CE Schmidt, Ph.D. Environmental Consultant

#### ATTACHMENT C

#### LABORATORY REPORTS

Phase I- Downhole Flux Testing

Phase II- Bucket Control/Control Agent Testing

Phase IV- Lagoon Testing/Control Agent Testing

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

Phases I, II, IV, and VIII - Odor Testing

CE Schmidt, Ph.D. Environmental Consultant

## ATTACHMENT C

### LABORATORY REPORTS

Phase I- Downhole Flux Testing

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



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

## LABORATORY REPORT

Client:	GEOSYN	NTEC CONSULTANTS, I	NC.	Date of Re	port:	04/08/04
Address:	2100 Ma	n Street, Suite 150		Date Recei	ved:	03/17/04
	Huntingt	on Beach, CA 92648		CAS Proje	ct No:	P2400531
Contact:	Mr. Mike	Reardon		Purchase C	Order:	SB0202/31
Client Project ID: Ascon/SB0202						
					<u></u>	
Nine (9) 1.0	Liter Canist	ers labeled:				
"PNL-15-10 "PNL-12-10 "PNL-3-211	0DHF"	"PNL-2-15DHF" "PNL-12-15DHF"	"PNL-15-12 "PNL-12-15			3-12DHF" A-11DHF"

The samples were received at the laboratory under chain of custody on March 17, 2004. The samples were received intact. Please refer to the sample acceptance check form for additional information. The results reported herein are applicable only to the condition of the samples at the time that they were received at the laboratory.

### C1 through C6 Hydrocarbon Analysis

The samples were analyzed per modified EPA Method TO-3 for  $C_1$  through  $>C_6$  hydrocarbons using a gas chromatograph equipped with a flame ionization detector (FID).

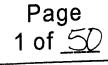
Reviewed and Approved:

(Etimal) (

Chris Parnell GCMS-VOA Team Leader Air Quality Laboratory Reviewed and Approved:

1/1de-

Wade Henton GC-VOA Team Leader Air Quality Laboratory





CAS Project No: P2400531

#### 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 5972 GC/MS/DS interfaced to a Tekmar AutoCan Elite whole air inlet system/cryogenic concentrator. A 100% Dimethylpolysiloxane capillary column ( $RT_x$ -1, Restek Corporation, Bellefonte, PA) was used to achieve chromatographic separation.

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

#### **RESULTS OF ANALYSIS**

Page 1 of 1

Client: Client Sample ID: Client Project ID:	GeoSyntec Consultants, Inc. PNL-15-100DHF Ascon/SB0202	CAS Project ID : P2400531 CAS Sample ID : P2400531-001

Test Code: Instrument ID: Analyst: Sampling Media:	Modified EPA TO-3 HP5890II/GC8/FID Regan Lau 1.0 Liter Canister		Date Collected: 3/15 Date Received: 3/15 Date Analyzed: 3/18 Volume(s) Analyzed:		7/04
Test Notes: Container ID:	1SC00003	Pi 1 =	0.8	Pf 1 = 10.0	

D.F. = 1.59

Company	Result	MRL	Data Qualifier
Compound	ppmV	ppmV	
Methane	ND	0.80	
C <sub>2</sub> as Ethane	ND	0.80	
C <sub>3</sub> as Propane	ND	0.80	
C <sub>4</sub> as n-Butane	ND	0.80	
$C_5$ as n-Pentane	ND	0.80	
$C_6$ as n-Hexane	ND	0.80	
$C_6^+$ as n-Hexane	ND	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.

Date: U Verified By: <u>R</u>

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

Client: Client Sample ID:	GeoSyntec Consultants, Inc. PNL-2-15DHF	CAS Project ID : P2400531
Client Project ID:	Ascon/SB0202	CAS Sample ID : P2400531-002

Test Code: Instrument ID:	Modified EPA TO-3 HP5890II/GC8/FID	Date Collected: 3/15/04 Date Received: 3/17/04			
Analyst:	Regan Lau	Date Analyzed: 3/1			
Sampling Media: Test Notes:	1.0 Liter Canister			Volume(s) Analyzed:	1.0 ml
Container ID:	1SC00002	Pi 1 =	0.3	Pf 1 = 10.0	

Pi 1 = 0.3 Pf 1 =

D.F. = 1.65

Compound	Result	MRL	Data Qualifier
Compound	ppmV	ppmV	
Methane	600	0.82	
$C_2$ as Ethane	ND	0.82	
C <sub>3</sub> as Propane	ND	0.82	
C <sub>4</sub> as n-Butane	ND	0.82	
C <sub>5</sub> as n-Pentane	ND	0.82	
C <sub>6</sub> as n-Hexane	ND	0.82	
C <sub>6</sub> + as n-Hexane	2.0	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: R. Date: 4504 4

#### RESULTS OF ANALYSIS Page 1 of 1

Client: Client Sample ID: Client Project ID:	GeoSyntec Consultants, Inc. PNL-15-12DHF Ascon/SB0202	CAS Project ID : P2400531 CAS Sample ID : P2400531-003
Test Code:	Modified EPA TO-3	Date Collected: 3/15/04
Instrument ID:	HP5890II/GC8/FID	Date Received: 3/17/04
Analyst:	Regan Lau	Date Analyzed: 3/18/04
Sampling Media:	1.0 Liter Canister	Volume(s) Analyzed: 1.0 ml

Container ID: 1SC00001

Test Notes:

Pi 1 = 0.0 Pf 1 =

D.F. = 1.68

10.0

	Result	MRL	Data
Compound	ppmV	ppmV	Qualifier
Methane	1,600	0.84	
$C_2$ as Ethane	ND	0.84	
C <sub>3</sub> as Propane	ND	0.84	
C <sub>4</sub> as n-Butane	0.84	0.84	
C <sub>5</sub> as n-Pentane	1.1	0.84	
C <sub>6</sub> as n-Hexane	ND	0.84	
C <sub>6</sub> + as n-Hexane	11	1.7	

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

Verified By: RG Date: 4/5/04 5	Verified By:	RG	Date: 415104	5
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## RESULTS OF ANALYSIS

Page 1 of 1

Client: Client Sample ID: Client Project ID:	GeoSyntec Consultants, Inc. PNL-13-12DHF Ascon/SB0202	CAS Project ID : P2400531 CAS Sample ID : P2400531-004
		Date Collected: 3/15/04

Test Code: Instrument ID:	Modified EPA TO-3 HP5890II/GC8/FID		5/04 7/04	
Analyst: Sampling Media:	Regan Lau 1.0 Liter Canister		Date Analyzed: 3/18 Volume(s) Analyzed:	1.0 ml
Test Notes: Container ID:	1SC00004		704 10.0	

Pi 1 = 0.1 Pf 1 = 10.0

D.F. = 1.67

Compound	Result	MRL	Data Qualifier
	ppmV	ppmV	
Methane	1,200	0.83	
C <sub>2</sub> as Ethane	ND	0.83	
C <sub>3</sub> as Propane	ND	0.83	
$C_4$ as n-Butane	3.3	0.83	
C <sub>5</sub> as n-Pentane	4.8	0.83	
$C_6$ as n-Hexane	5.4	0.83	
$C_6$ + as n-Hexane	100	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: Ro Date: 415104

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## RESULTS OF ANALYSIS

Page 1 of 1

Client: Client Sample ID: Client Project ID:	GeoSyntec Consultants, Inc. PNL-12-100DHF Ascon/SB0202	CAS Project ID : P2400531 CAS Sample ID : P2400531-005
Test Code:	Modified EPA TO-3	Date Collected: 3/16/04
Instrument ID:	HP5890II/GC8/FID	Date Received: 3/17/04
Analyst:	Regan Lau	Date Analyzed: 3/18/04
Sampling Media:	1.0 Liter Canister	Volume(s) Analyzed: 1.0 ml

Pi 1 = 0.4 Pf 1 = 10.1

D.F. = 1.64

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Compound	Result	MRL	Data Qualifier
	ppmV	ppmV	
Methane	ND	0.82	
C <sub>2</sub> as Ethane	ND	0.82	
C <sub>3</sub> as Propane	ND	0.82	
C <sub>4</sub> as n-Butane	ND	0.82	
C <sub>5</sub> as n-Pentane	ND	0.82	
C <sub>6</sub> as n-Hexane	ND	0.82	· · · · · ·
$C_6$ + as n-Hexane	ND	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.

RG Date: 415104 Verified By:

Test Notes:

Container ID:

1SC00018

## RESULTS OF ANALYSIS

Page 1 of 1

Client: Client Sample ID: Client Project ID:	GeoSyntec Consultants, Inc. PNL-12-15DHF Ascon/SB0202	CAS Project ID : P2400531 CAS Sample ID : P2400531-006

Test Code:	Modified EPA TO-3		Date Collected: 3/16/04	
Instrument ID:	HP5890II/GC8/FID		Date Received: 3/17/04	
Analyst:	Regan Lau		Date Analyzed: 3/18/04	
Sampling Media:	1.0 Liter Canister		Volume(s) Analyzed: 1.0 ml	
Test Notes: Container ID:	1SC00017	Pi 1 = 0.0	Pf 1 = 10.0	

D.F. = 1.68

	Result	MRL	Data Qualifier
Compound	ppmV	ppmV	Quanner
Methane	750	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	
$C_5$ as n-Pentane	ND	0.84	
$C_6$ as n-Hexane	ND	0.84	
$C_6$ as n-Hexane	23	1.7	

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

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

Client: Client Sample ID: Client Project ID:	GeoSyntec Consultants, Inc. PNL-12-15RDHF Ascon/SB0202	CAS Project ID : P2400531 CAS Sample ID : P2400531-007
Test Code: Instrument ID: Analyst:	Modified EPA TO-3 HP5890II/GC8/FID Regan Lau	Date Collected: 3/16/04 Date Received: 3/17/04 Date Analyzed: 3/18/04

Volume(s) Analyzed: 1.0 ml

10.5

1SC00016

1.0 Liter Canister

Sampling Media: Test Notes: Container ID:

Pi 1 = 0.0 Pf 1 =

D.F. = 1.71

Compound	Result	MRL	Data Qualifier
	ppmV	ppmV	
Methane	140	0.86	
C <sub>2</sub> as Ethane	ND	0.86	
$C_3$ as Propane	ND	0.86	
C <sub>4</sub> as n-Butane	ND	0.86	
C <sub>5</sub> as n-Pentane	ND	0.86	
C <sub>6</sub> as n-Hexane	ND	0.86	
C <sub>6</sub> + as n-Hexane	12	1.7	

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

Verified By: <u>R</u>	Date:	415/04
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## RESULTS OF ANALYSIS

Page 1 of 1

Client: Client Sample ID: Client Project ID:	GeoSyntec Consultants, Inc. PNL-5A-11DHF Ascon/SB0202	CAS Project ID : P2400531 CAS Sample ID : P2400531-008
Test Code: Instrument ID: Analyst:	Modified EPA TO-3 HP5890II/GC8/FID Regan Lau	Date Collected: 3/16/04 Date Received: 3/17/04 Date Analyzed: 3/18/04 Volume(s) Analyzed: 1.0 ml

Volume(s) Analyzed:

 $P_{i} 1 = 0.1$  Pf 1 = 10.2

D.F. = 1.68

Are the man water with the balance way with a first	Result	MRL	Data
Compound	ppmV	ppmV	Qualifier
Methane	380	0.84	
C <sub>2</sub> as Ethane	ND	0.84	
$C_3$ as Propane	ND	0.84	
$C_4$ as n-Butane	ND	0.84	
$C_5$ as n-Pentane	ND	0.84	
$C_6$ as n-Hexane	ND	0.84	
$C_6^+$ as n-Hexane	2.1	1.7	

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

It and Inc

1.0 Liter Canister

1SC00020

Sampling Media: Test Notes:

Container ID:

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

Verified By: RG- Date: 4504

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#### RESULTS OF ANALYSIS Page 1 of 1

Client: Client Sample ID: Client Project ID:	GeoSyntec Consultants, Inc. PNL-3-21DHF Ascon/SB0202	CAS Project ID : P2400531 CAS Sample ID : P2400531-009
Test Code:	Modified EPA TO-3	Date Collected: 3/16/04

Instrument ID:	HP5890II/GC8/FID			Date Received:	3/17/04
Analyst:	Regan Lau			Date Analyzed:	3/18/04
Sampling Media:	1.0 Liter Canister			Volume(s) Analyzed:	0.1 ml
Test Notes:					
Container ID:	1SC00019			DC1 10.2	
		Pi 1 =	0.3	Pf 1 = 10.2	

D.F. = 1.66

	Result	MRL	Data
Compound			Qualifier
	ppmV	ppmV	
Methane	240,000	8.3	
C <sub>2</sub> as Ethane	41	8.3	
C <sub>3</sub> as Propane	390	8.3	
C <sub>4</sub> as n-Butane	800	8.3	
C <sub>5</sub> as n-Pentane	530	8.3	
C <sub>6</sub> as n-Hexane	280	8.3	
$C_6$ + as n-Hexane	1,400	17	

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:Method BlankClient Project ID:Ascon/SB0202

CAS Project ID : P2400531 CAS Sample ID : P040318-MB

Test Code:	Modified EPA TO-3	Date Collected: NA
Instrument ID:	HP5890II/GC8/FID	Date Received: NA
Analyst:	Regan Lau	Date Analyzed: 3/18/04
Sampling Media:	1.0 Liter Canister	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	
$C_3$ as Propane	ND	0.50	
$C_4$ as n-Butane	ND	0.50	
C <sub>5</sub> as n-Pentane	ND	0.50	
$C_6$ as n-Hexane	ND	0.50	
$C_6$ + as n-Hexane	ND	1.0	

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

#### RESULTS OF ANALYSIS

Page 1 of 3

## Client:GeoSyntec Consultants, Inc.Client Sample ID:PNL-15-100DHFClient Project ID:Ascon/SB0202

CAS Project ID: P2400531 CAS Sample ID: P2400531-001

Test Code: Instrument ID: Analyst:	EPA TO-15 Tekmar AUTOCAN/HP5972/HP5890 II+/MS2 Michelle Sakamoto			Date Collected: 3/15/ Date Received: 3/17/ Date(s) Analyzed: 3/29/	04
Sampling Media:	1.0 Liter Canister			Volume(s) Analyzed:	0.40 Liter(s)
Test Notes: Container ID:	1SC00003	Pi 1 =	0.8	Pf 1 = 10.0	D.F. = 1.59
					D.F 1.39

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
74-87-3	Chloromethane	ND	2.0	ND	0.96	
75-01-4	Vinyl Chloride	ND	2.0	ND	0.78	
106-99-0	1,3-Butadiene	ND	2.0	ND	0.90	
74-83-9	Bromomethane	ND	2.0	ND	0.51	
75-00-3	Chloroethane	ND	2.0	ND	0.75	
67-64-1	Acetone	ND	20	ND	8.4	
75-69-4	Trichlorofluoromethane	ND	2.0	ND	0.35	
107-13-1	Acrylonitrile	ND	2.0	ND	0.92	
75-35-4	1,1-Dichloroethene	ND	2.0	ND	0.50	
75-09-2	Methylene chloride	ND	2.0	ND	0.57	
76-13-1	Trichlorotrifluoroethane	ND	2.0	ND	0.26	
75-15-0	Carbon Disulfide	ND	2.0	ND	0.64	
156-60-5	trans-1,2-Dichloroethene	ND	2.0	ND	0.50	
75-34-3	1,1-Dichloroethane	ND	2.0	ND	0.49	
1634-04-4	Methyl tert-Butyl Ether	ND	2.0	ND	0.55	
108-05-4	Vinyl Acetate	ND	2.0	ND	0.56	
78-93-3	2-Butanone (MEK)	ND	2.0	ND	0.67	
156-59-2	cis-1,2-Dichloroethene	ND	2.0	ND	0.50	
67-66-3	Chloroform	ND	2.0	ND	0.41	
107-06-2	1,2-Dichloroethane	ND	2.0	ND	0.49	
71-55-6	1,1,1-Trichloroethane	ND	2.0	ND	0.36	
71-43-2	Benzene	ND	2.0	ND	0.62	<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: KC. Date: 415104 Page No.

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#### **RESULTS OF ANALYSIS** Page 2 of 3

Client:	GeoSyntec Consultants, Inc.
Client Sample ID:	PNL-15-100DHF

Client Sample ID:

PNL-15-100DH Client Project ID: Ascon/SB0202

CAS Project ID: P2400531 CAS Sample ID: P2400531-001

D.F. = 1.59

0.29

0.33

0.33

0.33

Data Qualifier

Test Code: Instrument ID: Analyst: Sampling Media:	EPA TO-15 Tekmar AUTOCAN/HP5972/HP5890 II+/MS2 Michelle Sakamoto 1.0 Liter Canister			Date Collected: 3/15/04 Date Received: 3/17/04 Date(s) Analyzed: 3/29/04 Volume(s) Analyzed:	
Test Notes: Container ID:	1SC00003	Pi 1 =	0.8	Pf 1 = 10.0	

CAS#	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV
56-23-5	Carbon Tetrachloride	ND	2.0	ND	0.32
78-87-5	1,2-Dichloropropane	ND	2.0	ND	0.43
75-27-4	Bromodichloromethane	ND	2.0	ND	0.30
79-01-6	Trichloroethene	ND	2.0	ND	0.37
10061-01-5	cis-1,3-Dichloropropene	ND	2.0	ND	0.44
108-10-1	4-Methyl-2-pentanone	ND	2.0	ND	0.49
10061-02-6	trans-1,3-Dichloropropene	ND	2.0	ND	0.44
79-00-5	1,1,2-Trichloroethane	ND	2.0	ND	0.36
108-88-3	Toluene	ND	2.0	ND	0.53
591-78-6	2-Hexanone	ND	2.0	ND	0.49
124-48-1	Dibromochloromethane	ND	2.0	ND	0.23
106-93-4	1,2-Dibromoethane	ND	2.0	ND	0.26
127-18-4	Tetrachloroethene	ND	2.0	ND	0.29
108-90-7	Chlorobenzene	ND	2.0	ND	0.43
100-41-4	Ethylbenzene	ND	2.0	ND	0.46
136777-61-2	<i>m,p</i> -Xylenes	ND	4.0	ND	0.92
75-25-2	Bromoform	ND	2.0	ND	0.19
100-42-5	Styrene	ND	2.0	ND	0.47
95-47-6	o-Xylene	ND	2.0	ND	0.46

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.

ND

ND

ND

ND

2.0

2.0

2.0

2.0

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ND

ND

ND

ND

1,1,2,2-Tetrachloroethane

1,3-Dichlorobenzene

1,4-Dichlorobenzene

1,2-Dichlorobenzene

79-34-5

541-73-1

106-46-7

95-50-1

#### RESULTS OF ANALYSIS Page 3 of 3

## Client:GeoSyntec Consultants, Inc.Client Sample ID:PNL-15-100DHFClient Project ID:Ascon/SB0202

CAS Project ID: P2400531 CAS Sample ID: P2400531-001

## **Tentatively Identified Compounds**

Test Code:	EPA TO-15	Date Collected: 3/	/15/04
Instrument ID:	Tekmar AUTOCAN/HP5972/HP5890 II+/MS2	Date Received: 3/	/17/04
Analyst:	Michelle Sakamoto	Date Analyzed: 3/	/29/04
Sampling Media:	1.0 Liter Canister	Volume(s) Analyzed:	0.40 Liter(s)
Test Notes:			
Container ID:	1SC00003		

Pi 1 = 0.8 Pf 1 = 10.0

Verified By: R.G. Date: 41510

D.F. = 1.59

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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:PNL-2-15DHF

Client Project ID: Ascon/SB0202

CAS Project ID: P2400531 CAS Sample ID: P2400531-002

Test Code: Instrument ID: Analyst: Sampling Media: Test Notes:	EPA TO-15 Tekmar AUTOCAN/HP5972/HP5890 II+/MS2 Chris Parnell/Wade Henton 1.0 Liter Canister			Date Collected: 3/15/04 Date Received: 3/17/04 Date(s) Analyzed: 4/1/04 Volume(s) Analyzed:	
Container ID:	1SC00002	Pi 1 =	0.3	Pf 1 = 10.0	D.F. = 1.65

CAS#	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
74-87-3	Chloromethane	ND	2.1	ND	1.0	
75-01-4	Vinyl Chloride	ND	2.1	ND	0.81	
106-99-0	1,3-Butadiene	ND	2.1	ND	0.93	
74-83-9	Bromomethane	ND	2.1	ND	0.53	J
75-00-3	Chloroethane	ND	2.1	ND	0.78	
67-64-1	Acetone	45	21	19	8.7	
75-69-4	Trichlorofluoromethane	ND	2.1	ND	0.37	
107-13-1	Acrylonitrile	ND	2.1	ND	0.95	
75-35-4	1,1-Dichloroethene	ND	2.1	ND	0.52	_
75-09-2	Methylene chloride	ND	2.1	ND	0.59	
76-13-1	Trichlorotrifluoroethane	ND	2.1	ND	0.27	
75-15-0	Carbon Disulfide	4.8	2.1	1.6	0.66	_
156-60-5	trans-1,2-Dichloroethene	ND	2.1	ND	0.52	
75-34-3	1,1-Dichloroethane	ND	2.1	ND	0.51	
1634-04-4	Methyl tert-Butyl Ether	ND	2.1	ND	0.57	
108-05-4	Vinyl Acetate	ND	2.1	ND	0.59	
78-93-3	2-Butanone (MEK)	10	2.1	3.4	0.70	
156-59-2	cis-1,2-Dichloroethene	ND	2.1	ND	0.52	_
67-66-3	Chloroform	ND	2.1	ND	0.42	
107-06-2	1,2-Dichloroethane	ND	2.1	ND	0.51	
71-55-6	1,1,1-Trichloroethane	ND	2.1	ND	0.38	
71-43-2	Benzene	ND	2.1	ND	0.65	

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

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

Verified By: <u>KC</u> Date: <u>415104</u> **16** 

#### RESULTS OF ANALYSIS Page 2 of 3

Client:	GeoSyntec Consultants, Inc.
<b>Client Sample ID:</b>	PNL-2-15DHF
<b>Client Project ID:</b>	Ascon/SB0202

CAS Project ID: P2400531 CAS Sample ID: P2400531-002

Test Code: Instrument ID: Analyst:	EPA TO-15 Tekmar AUTOCAN/HP5972/HP5890 II+/MS2 Chris Parnell/Wade Henton			Date Collected: 3/15/04 Date Received: 3/17/04 Date(s) Analyzed: 4/1/04	
Sampling Media:	1.0 Liter Canister			Volume(s) Analyzed:	0.40 Liter(s)
Test Notes: Container ID:	1SC00002	Pi 1 =	0.3	Pf 1 = 10.0	DF 165
					D.F. = 1.65

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
56-23-5	Carbon Tetrachloride	ND	2.1	ND	0.33	· · · · · · · · · · · · · · · · · · ·
78-87-5	1,2-Dichloropropane	ND	2.1	ND	0.45	
75-27-4	Bromodichloromethane	ND	2.1	ND	0.31	
79-01-6	Trichloroethene	ND	2.1	ND	0.38	
10061-01-5	cis-1,3-Dichloropropene	ND	2.1	ND	0.45	
108-10-1	4-Methyl-2-pentanone	ND	2.1	ND	0.50	ļ
10061-02-6	trans-1,3-Dichloropropene	ND	2.1	ND	0.45	
79-00-5	1,1,2-Trichloroethane	ND	2.1	ND	0.38	
108-88-3	Toluene	ND	2.1	ND	0.55	
591-78-6	2-Hexanone	ND	2.1	ND	0.50	l
124-48-1	Dibromochloromethane	ND	2.1	ND	0.24	╢
106-93-4	1,2-Dibromoethane	ND	2.1	ND	0.27	
127-18-4	Tetrachloroethene	ND	2.1	ND	0.30	
108-90-7	Chlorobenzene	ND	2.1	ND	0.45	
100-41-4	Ethylbenzene	ND	2.1	ND	0.48	
136777-61-2	<i>m</i> , <i>p</i> -Xylenes	ND	4.1	ND	0.95	
75-25-2	Bromoform	ND	2.1	ND	0.20	
100-42-5	Styrene	ND	2.1	ND	0.48	
95-47-6	o-Xylene	ND	2.1	ND	0.48	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.1	ND	0.30	
541-73-1	1,3-Dichlorobenzene	ND	2.1	ND	0.34	
106-46-7	1,4-Dichlorobenzene	ND	2.1	ND	0.34	
95-50-1	1,2-Dichlorobenzene	ND	2.1	ND	0.34	

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

Verified By: <u><u><u>R</u></u><u><u>C</u><u></u><u>Page No.</u> **17**</u></u>

#### RESULTS OF ANALYSIS

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Client:	GeoSyntec Consultants, Inc.
<b>Client Sample ID:</b>	PNL-2-15DHF
<b>Client Project ID:</b>	Ascon/SB0202

CAS Project ID: P2400531 CAS Sample ID: P2400531-002

#### **Tentatively Identified Compounds**

Test Code: Instrument ID: Analyst: Sampling Media:	ument ID:Tekmar AUTOCAN/HP5972/HP5890 II+/MS2lyst:Chris Parnell/Wade Henton	2		Date Collected: 3/15/04 Date Received: 3/17/04 Date Analyzed: 4/1/04 Volume(s) Analyzed: 0.40 Lite			
Test Notes: Container ID:	T 1SC00002	Pi 1 =	0.3	Pf 1 = 10.0			

D.F. = 1.65

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GC / MS Ret. Time	Compound Identification	Concentration µg/m³	Data Qualifier
4.85	Propane + Carbonyl Sulfide	70	
5.26	Isobutane	400	
5.58	n-Butane	70	
6.65	Isopentane	100	
8.07	2,2-Dimethylbutane	80	
8.92	2,3-Dimethylbutane	400	
11.21	2,4-Dimethylpentane	200	
12.89	2,3-Dimethylpentane	300	
15.39	Trimethylcyclopentane Isomer	200	
16.16	Trimethylcyclopentane Isomer	600	
17.83	Tetramethylcyclopentane Isomer	100	
18.95	Tetramethylcyclopentane Isomer	500	
20.34	Unidentified	100	
20.84	Unidentified	100	
22.74	C <sub>10</sub> H <sub>20</sub> Compound	200	

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

00531VOA.RD1 - TIC (2)

#### RESULTS OF ANALYSIS

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#### Client: GeoSyntec Consultants, Inc. Client Sample ID: PNL-15-12DHF

Client Project ID: Ascon/SB0202

CAS Project ID: P2400531 CAS Sample ID: P2400531-003

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Verified By: <u>Rc</u> Date: <u>4(5)04</u> Page No.:

Test Code:	EPA TO-15			Date Collected: 3/15/04	4
Instrument ID:	Tekmar AUTOCAN/HP5972/HP5890 II+/MS2			Date Received: 3/17/04	4
Analyst:	Chris Parnell/Wade Henton			Date(s) Analyzed: 4/2/04	
Sampling Media:	1.0 Liter Canister			Volume(s) Analyzed:	0.20 Liter(s)
Test Notes:					
Container ID:	1SC00001				
		Pi 1 =	0.0	Pf 1 = 10.0	
					D.F. = 1.68

CAS#	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
74-87-3	Chloromethane	ND	4.2	ND	2.0	1
75-01-4	Vinyl Chloride	ND	4.2	ND	1.6	
106-99-0	1,3-Butadiene	13	4.2	6.1	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	0.75	
107-13-1	Acrylonitrile	ND	4.2	ND	1.9	<u> </u>
75-35-4	1,1-Dichloroethene	ND	4.2	ND	1.1	
75-09-2	Methylene chloride	ND	4.2	ND	1.2	
76-13-1	Trichlorotrifluoroethane	ND	4.2	ND	0.55	
75-15-0	Carbon Disulfide	6.0	4.2	1.9	1.3	
156-60-5	trans-1,2-Dichloroethene	ND	4.2	ND	1.1	
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	
78-93-3	2-Butanone (MEK)	14	4.2	4.9	1.4	
156-59-2	cis-1,2-Dichloroethene	ND	4.2	ND	1.1	
67-66-3	Chloroform	ND	4.2	ND	0.86	<u> </u>
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	<u> </u>
71-43-2	Benzene	130	4.2	41	1.3	

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

#### RESULTS OF ANALYSIS Page 2 of 3

Client:	GeoSyntec Consultants, Inc.
<b>Client Sample ID:</b>	PNL-15-12DHF
<b>Client Project ID:</b>	Ascon/SB0202

CAS Project ID: P2400531 CAS Sample ID: P2400531-003

Test Code: Instrument ID: Analyst: Sampling Media:	EPA TO-15 Tekmar AUTOCAN/HP5972/HP5890 II+/MS2 Chris Parnell/Wade Henton 1.0 Liter Canister			Date Collected: 3/15/04 Date Received: 3/17/04 Date(s) Analyzed: 4/2/04 Volume(s) Analyzed:	
Test Notes: Container ID:	1SC00001	Pi 1 =	0.0	Pf 1 = 10.0	D.F. = 1.68

CAS#	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
56-23-5	Carbon Tetrachloride	ND	4.2	ND	0.67	
78-87-5	1,2-Dichloropropane	ND	4.2	ND	0.91	
75-27-4	Bromodichloromethane	ND	4.2	ND	0.63	
79-01-6	Trichloroethene	ND	4.2	ND	0.78	
10061-01-5	cis-1,3-Dichloropropene	ND	4.2	ND	0.93	<u> </u>
108-10-1	4-Methyl-2-pentanone	ND	4.2	ND	1.0	
10061-02-6	trans-1,3-Dichloropropene	ND	4.2	ND	0.93	
79-00-5	1,1,2-Trichloroethane	ND	4.2	ND	0.77	
108-88-3	Toluene	86	4.2	23	1.1	
591-78-6	2-Hexanone	ND	4.2	ND	1.0	
124-48-1	Dibromochloromethane	ND	4.2	ND	0.49	l
106-93-4	1,2-Dibromoethane	ND	4.2	ND	0.55	
127-18-4	Tetrachloroethene	ND	4.2	ND	0.62	
108-90-7	Chlorobenzene	ND	4.2	ND	0.91	
100-41-4	Ethylbenzene	140	4.2	32	0.97	
136777-61-2	<i>m,p</i> -Xylenes	160	8.4	38	1.9	
75-25-2	Bromoform	ND	4.2	ND	0.41	
100-42-5	Styrene	ND	4.2	ND	0.99	
95-47-6	o-Xylene	100	4.2	24	0.97	
79-34-5	1,1,2,2-Tetrachloroethane	ND	4.2	ND	0.61	
541-73-1	1,3-Dichlorobenzene	ND	4.2	ND	0.70	
106-46-7	1,4-Dichlorobenzene	ND	4.2	ND	0.70	
95-50-1	1,2-Dichlorobenzene	ND	4.2	ND	0.70	

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

Verified By: <u>R</u> Date: <u>U15104</u> 20

#### **RESULTS OF ANALYSIS**

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Client:	GeoSyntec Consultants, Inc.
<b>Client Sample ID:</b>	PNL-15-12DHF
<b>Client Project ID:</b>	Ascon/SB0202

CAS Project ID: P2400531 CAS Sample ID: P2400531-003

#### **Tentatively Identified Compounds**

Test Code:	EPA TO-15			Date Collected: 3/	
Instrument ID:	Tekmar AUTOCAN/HP5972/HP5890 II+/MS2	2		Date Received: 3/	(17/04
Analyst:	Chris Parnell/Wade Henton			Date Analyzed: 4/	/2/04
Sampling Media:	1.0 Liter Canister			Volume(s) Analyzed:	0.20 Liter(s)
Test Notes:	Т				
Container ID:	1SC00001				
		Pi 1 =	0.0	Pf 1 = 10.0	

D.F. = 1.68

GC / MS Ret. Time	Compound Identification	Concentration µg/m³	Data Qualifier
5.62	n-Butane	700	
6.70	Isopentane	900	
7.20	n-Pentane	800	
9.09	2-Methylpentane	600	
11.24	Methylcyclopentane	900	
13.59	Dimethylcyclopentane Isomer	600	
13.72	Dimethylcyclopentane Isomer	600	
13.84	Dimethylcyclopentane Isomer	900	
15.39	Methylcyclohexane	800	
16.22	Trimethylcyclopentane Isomer	600	
16.58	Trimethylcyclopentane Isomer	800	
17.99	Dimethylcyclohexane Isomer	600	
20.51	Trimethylcyclohexane Isomer	900	
23.40	C <sub>9</sub> H <sub>16</sub> Compound	500	
23.62	C <sub>10</sub> H <sub>22</sub> Branched Alkane	500	

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

Verified By: <u>RU</u>Date: <u>415104</u> Page No.:

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RESULTS OF ANALYSIS

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## Client:GeoSyntec Consultants, Inc.Client Sample ID:PNL-13-12DHFClient Project ID:Ascon/SB0202

CAS Project ID: P2400531 CAS Sample ID: P2400531-004

Test Code: Instrument ID: Analyst:	EPA TO-15 Tekmar AUTOCAN/HP5972/HP5890 II+/MS2 Michelle Sakamoto			Date Collected: 3/15/0 Date Received: 3/17/0 Date(s) Analyzed: 3/31/0	94
Sampling Media:	1.0 Liter Canister			Volume(s) Analyzed:	0.010 Liter(s)
Test Notes: Container ID:	1SC00004	Pi 1 =	0.1	Pf 1 = 10.0	D.F. = 1.67

CAS#	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
74-87-3	Chloromethane	ND	84	ND	40	
75-01-4	Vinyl Chloride	ND	84	ND	33	
106-99-0	1,3-Butadiene	ND	84	ND	38	
74-83-9	Bromomethane	ND	84	ND	22	ļ
75-00-3	Chloroethane	ND	84	ND	32	
67-64-1	Acetone	ND	840	ND	350	<u> </u>
75-69-4	Trichlorofluoromethane	ND	84	ND	15	
107-13-1	Acrylonitrile	ND	84	ND	38	l
75-35-4	1,1-Dichloroethene	ND	84	ND	21	
75-09-2	Methylene chloride	ND	84	ND	24	l
76-13-1	Trichlorotrifluoroethane	ND	84	ND	11	J
75-15-0	Carbon Disulfide	ND	84	ND	27	J
156-60-5	trans-1,2-Dichloroethene	ND	84	ND	21	
75-34-3	1,1-Dichloroethane	ND	84	ND	21	
1634-04-4	Methyl tert-Butyl Ether	ND	84	ND	23	
108-05-4	Vinyl Acetate	ND	84	ND	24	
78-93-3	2-Butanone (MEK)	ND	84	ND	28	
156-59-2	cis-1,2-Dichloroethene	ND	84	ND	21	
67-66-3	Chloroform	ND	84	ND	17	
107-06-2	1,2-Dichloroethane	ND	84	ND	21	
71-55-6	1,1,1-Trichloroethane	ND	84	ND	15	
71-43-2	Benzene	580	84	180	26	

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

Verified By: <u><u>R</u>G\_\_\_\_\_Date: <u>45104</u> **22**</u>

**RESULTS OF ANALYSIS** 

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Client:	GeoSyntec Consultants, Inc.
<b>Client Sample ID:</b>	PNL-13-12DHF

Client Project ID: Ascon/SB0202

CAS Project ID: P2400531 CAS Sample ID: P2400531-004

Test Code: Instrument ID: Analyst: Sampling Media:	EPA TO-15 Tekmar AUTOCAN/HP5972/HP5890 II+/MS2 Michelle Sakamoto 1.0 Liter Canister			Date Collected: 3/15/0 Date Received: 3/17/0 Date(s) Analyzed: 3/31/0 Volume(s) Analyzed:	94
Test Notes: Container ID:	1SC00004	Pi 1 =	0.1	Pf 1 = 10.0	D.F. = 1.67

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
56-23-5	Carbon Tetrachloride	ND	84	ND	13	
78-87-5	1,2-Dichloropropane	ND	84	ND	18	
75-27-4	Bromodichloromethane	ND	84	ND	12	l
79-01-6	Trichloroethene	ND	84	ND	16	-
10061-01-5	cis-1,3-Dichloropropene	ND	84	ND	18	
108-10-1	4-Methyl-2-pentanone	ND	84	ND	20	
10061-02-6	trans-1,3-Dichloropropene	ND	84	ND	18	
79-00-5	1,1,2-Trichloroethane	ND	84	ND	15	
108-88-3	Toluene	1,300	84	360	22	
591-78-6	2-Hexanone	ND	84	ND	20	
124-48-1	Dibromochloromethane	ND	84	ND	9.8	
106-93-4	1,2-Dibromoethane	ND	84	ND	11	
127-18-4	Tetrachloroethene	ND	84	ND	12	
108-90-7	Chlorobenzene	ND	84	ND	18	
100-41-4	Ethylbenzene	940	84	220	19	
136777-61-2	<i>m,p</i> -Xylenes	2,200	170	510	38	
75-25-2	Bromoform	ND	84	ND	8.1	
100-42-5	Styrene	ND	84	ND	20	
95-47-6	o-Xylene	1,400	84	320	19	
79-34-5	1,1,2,2-Tetrachloroethane	ND	84	ND	12	
541-73-1	1,3-Dichlorobenzene	ND	84	ND	14	
106-46-7	1,4-Dichlorobenzene	ND	84	ND	14	
95-50-1	1,2-Dichlorobenzene	ND	84	ND	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: <u>RC</u> Date: <u>4504</u> 23

## RESULTS OF ANALYSIS

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## Client:GeoSyntec Consultants, Inc.Client Sample ID:PNL-13-12DHFClient Project ID:Ascon/SB0202

CAS Project ID: P2400531 CAS Sample ID: P2400531-004

#### **Tentatively Identified Compounds**

Test Code:	EPA TO-15			Date Collected: 3/15/04
Instrument ID:	Tekmar AUTOCAN/HP5972/HP5890 II+/MS	2		Date Received: 3/17/04
Analyst:	Michelle Sakamoto			Date Analyzed: 3/31/04
Sampling Media:	1.0 Liter Canister			Volume(s) Analyzed: 0.010 Liter(s)
Test Notes:	Т			
Container ID:	1SC00004			
		Pi 1 =	0.1	Pf 1 = 10.0

D.F. = 1.67

GC / MS Ret. Time	Compound Identification	Concentration µg/m³	Data Qualifier
6.66	Isopentane	6,000	
7.18	n-Pentane	5,000	
11.19	Methylcyclopentane	9,000	
13.55	Dimethylcyclopentane Isomer	7,000	
13.68	Dimethylcyclopentane Isomer	6,000	
13.79	Dimethylcyclopentane Isomer	9,000	
15.34	Methylcyclohexane	9,000	
16.17	Trimethylcyclopentane Isomer	6,000	
16.52	Trimethylcyclopentane Isomer	9,000	
17.94	Dimethylcyclohexane Isomer	7,000	
18.83	Dimethylcyclohexane Isomer	4,000	
20.47	Trimethylcyclohexane Isomer	10,000	
23.35	C <sub>10</sub> H <sub>22</sub> Branched Alkane + Unidentifed Compound	5,000	
23.60	C <sub>10</sub> H <sub>22</sub> Branched Alkane	5,000	
24.46	C <sub>10</sub> H <sub>20</sub> Compound	4,000	

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

Verified By: <u><u>K</u>(<u>y</u> <u>Date: <u>4</u>|5|0<u>4</u> Page No: **24**</u></u>

**RESULTS OF ANALYSIS** 

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#### GeoSyntec Consultants, Inc. **Client:** Client Sample ID: PNL-12-100DHF Client Project ID: Ascon/SB0202

#### CAS Project ID: P2400531 CAS Sample ID: P2400531-005

Test Code: Instrument ID: Analyst:	EPA TO-15 Tekmar AUTOCAN/HP5972/HP5890 II+/MS2 Michelle Sakamoto			Date Collected: 3/16/0 Date Received: 3/17/0 Date(s) Analyzed: 3/30/0	4
Sampling Media:	1.0 Liter Canister			Volume(s) Analyzed:	0.40 Liter(s)
Test Notes: Container ID:	1SC00018	Pi 1 =	0.4	Pf 1 = 10.1	D.F. = 1.64

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
74-87-3	Chloromethane	ND	2.1	ND	0.99	
75-01-4	Vinyl Chloride	ND	2.1	ND	0.80	
106-99-0	1,3-Butadiene	ND	2.1	ND	0.93	
74-83-9	Bromomethane	ND	2.1	ND	0.53	ļ
75-00-3	Chloroethane	ND	2.1	ND	0.78	
67-64-1	Acetone	ND	21	ND	8.6	
75-69-4	Trichlorofluoromethane	ND	2.1	ND	0.37	
107-13-1	Acrylonitrile	ND	2.1	ND	0.95	<b></b>
75-35-4	1,1-Dichloroethene	ND	2.1	ND	0.52	
75-09-2	Methylene chloride	ND	2.1	ND	0.59	<u> </u>
76-13-1	Trichlorotrifluoroethane	ND	2.1	ND	0.27	
75-15-0	Carbon Disulfide	ND	2.1	ND	0.66	l
156-60-5	trans-1,2-Dichloroethene	ND	2.1	ND	0.52	l
75-34-3	1,1-Dichloroethane	ND	2.1	ND	0.51	
1634-04-4	Methyl tert-Butyl Ether	ND	2.1	ND	0.57	
108-05-4	Vinyl Acetate	ND	2.1	ND	0.58	
78-93-3	2-Butanone (MEK)	ND	2.1	ND	0.70	
156-59-2	cis-1,2-Dichloroethene	ND	2.1	ND	0.52	
67-66-3	Chloroform	ND	2.1	ND	0.42	
107-06-2	1,2-Dichloroethane	ND	2.1	ND	0.51	
71-55-6	1,1,1-Trichloroethane	ND	2.1	ND	0.38	
71-43-2	Benzene	ND	2.1	ND	0.64	

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

Verified By: <u><u>Ru</u> <u>Date: 4504</u> **25** Page No.:</u>

#### **RESULTS OF ANALYSIS**

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Client:	GeoSyntec Consultants, Inc.
Client Sample ID:	PNL-12-100DHF
<b>Client Project ID:</b>	Ascon/SB0202

CAS Project ID: P2400531 CAS Sample ID: P2400531-005

Test Code: Instrument ID: Analyst: Sampling Media:	EPA TO-15 Tekmar AUTOCAN/HP5972/HP5890 II+/MS2 Michelle Sakamoto 1.0 Liter Canister			Date Collected: 3/16/04 Date Received: 3/17/04 Date(s) Analyzed: 3/30/04 Volume(s) Analyzed:	
Test Notes: Container ID:	1SC00018	Pi 1 =	0.4	Pf $1 = 10.1$	D.F. = 1.64

CAS#	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
56-23-5	Carbon Tetrachloride	ND	2.1	ND	0.33	
78-87-5	1,2-Dichloropropane	ND	2.1	ND	0.44	
75-27-4	Bromodichloromethane	ND	2.1	ND	0.31	
79-01-6	Trichloroethene	ND	2.1	ND	0.38	
10061-01-5	cis-1,3-Dichloropropene	ND	2.1	ND	0.45	
108-10-1	4-Methyl-2-pentanone	ND	2.1	ND	0.50	
10061-02-6	trans-1,3-Dichloropropene	ND	2.1	ND	0.45	
79-00-5	1,1,2-Trichloroethane	ND	2.1	ND	0.38	
108-88-3	Toluene	ND	2.1	ND	0.54	
591-78-6	2-Hexanone	ND	2.1	ND	0.50	
124-48-1	Dibromochloromethane	ND	2.1	ND	0.24	<u> </u>
106-93-4	1,2-Dibromoethane	ND	2.1	ND	0.27	
127-18-4	Tetrachloroethene	ND	2.1	ND	0.30	
108-90-7	Chlorobenzene	ND	2.1	ND	0.45	
100-41-4	Ethylbenzene	ND	2.1	ND	0.47	l
136777-61-2	<i>m,p</i> -Xylenes	ND	4.1	ND	0.94	ļ
75-25-2	Bromoform	ND	2.1	ND	0.20	
100-42-5	Styrene	ND	2.1	ND	0.48	ļ
95-47-6	o-Xylene	ND	2.1	ND	0.47	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.1	ND	0.30	ļ
541-73-1	1,3-Dichlorobenzene	ND	2.1	ND	0.34	<u> </u>
106-46-7	1,4-Dichlorobenzene	ND	2.1	ND	0.34	
95-50-1	1,2-Dichlorobenzene	ND	2.1	ND	0.34	<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: <u>Kle</u> Date: <u>415104</u>

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#### **RESULTS OF ANALYSIS**

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Client:	GeoSyntec Consultants, Inc.
<b>Client Sample ID:</b>	PNL-12-100DHF
<b>Client Project ID:</b>	Ascon/SB0202

CAS Project ID: P2400531 CAS Sample ID: P2400531-005

#### **Tentatively Identified Compounds**

Test Code: Instrument ID: Analyst:	EPA TO-15 Tekmar AUTOCAN/HP5972/HP5890 II+/MS2 Michelle Sakamoto	2		Date Collected: 3/ Date Received: 3/ Date Analyzed: 3/	17/04
Sampling Media: Test Notes:	1.0 Liter Canister			Volume(s) Analyzed:	0.40 Liter(s)
Container ID:	1SC00018	Pi 1 =	0.4	Pf 1 = 10.1	

D.F. = 1.64

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

Verified By: <u><u>R</u>. <u>Date: <u>4</u>5<u>104</u> Page No. **27**</u></u>

**RESULTS OF ANALYSIS** 

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## Client:GeoSyntec Consultants, Inc.Client Sample ID:PNL-12-15DHFClient Project ID:Ascon/SB0202

CAS Project ID: P2400531 CAS Sample ID: P2400531-006

Test Code: Instrument ID: Analyst:	EPA TO-15 Tekmar AUTOCAN/HP5972/HP5890 II+/MS2 Chris Parnell/Wade Henton			Date Collected: 3/16/0 Date Received: 3/17/0 Date(s) Analyzed: 4/2/04	4
Sampling Media:	1.0 Liter Canister			Volume(s) Analyzed:	0.10 Liter(s)
Test Notes: Container ID:	1SC00017	Pi 1 =	0.0	Pf 1 = 10.0	D.F. = 1.68
					D.r. = 1.08

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
74-87-3	Chloromethane	ND	8.4	ND	4.1	
75-01-4	Vinyl Chloride	ND	8.4	ND	3.3	-
106-99-0	1,3-Butadiene	ND	8.4	ND	3.8	
74-83-9	Bromomethane	ND	8.4	ND	2.2	
75-00-3	Chloroethane	ND	8.4	ND	3.2	
67-64-1	Acetone	ND	84	ND	35	
75-69-4	Trichlorofluoromethane	ND	8.4	ND	1.5	
107-13-1	Acrylonitrile	ND	8.4	ND	3.9	_
75-35-4	1,1-Dichloroethene	ND	8.4	ND	2.1	
75-09-2	Methylene chloride	ND	8.4	ND	2.4	
76-13-1	Trichlorotrifluoroethane	ND	8.4	ND	1.1	
75-15-0	Carbon Disulfide	ND	8.4	ND	2.7	
156-60-5	trans-1,2-Dichloroethene	ND	8.4	ND	2.1	
75-34-3	1,1-Dichloroethane	ND	8.4	ND	2.1	
1634-04-4	Methyl tert-Butyl Ether	ND	8.4	ND	2.3	
108-05-4	Vinyl Acetate	ND	8.4	ND	2.4	
78-93-3	2-Butanone (MEK)	9.2	8.4	3.1	2.8	
156-59-2	cis-1,2-Dichloroethene	ND	8.4	ND	2.1	
67-66-3	Chloroform	ND	8.4	ND	1.7	
107-06-2	1,2-Dichloroethane	ND	8.4	ND	2.1	
71-55-6	1,1,1-Trichloroethane	ND	8.4	ND	1.5	
71-43-2	Benzene	57	8.4	18	2.6	<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: R. Date: 4504 28

## **RESULTS OF ANALYSIS**

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Client:	GeoSyntec Consultants, Inc.
<b>Client Sample ID:</b>	PNL-12-15DHF
<b>Client Project ID:</b>	Ascon/SB0202

CAS Project ID: P2400531 CAS Sample ID: P2400531-006

Test Code:	EPA TO-15			Date Collected: 3/16/04	
Instrument ID:	Tekmar AUTOCAN/HP5972/HP5890 II+/MS2			Date Received: 3/17/04	
Analyst:	Chris Parnell/Wade Henton			Date(s) Analyzed: 4/2/04	
Sampling Media:	1.0 Liter Canister			Volume(s) Analyzed:	0.10 Liter(s)
Test Notes:					
Container ID:	1SC00017				
		Pi 1 =	0.0	Pf 1 = 10.0	

D.F. =	1.68
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CAS#	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
56-23-5	Carbon Tetrachloride	ND	8.4	ND	1.3	
78-87-5	1,2-Dichloropropane	ND	8.4	ND	1.8	
75-27-4	Bromodichloromethane	ND	8.4	ND	1.3	
79-01-6	Trichloroethene	ND	8.4	ND	1.6	
10061-01-5	cis-1,3-Dichloropropene	ND	8.4	ND	1.9	
108-10-1	4-Methyl-2-pentanone	ND	8.4	ND	2.1	
10061-02-6	trans-1,3-Dichloropropene	ND	8.4	ND	1.9	
79-00-5	1,1,2-Trichloroethane	ND	8.4	ND	1.5	
108-88-3	Toluene	15	8.4	3.9	2.2	
591-78-6	2-Hexanone	ND	8.4	ND	2.1	
124-48-1	Dibromochloromethane	ND	8.4	ND	0.99	
106-93-4	1,2-Dibromoethane	ND	8.4	ND	1.1	
127-18-4	Tetrachloroethene	ND	8.4	ND	1.2	
108-90-7	Chlorobenzene	ND	8.4	ND	1.8	
100-41-4	Ethylbenzene	230	8.4	52	1.9	
136777-61-2	<i>m,p</i> -Xylenes	98	17	22	3.9	
75-25-2	Bromoform	ND	8.4	ND	0.81	
100-42-5	Styrene	ND	8.4	ND	2.0	
95-47-6	o-Xylene	30	8.4	6.8	1.9	
79-34-5	1,1,2,2-Tetrachloroethane	ND	8.4	ND	1.2	
541-73-1	1,3-Dichlorobenzene	ND	8.4	ND	1.4	
106-46-7	1,4-Dichlorobenzene	ND	8.4	ND	1.4	
95-50-1	1,2-Dichlorobenzene	ND	8.4	ND	1.4	

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

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

Verified By: <u>RG</u> Date: <u>45104</u> 29

#### **RESULTS OF ANALYSIS**

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## Client:GeoSyntec Consultants, Inc.Client Sample ID:PNL-12-15DHFClient Project ID:Ascon/SB0202

CAS Project ID: P2400531 CAS Sample ID: P2400531-006

#### **Tentatively Identified Compounds**

Test Code: Instrument ID:	EPA TO-15 Tekmar AUTOCAN/HP5972/HP5890 II+/MS	2		Date Collected: 3/16/04 Date Received: 3/17/04
Analyst:	Chris Parnell/Wade Henton			Date Analyzed: 4/2/04
Sampling Media:	1.0 Liter Canister			Volume(s) Analyzed: 0.10 Liter(s)
Test Notes:	Т			
Container ID:	1SC00017			
		Pi 1 =	0.0	Pf 1 = 10.0

D.F. = 1.68

GC / MS Ret. Time	Compound Identification	Concentration μg/m³	Data Qualifier
13.71	Dimethylcyclopentane Isomer	800	
13.84	Dimethylcyclopentane Isomer	900	
15.39	Methylcyclohexane	900	
15.45	Trimethylcyclopentane Isomer	700	
16.22	Trimethylcyclopentane Isomer	1,000	
16.57	Trimethylcyclopentane Isomer	1,000	
17.99	Dimethylcyclohexane	1,000	
18.57	Methyl Ethyl Cyclopentane Isomer	700	
18.88	Dimethylcyclohexane	700	
19.00	C <sub>9</sub> H <sub>18</sub> Substituted Cyclopentane Isomer	700	
20.52	Trimethylcyclohexane	1,000	
20.89	C <sub>9</sub> H <sub>18</sub> Compound	700	
21.08	Trimethylcyclohexane Isomer	700	
23.39	C <sub>9</sub> H <sub>16</sub> Compound	900	
24.49	C <sub>10</sub> H <sub>20</sub> Substituted Cyclohexane Isomer	700	

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

Verified By: <u>R(.</u> Date: <u>4.15.10.4</u> **30** Page No.:

**RESULTS OF ANALYSIS** 

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## Client:GeoSyntec Consultants, Inc.Client Sample ID:PNL-12-15RDHFClient Project ID:Ascon/SB0202

CAS Project ID: P2400531 CAS Sample ID: P2400531-007

Test Code: Instrument ID: Analyst:	EPA TO-15 Tekmar AUTOCAN/HP5972/HP5890 II+/MS2 Chris Parnell/Wade Henton			Date Collected: 3/16/04 Date Received: 3/17/04 Date(s) Analyzed: 4/2/04	4
Sampling Media:	1.0 Liter Canister			Volume(s) Analyzed:	0.20 Liter(s)
Test Notes: Container ID:	1SC00016	Pi 1 =	0.0	Pf 1 = 10.5	D.F. = 1.71

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
74-87-3	Chloromethane	ND	4.3	ND	2.1	
75-01-4	Vinyl Chloride	ND	4.3	ND	1.7	
106-99-0	1,3-Butadiene	ND	4.3	ND	1.9	J
74-83-9	Bromomethane	ND	4.3	ND	1.1	
75-00-3	Chloroethane	ND	4.3	ND	1.6	
67-64-1	Acetone	ND	43	ND	18	
75-69-4	Trichlorofluoromethane	ND	4.3	ND	0.76	
107-13-1	Acrylonitrile	ND	4.3	ND	2.0	
75-35-4	1,1-Dichloroethene	ND	4.3	ND	1.1	
75-09-2	Methylene chloride	ND	4.3	ND	1.2	
76-13-1	Trichlorotrifluoroethane	ND	4.3	ND	0.56	
75-15-0	Carbon Disulfide	ND	4.3	ND	1.4	
156-60-5	trans-1,2-Dichloroethene	ND	4.3	ND	1.1	
75-34-3	1,1-Dichloroethane	ND	4.3	ND	1.1	
1634-04-4	Methyl tert-Butyl Ether	ND	4.3	ND	1.2	
108-05-4	Vinyl Acetate	ND	4.3	ND	1.2	_↓
78-93-3	2-Butanone (MEK)	6.2	4.3	2.1	1.5	
156-59-2	cis-1,2-Dichloroethene	ND	4.3	ND	1.1	
67-66-3	Chloroform	ND	4.3	ND	0.88	
107-06-2	1,2-Dichloroethane	ND	4.3	ND	1.1	
71-55-6	1,1,1-Trichloroethane	ND	4.3	ND	0.78	
71-43-2	Benzene	22	4.3	6.8	1.3	_ <u></u>

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

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**RESULTS OF ANALYSIS** 

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Client:	GeoSyntec Consultants, Inc.
Client Sample ID:	PNL-12-15RDHF
<b>Client Project ID:</b>	Ascon/SB0202

CAS Project ID: P2400531 CAS Sample ID: P2400531-007

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Test Code: Instrument ID:	EPA TO-15 Tekmar AUTOCAN/HP5972/HP5890 II+/MS2			Date Collected: 3/16/04 Date Received: 3/17/04 Date(s) Analyzed: 4/2/04	
Analyst: Sompling Media:	Chris Parnell/Wade Henton 1.0 Liter Canister			Volume(s) Analyzed:	0.20 Liter(s)
Sampling Media: Test Notes:					
Container ID:	1SC00016	Pi 1 =	0.0	Pf 1 = 10.5	
					D.F. = 1.71

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
56-23-5	Carbon Tetrachloride	ND	<u>4.3</u>	ND	0.68	
78-87-5	1,2-Dichloropropane	ND	4.3	ND	0.93	
75-27-4	Bromodichloromethane	ND	4.3	ND	0.64	
79-01-6	Trichloroethene	ND	4.3	ND	0.80	
10061-01-5	cis-1,3-Dichloropropene	ND	4.3	ND	0.94	
108-10-1	4-Methyl-2-pentanone	ND	4.3	ND	1.0	
10061-02-6	trans-1,3-Dichloropropene	ND	4.3	ND	0.94	
79-00-5	1,1,2-Trichloroethane	ND	4.3	ND	0.78	
108-88-3	Toluene	7.2	4.3	1.9	1.1	
591-78-6	2-Hexanone	ND	4.3	ND	1.0	
124-48-1	Dibromochloromethane	ND	4.3	ND	0.50	
106-93-4	1,2-Dibromoethane	- ND	4.3	ND	0.56	
127-18-4	Tetrachloroethene	ND	4.3	ND	0.63	
108-90-7	Chlorobenzene	ND	4.3	ND	0.93	
100-41-4	Ethylbenzene	120	4.3	28	0.98	
136777-61-2	<i>m,p</i> -Xylenes	51	8.6	12	2.0	
75-25-2	Bromoform	ND	4.3	ND	0.41	
100-42-5	Styrene	ND	4.3	ND	1.0	
95-47-6	o-Xylene	16	4.3	3.8	0.98	
79-34-5	1,1,2,2-Tetrachloroethane	ND	4.3	ND	0.62	
541-73-1	1,3-Dichlorobenzene	ND	4.3	ND	0.71	
106-46-7	1,4-Dichlorobenzene	ND	4.3	ND	0.71	
95-50-1	1.2-Dichlorobenzene	ND	4.3	ND	0.71	

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.

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#### RESULTS OF ANALYSIS Page 3 of 3

Client: Client Sample ID: Client Project ID:	GeoSyntec Consultants, Inc. PNL-12-15RDHF Ascon/SB0202	CAS Project ID: P2400531 CAS Sample ID: P2400531-007
	<b>Tentatively Identified Compounds</b>	
Test Code:	EPA TO-15	Date Collected: 3/16/04

rest Coue.	EIA 10-15			Butte concerne of	
Instrument ID:	Tekmar AUTOCAN/HP5972/HP5890 II+/MS	2		Date Received: 3/	17/04
Analyst:	Chris Parnell/Wade Henton			Date Analyzed: 4/	2/04
Sampling Media:	1.0 Liter Canister			Volume(s) Analyzed:	0.20 Liter(s)
Test Notes:	Т				
Container ID:	1SC00016				
		Pi 1 =	0.0	Pf 1 = 10.5	

D.F. = 1.71

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GC / MS Ret. Time	Compound Identification	Concentration µg/m <sup>3</sup>	Data Qualifier
13.71	Dimethylcyclopentane Isomer	400	1
13.84	Dimethylcyclopentane Isomer	400	
15.39	Methylcyclohexane	400	
15.45	Trimethylcyclopentane Isomer	300	
16.22	Trimethylcyclopentane Isomer	500	
16.57	Trimethylcyclopentane Isomer	600	
17.99	Dimethylcyclohexane	500	
18.57	Methyl Ethyl Cyclopentane Isomer	300	
18.88	Dimethylcyclohexane	500	
19.00	C <sub>9</sub> H <sub>18</sub> Substituted Cyclopentane Isomer	300	
20.52	Trimethylcyclohexane	300	
20.89	C <sub>9</sub> H <sub>18</sub> Compound	300	
21.08	Trimethylcyclohexane Isomer	400	
23.39	C <sub>9</sub> H <sub>16</sub> Compound	500	
24.49	C <sub>10</sub> H <sub>20</sub> Substituted Cyclohexane Isomer	400	

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

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RESULTS OF ANALYSIS

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## Client:GeoSyntec Consultants, Inc.Client Sample ID:PNL-5A-11DHFClient Project ID:Ascon/SB0202

#### CAS Project ID: P2400531 CAS Sample ID: P2400531-008

Test Code:	EPA TO-15			Date Collected: 3/16/04	
Instrument ID:	Tekmar AUTOCAN/HP5972/HP5890 II+/MS2			Date Received: 3/17/04	4
Analyst:	Michelle Sakamoto			Date(s) Analyzed: 3/30/04	4
Sampling Media:	1.0 Liter Canister			Volume(s) Analyzed:	0.40 Liter(s)
Test Notes:					
Container ID:	1SC00020				
		Pi 1 =	0.1	Pf 1 = 10.2	
					D.F. = 1.68

CAS#	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
74-87-3	Chloromethane	ND	2.1	ND	1.0	
75-01-4	Vinyl Chloride	ND	2.1	ND	0.82	
106-99-0	1,3-Butadiene	ND	2.1	ND	0.95	
74-83-9	Bromomethane	ND	2.1	ND	0.54	
75-00-3	Chloroethane	ND	2.1	ND	0.80	
67-64-1	Acetone	ND	21	ND	8.8	
75-69-4	Trichlorofluoromethane	ND	2.1	ND	0.37	
107-13-1	Acrylonitrile	ND	2.1	ND	0.97	
75-35-4	1,1-Dichloroethene	ND	2.1	ND	0.53	
75-09-2	Methylene chloride	ND	2.1	ND	0.60	
76-13-1	Trichlorotrifluoroethane	ND	2.1	ND	0.27	
75-15-0	Carbon Disulfide	2.1	2.1	0.69	0.67	
156-60-5	trans-1,2-Dichloroethene	ND	2.1	ND	0.53	
75-34-3	1,1-Dichloroethane	ND	2.1	ND	0.52	
1634-04-4	Methyl tert-Butyl Ether	ND	2.1	ND	0.58	
108-05-4	Vinyl Acetate	ND	2.1	ND	0.60	
78-93-3	2-Butanone (MEK)	8.2	2.1	2.8	0.71	
156-59-2	cis-1,2-Dichloroethene	ND	2.1	ND	0.53	
67-66-3	Chloroform	ND	2.1	ND	0.43	_
107-06-2	1,2-Dichloroethane	ND	2.1	ND	0.52	
71-55-6	1,1,1-Trichloroethane	ND	2.1	ND	0.39	
71-43-2	Benzene	3.1	2.1	1.0	0.66	

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

Verified By: <u><u>RG</u> Date: <u>4|5|04</u> **34** Page No.:</u>

**RESULTS OF ANALYSIS** 

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# Client:GeoSyntec Consultants, Inc.Client Sample ID:PNL-5A-11DHFClient Project ID:Ascon/SB0202

CAS Project ID: P2400531 CAS Sample ID: P2400531-008

Test Code: Instrument ID: Analyst: Sampling Media:	EPA TO-15 Tekmar AUTOCAN/HP5972/HP5890 II+/MS2 Michelle Sakamoto 1.0 Liter Canister			Date Collected: 3/16/04 Date Received: 3/17/04 Date(s) Analyzed: 3/30/04 Volume(s) Analyzed:	
Test Notes: Container ID:	1SC00020	Pi 1 =	0.1	Pf 1 = 10.2	D.F. = 1.68

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
56-23-5	Carbon Tetrachloride	ND	2.1	ND	0.33	
78-87-5	1,2-Dichloropropane	ND	2.1	ND	0.45	
75-27-4	Bromodichloromethane	ND	2.1	ND	0.31	
79-01-6	Trichloroethene	ND	2.1	ND	0.39	
10061-01-5	cis-1,3-Dichloropropene	ND	2.1	ND	0.46	
108-10-1	4-Methyl-2-pentanone	ND	2.1	ND	0.51	
10061-02-6	trans-1,3-Dichloropropene	ND	2.1	ND	0.46	
79-00-5	1,1,2-Trichloroethane	ND	2.1	ND	0.39	
108-88-3	Toluene	3.0	2.1	0.80	0.56	
591-78-6	2-Hexanone	ND	2.1	ND	0.51	
124-48-1	Dibromochloromethane	ND	2.1	ND	0.25	
106-93-4	1,2-Dibromoethane	ND	2.1	ND	0.27	
127-18-4	Tetrachloroethene	ND	2.1	ND	0.31	
108-90-7	Chlorobenzene	ND	2.1	ND	0.46	
100-41-4	Ethylbenzene	2.5	2.1	0.58	0.48	
136777-61-2	<i>m,p</i> -Xylenes	4.3	4.2	1.0	0.97	
75-25-2	Bromoform	ND	2.1	ND	0.20	
100-42-5	Styrene	ND	2.1	ND	0.49	
95-47-6	o-Xylene	2.8	2.1	0.64	0.48	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.1	ND	0.31	
541-73-1	1,3-Dichlorobenzene	ND	2.1	ND	0.35	
106-46-7	1,4-Dichlorobenzene	ND	2.1	ND	0.35	
95-50-1	1,2-Dichlorobenzene	ND	2.1	ND	0.35	_L

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: <u>RG</u> Date: <u>UI5104</u> Page No.:

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

Client:	GeoSyntec Consultants, Inc.
<b>Client Sample ID:</b>	PNL-5A-11DHF
<b>Client Project ID:</b>	Ascon/SB0202

CAS Project ID: P2400531 CAS Sample ID: P2400531-008

## **Tentatively Identified Compounds**

Test Code:	EPA TO-15 Tekmar AUTOCAN/HP5972/HP5890 II+/MS/	7		Date Collected: 3/16/04 Date Received: 3/17/04
Instrument ID: Analyst:	Michelle Sakamoto	2		Date Analyzed: 3/30/04
Sampling Media:	1.0 Liter Canister			Volume(s) Analyzed: 0.40 Liter(s)
Test Notes: Container ID:	T 1SC00020			
Container 1D.	10000020	Pi 1 =	0.1	Pf 1 = 10.2

D.F. = 1.68

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GC / MS Ret. Time	Compound Identification	Concentration µg/m³	Data Qualifier
25.65	C <sub>11</sub> H <sub>24</sub> Branched Alkane + Unidentified Compound	200	
25.71	C <sub>11</sub> H <sub>24</sub> Branched Alkane	200	
25.97	C <sub>12</sub> H <sub>26</sub> Branched Alkane + Unidentified Compound	200	
26.15	C <sub>12</sub> H <sub>26</sub> Branched Alkane	200	
26.45	C <sub>11</sub> H <sub>22</sub> Compound	200	
26.52	C <sub>12</sub> H <sub>26</sub> Branched Alkane	200	
26.59	C <sub>12</sub> H <sub>26</sub> Branched Alkane	200	
26.67	Decahydronaphthalene Isomer	300	
26.94	C <sub>12</sub> H <sub>26</sub> Branched Alkane + Unidentified Compound	200	
27.05	C <sub>13</sub> H <sub>28</sub> Branched Alkane + Unidentified Cyclic Compound	200	
27.11	C <sub>13</sub> H <sub>28</sub> Branched Alkane + Unidentified Compound	200	
27.27	C <sub>13</sub> H <sub>28</sub> Branched Alkane + Unidentified Cyclic Compound	200	
27.60	C13H28 Branched Alkane + Unidentified Compound	200	
27.67	Decahydromethylnaphthalene Isomer	300	
27.96	Decahydromethylnaphthalene Isomer	300	

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

Verified By: R\_\_\_\_\_ Date: 415104 Page No:

**RESULTS OF ANALYSIS** 

Page 1 of 3

# Client:GeoSyntec Consultants, Inc.Client Sample ID:PNL-3-21DHFClient Project ID:Ascon/SB0202

### CAS Project ID: P2400531 CAS Sample ID: P2400531-009

Test Code: Instrument ID: Analyst:	EPA TO-15 Tekmar AUTOCAN/HP5972/HP5890 II+/MS2 Michelle Sakamoto			Date Collected: 3/16/ Date Received: 3/17/ Date(s) Analyzed: 3/31/	/04
Sampling Media: Test Notes:	1.0 Liter Canister			Volume(s) Analyzed:	0.0015 Liter(s)
Container ID:	1SC00019	Pi 1 =	0.3	Pf 1 = 10.2	D.F. = 1.66

CAS#	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
74-87-3	Chloromethane	μg/m ND	<u></u> 550	ND	270	
		ND	550	ND	220	
75-01-4	Vinyl Chloride	ND	550	ND	250	
106-99-0	1,3-Butadiene Bromomethane	ND ND	550	ND	140	
74-83-9	Chloroethane	ND	550	ND	210	
75-00-3		ND	5,500	ND	2,300	
67-64-1	Acetone Trichlorofluoromethane	ND	550	ND	<u>2,300</u> 99	
75-69-4			550	ND	260	
107-13-1	Acrylonitrile	ND	550	ND	140	-
75-35-4	1,1-Dichloroethene	ND	550		140	
75-09-2	Methylene chloride	ND		ND ND	72	
76-13-1	Trichlorotrifluoroethane	ND	550	ND		-
75-15-0	Carbon Disulfide	ND	550	ND	180	
156-60-5	trans-1,2-Dichloroethene	ND	550	ND	140	-
75-34-3	1,1-Dichloroethane	ND	550	ND	140	
1634-04-4	Methyl tert-Butyl Ether	ND	550	ND	150	_
108-05-4	Vinyl Acetate	ND	550	ND	160	
78-93-3	2-Butanone (MEK)	ND	550	ND	190	
156-59-2	cis-1,2-Dichloroethene	ND	550	ND	140	
67-66-3	Chloroform	ND	550	ND	110	
107-06-2	1,2-Dichloroethane	ND	550	ND	140	
71-55-6	1,1,1-Trichloroethane	ND	550	ND	100	
71-43-2	Benzene	12,000	550	3,900	170	

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

**RESULTS OF ANALYSIS** 

Page 2 of 3

Client:	GeoSyntec	Consultants, Inc.
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Client Sample ID: PNL-3-21DHF Client Project ID: Ascon/SB0202 CAS Project ID: P2400531 CAS Sample ID: P2400531-009

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Test Code: Instrument ID: Analyst:	EPA TO-15 Tekmar AUTOCAN/HP5972/HP5890 II+/MS2 Michelle Sakamoto			Date Collected: 3/16/ Date Received: 3/17/ Date(s) Analyzed: 3/31/	04
Sampling Media:	1.0 Liter Canister			Volume(s) Analyzed:	0.0015 Liter(s)
Test Notes: Container ID:	1SC00019	Pi 1 =	0.3	Pf 1 = $10.2$	D.F. = 1.66

CAS#	Compound	Result µg/m³	MRL μg/m³	Result ppbV	MRL ppbV	Data Qualifier
56-23-5	Carbon Tetrachloride	ND	550	ND	88	
78-87-5	1,2-Dichloropropane	ND	550	ND	120	
75-27-4	Bromodichloromethane	ND	550	ND	83	
79-01-6	Trichloroethene	ND	550	ND	100	
10061-01-5	cis-1,3-Dichloropropene	ND	550	ND	120	
108-10-1	4-Methyl-2-pentanone	ND	550	ND	140	
10061-02-6	trans-1,3-Dichloropropene	ND	550	ND	120	
79-00-5	1,1,2-Trichloroethane	ND	550	ND	100	
108-88-3	Toluene	4,800	550	1,300	150	
591-78-6	2-Hexanone	ND	550	ND	140	
124-48-1	Dibromochloromethane	ND	550	ND	65	
106-93-4	1,2-Dibromoethane	ND	550	ND	72	
127-18-4	Tetrachloroethene	ND	550	ND	82	
108-90-7	Chlorobenzene	ND	550	ND	120	
100-41-4	Ethylbenzene	5,600	550	1,300	130	
136777-61-2	<i>m,p</i> -Xylenes	16,000	1,100	3,700	250	
75-25-2	Bromoform	ND	550	ND	54	
100-42-5	Styrene	ND	550	ND	130	
95-47-6	o-Xylene	6,100	550	1,400	130	
79-34-5	1,1,2,2-Tetrachloroethane	ND	550	ND	81	
541-73-1	1,3-Dichlorobenzene	ND	550	ND	92	
106-46-7	1,4-Dichlorobenzene	ND	550	ND	92	_
95-50-1	1,2-Dichlorobenzene	ND	550	ND	92	

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: <u>RG</u> Date: <u>4604</u>

00531VOA.RD1 - Sample (9)

#### RESULTS OF ANALYSIS Page 3 of 3

# Client:GeoSyntec Consultants, Inc.Client Sample ID:PNL-3-21DHFClient Project ID:Ascon/SB0202

CAS Project ID: P2400531 CAS Sample ID: P2400531-009

## **Tentatively Identified Compounds**

Test Code:	EPA TO-15			Date Collected: 3	3/16/04
Instrument ID:	Tekmar AUTOCAN/HP5972/HP5890 II+/MS2			Date Received: 2	3/17/04
Analyst:	Michelle Sakamoto			Date Analyzed: 3	3/31/04
Sampling Media:	1.0 Liter Canister			Volume(s) Analyzed:	0.0015 Liter(s)
Test Notes:	Т				
Container ID:	1SC00019				
		Pi 1 =	0.3	Pf 1 = 10.2	

D.F. = 1.66

GC / MS Ret. Time	Compound Identification	Concentration µg/m <sup>3</sup>	Data Qualifier
5.28	Isobutane	100,000	
5.61	n-Butane	100,000	
6.69	Isopentane	200,000	
7.20	n-Pentane	100,000	
8.96	Cyclopentane	90,000	
9.06	2-Methylpentane	100,000	
9.54	3-Methylpentane	100,000	
10.11	n-Hexane	200,000	
11.21	Methylcyclopentane	100,000	
13.56	Dimethylcyclopentane Isomer	100,000	
13.69	Dimethylcyclopentane Isomer	100,000	
13.81	Dimethylcyclopentane Isomer	100,000	
15.35	Methylcyclohexane	100,000	
16.53	Trimethylcyclopentane Isomer	100,000	
20.47	Trimethylcyclohexane Isomer	80,000	

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

RESULTS OF ANALYSIS

Page 1 of 3

## Client:GeoSyntec Consultants, Inc.Client Sample ID:Method Blank

Client Project ID: Ascon/SB0202

CAS Project ID: P2400531 CAS Sample ID: P040329-MB

Test Code:EPA TO-15Instrument ID:Tekmar AUTOCAN/HP5972/HP5890 II+/MS2Analyst:Michelle SakamotoSampling Media:1.0 Liter CanisterTest Notes:Test Notes:

Date Collected: NA Date Received: NA Date(s) Analyzed: 3/29/04 Volume(s) Analyzed: 1.00 Liter(s)

D.F. = 1.00

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

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

Verified By: RG Date: 415104 Page No.:

**RESULTS OF ANALYSIS** 

Page 2 of 3

# Client:GeoSyntec Consultants, Inc.Client Sample ID:Method BlankClient Project ID:Ascon/SB0202

CAS Project ID: P2400531 CAS Sample ID: P040329-MB

Test Code:EPA TO-15Instrument ID:Tekmar AUTOCAN/HP5972/HP5890 II+/MS2Analyst:Michelle SakamotoSampling Media:1.0 Liter CanisterTest Notes:Test Notes:

Date Collected: NA Date Received: NA Date(s) Analyzed: 3/29/04 Volume(s) Analyzed: 1.00 Liter(s)

D.F. = 1.00

CAS #	Compound	Result	MRL	Result	MRL	Data
	· · ·	μg/m³	µg/m³	ppbV	ppbV	Qualifier
56-23-5	Carbon Tetrachloride	ND	0.50	ND	0.080	
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	L
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	l
108-88-3	Toluene	ND	0.50	ND	0.13	
591-78-6	2-Hexanone	ND	0.50	ND	0.12	<u> </u>
124-48-1	Dibromochloromethane	ND	0.50	ND	0.059	
106-93-4	1,2-Dibromoethane	ND	0.50	ND	0.065	L
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	<i>m,p</i> -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	<u> </u>
95-50-1	1,2-Dichlorobenzene	ND	0.50	ND	0.083	J

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

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

Verified By: R. Date: 4504 41

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RESULTS OF ANALYSIS Page 3 of 3

Client:	GeoSyntec Consultants, Inc.	
<b>Client Sample ID:</b>	Method Blank	CAS Project ID: P2400531
<b>Client Project ID:</b>	Ascon/SB0202	CAS Sample ID: P040329-MB

## **Tentatively Identified Compounds**

Test Code:	EPA TO-15	Date Collected: N	A
Instrument ID:	Tekmar AUTOCAN/HP5972/HP5890 II+/MS2	Date Received: N	A
Analyst:	Michelle Sakamoto	Date Analyzed: 3/	/29/04
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		

Verified By: <u>R6</u> Date: <u>4504</u> **42** Page No.:

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**RESULTS OF ANALYSIS** Page 1 of 3

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

CAS Project ID: P2400531 CAS Sample ID: P040331-MB

Date Collected: NA Test Code: EPA TO-15 Tekmar AUTOCAN/HP5972/HP5890 II+/MS2 Date Received: NA Instrument ID: Date(s) Analyzed: 3/31/04 Analyst: Michelle Sakamoto Volume(s) Analyzed: 1.0 Liter Canister Sampling Media: Test Notes:

1.00 Liter(s)

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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	l
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	ļ
75-34-3	1,1-Dichloroethane	ND	0.50	ND	0.12	l
1634-04-4	Methyl tert-Butyl Ether	ND	0.50	ND	0.14	<b></b>
108-05-4	Vinyl Acetate	ND	0.50	ND	0.14	
78-93-3	2-Butanone (MEK)	ND	0.50	ND	0.17	l
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	
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	l
71-43-2	Benzene	ND	0.50	ND	0.16	<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: RC Date: 415104

**RESULTS OF ANALYSIS** 

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Client:GeoSyntec Consultants, Inc.Client Sample ID:Method BlankClient Project ID:Ascon/SB0202

CAS Project ID: P2400531 CAS Sample ID: P040331-MB

Test Code:EPA TO-15Instrument ID:Tekmar AUTOCAN/HP5972/HP5890 II+/MS2Analyst:Michelle SakamotoSampling Media:1.0 Liter CanisterTest Notes:Test Notes:

Date Collected: NA Date Received: NA Date(s) Analyzed: 3/31/04 Volume(s) Analyzed: 1.00 Liter(s)

D.F. = 1.00

44

CAS#	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
56-23-5	Carbon Tetrachloride	ND	0.50	ND	0.080	
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	<i>m,p</i> -Xylenes	ND	1.0	ND	0.23	
75-25-2	Bromoform	ND	0.50	ND	0.048	
100-42-5	Styrene	ND	0.50	ND	0.12	
95-47-6	o-Xylene	ND	0.50	ND	0.12	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	ND	0.073	
541-73-1	1,3-Dichlorobenzene	ND	0.50	ND	0.083	
106-46-7	1,4-Dichlorobenzene	ND	0.50	ND	0.083	
95-50-1	1,2-Dichlorobenzene	ND	0.50	ND	0.083	

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

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

00531VOA.RD1 - MBlank (2)

Verified By: RC Date: 4504 Page No.:

### RESULTS OF ANALYSIS Page 3 of 3

Client:	GeoSyntec Consultants, Inc.
Client Sample ID:	Method Blank
<b>Client Project ID:</b>	Ascon/SB0202

CAS Project ID: P2400531 CAS Sample ID: P040331-MB

## **Tentatively Identified Compounds**

Test Code:	EPA TO-15	Date Collected: N	A
Instrument ID:	Tekmar AUTOCAN/HP5972/HP5890 II+/MS2	Date Received: N	A
Analyst:	Michelle Sakamoto	Date Analyzed: 3/	31/04
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		

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Verified By: R. Date: 45104 45

**RESULTS OF ANALYSIS** Page 1 of 3

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

#### CAS Project ID: P2400531 CAS Sample ID: P040401-MB

Test Code: EPA TO-15 Instrument ID: Tekmar AUTOCAN/HP5972/HP5890 II+/MS2 Analyst: Wade Henton Sampling Media: 1.0 Liter Canister Test Notes:

Date Collected: NA Date Received: NA Date(s) Analyzed: 4/1/04 Volume(s) Analyzed:

1.00 Liter(s)

46

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	<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	
107-06-2	1,2-Dichloroethane	ND	0.50	ND	0.12	
71-55-6	1,1,1-Trichloroethane	ND	0.50	ND	0.092	
71-43-2	Benzene	ND	0.50	ND	0.16	

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

00531VOA.RD1 - MBlank (3)

Verified By: Kir Date: 415/04 Page No.:

RESULTS OF ANALYSIS

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# Client:GeoSyntec Consultants, Inc.Client Sample ID:Method BlankClient Project ID:Ascon/SB0202

CAS Project ID: P2400531 CAS Sample ID: P040401-MB

Test Code:EPA TO-15Instrument ID:Tekmar AUTOCAN/HP5972/HP5890 II+/MS2Analyst:Wade HentonSampling Media:1.0 Liter CanisterTest Notes:Test Notes:

Date Collected: NA Date Received: NA Date(s) Analyzed: 4/1/04 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
56-23-5	Carbon Tetrachloride	ND	0.50	ND	0.080	
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	<i>m,p</i> -Xylenes	ND	1.0	ND	0.23	
75-25-2	Bromoform	ND	0.50	ND	0.048	
100-42-5	Styrene	ND	0.50	ND	0.12	
95-47-6	o-Xylene	ND	0.50	ND	0.12	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	ND	0.073	
541-73-1	1,3-Dichlorobenzene	ND	0.50	ND	0.083	
106-46-7	1,4-Dichlorobenzene	ND	0.50	ND	0.083	
95-50-1	1,2-Dichlorobenzene	ND	0.50	ND	0.083	

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

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

00531VOA.RD1 - MBlank (3)

Verified By: <u>RG</u> Date: <u>415104</u> Page N

## RESULTS OF ANALYSIS Page 3 of 3

Client:	GeoSyntec Consultants, Inc.
<b>Client Sample ID:</b>	Method Blank
<b>Client Project ID:</b>	Ascon/SB0202

CAS Project ID: P2400531 CAS Sample ID: P040401-MB

## **Tentatively Identified Compounds**

Test Code:	EPA TO-15	Date Collected: N	A
Instrument ID:	Tekmar AUTOCAN/HP5972/HP5890 II+/MS2	Date Received: N	A
Analyst:	Wade Henton	Date Analyzed: 4/	/1/04
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		

Verified By: RG Date: 45104 Page No.: 48

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Columbia Analytical Services, Inc.

Sample Acceptance Check Form

Client	GeoSyntec Cons	sultants, Inc.		Work order:	P2400531			
Project	Ascon/SB0202							
	Sample(s) receive	ed on: 3/17/04	Date opened:	3/17/04	by:	SM		
		ples received by CAS. The use of this for					ation of	
compliance	or nonconformity. Ther	mal preservation and pH will only be ev	valuated either at the requi	est of the client or as requir	ed by the method/S	OP.	NT	
						Yes	No	<u>N/A</u>
1	Were custody sea	als on outside of cooler/Box?					X	
	Location of sea	l(s)?			Sealing Lid?			X
	Were signature	and date included?						X
	Were seals inta	.ct?						$\mathbf{X}$
	Were custody sea	Is on outside of sample contain	ner?				X	
	Location of sea	l(s)?			Sealing Lid?			X
	Were signature	and date included?						X
	Were seals inta	ict?						$\mathbf{X}$
2	Were sample cor	ntainers properly marked with	client sample ID?			X		
3	-	ainers arrive in good condition				X		
4		ustody papers used and filled of				X		
5	Did sample cont	ainer labels and/or tags agree	with custody papers	5?		X		
6	Was sample volu	me received adequate for anal	lysis?			X		
7	-	nin specified holding times?				X		
8	Was proper temp	perature (thermal preservation	n) of cooler at receip					X
		Cooler Temperature	NA	_°C				
		Blank Temperature		°C		-	1571	-
9		servation necessary, according			mation?			
		indication that the submitted s		i) preserved?				X
		s checked for presence/absence						X
	Does the client/	method/SOP require that the a	nalyst check the san	ple pH and <u>if necess</u>	sary alter it?			X
10	Tubes:	Are the tubes capped and int	act?					X
		Do they contain moisture?						X
11	Badges:	Are the badges properly cap						X
		Are dual bed badges separat	ted and individually	capped and intact?				×
	1 L C L TD	Dominod	nH	VOA Headspace	Ree	ceipt / Pres	ervation	

Lab Sample ID	Required pH	pH (as received, if required)	VOA Headspace (Presence/Absence)	Receipt / Preservation Comments
P2400531-001			NA	
P2400531-002			NA	
P2400531-003			NA	
P2400531-004			NA	
P2400531-005			NA	
P2400531-006			NA	
P2400531-007			NA	
P2400531-008			NA	
P2400531-009			NA	

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

400531SR.XLS - cooler - Page 1 of 1

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Analytical Services <sup>MC</sup>	Air Q 2665   Simi V Phone Fax	Air Quality Laboratory 2665 Park Center Drive, Suite D Simi Valley, California 93065 Phone (805) 526-7161 Fax (805) 526-7270	00rat0ry • Drive, Suito rnia 93065 • 7161 • 7270	O e			alytic:	r Cusi al Ser	Chain of Custody Kecora Analytical Service Request	ora uest	
Client/Address Gousyntee 2+ #150	4 1 1 1		The second	Scon					Analysis		CAS Project No.
Hurtington Beach, CA 92648 Project Number	each, cA	12648	Project Number	SB0702	202			$\sim$	13 / 82. /		Cooler / Blank
0280-696 (h12) m (310-6960-696)	- 696 (h)		Sampling Location	uo			から		1000		Temp
Email mreardon@geosyntec.com	intec. co	T	P.O. #/Billing In	Information			5-5)	a second	Jon 1		
Mike Reardon Fulling	gnature) LAAC			7090	20020'L 31	I		1 1	12 8 11 100 10	Expected	Comments (e.g., preservative or
Client Samole ID Collected	Time Collected	Lab Sample No.	Type of Sample	Container ID (Serial #)	Flow Controller (Serial #)	Sample Volume (Liters)	21	<b>`</b> .	*		
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Relinquished by: (Signature)		1/1/1/C	Time: d:d:py	Received by: (Si	by: (Signature)				3/17/04	1 ime: 42100	
Relinquished by: (Signature)		/ Date:	Time:	Received by. (Signature)	ignature)				Date:	Time:	
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## LABORATORY REPORT

Client:	GEOSYNTEC CONSULTANTS, INC.	Date of Report:	05/28/04
Address:	2100 Main Street, Suite 150	Date Received:	05/07/04
	Huntington Beach, CA 92648	CAS Project No:	P2400974
Contact:	Mr. Mike Reardon	Purchase Order:	SB0202/31
Client Projec	t ID: Ascon - Phase I/SB0202/31		

Eleven (11) 1.0 Liter Canisters labeled:

"PNL-1-15-DHF" "PNL-11-12 DHF" "PNL-6-15-RDHF" "PNL-8-6-DHF"	"PNL-14-21-DHF" "PNL-10A-13 DHF" "PNL-9-15-DHF" "PNL-8-18-DHF"	"PNL-7-21-DHF" "PNL-6-15-DHF" "PNL-9-21-BDHF"
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The samples were received at the laboratory under chain of custody on May 7, 2004. The samples were received intact. Please refer to the sample acceptance check form for additional information. The results reported herein are applicable only to the condition of the samples at the time that they were received at the laboratory.

C1 through C6 Hydrocarbon Analysis

The samples were analyzed per modified EPA Method TO-3 for  $C_1$  through  $>C_6$  hydrocarbons using a gas chromatograph equipped with a flame ionization detector (FID).

Reviewed and Approved:

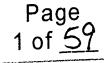
Michelle H. Jakamet.

Michelle Sakamoto Analytical Chemist Air Quality Laboratory

Reviewed and Approved:

11.14

Wade Henton GC-VOA Team Leader Air Quality Laboratory



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## CAS Project No: P2400974

## Volatile Organic Compound Analysis

The samples were 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 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 5972 GC/MS/DS interfaced to a Tekmar AutoCan Elite whole air inlet system/cryogenic concentrator. A 100% Dimethylpolysiloxane capillary column ( $RT_x$ -1, Restek Corporation, Bellefonte, PA) was used to achieve chromatographic separation.

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

### RESULTS OF ANALYSIS Page 1 of 1

Client:	GeoSyntec Consultants, Inc.	
<b>Client Sample ID:</b>	PNL-1-15-DHF	CAS Project I
Client Project ID:	Ascon - Phase I/SB0202/31	CAS Sample I

CAS Project ID : P2400974 CAS Sample ID : P2400974-001

Test Code:	Modified EPA TO-3	Date Collected: 5/3/04 Date Received: 5/7/04
Instrument ID: Analyst: Sampling Media:	HP5890II/GC8/FID Wade Henton 1.0 Liter Canister	Date Received: 5/11/04 Date Analyzed: 5/11/04 Volume(s) Analyzed: 0.250 ml
Test Notes:		

Pi 1 = -0.1 Pf 1 = 10.0

D.F. = 1.69

	Result	MRL	Data Qualifier
Compound	ppmV	ppmV	Quaimer
Methane	21,000	3.4	
$C_2$ as Ethane	30	3.4	
C <sub>3</sub> as Propane	93	3.4	
C <sub>4</sub> as n-Butane	160	3.4	
$C_5$ as n-Pentane	140	3.4	
$C_6$ as n-Hexane	110	3.4	
$C_6$ + as n-Hexane	1,700	6.8	

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

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

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#### RESULTS OF ANALYSIS Page 1 of 1

Client:	GeoSyntec Consultants, Inc.	CAS Project ID : P2400974
<b>Client Sample ID:</b>	PNL-14-21-DHF	0
<b>Client Project ID:</b>	Ascon - Phase I/SB0202/31	CAS Sample ID : P2400974-002

Test Code: Instrument ID:	Modified EPA TO-3 HP5890II/GC8/FID	Date Collected: 5/3/04 Date Received: 5/7/04 Date Analyzed: 5/11/04
Analyst: Sampling Media: Test Notes:	Wade Henton 1.0 Liter Canister	Volume(s) Analyzed: 0.250 ml

Pi 1 = -0.3 Pf 1 = 10.0

D.F. = 1.72

	Result	MRL	Data
Compound	ppmV	ppmV	Qualifier
Methane	170,000	3.4	
C <sub>2</sub> as Ethane	11	3.4	l
C <sub>3</sub> as Propane	54	3.4	
$C_4$ as n-Butane	240	3.4	
C <sub>5</sub> as n-Pentane	240	3.4	ļ
C <sub>6</sub> as n-Hexane	170	3.4	ļ
$C_6$ + as n-Hexane	1,800	6.9	

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

## RESULTS OF ANALYSIS

Page 1 of 1

Client:	GeoSyntec Consultants, Inc.	
<b>Client Sample ID:</b>	PNL-7-21-DHF	CAS Project ID : P2400974
<b>Client Project ID:</b>	Ascon - Phase I/SB0202/31	CAS Sample ID : P2400974-003

Test Code: Instrument ID: Analyst: Sampling Media: Test Notes:	Modified EPA TO-3 HP5890II/GC8/FID Wade Henton 1.0 Liter Canister	Date Collected: 5/3/04 Date Received: 5/7/04 Date Analyzed: 5/11/04 Volume(s) Analyzed: 0.250 ml
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Pi 1 = -0.1 Pf 1 = 10.0

D.F. = 1.69

	Result	MRL	Data Qualifier
Compound	ppmV	ppmV	Quanner
Methane	170,000	3.4	
C <sub>2</sub> as Ethane	7.6	3.4	
C <sub>3</sub> as Propane	8.9	3.4	_
$C_4$ as n-Butane	100	3.4	
$C_5$ as n-Pentane	140	3.4	
$C_6$ as n-Hexane	100	3.4	
$C_6^+$ as n-Hexane	1,300	6.8	<u></u>

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

### RESULTS OF ANALYSIS Page 1 of 1

Client:	GeoSyntec Consultants, Inc.	CAS Project ID : P2400974
Client Sample ID:	PNL-7-21-DHF	5
<b>Client Project ID:</b>	Ascon - Phase I/SB0202/31	CAS Sample ID : P2400974-003DUP

Test Code:	Modified EPA TO-3	Date Collected: 5/3/04
Instrument ID:	HP5890II/GC8/FID	Date Received: 5/7/04
Analyst:	Wade Henton	Date Analyzed: 5/11/04
Sampling Media:	1.0 Liter Canister	Volume(s) Analyzed: 0.250 ml
Test Notes:		

Pi 1 = -0.1 Pf 1 = 10.0

D.F. = 1.69

	Result	MRL	Data Qualifier
Compound	ppmV	ppmV	
Methane	180,000	3.4	
C <sub>2</sub> as Ethane	7.7	3.4	
C <sub>3</sub> as Propane	9.4	3.4	
$C_4$ as n-Butane	100	3.4	
C <sub>5</sub> as n-Pentane	140	3.4	
$C_6$ as n-Hexane	97	3.4	
$C_6^+$ as n-Hexane	1,400	6.8	

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

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

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## RESULTS OF ANALYSIS Page 1 of 1

Client:GeoSyntec Consultants, Inc.CAS Project ID : P2400974Client Sample ID:PNL-11-12 DHFCAS Project ID : P2400974-004Client Project ID:Ascon - Phase I/SB0202/31CAS Sample ID : P2400974-004

Test Code: Instrument ID: Analyst:	Modified EPA TO-3 HP5890II/GC8/FID Wade Henton	Date Collected: 5/4/04 Date Received: 5/7/04 Date Analyzed: 5/13/04 Volume(s) Analyzed: 1.0 ml
Sampling Media:	1.0 Liter Canister	volume(s) Analyzed.
Test Notes:		

Pi 1 = -0.1 Pf 1 = 10.0

D.F. = 1.69

	Result	MRL	Data Qualifier
Compound	ppmV	ppmV	
Methane	5.8	0.85	
C <sub>2</sub> as Ethane	ND	0.85	
C <sub>3</sub> as Propane	ND	0.85	
$C_4$ as n-Butane	ND	0.85	
$C_5$ as n-Pentane	ND	0.85	
$C_6$ as n-Hexane	ND	0.85	
$C_6^+$ as n-Hexane	7.5	1.7	

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

Verified By: Non Date: 50504	7	7
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#### RESULTS OF ANALYSIS Page 1 of 1

Client:	GeoSyntec Consultants, Inc.	
<b>Client Sample ID:</b>	PNL-11-12 DHF	CAS Project ID : P2400974
<b>Client Project ID:</b>	Ascon - Phase I/SB0202/31	CAS Sample ID : P2400974-004DUP

Test Code: Instrument ID:	Modified EPA TO-3 HP5890II/GC8/FID	Date Collected: 5/4/04 Date Received: 5/7/04 Date Analyzed: 5/13/04
Analyst: Sampling Media: Test Notes:	Wade Henton 1.0 Liter Canister	Volume(s) Analyzed: 1.0 ml

 $P_{i} 1 = -0.1$  Pf 1 = 10.0

D.F. = 1.69

	Result	MRL	Data
Compound	ppmV	ppmV	Qualifier
Methane	6.1	0.85	
C <sub>2</sub> as Ethane	ND	0.85	
C <sub>3</sub> as Propane	ND	0.85	
$C_4$ as n-Butane	ND	0.85	
C <sub>5</sub> as n-Pentane	ND	0.85	
$C_6$ as n-Hexane	ND	0.85	
$C_6^+$ as n-Hexane	8.0	1.7	

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

### RESULTS OF ANALYSIS Page 1 of 1

Client: Client Sample ID: Client Project ID:	GeoSyntec Consultants, Inc. PNL-10A-13 DHF Ascon - Phase I/SB0202/31	CAS Project ID : P2400974 CAS Sample ID : P2400974-005
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Test Code: Instrument ID: Analyst: Sampling Media: Test Notes:	Modified EPA TO-3 HP5890II/GC8/FID	Date Collected: 5/4/04 Date Received: 5/7/04		
	Wade Henton 1.0 Liter Canister	Date Analyzed: 5/11/04 Volume(s) Analyzed: 1.0 ml		

 $P_{11} = 0.5$   $Pf_{11} = 10.0$ 

D.F. = 1.63

	Result	MRL	Data
Compound	ppmV	ppmV	Qualifier
Methane	1,700	0.81	
$C_2$ as Ethane	ND	0.81	
$C_3$ as Propane	ND	0.81	
$C_4$ as n-Butane	ND	0.81	
$C_5$ as n-Pentane	ND	0.81	
C <sub>6</sub> as n-Hexane	ND	0.81	
$C_6$ as in-frexance $C_6$ + as n-Hexane	5.1	1.6	

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

## RESULTS OF ANALYSIS

Page 1 of 1

Client Sample ID:PNL-6-15-DHFCAS Project ID : P2400974Client Project ID:Ascon - Phase I/SB0202/31CAS Sample ID : P2400974-006
Chent Project ID: Ascon - Flase D'Sb0202/31

Test Code: Instrument ID:	Modified EPA TO-3 HP5890II/GC8/FID	Date Collected: 5/5/04 Date Received: 5/7/04 Date Analyzed: 5/11/04
Analyst: Sampling Media: Test Notes:	Wade Henton 1.0 Liter Canister	Volume(s) Analyzed: 0.250 ml

Pi 1 = 0.6 Pf 1 =

D.F. = 1.61

10.0

	Result	MRL	Data
Compound	ppmV	ppmV	Qualifier
Methane	56,000	3.2	
$C_2$ as Ethane	3.3	3.2	ļ
$C_3$ as Propane	ND	3.2	
C <sub>4</sub> as n-Butane	13	3.2	
C <sub>5</sub> as n-Pentane	13	3.2	
$C_6$ as n-Hexane	7.4	3.2	
$C_6$ as n-Hexane	81	6.5	

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

Verified By: KG \_\_\_\_\_ Date: 51.15104 10

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

Chefft Sample ID: FNL-0-15"NDIII	Project ID : P2400974 Sample ID : P2400974-007
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Test Code:	Modified EPA TO-3	Date Collected: 5/5/04
Instrument ID:	HP5890II/GC8/FID	Date Received: 5/7/04
Analyst: Wade Henton	Date Analyzed: 5/11/04 Volume(s) Analyzed: 0.250 ml	
Sampling Media:	1.0 Liter Canister	Volume(3) / Mary 20a.
Test Notes:		

10.0 Pi 1 = 0.5 Pf 1 =

D.F. = 1.63

	Result	MRL	Data
Compound	ppmV	ppmV	Qualifier
Methane	35,000	3.3	
$C_2$ as Ethane	ND	3.3	
C <sub>3</sub> as Propane	ND	3.3	
$C_4$ as n-Butane	7.1	3.3	
$C_5$ as n-Pentane	8.1	3.3	
$C_6$ as n-Hexane	4.6	3.3	
$C_6$ as n-Hexane	37	6.5	

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

### RESULTS OF ANALYSIS Page 1 of 1

Client:	GeoSyntec Consultants, Inc.	
<b>Client Sample ID:</b>	PNL-9-15-DHF	C
<b>Client Project ID:</b>	Ascon - Phase I/SB0202/31	CA

CAS Project ID : P2400974 CAS Sample ID : P2400974-008

Test Code:	Modified EPA TO-3	Date Collected: 5/5/04	
Instrument ID:	HP5890II/GC8/FID	Date Received: 5/7/04	
Analyst:	Wade Henton	Date Analyzed: 5/11/04	
Sampling Media:	1.0 Liter Canister	Volume(s) Analyzed: 0.250 ml	
Test Notes:			

Pi 1 = 0.2 Pf 1 = 10.0

D.F. = 1.66

	Result	MRL	Data Qualifier
Compound	ppmV	ppmV	
Methane	6,600	3.3	
C <sub>2</sub> as Ethane	ND	3.3	
C <sub>3</sub> as Propane	ND	3.3	
C <sub>4</sub> as n-Butane	ND	3.3	
$C_5$ as n-Pentane	9.3	3.3	
C <sub>6</sub> as n-Hexane	6.2	3.3	
$C_6$ + as n-Hexane	50	6.6	<u></u>

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

## RESULTS OF ANALYSIS Page 1 of 1

Client: Client Sample ID: Client Project ID:	GeoSyntec Consultants, Inc. PNL-9-21-BDHF Ascon - Phase I/SB0202/31	CAS Project ID : P2400974 CAS Sample ID : P2400974-009
--	---	---

Test Code: Instrument ID:	Modified EPA TO-3 HP5890II/GC8/FID	Date Collected: 5/5/04 Date Received: 5/7/04 Date Analyzed: 5/11/04	
Analyst: Sampling Media: Test Notes:	Wade Henton 1.0 Liter Canister	Volume(s) Analyzed: 1.0 ml	

 $P_{11} = 1.2$   $Pf_{11} = 1.2$ 

D.F. = 1.55

10.0

	Result	MRL	Data Ovalifiar
Compound	ppmV	ppmV	Qualifier
Methane	0.90	0.78	ļ
$C_2$ as Ethane	ND	0.78	
C <sub>3</sub> as Propane	ND	0.78	
C <sub>4</sub> as n-Butane	ND	0.78	
C <sub>5</sub> as n-Pentane	ND	0.78	
$C_6$ as n-Hexane	ND	0.78	
$C_6$ as n-Hexane	ND	1.6	

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

### RESULTS OF ANALYSIS Page 1 of 1

Client: Client Sample ID: Client Project ID:	GeoSyntec Consultants, Inc. PNL-8-6-DHF Ascon - Phase I/SB0202/31	CAS Project ID : P2400974 CAS Sample ID : P2400974-010
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Test Code:	Modified EPA TO-3	Date Collected: 5/5/04 Date Received: 5/7/04
Instrument ID:HP5890II/GC8/FIDAnalyst:Wade Henton	Date Analyzed: 5/11/04 Volume(s) Analyzed: 1.0 ml	
Sampling Media: Test Notes:	1.0 Liter Canister	( oranic(o) - hany - sa

Pf 1 =Pi 1 = 0.2

D.F. = 1.66

10.0

	Result	MRL	Data Qualifier
Compound	ppmV	ppmV	Quanner
Methane	370	0.83	
$C_2$ as Ethane	ND	0.83	
C <sub>3</sub> as Propane	ND	0.83	
$C_4$ as n-Butane	ND	0.83	
	ND	0.83	
C <sub>5</sub> as n-Pentane	ND	0.83	
C <sub>6</sub> as n-Hexane C <sub>6</sub> + as n-Hexane	6.0	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.	
<b>Client Sample ID:</b>	PNL-8-18-DHF	CAS Project ID : P2400974
<b>Client Project ID:</b>	Ascon - Phase I/SB0202/31	CAS Sample ID : P2400974-011

Test Code: Instrument ID:	Modified EPA TO-3 HP589011/GC8/FID Wade Henton	Date Collected: 5/5/04 Date Received: 5/7/04 Date Analyzed: 5/11/04
Analyst: Sampling Media: Test Notes:	1.0 Liter Canister	Volume(s) Analyzed: 0.250 ml

Pi 1 = -0.6 Pf 1 = 10.0

D.F. = 1.75

l	Result	MRL	Data
Compound	ppmV	ppmV	Qualifier
Methane	47,000	3.5	
$C_2$ as Ethane	10	3.5	L
C <sub>3</sub> as Propane	29	3.5	l
$C_4$ as n-Butane	50	3.5	
C <sub>5</sub> as n-Pentane	47	3.5	
C <sub>6</sub> as n-Hexane	33	3.5	ļ
$C_6$ + as n-Hexane	300	7.0	l

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

Verified By: R C Date: 50504	15
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#### RESULTS OF ANALYSIS Page 1 of 1

Client:	GeoSyntec Consultants, Inc.
<b>Client Sample ID:</b>	Method Blank
<b>Client Project ID:</b>	Ascon - Phase I/SB0202/31

Modified EPA TO-3

HP5890II/GC8/FID

1.0 Liter Canister

Wade Henton

Test Code:

Analyst:

Instrument ID:

Sampling Media: Test Notes: CAS Project ID : P2400974 CAS Sample ID : P040511-MB

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

D.F. = 1.00

	Result	MRL	Data Qualifier
Compound	ppmV	ppmV	
Methane	ND	0.50	
$C_2$ as Ethane	ND	0.50	
C <sub>3</sub> as Propane	ND	0.50	
C <sub>4</sub> as n-Butane	ND	0.50	
$C_5$ 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**.

Verified By: <u>K()</u> Date: <u>5125104</u>	16
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#### RESULTS OF ANALYSIS Page 1 of 1

Client:	GeoSyntec Consultants, Inc.
<b>Client Sample ID:</b>	Method Blank
<b>Client Project ID:</b>	Ascon - Phase I/SB0202/31

Test Code:

Analyst:

Test Notes:

Instrument ID:

Sampling Media:

Modified EPA TO-3

HP5890II/GC8/FID

1.0 Liter Canister

Wade Henton

CAS Project ID : P2400974 CAS Sample ID : P040513-MB

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

D.F. = 1.00

	Result	MRL	Data Qualifier
Compound	ppmV	ppmV	
Methane	ND	0.50	L
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	
$C_5$ 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**.

Verified By:	RG	Date:	5125104	17
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## RESULTS OF ANALYSIS Page 1 of 3

#### GeoSyntec Consultants, Inc. **Client:**

Client Sample ID:PNL-1-15-DHFCAS Friglet ID: 12400974-001Client Project ID:Ascon - Phase I/SB0202/31CAS Sample ID: P2400974-001	Client:	GeoSyntec Consultants, Inc.	CAS Project ID: P2400974
Client Project ID: Ascon - Phase I/SB0202/31	<b>Client Sample ID:</b>		
	<b>Client Project ID:</b>	Ascon - Phase I/SB0202/31	CAS Sample ID. 12100971 001

Test Code: Instrument ID: Analyst: Sampling Media:	EPA TO-15 Tekmar AUTOCAN/HP5972/HP5890 II+/MS2 Michelle Sakamoto/Aristotle Bragasin 1.0 LITER CANISTER			Date Collected: 5/3/ Date Received: 5/7/ Date(s) Analyzed: 5/1 Volume(s) Analyzed:	/04
Test Notes: Container ID:	ISC00011	Pi 1 =	-0.1	Pf 1 = 10.0	

D.F. = 1.69

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Page No :

CAS #	Compound	Result µg/m³	MRL μg/m³	Result ppbV	MRL ppbV	Data Qualifier
74-87-3	Chloromethane	ND	240	ND	120	
75-01-4	Vinyl Chloride	ND	240	ND	94	<b></b>
106-99-0	1,3-Butadiene	ND	240	ND	110	<u> </u>
74-83-9	Bromomethane	ND	240	ND	62	<b></b>
75-00-3	Chloroethane	ND	240	ND	92	╂
67-64-1	Acetone	ND	2,400	ND	1,000	┨
75-69-4	Trichlorofluoromethane	ND	240	ND	43	┦
107-13-1	Acrylonitrile	ND	240	ND	110	
75-35-4	1,1-Dichloroethene	ND	240	ND	61	
75-09-2	Methylene chloride	ND	240	ND	70	
76-13-1	Trichlorotrifluoroethane	ND	240	ND	32	
75-15-0	Carbon Disulfide	ND	240	ND	78	
156-60-5	trans-1,2-Dichloroethene	ND	240	ND	61	
75-34-3	1,1-Dichloroethane	ND	240	ND	60	
1634-04-4	Methyl tert-Butyl Ether	ND	240	ND	67	
108-05-4	Vinyl Acetate	ND	240	ND	69	
78-93-3	2-Butanone (MEK)	ND	240	ND	82	
156-59-2	cis-1,2-Dichloroethene	ND	240	ND	61	_
67-66-3	Chloroform	ND	240	ND	49	
107-06-2	1,2-Dichloroethane	ND	240	ND	60	
71-55-6	1,1,1-Trichloroethane	ND	240	ND	44	
71-43-2	Benzene	21,000	240	6,700	76	

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

### **RESULTS OF ANALYSIS** Page 2 of 3

Client:	GeoSyntec Consultants, Inc.	C+CD : +1D P2400074
Client Sample ID:	PNL-1-15-DHF Ascon - Phase I/SB0202/31	CAS Project ID: P2400974 CAS Sample ID: P2400974-001
Chent I lojett iD.	Ascon I huse his bounded of	

Test Code: Instrument ID: Analyst: Sampling Media:	EPA TO-15 Tekmar AUTOCAN/HP5972/HP5890 II+/MS2 Michelle Sakamoto/Aristotle Bragasin 1.0 LITER CANISTER			Date Collected: 5/3/0 Date Received: 5/7/0 Date(s) Analyzed: 5/18 Volume(s) Analyzed:	04
Test Notes: Container ID:	ISC00011	Pi 1 =	-0.1	Pf 1 = 10.0	

		F1 1 -	0.1		D.F. =	= 1.69
CAS#	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
56-23-5	Carbon Tetrachloride	ND	240	ND	38	
78-87-5	1,2-Dichloropropane	ND	240	ND	52	l
75-27-4	Bromodichloromethane	ND	240	ND	36	-↓
79-01-6	Trichloroethene	ND	240	ND	45	
10061-01-5	cis-1,3-Dichloropropene	ND	240	ND	53	
108-10-1	4-Methyl-2-pentanone	ND	240	ND	59	
10061-02-6	trans-1,3-Dichloropropene	ND	240	ND	53	
79-00-5	1,1,2-Trichloroethane	ND	240	ND	44	
108-88-3	Toluene	33,000	240	8,700	64	
591-78-6	2-Hexanone	ND	240	ND	59	
124-48-1	Dibromochloromethane	ND	240	ND	28	
106-93-4	1,2-Dibromoethane	ND	240	ND	31	
127-18-4	Tetrachloroethene	ND	240	ND	36	
108-90-7	Chlorobenzene	ND	240	ND	52	
100-41-4	Ethylbenzene	11,000	240	2,600	56	
136777-61-2	<i>m,p</i> -Xylenes	25,000	480	5,700	110	_
75-25-2	Bromoform	ND	240	ND	23	
100-42-5	Styrene	ND	240	ND	57	
95-47-6	o-Xylene	12,000	240	2,800	56	
79-34-5	1,1,2,2-Tetrachloroethane	ND	240	ND	35	
541-73-1	1,3-Dichlorobenzene	ND	240	ND	40	
106-46-7	1,4-Dichlorobenzene	ND	240	ND	40	
95-50-1	1,2-Dichlorobenzene	ND	240	ND	40	

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

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

Verified By: R1- Date: 50504 19

## RESULTS OF ANALYSIS Page 3 of 3

Client:	GeoSyntec Consultants, Inc.	<b>CARD CARD D2400074</b>
<b>Client Sample ID:</b>	PNL-1-15-DHF	CAS Project ID: P2400974
<b>Client Project ID:</b>	Ascon - Phase I/SB0202/31	CAS Sample ID: P2400974-001

## **Tentatively Identified Compounds**

Test Code: Instrument ID: Analyst: Sampling Media: Test Notes:	EPA TO-15 Tekmar AUTOCAN/HP5972/HP5890 II+/MS2 Michelle Sakamoto/Aristotle Bragasin 1.0 LITER CANISTER T	2		Date Collected: 5/3/04 Date Received: 5/7/04 Date Analyzed: 5/18/04 Volume(s) Analyzed: 0.00350 Liter(s)
Container ID:	ISC00011	Pi 1 =	-0.1	Pf 1 = 10.0

D.F. = 1.69

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GC / MS Ret. Time	Compound Identification	Concentration µg/m³	Data Qualifier
5.59	n-Butane	70,000	
6.67	Isopentane	70,000	
7.18	n-Pentane	70,000	
9.05	2-Methylpentane	60,000	
10.10	n-Hexane	80,000	
11.19	Methylcyclopentane	80,000	
12.58	Cyclohexane	60,000	
13.57	Dimethylcyclopentane Isomer	70,000	
13.69	Dimethylcyclopentane Isomer	70,000	
13.80	Dimethylcyclopentane Isomer	80,000	
15.35	Methylcyclohexane	80,000	·
16.17	Trimethylcyclopentane Isomer	60,000	
16.53	Trimethylcyclopentane Isomer	80,000	
17.94	Dimethylcyclohexane Isomer	60,000	
20.47	Trimethylcyclohexane Isomer	70,000	

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

#### RESULTS OF ANALYSIS Page 1 of 3

#### GeoSyntec Consultants, Inc. **Client:**

Client Sample ID:	PNL-14-21-DHF Ascon - Phase I/SB0202/31	CAS Projec CAS Sampl

ect ID: P2400974 ole ID: P2400974-002

Test Code: Instrument ID:	EPA TO-15 Tekmar AUTOCAN/HP5972/HP5890 II+/MS2 Michelle Sakamoto/Aristotle Bragasin			Date Collected: 5/3/ Date Received: 5/7/ Date(s) Analyzed: 5/18	/04
Analyst: Sampling Media:	1.0 LITER CANISTER			Volume(s) Analyzed:	0.00250 Liter(s)
Test Notes: Container ID:	ISC00009	Pi 1 =	-0.3	Pf 1 = 10.0	D.F. = 1.72

CAS #	Compound	Result µg/m³	MRL μg/m³	Result ppbV	MRL ppbV	Data Qualifier
74-87-3	Chloromethane	ND	340	ND	170	
75-01-4	Vinyl Chloride	ND	340	ND	130	
106-99-0	1,3-Butadiene	ND	340	ND	160	<b> </b>
74-83-9	Bromomethane	ND	340	ND	89	<b> </b>
75-00-3	Chloroethane	ND	340	ND	130	
67-64-1	Acetone	ND	3,400	ND	1,400	
75-69-4	Trichlorofluoromethane	ND	340	ND	61	
107-13-1	Acrylonitrile	ND	340	ND	160	
75-35-4	1,1-Dichloroethene	ND	340	ND	87	∦
75-09-2	Methylene chloride	ND	340	ND	99	<u> </u>
76-13-1	Trichlorotrifluoroethane	ND	340	ND	45	┨
75-15-0	Carbon Disulfide	ND	340	ND	110	
156-60-5	trans-1,2-Dichloroethene	ND	340	ND	87	
75-34-3	1,1-Dichloroethane	ND	340	ND	85	
1634-04-4	Methyl tert-Butyl Ether	ND	340	ND	95	
1034-04-4	Vinyl Acetate	ND	340	ND	98	-⊩
78-93-3	2-Butanone (MEK)	ND	340	ND	120	_
156-59-2	cis-1,2-Dichloroethene	ND	340	ND	87	
67-66-3	Chloroform	ND	340	ND	70	
107-06-2	1,2-Dichloroethane	ND	340	ND	85	
71-55-6	1,1,1-Trichloroethane	ND	340	ND	63	
71-43-2	Benzene	8,900	340	2,800	110	

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

Verified By: <u>R.G.</u> Date: <u>51.25104</u> 21

#### **RESULTS OF ANALYSIS** Page 2 of 3

GeoSyntec Consultants, Inc. **Client:** CAS Project ID: P2400974 Client Sample ID: PNL-14-21-DHF CAS Sample ID: P2400974-002 Client Project ID: Ascon - Phase I/SB0202/31

Test Code: Instrument ID: Analyst: Sampling Media:	EPA TO-15 Tekmar AUTOCAN/HP5972/HP5890 II+/MS2 Michelle Sakamoto/Aristotle Bragasin 1.0 LITER CANISTER			Date Collected: Date Received: Date(s) Analyzed: Volume(s) Analyzed:	5/7/04 5/18/04
Test Notes: Container ID:	ISC00009	Pi 1 =	-0.3	Pf 1 = 10.0	

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
56-23-5	Carbon Tetrachloride	ND	340	ND	55	<b> </b>
78-87-5	1,2-Dichloropropane	ND	340	ND	74	┃
75-27-4	Bromodichloromethane	ND	340	ND	51	<u> </u>
79-01-6	Trichloroethene	ND	340	ND	64	<u> </u>
10061-01-5	cis-1,3-Dichloropropene	ND	340	ND	76	<b> </b>
108-10-1	4-Methyl-2-pentanone	ND	340	ND	84	
10061-02-6	trans-1,3-Dichloropropene	ND	340	ND	76	╢
79-00-5	1,1,2-Trichloroethane	ND	340	ND	63	l
108-88-3	Toluene	710	340	190	91	l
591-78-6	2-Hexanone	ND	340	ND	84	ļ
124-48-1	Dibromochloromethane	ND	340	ND	40	
106-93-4	1,2-Dibromoethane	ND	340	ND	45	
127-18-4	Tetrachloroethene	ND	340	ND	51	
127-18-4	Chlorobenzene	ND	340	ND	75	
108-90-7	Ethylbenzene	8,200	340	1,900	79	
	<i>m,p</i> -Xylenes	10,000	690	2,300	160	
136777-61-2	Bromoform	ND	340	ND	33	
75-25-2		ND	340	ND	81	
100-42-5	Styrene	2,000	340	470	79	
95-47-6	o-Xylene	ND	340	ND	50	
79-34-5	1,1,2,2-Tetrachloroethane	ND	340	ND	57	
541-73-1	1,3-Dichlorobenzene	ND	340	ND	57	
106-46-7	1,4-Dichlorobenzene	ND ND	340	ND	57	
95-50-1	1,2-Dichlorobenzene					

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: <u>V</u> <u>Date: 51,25104</u> Page No.:

00974VOA.TO1 - Sample (2)

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D.F. = 1.72

#### RESULTS OF ANALYSIS Page 3 of 3

	GeoSyntec Consultants, Inc. PNL-14-21-DHF Ascon - Phase I/SB0202/31	CAS Project ID: P2400974 CAS Sample ID: P2400974-002
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### **Tentatively Identified Compounds**

Test Code: Instrument ID: Analyst: Sampling Media: Test Notes:	EPA TO-15 Tekmar AUTOCAN/HP5972/HP5890 II+/MS Michelle Sakamoto/Aristotle Bragasin 1.0 LITER CANISTER T	52		Date Collected: 5/3/04 Date Received: 5/7/04 Date Analyzed: 5/18/04 Volume(s) Analyzed: 0.00250 Liter(s)
Container ID:	ISC00009	Pi 1 =	-0.3	Pf 1 = 10.0

D.F. = 1.72

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Page No.:

GC / MS Ret. Time	Compound Identification	Concentration µg/m³	Data Qualifier
5.27	Isobutane	70,000	
5.60	n-Butane	100,000	
6.67	Isopentane	100,000	
7.19	n-Pentane	100,000	
9.05	2-Methylpentane	90,000	
9.52	3-Methylpentane	90,000	
11.20	Methylcyclopentane	100,000	
12.59	Cyclohexane	80,000	
13.56	Dimethylcyclopentane Isomer	100,000	
13.69	Dimethylcyclopentane Isomer	100,000	
13.80	Dimethylcyclopentane Isomer	100,000	
İ	Methylcyclohexane	100,000	
15.34	Trimethylcyclopentane Isomer	80,000	
16.17	Trimethylcyclopentane Isomer	100,000	
16.52 20.46	Trimethylcyclohexane Isomer	90,000	

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

#### RESULTS OF ANALYSIS Page 1 of 3

#### GeoSyntec Consultants, Inc. **Client:**

Client: GeoSyntec Consum	CAS Project ID: P24	r009/4
Client Sample ID: PNL-7-21-DHF Client Project ID: Ascon - Phase I/SB02	CAS Somula ID: P24	

Test Code: Instrument ID: Analyst: Sampling Media:	EPA TO-15 Tekmar AUTOCAN/HP5972/HP5890 II+/MS2 Michelle Sakamoto/Aristotle Bragasin 1.0 LITER CANISTER	Date Collected: 5/3/04 Date Received: 5/7/04 Date(s) Analyzed: 5/20/04 Volume(s) Analyzed: 0.00750 Liter(s)
Test Notes:		
Container ID:	ISC00006	o.t. DC1 10.0

 $P_{i1} = -0.1$   $P_{f1} = 10.0$ 

D.F. = 1.69

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
74-87-3	Chloromethane	ND	110	ND	55	
75-01-4	Vinyl Chloride	ND	110	ND	44	
106-99-0	1,3-Butadiene	ND	110	ND	51	
74-83-9	Bromomethane	ND	110	ND	29	
75-00-3	Chloroethane	ND	110	ND	43	
67-64-1	Acetone	ND	1,100	ND	470	
75-69-4	Trichlorofluoromethane	ND	110	ND	20	
107-13-1	Acrylonitrile	ND	110	ND	52	
75-35-4	1.1-Dichloroethene	ND	110	ND	28	
75-09-2	Methylene chloride	ND	110	ND	32	
76-13-1	Trichlorotrifluoroethane	ND	110	ND	15	
75-15-0	Carbon Disulfide	ND	110	ND	36	ļ
156-60-5	trans-1,2-Dichloroethene	ND	110	ND	28	
75-34-3	1,1-Dichloroethane	ND	110	ND	28	<u> </u>
1634-04-4	Methyl tert-Butyl Ether	ND	110	ND	31	l
108-05-4	Vinyl Acetate	ND	110	ND	32	ļ
78-93-3	2-Butanone (MEK)	ND	110	ND	38	J
156-59-2	cis-1,2-Dichloroethene	ND	110	ND	28	
67-66-3	Chloroform	ND	110	ND	23	
107-06-2	1,2-Dichloroethane	ND	110	ND	28	
71-55-6	1,1,1-Trichloroethane	ND	110	ND	21	
71-43-2	Benzene	3,700	110	1,200	35	

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

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

Verified By: <u>Ru</u>\_\_\_\_\_\_Date: <u>5125104</u> 24

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#### RESULTS OF ANALYSIS Page 2 of 3

CAS Project ID: P2400974 CAS Sample ID: P2400974-003

Test Code: Instrument ID: Analyst: Sampling Media:	EPA TO-15 Tekmar AUTOCAN/HP5972/HP5890 II+/MS2 Michelle Sakamoto/Aristotle Bragasin 1.0 LITER CANISTER			Date Collected: 5/3/0 Date Received: 5/7/0 Date(s) Analyzed: 5/20 Volume(s) Analyzed:	)4
Test Notes: Container ID:	ISC00006	Pi 1 =	-0.1	Pf 1 = 10.0	

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
56-23-5	Carbon Tetrachloride	ND	110	ND	18	┨────
78-87-5	1,2-Dichloropropane	ND	110	ND	24	┨────
75-27-4	Bromodichloromethane	ND	110	ND	17	┦────
79-01-6	Trichloroethene	ND	110	ND	21	
10061-01-5	cis-1,3-Dichloropropene	ND	110	ND	25	
108-10-1	4-Methyl-2-pentanone	ND	110	ND	28	
10061-02-6	trans-1,3-Dichloropropene	ND	110	ND	25	-
79-00-5	1,1,2-Trichloroethane	ND	110	ND	21	
108-88-3	Toluene	430	110	110	30	
591-78-6	2-Hexanone	ND	110	ND	28	
124-48-1	Dibromochloromethane	ND	110	ND	13	
106-93-4	1.2-Dibromoethane	ND	110	ND	15	
127-18-4	Tetrachloroethene	ND	110	ND	17	
108-90-7	Chlorobenzene	ND	110	ND	24	
108-90-7	Ethylbenzene	2,400	110	550	26	_
136777-61-2	<i>m,p</i> -Xylenes	2,900	230	670	52	
75-25-2	Bromoform	ND	110	ND	11	
	Styrene	ND	110	ND	26	
100-42-5	o-Xylene	1,300	110	300	26	
95-47-6	1,1,2,2-Tetrachloroethane	ND	110	ND	16	
79-34-5	1,3-Dichlorobenzene	ND	110	ND	19	
541-73-1		ND	110	ND	19	
106-46-7	1,4-Dichlorobenzene	ND	110	ND	19	

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

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method. Verified By: RC- Date: 5105104 25

D.F. = 1.69

### RESULTS OF ANALYSIS Page 3 of 3

Client Sample ID:	GeoSyntec Consultants, Inc. PNL-7-21-DHF Ascon - Phase I/SB0202/31	CAS Project ID: P2400974 CAS Sample ID: P2400974-003
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### Tentatively Identified Compounds

Test Code: Instrument ID: Analyst: Sampling Media: Test Notes:	EPA TO-15 Tekmar AUTOCAN/HP5972/HP5890 II+/MS Michelle Sakamoto/Aristotle Bragasin 1.0 LITER CANISTER T	2		Date Collected: 5/3/04 Date Received: 5/7/04 Date Analyzed: 5/20/04 Volume(s) Analyzed: 0.00750 Liter(s)
Container ID:	ISC00006	Pi 1 =	-0.1	Pf 1 = 10.0

D.F. = 1.69

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Page No.:

GC / MS Ret. Time	Compound Identification	Concentration µg/m³	Data Qualifier
6.69	Isopentane	40,000	
8.96	2,3-Dimethylbutane	30,000	
9.07	2-Methylpentane	30,000	
9.54	3-Methylpentane	30,000	
11.22	Methylcyclopentane	40,000	
12.93	2,3-Dimethylpentane	30,000	
13.57	Dimethylcyclopentane Isomer	40,000	
13.69	Dimethylcyclopentane Isomer	40,000	
13.89	Dimethylcyclopentane Isomer	40,000	
15.36	Methylcyclohexane	40,000	
15.42	Trimethylcyclopentane Isomer	30,000	
16.20	Trimethylcyclopentane Isomer	40,000	
16.20	Trimethylcyclopentane Isomer	30,000	
	Tetramethylcyclopentane Isomer	30,000	
18.97	Trimethylcyclohexane Isomer	30,000	

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

Verified By: RG Date: 51,25104

#### RESULTS OF ANALYSIS Page 1 of 3

# Client:GeoSyntec Consultants, Inc.Client Sample ID:PNL-11-12 DHFClient Project ID:Ascon - Phase I/SB0202/31

CAS Project ID: P2400974 CAS Sample ID: P2400974-004

Test Code: Instrument ID: Analyst: Sampling Media:	EPA TO-15 Tekmar AUTOCAN/HP5972/HP5890 II+/MS2 Michelle Sakamoto/Aristotle Bragasin 1.0 LITER CANISTER			Date Collected: 5/4/04 Date Received: 5/7/04 Date(s) Analyzed: 5/19 - Volume(s) Analyzed:	4
Test Notes: Container ID:	ISC00014	Pi 1 =	-0.1	Pf 1 = 10.0	D.F. = 1.69

CAS#	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
74-87-3	Chloromethane	ND	8.5	ND	4.1	
75-01-4	Vinyl Chloride	ND	8.5	ND	3.3	-
106-99-0	1,3-Butadiene	ND	8.5	ND	3.8	
74-83-9	Bromomethane	ND	8.5	ND	2.2	
75-00-3	Chloroethane	ND	8.5	ND	3.2	
67-64-1	Acetone	1,600	85	690	36	
75-69-4	Trichlorofluoromethane	ND	8.5	ND	1.5	
107-13-1	Acrylonitrile	ND	8.5	ND	3.9	
75-35-4	1,1-Dichloroethene	ND	8.5	ND	2.1	∦
75-09-2	Methylene chloride	ND	8.5	ND	2.4	-l
76-13-1	Trichlorotrifluoroethane	ND	8.5	ND	1.1	
75-15-0	Carbon Disulfide	ND	8.5	ND	2.7	
156-60-5	trans-1,2-Dichloroethene	ND	8.5	ND	2.1	
75-34-3	1,1-Dichloroethane	ND	8.5	ND	2.1	_
1634-04-4	Methyl tert-Butyl Ether	ND	8.5	ND	2.3	
108-05-4	Vinyl Acetate	25	8.5	7.0	2.4	
78-93-3	2-Butanone (MEK)	12	8.5	4.0	2.9	
156-59-2	cis-1,2-Dichloroethene	ND	8.5	ND	2.1	
67-66-3	Chloroform	ND	8.5	ND	1.7	
107-06-2	1,2-Dichloroethane	ND	8.5	ND	2.1	
71-55-6	1,1,1-Trichloroethane	ND	8.5	ND	1.5	
71-43-2	Benzene	220	8.5	70	2.6	

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: Re- Date: 5125104

### RESULTS OF ANALYSIS

Page 2 of 3

Client Sample ID:	GeoSyntec Consultants, Inc. PNL-11-12 DHF Ascon - Phase I/SB0202/31	CAS Project ID: P2400974 CAS Sample ID: P2400974-004
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Test Code: Instrument ID:	EPA TO-15 Tekmar AUTOCAN/HP5972/HP5890 II+/MS2 Michelle Sakamoto/Aristotle Bragasin			Date Collected: 5/4/0 Date Received: 5/7/0 Date(s) Analyzed: 5/19	4
Analyst: Sampling Media: Test Notes:	1.0 LITER CANISTER			Volume(s) Analyzed:	0.10 Liter(s) 0.010 Liter(s)
Container ID:	ISC00014	Pi 1 =	-0.1	Pf 1 = 10.0	

D.F. = 1.69

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CAS#	Compound	Result µg/m³	MRL μg/m³	Result ppbV	MRL ppbV	Data Qualifier
56.00.5	Carbon Tetrachloride	ND	<u>8.5</u>	ND	1.3	
56-23-5		ND	8.5	ND	1.8	
78-87-5	1,2-Dichloropropane Bromodichloromethane	ND	8.5	ND	1.3	
75-27-4		ND ND	8.5	ND	1.6	
79-01-6	Trichloroethene	ND	8.5	ND	1.9	
10061-01-5	cis-1,3-Dichloropropene	ND	8.5	ND	2.1	
108-10-1	4-Methyl-2-pentanone		8.5	ND ND	1.9	
10061-02-6	trans-1,3-Dichloropropene	ND		ND	1.5	╂────
79-00-5	1,1,2-Trichloroethane	ND	8.5	43	2.2	┟─────
108-88-3	Toluene	160	8.5		2.2	╢────
591-78-6	2-Hexanone	ND	8.5	ND		┨
124-48-1	Dibromochloromethane	ND	8.5	ND	0.99	╂─────
106-93-4	1,2-Dibromoethane	ND	8.5	ND	1.1	┦
127-18-4	Tetrachloroethene	ND	8.5	ND	1.2	
108-90-7	Chlorobenzene	ND	8.5	ND	1.8	
100-41-4	Ethylbenzene	4,900	8.5	1,100	1.9	
136777-61-2	<i>m,p</i> -Xylenes	ND	17	ND	3.9	_
75-25-2	Bromoform	ND	8.5	ND	0.82	
100-42-5	Styrene	1,100	8.5	260	2.0	
95-47-6	o-Xylene	11	8.5	2.5	1.9	
79-34-5	1,1,2,2-Tetrachloroethane	ND	8.5	ND	1.2	
541-73-1	1,3-Dichlorobenzene	ND	8.5	ND	1.4	
106-46-7	1,4-Dichlorobenzene	ND	8.5	ND	1.4	
95-50-1	1,2-Dichlorobenzene	ND	8.5	ND	1.4	

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

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

Verified By: Ris Date: 5135/64 Page No.:

### RESULTS OF ANALYSIS

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Client Sample ID:	GeoSyntec Consultants, Inc. PNL-11-12 DHF Ascon - Phase I/SB0202/31	CAS Project ID: P2400974 CAS Sample ID: P2400974-004
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### **Tentatively Identified Compounds**

Test Code: Instrument ID: Analyst: Sampling Media: Test Notes:	EPA TO-15 Tekmar AUTOCAN/HP5972/HP5890 II+/MS Michelle Sakamoto/Aristotle Bragasin 1.0 LITER CANISTER T	2		Date Collected: 5/4/04 Date Received: 5/7/04 Date Analyzed: 5/19 - 5/20/04 Volume(s) Analyzed: 0.10 Liter(s) 0.010 Liter(s)
Container ID:	ISC00014	Pi 1 =	-0.1	Pf 1 = 10.0

D.F. = 1.69

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GC / MS Ret. Time	Compound Identification	Concentration μg/m³	Data Qualifier
23.10	Cumene	2,000	
23.95	Propylbenzene	200	
24.13	3-Ethyltoluene	100	
24.58	alpha-Methylstyrene	3,000	
25.33	C10H14 Compound	200	
[	C10H14 Aromatic Compound	1,000	
25.39		1,000	
25.61	Methylstyrene Isomer	100	
25.94	Indane	1,000	
26.12	Diethylbenzene Isomer	100	
26.19	Acetophenone		
26.27	Diethylbenzene Isomer	800	
26.40	Diethylbenzene Isomer	300	_
27.31	C <sub>10</sub> H <sub>12</sub> Compound	300	
28.56	Naphthalene	500	
28.56	Benzothiophene Isomer	100	

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

#### RESULTS OF ANALYSIS Page 1 of 3

Client:	GeoSyntec Consultants, Inc.
<b>Client Sample ID:</b>	PNL-10A-13 DHF
<b>Client Project ID:</b>	Ascon - Phase I/SB0202/31

CAS Project ID: P2400974 CAS Sample ID: P2400974-005

Test Code: Instrument ID: Analyst: Sampling Media:	EPA TO-15 Tekmar AUTOCAN/HP5972/HP5890 II+/MS2 Michelle Sakamoto/Aristotle Bragasin 1.0 LITER CANISTER			Date Collected: 5/4/04 Date Received: 5/7/04 Date(s) Analyzed: 5/19/04 Volume(s) Analyzed:	0.40 Liter(s)
Test Notes: Container ID:	ISC00013	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	2.0	ND	0.99	ļ
75-01-4	Vinyl Chloride	ND	2.0	ND	0.80	l
106-99-0	1,3-Butadiene	4.4	2.0	2.0	0.92	
74-83-9	Bromomethane	ND	2.0	ND	0.52	<b></b>
75-00-3	Chloroethane	ND	2.0	ND	0.77	
67-64-1	Acetone	91	20	38	8.6	
75-69-4	Trichlorofluoromethane	ND	2.0	ND	0.36	╂
107-13-1	Acrylonitrile	ND	2.0	ND	0.94	
75-35-4	1,1-Dichloroethene	ND	2.0	ND	0.51	┩─────
75-09-2	Methylene chloride	ND	2.0	ND	0.59	
76-13-1	Trichlorotrifluoroethane	ND	2.0	ND	0.27	<u> </u>
75-15-0	Carbon Disulfide	13	2.0	4.0	0.65	- <b> </b>
156-60-5	trans-1,2-Dichloroethene	ND	2.0	ND	0.51	
75-34-3	1,1-Dichloroethane	ND	2.0	ND	0.50	
1634-04-4	Methyl tert-Butyl Ether	ND	2.0	ND	0.57	
108-05-4	Vinyl Acetate	ND	2.0	ND	0.58	
78-93-3	2-Butanone (MEK)	21	2.0	7.0	0.69	
156-59-2	cis-1,2-Dichloroethene	ND	2.0	ND	0.51	
67-66-3	Chloroform	ND	2.0	ND	0.42	
107-06-2	1,2-Dichloroethane	ND	2.0	ND	0.50	
71-55-6	1,1,1-Trichloroethane	ND	2.0	ND	0.37	
71-43-2	Benzene	24	2.0	7.6	0.64	

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: <u>K</u>(- Date: <u>5),504</u>

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#### **RESULTS OF ANALYSIS** Page 2 of 3

	GeoSyntec Consultants, Inc. PNL-10A-13 DHF Ascon - Phase I/SB0202/31	CAS Project ID: P2400974 CAS Sample ID: P2400974-005
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Test Code: Instrument ID: Analyst: Sampling Media:	EPA TO-15 Tekmar AUTOCAN/HP5972/HP5890 II+/MS2 Michelle Sakamoto/Aristotle Bragasin 1.0 LITER CANISTER			Date Collected: 5/4/04 Date Received: 5/7/04 Date(s) Analyzed: 5/19/04 Volume(s) Analyzed:	0.40 Liter(s)
Test Notes: Container ID:	ISC00013	Pi 1 =	0.5	Pf 1 = 10.0	

Pi 1 = 0.5

D.F. = 1.63

CAS#	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
56-23-5	Carbon Tetrachloride	ND	2.0	ND	0.32	
78-87-5	1,2-Dichloropropane	ND	2.0	ND	0.44	
75-27-4	Bromodichloromethane	ND	2.0	ND	0.30	
79-01-6	Trichloroethene	ND	2.0	ND	0.38	
10061-01-5	cis-1,3-Dichloropropene	ND	2.0	ND	0.45	
108-10-1	4-Methyl-2-pentanone	ND	2.0	ND	0.50	
10061-02-6	trans-1,3-Dichloropropene	ND	2.0	ND	0.45	
79-00-5	1,1,2-Trichloroethane	ND	2.0	ND	0.37	┫
108-88-3	Toluene	20	2.0	5.3	0.54	
591-78-6	2-Hexanone	ND	2.0	ND	0.50	
124-48-1	Dibromochloromethane	ND	2.0	ND	0.24	
106-93-4	1,2-Dibromoethane	ND	2.0	ND	0.27	
127-18-4	Tetrachloroethene	ND	2.0	ND	0.30	
108-90-7	Chlorobenzene	ND	2.0	ND	0.44	
100-41-4	Ethylbenzene	63	2.0	14	0.47	
136777-61-2	<i>m,p</i> -Xylenes	52	4.1	12	0.94	
75-25-2	Bromoform	ND	2.0	ND	0.20	
100-42-5	Styrene	5.2	2.0	1.2	0.48	
95-47-6	o-Xylene	27	2.0	6.2	0.47	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	ND	0.30	
541-73-1	1,3-Dichlorobenzene	ND	2.0	ND	0.34	
106-46-7	1,4-Dichlorobenzene	ND	2.0	ND	0.34	
95-50-1	1,2-Dichlorobenzene	ND	2.0	ND	0.34	

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

#### RESULTS OF ANALYSIS Page 3 of 3

	GeoSyntec Consultants, Inc. PNL-10A-13 DHF Ascon - Phase I/SB0202/31	CAS Project ID: P2400974 CAS Sample ID: P2400974-005
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### **Tentatively Identified Compounds**

Test Code: Instrument ID: Analyst: Sampling Media: Test Notes:	EPA TO-15 Tekmar AUTOCAN/HP5972/HP5890 II+/M Michelle Sakamoto/Aristotle Bragasin 1.0 LITER CANISTER T	182		Date Collected: 5/4 Date Received: 5/ Date Analyzed: 5/ Volume(s) Analyzed:	7/04
Container ID:	ISC00013	Pi 1 =	0.5	Pf 1 = 10.0	

D.F. = 1.63

GC / MS Ret. Time	Compound Identification	Concentration µg/m³	Data Qualifier
4.82	Propane + Propene	90	
10.06	n-Hexane	40	
11.17	Methylcyclopentane	200	
13.51	Dimethylcyclopentane Isomer	90	
13.64	Dimethylcyclopentane Isomer	90	
13.77	Dimethylcyclopentane Isomer	200	
15.31	Methylcyclohexane	100	
16.49	Trimethylcyclopentane Isomer	100	
17.91	Dimethylcyclohexane Isomer	90	
20.45	Trimethylcyclohexane Isomer	200	
22.49	n-Nonane	40	
23.57	$C_{10}H_{22}$ Branched Alkane	90	
23.74	alpha-Pinene	200	
24.44	Tetramethylcyclohexane Isomer	90	
25.87	d-Limonene	50	

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

### RESULTS OF ANALYSIS

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#### GeoSyntec Consultants, Inc. **Client:** Client Sample ID: PNL-6-15-DHF Client Project ID: Ascon - Phase I/SB0202/31

CAS Project ID: P2400974 CAS Sample ID: P2400974-006

Verified By: R. Date: 51,25104 33

Test Code: Instrument ID: Analyst: Sampling Media:	EPA TO-15 Tekmar AUTOCAN/HP5972/HP5890 II+/MS2 Michelle Sakamoto/Aristotle Bragasin 1.0 LITER CANISTER			Date Collected: 5/5/04 Date Received: 5/7/04 Date(s) Analyzed: 5/20/04 Volume(s) Analyzed:	
Test Notes: Container ID:	ISC00008	Pi 1 =	0.6	Pf 1 = 10.0	D.F. = 1.61

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
74-87-3	Chloromethane	ND	16	ND	7.8	
75-01-4	Vinyl Chloride	ND	16	ND	6.3	
106-99-0	1,3-Butadiene	140	16	63	7.3	
74-83-9	Bromomethane	ND	16	ND	4.1	
75-00-3	Chloroethane	ND	16	ND	6.1	
67-64-1	Acetone	ND	160	ND	68	
75-69-4	Trichlorofluoromethane	ND	16	ND	2.9	
107-13-1	Acrylonitrile	ND	16	ND	7.4	
75-35-4	1,1-Dichloroethene	ND	16	ND	4.1	
75-09-2	Methylene chloride	78	16	22	4.6	
76-13-1	Trichlorotrifluoroethane	ND	16	ND	2.1	
75-15-0	Carbon Disulfide	36	16	11	5.2	
156-60-5	trans-1,2-Dichloroethene	ND	16	ND	4.1	-∦
75-34-3	1,1-Dichloroethane	ND	16	ND	4.0	
1634-04-4	Methyl tert-Butyl Ether	ND	16	ND	4.5	
108-05-4	Vinyl Acetate	ND	16	ND	4.6	
78-93-3	2-Butanone (MEK)	69	16	23	5.5	- <b> </b>
156-59-2	cis-1,2-Dichloroethene	ND	16	ND	4.1	
67-66-3	Chloroform	ND	16	ND	3.3	
107-06-2	1,2-Dichloroethane	ND	16	ND	4.0	
71-55-6	1,1,1-Trichloroethane	ND	16	ND	3.0	
71-43-2	Benzene	26	16	8.1	5.0	

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

#### **RESULTS OF ANALYSIS** Page 2 of 3

Client Sample ID:	GeoSyntec Consultants, Inc. PNL-6-15-DHF Ascon - Phase I/SB0202/31	CAS Project ID: P2400974 CAS Sample ID: P2400974-006
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Test Code: Instrument ID: Analyst: Sampling Media:	EPA TO-15 Tekmar AUTOCAN/HP5972/HP5890 II+/MS2 Michelle Sakamoto/Aristotle Bragasin 1.0 LITER CANISTER			Date Collected: 5/5/04 Date Received: 5/7/04 Date(s) Analyzed: 5/20/04 Volume(s) Analyzed:	
Test Notes:					
Container ID:	ISC00008	~	0.6	$D_{1} = 10.0$	

0.6 Pi 1 =

D.F. = 1.61

Pf 1 = 10.0

Verified By: Ro Date: 5125104 34

CAS#	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
56-23-5	Carbon Tetrachloride	ND	16	ND	2.6	l
78-87-5	1,2-Dichloropropane	ND	16	ND	3.5	
75-27-4	Bromodichloromethane	ND	16	ND	2.4	
79-01-6	Trichloroethene	ND	16	ND	3.0	
10061-01-5	cis-1,3-Dichloropropene	ND	16	ND	3.5	∦
108-10-1	4-Methyl-2-pentanone	ND	16	ND	3.9	<u> </u>
10061-02-6	trans-1,3-Dichloropropene	ND	16	ND	3.5	ļ
79-00-5	1,1,2-Trichloroethane	ND	16	ND	3.0	┃
108-88-3	Toluene	18	16	4.7	4.3	┨
591-78-6	2-Hexanone	ND	16	ND	3.9	
124-48-1	Dibromochloromethane	ND	16	ND	1.9	
106-93-4	1,2-Dibromoethane	ND	16	ND	2.1	
127-18-4	Tetrachloroethene	ND	16	ND	2.4	
108-90-7	Chlorobenzene	92	16	20	3.5	
100-41-4	Ethylbenzene	34	16	7.9	3.7	
136777-61-2	<i>m,p</i> -Xylenes	ND	32	ND	7.4	
75-25-2	Bromoform	ND	16	ND	1.6	
100-42-5	Styrene	ND	16	ND	3.8	
<u> </u>	o-Xylene	ND	16	ND	3.7	
79-34-5	1,1,2,2-Tetrachloroethane	ND	16	ND	2.3	
541-73-1	1,3-Dichlorobenzene	ND	16	ND	2.7	
	1,4-Dichlorobenzene	ND	16	ND	2.7	
<u>106-46-7</u> 95-50-1	1,2-Dichlorobenzene	ND	16	ND	2.7	

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

#### RESULTS OF ANALYSIS

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Client Sample ID:	GeoSyntec Consultants, Inc. PNL-6-15-DHF Ascon - Phase I/SB0202/31	CAS Project ID: P2400974 CAS Sample ID: P2400974-006
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### **Tentatively Identified Compounds**

Test Code: Instrument ID: Analyst: Sampling Media: Test Notes:	EPA TO-15 Tekmar AUTOCAN/HP5972/HP5890 II+/MS Michelle Sakamoto/Aristotle Bragasin 1.0 LITER CANISTER <b>T</b>	2		Date Collected: 5/5/04 Date Received: 5/7/04 Date Analyzed: 5/20/04 Volume(s) Analyzed: 0.050 Liter(s)
Container ID:	ISC00008	Pi 1 =	0.6	Pf 1 = 10.0

D.F. = 1.61

Page No

GC / MS	Compound Identification	Concentration	Data Qualifier
Ret. Time		μg/m³	
5.28	Isobutane	5,000	
5.60	n-Butane	5,000	-┃
6.68	Isopentane	6,000	
8.95	2,3-Dimethylbutane	4,000	
9.53	3-Methylpentane	5,000	
12.90	2,3-Dimethylpentane	4,000	
13.10	Dimethylcyclopentane Isomer	4,000	
15.40	Trimethylcyclopentane Isomer	4,000	
16.17	Trimethylcyclopentane Isomer	5,000	
17.94	Trimethylcyclopentane Isomer	3,000	
18.82	Dimethylcyclohexane Isomer	3,000	
18.96	Tetramethylcyclopentane Isomer	4,000	
20.47	Trimethylcyclohexane Isomer	5,000	
20.47	C9H18 Compound	3,000	
23.34	C9H <sub>16</sub> Compound	3,000	

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

Verified By: RC- Date: 5125104 35

#### RESULTS OF ANALYSIS Page 1 of 3

#### GeoSyntec Consultants, Inc. **Client:**

Test Code: Instrument ID: Analyst: Sampling Media:	EPA TO-15 Tekmar AUTOCAN/HP5972/HP5890 II+/MS2 Michelle Sakamoto/Aristotle Bragasin 1.0 LITER CANISTER			Date Collected: 5/5/04 Date Received: 5/7/04 Date(s) Analyzed: 5/19/0 Volume(s) Analyzed:	ł
Test Notes: Container ID:	ISC00012	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	5.4	ND	2.6	
75-01-4	Vinyl Chloride	ND	5.4	ND	2.1	
106-99-0	1,3-Butadiene	ND	5.4	ND	2.5	
74-83-9	Bromomethane	ND	5.4	ND	1.4	
75-00-3	Chloroethane	ND	5.4	ND	2.1	
67-64-1	Acetone	ND	54	ND	23	
75-69-4	Trichlorofluoromethane	ND	5.4	ND	0.97	
107-13-1	Acrylonitrile	ND	5.4	ND	2.5	
75-35-4	1,1-Dichloroethene	ND	5.4	ND	1.4	
75-09-2	Methylene chloride	28	5.4	8.0	1.6	_
76-13-1	Trichlorotrifluoroethane	ND	5.4	ND	0.71	
75-15-0	Carbon Disulfide	13	5.4	4.2	1.7	·
156-60-5	trans-1,2-Dichloroethene	ND	5.4	ND	1.4	
75-34-3	1,1-Dichloroethane	ND	5.4	ND	1.3	
1634-04-4	Methyl tert-Butyl Ether	ND	5.4	ND	1.5	
108-05-4	Vinyl Acetate	ND	5.4	ND	1.5	
78-93-3	2-Butanone (MEK)	33	5.4	11	1.8	
156-59-2	cis-1,2-Dichloroethene	ND	5.4	ND	1.4	
67-66-3	Chloroform	ND	5.4	ND	1.1	
107-06-2	1,2-Dichloroethane	ND	5.4	ND	1.3	
71-55-6	1,1,1-Trichloroethane	ND	5.4	ND	1.0	
71-43-2	Benzene	6.4	5.4	2.0	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.

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Verified By: How Date: 50504

#### RESULTS OF ANALYSIS Page 2 of 3

Client Sample ID:	GeoSyntec Consultants, Inc. PNL-6-15-RDHF Ascon - Phase I/SB0202/31	CAS Project ID: P2400974 CAS Sample ID: P2400974-007
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Test Code: Instrument ID: Analyst: Sampling Media:	EPA TO-15 Tekmar AUTOCAN/HP5972/HP5890 II+/MS2 Michelle Sakamoto/Aristotle Bragasin 1.0 LITER CANISTER			Date Collected: 5/5/04 Date Received: 5/7/04 Date(s) Analyzed: 5/19/04 Volume(s) Analyzed:	
Test Notes: Container ID:	ISC00012	Pi 1 =	0.5	Pf 1 = 10.0	DF (16)

D.F. = 1.63

-1

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
		ND ND	5.4	ND	0.86	
56-23-5	Carbon Tetrachloride	ND ND	5.4	ND	1.2	
78-87-5	1,2-Dichloropropane	ND ND	5.4	ND	0.81	
75-27-4	Bromodichloromethane	ND ND	5.4	ND	1.0	
79-01-6	Trichloroethene	ND ND	5.4	ND	1.2	
10061-01-5	cis-1,3-Dichloropropene	ND ND	5.4	ND	1.3	
108-10-1	4-Methyl-2-pentanone		5.4	ND	1.2	
10061-02-6	trans-1,3-Dichloropropene	ND	5.4	ND	1.0	
79-00-5	1,1,2-Trichloroethane	ND		ND	1.4	
108-88-3	Toluene	ND	5.4	ND	1.3	
591-78-6	2-Hexanone	ND	5.4	ND ND	0.64	╢
124-48-1	Dibromochloromethane	ND	5.4		0.04	
106-93-4	1,2-Dibromoethane	ND	5.4	ND	0.80	
127-18-4	Tetrachloroethene	ND	5.4	ND	1.2	
108-90-7	Chlorobenzene	37	5.4	8.0		
100-41-4	Ethylbenzene	13	5.4	3.0	1.3	
136777-61-2	<i>m,p</i> -Xylenes	ND	11	ND	2.5	
75-25-2	Bromoform	ND	5.4	ND	0.53	
100-42-5	Styrene	ND	5.4	ND	1.3	
	o-Xylene	ND	5.4	ND	1.3	
95-47-6	1,1,2,2-Tetrachloroethane	ND	5.4	ND	0.79	
79-34-5	1,3-Dichlorobenzene	ND	5.4	ND	0.90	
541-73-1		ND	5.4	ND	0.90	
106-46-7	1,4-Dichlorobenzene	ND	5.4	ND	0.90	
95-50-1	1,2-Dichlorobenzene					

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. 37

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### RESULTS OF ANALYSIS

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Client Sample ID:	GeoSyntec Consultants, Inc. PNL-6-15-RDHF Ascon - Phase I/SB0202/31	CAS Project ID: P2400974 CAS Sample ID: P2400974-007
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### Tentatively Identified Compounds

Test Code: Instrument ID: Analyst: Sampling Media: Test Notes:	EPA TO-15 Tekmar AUTOCAN/HP5972/HP5890 II+/MS Michelle Sakamoto/Aristotle Bragasin 1.0 LITER CANISTER T	2		Date Collected: 5/5/04 Date Received: 5/7/04 Date Analyzed: 5/19/04 Volume(s) Analyzed: 0.150 Liter(s)
Container ID:	ISC00012	Pi 1 =	0.5	Pf 1 = 10.0

D.F. = 1.63

GC / MS	Compound Identification	Concentration	Data
Ret. Time		μg/m³	Qualifier
5.20	Isobutane	2,000	
5.29	n-Butane	2,000	
5.61		2,000	
6.69	Isopentane 2.3-Dimethylbutane	2,000	
8.96	3-Methylpentane	2,000	
9.54		2,000	
12.91	2,3-Dimethylpentane	1,000	
13.11	Dimethylcyclopentane Isomer	1,000	
13.63	Dimethylcyclopentane Isomer + C7H16 Compound		┨
15.40	Trimethylcyclopentane Isomer	2,000	
16.19	Trimethylcyclopentane Isomer	2,000	
18.83	Dimethylcyclohexane Isomer	1,000	
18.96	Tetramethylcyclopentane Isomer	1,000	l
20.48	Trimethylcyclohexane Isomer	2,000	╢
20.88	C9H <sub>18</sub> Compound	1,000	
21.06	Trimethylcyclohexane Isomer	1,000	<u> </u>

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

Verified By: Date: 5125104 Page No:

RESULTS OF ANALYSIS

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#### GeoSyntec Consultants, Inc. **Client:** Client Sample ID: PNL-9-15-DHF

Client Project ID: Ascon - Phase I/SB0202/31

#### CAS Project ID: P2400974 CAS Sample ID: P2400974-008

Test Code: Instrument ID: Analyst: Sampling Media:	EPA TO-15 Tekmar AUTOCAN/HP5972/HP5890 II+/MS2 Michelle Sakamoto/Aristotle Bragasin 1.0 LITER CANISTER			Date Collected: 5/5/04 Date Received: 5/7/04 Date(s) Analyzed: 5/19/04 Volume(s) Analyzed:	
Test Notes: Container ID:	ISC00010	Pi 1 =	0.2	Pf 1 = 10.0	

ontainer ID:	ISC00010	Pi 1 =	0.2	Pf 1 = 10.0	D.F. =	1.66
CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
74-87-3	Chloromethane	ND	17	ND	8.0	
	Vinyl Chloride	ND	17	ND	6.5	
75-01-4		ND	17	ND	7.5	
106-99-0	1,3-Butadiene	ND	17	ND	4.3	
74-83-9	Bromomethane		17	ND	6.3	
75-00-3	Chloroethane	ND ND	17	ND	70	
	A					

106-99-0	1,3-Butadiene	ND	17	ND	7.5	
74-83-9	Bromomethane	ND	17	ND	4.3	
75-00-3	Chloroethane	ND	17	ND	6.3	
67-64-1	Acetone	ND	170	ND	70	L
75-69-4	Trichlorofluoromethane	ND	17	ND	3.0	
107-13-1	Acrylonitrile	ND	17	ND	7.7	
75-35-4	1,1-Dichloroethene	ND	17	ND	4.2	
75-09-2	Methylene chloride	38	17	11	4.8	
76-13-1	Trichlorotrifluoroethane	ND	17	ND	2.2	
75-15-0	Carbon Disulfide	ND	17	ND	5.3	
156-60-5	trans-1,2-Dichloroethene	ND	17	ND	4.2	
75-34-3	1,1-Dichloroethane	ND	17	ND	4.1	
1634-04-4	Methyl tert-Butyl Ether	ND	17	ND	4.6	
1034-04-4	Vinyl Acetate	ND	17	ND	4.7	
	2-Butanone (MEK)		17	22	5.6	
78-93-3	cis-1,2-Dichloroethene	ND	17	ND	4.2	
156-59-2	Chloroform	ND	17	ND	3.4	
67-66-3		ND	17	ND	4.1	
107-06-2	1,2-Dichloroethane	ND	17	ND	3.0	
71-55-6	1,1,1-Trichloroethane	210	17	67	5.2	
71-43-2	Benzene					

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.

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#### RESULTS OF ANALYSIS Page 2 of 3

Class Comple LDC VNL-9-15-11HK	CAS Project ID: P2400974 CAS Sample ID: P2400974-008
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Test Code: Instrument ID: Analyst: Sampling Media:	EPA TO-15 Tekmar AUTOCAN/HP5972/HP5890 II+/MS2 Michelle Sakamoto/Aristotle Bragasin 1.0 LITER CANISTER			Date Collected: 5/5/04 Date Received: 5/7/04 Date(s) Analyzed: 5/19/04 Volume(s) Analyzed:	0.050 Liter(s)
Test Notes: Container ID:	ISC00010	Pi 1 =	0.2	Pf 1 = 10.0	

D.F. = 1.66

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CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
56-23-5	Carbon Tetrachloride	ND	17	ND	2.6	
78-87-5	1,2-Dichloropropane	ND	17	ND	3.6	
75-27-4	Bromodichloromethane	ND	17	ND	2.5	
79-01-6	Trichloroethene	ND	17	ND	3.1	
10061-01-5	cis-1,3-Dichloropropene	ND	17	ND	3.7	
108-10-1	4-Methyl-2-pentanone	ND	17	ND	4.1	
10061-02-6	trans-1,3-Dichloropropene	ND	17	ND	3.7	
79-00-5	1,1,2-Trichloroethane	ND	17	ND	3.0	
108-88-3	Toluene	51	17	14	4.4	
591-78-6	2-Hexanone	ND	17	ND	4.1	
124-48-1	Dibromochloromethane	ND	17	ND	1.9	
124-48-1	1,2-Dibromoethane	ND	17	ND	2.2	
127-18-4	Tetrachloroethene	ND	17	ND	2.4	
127-18-4	Chlorobenzene	ND	17	ND	3.6	_
	Ethylbenzene	360	17	83	3.8	
100-41-4		750	33	170	7.6	
136777-61-2	<i>m,p</i> -Xylenes Bromoform	ND	17	ND	1.6	
75-25-2		ND	17	ND	3.9	
100-42-5	Styrene	120	17	29	3.8	
95-47-6	o-Xylene	ND	17	ND	2.4	
79-34-5	1,1,2,2-Tetrachloroethane	- ND	17	ND	2.8	
541-73-1	1,3-Dichlorobenzene	ND	17	ND	2.8	
106-46-7	1,4-Dichlorobenzene	ND ND	17	ND	2.8	
95-50-1	1,2-Dichlorobenzene					

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

Verified By: RC. Date: 5125104

#### RESULTS OF ANALYSIS

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Client Sample ID:	GeoSyntec Consultants, Inc. PNL-9-15-DHF Ascon - Phase I/SB0202/31	CAS Project ID: P2400974 CAS Sample ID: P2400974-008
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### **Tentatively Identified Compounds**

Test Code: Instrument ID: Analyst: Sampling Media: Test Notes:	EPA TO-15 Tekmar AUTOCAN/HP5972/HP5890 II+/M Michelle Sakamoto/Aristotle Bragasin 1.0 LITER CANISTER T	52		Date Collected: 5/5/04 Date Received: 5/7/04 Date Analyzed: 5/19/04 Volume(s) Analyzed: 0.050 Liter(s)
Container ID:	ISC00010	Pi 1 =	0.2	Pf 1 = 10.0

D.F. = 1.66

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GC / MS Ret. Time	Compound Identification	Concentration µg/m³	Data Qualifier
5.58	n-Butane	2,000	
	Isopentane	4,000	
6.67	n-Pentane	2,000	
7.19		2,000	
8.94	Cyclopentane	3,000	
9.05	2-Methylpentane	3,000	
9.53	3-Methylpentane	3,000	
10.10	n-Hexane	4,000	
11.20	Methylcyclopentane		
12.58	Cyclohexane	2,000	
13.56	Dimethylcyclopentane Isomer	3,000	
13.68	Dimethylcyclopentane Isomer	3,000	
13.81	Dimethylcyclopentane Isomer	3,000	
15.34	Methylcyclohexane	3,000	
16.52	Trimethylcyclopentane Isomer	3,000	
20.46	Trimethylcyclohexane Isomer	2,000	

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

RESULTS OF ANALYSIS

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#### GeoSyntec Consultants, Inc. Client: Client Sample ID: PNL-9-21-BDHF Client Project ID: Ascon - Phase I/SB0202/31

CAS Project ID: P2400974 CAS Sample ID: P2400974-009

Test Code: Instrument ID: Analyst: Sampling Media:	EPA TO-15 Tekmar AUTOCAN/HP5972/HP5890 II+/MS2 Michelle Sakamoto/Aristotle Bragasin 1.0 LITER CANISTER			Date Collected: 5/5/04 Date Received: 5/7/04 Date(s) Analyzed: 5/19/04 Volume(s) Analyzed:	
Test Notes: Container ID:	ISC00007	Pi 1 =	1.2	Pf 1 = 10.0	D.F. = 1.55

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
74-87-3	Chloromethane	ND	1.9	ND	0.94	
75-01-4	Vinyl Chloride	ND	1.9	ND	0.76	<u> </u>
106-99-0	1,3-Butadiene	ND	1.9	ND	0.88	<u> </u>
74-83-9	Bromomethane	ND	1.9	ND	0.50	
75-00-3	Chloroethane	ND	1.9	ND	0.73	
67-64-1	Acetone	ND	19	ND	8.2	
75-69-4	Trichlorofluoromethane	ND	1.9	ND	0.34	<u> </u>
107-13-1	Acrylonitrile	ND	1.9	ND	0.89	
75-35-4	1,1-Dichloroethene	ND	1.9	ND	0.49	
75-09-2	Methylene chloride	ND	1.9	ND	0.56	
76-13-1	Trichlorotrifluoroethane	ND	1.9	ND	0.25	┨
75-15-0	Carbon Disulfide	ND	1.9	ND	0.62	
156-60-5	trans-1,2-Dichloroethene	ND	1.9	ND	0.49	-}
75-34-3	1,1-Dichloroethane	ND	1.9	ND	0.48	
1634-04-4	Methyl tert-Butyl Ether	ND	1.9	ND	0.54	
108-05-4	Vinyl Acetate	ND	1.9	ND	0.55	
78-93-3	2-Butanone (MEK)	4.9	1.9	1.7	0.66	
156-59-2	cis-1,2-Dichloroethene	ND	1.9	ND	0.49	
67-66-3	Chloroform	ND	1.9	ND	0.40	
107-06-2	1,2-Dichloroethane	ND	1.9	ND	0.48	
71-55-6	1,1,1-Trichloroethane	ND	1.9	ND	0.36	
71-43-2	Benzene	ND	1.9	ND	0.61	

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.

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#### RESULTS OF ANALYSIS Page 2 of 3

Test Code: Instrument ID: Analyst: Sampling Media:	EPA TO-15 Tekmar AUTOCAN/HP5972/HP5890 II+/MS2 Michelle Sakamoto/Aristotle Bragasin 1.0 LITER CANISTER			Date Collected: 5/5/04 Date Received: 5/7/04 Date(s) Analyzed: 5/19/04 Volume(s) Analyzed:	0.40 Liter(s)
Test Notes: Container ID:	ISC00007	Pi 1 =	1.2	Pf 1 = 10.0	

D.F. = 1.55

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
56-23-5	Carbon Tetrachloride	ND	1.9	ND	0.31	
78-87-5	1,2-Dichloropropane	ND	1.9	ND	0.42	
75-27-4	Bromodichloromethane	ND	1.9	ND	0.29	
79-01-6	Trichloroethene	ND	1.9	ND	0.36	
10061-01-5	cis-1,3-Dichloropropene	ND	1.9	ND	0.43	
108-10-1	4-Methyl-2-pentanone	ND	1.9	ND	0.47	
10061-02-6	trans-1,3-Dichloropropene	ND	1.9	ND	0.43	
79-00-5	1,1,2-Trichloroethane	ND	1.9	ND	0.36	
108-88-3	Toluene	ND	1.9	ND	0.51	
591-78-6	2-Hexanone	ND	1.9	ND	0.47	
124-48-1	Dibromochloromethane	ND	1.9	ND	0.23	
106-93-4	1,2-Dibromoethane	ND	1.9	ND	0.25	
127-18-4	Tetrachloroethene	ND	1.9	ND	0.29	
	Chlorobenzene	ND	1.9	ND	0.42	
108-90-7		ND	1.9	ND	0.45	
100-41-4	Ethylbenzene	ND	3.9	ND	0.89	
136777-61-2	<i>m,p</i> -Xylenes	ND	1.9	ND	0.19	
75-25-2	Bromoform	ND	1.9	ND	0.46	
100-42-5	Styrene	ND	1.9	ND	0.45	
95-47-6	o-Xylene	ND	1.9	ND	0.28	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.9	ND	0.32	
541-73-1	1,3-Dichlorobenzene	ND ND	1.9	ND	0.32	
106-46-7	1,4-Dichlorobenzene		1.9	- ND	0.32	
95-50-1	1,2-Dichlorobenzene	ND	1.9		1 0.52	

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

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method. 43

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#### RESULTS OF ANALYSIS

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Client: Client Sample ID: Client Project ID:	GeoSyntec Consultants, Inc. PNL-9-21-BDHF Ascon - Phase I/SB0202/31			CAS Project ID: P2400974 CAS Sample ID: P2400974-009
	Tentatively Identified	l Comp	ound	s
Test Code: Instrument ID: Analyst: Sampling Media:	EPA TO-15 Tekmar AUTOCAN/HP5972/HP5890 II+/MS2 Michelle Sakamoto/Aristotle Bragasin 1.0 LITER CANISTER T			Date Collected: 5/5/04 Date Received: 5/7/04 Date Analyzed: 5/19/04 Volume(s) Analyzed: 0.40 Liter(s)
Test Notes: Container ID:	- ISC00007	Pi 1 =	1.2	Pf 1 = 10.0

D.F. = 1.55

GC / MS	Compound Identification	Concentration	Data
Ret. Time		µg/m³	Qualifier
6.64	Isopentane	30	

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



RESULTS OF ANALYSIS

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#### GeoSyntec Consultants, Inc. **Client:**

Client Sample ID: PNL-8-6-DHF Client Project ID: Ascon - Phase I/SB0202/31

### CAS Project ID: P2400974 CAS Sample ID: P2400974-010

Test Code: Instrument ID: Analyst: Sampling Media:	EPA TO-15 Tekmar AUTOCAN/HP5972/HP5890 II+/MS2 Michelle Sakamoto/Aristotle Bragasin 1.0 LITER CANISTER			Date Collected: 5/5/04 Date Received: 5/7/04 Date(s) Analyzed: 5/19/04 Volume(s) Analyzed:	0.30 Liter(s)
Test Notes: Container ID:	ISC00019	Pi 1 =	0.2	Pf 1 = 10.0	D.F. = 1.66

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
74-87-3	Chloromethane	ND	2.8	ND	1.3	L
75-01-4	Vinyl Chloride	ND	2.8	ND	1.1	
106-99-0	1,3-Butadiene	8.1	2.8	3.7	1.3	┠
74-83-9	Bromomethane	ND	2.8	ND	0.71	
75-00-3	Chloroethane	ND	2.8	ND	1.0	
67-64-1	Acetone	ND	28	ND	12	
75-69-4	Trichlorofluoromethane	ND	2.8	ND	0.49	
107-13-1	Acrylonitrile	ND	2.8	ND	1.3	
75-35-4	1,1-Dichloroethene	ND	2.8	ND	0.70	l
75-09-2	Methylene chloride	36	2.8	10	0.80	
76-13-1	Trichlorotrifluoroethane	ND	2.8	ND	0.36	-
75-15-0	Carbon Disulfide	6.1	2.8	2.0	0.89	l
156-60-5	trans-1,2-Dichloroethene	ND	2.8	ND	0.70	
75-34-3	1,1-Dichloroethane	ND	2.8	ND	0.68	_
1634-04-4	Methyl tert-Butyl Ether	ND	2.8	ND	0.77	
1034-04-4	Vinyl Acetate	ND	2.8	ND	0.79	
78-93-3	2-Butanone (MEK)	51	2.8	17	0.94	
156-59-2	cis-1,2-Dichloroethene	ND	2.8	ND	0.70	
67-66-3	Chloroform	ND	2.8	ND	0.57	
107-06-2	1,2-Dichloroethane	ND	2.8	ND	0.68	
71-55-6	1,1,1-Trichloroethane	ND	2.8	ND	0.51	
71-43-2	Benzene	22	2.8	6.9	0.87	

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.

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Client Sample ID:	GeoSyntec Consultants, Inc. PNL-8-6-DHF Ascon - Phase I/SB0202/31	CAS Project ID: P2400974 CAS Sample ID: P2400974-010
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Test Code: Instrument ID: Analyst: Sampling Media:	EPA TO-15 Tekmar AUTOCAN/HP5972/HP5890 II+/MS2 Michelle Sakamoto/Aristotle Bragasin 1.0 LITER CANISTER			Date Collected: 5/5/04 Date Received: 5/7/04 Date(s) Analyzed: 5/19/04 Volume(s) Analyzed:	0.30 Liter(s)
Test Notes: Container ID:	ISC00019	Pi 1 =	0.2	Pf 1 = 10.0	

D.F. = 1.66

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
56-23-5	Carbon Tetrachloride	ND	2.8	ND	0.44	
78-87-5	1,2-Dichloropropane	ND	2.8	ND	0.60	ļ
75-27-4	Bromodichloromethane	ND	2.8	ND	0.41	ļ
79-01-6	Trichloroethene	ND	2.8	ND	0.52	
10061-01-5	cis-1,3-Dichloropropene	ND	2.8	ND	0.61	
108-10-1	4-Methyl-2-pentanone	ND	2.8	ND	0.68	
10061-02-6	trans-1,3-Dichloropropene	ND	2.8	ND	0.61	<u> </u>
79-00-5	1,1,2-Trichloroethane	ND	2.8	ND	0.51	<u> </u>
108-88-3	Toluene	13	2.8	3.4	0.73	
591-78-6	2-Hexanone	ND	2.8	ND	0.68	·
124-48-1	Dibromochloromethane	ND	2.8	ND	0.32	
124-48-1	1,2-Dibromoethane	ND	2.8	ND	0.36	l
127-18-4	Tetrachloroethene	ND	2.8	ND	0.41	
127-18-4	Chlorobenzene	ND	2.8	ND	0.60	
108-90-7	Ethylbenzene	100	2.8	23	0.64	
		190	5.5	44	1.3	
136777-61-2	<i>m,p</i> -Xylenes Bromoform	ND	2.8	ND	0.27	
75-25-2		ND	2.8	ND	0.65	
100-42-5	Styrene	32	2.8	7.4	0.64	
95-47-6	o-Xylene	ND	2.8	ND	0.40	
79-34-5	1,1,2,2-Tetrachloroethane	ND ND	2.8	ND	0.46	
541-73-1	1,3-Dichlorobenzene	ND ND	2.8	ND	0.46	
106-46-7	1,4-Dichlorobenzene	ND	2.8	ND	0.46	-∦
95-50-1	1,2-Dichlorobenzene		2.0		1	

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

Verified By: 126 Date: 25 25 04

#### RESULTS OF ANALYSIS

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Client: Client Sample ID: Client Project ID:	GeoSyntec Consultants, Inc. PNL-8-6-DHF Ascon - Phase I/SB0202/31			CAS Project ID: F CAS Sample ID: F	
	Tentatively Identifie	ed Comp	ounds		
Test Code: Instrument ID: Analyst: Sampling Media: Test Notes: Container ID:	EPA TO-15 Tekmar AUTOCAN/HP5972/HP5890 II+/MS2 Michelle Sakamoto/Aristotle Bragasin 1.0 LITER CANISTER T ISC00019	2 Pi 1 =	V 0.2	Date Collected: 4 Date Received: 4 Date Analyzed: 4 olume(s) Analyzed: Pf 1 = 10.0	5/7/04

GC / MS	Compound Identification	Concentration	Data
Ret. Time	Compound Leader	μg/m³	Qualifier
6.65	Isopentane	300	
11.19	Methylcyclopentane	600	
13.54	Dimethylcyclopentane Isomer	500	
13.66	Dimethylcyclopentane Isomer	500	
13.79	Dimethylcyclopentane Isomer	600	
15.33	Methylcyclohexane	600	
16.16	Trimethylcyclopentane Isomer	500	
16.51	Trimethylcyclopentane Isomer	600	
17.93	Trimethylcyclopentane Isomer	500	
18.95	Tetramethylcyclopentane Isomer	300	
20.47	Trimethylcyclohexane Isomer	700	
20.87	C9H <sub>18</sub> Compound	300	
23.34	C9H16 Compound	400	
	Tetramethylcyclohexane Isomer	400	
24.45	1,2,3-Trimethylbenzene	300	

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

Verified By: Ri- Date: 51.35104

#### RESULTS OF ANALYSIS

Page 1 of 3

#### GeoSyntec Consultants, Inc. **Client:** Client Sample ID: PNL-8-18-DHF

Client Project ID: Ascon - Phase I/SB0202/31

#### CAS Project ID: P2400974 CAS Sample ID: P2400974-011

Test Code: Instrument ID: Analyst: Sampling Media: Test Notes: Container ID:	EPA TO-15 Tekmar AUTOCAN/HP5972/HP5890 II+/MS2 Michelle Sakamoto/Aristotle Bragasin 1.0 LITER CANISTER		Date Collected: 5/5/04 Date Received: 5/7/04 Date(s) Analyzed: 5/20/04 Volume(s) Analyzed: 0.0150 Lite:				
	ISC00020	Pi 1 =	-0.6	Pf 1 = 10.0	D.F. = 1.75		

CAS#	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
74-87-3	Chloromethane	ND	58	ND	28	
75-01-4	Vinyl Chloride	ND	58	ND	23	
106-99-0	1,3-Butadiene	ND	58	ND	26	
74-83-9	Bromomethane	ND	58	ND	15	╢────┤
75-00-3	Chloroethane	ND	58	ND	22	-
67-64-1	Acetone	ND	580	ND	250	
75-69-4	Trichlorofluoromethane	ND	58	ND	10	
107-13-1	Acrylonitrile	ND	58	ND	27	
75-35-4	1,1-Dichloroethene	ND	58	ND	15	
75-09-2	Methylene chloride	180	58	50	17	
76-13-1	Trichlorotrifluoroethane	ND	58	ND	7.6	-∥
75-15-0	Carbon Disulfide	ND	58	ND	19	_l
156-60-5	trans-1,2-Dichloroethene	ND	58	ND	15	
75-34-3	1,1-Dichloroethane	ND	58	NDND	14	
1634-04-4	Methyl tert-Butyl Ether	ND	58	NDND	16	-∦
108-05-4	Vinyl Acetate	ND	58	ND	17	
78-93-3	2-Butanone (MEK)	110	58	38	20	
156-59-2	cis-1,2-Dichloroethene	ND	58	ND	15	
67-66-3	Chloroform	ND	58	ND	12	
107-06-2	1,2-Dichloroethane	ND	58	ND	14	
71-55-6	1,1,1-Trichloroethane	ND	58	ND	11	
71-43-2	Benzene	9,000	58	2,800	18	

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: Page No.

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#### RESULTS OF ANALYSIS

Page 2 of 3

Client Sample ID:	GeoSyntec Consultants, Inc. PNL-8-18-DHF Ascon - Phase I/SB0202/31	CAS Project ID: P2400974 CAS Sample ID: P2400974-011
Cheft Flojett ID.	Ascon - I huse hobozozie	

Test Code: Instrument ID: Analyst: Sampling Media: Test Notes: Container ID:	EPA TO-15 Tekmar AUTOCAN/HP5972/HP5890 II+/MS2 Michelle Sakamoto/Aristotle Bragasin 1.0 LITER CANISTER		Date Collected: 5/5/04 Date Received: 5/7/04 Date(s) Analyzed: 5/20/04 Volume(s) Analyzed: 0.0150 Liter(s)				
	ISC00020	Pi 1 =	-0.6	Pf 1 = 10.0	D.F. = 1.75		

CAS#	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
56-23-5	Carbon Tetrachloride	ND	58	ND	9.3	┨
78-87-5	1,2-Dichloropropane	ND	58	ND	13	┨
75-27-4	Bromodichloromethane	ND	58	ND	8.7	
79-01-6	Trichloroethene	ND	58	ND	11	
10061-01-5	cis-1,3-Dichloropropene	ND	58	ND	13	
108-10-1	4-Methyl-2-pentanone	ND	58	ND	14	
10061-02-6	trans-1,3-Dichloropropene	ND	58	ND	13	
79-00-5	1,1,2-Trichloroethane	ND	58	ND	11	
108-88-3	Toluene	5,300	58	1,400	15	
591-78-6	2-Hexanone	ND	58	ND	14	
124-48-1	Dibromochloromethane	ND	58	ND	6.9	
106-93-4	1,2-Dibromoethane	ND	58	ND	7.6	
127-18-4	Tetrachloroethene	ND	58	ND	8.6	
108-90-7	Chlorobenzene	ND	58	ND	13	
100-41-4	Ethylbenzene	2,600	58	590	13	
136777-61-2	<i>m,p</i> -Xylenes	4,300	120	990	27	
75-25-2	Bromoform	ND	58	ND	5.6	
100-42-5	Styrene	280	58	67	14	
95-47-6	o-Xylene	2,100	58	480	13	
	1,1,2,2-Tetrachloroethane	ND	58	ND	8.5	
79-34-5	1,3-Dichlorobenzene	ND	58	ND	9.7	
541-73-1	1,4-Dichlorobenzene	ND	58	ND	9.7	
106-46-7 95-50-1	1,2-Dichlorobenzene	ND	58	ND	9.7	

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. 49

Verified By: R. Date: 5125104 Page No.

### RESULTS OF ANALYSIS

Page 3 of 3

Client: Client Sample ID: Client Project ID:	GeoSyntec Consultants, Inc. PNL-8-18-DHF Ascon - Phase I/SB0202/31	CAS Project ID: P2400974 CAS Sample ID: P2400974-011
	Tentatively Identified Comp	ounds
Test Code: Instrument ID: Analyst: Sampling Media:	EPA TO-15 Tekmar AUTOCAN/HP5972/HP5890 II+/MS2 Michelle Sakamoto/Aristotle Bragasin 1.0 LITER CANISTER	Date Collected: 5/5/04 Date Received: 5/7/04 Date Analyzed: 5/20/04 Volume(s) Analyzed: 0.0150 Liter(s)

Pf 1 = 10.0Pi 1 = -0.6

D.F. = 1.75

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GC / MS Ret. Time	Compound Identification	Concentration µg/m³	Data Qualifier
5.28	Isobutane	20,000	
5.28	n-Butane	20,000	
[]	Isopentane	20,000	
6.69	n-Pentane	20,000	
II	Cyclopentane	10,000	
8.96	2-Methylpentane	20,000	
9.06		20,000	
9.54	3-Methylpentane	20,000	
10.11	n-Hexane	20,000	
11.21	Methylcyclopentane	20,000	
13.57	Dimethylcyclopentane Isomer	20,000	
13.70	Dimethylcyclopentane Isomer	20,000	
13.81	Dimethylcyclopentane Isomer		
15.35	Methylcyclohexane	20,000	
16.52	Trimethylcyclopentane Isomer	20,000	
20.47	Trimethylcyclohexane Isomer	20,000	

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

Т

ISC00020

Test Notes: Container ID:

RESULTS OF ANALYSIS

Page 1 of 3

#### GeoSyntec Consultants, Inc. Client:

Client Sample ID: Method Blank Client Project ID: Ascon - Phase I/SB0202/31

CAS Project ID: P2400974 CAS Sample ID: P040518-MB

Test Code: Instrument ID: Analyst: Sampling Media: Test Notes:	EPA TO-15 Tekmar AUTOCAN/HP5972/HP5890 II+/MS2 Michelle Sakamoto/Aristotle Bragasin 1.0 LITER CANISTER	Date Collected: NA Date Received: NA Date(s) Analyzed: 5/18/04 Volume(s) Analyzed:	1.00 Liter(s)
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D.F. = 1.00

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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	
	1,1-Dichloroethane	ND	0.50	ND	0.12	
75-34-3	Methyl tert-Butyl Ether	ND	0.50	ND	0.14	
1634-04-4	Vinyl Acetate	ND	0.50	ND	0.14	
108-05-4	2-Butanone (MEK)	ND	0.50	ND	0.17	
78-93-3		ND	0.50	ND	0.13	
156-59-2	cis-1,2-Dichloroethene	ND	0.50	ND	0.10	
67-66-3	Chloroform	ND	0.50	ND	0.12	
107-06-2	1,2-Dichloroethane	ND	0.50	ND	0.092	
71-55-6	1,1,1-Trichloroethane	ND ND	0.50	ND	0.16	
71-43-2	Benzene		1 0.50		<u> </u>	

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

#### **RESULTS OF ANALYSIS**

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Client:	GeoSyntec Consultants, Inc.	CAS Project ID: P2400974
<b>Client Sample ID:</b>		CAS Sample ID: P040518-MB
<b>Client Project ID:</b>	Ascon - Phase I/SB0202/31	CAS Sample ID: 1000000

<b>T</b> ( <b>C</b> 1)	ЕРА ТО-15	Date Collected: NA	
Test Code:	Tekmar AUTOCAN/HP5972/HP5890 II+/MS2	Date Received: NA	
Instrument ID:	Michelle Sakamoto/Aristotle Bragasin	Date(s) Analyzed: 5/18/04	
Analyst:		Volume(s) Analyzed:	1.00 Liter(s)
Sampling Media:	1.0 LITER CANISTER		
Test Notes:			

D.F. = 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
56-23-5	Carbon Tetrachloride	ND	0.50	ND	0.080	
78-87-5	1,2-Dichloropropane	ND	0.50	ND	0.11	
75-27-4	Bromodichloromethane	ND	0.50	ND	0.075	ļ
79-01-6	Trichloroethene	ND	0.50	ND	0.093	l
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	l
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	
	2-Hexanone	ND	0.50	ND	0.12	
591-78-6	Dibromochloromethane	ND	0.50	ND	0.059	
124-48-1	1,2-Dibromoethane	ND	0.50	ND	0.065	
106-93-4	Tetrachloroethene	ND	0.50	ND	0.074	
127-18-4	Chlorobenzene	ND	0.50	ND	0.11	
108-90-7		ND	0.50	ND	0.12	
100-41-4	Ethylbenzene	- ND	1.0	ND	0.23	
136777-61-2	<i>m,p</i> -Xylenes	- ND	0.50	ND	0.048	
75-25-2	Bromoform	ND	0.50	ND	0.12	
100-42-5	Styrene	- ND	0.50	ND	0.12	
95-47-6	o-Xylene	ND ND	0.50	ND	0.073	
79-34-5	1,1,2,2-Tetrachloroethane	ND ND	0.50	ND	0.083	
541-73-1	1,3-Dichlorobenzene		0.50	ND ND	0.083	-
106-46-7	1,4-Dichlorobenzene	ND		ND ND	0.083	
95-50-1	1,2-Dichlorobenzene	ND	0.50		0.005	

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: <u>Lt-</u> Date: <u>51.251.04</u> Page No: 52

### RESULTS OF ANALYSIS

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Client:	GeoSyntec Consultants, Inc.
<b>Client Sample ID:</b>	Method Blank
<b>Client Project ID:</b>	Ascon - Phase I/SB0202/31

CAS Project ID: P2400974 CAS Sample ID: P040518-MB

### Tentatively Identified Compounds

D.F. = 1.00

-1

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

RESULTS OF ANALYSIS

Page 1 of 3

GeoSyntec Consultants, Inc. **Client:** 

Client Sample ID: Method Blank Client Project ID: Ascon - Phase I/SB0202/31

CAS Project ID: P2400974 CAS Sample ID: P040520-MB

Test Code: Instrument ID: Analyst: Sampling Media: Test Notes:	EPA TO-15 Tekmar AUTOCAN/HP5972/HP5890 II+/MS2 Michelle Sakamoto/Aristotle Bragasin 1.0 LITER CANISTER	Date Collected: NA Date Received: NA Date(s) Analyzed: 5/20/04 Volume(s) Analyzed:	1.00 Liter(s)
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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	L
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	<u> </u>
75-34-3	1,1-Dichloroethane	ND	0.50	ND	0.12	<u> </u>
1634-04-4	Methyl tert-Butyl Ether	ND	0.50	ND	0.14	
1034-04-4	Vinyl Acetate	ND	0.50	ND	0.14	
78-93-3	2-Butanone (MEK)	ND	0.50	ND	0.17	
	cis-1,2-Dichloroethene	ND	0.50	ND	0.13	
156-59-2	Chloroform	ND	0.50	ND	0.10	
67-66-3	1,2-Dichloroethane	ND	0.50	ND	0.12	
107-06-2	1,1,1-Trichloroethane	ND	0.50	ND	0.092	
71-55-6 71-43-2	Benzene	ND	0.50	ND	0.16	

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

#### **RESULTS OF ANALYSIS**

Page 2 of 3

Client Sample ID:	GeoSyntec Consultants, Inc. Method Blank Ascon - Phase I/SB0202/31	CAS Project ID: P2400974 CAS Sample ID: P040520-MB
Chent Hojeet ID.		

Test Code: Instrument ID: Analyst: Sampling Media: Test Notes:	EPA TO-15 Tekmar AUTOCAN/HP5972/HP5890 II+/MS2 Michelle Sakamoto/Aristotle Bragasin 1.0 LITER CANISTER	Date Collected: NA Date Received: NA Date(s) Analyzed: 5/20/04 Volume(s) Analyzed:	1.00 Liter(s)
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D.F. = 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
56-23-5	Carbon Tetrachloride	ND	0.50	ND	0.080	
78-87-5	1,2-Dichloropropane	ND	0.50	ND	0.11	
75-27-4	Bromodichloromethane	ND	0.50	ND	0.075	
	Trichloroethene	ND	0.50	ND	0.093	
79-01-6	cis-1,3-Dichloropropene	ND	0.50	ND	0.11	
10061-01-5	4-Methyl-2-pentanone	ND	0.50	ND	0.12	
108-10-1	trans-1,3-Dichloropropene	ND	0.50	ND	0.11	
10061-02-6		ND	0.50	ND	0.092	
79-00-5	1,1,2-Trichloroethane	ND	0.50	ND	0.13	
108-88-3	Toluene	ND	0.50	ND	0.12	
591-78-6	2-Hexanone		0.50	ND	0.059	
124-48-1	Dibromochloromethane	ND	0.50	ND	0.065	
106-93-4	1,2-Dibromoethane	ND ND	0.50	ND	0.074	
127-18-4	Tetrachloroethene	- ND	0.50	ND	0.11	
108-90-7	Chlorobenzene	ND	0.50	ND	0.12	
100-41-4	Ethylbenzene	ND ND	1.0	ND	0.23	-
136777-61-2	<i>m</i> , <i>p</i> -Xylenes	ND ND	0.50	ND	0.048	
75-25-2	Bromoform	ND ND	0.50	ND	0.12	╢────
100-42-5	Styrene		0.50	ND	0.12	
95-47-6	o-Xylene	ND	1	ND	0.073	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	ND	0.083	
541-73-1	1,3-Dichlorobenzene	ND	0.50	ND	0.083	
106-46-7	1,4-Dichlorobenzene	ND	0.50		0.083	
95-50-1	1,2-Dichlorobenzene	ND	0.50	ND	0.083	

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

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method. Verified By: 12(- Date: 5/25/04 55

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RESULTS OF ANALYSIS

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### Tentatively Identified Compounds

Test Code: Instrument ID: Analyst: Sampling Media: Test Notes:	EPA TO-15 Tekmar AUTOCAN/HP5972/HP5890 II+/MS2 Michelle Sakamoto/Aristotle Bragasin 1.0 LITER CANISTER	Date Collected: NA Date Received: NA Date Analyzed: 5/20/04 Volume(s) Analyzed: 1.00 Liter(s)
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D.F. = 1.00

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

56 Verified By: RC- Date: 505104 Page No.:

### Columbia Analytical Services, Inc.

Sample Acceptance Check Form

Client:	GeoSyntec Cor	nsultants	, Inc.			Work a	order:	P2400974			
	Ascon - Phase										
S	Sample(s) receiv	red on:	5/7/04		Date opene		5/7/04		SM		
<i>Note:</i> This	form is used for <u>all</u> sa	imples recei	ived by CAS. The	use of this fo	orm for custody sea	als is strictly r	meant to indic	ate presence/absenc	e and not as	an indicati	on of
compliance	or nonconformity. T	hermal pres	servation and pH wi	ill only be ev	valuated either at t	he request of t	the client or a	s required by the m	ethod/SOP.		
									105	<u>No</u>	<u>N/A</u>
1	Were custody s	eals on ou	itside of cooler/	Box?						$\boxtimes$	
	Location of se	al(s)?						Sealing Lid?			$\mathbf{X}$
	Were signatur	e and date	e included?								$\mathbf{X}$
	Were seals int										$\mathbf{X}$
	Were custody se	eals on ou	itside of sample	container	?					$\mathbf{X}$	
	Location of se							Sealing Lid?			$\mathbf{X}$
	Were signatur	e and dat	e included?								$\mathbf{X}$
	Were seals int										$\mathbf{X}$
2	Were sample c	ontainers	properly marke	ed with cli	ent sample ID	2			X		
3	Did sample cor								$\mathbf{X}$		
4			papers used and		?				$\mathbf{X}$		
5			bels and/or tags			ers?			$\mathbf{X}$		
6			eived adequate t						$\mathbf{X}$		
7	Are samples wi	thin spec	ified holding tin	nes?					$\mathbf{X}$		
8	Was proper ten	nperatur	e (thermal prese	rvation) o	of cooler at rece	eipt adhered	l to?				$\mathbf{X}$
			Cooler Temperat		NA	°C					
			Blank Temperat		NA	°C			_	677	-
9	Is pH (acid) <b>pr</b>	eservatio	n necessary, ac	cording to	method/SOP of	or Client sp	ecified info	ormation?		$\boxtimes$	
	Is there a clien	t indication	on that the subm	nitted sam	ples are <b>pH</b> (ac	id) preserv	ed?				
	Were VOA vi	als check	ed for presence/	absence o	f air bubbles?						X
	Does the clien	t/method/	SOP require the	at the analy	yst check the s	ample pH a	nd <u>if neces</u>	sary alter it?			X
10	Tubes:		e tubes capped								X
		Do th	ey contain mois	ture?							
11	Badges:		he badges prope								X
	9		ual bed badges			y capped a	nd intact?				X

Lab Sample ID	Required pH	pH (as received, if required)	VOA Headspace (Presence/Absence)	Receipt / Preservation Comments
P2400974-001			NA	
P2400974-002			NA	
P2400974-003			NA	
P2400974-004			NA	
P2400974-005			NA	
P2400974-005			NA	
P2400974-007			NA	
P2400974-008			NA	
P2400974-009			NA	
P2400974-010			NA	

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



# Columbia Analytical Services, Inc.

Sample Acceptance Check Form

 Client: GeoSyntec Consultants, Inc.
 Work order:
 P2400974

 Project: Ascon - Phase I/SB0202/31
 Sample(s) received on:
 5/7/04
 Date opened:
 5/7/04
 by:
 SM

Lab Sample ID	Required pH	pH (as received, if required)	VOA Headspace (Presence/Absence)	Receipt / Preservation Comments
P2400974-011			NA	
P2400974-012			NA	
P2400974-013			NA	

Page of	CAS Project No. アコリロのイフィ	「 「 「 「 「 「 「 」 「 」 」 「 」 「 」 」 「 」 」 「 」」 「 」」 「 」」 「 の oler / 」 Cooler / Blank	Temp	(10 Ba	Comments	specific instructions)	11000051	60	90	Q)r/	Ø13	08	<u>e</u> l	0/	<i>t0</i>	610	020	LIO	018	Additional Comments	0	Ś	
Chain of Custody Record Analytical Service Request	Analysis				3/	Q1	×	X	×	×	X	×	x	×	×	×	×				2104	2	Date: Time:
Chain of Analytica	Z			1	91-0	Sample Superation Superational Superationa		/ × /	X V	* ~	×	×	×	X	× -		×					Coast Courter	$\left  \right\rangle$
	on - Phase	SB0202 /3 1	Ascon LF		15/21	Flow Controller (Scrial #)		99	63	121	10	j J	69	67	64	76	77			Received by: (Signature)	Janma Dag	Signalyte)	d by: (Signature)
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Columbia Analytical Services to	Client/Address GeoSyntec	Huntington	Phone (714) 9690600	Emuit mreardon a geosy	Contact MIKC	Client Sample ID	PULITIE DAF	PML -14 -21 DAF	PML 7-21 DHF	PLUL - 11 - 12 DHF	PNL - 10A - 13 DHF	Pru. 6-15-04	PNL- 6-15-ROUF	Pur-9-15-DHF	PN1-9-21-5046	Par - 8 - 6 - 046	Pur- 8-18-040		and a subscription of the second s	Relinguistist by: (Signature)	Ken Ca	Relinguished by (Signature)	Relinquished by: (Signature)