modified EPA TO-15

Date Collected: 6/28/04

Instrument ID:

Tekmar AUTOCAN/HP5972/HP5890 II+/MS2

Date Received: 6/28/04

Analyst:

Aristotle Bragasin

Date Analyzed: 6/30/04

Sampling Media:

1.0 Liter Canister

Volume(s) Analyzed:

0.10 Liter(s)

Test Notes:

T

Container ID:

ISC00001

Pi 1 =0.5 Pf 1 = 10.0

D.F. = 1.63

GC / MS Ret. Time	Compound Identification	Concentration μg/m³	Data Qualifier
15.38	Trimethylcyclopentane Isomer	3,000	
16.14	Trimethylcyclopentane Isomer	1,000	
17.81	Tetramethylcyclopentane Isomer	2,000	
18.94	C <sub>9</sub> H <sub>18</sub> Compound	3,000	
19.98	C <sub>9</sub> H <sub>20</sub> Compound	1,000	
20.45	Trimethylcyclohexane Isomer	2,000	
20.84	Dimethylcyclopentane Isomer	2,000	
21.03	Trimethylcyclohexane Isomer	2,000	
21.73	C <sub>9</sub> H <sub>18</sub> Compound	1,000	
22.72	C <sub>10</sub> H <sub>20</sub> Compound	2,000	
23.34	C <sub>9</sub> H <sub>16</sub> Compound	2,000	
23.57	C <sub>2</sub> H <sub>18</sub> Compound + C <sub>10</sub> H <sub>20</sub> Compound	1,000	
24.45	C <sub>10</sub> H <sub>20</sub> Compound	3,000	
24.83	C <sub>10</sub> H <sub>20</sub> Compound	1,000	
25.64	$C_{10}H_{20}$ Compound + $C_{11}H_{22}$ Compound	1,000	

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

Verified By: Date: 11304
Page No.

### RESULTS OF ANALYSIS Page 1 of 3

Client:

GeoSyntec Consultants, Inc.

Client Sample ID: Method Blank

Client Project ID: Ascon LF/SB0202-31H

CAS Project ID: P2401376 CAS Sample ID: P040630-MB

Test Code:

Modified EPA TO-15

Instrument ID:

Tekmar AUTOCAN/HP5972/HP5890 II+/MS2

Analyst:

Aristotle Bragasin

Sampling Media:

1.0 Liter Canister

Test Notes:

Date Collected: NA Date Received: NA Date(s) Analyzed: 6/30/04

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	1.0	ND	0.28	
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	
71-33-6	Benzene	ND	0.50	ND	0.16	
56-23-5	Carbon Tetrachloride	ND	0.50	ND	0.080	<u> </u>

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: 26 Date: 71304

### **RESULTS OF ANALYSIS**

Page 2 of 3

Client:

GeoSyntec Consultants, Inc.

Client Sample ID: Method Blank

Client Project ID: Ascon LF/SB0202-31H

CAS Project ID: P2401376

CAS Sample ID: P040630-MB

Test Code:

Modified EPA TO-15

Instrument ID:

Tekmar AUTOCAN/HP5972/HP5890 II+/MS2

Analyst:

Aristotle Bragasin

Sampling Media:

1.0 Liter Canister

Date Collected: NA Date Received: NA Date(s) Analyzed: 6/30/04

Volume(s) Analyzed:

1.00 Liter(s)

Test Notes:

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	<b> </b>
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	<b></b>
136777-61-2	m,p-Xylenes	ND	1.0	ND	0.23	
75-25-2	Bromoform	ND	0.50	ND	0.048	ļ
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	<b> </b>
106-46-7	1,4-Dichlorobenzene	ND	0.50	ND	0.083	
95-50-1	1,2-Dichlorobenzene	ND	0.50	ND	0.083	<u></u>

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

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

Verified By: Date: Date: 10

# RESULTS OF ANALYSIS Page 3 of 3

Client:

GeoSyntec Consultants, Inc.

Client Sample ID:

Method Blank

Client Project ID:

Ascon LF/SB0202-31H

CAS Project ID: P2401376

CAS Sample ID: P040630-MB

## **Tentatively Identified Compounds**

Test Code:

Modified EPA TO-15

Date Collected: NA

Instrument ID:

Tekmar AUTOCAN/HP5972/HP5890 II+/MS2

Date Received: NA

Analyst:

Aristotle Bragasin

Date Analyzed: 6/30/04

Sampling Media:

1.0 Liter Canister

Volume(s) Analyzed: 1.00 Liter(s)

Test Notes:

D.F. = 1.00

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

#### Columbia Analytical Services, Inc. Sample Acceptance Check Form

	GeoSyntec Co		Wo	ork order:	P2401376		· · ·	
_	Ascon LF/SB0					CM		
		ved on: 6/28/04	Date opened:	6/28/04	by:	SM		
ote: This	form is used for <u>all</u> sa	imples received by CAS. The use of t	his form for custody seals is strictly	meant to indicate prese	nce/absence and n	ot as an indica	ition of	
ompliance	or nonconformity. The	hermal preservation and pH will only	be evaluated either at the request of	the client or as require	d by the method/S	Yes	No	N/A
			_				<u> </u>	
1		seals on outside of cooler/Box	x?		g 1: 1:10			□ ⊠
	Location of se	eal(s)?			Sealing Lid?			
	Were signatu	re and date included?						X
	Were seals in	atact?						$\boxtimes$
	Were custody s	eals on outside of sample cor	ntainer?				$\boxtimes$	
	Location of s	eal(s)?			Sealing Lid?			X
	Were signatu	ire and date included?						X
	Were seals in	ntact?						$\boxtimes$
2	Were sample c	containers properly marked v	with client sample ID?			$\boxtimes$		
3	Did sample co	ntainers arrive in good cond	ition?			$\boxtimes$		
4	Were chain-of-	-custody papers used and fill	ed out?			$\boxtimes$		
5	Did sample co	ntainer labels and/or tags ag	gree with custody papers?			$\boxtimes$		
6	Was sample vo	olume received adequate for	analysis?			$\boxtimes$		
7		ithin specified holding times				$\boxtimes$		
8	Was proper ter	mperature (thermal preserva	ntion) of cooler at receipt ad	hered to?				X
		Cooler Temperature						
		Blank Temperature	NA °C	•			_	_
9	Is pH (acid) pr	reservation necessary, accord	ding to method/SOP or Clies	nt specified infor	nation?		$\boxtimes$	
	Is there a clien	nt indication that the submitt	ed samples are pH (acid) pr	reserved?				X
		ials checked for presence/abs						$\boxtimes$
	Does the clier	nt/method/SOP require that the	he analyst check the sample	pH and if necess	ary alter it?			X
10	<b>Tubes:</b>	Are the tubes capped and	l intact?					X
		Do they contain moistur	e?					X
11	Badges:	Are the badges properly	capped and intact?					$\boxtimes$
	Ü	Are dual bed badges sep	arated and individually cap	ped and intact?				X
				VOA Headspace	p <sub>o</sub>	ceipt / Pres	ervation	
	Lab Sample ID	Required pH	•	(Presence/Absence)	100	Comme		
		PIX		NA	1			
P24013'	76-001			NA				
					<del> </del>			
						-		

Page\_\_

2665 Park Center Drive, Suite D Air Quality Laboratory

Simi Valley, California 93065 (805) 526-7270 Phone (805) 526-7161

Columbia Analytical Services No.

Analytical Service Request Chain of Custody Record

P2401375 Additional Comments specific instructions) (e.g., preservative or Cooler / Blank Comments CAS Project No. Temp\_ Expected Tunnanund Tung (10 Business Days) 6/28/cy 1205 62804 1154 Time: Date: 04 Analysis × The workladere Sample Volume (Liters) ا: ٥ Sumpling Location Seciels CA Geosyntec Consutaints Flow Controller (Serial #) 11500003 Reconved by: (Signature) Received by: (Signature) unn Container ID (Serial #) 06757 480202-31H さっているののの P.O. #/Billing Information Project Number היוסר היוסה) יני היי Ozder Time: Project Name SC1/40-02-0 Type of Sample C. 18.04 Lab Sample No. Hunthing ton Beach, On 92648 Fax (744) 969-0820 CON ClienvAddress (16054ntec Consult townts Time Collected 82.6 2100 Main St. #150 Email Mreardon a geosyntec Sampler 18 jenature, 06-28-cxt Date / Collected ASSIST CORP कि विवास के An Employee - Owned Company Phone (714) 969-0800 1 Relinquished by: (Signature) Relinguished by: (Signaturs PNL-55-13.5. Client Sample ID inguished by Contact

#### LABORATORY REPORT

Client:

GEOSYNTEC CONSULTANTS, INC.

Date of Report:

07/16/04

Address:

2100 Main Street, Suite 150

Date Received:

06/29/04

Huntington Beach, CA 92648

CAS Project No:

P2401379

Contact:

Mr. Mike Reardon

Purchase Order:

SB0202-31H

Client Project ID: Ascon LF/SB0202-31H

Two (2) Tedlar Bag Samples labeled:

"PNL-F4-15-S" and "SF-BLK-S"

The samples were received at the laboratory under chain of custody on June 29, 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 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:

1 Miles

Wade Henton GC-VOA Team Leader Air Quality Laboratory

Page 1 of 6

# RESULTS OF ANALYSIS Page 1 of 1

Client:

GeoSyntec Consultants, Inc.

**Client Sample ID:** 

PNL-F4-15-S

Client Project ID:

Ascon LF/SB0202-31H

CAS Project ID: P2401379

CAS Sample ID: P2401379-001

Test Code:

ASTM D 5504-01

Instrument ID:

HP5890 II/GC5/SCD

Analyst:

Zheng Wang

Sampling Media:

Tedlar Bag

Test Notes:

Date Collected: 6/28/04 Time Collected: 13:58

Date Received: 6/29/04 Date Analyzed: 6/29/04

Time Analyzed: 11:43

Volume(s) Analyzed:

1.0 ml(s)

D.F.=1.00

		Result	MRL	Result	MRL	Data
G. G. II	Commound	Result	MAC			Qualifier
CAS#	Compound	μg/m³	μg/m³	ppbV	ppbV	
7783-06-4	Hydrogen Sulfide	21.4	7.00	15.4	5.00	
463-58-1	Carbonyl Sulfide	360	12.0	146	5.00	
74-93-1	Methyl Mercaptan	ND	9.80	ND	5.00	1
75-08-1	Ethyl Mercaptan	8.43	13.0	3.32	5.00	J
75-18-3	Dimethyl Sulfide	17.2	13.0	6.79	5.00	
75-15-0	Carbon Disulfide	73.6	7.80	23.6	2.50	
75-33-2	Isopropyl Mercaptan	ND	16.0	ND	5.00	
75-66-1	tert-Butyl Mercaptan	53.8	18.0	14.6	5.00	
107-03-9	n-Propyl Mercaptan	ND	16.0	ND	5.00	
624-89-5	Ethyl Methyl Sulfide	13.4	16.0	4.31	5.00	J
110-02-1	Thiophene	31.7	17.0	9.21	5.00	
513-44-0	Isobutyl Mercaptan	ND	18.0	ND	5.00	
352-93-2	Diethyl Sulfide	103	18.0	27.9	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	48.1	18.0	13.4	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:	KUH	Date:	व्याग्नीव्म
			Page No.:

#### RESULTS OF ANALYSIS

Page 1 of 1

Client: GeoSyntec Consultants, Inc.

Client Sample ID: SF-BLK-S CAS Project ID: P2401379
Client Project ID: Ascon LF/SB0202-31H CAS Sample ID: P2401379-002

Test Code:

ASTM D 5504-01

Instrument ID:

HP5890 II/GC5/SCD

Analyst:

Zheng Wang

Sampling Media:

Tedlar Bag

Test Notes:

Date Collected: 6/28/04 Time Collected: 14:06 Date Received: 6/29/04 Date Analyzed: 6/29/04 Time Analyzed: 12:04

Volume(s) Analyzed:

1.0 ml(s)

D.F.=1.00

		Result	MRL	Result	MRL	Data
CAS#	Compound					Qualifier
CAS#	Compound	μg/m³	μg/m³	ppbV	ppbV	
7783-06-4	Hydrogen Sulfide	3.69	7.00	2.65	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	<u> </u>
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	18.2	7.80	5.84	2.50	
75-33-2	Isopropyl Mercaptan	ND	16.0	ND	5.00	1
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	<u> </u>
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	1
872-55-9	2-Ethylthiophene	ND	23.0	ND	5.00	
110-81-6	Diethyl Disulfide	ND	12.0	ND	2.50	_L

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:	FUH	Date:	0714104
			Dogo No:

#### **RESULTS OF ANALYSIS** Page 1 of 1

**Client:** 

GeoSyntec Consultants, Inc.

Client Sample ID:

Method Blank

**Client Project ID:** 

Ascon LF/SB0202-31H

CAS Project ID: P2401379

CAS Sample ID: P040629-MB

Test Code:

ASTM D 5504-01

Instrument ID:

HP5890 II/GC5/SCD

Analyst:

Zheng Wang

Sampling Media:

Tedlar Bag

Test Notes:

Date Received: NA Date Analyzed: 6/29/04 Time Analyzed: 09:57

Date Collected: NA

Time Collected: NA

Volume(s) Analyzed:

1.0 ml(s)

D.F.=1.00

	T	Result	MRL	Result	MRL	Data
CAS#	Compound					Qualifier
CAS #	Compound	μg/m³	μg/m³	ppbV	ppbV	
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.

Verified By:	KMH	Date: 07114104
		n . M

#### Columbia Analytical Services, Inc. Sample Acceptance Check Form

				impie Acceptance Cu		D2401270			
	GeoSyntec Consu				Work order:	P2401379			
roject:	Ascon LF/SB020	2-31F					G) f	·	
	ample(s) received		6/29/04	Date opened:		_	SM	··	
ote: This	form is used for <u>all</u> samp	les rece	ived by CAS. The use	of this form for custody seals	is strictly meant to indica	ite presence/absenc	e and not as a	ın indicati	on of
mpliance	or nonconformity. Their	mal pres	servation and pH will o	only be evaluated either at the	request of the client or as	required by the m	ethod/SOP.	No	TAT / A
							Yes	No	N/A
1	Were custody seal	s on ou	itside of cooler/Bo	ox?				X	
	Location of seal(	s)?				Sealing Lid?			X
	Were signature a	nd date	e included?						X
	Were seals intact	i?							X
	Were custody seals	s on ou	itside of sample co	ontainer?				X	
	Location of seal(	s)?				_Sealing Lid?			X
	Were signature a	nd date	e included?						X
	Were seals intact	t?							X
2	Were sample cont	ainers	properly marked	with client sample ID?			$\boxtimes$		
3	Did sample conta	iners a	rrive in good cond	dition?			$\boxtimes$		
4	Were chain-of-cus	stody p	papers used and fil	lled out?			X		
5	Did sample conta	iner la	bels and/or tags a	gree with custody papers	?		$\boxtimes$		
6	Was sample volum	ne rece	eived adequate for	analysis?			$\boxtimes$		
7	Are samples withi	n speci	ified holding times	s?			$\times$		
8	Was proper tempe	erature	e (thermal preserva	ation) of cooler at receip	t adhered to?				X
		C	ooler Temperature	e NA	_°C				
		I	Blank Temperature	e NA	_°C				
9	Is pH (acid) prese	rvatio	n necessary, accor	eding to method/SOP or	Client specified infor	mation?		$\overline{\mathbf{X}}$	
	Is there a client in	dicatio	on that the submitt	ed samples are pH (acid	) preserved?				X
	Were <b>VOA vials</b>	checke	ed for presence/abs	sence of air bubbles?					X
	Does the client/m	ethod/	SOP require that the	he analyst check the sam	ple pH and if necess	ary alter it?			X
10	Tubes:	Are the	e tubes capped and	d intact?					X
		Do the	ey contain moistur	e?					X
11	Badges:	Are th	e badges properly	capped and intact?					X
		Are du	ual bed badges sep	arated and individually o	capped and intact?				$\times$
		er as		pH	VOA Headspace	Re	ceipt / Pres	ervation	
	Lab Sample ID		Required pH	(as received, if required)	(Presence/Absence)		Comme	1. E. A. C. T. C.	
D2 4012	70.001				l NA				
P240131 P240131					NA NA				
1 24013	77-002								
	· · · · · · · · · · · · · · · · · · ·								

6/29/04 11:04 AM

J. Page

Air Quality Laboratory

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

Columbia Analytical Services<sup>NG.</sup>

An Employee - Owned Company

(805) 526-7270

Fax

Analytical Service Request Chain of Custody Record

CAS Project No.

10/4 01E 000 Pato 1379 Additional Comments specific instructions) Cooler / Blank (e.g., preservative or Comments Temp\_ Expected Junamound Time

Lypected Tunning Time

Lypected Tunning Time

Lypected Tunning Time CK9 名に Time: Analysis 10.35.0 Date: " DUL X Sample Volume (Liters) ٥ Sumpling Location Beach, CA Flow Controller (Serial #) Sharon Received by: (Signature) Received/by: (Signature) Received by: (Signature) Lann Container ID SBOZOZ-31H Geosyntec Project Number SBOZ OZ - 31H (Serial #) P.O. #/Billing Information ASCOR SC THEN 多いと Project Name Type of Sample 1650 といった Time: 6-28-04 Lab Sample No. po 37.90 Hourman for a ching A 72648 Phone 714)964-0800 Fax (714)969-0820 Date: Date: Email MIRE arden Cogeosyntec.com TO SE TONGO Time Collected 3.58 14:00 Georgantec Constalt Goo Main St # 150 Contact Recurdon Sample Signiffur OC-28:04 Date Collected Relinquished by: (Signature) Relinquishod by: (Signature) PAL-F4-15-3 Relynquisted by: (Signature) Client Sample ID ツゲーのコス Client/Address 6

White Conv. Acronomies, Samples

Vallani Canson Darwinsad Ing Oliver



#### LABORATORY REPORT

Client:

GEOSYNTEC CONSULTANTS, INC.

Date of Report:

07/19/04

Address:

2100 Main Street, Suite 150

Date Received:

06/30/04

Huntington Beach, CA 92648

CAS Project No:

P2401395

Contact:

Mr Mike Reardon

Purchase Order:

SB0202-31H

Client Project ID: Ascon LF/SB0202-31H

Four (4) Tedlar Bag Samples labeled:

"PNL-F19-4-S"

"PNL-F19-10-S"

"PNL-F1-13-S"

"PNL-F1-13-SR"

The samples were received at the laboratory under chain of custody on June 30, 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 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:

Reviewed and Approved:

Zheng Wang Analytical Chemist Air Quality Laboratory Wade Henton GC-VOA Team Leader Air Quality Laboratory

Page 1 of 9

#### **RESULTS OF ANALYSIS** Page 1 of 1

Client:

GeoSyntec Consultants, Inc.

Client Sample ID:

PNL-F19-4-S

**Client Project ID:** 

Ascon LF/SB0202-31H

CAS Project ID: P2401395

CAS Sample ID: P2401395-001

Test Code:

ASTM D 5504-01

Instrument ID:

HP5890 II/GC5/SCD

Analyst:

Zheng Wang/Wade Henton

Sampling Media:

Tedlar Bag

Test Notes:

Date Collected: 6/30/04

Time Collected: 08:25 Date Received: 6/30/04

Date Analyzed: 6/30/04

Time Analyzed: 20:08

Volume(s) Analyzed:

 $1.0 \, \text{ml(s)}$ 

D.F.=1.00

	T	Result	MRL	Result	MRL	Data
CAS#	Compound					Qualifier
0110 17		μg/m³	μg/m³	ppbV	ppbV	
7783-06-4	Hydrogen Sulfide	2.91	7.00	2.09	5.00	J
463-58-1	Carbonyl Sulfide	18.7	12.0	7.60	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	45.9	7.80	14.8	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	<u> </u>
107-03-9	n-Propyl Mercaptan	ND	16.0	ND	5.00	
624-89-5	Ethyl Methyl Sulfide	ND	16.0	ND	5.00	<u> </u>
110-02-1	Thiophene	ND	17.0	ND	5.00	<u> </u>
513-44-0	Isobutyl Mercaptan	ND	18.0	ND	5.00	<u> </u>
352-93-2	Diethyl Sulfide	ND	18.0	ND	5.00	<u> </u>
109-79-5	n-Butyl Mercaptan	ND	18.0	ND	5.00	
624-92-0	Dimethyl Disulfide	ND	9.60	ND	2.50	<u> </u>
616-44-4	3-Methylthiophene	ND	20.0	ND	5.00	<u> </u>
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:_	rmH	Date:_	C115 04-
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#### **RESULTS OF ANALYSIS**

Page 1 of 1

Client:

GeoSyntec Consultants, Inc.

**Client Sample ID:** 

PNL-F19-10-S

**Client Project ID:** 

Ascon LF/SB0202-31H

CAS Project ID: P2401395

CAS Sample ID: P2401395-002

Test Code:

ASTM D 5504-01

Instrument ID:

HP5890 II/GC5/SCD

Analyst:

Zheng Wang/Wade Henton

Sampling Media:

Tedlar Bag

Test Notes:

Date Collected: 6/30/04 Time Collected: 09:04 Date Received: 6/30/04 Date Analyzed: 6/30/04

Time Analyzed: 20:26

Volume(s) Analyzed:

 $1.0 \, \text{ml}(s)$ 

D.F.=1.00

	1	Result	MRL	Result	MRL	Data
CAS#	Compound					Qualifier
CAS#	Compound	μg/m³	μg/m³	ppbV	ppbV	
7783-06-4	Hydrogen Sulfide	5.02	7.00	3.60	5.00	J
463-58-1	Carbonyl Sulfide	76.3	12.0	31.1	5.00	<b> </b>
74-93-1	Methyl Mercaptan	ND	9.80	ND	5.00	<u> </u>
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	27.3	7.80	8.78	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:	KTTH	Date:_	01115104 Page No.:
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### **RESULTS OF ANALYSIS**

Page 1 of 1

Client:

GeoSyntec Consultants, Inc.

Client Sample ID:

PNL-F1-13-S

Client Project ID:

Ascon LF/SB0202-31H

CAS Project ID: P2401395

CAS Sample ID: P2401395-003

Test Code:

ASTM D 5504-01

Instrument ID:

Agilent 6890A/GC13/SCD

Analyst:

Zheng Wang/Wade Henton

Sampling Media:

Tedlar Bag

Test Notes:

Date Analyzed: 7/1/04 Time Analyzed: 10:13

Date Collected: 6/30/04

Date Received: 6/30/04

Time Collected: 11:10

Volume(s) Analyzed:

1.0 ml(s)

D.F.=1.00

		Result	MRL	Result	MRL	Data
CAC#	Compound					Qualifier
CAS#	Compound	μg/m³	μg/m³	ppbV	ppbV	
7783-06-4	Hydrogen Sulfide	9.56	7.00	6.86	5.00	
463-58-1	Carbonyl Sulfide	342	12.0	139	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	23.7	13.0	9.32	5.00	
75-15-0	Carbon Disulfide	448	7.80	144	2.50	
75-33-2	Isopropyl Mercaptan	ND	16.0	ND	5.00	
75-66-1	tert-Butyl Mercaptan	43.0	18.0	11.7	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	42.6	17.0	12.4	5.00	
513-44-0	Isobutyl Mercaptan	ND	18.0	ND	5.00	
352-93-2	Diethyl Sulfide	745	18.0	202	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	273	18.0	75.8	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	_l

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.

Date: 07115/04-KHIT Verified By:

01395SVG.RD1 - Sample (3)

#### RESULTS OF ANALYSIS

Page 1 of 1

Client:

GeoSyntec Consultants, Inc.

Client Sample ID:

PNL-F1-13-SR

Client Project ID:

Ascon LF/SB0202-31H

CAS Project ID: P2401395

CAS Sample ID: P2401395-004

Test Code:

ASTM D 5504-01

Instrument ID:

Analyst:

Zheng Wang/Wade Henton

Sampling Media:

Tedlar Bag

Test Notes:

Agilent 6890A/GC13/SCD

Date Received: 6/30/04 Date Analyzed: 7/1/04 Time Analyzed: 10:36

Time Collected: 11:20

Date Collected: 6/30/04

Volume(s) Analyzed:

1.0 ml(s)

D.F.=1.00

		Result	MRL	Result	MRL	Data
CAS#	Compound	Tresure				Qualifier
CAS#	Compound	μg/m³	$\mu g/m^3$	ppbV	ppbV	
7783-06-4	Hydrogen Sulfide	14.2	7.00	10.2	5.00	
463-58-1	Carbonyl Sulfide	299	12.0	122	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	21.4	13.0	8.42	5.00	
75-15-0	Carbon Disulfide	403	7.80	130	2.50	
75-33-2	Isopropyl Mercaptan	ND	16.0	ND	5.00	<u> </u>
75-66-1	tert-Butyl Mercaptan	32.7	18.0	8.88	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	35.7	17.0	10.4	5.00	
513-44-0	Isobutyl Mercaptan	ND	18.0	ND	5.00	
352-93-2	Diethyl Sulfide	646	18.0	175	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	247	18.0	68.5	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.

KLIH

01395SVG.RD1 - Sample (4)

#### **RESULTS OF ANALYSIS** Page 1 of 1

Client:

GeoSyntec Consultants, Inc.

Client Sample ID:

Method Blank

Client Project ID:

Ascon LF/SB0202-31H

CAS Project ID: P2401395

CAS Sample ID: P040630-MB

Test Code:

ASTM D 5504-01

Instrument ID:

HP5890 II/GC5/SCD

Analyst:

Sampling Media:

Tedlar Bag

Test Notes:

Date Collected: NA Time Collected: NA Date Received: NA Zheng Wang/Wade Henton

Date Analyzed: 6/30/04

Time Analyzed: 10:08

Volume(s) Analyzed:

 $1.0 \, \text{ml(s)}$ 

D.F.=1.00

		Result	MRL	Result	MRL	Data
CAS#	Compound	Result	11112			Qualifier
CAS#	Compound	μg/m³	μg/m³	ppbV	ppbV	
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	<u>                                     </u>
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	<u> </u>
110-01-0	Tetrahydrothiophene	ND	18.0	ND	5.00	
638-02-8	2,5-Dimethylthiophene	ND	23.0	ND	5.00	ļ
872-55-9	2-Ethylthiophene	ND	23.0	ND	5.00	<u> </u>
110-81-6	Diethyl Disulfide	ND	12.0	ND	2.50	<u> </u>

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

Verified By: Date: OTHER	Verified By:	'aiH	Date:_	07115104
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## RESULTS OF ANALYSIS

Page 1 of 1

**Client:** 

GeoSyntec Consultants, Inc.

**Client Sample ID:** 

Method Blank

Client Project ID:

Ascon LF/SB0202-31H

CAS Project ID: P2401395

CAS Sample ID: P040701-MB

Test Code:

ASTM D 5504-01

Instrument ID:

Agilent 6890A/GC13/SCD Zheng Wang/Wade Henton

Analyst: Sampling Media:

Tedlar Bag

Test Notes:

Date Collected: NA Time Collected: NA Date Received: NA Date Analyzed: 7/01/04

Time Analyzed: 09:50

Volume(s) Analyzed:

1.0 ml(s)

D.F.=1.00

	T	Result	MRL	Result	MRL	Data
CAS#	Compound					Qualifier
CAS #	Compound	μg/m³	μg/m³	ppbV	ppbV	
7783-06-4	Hydrogen Sulfide	ND	7.00	ND	5.00	
463-58-1	Carbonyl Sulfide	ND	12.0	ND	5.00	<u> </u>
74-93-1	Methyl Mercaptan	ND	9.80	ND	5.00	<b> </b>
75-08-1	Ethyl Mercaptan	ND	13.0	ND	5.00	<u> </u>
75-18-3	Dimethyl Sulfide	ND	13.0	ND	5.00	<u> </u>
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	<b> </b>
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	<u> </u>
513-44-0	Isobutyl Mercaptan	ND	18.0	ND	5.00	<u> </u>
352-93-2	Diethyl Sulfide	ND	18.0	ND	5.00	
109-79-5	n-Butyl Mercaptan	ND	18.0	ND	5.00	<u> </u>
624-92-0	Dimethyl Disulfide	ND	9.60	ND	2.50	
616-44-4	3-Methylthiophene	ND	20.0	ND	5.00	<b></b>
110-01-0	Tetrahydrothiophene	ND	18.0	ND	5.00	ᆀ
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.

Verified By:	Kritt	Date:	CHISTON Page No.
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### Columbia Analytical Services, Inc. Sample Acceptance Check Form

				nple Acceptance Une		D2401205			
	GeoSyntec Con				Work order:	P2401395			
Project:	Ascon LF/SB02	02-31]			2/2 2/2		CM		
S	ample(s) receive	ed on:	6/30/04	Date opened:	6/30/04	by:	SM		
ote: This f	form is used for <u>all</u> sar	nples rec	eived by CAS. The use o	f this form for custody seals is	strictly meant to indicat	e presence/absenc	e and not as a	an indication	on of
ompliance	or nonconformity. Th	ermal pro	eservation and pH will on	ly be evaluated either at the rec	quest of the client or as t	equired by the me	Voc	No	N/A
							<u>Yes</u> □	$\boxtimes$	
1	Were custody se	als on o	outside of cooler/Box	?		~			
	Location of sea	l(s)?				Sealing Lid?			X
	Were signature	and da	te included?						X
	Were seals inta	ct?							$\boxtimes$
	Were custody sea	ıls on o	utside of sample con	tainer?				$\boxtimes$	
	Location of sea	l(s)?				Sealing Lid?			X
	Were signature	and da	te included?						X
	Were seals inta								$\boxtimes$
2	Were sample con	ntainer	s properly marked w	ith client sample ID?			$\boxtimes$		
3	Did sample cont	ainers	arrive in good condi	tion?			$\boxtimes$		
4			papers used and fille				$\boxtimes$		
5	_			ee with custody papers?			$\mathbf{X}$		
6	-		ceived adequate for a				X		
7			cified holding times?				$\boxtimes$		
8	Was proper temperature (thermal preservation) of cooler at receipt adhered to?								X
		(	Cooler Temperature		°C				
			Blank Temperature		°C			157	F-1
9				ing to method/SOP or Cl		nation?		$\boxtimes$	
				d samples are pH (acid) p	oreserved?				X X
			ted for presence/abse						i
	Does the client/			e analyst check the sample	e pH and if necessa	ry alter it?			ı∆ı ⊠
10	Tubes:	Are th	ne tubes capped and	intact?					⊠ ⊠
			ey contain moisture						区 区
11	Badges:		he badges properly o						区 区
		Are d	lual bed badges sepa	rated and individually ca	pped and intact?		Ц		<u> </u>
12 2 4 6 S	Lab Sample ID		Required	pH	VOA Headspace	Re	ceipt / Pres	ervation	
			рН	(as received, if required)	(Presence/Absence)		Comme	nts	
P240139	05-001				NA				
P240139					NA				
P240139					NA	<u> </u>			
P240139	95-004				NA				
Explai	n any discrepancie	es: (incl	ude lab sample ID n	umbers):					

8

Page Lof (

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

> Columbia Analytical Services 146.

An Employee - Owned Company

Chain of Custody Record Analytical Service Request

0940139S Additional Comments (e.g., preservative or specific instructions) Cooler / Blank Comments Temp\_ CAS Project No. Standard (10 business Days)

Lypected Turndround Time

Lypected Turndround Time 0 9 9 20:00 ٥ 44.11 ्रमा Time: Time: 10/20/91 Analysis 40-05-9 3, Jade SULFUE × × X Х Sample Volume (Liters) 125% Chtumory Flow Gentroller (Serial #) Sampling Location Hellen Received by: (Signature) Receiyed by: (Signature) Received by: (Signature) Kann SBBD2-51# GeoSyntec 418-202083 Container ID (Serial #) P.O. #/Billing Information Ascon Bundere ime: 2000 92648 Project Number pe. 20 of 11:49 Project Name 1240 The state of the s Type of Sample フェア OFF プチア Ime: 40-08-01 Lab Sample No. Fax (7 14) 969-0820 geosylvice con Huntmyfon Beach, CA GOSYNTER CONSILTERATES Time Collected 11:20 2100 Main 54, #150 06.30 Oct 0825 11 10 0804 Sampler 18 ignature) Date Collected Email MY real rafor (0) Phone 714)969-020 PNL. F1-13-5R 2 talkon Mike Reardon PAL-F1-13-5 PNL-FIG. 4-5 PNL- F19-10-5 Client Sample ID bg: (Signat) Client/Address Contact

#### LABORATORY REPORT

Client:

GEOSYNTEC CONSULTANTS, INC.

Date of Report:

07/19/04

Address:

2100 Main Street, Suite 150

Date Received:

06/30/04

Huntington Beach, CA 92648

CAS Project No:

P2401396

Contact:

Mr. Mike Reardon

Purchase Order:

Verbal

Client Project ID: Ascon LF/SB0202-31H

Six (6) Stainless Steel Summa Canisters labeled:

"PNL-F4-15-T"

"PNL-F19-10-T"

"SF-BLK"

"PNL-F1-13-T"

"PNL-F19-4-T"

"PNL-F1-13-TR"

The samples were received at the laboratory under chain of custody on June 30, 2004. The sample labeled "SF-BLK" was not received. Otherwise, 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

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

Reviewed and Approved:

Wade Henton

GC-VOA Team Leader Air Quality Laboratory

John Yokoyama

Operations Manager Air Quality Laboratory

Reviewed and Approved:



CAS Project No:

P2401396

## 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 system used was comprised of a Hewlett Packard Model 5973 GC/MS/DS interfaced to a Tekmar AutoCan Elite whole air inlet system/cryogenic concentrator. A 100% Dimethylpolysiloxane capillary column (RT<sub>x</sub>-1, Restek Corporation, Bellefonte, PA) was used to achieve chromatographic separation.

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

## RESULTS OF ANALYSIS

Page 1 of 1

Client:

GeoSyntec Consultants, Inc.

**Client Sample ID:** 

PNL-F4-15-T

CAS Project ID: P2401396

Date Collected: 6/28/04

**Client Project ID:** 

Ascon LF/SB0202-31H

CAS Sample ID: P2401396-001

Test Code:

Modified EPA TO-3

Instrument ID:

HP5890II/GC8/FID

Analyst:

Wade Henton

Summa Canister

Sampling Media: Test Notes:

Container ID:

ISC00009

Date Received: 6/30/04 Date Analyzed: 7/7/04 Volume(s) Analyzed:

> 0.0 Pf 1 =10.0 Pi 1 =

D.F. = 1.68

1.0 ml

	Result	MRL	Data
Compound			Qualifier
	ppmV	ppmV	
Methane	1,200	0.84	
C <sub>2</sub> as Ethane	ND	0.84	
C <sub>3</sub> as Propane	ND	0.84	
C <sub>4</sub> as n-Butane	ND	0.84	
C <sub>5</sub> as n-Pentane	ND	0.84	
C <sub>6</sub> as n-Hexane	ND	0.84	
C <sub>6</sub> + as n-Hexane	230	1.7	

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

#### **RESULTS OF ANALYSIS** Page 1 of 1

GeoSyntec Consultants, Inc. **Client:** 

**Client Sample ID:** PNL-F19-4-T

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

CAS Project ID: P2401396

Date Collected: 6/30/04

Date Received: 6/30/04

Date Analyzed: 7/7/04

CAS Sample ID: P2401396-003

Test Code: Instrument ID: Modified EPA TO-3

HP5890II/GC8/FID

Analyst:

Wade Henton

Sampling Media: Test Notes:

Container ID:

Summa Canister

ISC00020

Pi 1 =

0.2

Pf1 =

10.2

Volume(s) Analyzed:

D.F. = 1.67

1.0 ml

	Result	MRL	Data Qualifier
Compound	ppmV	ppmV	
Methane	4.4	0.84	
C <sub>2</sub> as Ethane	ND	0.84	
C <sub>3</sub> as Propane	ND	0.84	
C <sub>4</sub> as n-Butane	ND	0.84	
C <sub>5</sub> as n-Pentane	ND	0.84	
C <sub>6</sub> as n-Hexane	ND	0.84	
C <sub>6</sub> + as n-Hexane	3.3	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: RG Date: 7/15/04

#### **RESULTS OF ANALYSIS** Page 1 of 1

Client:

GeoSyntec Consultants, Inc.

**Client Sample ID:** 

PNL-F19-10-T

CAS Project ID: P2401396

**Client Project ID:** 

Ascon LF/SB0202-31H

CAS Sample ID: P2401396-004

Test Code:

Modified EPA TO-3

Instrument ID:

HP5890II/GC8/FID

Analyst: Sampling Media: Wade Henton

Summa Canister

Test Notes:

Container ID:

ISC00017

Date Collected: 6/30/04 Date Received: 6/30/04

Date Analyzed: 7/7/04 Volume(s) Analyzed:

1.0 ml

Pf1 =10.1 0.2 Pi 1 =

D.F. = 1.66

Compound  Methane	Result	MRL	Data Qualifier
	ppmV	ppmV	
	150	0.83	
C <sub>2</sub> as Ethane	ND	0.83	
C <sub>3</sub> as Propane	ND	0.83	
C <sub>4</sub> as n-Butane	ND	0.83	
C <sub>5</sub> as n-Pentane	ND	0.83	
C <sub>6</sub> as n-Hexane	ND	0.83	
C <sub>6</sub> + as n-Hexane	37	1.7	

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

# RESULTS OF ANALYSIS Page 1 of 1

Client:

GeoSyntec Consultants, Inc.

Client Sample ID:

PNL-F19-10-T

CAS Project ID: P2401396

Date Collected: 6/30/04

Date Received: 6/30/04

Client Project ID:

Ascon LF/SB0202-31H

CAS Sample ID: P2401396-004DUP

Test Code:

Modified EPA TO-3

Instrument ID:

HP5890II/GC8/FID

Analyst: Sampling Media: Wade Henton Summa Canister Date Analyzed: 7/7/04 Volume(s) Analyzed:

1.0 ml

Test Notes:

Container ID:

ISC00017

Pi 1 = 0.2

Pf1 =

10.1

D.F. = 1.66

Compound	Result	MRL	Data Qualifier
	ppmV	ppmV	
Methane	150	0.83	
C <sub>2</sub> as Ethane	ND	0.83	
C <sub>3</sub> as Propane	ND	0.83	
C <sub>4</sub> as n-Butane	ND	0.83	
C <sub>5</sub> as n-Pentane	ND	0.83	
C <sub>6</sub> as n-Hexane	ND	0.83	
C <sub>6</sub> + as n-Hexane	40	1.7	

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

#### RESULTS OF ANALYSIS

Page 1 of 1

Client:

GeoSyntec Consultants, Inc.

Client Sample ID: **Client Project ID:**  PNL-F1-13-T

Ascon LF/SB0202-31H

CAS Project ID: P2401396

CAS Sample ID: P2401396-005

Test Code:

Modified EPA TO-3

Instrument ID:

HP5890II/GC8/FID

Analyst:

Wade Henton

Sampling Media:

Summa Canister

Test Notes:

Container ID:

ISC00010

Date Collected: 6/30/04 Date Received: 6/30/04 Date Analyzed: 7/7/04

Volume(s) Analyzed:

10.1

1.0 ml

Pf 1 =Pi1 =0.0

D.F. = 1.69

	Result	MRL	Data
Compound	ppmV	ppmV	Qualifier
Methane	21	0.84	
C <sub>2</sub> as Ethane	ND	0.84	
C <sub>3</sub> as Propane	ND	0.84	
C <sub>4</sub> as n-Butane	ND	0.84	
C <sub>5</sub> as n-Pentane	ND	0.84	
C <sub>6</sub> as n-Hexane	ND	0.84	
C <sub>6</sub> as n-Hexane	86	1.7	

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

## RESULTS OF ANALYSIS

Page 1 of 1

Client:

GeoSyntec Consultants, Inc.

Client Sample ID: Client Project ID: PNL-F1-13-TR

Ascon LF/SB0202-31H

CAS Project ID: P2401396

CAS Sample ID: P2401396-006

Test Code:

Modified EPA TO-3

Instrument ID:

HP5890II/GC8/FID

Analyst:

Wade Henton

Summa Canister

Sampling Media: Test Notes:

Container ID:

ISC00013

Date Collected: 6/30/04 Date Received: 6/30/04 Date Analyzed: 7/7/04

Volume(s) Analyzed:

1.0 ml

Pi 1 =

0.0

Pf1 =

10.0

D.F. = 1.68

Compound	Result	MRL	Data Qualifier
	ррт	ppmV	
Methane	7.8	0.84	
C <sub>2</sub> as Ethane	ND	0.84	
C <sub>3</sub> as Propane	ND	0.84	
C <sub>4</sub> as n-Butane	ND	0.84	
C <sub>5</sub> as n-Pentane	ND	0.84	
C <sub>6</sub> as n-Hexane	ND	0.84	
C <sub>6</sub> + as n-Hexane	41	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: RG Date: 7115104

## **RESULTS OF ANALYSIS**

Page 1 of 1

**Client:** 

GeoSyntec Consultants, Inc.

**Client Sample ID: Client Project ID:**  Method Blank

Ascon LF/SB0202-31H

CAS Project ID: P2401396

CAS Sample ID: P040707-MB

Test Code:

Modified EPA TO-3

Instrument ID:

HP5890II/GC8/FID

Analyst:

Wade Henton

Sampling Media:

Summa Canister

Date Collected: NA Date Received: NA Date Analyzed: 7/07/04

Volume(s) Analyzed:

1.0 ml

Test Notes:

D.F. = 1.00

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

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

### **RESULTS OF ANALYSIS**

Page 1 of 3

Client:

GeoSyntec Consultants, Inc.

Client Sample ID: PNL-F4-15-T

Client Project ID: Ascon LF/SB0202-31H

CAS Project ID: P2401396

CAS Sample ID: P2401396-001

Test Code:

EPA TO-15

Instrument ID:

Tekmar AUTOCAN/HP5973/HP6890/MS3

Analyst:

Rusty Bravo/Wade Henton

Sampling Media:

Summa Canister

Test Notes:

Container ID:

ISC00009

Date Collected: 6/28/04

Date Received: 6/30/04

Date(s) Analyzed: 7/2/04 & 7/6/04

Volume(s) Analyzed:

0.0010 Liter(s)

0.00030 Liter(s)

Pf 1 = 10.0

0.0

Pi 1 =

D.F. = 1.68

				D	MRL	Data
CAS#	Compound	Result	MRL	Result		Qualifier
		μg/m³	μg/m³	ppbV	ppbV	Quantilei
74-87-3	Chloromethane	ND	840	ND	410	<del> </del>
75-01-4	Vinyl Chloride	ND	840	ND	330	<b> </b>
106-99-0	1,3-Butadiene	ND	840	ND	380	<b> </b>
74-83-9	Bromomethane	ND	840	ND	220	<u> </u>
75-00-3	Chloroethane	ND	840	ND	320	
67-64-1	Acetone	ND	8,400	ND	3,500	<b> </b>
75-69-4	Trichlorofluoromethane	ND	840	ND	150	<u> </u>
107-13-1	Acrylonitrile	ND	840	ND	390	
75-35-4	1,1-Dichloroethene	ND	840	ND	210	
75-09-2	Methylene chloride	ND	840	ND	240	
76-13-1	Trichlorotrifluoroethane	ND	840	ND	110	
75-15-0	Carbon Disulfide	ND	840	ND	270	
156-60-5	trans-1,2-Dichloroethene	ND	840	ND	210	
75-34-3	1,1-Dichloroethane	ND	840	ND	210	
1634-04-4	Methyl tert-Butyl Ether	ND	840	ND	230	
108-05-4	Vinyl Acetate	ND	840	ND	240	
78-93-3	2-Butanone (MEK)	ND	840	ND	280	
156-59-2	cis-1,2-Dichloroethene	ND	840	ND	210	_
67-66-3	Chloroform	ND	840	ND	170	
107-06-2	1,2-Dichloroethane	ND	840	ND	210	
71-55-6	1,1,1-Trichloroethane	ND	840	ND	150	
71-33-0	Benzene	15,000	840	4,600	260	
56-23-5	Carbon Tetrachloride	ND	840	ND	130	

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: Popel Page No.

#### RESULTS OF ANALYSIS

Page 2 of 3

Client:

GeoSyntec Consultants, Inc.

Client Sample ID: PNL-F4-15-T

Client Project ID: Ascon LF/SB0202-31H

CAS Project ID: P2401396

CAS Sample ID: P2401396-001

Test Code:

EPA TO-15

Instrument ID:

Tekmar AUTOCAN/HP5973/HP6890/MS3

Analyst:

Rusty Bravo/Wade Henton

Test Notes:

Summa Canister

Sampling Media:

Container ID:

ISC00009

Date Collected: 6/28/04

Date Received: 6/30/04

Date(s) Analyzed: 7/2/04 & 7/6/04

Volume(s) Analyzed:

Pf 1 = 10.0

0.0010 Liter(s)

0.00030 Liter(s)

0.0 Pi 1 =

D.F. = 1.68

CAS#	Compound	Result μg/m³	MRL μg/m³	Result ppbV	MRL ppbV	Data Qualifier
78-87-5	1,2-Dichloropropane	ND	840	ND	180	
75-27-4	Bromodichloromethane	ND	840	ND	130	
79-01-6	Trichloroethene	ND	840	ND	160	
10061-01-5	cis-1,3-Dichloropropene	ND	840	ND	190	<b></b>
108-10-1	4-Methyl-2-pentanone	ND	840	ND	210	ļ
10061-02-6	trans-1,3-Dichloropropene	ND	840	ND	190	
79-00-5	1,1,2-Trichloroethane	ND	840	ND	150	
108-88-3	Toluene	11,000	840	2,800	220	
591-78-6	2-Hexanone	ND	840	ND	210	
124-48-1	Dibromochloromethane	ND	840	ND	99	
106-93-4	1,2-Dibromoethane	ND	840	ND	110	
127-18-4	Tetrachloroethene	ND	840	ND	120	
108-90-7	Chlorobenzene	ND	840	ND	180	
100-41-4	Ethylbenzene	250,000	840	58,000	190	1
136777-61-2	m,p -Xylenes	ND	1,700	ND	390	1
75-25-2	Bromoform	ND	840	ND	81	<u> </u>
100-42-5	Styrene	ND	840	ND	200	
95-47-6	o-Xylene	ND	840	ND	190	
79-34-5	1,1,2,2-Tetrachloroethane	ND	840	ND	120	
541-73-1	1,3-Dichlorobenzene	ND	840	ND	140	
106-46-7	1,4-Dichlorobenzene	ND	840	ND	140	
95-50-1	1,2-Dichlorobenzene	ND	840	ND	140	

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

#### **RESULTS OF ANALYSIS** Page 3 of 3

**Client:** 

GeoSyntec Consultants, Inc.

Client Sample ID:

PNL-F4-15-T

Client Project ID:

Ascon LF/SB0202-31H

CAS Project ID: P2401396

CAS Sample ID: P2401396-001

## **Tentatively Identified Compounds**

Test Code:

EPA TO-15

Tekmar AUTOCAN/HP5973/HP6890/MS3

Instrument ID: Analyst:

Rusty Bravo/Wade Henton

Sampling Media:

Test Notes:

T

Container ID:

ISC00009

Summa Canister

Date Collected: 6/28/04 Date Received: 6/30/04

Date Analyzed: 7/2/04 & 7/6/04 Volume(s) Analyzed: 0.0010 Liter(s)

0.00030 Liter(s)

Pi 1 = 0.0 Pf 1 = 10.0

D.F. = 1.68

GC / MS Ret. Time	Compound Identification	Concentration μg/m³	Data Qualifier
22.13	Cumene	60,000	
22.97	n-Propylbenzene	4,000	
23.15	3-Ethyltoluene	2,000	
23.62	alpha-Methylstyrene	40,000	_
24.23	Isobutylbenzene	4,000	
24.50	sec-Butylbenzene	20,000	_
24.74	C <sub>9</sub> H <sub>10</sub> Aromatic Compound	10,000	
25.30	C <sub>10</sub> H <sub>14</sub> Aromatic Compound	20,000	
25.46	C <sub>10</sub> H <sub>14</sub> Aromatic Compound	10,000	

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

## **RESULTS OF ANALYSIS**

Page 1 of 3

Client:

GeoSyntec Consultants, Inc.

Client Sample ID: PNL-F19-4-T

Client Project ID: Ascon LF/SB0202-31H

CAS Project ID: P2401396

CAS Sample ID: P2401396-003

Test Code:

EPA TO-15

Instrument ID:

Tekmar AUTOCAN/HP5973/HP6890/MS3

Analyst:

Rusty Bravo/Wade Henton

Sampling Media:

Summa Canister

Test Notes:

Container ID:

ISC00020

Date Collected: 6/30/04

Date Received: 6/30/04

Date(s) Analyzed: 7/2/04

Volume(s) Analyzed:

0.20 Liter(s)

Pf 1 = 10.2Pi 1 = 0.2

D.F. = 1.67

CAS#	Compound	Result µg/m³	MRL μg/m³	Result ppbV	MRL ppbV	Data Qualifier
74-87-3	Chloromethane	ND	4.2	ND	2.0	
75-01-4	Vinyl Chloride	ND	4.2	ND	1.6	
106-99-0	1,3-Butadiene	6.0	4.2	2.7	1.9	ļ
74-83-9	Bromomethane	ND	4.2	ND_	1.1	
75-00-3	Chloroethane	ND	4.2	ND_	1.6	
67-64-1	Acetone	ND	42	ND	18	
75-69-4	Trichlorofluoromethane	ND	4.2	ND	0.74	<u> </u>
107-13-1	Acrylonitrile	ND	4.2	ND	1.9	<u> </u>
75-35-4	1,1-Dichloroethene	ND	4.2	ND	1.1	<u> </u>
75-09-2	Methylene chloride	ND	4.2	ND	1.2	<u> </u>
76-13-1	Trichlorotrifluoroethane	ND	4.2	ND	0.54	<u> </u>
75-15-0	Carbon Disulfide	7.3	4.2	2.4	1.3	<u> </u>
156-60-5	trans-1,2-Dichloroethene	ND	4.2	ND	1.1	<u> </u>
75-34-3	1,1-Dichloroethane	ND	4.2	ND	1.0	
1634-04-4	Methyl tert-Butyl Ether	ND	4.2	ND	1.2	
108-05-4	Vinyl Acetate	ND	4.2	ND	1.2	<u> </u>
78-93-3	2-Butanone (MEK)	4.6	4.2	1.6	1.4	<b></b>
156-59-2	cis-1,2-Dichloroethene	ND	4.2	ND	1.1	
67-66-3	Chloroform	ND	4.2	ND	0.86	
107-06-2	1,2-Dichloroethane	ND	4.2	ND_	1.0	
71-55-6	1,1,1-Trichloroethane	ND	4.2	ND	0.77	
71-43-2	Benzene	ND	4.2	ND	1.3	
56-23-5	Carbon Tetrachloride	ND	4.2	ND	0.66	

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

Verified By:	Ru	Date:	7115104 Page No.:
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#### RESULTS OF ANALYSIS

Page 2 of 3

Client:

GeoSyntec Consultants, Inc.

Client Sample ID: PNL-F19-4-T

Client Project ID: Ascon LF/SB0202-31H

CAS Project ID: P2401396

CAS Sample ID: P2401396-003

Test Code:

EPA TO-15

Instrument ID:

Tekmar AUTOCAN/HP5973/HP6890/MS3

Analyst:

Rusty Bravo/Wade Henton

Test Notes:

Container ID:

Sampling Media:

Summa Canister

ISC00020

Date Collected: 6/30/04

Date Received: 6/30/04

Date(s) Analyzed: 7/2/04

Volume(s) Analyzed:

0.20 Liter(s)

Pi 1 = 0.2 Pf 1 = 10.2

D.F. = 1.67

CAS#	Compound	Result µg/m³	MRL μg/m³	Result ppbV	MRL ppbV	Data Qualifier
78-87-5	1,2-Dichloropropane	ND	4.2	ND	0.90	
75-27-4	Bromodichloromethane	ND	4.2	ND	0.62	<u> </u>
79-01-6	Trichloroethene	ND	4.2	ND	0.78	ļ
10061-01-5	cis-1,3-Dichloropropene	ND	4.2	ND	0.92	<u> </u>
108-10-1	4-Methyl-2-pentanone	ND	4.2	ND	1.0	<u> </u>
10061-02-6	trans-1,3-Dichloropropene	ND	4.2	ND	0.92	<b> </b>
79-00-5	1,1,2-Trichloroethane	ND	4.2	ND	0.77	<u> </u>
108-88-3	Toluene	11	4.2	3.0	1.1	
591-78-6	2-Hexanone	ND	4.2	ND	1.0	<b> </b>
124-48-1	Dibromochloromethane	ND	4.2	ND	0.49	
106-93-4	1,2-Dibromoethane	ND	4.2	ND	0.54	
127-18-4	Tetrachloroethene	ND	4.2	ND	0.62	<b> </b>
108-90-7	Chlorobenzene	ND	4.2	ND	0.91	<b></b>
100-41-4	Ethylbenzene	800	4.2	180	0.96	
136777-61-2	m,p-Xylenes	ND	8.4	ND	1.9	
75-25-2	Bromoform	ND	4.2	ND	0.40	
100-42-5	Styrene	5.1	4.2	1.2	0.98	
95-47-6	o-Xylene	ND	4.2	ND	0.96	
79-34-5	1,1,2,2-Tetrachloroethane	ND	4.2	ND	0.61	
541-73-1	1,3-Dichlorobenzene	ND	4.2	ND	0.69	
106-46-7	1,4-Dichlorobenzene	ND	4.2	ND	0.69	<u> </u>
95-50-1	1,2-Dichlorobenzene	ND	4.2	ND	0.69	<u></u>

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: 71504

# RESULTS OF ANALYSIS Page 3 of 3

Client:

GeoSyntec Consultants, Inc.

Client Sample ID: Client Project ID: PNL-F19-4-T

Ascon LF/SB0202-31H

CAS Project ID: P2401396

CAS Sample ID: P2401396-003

#### **Tentatively Identified Compounds**

Test Code:

EPA TO-15

Summa Canister

Date Collected: 6/30/04

Instrument ID:

Tekmar AUTOCAN/HP5973/HP6890/MS3

Date Received: 6/30/04

Analyst:

Rusty Bravo/Wade Henton

Date Analyzed: 7/2/04

Volume(s) Analyzed: 0.20 Liter(s)

Sampling Media: Test Notes:

Т

Container ID:

ISC00020

Pi 1 = 0.2

Pf 1 = 10.2

D.F. = 1.67

GC / MS Ret. Time	Compound Identification	Concentration μg/m³	Data Qualifier
4.93	Propene	50	
18.72	Hexamethylcyclotrisiloxane (Possible Artifact)	90	
22.14	Cumene	2,000	
22.98	n-Propylbenzene	40	
23.62	alpha-Methylstyrene	50	
24.43	Isobutylbenzene	100	
24.50	sec-Butylbenzene	300	
24.73	C₀H₁₀ Aromatic Compound	300	
25.30	C <sub>10</sub> H <sub>14</sub> Aromatic Compound	200	
25.46	C <sub>10</sub> H <sub>14</sub> Aromatic Compound	400	
25.62	C <sub>10</sub> H <sub>14</sub> Aromatic Compound	100	
26.58	C <sub>10</sub> H <sub>12</sub> Aromatic Compound	200	
27.92	Naphthalene	50	
28.20	C <sub>12</sub> H <sub>18</sub> Aromatic Compound	20	
30.51	Biphenyl	90	

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

Verified By: RC Date: 115 04
Page No.:

#### RESULTS OF ANALYSIS Page 1 of 3

Client:

GeoSyntec Consultants, Inc.

Client Sample ID: PNL-F19-4-T

Client Project ID: Ascon LF/SB0202-31H

CAS Project ID: P2401396

CAS Sample ID: P2401396-003DUP

Test Code:

**EPA TO-15** 

Instrument ID:

Tekmar AUTOCAN/HP5973/HP6890/MS3

Analyst:

Rusty Bravo/Wade Henton

Summa Canister

Sampling Media:

Test Notes:

Container ID:

ISC00020

Date Collected: 6/30/04 Date Received: 6/30/04 Date(s) Analyzed: 7/2/04

Volume(s) Analyzed:

0.20 Liter(s)

Pi 1 =

0.2

Pf 1 = 10.2

D.F. = 1.67

CAS#	Compound	Result μg/m³	MRL μg/m³	Result ppbV	MRL ppbV	Data Qualifier
74-87-3	Chloromethane	ND	4.2	ND	2.0	
75-01-4	Vinyl Chloride	ND	4.2	ND	1.6	
106-99-0	1,3-Butadiene	6.3	4.2	2.8	1.9	
74-83-9	Bromomethane	ND	4.2	ND	1.1	
75-00-3	Chloroethane	ND	4.2	ND	1.6	
67-64-1	Acetone	ND	42	ND	18	
75-69-4	Trichlorofluoromethane	ND	4.2	ND	0.74	
107-13-1	Acrylonitrile	ND	4.2	ND	1.9	
75-35-4	1,1-Dichloroethene	ND	4.2	ND	1.1	<u> </u>
75-09-2	Methylene chloride	ND	4.2	ND	1.2	<u> </u>
76-13-1	Trichlorotrifluoroethane	ND	4.2	ND	0.54	
75-15-0	Carbon Disulfide	7.0	4.2	2.3	1.3	ļ
156-60-5	trans-1,2-Dichloroethene	ND	4.2	ND	1.1	<u> </u>
75-34-3	1,1-Dichloroethane	ND	4.2	ND	1.0	<b> </b>
1634-04-4	Methyl tert-Butyl Ether	ND	4.2	ND	1.2	ļ
108-05-4	Vinyl Acetate	ND	4.2	ND	1.2	<b> </b>
78-93-3	2-Butanone (MEK)	ND	4.2	ND	1.4	<u> </u>
156-59-2	cis-1,2-Dichloroethene	ND	4.2	ND_	1.1	<u> </u>
67-66-3	Chloroform	ND	4.2	ND	0.86	<b></b>
107-06-2	1,2-Dichloroethane	ND	4.2	ND	1.0	<u> </u>
71-55-6	1,1,1-Trichloroethane	ND	4.2	ND	0.77	<u> </u>
71-43-2	Benzene	ND	4.2	ND	1.3	
56-23-5	Carbon Tetrachloride	ND	4.2	ND	0.66	

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: 715104

#### RESULTS OF ANALYSIS Page 2 of 3

**Client:** 

GeoSyntec Consultants, Inc.

Client Sample ID: PNL-F19-4-T

Client Project ID:

Ascon LF/SB0202-31H

CAS Project ID: P2401396

CAS Sample ID: P2401396-003DUP

Test Code:

**EPA TO-15** 

Instrument ID:

Tekmar AUTOCAN/HP5973/HP6890/MS3

Analyst: Sampling Media:

Summa Canister

Rusty Bravo/Wade Henton

Test Notes:

Container ID:

ISC00020

Date Collected: 6/30/04

Date Received: 6/30/04

Date(s) Analyzed: 7/2/04

Volume(s) Analyzed:

0.20 Liter(s)

0.2 Pf 1 = 10.2Pi 1 =

D.F. = 1.67

CAS#	Compound	Result µg/m³	MRL μg/m³	Result ppbV	MRL ppbV	Data Qualifier
78-87-5	1,2-Dichloropropane	ND	4.2	ND	0.90	
75-27-4	Bromodichloromethane	ND	4.2	ND	0.62	
79-01-6	Trichloroethene	ND	4.2	ND	0.78	
10061-01-5	cis-1,3-Dichloropropene	ND	4.2	ND	0.92	
108-10-1	4-Methyl-2-pentanone	ND	4.2	ND	1.0	
10061-02-6	trans-1,3-Dichloropropene	ND	4.2	ND	0.92	
79-00-5	1,1,2-Trichloroethane	ND	4.2	ND	0.77	
108-88-3	Toluene	11	4.2	3.0	1.1	
591-78-6	2-Hexanone	ND	4.2	ND	1.0	
124-48-1	Dibromochloromethane	ND	4.2	ND	0.49	
106-93-4	1,2-Dibromoethane	ND	4.2	ND	0.54	
127-18-4	Tetrachloroethene	ND	4.2	ND	0.62	
108-90-7	Chlorobenzene	ND	4.2	ND	0.91	
100-41-4	Ethylbenzene	790	4.2	180	0.96	
136777-61-2	m,p-Xylenes	ND	8.4	ND	1.9	
75-25-2	Bromoform	ND	4.2	ND	0.40	
100-42-5	Styrene	4.9	4.2	1.2	0.98	
95-47-6	o-Xylene	ND	4.2	ND	0.96	<u> </u>
79-34-5	1,1,2,2-Tetrachloroethane	ND	4.2	ND	0.61	<u> </u>
541-73-1	1,3-Dichlorobenzene	ND	4.2	ND	0.69	
106-46-7	1,4-Dichlorobenzene	ND	4.2	ND	0.69	
95-50-1	1,2-Dichlorobenzene	ND	4.2	ND	0.69	1

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

#### RESULTS OF ANALYSIS Page 3 of 3

**Client:** 

GeoSyntec Consultants, Inc.

Client Sample ID:

PNL-F19-4-T

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

CAS Project ID: P2401396

CAS Sample ID: P2401396-003DUP

#### **Tentatively Identified Compounds**

Test Code:

EPA TO-15

Date Collected: 6/30/04

Instrument ID:

Tekmar AUTOCAN/HP5973/HP6890/MS3

Date Received: 6/30/04

Analyst:

Rusty Bravo/Wade Henton

Date Analyzed: 7/2/04

Sampling Media:

Summa Canister

Volume(s) Analyzed:

0.20 Liter(s)

Test Notes:

T

Container ID:

ISC00020

Pi 1 = 0.2 Pf 1 = 10.2

D.F. = 1.67

GC / MS Ret. Time	Compound Identification	Concentration µg/m³	Data Qualifier
4.93	Propene	50	
18.73	Hexamethylcyclotrisiloxane (Possible Artifact)	90	
22.16	Cumene	2,000	
22.99	n-Propylbenzene	40	
23.62	alpha-Methylstyrene	50	
24.43	Isobutylbenzene	100	
24.51	sec-Butylbenzene	300	
24.74	C <sub>2</sub> H <sub>10</sub> Aromatic Compound	300	
25.31	C <sub>10</sub> H <sub>14</sub> Aromatic Compound	200	
25.46	C <sub>10</sub> H <sub>14</sub> Aromatic Compound	400	
25.62	C <sub>10</sub> H <sub>14</sub> Aromatic Compound	100	
26.59	C <sub>10</sub> H <sub>12</sub> Aromatic Compound	200	
27.92	Naphthalene	50	
28.21	C <sub>12</sub> H <sub>18</sub> Aromatic Compound	50	
30.52	Biphenyl	100	

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

### RESULTS OF ANALYSIS Page 1 of 3

Client:

GeoSyntec Consultants, Inc.

Client Sample ID: PNL-F19-10-T

Client Project ID: Ascon LF/SB0202-31H

CAS Project ID: P2401396

CAS Sample ID: P2401396-004

Test Code:

EPA TO-15

Summa Canister

Instrument ID:

Tekmar AUTOCAN/HP5973/HP6890/MS3

Analyst:

Rusty Bravo/Wade Henton

Sampling Media: Test Notes:

Container ID:

ISC00017

Date Collected: 6/30/04

Date Received: 6/30/04

Date(s) Analyzed: 7/6/04 Volume(s) Analyzed:

0.010 Liter(s)

Pf 1 = 10.10.2 Pi 1 =

D.F. = 1.66

CAS#	Compound	Result μg/m³	MRL μg/m³	Result ppbV	MRL ppbV	Data Qualifier
74-87-3	Chloromethane	ND	83	ND	40	
75-01-4	Vinyl Chloride	ND	83	ND	32	
106-99-0	1,3-Butadiene	ND	83	ND	38	
74-83-9	Bromomethane	ND	83	ND	21	
75-00-3	Chloroethane	ND	83	ND	31	
67-64-1	Acetone	ND	830	ND	350	
75-69-4	Trichlorofluoromethane	ND	83	ND	15	
107-13-1	Acrylonitrile	ND	83	ND	38	<u> </u>
75-35-4	1,1-Dichloroethene	ND	83	ND	21	
75-09-2	Methylene chloride	ND	83	ND	24	<u> </u>
76-13-1	Trichlorotrifluoroethane	ND	83	ND	11	<u> </u>
75-15-0	Carbon Disulfide	ND	83	ND	27	
156-60-5	trans-1,2-Dichloroethene	ND	83	ND	21	
75-34-3	1,1-Dichloroethane	ND	83	ND	21	
1634-04-4	Methyl tert-Butyl Ether	ND	83	ND_	23	<u> </u>
108-05-4	Vinyl Acetate	ND	83	ND	24	
78-93-3	2-Butanone (MEK)	ND	83	ND	28	<u> </u>
156-59-2	cis-1,2-Dichloroethene	ND	83	ND	21	1
67-66-3	Chloroform	ND	83	ND	17	
107-06-2	1,2-Dichloroethane	ND	83	ND	21	<b>_</b>
71-55-6	1,1,1-Trichloroethane	ND	83	ND	15	
71-43-2	Benzene	ND	83	ND	26	
56-23-5	Carbon Tetrachloride	ND	83	ND	13	

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

Verified By:	RL	Date:_	7/15/04 Page No.
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## **RESULTS OF ANALYSIS**

Page 2 of 3

Client:

GeoSyntec Consultants, Inc.

Client Sample ID: PNL-F19-10-T

Client Project ID: Ascon LF/SB0202-31H

CAS Project ID: P2401396 CAS Sample ID: P2401396-004

Test Code:

EPA TO-15

Summa Canister

Instrument ID:

Tekmar AUTOCAN/HP5973/HP6890/MS3

Analyst:

Rusty Bravo/Wade Henton

Sampling Media:

Test Notes:

Container ID:

ISC00017

Date Collected: 6/30/04

Date Received: 6/30/04

Date(s) Analyzed: 7/6/04 Volume(s) Analyzed:

0.010 Liter(s)

Pi 1 = 0.2 Pf 1 = 10.1

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	83	ND	18	
75-27-4	Bromodichloromethane	ND	83	ND	12	
79-01-6	Trichloroethene	ND	83	ND	15	
10061-01-5	cis-1,3-Dichloropropene	ND	83	ND	18	
108-10-1	4-Methyl-2-pentanone	ND	83	ND	20	
10061-02-6	trans-1,3-Dichloropropene	ND	83	ND	18	
79-00-5	1,1,2-Trichloroethane	ND	83	ND	15	ļ
108-88-3	Toluene	ND	83	ND	22	
591-78-6	2-Hexanone	ND	83	ND	20	
124-48-1	Dibromochloromethane	ND	83	ND	9.7	ļ
106-93-4	1,2-Dibromoethane	ND	83	ND	11	ļ
127-18-4	Tetrachloroethene	ND	83	ND	12	<u> </u>
108-90-7	Chlorobenzene	ND	83	ND	18	<u> </u>
100-41-4	Ethylbenzene	3,300	83	750	19	
136777-61-2	m,p-Xylenes	ND	170	ND	38	<u> </u>
75-25-2	Bromoform	ND	83	ND	8.0	<b> </b>
100-42-5	Styrene	ND	83	ND	19	
95-47-6	o-Xylene	ND	83	ND	19	<u> </u>
79-34-5	1,1,2,2-Tetrachloroethane	ND	83	ND	12	
541-73-1	1,3-Dichlorobenzene	ND	83	ND	14	<u> </u>
106-46-7	1,4-Dichlorobenzene	ND	83	ND	14	<u> </u>
95-50-1	1,2-Dichlorobenzene	ND	83	ND	14	<u></u>

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

### RESULTS OF ANALYSIS Page 3 of 3

Client:

GeoSyntec Consultants, Inc.

Client Sample ID:

PNL-F19-10-T

CAS Project ID: P2401396

Client Project ID:

Ascon LF/SB0202-31H

CAS Sample ID: P2401396-004

## **Tentatively Identified Compounds**

Test Code:

EPA TO-15

Date Collected: 6/30/04

Instrument ID:

Tekmar AUTOCAN/HP5973/HP6890/MS3

Date Received: 6/30/04

Analyst:

Rusty Bravo/Wade Henton

Date Analyzed: 7/6/04

Sampling Media:

Summa Canister

Volume(s) Analyzed: 0.010 Liter(s)

Test Notes:

T

Container ID:

ISC00017

Pi 1 = 0.2 Pf 1 = 10.1

D.F. = 1.66

GC / MS Ret. Time	Compound Identification	Concentration µg/m³	Data Qualifier
22.14	Cumene	40,000	
22.97	n-Propylbenzene	800	
23.21	C <sub>9</sub> H <sub>12</sub> Aromatic Compound	500	
23.67	2-Ethyltoluene	200	
24.43	Isobutylbenzene	2,000	
24.50	sec-Butylbenzene	4,000	
24.74	C <sub>2</sub> H <sub>10</sub> Aromatic Compound	4,000	
25.12	C <sub>2</sub> H <sub>10</sub> Aromatic Compound	500	
25.30	C <sub>10</sub> H <sub>14</sub> Aromatic Compound	10,000	
25.46	C <sub>10</sub> H <sub>14</sub> Aromatic Compound	5,000	
25.62	C <sub>10</sub> H <sub>14</sub> Aromatic Compound	2,000	
26.59	C <sub>10</sub> H <sub>12</sub> Aromatic Compound	900	

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

Verified By: RC

### **RESULTS OF ANALYSIS**

Page 1 of 3

Client:

GeoSyntec Consultants, Inc.

Client Sample ID: PNL-F1-13-T

Client Project ID: Ascon LF/SB0202-31H

CAS Project ID: P2401396

CAS Sample ID: P2401396-005

Test Code:

EPA TO-15

Instrument ID:

Tekmar AUTOCAN/HP5973/HP6890/MS3

Analyst:

Rusty Bravo/Wade Henton

Sampling Media: Container ID:

Test Notes:

Summa Canister

ISC00010

Date Collected: 6/30/04

Date Received: 6/30/04 Date(s) Analyzed: 7/6/04

0.0030 Liter(s) Volume(s) Analyzed:

0.0010 Liter(s)

Pi 1 =

0.0

Pf 1 = 10.1

D.F. = 1.69

CAS#	Compound	Result	MRL μg/m³	Result ppbV	MRL ppbV	Data Qualifier
		μg/m³ ND	280	ND	140	i i
74-87-3	Chloromethane		280	ND	110	
75-01-4	Vinyl Chloride	ND ND		ND	130	
106-99-0	1,3-Butadiene	ND	280	<u> </u>	73	-
74-83-9	Bromomethane	ND	280	ND	110	╂
75-00-3	Chloroethane	ND	280	ND		-
67-64-1	Acetone	ND	2,800	ND	1,200	
75-69-4	Trichlorofluoromethane	ND	280	ND	50	<b></b>
107-13-1	Acrylonitrile	ND	280	ND	130	<u> </u>
75-35-4	1,1-Dichloroethene	ND	280	ND	71	
75-09-2	Methylene chloride	ND	280	ND	81	
76-13-1	Trichlorotrifluoroethane	ND	280	ND	37	
75-15-0	Carbon Disulfide	ND	280	ND	90	<u> </u>
156-60-5	trans-1,2-Dichloroethene	ND	280	ND	71	
75-34-3	1.1-Dichloroethane	ND	280	ND	70	
1634-04-4	Methyl tert-Butyl Ether	ND	280	ND	78	
108-05-4	Vinyl Acetate	ND	280	ND	80	
78-93-3	2-Butanone (MEK)	ND	280	ND	96	
156-59-2	cis-1,2-Dichloroethene	ND	280	ND	71	
	Chloroform	ND	280	ND	58	
67-66-3	1,2-Dichloroethane	ND	280	ND	70	
107-06-2		ND	280	ND	52	
71-55-6	1,1,1-Trichloroethane	35,000	280	11,000	88	
71-43-2	Benzene	35,000 ND	280	ND	45	
56-23-5	Carbon Tetrachloride		1 200	_! <u></u>	<del></del>	

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: 71504 Page No.

### RESULTS OF ANALYSIS Page 2 of 3

GeoSyntec Consultants, Inc. Client:

Client Sample ID: PNL-F1-13-T Client Project ID: Ascon LF/SB0202-31H

CAS Project ID: P2401396 CAS Sample ID: P2401396-005

Test Code:

EPA TO-15

Instrument ID:

Tekmar AUTOCAN/HP5973/HP6890/MS3

Analyst:

Rusty Bravo/Wade Henton

Sampling Media: Test Notes:

Summa Canister

ISC00010 Container ID:

Date Collected: 6/30/04

Date Received: 6/30/04 Date(s) Analyzed: 7/6/04

Volume(s) Analyzed:

0.0030 Liter(s)

0.0010 Liter(s)

Pi 1 = 0.0 Pf 1 = 10.1

D.F. = 1.69

CAS#	Compound	Result µg/m³	MRL μg/m³	Result ppbV	MRL ppbV	Data Qualifier
78-87-5	1,2-Dichloropropane	ND	280	ND	61	
75-27-4	Bromodichloromethane	ND	280	ND	42	
79-01-6	Trichloroethene	ND	280	ND	52	
10061-01-5	cis-1,3-Dichloropropene	ND	280	ND	62	<u> </u>
108-10-1	4-Methyl-2-pentanone	ND	280	ND	69	<u> </u>
10061-02-6	trans-1,3-Dichloropropene	ND	280	ND	62	<u> </u>
79-00-5	1,1,2-Trichloroethane	ND	280	ND	52	
108-88-3	Toluene	9,900	280	2,600	75	ļ
591-78-6	2-Hexanone	ND	280	ND	69	<b> </b>
124-48-1	Dibromochloromethane	ND	280	ND	33	<u> </u>
106-93-4	1,2-Dibromoethane	ND	280	ND	37	
127-18-4	Tetrachloroethene	ND	280	ND	42	<u> </u>
108-90-7	Chlorobenzene	ND	280	ND	61	
100-41-4	Ethylbenzene	91,000	280	21,000	65	
136777-61-2	m,p-Xylenes	ND	560	ND	130	
75-25-2	Bromoform	ND	280	ND	27	
100-42-5	Styrene	ND	280	ND	66	<b></b>
95-47-6	o-Xylene	ND	280	ND	65	
79-34-5	1,1,2,2-Tetrachloroethane	ND	280	ND	41	
541-73-1	1,3-Dichlorobenzene	ND	280	ND	47	<b></b>
106-46-7	1,4-Dichlorobenzene	ND	280	ND	47	
95-50-1	1,2-Dichlorobenzene	ND	280	ND	47	

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

Verified By:	Ru	Date:	1504 Page No.
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### RESULTS OF ANALYSIS Page 3 of 3

Client:

GeoSyntec Consultants, Inc.

Client Sample ID: PNL-F1-13-T

Ascon LF/SB0202-31H Client Project ID:

CAS Project ID: P2401396

CAS Sample ID: P2401396-005

## **Tentatively Identified Compounds**

Test Code:

EPA TO-15

ISC00010

Tekmar AUTOCAN/HP5973/HP6890/MS3

Date Collected: 6/30/04 Date Received: 6/30/04

Instrument ID: Analyst:

Rusty Bravo/Wade Henton

Date Analyzed: 7/6/04

Sampling Media:

Summa Canister

Volume(s) Analyzed: 0.0030 Liter(s)

0.0010 Liter(s)

Test Notes: Container ID: T

Pi 1 =0.0 Pf 1 = 10.1

D.F. = 1.69

GC / MS Ret. Time	Compound Identification	Concentration μg/m³	Data Qualifier
14.02	n-Heptane	900	
22.12	Cumene	6,000	
22.98	n-Propylbenzene	2,000	
23.16	3-Ethyltoluene	1,000	
23.22	4-Ethyltoluene	600	
23.62	alpha-Methylstyrene	10,000	
24.42	Isobutylbenzene	3,000	
24.50	sec-Butylbenzene	10,000	
24.73	C <sub>9</sub> H <sub>10</sub> Aromatic Compound	20,000	
25.31	C <sub>10</sub> H <sub>14</sub> Aromatic Compound	20,000	
25.46	C <sub>10</sub> H <sub>14</sub> Aromatic Compound	9,000	
25.62	C <sub>10</sub> H <sub>14</sub> Aromatic Compound	3,000	
26.58	C <sub>10</sub> H <sub>12</sub> Aromatic Compound	3,000	
27.91	Naphthalene	800	

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

Verified By: Date: 115104 Page No.: 24

### RESULTS OF ANALYSIS

Page 1 of 3

Client:

GeoSyntec Consultants, Inc.

Client Sample ID: PNL-F1-13-TR

Client Project ID: Ascon LF/SB0202-31H

CAS Project ID: P2401396

CAS Sample ID: P2401396-006

Test Code:

EPA TO-15

Summa Canister

Instrument ID:

Tekmar AUTOCAN/HP5973/HP6890/MS3

Analyst:

Rusty Bravo/Wade Henton

Sampling Media: Test Notes:

Container ID:

ISC00013

Date Collected: 6/30/04

Date Received: 6/30/04

Date(s) Analyzed: 7/6/04

Volume(s) Analyzed:

0.0025 Liter(s)

Pf 1 = 10.0Pi 1 = 0.0

D.F. = 1.68

CAS#	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
74-87-3	Chloromethane	ND	340	ND	160	
75-01-4	Vinyl Chloride	ND	340	ND	130	
106-99-0	1,3-Butadiene	ND	340	ND	150	<b></b>
74-83-9	Bromomethane	ND	340	ND	87	<b>_</b>
75-00-3	Chloroethane	ND	340	ND	130	<b> </b>
67-64-1	Acetone	ND	3,400	ND	1,400	<u> </u>
75-69-4	Trichlorofluoromethane	ND	340	ND	60	
107-13-1	Acrylonitrile	ND	340	ND	150	<u> </u>
75-35-4	1,1-Dichloroethene	ND	340	ND	85	
75-09-2	Methylene chloride	ND	340	ND	97	
76-13-1	Trichlorotrifluoroethane	ND	340	ND	44	
75-15-0	Carbon Disulfide	ND	340	ND	110	_
156-60-5	trans-1,2-Dichloroethene	ND	340	ND_	85	
75-34-3	1,1-Dichloroethane	ND	340	ND	83	
1634-04-4	Methyl tert-Butyl Ether	ND	340	ND	93	_
108-05-4	Vinyl Acetate	ND	340	ND	95	
78-93-3	2-Butanone (MEK)	ND	340	ND	110	
156-59-2	cis-1,2-Dichloroethene	ND	340	ND	85	
67-66-3	Chloroform	ND	340	ND	69	_
107-06-2	1,2-Dichloroethane	ND	340	ND	83	
71-55-6	1,1,1-Trichloroethane	ND	340	ND	62	
71-43-2	Benzene	13,000	340	4,000	110	
56-23-5	Carbon Tetrachloride	ND	340	ND	53	

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: \( \text{\( \text{\) \exiting \exit

### RESULTS OF ANALYSIS

Page 2 of 3

Client:

GeoSyntec Consultants, Inc.

Client Sample ID: PNL-F1-13-TR

Client Project ID: Ascon LF/SB0202-31H

CAS Project ID: P2401396

CAS Sample ID: P2401396-006

Test Code:

EPA TO-15

Instrument ID:

Tekmar AUTOCAN/HP5973/HP6890/MS3

Analyst:

Rusty Bravo/Wade Henton

Sampling Media:

Summa Canister

Test Notes:

Container ID:

ISC00013

Date Collected: 6/30/04

Date Received: 6/30/04

Date(s) Analyzed: 7/6/04

Volume(s) Analyzed:

0.0025 Liter(s)

Pf 1 = 10.00.0 Pi 1 =

D.F. = 1.68

CAS#	Compound	Result µg/m³	MRL μg/m³	Result ppbV	MRL ppbV	Data Qualifier
78-87-5	1,2-Dichloropropane	ND	340	ND	73	<u> </u>
75-27-4	Bromodichloromethane	ND	340	ND	50	<u> </u>
79-01-6	Trichloroethene	ND	340	ND	63	1
10061-01-5	cis-1,3-Dichloropropene	ND	340	ND	74	-
108-10-1	4-Methyl-2-pentanone	ND	340	ND	82	<u> </u>
10061-02-6	trans-1,3-Dichloropropene	ND	340	ND	74	<b></b>
79-00-5	1,1,2-Trichloroethane	ND	340	ND	62	_
108-88-3	Toluene	4,000	340	1,100	89	
591-78-6	2-Hexanone	ND	340	ND	82	
124-48-1	Dibromochloromethane	ND	340	ND	39	
106-93-4	1,2-Dibromoethane	ND	340	ND	44	
127-18-4	Tetrachloroethene	ND	340	ND	50	
108-90-7	Chlorobenzene	ND	340	ND	73	
108-90-7	Ethylbenzene	45,000	340	10,000	77	
	m,p-Xylenes	ND	670	ND	150	
136777-61-2	Bromoform	ND	340	ND	33	
75-25-2		ND	340	ND	79	
100-42-5	Styrene	ND	340	ND	77	
95-47-6	o-Xylene	ND	340	ND	49	
79-34-5	1,1,2,2-Tetrachloroethane	ND	340	ND	56	
541-73-1	1,3-Dichlorobenzene	ND ND	340	ND	56	
106-46-7	1,4-Dichlorobenzene		340	ND	56	
95-50-1	1,2-Dichlorobenzene	ND	1340			

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: V26 Date: 715 Page No.: 26

# RESULTS OF ANALYSIS Page 3 of 3

Client:

GeoSyntec Consultants, Inc.

Client Sample ID:

PNL-F1-13-TR

Client Project ID:

Ascon LF/SB0202-31H

CAS Project ID: P2401396

CAS Sample ID: P2401396-006

## **Tentatively Identified Compounds**

Test Code:

EPA TO-15

Tekmar AUTOCAN/HP5973/HP6890/MS3

Instrument ID: Analyst:

Rusty Bravo/Wade Henton

Sampling Media: Test Notes:

Summa Canister T

Container ID:

....

ISC00013 Pi 1 = 0.0

Date Collected: 6/30/04

Date Received: 6/30/04

Date Analyzed: 7/6/04 Volume(s) Analyzed: 0.0025 Liter(s)

Pf 1 = 10.0

D.F. = 1.68

GC / MS Ret. Time	Compound Identification	Concentration μg/m³	Data Qualifier
22.13	Cumene	4,000	_
22.97	n-Propylbenzene	800	-
23.62	alpha-Methylstyrene	6,000	
24.50	sec-Butyllbenzene	4,000	<b>_</b>
24.74	C <sub>9</sub> H <sub>10</sub> Aromatic Compound	10,000	
25.30	C <sub>10</sub> H <sub>14</sub> Aromatic Compound	10,000	
25.46	C <sub>10</sub> H <sub>14</sub> Aromatic Compound	5,000	
25.62	C <sub>10</sub> H <sub>14</sub> Aromatic Compound	2,000	
26.59	C <sub>10</sub> H <sub>12</sub> Aromatic Compound	2,000	

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

Verified By: Date: 71504

### RESULTS OF ANALYSIS Page 1 of 3

Client:

GeoSyntec Consultants, Inc.

Client Sample ID: Method Blank

Client Project ID: Ascon LF/SB0202-31H

CAS Project ID: P2401396

CAS Sample ID: P040702-MB

Test Code:

EPA TO-15

Instrument ID:

Tekmar AUTOCAN/HP5973/HP6890/MS3

Analyst:

Rusty Bravo/Wade Henton

Sampling Media: Test Notes:

Summa Canister

Date Received: NA Date(s) Analyzed: 7/2/04

Date Collected: NA

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	ļ
156-60-5	trans-1,2-Dichloroethene	ND	0.50	ND	0.13	<u> </u>
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	<b></b>
107-06-2	1,2-Dichloroethane	ND	0.50	ND	0.12	<u> </u>
71-55-6	1,1,1-Trichloroethane	ND	0.50	ND	0.092	<u> </u>
71-43-2	Benzene	ND	0.50	ND	0.16	<u> </u>
56-23-5	Carbon Tetrachloride	ND	0.50	ND	0.080	<u></u>

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

#### **RESULTS OF ANALYSIS**

Page 2 of 3

Client:

GeoSyntec Consultants, Inc.

Client Sample ID: Method Blank

Client Project ID: Ascon LF/SB0202-31H

CAS Project ID: P2401396 CAS Sample ID: P040702-MB

Test Code:

EPA TO-15

Instrument ID:

Tekmar AUTOCAN/HP5973/HP6890/MS3

Analyst:

Rusty Bravo/Wade Henton

Sampling Media:

Summa Canister

Test Notes:

Date Collected: NA Date Received: NA Date(s) Analyzed: 7/2/04

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 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.

RESULTS OF ANALYSIS Page 3 of 3

Client:

GeoSyntec Consultants, Inc.

Client Sample ID:

Method Blank

Client Project ID:

Ascon LF/SB0202-31H

CAS Project ID: P2401396

CAS Sample ID: P040702-MB

## **Tentatively Identified Compounds**

Test Code:

EPA TO-15

Instrument ID:

Tekmar AUTOCAN/HP5973/HP6890/MS3

Analyst:

Rusty Bravo/Wade Henton

Sampling Media:

Summa Canister

Date Collected: NA Date Received: NA

Date Analyzed: 7/2/04

Volume(s) Analyzed:

1.00 Liter(s)

Test Notes:

D.F. = 1.00

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

### **RESULTS OF ANALYSIS**

Page 1 of 3

Client:

GeoSyntec Consultants, Inc.

Client Sample ID: Method Blank

Client Project ID: Ascon LF/SB0202-31H

CAS Project ID: P2401396 CAS Sample ID: P040706-MB

Test Code:

EPA TO-15

Instrument ID:

Tekmar AUTOCAN/HP5973/HP6890/MS3

Analyst:

Rusty Bravo/Wade Henton

Sampling Media:

Summa Canister

Test Notes:

Date Collected: NA Date Received: NA

Date(s) Analyzed: 7/6/04

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	<b></b>
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	<u> </u>
67-66-3	Chloroform	ND	0.50	ND	0.10	<u> </u>
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	<u> </u>
71-43-2	Benzene	ND	0.50	ND	0.16	<u> </u>
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: P(- Date: 1151014

### **RESULTS OF ANALYSIS**

Page 2 of 3

**Client:** 

GeoSyntec Consultants, Inc.

Client Sample ID: Method Blank

Client Project ID: Ascon LF/SB0202-31H

CAS Project ID: P2401396 CAS Sample ID: P040706-MB

Test Code:

EPA TO-15

Instrument ID:

Tekmar AUTOCAN/HP5973/HP6890/MS3

Analyst:

Rusty Bravo/Wade Henton

Sampling Media:

Summa Canister

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

Volume(s) Analyzed:

1.00 Liter(s)

Test Notes:

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	<u> </u>
108-90-7	Chlorobenzene	ND	0.50	ND	0.11	
100-41-4	Ethylbenzene	ND	0.50	ND	0.12	ļ
136777-61-2	m,p-Xylenes	ND	1.0	ND	0.23	
75-25-2	Bromoform	ND	0.50	ND	0.048	<u> </u>
100-42-5	Styrene	ND	0.50	ND	0.12	
95-47-6	o-Xylene	ND	0.50	ND	0.12	<b> </b>
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	ND	0.073	ļ
541-73-1	1,3-Dichlorobenzene	ND	0.50	ND	0.083	ļ
106-46-7	1,4-Dichlorobenzene	ND	0.50	ND	0.083	<u> </u>
95-50-1	1,2-Dichlorobenzene	ND	0.50	ND	0.083	<u> </u>

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

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

Verified By: Date: 115 Dy

### RESULTS OF ANALYSIS Page 3 of 3

Client:

GeoSyntec Consultants, Inc.

Client Sample ID:

Method Blank

**Client Project ID:** 

Ascon LF/SB0202-31H

CAS Project ID: P2401396

CAS Sample ID: P040706-MB

### **Tentatively Identified Compounds**

Test Code:

EPA TO-15

Tekmar AUTOCAN/HP5973/HP6890/MS3

Analyst:

Instrument ID:

Rusty Bravo/Wade Henton

Sampling Media: Test Notes:

Summa Canister

Date Collected: NA

Date Received: NA

Date Analyzed: 7/6/04

Volume(s) Analyzed:

1.00 Liter(s)

D.F. = 1.00

Concentration Data **Compound Identification** GC/MS Qualifier  $\mu g/m^3$ Ret. Time No Compounds Detected

# Columbia Analytical Services, Inc. Sample Acceptance Check Form

			Sar	nple Acceptance Che	ck Form				
Client:	GeoSyntec Cons	sultant		•		P2401396	<u></u>	,	
Project:	Ascon LF/SB02	02-311	I						
S	ample(s) receive	d on:	6/30/04	Date opened:	6/30/04	by:	SM		
lote: This l	form is used for <u>all</u> san	ples rece	eived by CAS. The use of	f this form for custody seals is	strictly meant to indicat	e presence/absenc	e and not as a	ın indicatio	on of
ompliance	or nonconformity. The	ermal pre	eservation and pH will or	ly be evaluated either at the re-	quest of the client or as	required by the mo	ethod/SOP.		<b>B</b> T/4
							<u>Yes</u> □	<u>No</u>	N/A
1	Were custody sea	Were custody seals on outside of cooler/Box?						$\boxtimes$	
	Location of seal	l(s)?				Sealing Lid?			X
	Were signature	-	te included?						$\boxtimes$
	Were seals intag								$\boxtimes$
			utside of sample con	tainer'?				X	
	Location of sea		<b>atorac</b> of s <b>amp</b> 22			Sealing Lid?			X
	Were signature	-	te included?						X
	Were seals inta		te meradea.						X
2			e properly marked w	vith client sample ID?			$\times$		
2							X		
3			arrive in good condi				$\boxtimes$		
4			papers used and fille				$\boxtimes$		
5				ree with custody papers?			$\boxtimes$		
6			ceived adequate for a				$\boxtimes$		
7			eified holding times?		dharad to?				X
8	Was proper temp			ion) of cooler at receipt a	°C		_		
			Cooler Temperature		°C				
			Blank Temperature			mation?		X	
9			on necessary, according to method/SOP or Client specified informatio on that the submitted samples are <b>pH</b> (acid) preserved?						×
					oreserved?				×
			ted for presence/abso		II I : f	my alter it?			×
			/SOP require that th	iy anei ii:			X		
10	Tubes:		ne tubes capped and				×		
			ey contain moisture						X
11	Badges:		he badges properly o						$\boxtimes$
		Are d	lual bed badges sepa	rated and individually ca	pped and intact?				
	Lab Sample ID		Required	рН	VOA Headspace	Re	ceipt / Pres	Control of the second of the	
			рН	(as received, if required)	(Presence/Absence)		Comme	its	
P240139	06-001				NA				
P240139	06-002				NA				
P240139					NA				
P2401396-004					NA NA				
P2401396-005 P2401396-006					NA NA				
P24013	70-000								
L									
Explai	n any discrepancie	s: (incl	ude lab sample ID n	umbers):					

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5 Page

> 2665 Park Center Drive, Suite D Air Quality Laboratory

Simi Valley, California 93065

(805) 526-7270 Phone (805) 526-7161

Analytical Services Mc

Columbia

An Employee - Owned Company

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Analytical Service Request Chain of Custody Record

P24 (396 Additional Comments (e.g., preservative or specific instructions) Cooler / Blank Comments Temp\_\_ CAS Project No. Standard (10 Business Days)
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Lypected Turnstound Time 1240 3.3 6h: 11 0 ٦ ۳ Time: Гіпе: Time: Date: 6 26-64 Analysis 120 21 OU €0 ኢ λ × X X Sample Volume HOST! 15000 J 1500013 See 377 150 000 20 Flow Controller (Swint#) 06740 1150 accord 15.0000 1200391 Beach Witches Received by; (Signature) Received by: (Signature) Change of Transfer 44 Received by: (Signaluge) ころからつ H12-202085 06.4.90 Container ID 46200 20670 Geosyntec Sampling Location 127 8300 77 Project Number SBCZJZ-3/H P.O. #/Billing Information Project Name Time: Zczco Course -1 Type of Sample **2**を DAF の千万 せる OHT P 上古 Time: |Date: | G | 70 ( + 1 | Lab Sample No. 40-05-9 V 9 Fax (714) 969-0820 4 1) 丁( (でたらばんするです Huntington Beach, CA imail Mreathdone geosyntyc.com 22:80 Time Collected 4.00 02:04 = . 5, 0 : 10 06-28:04 13:58 WILL DE THE Sampler (Sprinture) \$ 8 B Date Collected ٠ • Mient/Address Geo Syrutec "hone(7-14) 969-0800 ST. F. O. L. とからた MikeReandon ス・下1・3・ド inquished by: (Signature) No. FR. 10. F ignature) シュードキ・ア・ト ノーナーカナーン (Signature Client Sample ID 2.0.2 inquished by: インシュ

COC #13-7/03

Yellow Conv. Retained by Client

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White Copy: Accompanies Samples