APPENDIX S DUSRs For All Endpoint Samples

Table 1 Samples For Data Validation Review Atlas Park Interim Remedial Measures Glendale, New York Severn Trent Sample Delivery Group 208881

						Ā	ANALYSES PERFORMED	RFORMED		
SAMPLE I.D.	LABORATORY I.D.		DATE SAMPLED	MATRIX	VOC	SVOC	PEST	PCB	TMET	S
CONED-SSW-022305	208881	_	2/23/2005	Soil	×	×	×	×	×	>
CONED-WSW-022305	208881	2	2/23/2005	Soil	: ×	; ×	; ×	∶ ≻	< >	< >
CONED-BOT1-022305	208881	3	2/23/2005	Soil	: ×	; ×	: >	< ≻	< ≻	< >
CONED-BOT2-022305	208881	4	2/23/2005	Soil	: ×	: ×	< ≻	< ≻	< >	< >
				1	4	4	*	<	<	<

VOCVolatile Organic CompoundsSVOCSemivolatile Organic CompoundPESTPestside CompoundsPCBPolychlorinated BiphenylsTMETMetalsCNCyanide

SAMPLE INFORMATION Date: 03/11/2005

Job Number.: 208881

Customer...: LANGAN ENVIRONMENTAL SERVICES

Attn..... Jamie Barr

Project Number.....: 20000936 Customer Project ID...: 5555107-ATLAS Project Description...: 5555107-ATLAS TERMINALS

Laboratory Sample ID	Customer Sample ID	Sample Matrix	Date Sampled	Time Sampled	Date Received	Time Received
208881-1	CONED-SSW-022305	Soil	02/23/2005	09:47	02/25/2005	15:30
208881-2	CONED-WSW-022305	Soil	02/23/2005	09:58	02/25/2005	15:30
208881-3	CONED-BOT1-022305	Soil	02/23/2005	10:15	02/25/2005	15:30
208881-4	CONED-BOT2-022305	Soil	02/23/2005	10:32	02/25/2005	15:30
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TORY TEST RESULTS Date:03/04/2005 PROJECT: 5555107-ATMAS ATTN: Jamie Barr	Laboratory Sample ID: 208881-1 Date Received: 02/25/2005 Time Received: 15:30	RESULT Q FLAGS MOE RE DILUTION UNITS BATCH DT DATE/TIME 44.1 0.10 0.10 0.10 1 % 45298 02/28/05 000 5.9 0.10 0.10 1 % 45298 02/28/05 000	10
LABORA	7 2005 7 2005	TEST NETHOD PARAMETER/TEST DESCRIPTION SANPLE REST ASTM D-2216 % Solids, Solid 84.1	Volatile Organics Vinyl chloride, Solid* Chloroethane, Solid* 1,1-Dichloroethane, Solid* Irichlorotrif(Lucreethane, Solid* Irichlorotrif(Lucreethane, Solid* Irichlorotrif(Lucreethane, Solid* ND Acetone, Solid* NETHONO CAPACHONE SOLID* International Chloroethane, Solid* International Chloroethane, Solid* International Chloroethane, Solid* International Chloroethane, Solid* International Carbon tetrachloride, Solid* International Capachane, So

20	Bann	03/01/05 1809 pam 03/01/05 1809 pam 03/01/05 1809 pam 03/01/05 1809 pam 03/01/05 1809 pam 03/01/05 1809 pam	
Date: 03/04/2005	ATTN: Jamie	UNITS BATCH Ug/Kg	
		1.00000 1.00000 1.00000 1.00000 1.00000	
S	208881-1 02/25/2005 15:30	0.0,0,0,0,0 0.0,0,0,0	
ST RESUL	07-ATLAS Laboratory Sample ID: Date Received	1.5 1.4 1.1 0.48 0.83	
ORY TES	PROJECT 5555107-ATLAS Laborato Date Rec	FLAGS	Page 3
LABORATO		SAMPLE RESULT	
		id*	Jgt.
Job Wumber: 208881	## SERVICES ## ID: CONED-SSW-022305 ## ID: 02/23/2005 ## ID: 09:47 ## ID: Soil	PARAMETER/TEST DESCRIPTION 1,2,3-Trichloropropane, Solid* Xylenes (tatal), Solid* 1,3-Dichlorobenzene, Solid* 1,4-Dichlorobenzene, Solid* 1,2-Dichlorobenzene, Solid* 1,2,4-Trichlorobenzene, Solid*	* In Description = Dry Wgt.
IN dol	CUSTOMER: LANGAN ENVIRONMENTAL Customer Sample ID: CONEI Date Sampled 02/23 Time Sampled 80:47	TEST METHOD 1,2,3- X/1606 1,4-01 1,2,4- 1,2,4-	*

TECH pam pam pam pam pam pam Eed pam pam pam Ball pam med pam pad 0000 2129 DATE/TIME 02/28/05 02/28/05 02/28/05 02/28/05 02/28/05 02/28/05 02/28/05 02/28/05 02/28/05 02/28/05 02/28/05 02/28/05 02/28/05 02/28/05 02/28/05 02/28/05 02/28/05 02/28/05 02/28/05 1990 占 ATTN: Jamie Barr Jate: 03/04/2005 BATCH 72757 92757 92757 92759 92759 92759 45476 45476 45476 45476 45476 45476 45476 45476 45476 45476 45476 45476 45476 45298 45298 ug/kg ug/kg ug/kg ug/kg JBX/Bn UNITS ug/Kg DICUTION 1.00000 1.00000 00000 1,00000 00000 1.00000 00000 .00000 00000.1 1,00000 .00000 .00000 1,00000 00000-1 Laboratory Sample ID: 208881-2 Date Received.....: 02/25/2005 Time Received.....: 15:30 0.10 ₩. 귍 × . 1 do 0.59 0.59 0.59 0.59 0.59 0.59 0.59 0.10 S -99 2 ш 2 PROJECT: 5555107-ATLAS Ø FLAGS ш -6 a ______ > 04 RESULT 0 84.5 15.5 ۲ ۲ ş. 0 SAMPLE 3 œ • PARAMETER/TEST DESCRIPTION Trichloroethene, Solid* 4-Methyl-2-pentanone (MIBK), Solid* Trichlorotrifluoroethane, Solid* trans-1,2-Dichloroethene, Solid* 1,1,1-Trichloroethane, Solid* Carbon tetrachloride, Solid* : CONED-WSW-022305 : 02/23/2005 : 09:58 Methylene chloride, Solid* 1,2-Dichloroethane, Solid* 1,1-Dichloroethene, Solid* 1,1-Dichloroethane, Solid* Tetrachloroethene, Solid* 2-Butanone (MEK), Solid* Chloroform, Solid* Carbon disulfide, Solid* SERVICES Vinyl chloride, Solid* Chloroethane, Solid* Solids, Solid Moisture, Solid Volatile Organics Job Number: 208881 foluene, Solid* Acetone, Solid* CUSTOMER: LANGAN ENVIRONMENTAL Benzene, Solid* Sample Matrix....: Soil Customer Sample ID: Time Sampled....: Date Sampled....: S TEST METHOD ASTM D-2216 8260B

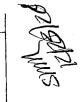
* In Description = Dry Wgt.

1,1,2,2-Tetrachloroethane, Solid*

Dibromochloromethane, Solid* ,3-Dichloropropane, Solid*

Chiorobenzene, Solid* Ethylbenzene, Solid Page

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02/28/05 02/28/05 02/28/05

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		DATE/FIME TECH 22/28/05 2129 pam 22/28/05 2129 pam 22/28/05 2129 pam 32/28/05 2129 pam 32/28/05 2129 pam 32/28/05 2129 pam	
/2005	Jamie Barr	BATCH DT DA E/F1 45476 02/28/05 45476 02/28/05 45476 02/28/05 45476 02/28/05 45476 02/28/05	
Date:03/04/2005	ATTN. Jan	UBITS 845 BY	
	30 - 05 - 70 - 900 -	DILUTION 1.000000 1.00000 1.00000 1	
ω	2. 20881-2 :: 02/25/2005 :: 15:30	2. v.v.v.v.v. v.v.v.v.v.v.	
RESULT	ry Sample II	1.5 1.1 1.1 0.083	
F S H	: 5555/07-ATLAS	PLAGS	
ABORATORY	PROJECT	SAMPLE RESULT	
ר י			
Job Number: 208881	CUSTOMER: LANGAN ENVIRONMENTAL SERVICES CUSTOMER: LANGAN ENVIRONMENTAL SERVICES CUSTOMER: LANGAN ENVIRONMENTAL SERVICES CUSTOMER: LANGAN ENVIRONMENTAL SERVICES CUSTOMER: CONTRACT CONT	PARAMETER/TEST DESCRIPTION 1,2,3-Trichloropropane, Solid* 1,3-Dichlorobenzene, Solid* 1,4-Dichlorobenzene, Solid* 1,2-Dichlorobenzene, Solid* 1,2-Trichlorobenzene, Solid* 1,2,4-Trichlorobenzene, Solid*	
	Customer: LANGA Customer Date Samp	TEST WETHOU	

	Job Number: 208881	ABORATORY	T E S T	RESULT	S		Date:03/04/2005	704/2005		
CUSTOMER	CUSTOMER: LANGAN ENVIRONMENTAL SERVICES	PROJECT:	5555107-ATLAS					ATTN: Jamie Barr		
Customer Date Samy Time Samy Sample M	Customer Sample ID: CONED-BOT1-022305 Date Sampled: 02/23/2005 Time Sampled: 10:15 Sample Matrix: Soil		Labor Date Time	Laboratory Sample ID: Date Received Time Received): 208881-3 :: 02/25/2005 :: 15:30			·		
TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT 0	FLAGS	TQ.	RL	DILUTION	UNITS	BATEH DT	DATE/TIME	WE TECH
ASTM 0-2216	% Solids, Solid % Moisture, Solid	85.2 14.8		0.10	0.10	g y	жж	45298 45298	02/28/05	0000 rtm
82608	Volatile Organics Vinyl chloride, Solid* Chloroethare, Solid* 1,1-Dichloroethere, Solid* Trichlorotrifluoroethane, Solid* Acetone, Solid* Methylene chloride, Solid* H.1-Dichloroethane, Solid* 2-Butanone (MEK), Solid* Carbon tetrachloroethane, Solid* 1,1-Trichloroethane, Solid* Carbon tetrachloride, Solid* Trichloroethane, Solid* 1,2-Dichloroethane, Solid* Trichloroethane, Solid* Trichloroethane, Solid* Trichloroethane, Solid* Trichloroethane, Solid* Trichloroethane, Solid* Trichloroethane, Solid* Toluene, Solid* Tetrachloroethene, Solid* Toluene, Solid*	8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	5 h h	2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.	ײַ װִי װִ װִ מַ מַ װִי װִ	1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000		45477 45477	03/01/05 03/01/05 03/01/05 03/01/05 03/01/05 03/01/05 03/01/05 03/01/05 03/01/05 03/01/05 03/01/05 03/01/05 03/01/05 03/01/05 03/01/05 03/01/05 03/01/05	1835 pam 1835 pam
	Ethylbenzene, Solid* 1,1,2,2-Tetrachloroethane, Solid*		22	2.1 0.59	v, rv oʻ, oʻ	1.00000	ug/kg ug/kg	42477	03/01/05	1835



Page 6

* In Description = Dry Wgt.

	Job Number: 208881	LABORATORY	TEST RESU	S L J		Date:03,	Date:03/04/2005		
CUSTOMER: LAN	CUSTOMER: LANGAN ENVIRONMENTAL SERVICES	PROJECT:	5555107-ATLAS			ATTN: Jami	Jamie Barr		
Customel Date Sar Time Sar Sample #	Customer Sample ID: CONED-BOT1-022305 Date Sampled: 02/23/2005 Time Sampled: 10:15 Sample Matrix: Soil		Laboratory Sample ID: Date Received	: 1D: 208881-3 : 02/25/2005 : 15:30					
TEST METHOD	PARAMETER/TEST DESCRIPTION	SANPLE RESULT	Q FLAGS MOL	RL	DILUTION	UNITS	BATCH DT	DATE/TIME	TECH
	1,2,3-frichloropropane, Solid* Xylenes (total), Solid* 1,3-Dichlorobenzene, Solid* 1,2-Dichlorobenzene, Solid* 1,2,4-Trichlorobenzene, Solid* 1,2,4-Trichlorobenzene, Solid*	<u> 오 오 오 오 오</u>	1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5	ທຸນ ທຸນ ທຸນ ຜູ້ວ່ວ ວ່ວ	1.00000 1.00000 1.00000 1.00000 1.00000	19/Kg 19/Kg 19/Kg 19/Kg 19/Kg	45477 45477 45477 45477 45477 45477	03/01/05 1835 03/01/05 1835 03/01/05 1835 03/01/05 1835 03/01/05 1835	pam
	* In Description = Dry Wgt.		Page 7						

ut	Job Number: 208881	LABORATORY	T S T	RESULT	w		Date:03	Date: 03/04/2005		
CUSTOMER:	LANGAN ENVIRONMENTAL SERVICES	PROJECT:	5555107-ATLAS	AS			ATIN:	Jamie Barr		
Cust Date Time Samp	Customer Sample 10: CONED-BOT2-022305 Date Sampled: 02/23/2005 Time Sampled: 10:32 Sample Matrix: Soil		Labore Date H Time R	Laboratory Sample ID: Date Received	: 208881-4 : 02/25/2005 : 15:30					
TEST METHOD	HOD PARAMETER/TEST DESCRIPTION	SANPLE RESULT Q	FLAGS	MDL	RL	DILUTION	UNITS	ВАТСН ВТ	DATE/TIME	E TECH
ASTM D-2216	% Solids, Solid % Moisture, Solid	87.9		0.10	0.10		36 36	45298 45298	02/28/05 (0000 rlm
	Votatile Organics Vinyl chloride, Solid* Chloroethane, Solid* 1,1-Dichloroethene, Solid* Trichlorotrif(woroethane, Solid* Acetone, Solid* Acetone, Solid* Acetone, Solid* Acetone, Solid* I,1-Dichloroethane, Solid* I,1-Dichloroethane, Solid* I,1-Dichloroethane, Solid* Carbon tetrachloride, Solid* I,1,1-Trichloroethane, Solid* I,2-Dichloroethane, Solid* I,2-Dichloroethane, Solid* I,2-Dichloroethane, Solid* Irichloroethane, Solid* Irichloroethane, Solid* Irichloroethane, Solid* Irichloroethane, Solid* Interachloroethane, Solid* Interachloromethane, Solid* Interphylbenzene, Solid* Ethylbenzene, Solid* I,1,2,2-Tetrachloroethane, Solid*	2.5 2.2 2.2 2.2 2.2 2.2 2.2 2.2 2.2 2.2	772222222222222222222222222222222222222	23.3.3.4.4.6.0.4.4.0.0.1.9.0.1.9.0.0.1.9.0.0.0.0.0.0.0.0.0	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000	63/ka 63	45477 45477 45477 45477 45477 45477 45477 45477 45477 45477 45477 45477 45477 45477 45477 45477 45477 45477 45477	03/01/05 03/01/05 03/01/05 03/01/05 03/01/05 03/01/05 03/01/05 03/01/05 03/01/05 03/01/05 03/01/05 03/01/05 03/01/05 03/01/05 03/01/05 03/01/05	771, pam (774, p
										+

Date:03/04/2005	ATTN: Jamie Barr		10K UNITS BATCH DT DATE/TIME TECH 100 UG/KG 45477 (03/01/05 1444 pam 100 UG/KG 45477 (
S		208881-4 02/25/2005 15:30	8t. 8 plution	
TEST RESULT	5107-A1LAS	Laboratory Sample ID: Date Received Time Received:	1.5 1.0 0.46 0.80	
LABORATORY	PROJECT: 5555107-ATLAS		SAMPLE, RESULT Q ND	Page 9
Job Number: 208881	CUSTOMER: LANGAN ENVIRONMENTAL SERVICES	Customer Sample ID: CONED-B0T2-022305 Date Sampled: 02/23/2005 Time Sampled: 10:32 Sample Matrix: Soil	PARAMETER/TEST DESCRIPTION 1,2,3-Trichloropane, Solid* 1,3-Dichlorobenzene, Solid* 1,4-Dichlorobenzene, Solid* 1,2-Dichlorobenzene, Solid* 1,2,4-Trichlorobenzene, Solid*	* In Description = Dry Wgt.
7	CUSTOMER: LANGA	Customer Date Samp Time Samp Sample Ma	TEST WETHOD	

	Job Number: 208881	K	ь Н	о В В	σ	0.000	Date: 0	Date:03/11/2005		
CUSTOMER: LAN	CUSTONER: LANGAN ENVIRONMENTAL SERVICES	PROJECT	PROJECT 5555107-ATLAS	ATLAS		-	ATTN:	Jamie Barr		
Custome Date Sa Time Sa Sample	Customer Sample ID: CONED-SSW-022305 Date Sampled: 02/23/2005 Time Sampled: 09:47 Sample Matrix: Soil		Labor Date Time	atory Sample Received Received	. ID: 208881-1 : 02/25/2005 : 15:30					
тезт метнор	PARAHETER/TEST DESCRIPTION	SAMPLE RESULT	Q FLAGS	TOH	צר	DICUTION	UNITS	ВАТСН В	DT DATE/TIME	INE TECH
ASTM D-2216	% Solids, Solid % Moisture, Solid	84.1		0.10	0.10		**	45298 45298	02/28/05 02/28/05	0000 rlm
8270C	Semivolatile Organics Aniline, Solid* Phenol, Solid* 2-Methylphenol, Solid* 4-Methylphenol, Solid* 2-Chlorophenol, Solid* Benzoic acid, Solid* Benzoic acid, Solid* Isophorone, Solid* Isophorone, Solid* A-Dichlorophenol, Solid* 2,4-Dichlorophenol, Solid* 2-A-Dichlorophenol, Solid* 2-Methylnaphthalene, Solid* 2-Methylnaphthalene, Solid* 2-Mitrophenol, Solid* 2-Mitrophenol, Solid* 3-Mitroaniline, Solid* 3-Mitroaniline, Solid* 3-Mitroaniline, Solid* 3-Mitroaniline, Solid* 3-Mitrophenol, Solid* Acenaphthylene, Solid* Acenaphthylene, Solid* Acenaphthylene, Solid* Acenaphtholene, Solid* Acenaphtholenel, Solid* Acenaphtholenel, Solid*	22222222222222222222222222222222222222	כריבבכככבברככביקככבבככ	%555554 5 638554245588854428	380 380 380 380 380 380 380 380 380 380	0.00000 0.000000	\$\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	45735 45735 45735 45735 45735 45735 45735 45735 45735 45735 45735 45735 45735 45735 45735 45735 45735 45735 45735	03/08/05 03/	1853 jdv 1853 jdv
	* In Description = Dry Wgt.		Page 2						-	THE W

Date: 03/11/2005	ATTN: Jamie Barr	٠.	DILUTION UNITS BATCH DT DATE/TIME FECH	1.00000 ug/kg 45735 03/08/05 1853 jdw 1.00000 ug/kg 45735 03/08/05 1853 jdw	
RATORY TEST RESULTS	PROJECT: 5555107-ATLAS	Laboratory Sample ID: 208881-1 Date Received: 02/25/2005 Time Received: 15:30	LE RESULT Q FLAGS MOL RL	56 J 50 380 1200 U 57 380 140 J 64 380 1700 U 64 380 1700 U 51 380 610 U 760 610 U 760 620 J 741 380 750 380 760 J 760 760	Page 3
Job Number: 208881	CUSTOMER: LANGAN ENVIRONMENTAL SERVICES	Customer Sample ID: CONED-SSW-022305 Date Sampled: 02/23/2005 Time Sampled: 09:47 Sample Matrix: Soil	TEST METHOD PARAMETER/TEST DESCRIPTION SAMPLE	Fluorene, Solid* Hexachlorobenzene, Solid* Diethyl phthalate, Solid* Penanthrene, Solid* Anthracene, Solid* Anthracene, Solid* Di-n-butyl phthalate, Solid* Fluoranthene, Solid* Pyrene, Solid* Benzo(a)anthracene, Solid* Chrysene, Solid* SJ3-Dichlorobenzidine, Solid* Benzo(a)fluoranthene, Solid* Benzo(b)fluoranthene, Solid* Benzo(c)fluoranthene, Solid*	* In Description = Dry Wgt.

CUSTOMER: LANGAN ENVIRON Date Sample ID Date Sampled Sample Matrix Sample Matrix ASTM D-2216 % Solids, % Moistur ASTM D-2216 % Solids, % Moistur BENZOC Semivolat Phenol, 9 2-Chlorog Nitrobenz Benzoic Elsophoror Naphthalt 2,4,5-Tr' 2-Methylt	ENVIRONMENTAL SERVICES ENVIRONMENTAL SERVICES dd: 02/23/2005 dd: 07/23/2005 dd: 08:58 rix: Soil Moisture, Solid Moisture, Solid Moisture, Solid Moisture, Solid Moisture, Solid Methylphenol, Solid Methylphenol, Solid Apphralene, Soli	SAMPLE RESULT: SAMPLE RESULT: 15.5 15.5 16.5 ND ND ND ND ND ND ND ND ND N	F. F	25 T R E S U L T Laboratory Sample ID: Date Received Time Received Time Received 100 0.10 0.10 100 210 99 46 1130 120 130 130 130 130 130 130 130 130 130 13	2. 208881-2 : 202/25/2005 : 15:30 0.10 0.10 0.10 380 380 380 380 380 380 380 380 380 38	1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000	2	ATTN: Jamie Banr ATTN: Jamie Banr % 45298 % 45298 % 45298 % 45735 J/Kg 45735	02/28/05 000 02/28/05 000 02/28/05 000 02/28/05 193 03/08/05 193 03/08	1920 1920 1920 1920 1920 1920 1920 1920	केर्न्ट्रेन्
	Acenaphrnene, Solid* Dibenzofuran, Solid* 4-Nitrophenol, Solid*	S S S	222	160	380	1.00000	ng/kg ng/kg	45735	03/08/05	1920	, j.
	★ In Description = Dry Wgt.		Page 4						CMP C	\$	_

Date: 03/11/2005	ATTN: Jámie Barr	-2 2005	1.00000 ug/kg 45735 03/08/05 1920 jdw 1.00000 ug/kg 45735 03/08/05 192	
LABORATORY TEST RESULTS	PROJECT: 5555107-ATLAS	Laboratory Sample ID: 208881-2 Date Received: 02/25/2005 Time Received: 15:30	SAMPLE RESULT OF FLAGS MOL RL ND ND U 56 380 ND ND U 56 380 ND ND U 63 380 ND S4 J 618 530 ND ND U 63 380 ND ND U 63 380 ND ND U 63 380 ND ND U 648 380 ND ND U 658 380 ND ND U 670 ND	Page 5
Job Number: 208881	CUSTOMER: LANGAN ENVIRONMENTAL SERVICES	Customer Sample ID: CONED-WSW-O22305 Date Sampled: 02/23/2005 Time Sampled: 09:58 Sample Matrix: Soil	TEST_METHOD Fluorene, Solid* Hexachlorobenzene, Solid* Diethyl phthalate, Solid* Pentachlorophenol, Solid* Anthracene, Solid* Anthracene, Solid* Di-n-butyl phthalate, Solid* Fluoranthene, Solid* Pyrene, Solid* Butyl benzyl phthalate, Solid* Butyl benzyl phthalate, Solid* Braco(a)anthracene, Solid* Si3-Dichlorobenzidine, Solid* Bis(2-ethylhexyl)phthalate, Solid* Bis(2-ethylhexyl)phthalate, Solid* Benzo(b)fluoranthene, Solid* Benzo(b)fluoranthene, Solid* Benzo(b)fluoranthene, Solid* Benzo(a)pyrene, Solid* Benzo(a)hanthracene, Solid* Benzo(a)hanthracene, Solid* Benzo(a)hanthracene, Solid* Benzo(a)hanthracene, Solid*	* In Description = Drv Wat.

	Job Number: 208881	LABORATORY	H E S	T RESUL	<i>S</i> ⊢		Date:0	Date:03/11/2005		
CUSTOMER: LANG	LANGAN ENVIRONMENTAL SERVICES	PRÖJECT:	5555107-ATLAS				ATTN:	Jamie Ba	Barr	
Custome Date Sar Time Sar Sample h	Customer Sample ID: CONED-BOT1-022305 Date Sampled: 02/23/2005 Time Sampled: 10:15 Sample Matrix: Soil		Labor Date Time	atory Sample Received Received	1D: 208881-3 : 02/25/2005 : 15:30					
TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT 6	Q FLAGS	HDL	RL	DILUTION	UNITS	ВАТСН	DT DATE/TIME	INE TECH
ASTM D-2216	% Solids, Solid % Moisture, Solid	85.2 14.8		0.10 0.10	0.10		**	45298 45298	02/28/05 02/28/05	0000 rtm
82700	Semivolatile Organics Aniline, Solid* Phenol, Solid* 2-Methylphenol, Solid* 4-Methylphenol, Solid* 2-Chlorophenol, Solid* Nitrobenzene, Solid* Benzoic acid, Solid* Isophorone, Solid* Isophorone, Solid* Isophorone, Solid* Isophorone, Solid* 2,4-0ichlorophenol, Solid* 2,4-7-Trichlorophenol, Solid* 2-4,5-Trichlorophenol, Solid* 2-Methylnaphthalene, Solid* 2-Methylnaphthalene, Solid* 2-Nitroaniline, Solid* 2-Oinitrotoluene, Solid* 2-Oinitrotoluene, Solid* 2-Oinitrophenol, Solid* 2-Oinitrophenol, Solid* 3-Nitroaniline, Solid* 3-Nitroaniline, Solid* Acenaphthylene, Solid*	85 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5		230 230 230 230 250 250 260 270 270 270 270 270 270 270 270 270 27	370 370 370 370 370 370 370 370	00000 00000 00000 00000 00000 00000 0000	63/66 63	45735 45735 45735 45735 45735 45735 45735 45735 45735 45735 45735 45735 45735 45735 45735 45735 45735 45735 45735	03/09/05 03/09/05 03/09/05 03/09/05 03/09/05 03/09/05 03/09/05 03/09/05 03/09/05 03/09/05 03/09/05 03/09/05 03/09/05	1740 jdw 1740 jdw
	* In Description ≈ Dry Wgt.	P. P.	Page 6					_		- X

	85. · -35. · * :3		1740 jdw 1740 jdw	
	ı.		03/09/05 17:09/05 17:09/05 17:09/05 17:03/05 17:03/09/05 17:03/09/05 17:03/09/05 17:03/09/05 17:03/09/05 17:03/09/05 17:03/09/05 17:03/09/05 17:03/09/05 17:03/09/05 17:03/09/	
Date: 03/11/2005	Jamie Barr		### BATCH ID 45735	
Date:0	ATTN		2 / Bu By / Bu	
			1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000	
s L		o: 208881-3 .: 02/25/2005 .: 15:30	370 370 370 370 370 370 370 370	
T RESUL.	TLAS	Laboratory Sample ID Date Received Time Received	MDL 100 110 130 130 130 130 130 130 130 130	
н В	\$555107-ATLAS	Labor Date Time	FLAGS	
ABORATORY	PROJECT		SAMPLE RESULTS 6 220 ND 3100 3100 5300 ND 1800 2000 ND 1400 1700 1700 1200	
		·		
Job Number: 208881	LANGAN ENVIRONMENTAL SERVICES	mple ID: CONED-B011-022305 cd: 02/23/2005 cd: 10:15	FARAMETER TEST DESCRIPTION Fluorene, Solid* Hexachlorobenzene, Solid* Pentachlorophenol, Solid* Anthracene, Solid* Anthracene, Solid* Anthracene, Solid* Anthracene, Solid* Fluoranthene, Solid* Buryl benzyl phthalate, Solid* Bryche, Solid* Buryl benzyl phthalate, Solid* Buryl benzyl phthalate, Solid* Buryl benzyl phthalate, Solid* Benzo(a)anthracene, Solid* Bis(2-ethylhexyl)phthalate, Solid* Bis(2-ethylhexyl)phthalate, Solid* Benzo(b)fluoranthene, Solid* Benzo(b)fluoranthene, Solid* Benzo(b)prene, Solid* Dibenzo(a)h)anthracene, Solid* Benzo(ahi)perylene, Solid* Benzo(ahi)perylene, Solid* Benzo(ahi)perylene, Solid*	
dot	CUSTOMER: LANGAN E	Customer Sample ID: Date Sampled Time Sampled	FLC Her Her Price	

Semple ID: CONSED-BOTZ-022305		Job Number: 208881	ABORATORY	н В	RESULTS			Date: 03/11/2005	11/2005		
Patrix	CUSTOMER: LAN		PROJECT:	1 1				1 1	Jamie Barr		
x solids, solid ND 0.10 1 x 4 x solids, solid ND 0.10 0.10 1 x 4 x miline, solids ND 0 0 0 0 0 1 x 4 x miline, solids ND 0 0 0 10 1 x 4 x miline, solids ND 0 0 0 0 10 1 x 4 2-Methylphend, Solids ND 0	Custom Date Si Time Si Sample	•		Laborator Date Rece Time Rece	e ID:	208881–4 02/25/2005 15:30					
## Solids, Solid ## No Solids #	TEST METHOD	* * * PARAMETER/TEST DESCRIPTION **	RESULT	FLAGS		RL		UNITS	BATCH DT	PATE/TIME	IE TECH
Semivolatile Organics Aniline, Solid*	ASTM D-2216	% Solid % Maist	87.9 12.1		0.10	0.10			45298	02/28/05 0	0000 rlm
0 (N)	8270C	anics Solid* Solid* Lid* Lid* Lid* Lid* Lid* Lid* Solid* Solid* Lid* Lid* Lid* Lid* Lid* Lid* Lid* L		772222222222222222	44 50 50 50 50 50 50 50 50 50 50 50 50 50		1.00000 1.00000		45735 45735 45735 45735 45735 45735 45735 45735 45735 45735 45735 45735 45735 45735 45735 45735 45735 45735 45735	03/08/05 03/	2013 jdv 2013 jdv

			FEEFEEFEEFEEFEEFEEFEE	
			DATE/TINE 03/08/05 2013	
1/2005	Jamie Barr		45735 45735	
Date:03/11/2005	ATTN: Ja		UNITS UG/KG UG	
			1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000	
S -		10: 208881-4 : 02/25/2005 : 15:30	370 370 370 370 370 370 370 370 370 370	
ST RESUL	-ATLAS	Laboratory Sample ID Date Received	#BL 49 330 330 330 330 330 330 330 330 330 33	
⊢ E.S	5555107-ATLAS	Labor Date Time	F_LAGS	Page 9
ABORATORY	PROJECT:		ND	& &
	ces	-022305	Solid* Solid* benzene, Solid* thalate, Solid* cophenol, Solid* phthalate, Solid* phthalate, Solid* lid* yl phthalate, Solid* looenzidine, Solid* phthalate, Solid* looenzhene, Solid* uoranthene, Solid* noranthene, Solid* y-dolpyrene, Solid* n)anthracene, Solid* oerylene, Solid*	= Dry Wgt.
Job Number: 208881	CUSTOMER: LANGAN ENVIRONMENTAL SERVICES	Customer Sample ID: CONED-BOT2-022305 Date Sampled: 02/23/2005 Time Sampled: 10:32 Sample Matrix: Soil	Filorene, Solid* Hexachlorobenzene, Solid* Diethyl phthalate, Solid* Pentachlorophenol, Solid* Phenanthrene, Solid* Anthracene, Solid* Anthracene, Solid* Din-butyl phthalate, Solid* Fluoranthene, Solid* Butyl benzyl phthalate, Solid* Butyl benzyl phthalate, Solid* Butyl benzyl phthalate, Solid* Benzo(a) anthracene, Solid* Benzo(a) anthracene, Solid* Benzo(b)fluoranthene, Solid* Benzo(b)fluoranthene, Solid* Benzo(b)fluoranthene, Solid* Benzo(b)fluoranthene, Solid* Benzo(a)h)rene, Solid* Benzo(a)h)anthracene, Solid* Benzo(a,h)anthracene, Solid* Benzo(ghi)perylene, Solid* Benzo(ghi)perylene, Solid*	* In Description = Dry Wgt
	CUSTOMER: LANG	Customer Sample] Date Sampled Time Sampled	теят метноо	

cut	Luch Number: 208881	LABORATORY	T E S T	RESUL	S		Date:03,	Date: 03/04/2005		
CUSTOMER: LANG	CUSTOMER: LANGAN ENVIRONMENTAL BERVICES	PROJECTS	5555107-ATLAS				ATTN	Jamie Barr		
Customer Date San Time San Sample M	Customer Sample ID: COMED-SSW-022305 Date Sampled: 02/23/2005 Time Sampled: 09:47 Sample Matrix: Soil		Labora Date R Time R	Laboratory Sample ID: Date Received Time Received	ID: 208881-1 : 02/25/2005 : 15:30					
TEST WETHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q FLAGS	1 9	RL	DILUTION	UNITS	ватсн рт	DATE/TIME	TECH
ASTM D-2216	% Solids, Solid % Moisture, Solid	84.1		0.10	0.10		34 34	45298 45298	02/28/05 0000	10 rtm
8081A	Organochlorine Pesticide Analysis alpha-BHC, Solid* beta-BHC, Solid* delta-BHC, Solid* delta-BHC, Solid* gamma-BHC (Lindane), Solid* Heptachlor, Solid* Aldrin, Solid* Heptachlor epoxide, Solid* Lidosulfan I, Solid* Endosulfan II, Solid* Endosulfan II, Solid* Endosulfan II, Solid* Endosulfan Solid* A,4'-DDD, Solid* Endosulfan sulfate, Solid* A,4'-DDT, Solid* Aldrin sulfate, Solid* Aldrin solid* Aldrin Solid* Endosulfan sulfate, Solid* Aldrin Solid* Aldrin Solid* Aldrin Solid* Aldrin Ketone, Solid* Endrin ketone, Solid*	A C C C C C C C C C C C C C C C C C C C	7 17	0.32 0.18 0.18 0.18 0.45 0.17 0.20 0.20 0.20 0.20 0.13	2,2,2,2,2,2,2,2,2,2,2,2,2,2,2,2,2,2,2,	1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000	19/Kg	45525 45525 45525 45525 45525 45525 45525 45525 45525 45525 45525 45525 45525 45525 45525 45525 45525 45525 45525	03/01/05 03/01/05 03/01/05 03/01/05 03/01/05 03/01/05 03/01/05 03/01/05 03/01/05 03/01/05 03/01/05 03/01/05 03/01/05	0514 mds 0514 mds
	* In Description = Dry Wgt.		Page 2							3

1 †	Job Number: 208881	ABORATORY	F S	T RESUL	s ⊢		Date:03	Date:03/04/2005		
CUSTOMER: LAN	GUSTOMER: LANGAR ENVIRONMENTAL SERVICES		PRDJECT: 5555107-ATLAS	TLAS			ATTN:	Jamie Barr		
Custome Date Sa Time Sa Sample	Customer Sample ID: CONED-WSW-022305 Date Sampled: 02/23/2005 Time Sampled: 09:58 Sample Matrix: Soil		Labor Date Time	atory Sample Received Received	1D: 20881-2 : 02/25/2005 : 15:30					
TEST METHOO	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q FLAGS	J.CM	RL	DIEUTION	UNITS	BATCH DT	DATE/TIME	IE TECH
ASTM D-2216	% Solids, Solid % Moisture, Solid	84.5 15.5		0.10	6.10 0.10	₩- ₩-	34 34	45298 45298	02/28/05 (0000 rlm 0000 rlm
8081A	Organochlorine Pesticide Analysis alpha-BHC, Solid* beta-BHC, Solid* delta-BHC, Solid* demachlor, Solid* Heptachlor, Solid* Heptachlor epoxide, Solid* Heptachlor epoxide, Solid* Lindsulfan I, Solid* Dieldrin, Solid* Lindsulfan I, Solid* Lindsulfan I, Solid* Lindsulfan I, Solid* Lindsulfan I, Solid* Lindsulfan Solid* Lindsulfan Solid* Lindsulfan solid* Endosulfan solid* Endosulfan solid* Endosulfan solid* Endosulfan solid* Endosulfan solid* Endosulfan solid* Solid* Endosulfan solid*	55555 555555 2 2	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	0.32 0.31 0.12 0.13 0.13 0.51 0.20 0.20 0.36 0.37 0.13 0.13	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000	18/Kg 18/Kg	45525 45525 45525 45525 45525 45525 45525 45525 45525 45525 45525 45525 45525 45525 45525 45525	03/01/05 03/01/05 03/01/05 03/01/05 03/01/05 03/01/05 03/01/05 03/01/05 03/01/05 03/01/05 03/01/05 03/01/05 03/01/05	0552 mds
	* In Description = Dry Wat.		Page 3							

LABORATORY TEST RESU	CUSTOMER: CANGAN ENVIRONMENTAL SERVICES CUSTOMER Sample 1D: CONED-BOI1-022305 Date Sampled: 02/23/2005 Time Sampled: 10:15 Sample Matrix: Soil	X Solids, Solid X Solids, Solid X Moisture Solid X Moisture Solid	Organochlorine Pesticide Analysis Alpha-BHC, Solid* Landel BHC, Landel BHC, Solid* Landel BHC, Landel BHC, Landel BHC, Land	
LTS	: 1D: 208881-3 : 02/25/2005	RL DITUTION	1.9 1.00000 1.9 1.00000 1.9 1.00000 1.9 1.00000 2.3 1.00000 1.9 1.00000 3.8 1.00000	
Date:03/04/2005	ATTN: Jamie Bath	NNITS BATCH DI DATE/TIME x 45298 02/28/05 0000 x 45298	ug/kg 45525 ug/kg 45526 ug/kg 45526 ug/kg 45525	

	Job Number: 208881	ABGRATORY TE	ST RESUL	S L		Date:03,	Date: 03/04/2005		
CUSTOMER: LANG	CUSTOMER: LANGAN ENVIRGNMENTAL SERVICES	PROJECT:	5555107-ATLAS			ATTRE	Jamie Barr		
Customer Date Sam Time Sam Sample M	Customer Sample ID: CONED-BOT2-022305 Date Sampled: 02/23/2005 Time Sampled: 10:32 Sample Matrix: Soil	1 0 T	Laboratory Sample ID: Date Received Time Received	ID: 208881-4 : 02/25/2005 : 15:30					
TEST WETHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT Q FLAGS	3	RE	DILUTION	UNITS	BATCH DT	DATE/TIME	<u> </u>
ASTM D-2216	% Solids, Solid % Moisture, Solid	87.9	0.10	0.10	- -	26 26	45298 45298	02/28/05 0000 02/28/05 0000	Ela Fla
3081A	Organochlorine Pesticide Analysis alpha-BHC, Solid* beta-BHC, Solid* delta-BHC, Solid* delta-BHC, Solid* gamma-BHC (Lindane), Solid* Heptachlor, Solid* Adrin, Solid* Heptachlor epoxide, Solid* Endosulfan I, Solid* Endosulfan II, Solid* Endosulfan II, Solid* Endosulfan II, Solid* Endosulfan II, Solid* Endosulfan Solid* Endosulfan Solid* Endosulfan Solid* Endosulfan Solid* Methoxychlor, Solid* Methoxychlor, Solid* Bethoxychlor, Solid* Endrin ketone, Solid* Endrin ketone, Solid*	30 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0.33 0.12 0.17 0.17 0.17 0.18 0.19 0.19 0.19 0.19 0.10 0.10		1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000	UB/KB UB/KB UB/KB UB/KB UB/KB UB/KB UB/KB UB/KB UB/KB UB/KB UB/KB	45525 4552 452 4	03/01/05 1613 03/01/05 1613	mds mds mds mds mds mds mds mds mds mds
	* In Description = Dry Wgt.	Page 5						1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Mark

		1451 mbe 1551 mbe 155	
<u> </u>	. « <u>.</u>	DATE/TI 02/28/05 02/28/05 03/01/05 03/01/05 03/01/05 03/01/05	
Date: 03/02/2005	Allthis Lamie Barr	BATCH DI 45298 45298 45412 45412 45412 45412 45412 45412 45412	
Date:03		% % % % % % % % % % % % % % % % % % %	
		1.00000 1.00000 1.00000 1.00000 1.00000 1.00000	
	38881-1 2/25/2005 5:30	74. 0 0.10 20 20 20 20 20 20 20 20	
T RESUL1	Laboratory Sample ID: 20888 Date Received 02/25 Time Received 15:30	3.3 1.8 3.5 3.1 1.4 4.7	
TES	Labo Date Time	FIAGS	2 000
,	RROJECT:	SAMPLE RESULT 9 84.1 15.9 U ND ND U U U U U U U U U U U U U	Ó
-			
	CUSTOMER: LANGAN ENVIRONMENTAL SERVICES Customer Sample ID: CONED-SSW-022305 Date Sampled 02/23/2005 Time Sampled 99:47 Sample Matrix Soil	# PARAMETER/TEST DESCRIPTION % Solids, Solid % Moisture, Solid # PCB Analysis # Aroclor 1242, Solid* # Aroclor 1248, Solid* # Aroclor 1254, Solid* # Aroclor 1254, Solid* # Aroclor 1256, Solid* # Aroclor 1259, Solid*	
סק	CUSTOMER: LANGAN Customer S Date Sampl Time Sample Mat	ASTM D-2216 % S % N % N % N % N % N % N % N % N % N	

	CUSTOMER: LAN	Custome Date San Time San Sample	TEST METHOD	ASTM D-2216	8082	
Job Number: 208881	CUSTOMER: CANGAN ENVIRONMENTÁL SERVICES	Customer Sample ID: CONED-WSW-022305 Date Sampled: 02/23/2005 Time Sampled: 09:58 Sample Matrix: Soil	PARAMETER/TEST DESCRIPTION	% Solids, Solid % Moisture, Solid	PCB Analysis Aroclor 1016, Solid* Aroclor 1221, Solid* Aroclor 1242, Solid* Aroclor 1248, Solid* Aroclor 1256, Solid* Aroclor 1260, Solid*	* In Description = Dry Uct
ABORATORY TE	PROJECT: 5555107-ATLAS	ÄĞË	SAMPLE RESULT Q FLAGS.	84.5 15.5		Page 3
STRESULT	7 ATLAS	Laboratory Sample ID: Date Received	TOM	0.10	8 4. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4.	
ω	108388634	: 208881-2 : 02/25/2005 : 15:30	RL DI	0.10	20 20 20 20 20 20 20 20 20 20 20 20 20 2	
Да			DILUTION UNITS	26 36	1.00000 ug/kg 1.00000 ug/kg 1.00000 ug/kg 1.00000 ug/kg 1.00000 ug/kg 1.00000 ug/kg	
Date: 03/02/2005	ATTW: Jamie Barr		ватсн	45298 45298	69 45412 69 45412 69 45412 69 45412 69 45412 69 45412 69 45412	
	1		DT DATE/TIME	02/28/05 00 02/28/05 00	03/01/05 15 03/01/05 15 03/01/05 15 03/01/05 10 03/01/05 11	-
			#D34	0000 rlm	1508 mbe 1508 mbe 1508 mbe 1508 mbe 1508 mbe 1508 mbe	7

	Job Number: 208881	LABORATORY	⊢ ES	T RESUL	ω 		Date:0	Date: 03/02/2005		
CUSTOMER: LAN	DUSTOWER: LANGAN ENVIRONMENTAL SERVICES	PROJECT: 5555107-ATLAS	-5555107-	ATLAS			ATIM	Alin: Jamie Barr		
Custome Date Sa Time Sa Sample	Customer Sample ID: CONED-BOT1-022305 Date Sampled: 02/23/2005 Time Sampled: 10:15 Sample Matrix: Soil		Labor Date Time	atory Sample Received Received	10: 208881-3 02/25/2005 : 15:30					
TEST WETHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q FLAGS		34	PILUTION	UNITS	BATCH OF	DATE/1118E	TECH
ASTM D-2216	% Solids, Solid % Moisture, Solid	85.2 14.8		0.10	0.10		34 34	45298 45298	02/28/05 0000 02/28/05 0000	E I I
8082	PCB Analysis Aroclor 1016, Solid* Aroclor 1221, Solid* Aroclor 1242, Solid* Aroclor 1248, Solid* Aroclor 1254, Solid* Aroclor 1256, Solid*	N N N N N N N N N N N N N N N N N N N	2222	8 - 4 8 - 4 8 - 4 - 4 6	5 x 5 5 5 5 5	1.00000 1.00000 1.00000 1.00000 1.00000 1.00000	49/Kg 19/Kg 19/Kg 19/Kg 19/Kg	45412 45412 45412 45412 45412 45412 45412	03/01/05 1525 03/01/05 1525 03/01/05 1525 03/01/05 1525 03/01/05 1525 03/01/05 1525 03/01/05 1525	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5
	* In Description = Dry Wgt.		Page 4					1 1)	SW/23d	7

RATORY TEST RESULTS	PROJECT: 5585107-ATLAS Laboratory Sample ID: 208881-4 Date Received 02/25/2005 Time Received 15:30	SAMPLE RESULT G FLAGS MDL RL DILUTION UNITS BATCH 87.9 0.10 1 % 45298 12.1 0 3.2 19 1.00000 ug/Kg 45412 ND U	
Job Number: 208881	CUSTOMER: LANGAN ENVIRONMENTAL SERVICES Customer Sample 1D: CONED-BOT2-022305 Date Sampled: 02/23/2005 Time Sampled: 10:32 Sample Matrix: Soil	ASTM D-2216 % Solids, Solid % Moisture, Solid % Moisture, Solid % Moisture, Solid Aroclor 1016, Solid* Aroclor 1272, Solid* Aroclor 1248, Solid* Aroclor 1254, Solid* Aroclor 1256, Solid* Aroclor 1256, Solid*	

CUSTOMER: LANG	Job Number: 208881 CUSTOMER: LÄNGAN ENVIRONNENTAL SERVICES	PROJECT: 5555107 ATLAS	555510					Date: 03	Date: 03/07/2005	Date: 03/07/2005	
Custome Date Sar Time San Sample h	305		185	Laborator Date Rece Time Rece	mple I	D: 208881-1 .: 02/25/2005 .: 15:30					
TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	O FLAGS		£		NOTITION	SLIMO	ватся	DT DATE/TIME	TECH
ASTM D-2216	% Solids, Solid % Moisture, Solid	84.1 15.9			0.10	0.10		* *	45298 45298	02/28/05 01 02/28/05 01	0000 rlm 0000 rlm
7471A	Mercury (CVAA) Solids Mercury, Solid*	0.14	¥	17	0.014	0.048	1.0000	mg/Kg	45541	1,03/04/05 1443	duu 275
60108	Metals Analysis (ICAP Trace) Aluminum, Solid* Ansenic, Solid* Arsenic, Solid* Barium, Solid* Barium, Solid* Cadmium, Solid* Calcium, Solid* Calcium, Solid* Calcium, Solid* Calcium, Solid* Calcium, Solid* Chomium, Solid* Copper, Solid* Copper, Solid* Manganese, Solid* Manganese, Solid* Nickel, Solid* Nickel, Solid*	7800 3.8 15.9 101 ND 2830 2830 15.2 9.7 17.2 27.6 1720 277 17.7 17.7 566 158 ND 158	1 # + + + + + + + + + + + + + + + + + +	6 60 H/h	27.0 1.6 1.6 1.6 1.7 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	349 15.8 10.8 2.7 2.7 4.1 4.1 12.2 47.3 47.3 5.4 6.8 27.2 7.2 7.2 7.3 7.4 7.3 7.4 7.3 7.4 7.3 7.4 7.3 7.4 7.3 7.4 7.3 7.4 7.3 7.4 7.3 7.4 7.3 7.3 7.4 7.3 7.4 7.3 7.4 7.3 7.4 7.3 7.4 7.3 7.4 7.3 7.4 7.4 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7		99/Kg 99/Kg 99/Kg 99/Kg 99/Kg 99/Kg 99/Kg 99/Kg 99/Kg 99/Kg 99/Kg 99/Kg	45584 45584	03/07/05 03/07/	4 m 2011 4 m 2011 4 m 2011 6 m 20
	* In Description = Dry Wgt.		Page 2							None	A

oner and a second		LABORATORY TEST RES	EST RESUL	S		Date:03/07/2005		
Customer Customer Date San Time Sanple *		- CO.	1 2 : :	208881-1 02/25/2005 15:30				
TEST WETHOD	Zinc, Solid*	SAMPLE RESULT Q	5.1	27.0 1	mg/Kg	- BATCH DT 45584	DATE/TTHE 03/07/05 1102	nnp dur
					·	·		
	* In Description = Dry Wgt.	Page 3	2					

	Job Number: 208881	LABORAT	ORY	E S 1	RESULT	S	- To the state of	Date:03	Date:03/07/2005			
CUSTOMER: LANG	CUSTOHER: LANGAN ENVIRONMENTAL SERVICES	PR	PROJECT: 5555107-ATLAS	107-ATLA				ATTING	Jamie Bar	ATTM: Jamie Bacr		
Customer Date Sam Time Sam Sample M	Customer Sample ID: CONED-WSW-022305 Date Sampled 02/23/2005 Time Sampled 09:58 Sample Matrix: Soil			Laborat Date Re Time Re	Laboratory Sample ID: Date Received Time Received	: 208881-2 : 02/25/2005 : 15:30						
TEST METHOD	PARAMETER/TEST DESCRIPTION	SANPLE RESULT	o	FLAGS	, AD	. T.	DITUTION	SETRO	ватсн рт	DT DATE/TIME		
ASTM D-2216	% Solids, Solid % Moisture, Solid	84.5 15.5			0.10	0.10	-	24 24	45298 45298	02/28/05 02/28/05	0000	rlm rlm
7471A	Mercury (CVAA) Solids Mercury, Solid*	0.13	<u> </u>	F	0.015	0.049	1.0000	тв/Кв	45541	03/04/05 1446		duu
60108	Metals Analysis (ICAP Trace) Aluminum, Solid* Antimory, Solid* Arsenic, Solid* Barjum, Solid* Beryllium, Solid* Cadmium, Solid* Chromium, Solid* Chromium, Solid* Chromium, Solid* Chromium, Solid* Chromium, Solid* Copper, Solid* Iron, Solid* Magnesium, Solid* Mickel, Solid* Nickel, Solid* Selenium, Solid* Silver, Solid* Silver, Solid* Silver, Solid* Sodium, Solid* Sodium, Solid* Vanadium, Solid* Vanadium, Solid*	ND 10800 ND 4.2 ND 1340 20.8 6.0 13.8 17200 13.8 13.8 ND 204 ND 204	20 22 22 2	प्रेंड मेर्ट्र मेर्ट्र मेर्ट्र	26.9 1.5 1.6 1.6 1.6 1.1 1.1 1.1 1.1 1.2 1.2 1.2 1.3 1.3 1.3 1.3 1.3 1.3 1.3 1.3 1.3 1.3	247 15.7 10.8 10.8 11.4 14.0 17.7 19.5 17.1 47.1 2.7 26.7 26.7 26.7 27.1 27.1 27.1 27.2 27.2 27.2 27.2 27		######################################	45584 45584	03/07/05 03/07/05 03/07/05 03/07/05 03/07/05 03/07/05 03/07/05 03/07/05 03/07/05 03/07/05 03/07/05 03/07/05 03/07/05 03/07/05 03/07/05 03/07/05 03/07/05	1144 1144 1144 1144 1144 1144 1144 114	להיה להיה להיה להיה להיה להיה להיה להיה
	* In Description = Dry Wgt.		Page	7						Nov		R

	PRDJECT: 5555107% AtLAS. Laboratory Sample 1D: 208881-2	Date Received: 02/25/2005 Time Received: 15:30	DILUTION UNITS BATCH DT	28.7 5.1 26.9 1 mg/Kg 45584 03/07/05 1144 mp
Job Number: 208881		Date Sampled: 02/23/2005 Time Sampled: 09:58 Sample Matrix: Soil	TEST METHOD PARAMETER/TEST DESCRIPTION	Zir

	Job Number: 208881	ABORATORY	S II L	RESCL	S L		Date:03	Date: 03/07/2005		·
CUSTOMER: LANG	CUSTOMER: LANGAR ENVIRONMENTAL SERVICES	PROJECT: 5555107 ATLAS	5555107-A				ATTN	Jamie Barr		
Customer Date Sam Time Sam Sample M	Customer Sample iD: CONED-BOT1-022305 Date Sampled: 02/23/2005 Time Sampled: 10:15 Sample Matrix: Soil		Labor Date Time	Laboratory Sample ID: Date Received Time Received	1D: 208881-3 : 02/25/2005 : 15:30					
TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	a FLAGS	7,04	RL	DICUTION	UNITS	ватсн от	r DATEZTINE	TECH
ASTM D-2216	% Solids, Solid % Moisture, Solid	85.2 14.8		0.10	0.10		* *	45298 45298	02/28/05 01 02/28/05 00	0000 rlm
7471A	Mercury (CVAA) Solids Mercury, Solid*	0.38	17	0.013	0.042	1.0000	mg/Kg	45541 LD	03/04/05	1448 mp
60108	Metals Analysis (ICAP Trace) Aluminum, Solid* Ansenic, Solid* Arsenic, Solid* Barium, Solid* Calcium, Solid* Chomium, Solid* Chomium, Solid* Chomium, Solid* Chomium, Solid* Chomium, Solid* Copalt, Solid* Copalt, Solid* Iron, Solid* Magnesium, Solid* Magnesium, Solid* Nicket, Solid* Nicket, Solid* Vanadium, Solid*	ND 9.9 ND 125 ND 9190 22.2 6.2 68.0 15600 15600 15600 15600 1600 ND 74.2	1 x x x x x x x x x x x x x x x x x x x	28.2 26.7 4.4.4 26.62 2.3 2.3 2.3 2.3 2.3 2.3 2.3 2.3 2.3 2.	364 11.3 11.3 2.8 2.8 4.2 4.2 7.1 205 7.1 205 7.1 205 4.2 4.2 4.2 133 5.6		mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg	45584 45584	03/07/05 1 03/07/05 1 03/07/05 1 03/07/05 1 03/07/05 1 03/07/05 1 03/07/05 1 03/07/05 1 03/07/05 0 03/07/05 0	1150 mp (150 mp) (150
	* In Description = Dry Wgt.		Page 6						W. 000	

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⊢ S	A-7015538	Labor Date Time	Q FLAGS		Page 7
ABORATORY	PROJECT: 5555107 ATLAS.		SAMPLE RESULT	188	
Job Number: 208881	CUSTOMER: LANGAN ENVIRONMENTAL SERVICES	Customer Sample ID: CONED-B011-022305 Date Sampled: 02/23/2005 Time Sampled: 10:15 Sample Matrix: Soil	TEST METHOD PARAMETER/TEST DESCRIPTION	Zinc, Solid*	* In Description = Dry Wgt.

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TEST	555:107+AT	Labor Date I Time	FLAGS		PS X	141 + 14 141 1441	Page 8
BORATORY	PROJECT: 5555107: ATLAS		SAMPLE RESULT @	87.9	0.20	6890 1.8 6.0 6.0 6.0 470 15.9 5.0 41.9 12100 91.7 2000 272 16.7 497 ND ND ND ND ND ND ND ND ND ND	ď
Job Number: 208881	CUSTOMER: LANGAN ENXIRONMENTAL SERVICES	Customer Sample ID: CONED-BOT2-022305 Date Sampled: 02/23/2005 Time Sampled: 10:32 Sample Matrix: Soil	PARAMETER/TEST DESCRIPTION	% Solids, Solid % Moisture, Solid	Mercury (CVAA) Solids Mercury, Solid*	Metals Analysis (ICAP Trace) Aluminum, Solid* Antimony, Solid* Arsenic, Solid* Barium, Solid* Cadmium, Solid* Calcium, Solid* Cobalt, Solid* Copper, Solid* Iron, Solid* Solid* Nagnesium, Solid* Nickel, Solid* Nickel, Solid* Thallium, Solid* Thallium, Solid*	* In Description = Dry Wgt.
	CUSTOMER : LANG	Customer Date Samm Time Sample M	TEST METHOD	ASTM D-2216	7471A	6010B	

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н S	555107-8	Labo Date Time	Q FLAGS		
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L)	CUSTONER: LANGAR ENVIRONMENTAL SERVICES	Customer Sample ID: CONED-BOT2-022305 Date Sampled: 02/23/2005 Time Sampled: 10:32 Sample Matrix: Soil	PARAMETER/TEST DESCRIPTION	Zinc, Solid*	
יי	CUSTOMER: LANGA	Customer Samp Date Samp Time Samp Sample Ma	TEST METHOD		

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	Job Number: 208881	LABORATOR	Y E S	T RESUL	S L		Date:C	Date: 03/07/2005			
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TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q FLAGS	MOL	RE	DILUTION	UNITS	ватсн	TO	DATE/TIME	TECH
ASTM D-2216	% Solids, Solid % Moisture, Solid	84.1		0.10	0.10		% %	45298 45298	20	02/28/05 0000 02/28/05 0000	וון וויי
9012	Cyanide (Colorimetric) Cyanide, Total, Solid*	79.5	200	30.8	572	1.0	ug/Kg	45395	03	03/02/05 1112 dtn	dtn
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	Job Number: 208881	LABORATOR	Y TES	T RESUL	S		Date:0	Date:03/07/2005		
CUSTOMER: LAM	CUSTOMER: LANGAN ENVIRONMENTAL SERVICES	PROJECT:	T: 5555107-ATLAS	ATLAS			ATTN:	Jamie Barr	2	
Custome Date Sa Time Sa Sample	Customer Sample ID: CONED-WSW-022305 Date Sampled: 02/23/2005 Time Sampled: 09:58 Sample Matrix: Soil		Lab Dat Tim	Laboratory Sample ID: Date Received: Time Received:	D: 208881-2 .: 02/25/2005 .: 15:30					
TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q FLAGS	MDL	RL	DILUTION	UNITS	ВАТСН	DT DATE/TIME	rIME TECH
ASTM D-2216	% Solids, Solid % Moisture, Solid	84.5		0.10	0.10	4- 4-	% %	45298 45298	02/28/05	0000
9012	Cyanide (Colorimetric) Cyanide, Total, Solid*	Q.	5	31.5	586	1.0	ug/Kg	45395	03/05/0	1113
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	Job Number: 208881	LABORATOR	→	ST RESUL	S		Date:	Date:03/07/2005		
CUSTOMER: LAN	CUSTOMER: LANGAN ENVIRONMENTAL SERVICES	PROJECT	PROJECT: 5555107-ATLAS	-ATLAS			ATTN:	Jamie Barr	rr	
Custome Date Sal Time Sar Sample P	Customer Sample ID: CONED-BOT1-022305 Date Sampled: 02/23/2005 Time Sampled: 10:15 Sample Matrix: Soil		Lat Da: Tir	Laboratory Sample ID: Date Received: Time Received:	D: 208881-3 .: 02/25/2005 .: 15:30	-				
TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q FLAGS	MDL	RL	DILUTION	UNITS	ВАТСН	DT DATE/TIME	ME TECH
ASTM D-2216	% Solids, Solid % Moisture, Solid	85.2		0.10	0.10		26 24		020	
9012	Cyanide (Colorimetric) Cyanide, Total, Solid*	Q	-	30.7	570	1.0	ug/Kg	45395	03/02/05	

	* In Description = Dry Wat.		Dage 4							

	Job Number: 208881	LABORATOR	Y TES	T RESUL	S L		Date:0	Date:03/07/2005		
CUSTOMER: LAN	CUSTOMER: LANGAN ENVIRONMENTAL SERVICES	PROJECT:	r: 5555107-ATLAS	ATLAS			ATTN:	Jamie Barr	ויר	
Custome Date Sa Time Sa Sample	Customer Sample ID: CONED-BOT2-022305 Date Sampled: 02/23/2005 Time Sampled: 10:32 Sample Matrix: Soil		Lab Dat Tim	Laboratory Sample ID: 208881-4 Date Received: 02/25/2005 Time Received: 15:30	D: 208881-4 .: 02/25/2005 .: 15:30	•				
TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q FLAGS	MDL	RL	DILUTION	UNITS	ВАТСН	DT DAT	DATE/TIME TECH
ASTM D-2216	% Solids, Solid % Moisture, Solid	87.9		0.10	0.10		. % %	45298 45298	02/28/05	//05 0000 rlm
9012	Cyanide (Colorimetric) Cyanide, Total, Solid*	89.1	ba	30.6	269	1.0	ug/Kg	45395	03/05	03/02/05 1115 dtn
	* In Description = Dry Wgt.		Page 5						- M	- M W >



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May 5, 2005

Ms. Ilkay Cam-Spanos
Langan Engineering and Environmental
Services, Inc.
21 Penn Plaza
360 West 31st Street, Suite 900
New York, NY 10001-27279

Re: Data Validation Reports

Glendale, New York Project

March 2005 through April 2005 Soil and Soil Gas Sampling Events

Dear Ms. Cam-Spanos:

The data validation summaries and data usability summary reports (DUSRs) are attached to this letter for the Glendale, New York project, March 2005 through April 2005 soil and soil gas sampling events. The majority of the data were acceptable, with issues that are identified in the corresponding DUSRs and validation summaries for the following data packages: STL Connecticut Job Nos. 209073, 209159, 209172, 209184, 209185, and 209233; Spectrum Analytical, Inc., SDG No. 27062; and Long Island Analytical Laboratories, Inc., ID Nos. 1066527-1066530, 1066138, and 1068436-1068437.

There were data that were flagged as unusable (R) in data packs 209159, 209184, and 209185. The DUSRs for these data packs contain the reasons for qualifying the data as rejected. The data were rejected based solely on the validation guidance criteria. The rejected data may be determined to be acceptable to the user based on additional information that is not contained in the data validation criteria.

I have included a list of data validation qualifiers and acronyms to assist you in interpreting the reports. If you have any questions concerning this report, please contact us at (518) 348-6995. Thank you for the opportunity to assist Langan Engineering and Environmental Services, Inc.

Sincerely,

Alpha Environmental Consultants, Inc.

ean M. Neubeck

President

JMN:bms

Attachments

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Data Validation Qualifiers Used in the QA/QC Reviews for USEPA Region II

- U = Not detected. The associated number indicates the approximate sample concentration necessary to be detected significantly greater than the level of the highest associated blank.
- R = Unreliable result; data is rejected or unusable. Analyte may or may not be present in the sample. Supporting data or information is necessary to confirm the result.
- N = Tentative identification. Analyte is considered present. Special methods may be needed to confirm its presence or absence during future sampling efforts.
- J = Analyte is present. Reported value may be associated with a higher level of uncertainty than is normally expected with the analytical method.
- UJ = Not detected, quantitation limit may be inaccurate or imprecise.

Note: These qualifiers are used for data validation purposes. The data validation qualifiers may differ from the qualifiers that the laboratory assigns to the data. Refer to the laboratory analytical report for the definitions of the laboratory qualifiers.

Data Validation Acronyms

AA Atomic absorption, flame technique

BHC Hexachlorocyclohexane
BFB Bromofluorobenzene

CCB Continuing calibration blank
CCC Calibration check compound
CCV Continuing calibration verification

CN Cyanide

CRDL Contract required detection limit
CRQL Contract required quantitation limit
CVAA Atomic adsorption, cold vapor technique

DCAA 2,4-Dichlophenylacetic acid

DCB Decachlorobiphenyl

DFTPP Decafluorotriphenyl phosphine ECD Electron capture detector

FAA Atomic absorption, furnace technique

FID Flame ionization detector FNP 1-Fluoronaphthalene GC Gas chromatography

GC/MS Gas chromatography/mass spectrometry

GPC Gel permeation chromatography

ICB Initial calibration blank

ICP Inductively coupled plasma-atomic emission spectrometer

ICV Initial calibration verification IDL Instrument detection limit

IS Internal standard

LCS Laboratory control sample

LCS/LCSD Laboratory control sample/laboratory control sample duplicate

MSA Method of standard additions
MS/MSD Matrix spike/matrix spike duplicate

PID Photo ionization detector PCB Polychlorinated biphenyl

PCDD Polychlorinated dibenzodioxins PCDF Polychlorinated dibenzofurans

QA Quality assurance
QC Quality control
RF Response factor

RPD Relative percent difference RRF Relative response factor

RRF(number) Relative response factor at concentration of the number following

RT Retention time

RRT Relative retention time SDG Sample delivery group

SPCC System performance check compound

TCX Tetrachloro-m-xylene %D Percent difference %R Percent recovery

%RSD Percent relative standard deviation



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Data Usability Summary Report for Spectrum Analytical, Inc. SDG 27062 Soil Gas (SUMA Can) Samples Collected April 25, 2005

Prepared by: Donald Anné May 3, 2005

The data packages contain the documentation required by NYSDEC ASP. The proper chain of custody procedures were followed by the samplers. All information appeared legible and complete. The data pack contained the results of volatile analyses.

The overall performances of the analyses are acceptable. Spectrum Analytical, Inc. did fulfill the requirements of the analytical methods.

The were no data qualified in this data pack. The data are acceptable and are usable with no validation issues. Detailed information on data quality is included in the data validation review.



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QA/QC Review of TO-15 Volatiles Data for Spectrum Analytical, Inc. SDG 27062 Soil Gas (SUMA Can) Samples Collected April 25, 2005

Prepared by: Donald Anné May 3, 2005

Holding Times: Samples were analyzed within USEPA method TO-15 holding times.

GC/MS Tuning and Mass Calibration: The BFB tuning criteria were within control limits.

Initial Calibration: The average RRFs for target compounds were above the allowable minimum (0.050) and the %RSDs were below the allowable maximum (30%), as required.

Continuing Calibration: The RRF50s for target compounds were above the allowable minimum (0.050) and the %Ds were below the allowable maximum (30%), as required.

Blanks: The analyses of method and trip blanks reported target compounds as not detected.

Internal Standard Area Summary: The internal standard areas and retention times were within control limits.

<u>Surrogate Recovery</u>: The surrogate recoveries were within control limits for environmental samples.

Duplicate Sample: The relative percent differences for applicable target compounds were below the allowable maximum (30%), as required.

Laboratory Control Sample: The percent recoveries for target compounds were within QC limits (70-130%) for LCS sample 5041493-BS1.

Compound ID: Checked compounds were within GC quantitation limits. The mass spectra for detected compounds contained the primary and secondary ions, as outlined in the method.

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Data Usability Summary Report for STL Connecticut, Job No. 209159 Soil Samples Collected March 30, 2005

Prepared by: Donald Anné May 3, 2005

The data packages contain the documentation required by NYSDEC ASP. The proper chain of custody procedures were followed by the samplers. All information appeared legible and complete. The data packs contained the results of volatile, semi-volatile, PCB, pesticide, herbicide, metal and cyanide analyses. This DUSR and the associated QA/QC reviews applies only to the following samples in this data pack:

BLDG4-H(4)-033005

BLDG4-I(10)-033005

BLDG4-J(8)-033005

The overall performances of the analyses are acceptable. STL Connecticut did fulfill the requirements of the analytical methods.

The majority of the data are acceptable with some issues that are identified in the accompanying data validation reviews. The following data were flagged:

- Positive results for acetone and methylene chloride were flagged as "not detected" (U) in all three samples because the sample results were not significantly greater than the concentrations detected in the associated method blanks.
- The volatile results for sample BLDG4-J(8)-033005 were flagged as estimates (J) because the sample was analyzed beyond NYSDEC holding times.
- The semi-volatile results for sample BLDG4-J(8)-033005 were flagged as estimates (J) because the sample was extracted beyond NYSDEC holding times.
- The semi-volatile results for 2,4-dinitrophenol were flagged as "estimated" (J) in all three samples because the percent recoveries were below QC limits in LCS/LCSD samples 46700-002 and 47171-002.
- The pesticide results for sample BLDG4-J(8)-033005 were flagged as estimates (J) because the sample was extracted beyond NYSDEC holding times.

- The results for heptachlor epoxide, alpha-chlordane, and endosulfan sulfate were flagged as "unusable" (R) in sample BLDG4-J(8)-033005 because the %Ds for dual column quantitation were greater than 100%.
- The PCB results for sample BLDB4-J(8)-033005 were flagged as estimates (J) because the sample was extracted beyond NYSDEC holding times.
- The herbicide results for sample BLDB4-J(8)-033005 were flagged as estimates (J) because the sample was extracted beyond NYSDEC holding times.
- The cyanide result for sample BLDB4-J(8)-033005 was flagged as estimated (J) because the sample was analyzed beyond NYSDEC holding times.
- Results reported as "not detected" for antimony were flagged as estimates (J) in all three samples because the percent recoveries for antimony were below control limits (75-125%), but were greater than 10% in soil spike samples 209171-3 and 209247-1.
- The potassium results were flagged as "estimated" (J) in samples BLDG4-H(4)-033005 and BLDG4-I(10)-033005 because the percent recovery for potassium was below control limits (75-125%), but was greater than 10% in spike sample 209171-3.
- The sodium result was flagged as estimated (J) in sample BLDG4-J(8)-033005 because the percent recovery for sodium was above control limits (75-125%) in soil spike sample 209247-1.
- Positive results for calcium, lead, and manganese were flagged as "estimated" (J) in sample BLDG4-J(8)-033005 because the relative percent differences for these metals were above the allowable maximum (35%) in duplicate sample 209247-1.
- Results reported as "not detected" for thallium were flagged as "estimated" (J) in all three samples because the percent recoveries for thallium were below control limits (80-120%) for the ICP Interference Check Samples.

All data that are not flagged rejected (R) are considered usable, with estimated (J) data associated with a higher level of quantitative uncertainty. Detailed information on data quality is included in the data validation reviews.



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QA/QC Review of Volatiles Data for STL Connecticut, Job No. 209159 Soil Samples Collected March 30, 2005

Prepared by: Donald Anné May 3, 2005

<u>Holding Times</u>: Sample BLDG4-J(8)-033005 was analyzed outside NYSDEC holding times. Results for sample BLDG4-J(8)-033005 should be considered estimates.

GC/MS Tuning and Mass Calibration: The BFB tuning criteria were within control limits.

Initial Calibration: The SPCCs and CCCs were within control limits for method 8260B.

The average RRFs for target compounds were above the allowable minimum (0.050), as required. The %RSD for methylene chloride (31.8%) was above the allowable maximum (30%) for MSN on 03-21-05. The %RSD for chloromethane (93.0%), trichlorofluoromethane (55.3%), acetone (63.6%), and methylene chloride (63.3%) were above the allowable maximum (30%) for MSN on 04-06-05. Positive results for these compounds should be considered estimates (J) in associated samples.

Continuing Calibration: The SPCCs and CCCs were within control limits for method 8260B.

The RRF50s for target compounds were above the allowable minimum (0.050), as required. The %D for chloroethane (38.3%) was above the allowable maximum (25%) on 04-12-05 (N8876). Positive results for chloroethane should be considered estimates (J) in associated samples.

Blanks: Method blank MB 46845-001 contained traces of acetone (4.943 ug/kg) and methylene chloride (5.982 ug/kg). Method blank MB 47147-001 contained traces of acetone (5.947 ug/kg) and methylene chloride (6.954 ug/kg). Results for acetone and methylene chloride that are less than ten times the highest method blank level should be reported as not detected (U) in associated samples.

<u>Internal Standard Area Summary</u>: The internal standard areas and retention times were within control limits.

<u>Surrogate Recovery</u>: The surrogate recoveries were within control limits for environmental samples.

Matrix Spike/Matrix Spike Duplicate: MS/MSD data were not provided in this data pack. No action is taken on MS/MSD data alone to qualify or reject an entire set of samples.

<u>Laboratory Control Sample</u>: The percent recovery for chloroethane was above QC limits for LCS/LCSD sample 46845-002. Positive results for chloroethane should be considered estimates (J) in associated samples.

The percent recovery for chloroethane was below QC limits for LCS/LCSD sample 47147-002. All results for chloroethane should be considered estimates (J) in associated samples.

<u>Compound ID</u>: Checked compounds were within GC quantitation limits. The mass spectra for detected compounds contained the primary and secondary ions, as outlined in the method.



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QA/QC Review of Semi-Volatiles Data for STL Connecticut, Job No. 209159 Soil Samples Collected March 30, 2005

Prepared by: Donald Anné May 3, 2005

<u>Holding Times</u>: Sample BLDG4-J(8)-033005 was extracted outside NYSDEC holding times. Results for sample BLDG4-J(8)-033005 should be considered estimates (J).

GC/MS Tuning and Mass Calibration: The DFTPP tuning criteria were within control limits.

Initial Calibration: The SPCCs and CCCs were within control limits for method 8270C.

The average RRFs for target compounds were above the allowable minimum (0.050), as required. The %RSD for benzoic acid (32.1%) was above the allowable maximum (30%) for MSP on 04-07-05. Positive results for benzoic acid should be considered estimates (J) in associated samples.

Continuing Calibration: The SPCCs and CCCs were within control limits for method 8270C.

The RRF40s for target compounds were above the allowable minimum (0.050), as required. The %D for 2,4-dinitrophenol (26.9%) was above the allowable maximum (25%) on 04-03-05 (U7525). Positive results for 2,4-dinitrophenol should be considered estimates (J) in associated samples.

<u>Blanks</u>: Method blank 47171-001 contained a trace of bis(2-ethylhexyl)phthalate (52.76 ug/kg). Results for bis(2-ethylhexyl)phthalate that are less than ten times the method blank level should be reported as not detected in associated samples.

<u>Internal Standard Area Summary</u>: The internal standard areas and retention times were within control limits.

Surrogate Recovery: The surrogate recoveries were within control limits for environmental samples.

- Matrix Spike/Matrix Spike Duplicate: MS/MSD data were not provided in this data pack. No action is taken on MS/MSD data alone to qualify or reject an entire set of samples.
- <u>Laboratory Control Sample</u>: The percent recoveries for 2,4-dinitrophenol were below QC limits for LCS/LCSD sample 46700-002. All results for 2,4-dinitrophenol should be considered estimates (J) in associated samples.

The percent recoveries for 2,4-dinitrophenol and pentachlorophenol were below QC limits for LCS/LCSD sample 47171-002. All results for 2,4-dinitrophenol and pentachlorophenol should be considered estimates (J) in associated samples.

The percent recoveries for 4-methylphenol, indeno(1,2,3-cd)pyrene, and dibenzo(a,h)anthracene were above QC limits for LCS/LCSD sample 47171-002. Positive results for theses three compounds should be considered estimates (J) in associated samples.

<u>Compound ID</u>: Checked compounds were within GC quantitation limits. The mass spectra for detected compounds contained the primary and secondary ions, as outlined in the method.



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QA/QC Review of Pesticide Data for STL Connecticut, STL Job No. 209159 Soil Samples Collected March 30, 2005

Prepared by: Donald Anné May 3, 2005

- <u>Holding Times</u>: Sample BLDG4-J(8)-033005 was extracted outside NYSDEC holding times. Results for sample BLDG4-J(8)-033005 should be considered estimates (J).
- Blanks: The analyses of method and instrument blanks reported target pesticides as not detected.
- <u>Surrogate Recovery</u>: The surrogate recoveries were within advisory limits on both columns for validated samples.
- Matrix Spike/Matrix Spike Duplicate: The relative percent differences were below the allowable maximums and the percent recoveries were within QC limits for MS/MSD sample BLDG4-H(4)-033005.
- <u>Laboratory Control Sample</u>: The percent recoveries for target pesticides were within QC limits for LCS samples 46701-002 and 47204-002.
- <u>Initial Calibration</u>: The %RSDs for target pesticides were below the allowable maximum (20%) for primary and confirmation columns, as required.
- <u>Continuing Calibration</u>: This data were not used to qualify samples because the continuing calibrations were performed at the end of the analyses.
- Endrin and DDT Breakdown Evaluation: The percent breakdowns were below the allowable maximum (20%) for 4,4'-DDT and endrin, as required.
- <u>Pesticide Analytical Sequence</u>: The retention times for TCX and DCB were within control limits for both columns.

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<u>Pesticide Identification Summary for Single Component Analytes</u>: Checked results were within GC quantitation limits.

The %Ds for dual column quantitation of heptachlor epoxide (113.4%), alpha-chlordane (131.1%), and endosulfan sulfate (191.9%) in sample BLDG4-J(8)-033005 were greater than the allowable maximum (25%). The results for these compounds with %Ds greater than 100% should be considered unusable (R). The flagged results may be biased low.

<u>Pesticide Identification Summary for Multicomponent Analytes</u>: There were no detectable concentrations of target multi-component pesticides reported in the three samples reviewed in this data pack.



QA/QC Review of PCB Aroclor Data for STL Connecticut, STL Job No. 209159 Soil Samples Collected March 30, 2005

Data Validation

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Prepared by: Donald Anné May 3, 2005

<u>Holding Times</u>: Sample BLDG4-J(8)-033005 was extracted outside the NYSDEC holding times. Results for sample BLDG4-J(8)-033005 should be considered estimates (J).

Blanks: The analyses of the instrument and method blanks reported target aroclors as not detected.

<u>Surrogate Recovery</u>: The surrogate recoveries were within advisory limits on both columns for environmental samples.

- Matrix Spike/Matrix Spike Duplicate: The relative percent difference (1%) for aroclo-1260 was below the allowable maximum (50%), and the percent recoveries (102% and 102%) were within QC limits for MS/MSD sample BLDG4-H(4)-033005.
- <u>Laboratory Control Sample</u>: The percent recoveries for aroclor-1260 and aroclor-1016 were within QC limits for LCS samples 46701-003 and 47204-003.
- <u>Initial Calibration</u>: The %RSDs for target aroclors were below the allowable maximum (20%) for primary and confirmation columns, as required.
- <u>Continuing Calibration</u>: The average %Ds for target aroclors were below the allowable maximum (15%) for both columns, as required.
- <u>Pesticide Analytical Sequence</u>: The retention times for TCX and DCB were within control limits for both columns.
- <u>Pesticide Identification Summary for Single Component Analytes</u>: Checked surrogates were within GC quantitation limits. The analyses of the three samples reviewed in this data pack reported target aroclors as not detected.

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QA/QC Review of Herbicide Data for STL Connecticut, STL Job No. 209159 (STL Buffalo Job# A05-2962, A05-3506) Soil Samples Collected March 30, 2005

> Prepared by: Donald Anné May 3, 2005

<u>Holding Times</u>: Sample BLDG4-J(8)-033005 was extracted outside the NYSDEC holding times. Results for sample BLDG4-J(8)-033005 should be considered estimated (J).

Blanks: The analyses of method blanks reported 2,4-D and 2,4,5-TP as not detected.

<u>Surrogate Recovery</u>: The surrogate recoveries were within QC limits for environmental samples.

Matrix Spike/Matrix Spike Duplicate: The relative percent differences (RPDs) were below the allowable maximum and the percent recoveries (%Rs) were within QC limits for soil MS/MSD sample A5B0512903. The %Rs were within QC limits, but one of two RPDs was above the allowable maximum for soil MS/MSD sample A5B0450003. No action is taken on MS/MSD data alone to qualify or reject an entire set of samples.

<u>Initial Calibration</u>: The %RSDs for 2,4-D and 2,4,5-TP were below the allowable maximum (20%) for primary and confirmation columns, as required.

Continuing Calibration: The %Ds for 2,4-D and 2,4,5-TP were below the allowable maximum (15%) for primary and confirmation columns, as required.

<u>Herbicide Identification Summary</u>: Checked surrogates were within GC quantitation limits. There were no detectable concentrations of 2,4-D and 2,4,5-TP reported in the three samples reviewed in this data pack.

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QA/QC Review of Metals and Cyanide Data for STL Connecticut, Job No. 209159 Soil Samples Collected March 30, 2005

Data Validation

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Prepared by: Donald Anné May 3, 2005

- <u>Holding Times</u>: Sample BLDG4-J(8)-033005 was analyzed beyond the NYSDEC holding time for cyanide. The result for cyanide in sample BLDG4-J(8)-033005 should be considered estimated (J).
- <u>Initial and Continuing Calibration Verification</u>: The percent recoveries for target metals and cyanide were within control limits (80-120% for Hg, 90-110% for all other metals, 85-115% for cyanide).
- <u>CRDL Standard</u>: The percent recoveries for target metals were within laboratory QC limits (50-150%) for CRDL standards.
- <u>Blanks</u>: The analyses for initial and continuing calibration, and method blanks reported target metals and cyanide as below the CRDLs, as required.
- <u>ICP Interference Check Sample</u>: The percent recoveries for thallium were below control limits (80-120%). Results for thallium should be considered estimates (J).
- Spike Sample Recovery: The percent recoveries for antimony (53%) and potassium (73%) were below control limits (75-125%) for soil spike sample 209171-3. All results for antimony and potassium should be considered estimates (J) in associated samples.

The percent recoveries for antimony (31%) and thallium (72%) were below control limits (75-125%) for soil spike sample 209247-1. All results for antimony and thallium should be considered estimates (J) in associated samples. The percent recovery for sodium (151%) was above control limits (75-125%) for soil spike sample 209247-1. Positive results for sodium should be considered estimates (J) in associated samples.

<u>Duplicates</u>: The relative percent differences for applicable target metals were below the allowable maximum (35%) for soil duplicate sample 209171-3, as required.

The relative percent differences for calcium (93.8%), lead (53.3%), and manganese (50.3%) were above the allowable maximum (35%) for soil duplicate sample 209247-1. Positive results for calcium, lead, and manganese should be considered estimates (J) in associated samples.

<u>Laboratory Control Sample</u>: The percent recoveries for target metals and cyanide were within QC limits for the soil LCSs.

<u>ICP Serial Dilution</u>: The %Ds for applicable target metals were below the allowable maximum (10%) for serial dilution sample BLDG4-I(10)-033005, as required.

<u>Instrument Detection Limits</u>: The IDLs were at or below CRDLs, as required.

<u>Percent Solids</u>: The percent solids for soil samples were greater than 50%, as required.



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Sampling Plans

Data Usability Summary Report for STL Connecticut, Job No. 209172 Soil Samples Collected March 30 and 31, 2005

Prepared by: Donald Anné May 3, 2005

The data packages contain the documentation required by NYSDEC ASP. The proper chain of custody procedures were followed by the samplers. All information appeared legible and complete. The data packs contained the results of volatile, semi-volatile, PCB, pesticide, herbicide, metal and cyanide analyses. This DUSR and the associated QA/QC reviews applies only to the following samples in this data pack:

BLDG4-B(4)-033005

BLDG4-D(7)-033005

BLDG4-E(6)-033005

BLDG4-G(8)-033005

BLDG4-F(7)-033105

The overall performances of the analyses are acceptable. STL Connecticut did fulfill the requirements of the analytical methods.

The data are acceptable with some issues that are identified in the accompanying data validation reviews. The following data were flagged:

- Positive results for methylene chloride were flagged as "not detected" (U) in all five samples because the sample results were not significantly greater than the concentration detected in the associated method blank.
- The volatile results for chloroethane were flagged as "estimated" (J) in samples BLDB4-D(7)-033005 and BLDG4-F(7)-033105 because the percent recoveries were below QC limits in the LCS/LCSD sample 46900-002.
- The semi-volatile results for 2,4-dinitrophenol were flagged as "estimated" (J) in all five samples because the percent recoveries were below QC limits in LCS/LCSD samples 46724-002 and 46959-002.
- The result for 4,4'-DDE was flagged as "estimated" (J) in sample BLDG4-G(8)-033005 because the %D for dual column quantitation was greater than 25%, but was less than 70%.

- The result for aroclor-1254 was flagged as "estimated" (J) in sample BLDG4-G(8)-033005 because the %D for dual column quantitation was greater than 25%, but was less than 70%.
- Results reported as "not detected" for antimony were flagged as estimates (J) in all five samples because the percent recoveries for antimony were below control limits (75-125%), but were greater than 10% in soil spike samples 209171-3 and 209221-1.
- The potassium results were flagged as "estimated" (J) in samples BLDB4-B(4)-033005, BLDG4-E(6)-033005, and BLDG4-G(8)-033005 because the percent recovery for potassium was below control limits (75-125%), but was greater than 10% in spike sample 209171-3.
- Positive results for the following metals were flagged as estimates (J) in samples BLDG4-D(7)-033005 and BLDG4-F(7)-033105 because the percent recoveries for these metals were above control limits (75-125%) in soil spike sample 209221-1.

chromium copper lead sodium vanadium zinc

- Results reported as "not detected" for thallium were flagged as "estimated" (J) in all five samples because the percent recoveries for thallium were below control limits (80-120%) for the ICP Interference Check Samples.
- Positive results for chromium were flagged as "estimated" (J) in samples BLDG4-B(4)-033005, BLDG4-E(6)-033005, and BLDG4-G(8)-033005 because the percent difference for serial dilution sample 209172-17 was above the allowable maximum (10%).

All data are considered usable, with estimated (J) data associated with a higher level of quantitative uncertainty. Detailed information on data quality is included in the data validation reviews.



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Sampling Plans

QA/QC Review of Volatiles Data for STL Connecticut, Job No. 209172 Soil Samples Collected March 30 and 31, 2005

Prepared by: Donald Anné May 2, 2005

Holding Times: Samples were analyzed within NYSDEC holding times.

GC/MS Tuning and Mass Calibration: The BFB tuning criteria were within control limits.

Initial Calibration: The SPCCs and CCCs were within control limits for method 8260B.

The wrage RRFs for target compounds were above the allowable minimum (0.050), as required. The %RSD for methylene chloride (31.8%) was above the allowable maximum (30%) for MSN on 03-21-05. The %RSD for chloromethane (93.0%), trichlorofluoromethane (55.3%), acetone (63.6%), and methylene chloride (63.3%) were above the allowable maximum (30%) for MSN on 04-06-05. Positive results for these compounds should be considered estimates (J) in associated samples.

Continuing Calibration: The SPCCs and CCCs were within control limits for method 8260B.

The RRF50s for target compounds were above the allowable minimum (0.050), as required. The %Ds for trichlorofluoromethane (35.2%) and 1,2-dichloroethane (25.9%) were above the allowable maximum (25%) on 04-04-05 (N8708). The %Ds for the following compounds were above the allowable maximum (25%) on 04-07-05 (N8792).

chloroethane (42.2%)

trichlorofluoromethane (57.7%)

methylene chloride (28.6%)

2-butanone (35.3%)

1,1,1-trichloroethane (28.3%)

carbon tetrachloride (29.5%)

2-hexanone (38.0%)

Positive results for these above compounds should be considered estimates (J) in associated samples.

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<u>Blanks</u>: Method blank MB 46784-001 contained a trace of methylene chloride (6.056 ug/kg). Method blank MB 46900-001 contained a trace of methylene chloride (4.957 ug/kg).

Results for methylene chloride that are less than ten times the method blank level should be reported as not detected (U) in associated samples.

<u>Internal Standard Area Summary</u>: The internal standard areas and retention times were within control limits.

<u>Surrogate Recovery</u>: The surrogate recoveries were within control limits for environmental samples.

Matrix Spike/Matrix Spike Duplicate: MS/MSD data were not provided in this data pack. No action is taken on MS/MSD data alone to qualify or reject an entire set of samples.

<u>Laboratory Control Sample</u>: The percent recoveries for target metals were within QC limits for LCS/LCSD sample 46784-002. The percent recovery for chloroethane was below QC limits for LCS/LCSD sample 46900-002. Results for chloroethane should be considered estimates (J) in associated samples.

<u>Compound ID</u>: Checked compounds were within GC quantitation limits. The mass spectra for detected compounds contained the primary and secondary ions, as outlined in the method.



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Sampling Plans

QA/QC Review of Semi-Volatiles Data for STL Connecticut, Job No. 209172 **Soil Samples** Collected March 30 and 31, 2005

Prepared by: Donald Anné May 2, 2005

Holding Times: Samples were extracted and analyzed within NYSDEC holding times.

GC/MS Tuning and Mass Calibration: The DFTPP tuning criteria were within control limits.

Initial Calibration: The SPCCs and CCCs were within control limits for method 8270C.

The average RRFs for target compounds were above the allowable minimum (0.050) and the %RSDs were below the allowable maximum (30%), as required.

Continuing Calibration: The SPCCs and CCCs were within control limits for method 8270C.

The RRF40s for target compounds were above the allowable minimum (0.050), as required. The %Ds for benzoic acid (28.3%) and 2,4-dinitrophenol (39.3%) were above the allowable maximum (25%) on 04-04-05 (R7901). Positive results for these two compounds should be considered estimates (J) in associated samples.

Blanks: The analyses of method blanks reported target compounds as not detected.

Internal Standard Area Summary: The internal standard areas and retention times were within control limits.

Surrogate Recovery: One of three acid extractable surrogate recoveries for sample BLDG4-B(4)-033005 was below control limits, but was greater than 10%. No action is taken on one surrogate per fraction outside control limits, provided no recovery is less than 10%.

Matrix Spike/Matrix Spike Duplicate: MS/MSD data were not provided in this data pack. No action is taken on MS/MSD data alone to qualify or reject an entire set of samples.

<u>Laboratory Control Sample</u>: The percent recoveries for 2,4-dinitrophenol were below QC limits for LCS/LCSD samples 46724-002 and 46959-002. Results for 2,4-dinitrophenol should be considered estimates (J) in associated samples.

The percent recoveries for the following compounds were above QC limits for the LCS/LCSD sample 46724-002. Positive results should be considered estimates (J) in associated samples:

bis(2-chloroethy)lether n-nitroso-di-n-propylamine 4-methylphenol

hexachloroethane

1,4-dichlorobenzene

<u>Compound ID</u>: Checked compounds were within GC quantitation limits. The mass spectra for detected compounds contained the primary and secondary ions, as outlined in the method.



QA/QC Review of Pesticide Data for STL Connecticut, STL Job No. 209172 Soil Samples Collected March 30 and 31, 2005

Data Validation

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Prepared by: Donald Anné May 2, 2005

Holding Times: Samples were extracted and analyzed within NYSDEC holding times.

Blanks: The analyses of method and instrument blanks reported target pesticides as not detected.

<u>Surrogate Recovery</u>: The surrogate recoveries were within advisory limits on both columns for validated samples.

Matrix Spike/Matrix Spike Duplicate: MS/MSD data were not provided in this data pack. No action is taken on MS/MSD data alone to qualify or reject an entire set of samples.

<u>Laboratory Control Sample</u>: The percent recoveries for target pesticides were within QC limits for LCS samples 46909-002 and 46726-002.

<u>Initial Calibration</u>: The %RSDs for target pesticides were below the allowable maximum (20%) for primary and confirmation columns, as required.

<u>Continuing Calibration</u>: This data were not used to qualify samples because the continuing calibrations were performed at the end of the analyses.

Endrin and DDT Breakdown Evaluation: The percent breakdowns were below the allowable maximum (20%) for 4,4'-DDT and endrin (20%), as required.

<u>Pesticide Analytical Sequence</u>: The retention times for TCX and DCB were within control limits for both columns.

Pesticide Identification Summary for Single Component Analytes: Checked results were within GC quantitation limits. The %D for dual column quantitation of 4,4'-DDE (66%) in sample BLDG4-G(8)-033005 were greater than the allowable maximum (25%).

The result for 4,4'-DDE with the %D greater than 25% but less than 70% should be considered estimated (J). The flagged results may be biased low.

<u>Pesticide Identification Summary for Multicomponent Analytes</u>: There were no detectable concentrations of target multi-component pesticides reported in the five samples reviewed in this data pack.



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QA/QC Review of Herbicide Data for STL Connecticut, STL Job No. 209172 (STL Buffalo Job# A05-3010, A05-3134) Soil Samples Collected March 30 and 31, 2005

> Prepared by: Donald Anné May 2, 2005

Holding Times: Samples were extracted and analyzed within NYSDEC holding times.

Blanks: The analyses of method blanks reported 2,4-D and 2,4,5-TP as not detected.

<u>Surrogate Recovery</u>: The surrogate recoveries were within QC limits for environmental samples.

Matrix Spike/Matrix Spike Duplicate: The relative percent differences were below the allowable maximum and the percent recoveries were within QC limits for soil MS/MSD samples A5B0455003 and A5B0492203.

<u>Initial Calibration</u>: The %RSDs for 2,4-D and 2,4,5-TP were below the allowable maximum (20%) for primary and confirmation columns, as required.

Continuing Calibration: The %Ds for 2,4-D and 2,4,5-TP were below the allowable maximum (15%) for primary and confirmation columns, as required.

<u>Herbicide Identification Summary</u>: Checked surrogates were within GC quantitation limits. There were no detectable concentrations of 2,4-D and 2,4,5-TP reported in the five samples reviewed in this data pack.

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QA/QC Review of Metals and Cyanide Data for STL Connecticut, Job No. 209172 Soil Samples Collected March 30 and 31, 2005

Data Validation

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Sampling Plans

Prepared by: Donald Anné May 2, 2005

Holding Times: Samples were analyzed within the NYSDEC holding times.

<u>Initial and Continuing Calibration Verification</u>: The percent recoveries for target metals and cyanide were within control limits (80-120% for Hg, 90-110% for all other metals, 85-115% for cyanide).

<u>CRDL Standard</u>: The percent recoveries for target metals were within laboratory QC limits (50-150%) for CRDL standards.

<u>Blanks</u>: The analyses for initial and continuing calibration, and method blanks reported target metals and cyanide as below the CRDLs, as required.

ICP Interference Check Sample: The percent recoveries for thallium were below control limits (80-120%). Results for thallium should be considered estimates (J).

<u>Spike Sample Recovery</u>: The percent recoveries for antimony (53%) and potassium (73%) were below control limits (75-125%) for soil spike sample 209171-3. All results for antimony and potassium should be considered estimates (J) in associated samples.

The percent recovery for antimony (26%) was below control limits (75-125%) for soil spike sample 209221-1. All results for antimony should be considered estimates (J) in associated samples. The percent recoveries for the following metals were above control limits (75-125%) for soil spike sample 209221-1. Positive results for these metals should be considered estimates (J) in associated samples.

chromium (221%)

copper (201%)

lead (200%)

sodium (162%)

vanadium (162%)

zinc (150%)

<u>Duplicates</u>: The relative percent differences for applicable target metals were below the allowable maximum (35%) for soil duplicate samples 209171-3 and 209221-1, as required.

<u>Laboratory Control Sample</u>: The percent recoveries for target metals and cyanide were within QC limits for the soil LCSs.

<u>ICP Serial Dilution</u>: The %D for chromium (13%) was above the allowable maximum (10%) for serial dilution sample 209172-17. Positive results for chromium that were reported above the CRDL should be considered estimates (J) in associated samples.

<u>Instrument Detection Limits</u>: The IDLs were at or below CRDLs, as required.

Percent Solids: The percent solids for soil samples were greater than 50%, as required.



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Sampling Plans

Data Usability Summary Report for STL Connecticut, Job No. 209184 Soil Samples Collected March 31 and April 1, 2205

Prepared by: Donald Anné May 2, 2005

The data packages contain the documentation required by NYSDEC ASP. The proper chain of custody procedures were followed by the samplers. All information appeared legible and complete. The data packs contained the results of volatile, semi-volatile, PCB, pesticide, herbicide, metal and cyanide analyses. This DUSR and associated QA/QC reviews applies only to the following samples in this data pack:

BLDG4-C(5)-033105

BLDG4-A(5)-033105

GAR-E2(5)-040105

GAR-E3(5)-040105

The overall performances of the analyses are acceptable. STL Connecticut did fulfill the requirements of the analytical methods.

The majority of the data are acceptable with some issues that are identified in the accompanying data validation reviews. The following data were flagged:

- Positive results for methylene chloride were flagged as "not detected" (U) in all four samples because the sample results were not significantly greater than the concentration detected in the associated method blank.
- The semi-volatile results for 2,4-dinitrophenol were flagged as "estimated" (J) in all four samples because the percent recoveries were below QC limits in LCS/LCSD samples 46750-002 and 46750-003.
- Results for 4,4'-DDE and endosulfan II were flagged as "estimated, presumptive evidence" in sample GAR-E2(5)-040105 (JN) because the %Ds for dual column quantitation were greater than 70%, but were less than 100%.
- The result for endosulfan sulfate was flagged as unusable (R) in sample GAR-E2(5)-040105 because the %D for dual column quantitation was greater than 100%.

- Results reported as "not detected" for antimony were flagged as estimates (J) in all four samples because the percent recovery for antimony was below control limits (75-125%), but was greater than 10% in soil spike sample 209185-12.
- The arsenic result was flagged as "estimated" (J) in sample GAR-E3(5)-040105 because the percent recovery for arsenic in spike sample 209185-12 was above control limits (75-125%).
- Results reported as "not detected" for thallium were flagged as "estimated" (J) in all four samples because the percent recoveries for thallium were below control limits (80-120%) for the ICP Interference Check Samples.
- Results for lead were flagged as "estimated" (J) in all four samples because the relative percent difference for duplicate sample 209185-12 was above the allowable maximum (35%).

All data that are not flagged rejected (R) are considered usable, with estimated (J) data associated with a higher level of quantitative uncertainty. Detailed information on data quality is included in the data validation reviews.



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Sampling Plans

QA/QC Review of Volatiles Data for STL Connecticut, Job No. 209184 Soil Samples Collected March 31 and April 1, 2005

Prepared by: Donald Anné April 29, 2005

Holding Times: Samples were analyzed within NYSDEC holding times.

GC/MS Tuning and Mass Calibration: The BFB tuning criteria were within control limits.

Initial Calibration: The SPCCs and CCCs were within control limits for method 8260B.

The average RRFs for target compounds were above the allowable minimum (0.050), as required. The %RSD for methylene chloride (31.8%) was above the allowable maximum (30%) for MSN on 03-21-05. Positive results for methylene chloride should be considered estimates (J) in associated samples.

Continuing Calibration: The SPCCs and CCCs were within control limits for method 8260B.

The RRF50s for target compounds were above the allowable minimum (0.050), as required. The %Ds for trichlorofluoromethane (35.2%) and 1,2-dichloroethane (25.9%) were above the allowable maximum (25%) on 04-04-05 (N8708). Positive results for these two compounds should be considered estimates (J) in associated samples.

Blanks: Method blank MB 46784-001 contained a trace of methylene chloride (6.056 ug/kg). Results for methylene chloride that are less than ten times the method blank level should be reported as not detected (U) in associated samples.

<u>Internal Standard Area Summary</u>: The internal standard areas and retention times were within control limits.

<u>Surrogate Recovery</u>: The surrogate recoveries were within control limits for environmental samples.

Matrix Spike/Matrix Spike Duplicate: MS/MSD data were not provided in this data pack. No action is taken on MS/MSD data alone to qualify or reject an entire set of samples.

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<u>Laboratory Control Sample</u>: The percent recoveries for target metals were within QC limits for LCS sample 46784-002.

<u>Compound ID</u>: Checked compounds were within GC quantitation limits. The mass spectra for detected compounds contained the primary and secondary ions, as outlined in the method.



Environmental Chemistry

Lab and Field Audits

Sampling Plans

QA/QC Review of Semi-Volatiles Data for STL Connecticut, Job No. 209184 Soil Samples Collected March 31 and April 1, 2005

Prepared by: Donald Anné April 29, 2005

<u>Holding Times</u>: Samples were extracted and analyzed within NYSDEC holding times.

GC/MS Tuning and Mass Calibration: The DFTPP tuning criteria were within control limits.

Initial Calibration: The SPCCs and CCCs were within control limits for method 8270C.

The average RRFs for target compounds were above the allowable minimum (0.050) and the %RSDs were below the allowable maximum (30%), as required.

Continuing Calibration: The SPCCs and CCCs were within control limits for method 8270C.

The RRF40s for target compounds were above the allowable minimum (0.050) and the %Ds were below the allowable maximum (25%), as required.

Blanks: The analyses of method blanks reported target compounds as not detected.

<u>Internal Standard Area Summary</u>: The internal standard areas and retention times were within control limits.

Surrogate Recovery: The surrogate recoveries were within control limits for environmental samples.

Matrix Spike/Matrix Spike Duplicate: MS/MSD data were not provided in this data pack. No action is taken on MS/MSD data alone to qualify or reject an entire set of samples.

<u>Laboratory Control Sample</u>: The percent recovery for benzyl alcohol was above QC limits for LCS sample 446750-3. The percent recoveries for 2,4-dinitrophenol were below QC limits for LCS/LCSD samples 46750-002 and 46750-003. Positive results for benzyl alcohol and all results for 2,4-dinitrophenol should be considered estimates (J).

<u>Compound ID</u>: Checked compounds were within GC quantitation limits. The mass spectra for detected compounds contained the primary and secondary ions, as outlined in the method.

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QA/QC Review of Pesticide Data for STL Connecticut, STL Job No. 209184 Soil Samples Collected March 31 ans April 1, 2005

Data Validation

Environmental Chemistry

Lab and Field Audits

Sampling Plans

Prepared by: Donald Anné April 29, 2005

Holding Times: Samples were extracted and analyzed within NYSDEC holding times.

Blanks: The analyses of method and instrument blanks reported target pesticides as not detected.

<u>Surrogate Recovery</u>: The surrogate recoveries were within advisory limits on both columns for validated samples.

Matrix Spike/Matrix Spike Duplicate: MS/MSD data were not provided in this data pack. No action is taken on MS/MSD data alone to qualify or reject an entire set of samples.

<u>Laboratory Control Sample</u>: The percent recoveries for target pesticides were within QC limits for LCS samples 46909-002 and 47204-002.

<u>Initial Calibration</u>: The %RSDs for target pesticides were below the allowable maximum (20%) for primary and confirmation columns, as required.

<u>Continuing Calibration</u>: This data were not used to qualify samples because the continuing calibrations were performed at the end of the analyses.

Endrin and DDT Breakdown Evaluation: The percent breakdowns were below the allowable maximum (20%) for 4,4'-DDT and endrin (20%), as required.

<u>Pesticide Analytical Sequence</u>: The retention times for TCX and DCB were within control limits for both columns.

Pesticide Identification Summary for Single Component Analytes: Checked results were within GC quantitation limits. The %Ds for dual column quantitation for 4,4'-DDE (74.1%), endosulfan II (73.8%), and endosulfan sulfate (177%) in sample GAR-E2(5)-040105 were greater than the allowable maximum (25%).

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Results for the above compounds with %Ds greater than 70% but less than 100% should be considered estimates and presumptive evidence of its presence (JN). Results with %Ds greater than 100% should be considered unusable (R). Flagged results may be biased low.

<u>Pesticide Identification Summary for Multicomponent Analytes</u>: There were no detectable concentrations of target multi-component pesticides reported in the four samples reviewed in this data pack.



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Sampling Plans

QA/QC Review of PCB Aroclor Data for STL Connecticut, STL Job No. 209184 Soil Samples Collected March 31 and April 1, 2005

Prepared by: Donald Anné May 2, 2005

Holding Times: Samples were extracted and analyzed within NYSDEC holding times.

Blanks: The analyses of the instrument and method blanks reported target aroclors as not detected.

<u>Surrogate Recovery</u>: The surrogate recoveries were within advisory limits on both columns for environmental samples.

Matrix Spike/Matrix Spike Duplicate: MS/MSD data were not provided in this data pack. No action is taken on MS/MSD data alone to qualify or reject an entire set of samples.

<u>Laboratory Control Sample</u>: The percent recoveries for aroclor-1260 and aroclor-1016 were within QC limits for LCS samples 46909-003 and 47204-003.

<u>Initial Calibration</u>: The %RSDs for target aroclors were below the allowable maximum (20%) for primary and confirmation columns, as required.

<u>Continuing Calibration</u>: The average %Ds for target aroclors were below the allowable maximum (15%) for both columns, as required.

<u>Pesticide Analytical Sequence</u>: The retention times for TCX and DCB were within control limits for both columns.

<u>Pesticide Identification Summary for Single Component Analytes</u>: Checked surrogates were within GC quantitation limits. The analyses of the four samples reviewed in this data pack reported target aroclors as not detected.

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Environmental Chemistry

Lab and Field Audits

Sampling Plans

QA/QC Review of Herbicide Data for STL Connecticut, STL Job No. 209184 (STL Buffalo Job# A05-3132) Soil Samples Collected March 31 and April 1, 2005

Prepared by: Donald Anné May 2, 2005

Holding Times: Samples were extracted and analyzed within NYSDEC holding times.

Blanks: The analyses of method blanks reported 2,4-D and 2,4,5-TP as not detected.

<u>Surrogate Recovery</u>: The surrogate recoveries were within QC limits for environmental samples.

Matrix Spike/Matrix Spike Duplicate: The relative percent differences were below the allowable maximum and the percent recoveries were within QC limits for soil MS/MSD samples A5B0471803 and A5B0521903.

<u>Initial Calibration</u>: The %RSDs for 2,4-D and 2,4,5-TP were below the allowable maximum (20%) for primary and confirmation columns, as required.

Continuing Calibration: The %Ds for 2,4-D and 2,4,5-TP were below the allowable maximum (15%) for primary and confirmation columns, as required.

<u>Herbicide Identification Summary</u>: Checked surrogates were within GC quantitation limits. There were no detectable concentrations of 2,4-D and 2,4,5-TP reported in the four samples reviewed in this data pack.

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QA/QC Review of Metals and Cyanide Data for STL Connecticut, Job No. 209184 Soil Samples Collected March 31 and April 1, 2005

Data Validation

Environmental Chemistry

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Sampling Plans

Prepared by: Donald Anné April 29, 2005

Holding Times: Samples were analyzed within the NYSDEC holding times.

- <u>Initial and Continuing Calibration Verification</u>: The percent recoveries for target metals and cyanide were within control limits (80-120% for Hg, 90-110% for all other metals, 85-115% for cyanide).
- <u>CRDL Standard</u>: The percent recoveries for target metals were within laboratory QC limits (50-150%) for CRDL standards.
- <u>Blanks</u>: The analyses for initial and continuing calibration, and method blanks reported target metals and cyanide as below the CRDLs, as required.
- ICP Interference Check Sample: The percent recoveries for thallium were below control limits (80-120%). Results for thallium should be considered estimates (J).
- <u>Spike Sample Recovery</u>: The percent recoveries for antimony (39%) and arsenic (167%) were outside control limits (75-125%) for soil spike sample 209185-12. All results for antimony and positive results for arsenic should be considered estimates (J).
- <u>Duplicates</u>: The relative percent difference for lead (37.5%) was above the allowable maximum (35%) for soil duplicate sample 209185-12. Positive results for lead should be considered estimates (J).
- <u>Laboratory Control Sample</u>: The percent recoveries for target metals and cyanide were within QC limits for the soil LCSs.

ICP Serial Dilution: The %Ds for applicable target metals were below the allowable maximum (10%) for serial dilution sample GAR-E3(5)-040105, as required.

<u>Instrument Detection Limits</u>: The IDLs were at or below CRDLs, as required.

Percent Solids: The percent solids for soil samples were greater than 50%, as required.



Environmental Chemistry

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Sampling Plans

Data Usability Summary Report for STL Connecticut, Job No. 209185 Soil Samples Collected April 1, 2005

Prepared by: Donald Anné May 3, 2005

The data packages contain the documentation required by NYSDEC ASP. The proper chain of custody procedures were followed by the samplers. All information appeared legible and complete. The data packs contained the results of volatile, semi-volatile, PCB, pesticide, herbicide, metal and cyanide analyses. This DUSR and the associated QA/QC reviews applies only to the following samples in this data pack:

GAR-D1(7)-040105

GAR-D2(7)-040105

GAR-F1(5)-040105

GAR-F2(5)-040105

The overall performances of the analyses are acceptable. STL Connecticut did fulfill the requirements of the analytical methods.

The majority of the data are acceptable with some issues that are identified in the accompanying data validation reviews. The following data were flagged:

- Positive results for methylene chloride and acetone were flagged as "not detected" (U) in all four samples because the sample results were not significantly greater than the concentrations detected in the associated method blanks.
- The volatile results for samples GAR-D1(7)-040105 and GAR-D2(7)-040105 were flagged as estimates (J) because the samples were analyzed beyond the NYSDEC holding times.
- The semi-volatile results for samples GAR-D1(7)-040105 and GAR-D2(7)-040105 were flagged as estimates (J) because the samples were extracted beyond the NYSDEC holding times.
- The pesticide results for samples GAR-D1(7)-040105 and GAR-D2(7)-040105 were flagged as estimates (J) because the sample was extracted beyond the NYSDEC holding times.
- The result for 4,4'-DDT was flagged as "estimated" in sample GAR-F2(5)-040105 (J) because the %D for dual column quantitation was greater than 25%, but was less than 70%.

- The result for alpha-chlordane was flagged as unusable (R) in sample GAR-F2(5)-040105 because the %D for dual column quantitation was greater than 100%.
- The PCB results for samples GAR-D1(7)-040105 and GAR-D2(7)-040105 were flagged as estimates (J) because the samples were extracted beyond the NYSDEC holding times.
- The herbicide results for samples GAR-D1(7)-040105 and GAR-D2(7)-040105 were flagged as estimates (J) because the samples were extracted beyond the NYSDEC holding times.
- Results reported as "not detected" for antimony were flagged as estimates (J) in all four samples because the percent recoveries for antimony were below control limits (75-125%), but were greater than 10% in soil spike samples 209185-12 and 209247-1.
- The arsenic results were flagged as "estimated" (J) in samples GAR-F1(5)-040105 and GAR-F2(5)-040105 because the percent recovery for arsenic was above control limits (75-125%) in spike sample 209185-12.
- The sodium results were flagged as estimated (J) in samples GAR-D1(7)-040105 and GAR-D2(7)-040105 because the percent recovery for sodium was above control limits (75-125%) in soil spike sample 209247-1.
- Positive results for lead were flagged as "estimated" (J) in all four samples because the relative percent differences for lead in duplicate samples 209185-12 and 209247-1 were above the allowable maximum (35%).
- Positive results for calcium and manganese were flagged as "estimated" (J) in samples GAR-D1(7)-040105 and GAR-D2(7)-040105 because the relative percent differences for calcium and manganese in duplicate sample 209247-1 were above the allowable maximum (35%).
- Results reported as "not detected" for thallium were flagged as "estimated" (J) in all four samples
 because the percent recoveries for thallium were below control limits (80-120%) for the ICP
 Interference Check Samples.

All data that are not flagged rejected (R) are considered usable, with estimated (J) data associated with a higher level of quantitative uncertainty. Detailed information on data quality is included in the data validation reviews.



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QA/QC Review of Volatiles Data for STL Connecticut, Job No. 209185 Soil Samples Collected April 1, 2005

Prepared by: Donald Anné May 3, 2005

Holding Times: Samples GAR-D1(7)-040105 and GAR-D2(7)-040105 were analyzed outside NYSDEC holding times. Results for samples GAR-D1(7)-040105 and GAR-D2(7)-040105 should be considered estimates (J).

GC/MS Tuning and Mass Calibration: The BFB tuning criteria were within control limits.

Initial Calibration: The SPCCs and CCCs were within control limits for method 8260B.

The %RSD for methylene chloride (31.8%) was above the allowable minimum (0.050), as required. The %RSD for methylene chloride (31.8%) was above the allowable maximum (30%) for MSN on 03-21-05. The %RSD for chloromethane (93.0%), trichlorofluoromethane (55.3%), acetone (63.6%), and methylene chloride (63.3%) were above the allowable maximum (30%) for MSN on 04-06-05. Positive results for these compounds should be considered estimates (J) in associated samples.

Continuing Calibration: The SPCCs and CCCs were within control limits for method 8260B.

The RRF50s for target compounds were above the allowable minimum (0.050), as required. The %Ds for chloroethane (40.3%) and 2-butanone (43.7%) were above the allowable maximum (25%) on 04-13-05 (N8905). Positive results for these two compounds should be considered estimates (J) in associated samples.

Blanks: Method blank MB 46833-001 contained traces of acetone (3.497 ug/kg) and methylene chloride (7.048 ug/kg). Method blank MB 47190-001 contained traces of acetone (3.431 ug/kg) and methylene chloride (7.947 ug/kg). Results for acetone and methylene chloride that are less than ten times the method blank level should be reported as not detected (U) in associated samples.

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- <u>Internal Standard Area Summary</u>: The internal standard areas and retention times were within control limits.
- <u>Surrogate Recovery</u>: The surrogate recoveries were within control limits for environmental samples.
- Matrix Spike/Matrix Spike Duplicate: MS/MSD data were not provided in this data pack. No action is taken on MS/MSD data alone to qualify or reject an entire set of samples.
- <u>Laboratory Control Sample</u>: The percent recoveries for target metals were within QC limits for LCS sample 46833-002.
- <u>Compound ID</u>: Checked compounds were within GC quantitation limits. The mass spectra for detected compounds contained the primary and secondary ions, as outlined in the method.



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QA/QC Review of Semi-Volatiles Data for STL Connecticut, Job No. 209185 Soil Samples Collected April 1, 2005

Prepared by: Donald Anné May 3, 2005

<u>Holding Times</u>: Samples GAR-D1(7)-040105 and GAR-D2(7)-040105 were extracted outside NYSDEC holding times. Results for sample GAR-D1(7)-040105 and GAR-D2(7)-040105 should be considered estimates (J).

GC/MS Tuning and Mass Calibration: The DFTPP tuning criteria were within control limits.

Initial Calibration: The SPCCs and CCCs were within control limits for method 8270C.

The average RRFs for target compounds were above the allowable minimum (0.050), as required. The %RSD for benzoic acid (32.1%) was above the allowable maximum (30%) for MSP on 04-07-05. Positive results for benzoic acid should be considered estimates (J) in associated samples.

Continuing Calibration: The SPCCs and CCCs were within control limits for method 8270C.

The RRF40s for target compounds were above the allowable minimum (0.050) and the %Ds were below the allowable maximum (25%), as required.

<u>Blanks</u>: Method blank 47171-001 contained a trace of bis(2-ethylhexyl)phthalate (52.76 ug/kg). Results for bis(2-ethylhexyl)phthalate that are less than ten times the method blank level should be reported as not detected in associated samples.

<u>Internal Standard Area Summary</u>: The internal standard areas and retention times were within control limits.

Surrogate Recovery: The surrogate recoveries were within control limits for environmental samples.

Matrix Spike/Matrix Spike Duplicate: MS/MSD data were not provided in this data pack. No action is taken on MS/MSD data alone to qualify or reject an entire set of samples.

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<u>Laboratory Control Sample</u>: The percent recoveries for target compounds were within QC limits for LCS sample 46750-002.

The percent recoveries for 2,4-dinitrophenol and pentachlorophenol were below QC limits for LCS/LCSD sample 47171-002. All results for 2,4-dinitrophenol and pentachlorophenol should be considered estimates (J) in associated samples.

The percent recoveries for 4-methylphenol, indeno(1,2,3-cd)pyrene, and dibenzo(a,h)anthracene were above QC limits for LCS/LCSD sample 47171-002. Positive results for theses three compounds should be considered estimates (J) in associated samples.

<u>Compound ID</u>: Checked compounds were within GC quantitation limits. The mass spectra for detected compounds contained the primary and secondary ions, as outlined in the method.



QA/QC Review of Pesticide Data for STL Connecticut, STL Job No. 209185 Soil Samples Collected April 1, 2005

Data Validation

Environmental Chemistry

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Sampling Plans

Prepared by: Donald Anné May 3, 2005

Holding Times: Samples GAR-D1(7)-040105 and GAR-D2(7)-040105 were extracted outside NYSDEC holding times. Results for sample GAR-D1(7)-040105 and GAR-D2(7)-040105 should be considered estimates (J).

<u>Blanks</u>: The analyses of method and instrument blanks reported target pesticides as not detected.

- <u>Surrogate Recovery</u>: The surrogate recoveries were within advisory limits on both columns for the four validated samples.
- Matrix Spike/Matrix Spike Duplicate: The relative percent differences were below the allowable maximums and the percent recoveries were within QC limits for MS/MSD sample 209185-12.
- <u>Laboratory Control Sample</u>: The percent recoveries for target pesticides were within QC limits for LCS samples 46909-002 and 47204-002.
- <u>Initial Calibration</u>: The %RSDs for target pesticides were below the allowable maximum (20%) for primary and confirmation columns, as required.
- <u>Continuing Calibration</u>: This data were not used to qualify samples because the continuing calibrations were performed at the end of the analyses.
- Endrin and DDT Breakdown Evaluation: The percent breakdowns were below the allowable maximum (20%) for 4,4'-DDT and endrin, as required.
- <u>Pesticide Analytical Sequence</u>: The retention times for TCX and DCB were within control limits for both columns.

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<u>Pesticide Identification Summary for Single Component Analytes</u>: Checked results were within GC quantitation limits. The %Ds for dual column quantitation of alpha-chlordane (100.8%) and 4,4'-DDT (25.9%) in sample GAR-F2(5)-040105 were greater than the allowable maximum (25%).

The result for 4,4'-DDT with a %D greater than 25% but less than 70% should be considered as estimated (J). The result for alpha-chlordane with a %D greater than 100% should be considered unusable (R). Flagged results may be biased low.

<u>Pesticide Identification Summary for Multicomponent Analytes</u>: There were no detectable concentrations of target multi-component pesticides reported in the four samples reviewed in this data pack.

QA/QC Review of PCB Aroclor Data for STL Connecticut, STL Job No. 209185 Soil Samples Collected April 1, 2005

Prepared by: Donald Anné May 3, 2005

- Holding Times: Samples GAR-D1(7)-040105 and GAR-D2(7)-040105 were extracted outside NYSDEC holding times. Results for sample GAR-D1(7)-040105 and GAR-D2(7)-040105 should be considered estimates (J).
- Blanks: The analyses of the instrument and method blanks reported target aroclors as not detected.
- <u>Surrogate Recovery</u>: The surrogate recoveries were within advisory limits on both columns for environmental samples.
- <u>Matrix Spike/Matrix Spike Duplicate</u>: The relative percent difference for aroclor-1260 was below the allowable maximum and the percent recoveries were within QC limits for MS/MSD sample 209185-12.
- <u>Laboratory Control Sample</u>: The percent recoveries for aroclor-1260 and aroclor-1016 were within QC limits for LCS samples 46909-003, 46997-003, and 47204-003.
- <u>Initial Calibration</u>: The %RSDs for target aroclors were below the allowable maximum (20%) for primary and confirmation columns, as required.
- <u>Continuing Calibration</u>: The average %Ds for target aroclors were below the allowable maximum (15%) for both columns, as required.
- <u>Pesticide Analytical Sequence</u>: The retention times for TCX and DCB were within control limits for both columns.
- <u>Pesticide Identification Summary for Single Component Analytes</u>: Checked surrogates were within GC quantitation limits. The analyses of the four samples reviewed in this data pack reported target aroclors as not detected.

QA/QC Review of Herbicide Data for STL Connecticut, STL Job No. 209185 (STL Buffalo Job# A05-3133, A05-3508) Soil Samples Collected April 1, 2005

Prepared by: Donald Anné May 3, 2005

Holding Times: Samples GAR-D1(7)-040105 and GAR-D2(7)-040105 were extracted outside NYSDEC holding times. Results for sample GAR-D1(7)-040105 and GAR-D2(7)-040105 should be considered estimates (J).

Blanks: The analyses of method blanks reported 2,4-D and 2,4,5-TP as not detected.

<u>Surrogate Recovery</u>: The surrogate recoveries were within QC limits for environmental samples.

- <u>Matrix Spike/Matrix Spike Duplicate</u>: The relative percent differences were below the allowable maximum and the percent recoveries were within QC limits for soil MS/MSD samples A5B0471803 and A5B0521903.
- <u>Initial Calibration</u>: The %RSDs for 2,4-D and 2,4,5-TP were below the allowable maximum (20%) for primary and confirmation columns, as required.
- <u>Continuing Calibration</u>: The %Ds for 2,4-D and 2,4,5-TP were below the allowable maximum (15%) for primary and confirmation columns, as required.
- <u>Herbicide Identification Summary</u>: Checked surrogates were within GC quantitation limits. There were no detectable concentrations of 2,4-D and 2,4,5-TP reported in the four samples reviewed in this data pack.



QA/QC Review of Metals and Cyanide Data for STL Connecticut, Job No. 209185 Soil Samples Collected April 1, 2005

Data Validation

Environmental Chemistry

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Sampling Plans

Prepared by: Donald Anné May 3, 2005

Holding Times: Samples were analyzed within the NYSDEC holding times.

<u>Initial and Continuing Calibration Verification</u>: The percent recoveries for target metals and cyanide were within control limits (80-120% for Hg, 90-110% for all other metals, 85-115% for cyanide).

<u>CRDL Standard</u>: The percent recoveries for target metals were within laboratory QC limits (50-150%) for CRDL standards.

<u>Blanks</u>: The analyses for initial and continuing calibration, and method blanks reported target metals and cyanide as below the CRDLs, as required.

ICP Interference Check Sample: The percent recoveries for thallium were below control limits (80-120%). Results for thallium should be considered estimates (J).

Spike Sample Recovery: The percent recovery for antimony (39%) was below control limits (75-125%) for soil spike sample 209185-12. All results for antimony should be considered estimates (J) in associated samples. The percent recovery for arsenic (167%) was above control limits (75-125%) for soil spike sample 209185-12. All results for arsenic should be considered estimates (J) in associated samples.

The percent recoveries for antimony (31%) and thallium (72%) were below control limits (75-125%) for soil spike sample 209247-1. All results for antimony and thallium should be considered estimates (J) in associated samples. The percent recovery for sodium (151%) was above control limits (75-125%) for soil spike sample 209247-1. Positive results for sodium should be considered estimates (J) in associated samples.

<u>Duplicates</u>: The relative percent difference for lead (37.5%) was above the allowable maximum (35%) for soil duplicate sample 209185-12. Positive results for lead should be considered estimates (J) in associated samples.

The relative percent differences for calcium (93.8%), lead (53.3%), and manganese (50.3%) were above the allowable maximum (35%) for soil duplicate sample 209247-1. Positive results for calcium, lead, and manganese should be considered estimates (J) in associated samples.

<u>Laboratory Control Sample</u>: The percent recoveries for target metals and cyanide were within QC limits for the soil LCSs.

<u>ICP Serial Dilution</u>: The %Ds for applicable target metals were below the allowable maximum (10%) for serial dilution sample 209185-15, as required.

Instrument Detection Limits: The IDLs were at or below CRDLs, as required.

Percent Solids: The percent solids for soil samples were greater than 50%, as required.



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Data Usability Summary Report for STL Connecticut, Job No. 209233 Soil Samples Collected April 7, 2005

Prepared by: Donald Anné May 2, 2005

The data packages contain the documentation required by NYSDEC ASP. The proper chain of custody procedures were followed by the samplers. All information appeared legible and complete. The data packs contained the results of volatile and semi-volatile analyses.

The overall performances of the analyses are acceptable. STL Connecticut did fulfill the requirements of the analytical methods.

The were no data qualified in this data pack. The data are acceptable and are usable with no validation issues. Detailed information on data quality is included in the data validation reviews.



QA/QC Review of Method 8021Volatiles Data for STL Connecticut, Job No. 209233 (STL Buffalo Job # A05-3426) Soil Samples Collected April 7, 2005

Data Validation

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Sampling Plans

Prepared by: Donald Anné April 29, 2005

Holding Times: Samples were analyzed within NYSDEC holding times.

<u>Initial Calibration</u>: The %RSDs for target compounds were below the allowable maximum (20%), as required.

<u>Continuing Calibration</u>: The %Ds for target compounds were below the allowable maximum (15%), as required.

Blanks: The analysis of the method blank reported target compounds as not detected.

Internal Standard Area Summary: The internal standard areas and retention times were within control limits.

Surrogate Recovery: The surrogate recoveries were within control limits for environmental samples.

Matrix Spike/Matrix Spike Duplicate: The relative percent differences were below the allowable maximum and the percent recoveries were within control limits for MS/MSD sample VBLK13.

Compound ID: Checked compounds were within GC quantitation limits.

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QA/QC Review of Semi-Volatiles Data for STL Connecticut, Job No. 209233 Soil Samples Collected April 7, 2005

Data Validation

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Sampling Plans

Prepared by: Donald Anné April 29, 2005

Holding Times: Samples were extracted and analyzed within NYSDEC holding times.

GC/MS Tuning and Mass Calibration: The DFTPP tuning criteria were within control limits.

Initial Calibration: The SPCCs and CCCs were within control limits for method 8270C.

The average RRFs for target polynuclear aromatic hydrocarbons (PAHs) were above the allowable minimum (0.050) and the %RSDs were below the allowable maximum (30%), as required.

Continuing Calibration: The SPCCs and CCCs were within control limits for method 8270C.

The RRF40s for target PAHs were above the allowable minimum (0.050) and the %Ds were below the allowable maximum (25%), as required.

Blanks: The analyses of method blanks reported target PAHs as not detected.

<u>Internal Standard Area Summary</u>: The internal standard areas and retention times were within control limits.

<u>Surrogate Recovery</u>: The surrogate recoveries were within control limits for environmental samples.

<u>Matrix Spike</u>: The percent recoveries for PAHs were within QC limits for MS sample B-UST2-54-56-040705.

<u>Laboratory Control Sample</u>: The percent recoveries for PAHs were within QC limits for LCS sample 47032-002.

<u>Compound ID</u>: Checked compounds were within GC quantitation limits. The mass spectra for detected compounds contained the primary and secondary ions, as outlined in the method.

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Environmental Chemistry

Lab and Field Audits

Sampling Plans

Data Usability Summary Report for Long Island Analytical Laboratories Inc. Laboratory ID Numbers 1066527-1066530 Soil Samples Collected February 17, 2005

Prepared by: Donald Anné May 5, 2005

The data packages did not contain the documentation required by NYSDEC ASP. The proper chain of custody procedures were followed by the samplers. The data packs contained the results of volatile, semi-volatile, TPH, and metal analyses. This review is based solely on the data provided by the laboratory and as outlined in the QA/QC reviews.

The data are acceptable with some issues that are identified in the accompanying data validation reviews. The following data were flagged:

- Positive results for TPH were flagged as "not detected" (U) in samples E14 SW-SE(20'-24'), E14 SW-NW(16'-20'), and E14 SW-SW(20'-24') because the sample results were not significantly greater than the concentration detected in the associated method blank.
- The result for TPH was flagged as "estimated" (J) in sample E14 SW-NE(16'-20'), because the %RSD in the continuing calibration was greater than the allowable maximum of 20%.
- The results reported as "not detected" for lead and selenium were flagged as "estimated" (J) in all four samples because the percent recoveries for lead and selenium were below control limits (75-125%), but greater than 10% in spike sample 1066441.
- Results reported as "not detected" for silver were flagged as "estimated" (J) in all four samples because the percent recovery for silver was below control limits (80-120%) for the ICP Interference Check Samples.

All data are considered usable, with estimated (J) data associated with a higher level of quantitative uncertainty. Detailed information on data quality is included in the data validation reviews.

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Environmental Chemistry

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Sampling Plans

QA/QC Review of Volatiles Data Long Island Analytical Laboratories Inc. Laboratory ID Numbers 1066527-1066530 Soil Samples Collected February 17, 2005

Prepared by: Donald Anné May 5, 2005

Holding Times: Samples were analyzed within NYSDEC holding times.

GC/MS Tuning and Mass Calibration: The BFB tuning criteria were within control limits.

Initial Calibration: The SPCCs and CCCs were within control limits for method 8260B.

The average RRFs for target compounds were above the allowable minimum (0.050) and the %RSDs were below the allowable maximum (30%), as required.

Continuing Calibration: The SPCCs and CCCs were within control limits for method 8260B.

The CCRFs for SPCCs and CCCs were above the allowable minimum (0.050), as required. The %D for bromoform (32.7%) was above the allowable maximum (25%) on 02-18-05 (Q050218.D). Positive results for bromoform should be considered estimates (J) in associated samples. Note: The CCRFs and %Ds for all target compounds were not provided; only data for SPCCs and CCCs were reviewed.

Blanks: The analysis of the method blank reported target compounds as not detected.

<u>Internal Standard Area Summary</u>: The internal standard areas and retention times were within control limits.

<u>Surrogate Recovery</u>: The surrogate recoveries were within control limits for environmental samples.

Matrix Spike/Matrix Spike Duplicate: The relative percent differences were below the allowable maximum (20%) and the percent recoveries were within QC limits (70-130%) for the MS/MSD sample.

Compound ID: Target compounds were reported as not detected for samples in this data pack.

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QA/QC Review of Semi-Volatiles Data Long Island Analytical Laboratories Inc. Laboratory ID Number 1066527-1066530 Soil Samples Collected February 17, 2005

Prepared by: Donald Anné May 5, 2005

Holding Times: Sample E14-021405 was extracted and analyzed within NYSDEC holding times.

GC/MS Tuning and Mass Calibration: The DFTPP tuning criteria were within control limits.

Initial Calibration: The SPCCs and CCCs were within control limits for method 8270C.

The average RRFs for target compounds were above the allowable minimum (0.050) and the %RSDs were below the allowable maximum (30%), as required.

Continuing Calibration: The SPCCs and CCCs were within control limits for method 8270C.

The CCRFs for SPCCs and CCCs were above the allowable minimum (0.050), as required. The %D for hexachlorocyclopentadiene (38.7%) was above the allowable maximum (25%) on 02-18-05 (Q050218.D). The %D for hexachlorocyclopentadiene (49.4%) was above the allowable maximum (25%) on 02-19-05 (Q050218A.D). Positive results for this compound should be considered estimates (J) in associated samples. Note: The CCRFs and %Ds for all target compounds were not provided; only data for SPCCs and CCCs were reviewed.

<u>Blanks</u>: The analysis of the method blank reported target compounds as not detected.

<u>Internal Standard Area Summary</u>: The internal standard areas and retention times were within control limits.

<u>Surrogate Recovery</u>: The surrogate recoveries were within control limits for environmental samples.

Matrix Spike/Matrix Spike Duplicate: The relative percent differences for acenaphthene and pyrene were below the allowable maximum (40%) and the percent recoveries were within QC limits (50-150%) for the MS/MSD sample 1066060.

<u>Laboratory Control Sample</u>: The percent recoveries for acenaphthene and pyrene were above QC limits (50-150%) for the LCS sample.

Compound ID: Target compounds were reported as not detected for samples in this data pack.



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QA/QC Review of Method 8015 TPH* Data for Long Island Analytical Laboratories Inc. Laboratory ID Numbers 1066527-1066530 Soil Samples Collected February 17, 2005

Prepared by: Donald Anné May 5, 2005

<u>Holding Times</u>: Samples were extracted and analyzed within NYSDEC holding times.

<u>Blanks</u>: The method blank contained GRO (14.5 mg/kg) and DRO (81.5 mg/kg). Results for TPH that are less than five time the method blank level (96 mg/kg) should be reported as not detected (U) in associated samples.

<u>Surrogate Recovery</u>: The surrogate recoveries were within advisory limits (70-130%) for samples in this data pack.

Matrix Spike/Matrix Spike Duplicate: This data were not provided in this data pack. No action is taken on MS/MSD data alone to qualify or reject an entire set of samples.

<u>Laboratory Control Sample</u>: This data were not provided in this data pack; therefore, %Rs could not be evaluated for potential matrix effects.

Initial Calibration: The %RSD for GRO was below the allowable maximum (20%), as required. The %RSD for DRO was above the allowable maximum (20%). Results for TPH should be considered estimates (J) because DRO is a portion of TPH.

Continuing Calibration: The %D for DRO was below the allowable maximum (15%), as required.

* Total petroleum hydrocarbons (TPH) is calculated by adding diesel range organics (DRO) and gasoline range organics (GRO)

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QA/QC Review of RCRA Metals Data for Long Island Analytical Laboratories Inc. Laboratory ID Number 1066527-1066530 Soil Samples Collected February 17, 2005

Prepared by: Donald Anné May 5, 2005

Holding Times: Samples were analyzed within NYSDEC holding times.

Initial and Continuing Calibration Verification: The continuing calibration verification (CCV) percent recoveries for RCRA metals were within control limits (80-120% for Hg, 90-110% for all other metals). Initial calibration verification data were not provided by the laboratory; however, the sample analyses were performed between two CCVs that were within control limits.

CRDL Standard: CRDL standard data was not provided in this data pack.

<u>Blanks</u>: The analyses of continuing calibration and method blanks reported RCRA metals as not detected.

ICP Interference Check Sample: The percent recovery for silver (41%) was outside control limits (80-120%). Results for silver should be considered estimates (J).

Spike Sample Recovery: The percent recoveries for lead (69% and 70%) and selenium (67% and 68%) were below control limits (75-125%) for MS/MSD sample 1066441. Results for lead and selenium should be considered estimates (J).

<u>Duplicates</u>: The relative percent differences for RCRA metals were below the allowable maximum (35%) for MS/MSD sample 1066441 and duplicate sample 1066441D.

<u>Laboratory Control Sample</u>: The percent recoveries for RCRA metals were within control limits (80-120%) for the LCS.

ICP Serial Dilution: ICP serial dilution data were not provided in this data pack.

<u>Instrument Detection Limits</u>: IDL data were not provided in this data pack.

Percent Solids: Percent solids data were not provided in this data pack.



Environmental Chemistry

Lab and Field Audits

Sampling Plans

Data Usability Summary Report for Long Island Analytical Laboratories Inc. Laboratory ID Numbers 1066138 Soil Sample Collected February 14, 2005

Prepared by: Donald Anné May 5, 2005

The data packages did not contain the documentation required by NYSDEC ASP. The proper chain of custody procedures were followed by the samplers. The data packs contained the results of volatile, semi-volatile, TPH, and metal analyses for one sample, E14-021405. This review is based solely on the data provided by the laboratory and as outlined in the QA/QC reviews.

The data are acceptable with some issues that are identified in the accompanying data validation reviews. The following data were flagged:

- The positive result for TPH was flagged as "not detected" (U) in sample E14-021405 because the sample result was not significantly greater than the concentration detected in the associated method blank.
- The result reported as "not detected" for silver was flagged as "estimated" (J) in sample E14-021405 because the percent recovery for silver was below control limits (80-120%) for the ICP Interference Check Samples.

All data are considered usable, with estimated (J) data associated with a higher level of quantitative uncertainty. Detailed information on data quality is included in the data validation reviews.



Environmental Chemistry

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QA/QC Review of Volatiles Data Long Island Analytical Laboratories Inc. Laboratory ID Numbers 1066138 Soil Sample Collected February 14, 2005

Prepared by: Donald Anné May 5, 2005

Holding Times: Sample E14-021405 was analyzed within NYSDEC holding times.

GC/MS Tuning and Mass Calibration: The BFB tuning criteria were within control limits.

Initial Calibration: The SPCCs and CCCs were within control limits for method 8260B.

The average RRFs for target compounds were above the allowable minimum (0.050) and the %RSDs were below the allowable maximum (30%), as required.

Continuing Calibration: The SPCCs and CCCs were within control limits for method 8260B.

The CCRFs for SPCCs and CCCs were above the allowable minimum (0.050), as required. The %D for bromoform (29.4%) was above the allowable maximum (25%) on 02-15-05 (Q050215.D). Positive results for bromoform should be considered estimates (J) in associated samples. Note: The CCRFs and %Ds for all target compounds were not provided; only data for SPCCs and CCCs were reviewed.

<u>Blanks</u>: The analysis of the method blank reported target compounds as not detected.

<u>Internal Standard Area Summary</u>: The internal standard areas and retention times were within control limits.

<u>Surrogate Recovery</u>: The surrogate recoveries were within control limits for environmental samples.

Matrix Spike/Matrix Spike Duplicate: The relative percent differences were below the allowable maximum (20%) and the percent recoveries were within QC limits (70-130%) for the MS/MSD sample 1065977.

Compound ID: Target compounds were reported as not detected for sample E14-021405.

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QA/QC Review of Semi-Volatiles Data Long Island Analytical Laboratories Inc. Laboratory ID Number 1066138 Soil Sample Collected February 14, 2005

Prepared by: Donald Anné May 5, 2005

<u>Holding Times</u>: Sample E14-021405 was extracted and analyzed within NYSDEC holding times.

GC/MS Tuning and Mass Calibration: The DFTPP tuning criteria were within control limits.

Initial Calibration: The SPCCs and CCCs were within control limits for method 8270C.

The average RRFs for target compounds were above the allowable minimum (0.050) and the %RSDs were below the allowable maximum (30%), as required.

Continuing Calibration: The SPCCs and CCCs were within control limits for method 8270C.

The CCRFs for SPCCs and CCCs were above the allowable minimum (0.050) and the %Ds were below the allowable maximum (25%), as required. Note: The CCRFs and %Ds for all target compounds were not provided; only data for SPCCs and CCCs were reviewed.

Blanks: The analysis of the method blank reported target compounds as not detected.

<u>Internal Standard Area Summary</u>: The internal standard areas and retention times were within control limits.

<u>Surrogate Recovery</u>: The surrogate recoveries were within control limits for environmental samples.

Matrix Spike/Matrix Spike Duplicate: The relative percent differences for acenaphthene and pyrene were below the allowable maximum (40%) and the percent recoveries were within QC limits (50-150%) for the MS/MSD sample 1066060.

<u>Laboratory Control Sample</u>: The percent recoveries for acenaphthene and pyrene were above QC limits (50-150%) for the LCS sample.

Compound ID: Target compounds were reported as not detected for sample E14-021405.



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QA/QC Review of Method 8015 TPH* Data for Long Island Analytical Laboratories Inc. Laboratory ID Numbers 1066527-1066530 Soil Samples Collected February 17, 2005

Prepared by: Donald Anné May 5, 2005

<u>Holding Times</u>: Sample E14-021405 was extracted and analyzed within NYSDEC holding times.

Blanks: The method blank contained GRO (9.2 mg/kg) and DRO (105.0 mg/kg). Results for TPH that are less than five time the method blank level (total 114 mg/kg) should be reported as not detected (U) in associated samples.

<u>Surrogate Recovery</u>: The surrogate recoveries were within advisory limits (70-130%) for samples in this data pack.

Matrix Spike/Matrix Spike Duplicate: This data were not provided in this data pack. No action is taken on MS/MSD data alone to qualify or reject an entire set of samples.

<u>Laboratory Control Sample</u>: This data were not provided in this data pack; therefore, %Rs could not be evaluated for potential matrix effects.

Initial Calibration: The %RSD for GRO was below the allowable maximum (20%), as required. The %RSD for DRO (33%) was above the allowable maximum (20%). Results for TPH should be considered estimates (J) because DRO is a portion of TPH.

Continuing Calibration: The %D for DRO was below the allowable maximum (15%), as required.

* Total petroleum hydrocarbons (TPH) is calculated by adding diesel range organics (DRO) and gasoline range organics (GRO)

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QA/QC Review of RCRA Metals Data for Long Island Analytical Laboratories Inc. Laboratory ID Number 1066138 Soil Sample Collected February 14, 2005

Prepared by: Donald Anné May 5, 2005

Holding Times: Sample E14-021405 was analyzed within NYSDEC holding times.

Initial and Continuing Calibration Verification: The continuing calibration verification (CCV) percent recoveries for RCRA metals were within control limits (80-120% for Hg, 90-110% for all other metals). Initial calibration verification data were not provided by the laboratory; however, the sample analyses were performed between two CCVs that were within control limits.

CRDL Standard: CRDL standard data was not provided in this data pack.

<u>Blanks</u>: The analyses of initial and continuing calibration and method blanks reported RCRA metals as not detected.

ICP Interference Check Sample: The percent recovery for silver (71%) was outside control limits (80-120%). Results for silver should be considered estimates (J).

<u>Spike Sample Recovery</u>: The percent recoveries for RCRA metals were within control limits (75-125%) for MS/MSD sample 1066121.

<u>Duplicates</u>: The relative percent differences for RCRA metals were below the allowable maximum (35%) for MS/MSD sample 1066121.

<u>Laboratory Control Sample</u>: The percent recoveries for RCRA metals were within control limits (80-120%) for the LCS.

<u>ICP Serial Dilution</u>: ICP serial dilution data were not provided in this data pack.

<u>Instrument Detection Limits</u>: IDL data were not provided in this data pack.

Percent Solids: Percent solids data were not provided in this data pack.



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Data Usability Summary Report for Long Island Analytical Laboratories Inc. Laboratory ID Numbers 1068436-1068437 Soil Samples Collected March 14, 2005

Prepared by: Donald Anné May 2, 2005

The data packages did not contain the documentation required by NYSDEC ASP. The proper chain of custody procedures were followed by the samplers. The data packs contained the results of volatile, semi-volatile, PCB, pesticide, herbicide, and metal analyses. This review is based solely on the data provided by the laboratory and as outlined in the QA/QC reviews.

The data are acceptable with some issues that are identified in the accompanying data validation reviews. The following data were flagged:

• Results for all metals except mercury were flagged as "estimated" (J) in samples EP-G6-031405 and EP-H5-031405 because spike recovery and duplicate data was not provided.

All data are considered usable, with estimated (J) data associated with a higher level of quantitative uncertainty. Detailed information on data quality is included in the data validation reviews.



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QA/QC Review of Volatiles Data Long Island Analytical Laboratories Inc. Laboratory ID Numbers 1068436-1068437 Soil Samples Collected March 14, 2005

Prepared by: Donald Anné April 29, 2005

Holding Times: Samples were analyzed within NYSDEC holding times.

GC/MS Tuning and Mass Calibration: The BFB tuning criteria were within control limits.

Initial Calibration: The SPCCs and CCCs were within control limits for method 8260B.

The average RRFs for target compounds were above the allowable minimum (0.050) and the %RSDs were below the allowable maximum (30%), as required.

Continuing Calibration: The SPCCs and CCCs were within control limits for method 8260B.

The CCRFs for SPCCs and CCCs were above the allowable minimum (0.050), as required. The %D for bromoform (25.6%) was above the allowable maximum (25%) on 03-16-05 (Q050315.D). Positive results for bromoform should be considered estimates (J) in associated samples. Note: The CCRFs and %Ds for all target compounds were not provided; only data for SPCCs and CCCs were reviewed.

<u>Blanks</u>: The analysis of the method blank reported target compounds as not detected.

<u>Internal Standard Area Summary</u>: The internal standard areas and retention times were within control limits.

Surrogate Recovery: The surrogate recoveries were within control limits for environmental samples.

Matrix Spike/Matrix Spike Duplicate: The relative percent differences were below the allowable maximum (20%) and the percent recoveries were within QC limits (70-130%) for the MS/MSD sample.

Compound ID: Target compounds were reported as not detected for samples in this data pack.

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QA/QC Review of Semi-Volatiles Data Long Island Analytical Laboratories Inc. Laboratory ID Numbers 1068436-1068437 Soil Samples Collected March 14, 2005

Prepared by: Donald Anné April 29, 2005

Holding Times: Samples were extracted and analyzed within NYSDEC holding times.

GC/MS Tuning and Mass Calibration: The DFTPP tuning criteria were within control limits.

Initial Calibration: The SPCCs and CCCs were within control limits for method 8270C.

The average RRFs for target compounds were above the allowable minimum (0.050) and the %RSDs were below the allowable maximum (30%), as required.

Continuing Calibration: The SPCCs and CCCs were within control limits for method 8270C.

The CCRFs for SPCCs and CCCs were above the allowable minimum (0.050), as required. The %D for hexachlorocyclopentadiene (34.6%) was above the allowable maximum (25%) on 03-15-05 (Q050315.D). The %Ds for hexachlorocyclopentadiene (28.2%) and 2,4-dinitrophenol (30.7%) were above the allowable maximum (25%) on 03-16-05 (Q050316A.D). Positive results for these two compounds should be considered estimates (J) in associated samples. Note: The CCRFs and %Ds for all target compounds were not provided; only data for SPCCs and CCCs were reviewed.

Blanks: The analyses of method blanks reported target compounds as not detected.

<u>Internal Standard Area Summary</u>: The internal standard areas and retention times were within control limits.

<u>Surrogate Recovery</u>: The surrogate recoveries were within control limits for environmental samples.

Matrix Spike/Matrix Spike Duplicate: The relative percent differences were below the allowable maximum (40%) and the percent recoveries were within QC limits (50-150%) for the MS/MSD sample.

<u>Laboratory Control Sample</u>: The percent recoveries were above QC limits (60-140%) for the LCS sample.

Compound ID: Target compounds were reported as not detected for samples in this data pack.



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QA/QC Review of Pesticide/PCB Data for Long Island Analytical Laboratories Inc. Laboratory ID Numbers 1068436-1068437 Soil Samples Collected March 14, 2005

Prepared by: Donald Anné April 29, 2005

<u>Holding Times</u>: Samples were extracted and analyzed within NYSDEC holding times.

Blanks: The analyses of the instrument and method blanks reported target pesticides as not detected.

<u>Surrogate Recovery</u>: The surrogate recoveries were within advisory limits (50-150%) on both columns for samples in this data pack.

Matrix Spike/Matrix Spike Duplicate: The relative percent differences were below the allowable maximum (40%) and the percent recoveries were within QC limits (50-150%) for the MS/MSD sample.

Laboratory Control Sample: The LCS data were not provided in this data pack.

<u>Initial Calibration</u>: The %RSDs for target pesticides and average %RSDs for target aroclors were below the allowable maximum (20%) for primary and confirmation columns, as required.

<u>Continuing Calibration</u>: The average %Ds for target aroclors were below the allowable maximum (15%) for primary and confirmation columns, as required.

The %D for endrin aldehyde (18%) was above the allowable maximum (15%) for primary column on 03-16-05. Positive results for endrin aldehyde should be considered estimates in associated samples

Endrin and DDT Breakdown Evaluation: The percent breakdowns were below the allowable maximum (20%) for endrin and 4,4-DDT, as required.

<u>Pesticide Analytical Sequence</u>: This data were not provided by the laboratory because samples were quantitated using internal standards.

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- <u>Pesticide Identification Summary for Single Component Analytes</u>: There were no detectable concentrations of single component pesticides reported in samples contained in this data pack.
- <u>Pesticide Identification Summary for Multicomponent Analytes</u>: There were no detectable concentrations of target multi-component pesticides and PCBs reported in samples contained in this data pack.



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Sampling Plans

QA/QC Review of Herbicide Data for Long Island Analytical Laboratories Inc. Laboratory ID Numbers 1068436-1068437 Soil Samples Collected March 14, 2005

Prepared by: Donald Anné April 29, 2005

Holding Times: Samples were extracted and analyzed within NYSDEC holding times.

Blanks: The analysis of the method blank reported target herbicides as not detected.

<u>Surrogate Recovery</u>: The surrogate recoveries were within advisory limits (60-140%) for samples in this data pack.

Matrix Spike/Matrix Spike Duplicate: This data were not provided in this data pack. No action is taken on MS/MSD data alone to qualify or reject an entire set of samples.

<u>Laboratory Control Sample</u>: This data were not provided in this data pack; therefore, %Rs could not be evaluated for potential matrix effects.

<u>Initial Calibration</u>: The %RSDs for target compounds were below the allowable maximum (20%) for primary and confirmation columns, as required.

Continuing Calibration: The %Ds for target compounds were below the allowable maximum (15%) for primary and confirmation columns, as required.

<u>Herbicide Identification Summary</u>: There were no detectable concentrations of target compounds reported in samples contained in this data pack.

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Environmental Chemistry

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QA/QC Review of Metals and Cyanide Data for Long Island Analytical Laboratories Inc. Laboratory ID Numbers 1068436-1068437 Soil Samples Collected March 14, 2005

Prepared by: Donald Anné April 29, 2005

Holding Times: Samples were analyzed within NYSDEC holding times.

Initial and Continuing Calibration Verification: The continuing calibration verification (CCV) percent recoveries for target metals were within control limits (80-120% for Hg, 90-110% for all other metals, 85-115% for cyanide). Initial calibration verification data were not provided by the laboratory; however, the sample analyses were performed between two CCVs that were within control limits.

<u>CRDL Standard</u>: CRDL standard data was not provided in this data pack.

<u>Blanks</u>: The analyses of initial and continuing calibration and method blanks reported target metals and cyanide as not detected.

<u>ICP Interference Check Sample</u>: The percent recoveries for the following metals were outside control limits (80-120%). Results for these metals should be considered estimates (J):

antimony (0%)

calcium (54%)

manganese (78%)

silver (59%)

thallium (121%)

zinc (3.9%)

<u>Spike Sample Recovery</u>: The percent recoveries for mercury and cyanide were within control limits (75-125%) for spike samples.

Spike recovery data for all other metals was not provided in this data pack. Results for all metals except mercury should be considered estimates (J).

<u>Duplicates</u>: The relative percent differences for mercury and cyanide were below the allowable maximum (35%) for duplicate samples.

Duplicate data for all other metals was not provided in this data pack. Positive results for all metals except mercury should be considered estimates (J).

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<u>Laboratory Control Sample</u>: The percent recoveries for calcium (146%) and potassium (75%) were outside control limits (80-120%) for the LCS. Positive results for calcium and all results for potassium should be considered estimates (J).

ICP Serial Dilution: ICP serial dilution data were not provided in this data pack.

<u>Instrument Detection Limits</u>: IDL data were not provided in this data pack.

Percent Solids: Percent solids data were not provided in this data pack.



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May 20, 2005

Ms. Ilkay Cam-Spanos
Langan Engineering and Environmental
Services, Inc.
21 Penn Plaza
360 West 31st Street, Suite 900
New York, NY 10001-27279

Re:

Revised Data Validation Reports for Herbicide Analyses

Glendale, New York Project

Dear Ms. Cam-Spanos:

The revised data validation summaries are attached to this letter for the Glendale, New York project. The herbicide reports were revised at your request, to include reviewing the analyses for one additional herbicide, 2,4,5-T, that was not previously contained in the initial sample delivery groups provided by the laboratory.

The herbicide data all are acceptable with no rejected data for the following data packages: STL Connecticut Job Nos. 208377, 208437, 208473, 208607, 209073, 209159, 209172, 209184, 209185, and Long Island Analytical Laboratories, Inc., ID No. 068436-1068437. It was not necessary to revise any of the associated DUSRs for the above data packages.

If you have any questions concerning these revised reports, please contact us at (518) 348-6995. Thank you for the opportunity to assist Langan Engineering and Environmental Services, Inc.

Sincerely,

Alpha Environmental Consultants, Inc.

Werbeck_

Jean M. Neubeck

President

JMN:bms

Attachments

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REVISED QA/QC Review of Herbicide Data for STL Connecticut, STL Job No. 208377 (STL Buffalo Job# A04-C686) Soil Samples Collected December 17, 2004

Prepared by: Donald Anné May 19, 2005

Holding Times: Samples were extracted and analyzed within NYSDEC holding times.

Blanks: The analysis of the method blank reported 2,4-D, 2,4,5-T, and 2,4,5-TP as not detected.

<u>Surrogate Recovery</u>: The surrogate recoveries were within QC limits for environmental samples.

Matrix Spike/Matrix Spike Duplicate: The relative percent differences were below the allowable maximum and the percent recoveries were within QC limits for soil MS/MSD sample A4B2139103.

<u>Initial Calibration</u>: The %RSDs for 2,4-D, 2,4,5-T, and 2,4,5-TP were below the allowable maximum (20%) for primary and confirmation columns, as required.

Continuing Calibration: The %Ds for 2,4-D, 2,4,5-T, and 2,4,5-TP were below the allowable maximum (15%) for primary and confirmation columns, as required.

<u>Herbicide Identification Summary</u>: Checked surrogates were within GC quantitation limits. There were no detectable concentrations of 2,4-D, 2,4,5-T, and 2,4,5-TP reported in samples contained in this data pack.

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REVISED QA/QC Review of Herbicide Data for STL Connecticut, STL Job No. 208437 (STL Buffalo Job# A05-0014) Soil Samples Collected December 29, 2004

Prepared by: Donald Anné May 19, 2005

Holding Times: Samples were extracted and analyzed within NYSDEC holding times.

Blanks: The analysis of the method blank reported 2,4-D, 2,4,5-T, and 2,4,5-TP as not detected.

<u>Surrogate Recovery</u>: The surrogate recoveries were within QC limits for environmental samples.

Matrix Spike/Matrix Spike Duplicate: The relative percent differences were below the allowable maximum and the percent recoveries were within QC limits for soil MS/MSD sample A5004803.

<u>Laboratory Control Sample</u>: The percent recoveries for 2,4-D, 2,4,5-T, and 2,4,5-TP were within QC limits for LCS sample A5B0010002.

<u>Initial Calibration</u>: The %RSDs for 2,4-D, 2,4,5-T, and 2,4,5-TP were below the allowable maximum (20%) for primary and confirmation columns, as required.

Continuing Calibration: The %D for 2,4,5-T (18.9%) was above the allowable maximum (15%) for RTXCLPII column on 01-07-05 (13b01018.raw). The %D for 2,4,5-T (23.2%) was above the allowable maximum (15%) for RTXCLPII column on 01-07-05 (13b01029.raw). Positive results for 2,4,5-T should be considered estimates (J) in associated samples.

<u>Field Duplicate</u>: The analyses for field duplicates reported target pesticides as not detected in sample pair EP-I5-122904/EP-I5-122904-DUP.

Herbicide Identification Summary: Checked surrogates were within GC quantitation limits. There were no detectable concentrations of 2,4-D, 2,4,5-T, and 2,4,5-TP reported in samples contained in this data pack.

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Environmental Chemistry

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REVISED QA/QC Review of Herbicide Data for STL Connecticut, STL Job No. 208473 (STL Buffalo Job# A05-0200) Soil Samples Collected January 5 and 6, 2005

Prepared by: Donald Anné May 19, 2005

Holding Times: Samples were extracted and analyzed within NYSDEC holding times.

Blanks: The analysis of the method blank reported 2,4-D, 2,4,5-T, and 2,4,5-TP as not detected.

<u>Surrogate Recovery</u>: The surrogate recoveries were within QC limits for environmental samples.

Matrix Spike/Matrix Spike Duplicate: The relative percent differences were below the allowable maximum and the percent recoveries were within QC limits for soil MS/MSD sample A5B0033803,

<u>Initial Calibration</u>: The %RSDs for 2,4-D, 2,4,5-T, and 2,4,5-TP were below the allowable maximum (20%) for primary and confirmation columns, as required.

Continuing Calibration: The %D for 2,4,5-T (20.5%) was above the allowable maximum (15%) for the RTXCLPII column on 01-12-05 @ 15:20. The %D for 2,4,5-T (19.9%) was above the allowable maximum (15%) for the RTXCLPII column on 01-12-05 @ 20:44. Positive results for 2,4,5-T should be considered estimates (J) in associated samples.

Herbicide Identification Summary: Checked surrogates were within GC quantitation limits. There were no detectable concentrations of 2,4-D, 2,4,5-T, and 2,4,5-TP reported in samples contained in this data pack.

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REVISED QA/QC Review of Herbicide Data for STL Connecticut, STL Job No. 208607 (STL Buffalo Job# A05-0657) Soil Samples Collected January 21, 2005

Prepared by: Donald Anné May 19, 2005

Holding Times: Sample EP-SW-B8-012105 was extracted and analyzed within NYSDEC holding times.

Blanks: The analysis of the method blank reported 2,4-D, 2,4,5-T, and 2,4,5-TP as not detected.

Surrogate Recovery: The surrogate recoveries were within QC limits for sample EP-SW-B8-012105.

<u>Matrix Spike/Matrix Spike Duplicate</u>: The relative percent differences were below the allowable maximum and the percent recoveries were within QC limits for soil MS/MSD sample A5B0107903.

<u>Initial Calibration</u>: The %RSDs for 2,4-D, 2,4,5-T, and 2,4,5-TP were below the allowable maximum (20%) for primary and confirmation columns, as required.

Continuing Calibration: The %Ds for 2,4-D, 2,4,5-T, and 2,4,5-TP were below the allowable maximum (15%) for primary and confirmation columns, as required.

<u>Herbicide Identification Summary</u>: Checked surrogates were within GC quantitation limits. There were no detectable concentrations of 2,4-D, 2,4,5-T, and 2,4,5-TP reported in sample EP-SW-B8-012105.

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Environmental Chemistry

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REVISED QA/QC Review of Herbicide Data for STL Connecticut, STL Job No. 209073 (STL Buffalo Job# A05-2536) Soil Samples Collected March 18, 2005

Prepared by: Donald Anné May 17, 2005

<u>Holding Times</u>: Samples were extracted and analyzed within NYSDEC holding times.

<u>Blanks</u>: The analyses of method blanks reported target herbicides 2,4-D, 2,4,5-T, and 2,4,5-TP as not detected.

<u>Surrogate Recovery</u>: The surrogate recoveries were within QC limits for environmental samples.

Matrix Spike/Matrix Spike Duplicate: The percent recoveries were within QC limits, but one of three relative percent differences was above the allowable maximum for soil MS/MSD sample A5B038503. No action is taken on MS/MSD data alone to qualify or reject an entire set of samples.

<u>Initial Calibration</u>: The %RSDs for 2,4-D, 2,4,5-T, and 2,4,5-TP were below the allowable maximum (20%) for primary and confirmation columns, as required.

Continuing Calibration: The %Ds for 2,4-D, 2,4,5-T, and 2,4,5-TP were below the allowable maximum (15%) for primary and confirmation columns, as required.

<u>Herbicide Identification Summary</u>: Checked surrogates were within GC quantitation limits. There were no detectable concentrations of 2,4-D, 2,4,5-T, and 2,4,5-TP reported in the four samples reviewed in this data pack.

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Sampling Plans

REVISED QA/QC Review of Herbicide Data for STL Connecticut, STL Job No. 209159 (STL Buffalo Job# A05-2962, A05-3506) Soil Samples

Prepared by: Donald Anné May 17, 2005

Collected March 30, 2005

Holding Times: Sample BLDG4-J(8)-033005 was extracted beyond the NYSDEC holding times. Results for sample BLDG4-J(8)-033005 should be considered estimated (J).

<u>Blanks</u>: The analyses of method blanks reported target herbicides 2,4-D, 2,4,5-T, and 2,4,5-TP as not detected.

<u>Surrogate Recovery</u>: The surrogate recoveries were within QC limits for environmental samples.

Matrix Spike/Matrix Spike Duplicate: The relative percent differences (RPDs) were below the allowable maximum and the percent recoveries (%Rs) were within QC limits for soil MS/MSD sample A5B0512903. The %Rs were within QC limits, but two of three RPDs were above the allowable maximum for soil MS/MSD sample A5B0450003. No action is taken on MS/MSD data alone to qualify or reject an entire set of samples.

<u>Initial Calibration</u>: The %RSDs for 2,4-D, 2,4,5-T, and 2,4,5-TP were below the allowable maximum (20%) for primary and confirmation columns, as required.

Continuing Calibration: The %Ds for 2,4-D, 2,4,5-T, and 2,4,5-TP were below the allowable maximum (15%) for primary and confirmation columns, as required.

Herbicide Identification Summary: Checked surrogates were within GC quantitation limits. There were no detectable concentrations of 2,4-D, 2,4,5-T, and 2,4,5-TP reported in the three samples reviewed in this data pack.

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Environmental Chemistry

Lab and Field Audits

Sampling Plans

REVISED QA/QC Review of Herbicide Data for STL Connecticut, STL Job No. 209172 (STL Buffalo Job# A05-3010, A05-3134) Soil Samples Collected March 30 and 31, 2005

Prepared by: Donald Anné May 17, 2005

Holding Times: Samples were extracted and analyzed within NYSDEC holding times.

<u>Blanks</u>: The analyses of method blanks reported target herbicides 2,4-D, 2,4,5-T, and 2,4,5-TP as not detected.

<u>Surrogate Recovery</u>: The surrogate recoveries were within QC limits for environmental samples.

<u>Matrix Spike/Matrix Spike Duplicate</u>: The relative percent differences were below the allowable maximum and the percent recoveries were within QC limits for soil MS/MSD samples A5B0455003 and A5B0492203.

<u>Initial Calibration</u>: The %RSDs for 2,4-D, 2,4,5-T, and 2,4,5-TP were below the allowable maximum (20%) for primary and confirmation columns, as required.

<u>Continuing Calibration</u>: The %Ds for 2,4-D, 2,4,5-T, and 2,4,5-TP were below the allowable maximum (15%) for primary and confirmation columns, as required.

<u>Herbicide Identification Summary</u>: Checked surrogates were within GC quantitation limits. There were no detectable concentrations of 2,4-D, 2,4,5-T, and 2,4,5-TP reported in the five samples reviewed in this data pack.

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Environmental Chemistry

Lab and Field Audits

Sampling Plans

REVISED QA/QC Review of Herbicide Data for STL Connecticut, STL Job No. 209184 (STL Buffalo Job# A05-3132) Soil Samples Collected March 31 and April 1, 2005

Prepared by: Donald Anné May 17, 2005

Holding Times: Samples were extracted and analyzed within NYSDEC holding times.

<u>Blanks</u>: The analyses of method blanks reported target herbicides 2,4-D, 2,4,5-T, and 2,4,5-TP as not detected.

<u>Surrogate Recovery</u>: The surrogate recoveries were within QC limits for environmental samples.

Matrix Spike/Matrix Spike Duplicate: The relative percent differences were below the allowable maximum and the percent recoveries were within QC limits for soil MS/MSD samples A5B0471803 and A5B0521903.

<u>Initial Calibration</u>: The %RSDs for 2,4-D, 2,4,5-T, and 2,4,5-TP were below the allowable maximum (20%) for primary and confirmation columns, as required.

Continuing Calibration: The %Ds for 2,4-D, 2,4,5-T, and 2,4,5-TP were below the allowable maximum (15%) for primary and confirmation columns, as required.

<u>Herbicide Identification Summary</u>: Checked surrogates were within GC quantitation limits. There were no detectable concentrations of 2,4-D, 2,4,5-T, and 2,4,5-TP reported in the four samples reviewed in this data pack.

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Environmental Chemistry

Lab and Field Audits

Sampling Plans

REVISED QA/QC Review of Herbicide Data for STL Connecticut, STL Job No. 209185 (STL Buffalo Job# A05-3133, A05-3508) Soil Samples Collected April 1, 2005

Prepared by: Donald Anné May 17, 2005

Holding Times: Samples GAR-D1(7)-040105 and GAR-D2(7)-040105 were extracted beyond NYSDEC holding times. Results for sample GAR-D1(7)-040105 and GAR-D2(7)-040105 should be considered estimates (J).

<u>Blanks</u>: The analyses of method blanks reported target herbicides 2,4-D, 2,4,5-T, and 2,4,5-TP as not detected

<u>Surrogate Recovery</u>: The surrogate recoveries were within QC limits for environmental samples.

<u>Matrix Spike/Matrix Spike Duplicate</u>: The relative percent differences were below the allowable maximum and the percent recoveries were within QC limits for soil MS/MSD samples A5B0471803 and A5B0521903.

<u>Initial Calibration</u>: The %RSDs for 2,4-D, 2,4,5-T, and 2,4,5-TP were below the allowable maximum (20%) for primary and confirmation columns, as required.

Continuing Calibration: The %Ds for 2,4-D, 2,4,5-T, and 2,4,5-TP were below the allowable maximum (15%) for primary and confirmation columns, as required.

<u>Herbicide Identification Summary</u>: Checked surrogates were within GC quantitation limits. There were no detectable concentrations of 2,4-D, 2,4,5-T, and 2,4,5-TP reported in the four samples reviewed in this data pack.

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Environmental Chemistry

Lab and Field Audits

Sampling Plans

REVISED

QA/QC Review of Herbicide Data for Long Island Analytical Laboratories Inc. Laboratory ID Numbers 1068436-1068437 Soil Samples Collected March 14, 2005

> Prepared by: Donald Anné May 17, 2005

Holding Times: Samples were extracted and analyzed within NYSDEC holding times.

<u>Blanks</u>: The analysis of the method blank reported target herbicides dicamba, 2,4,-D, 2,4,5-T, 2,4,5-TP, and 2,4-DB as not detected.

<u>Surrogate Recovery</u>: The surrogate recoveries were within advisory limits (60-140%) for samples in this data pack.

Matrix Spike/Matrix Spike Duplicate: This data were not provided in this data pack. No action is taken on MS/MSD data alone to qualify or reject an entire set of samples.

<u>Laboratory Control Sample</u>: This data were not provided in this data pack; therefore, %Rs could not be evaluated for potential matrix effects.

<u>Initial Calibration</u>: The %RSDs for target compounds were below the allowable maximum (20%) for primary and confirmation columns, as required.

<u>Continuing Calibration</u>: The %Ds for target compounds were below the allowable maximum (15%) for primary and confirmation columns, as required.

<u>Herbicide Identification Summary</u>: There were no detectable concentrations of target compounds reported in samples contained in this data pack.

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Table 1 Samples For Data Validation Review Atlas Park - Parcel B Glendale, New York Severn Trent Sample Delivery Group 209184

		npounds	Volatile Organic Compounds	Ω	VOC	
×		Soil	3/31/2005	9	209184	UST1-SSW-033105
×		Soil	3/31/2005	∞	209184	UST1-WSW-033105
×		Soil	3/31/2005	7	209184	UST1-ESW-033105
×		Soil	3/31/2005	6	209184	UST1-NSW-033105
×		Soil	3/31/2005	5	209184	UST1-BOT-033105
SVOC	VOC	11 M A A A CLO A	SAMPLED		I.D.	
RMED ANALYSES PERFORMED	ANALYSES PERFORMED AN	MATRIX	DATE		I.ABORATORY	SAMPLE I.D.

SVOC

Semivolatile Organic Compounds

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	7500000		
	ASTN D-2216 8270c	Customer Date Samp Time Sample Ma Sample Ma	CUSTOMER: L'ANGA
* In Description = Dry Wgt.	% Solids, Solid % Moisture, Solid % Moisture, Solid* Acenaphthene, Solid* Acenaphthene, Solid* Fluorene, Solid* Fluoranthene, Solid* Pyrene, Solid* Benzo(a)anthracene, Solid* Benzo(b)fluoranthene, Solid* Benzo(b)fluoranthene, Solid* Benzo(ca)pyrene, Solid* Benzo(a)h)anthracene, Solid* Benzo(a,h)anthracene, Solid* Benzo(a,h)anthracene, Solid* Benzo(ghi)perylene, Solid* Benzo(ghi)perylene, Solid*	Customer Sample ID: UST1-BOT-033105 Date Sampled: 03/31/2005 Time Sampled: 12:00 Sample Matrix: Soil METHOD: PARAMETER/TEST DESCRIPTION	Job Number: 209184 CUSTOMER: LANGAN ENVIRONMENTAL SERVICES
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	ASTH D-2216 B270C	TEST METHOD	Customer Date Sam Time Sam Sample M	CUSTOMER: LANGAN	
* In Description = Dry Wgt.	% Solids, Solid % Moisture, Solid Semivolatile Organics Naphthalene, Solid* Accnaphthene, Solid* Fluorene, Solid* Phenanthrene, Solid* Phenanthrene, Solid* Prene, Solid* Pyrene, Solid* Benzo(a)anthracene, Solid* Benzo(b)fluoranthene, Solid* Benzo(b)fluoranthene, Solid* Benzo(b)fluoranthene, Solid* Benzo(a)pyrene, Solid* Indeno(1,2,3-cd)pyrene, Solid* Dibenzo(a,h)anthracene, Solid* Benzo(ghi)perylene, Solid* Benzo(ghi)perylene, Solid*		Customer Sample ID: UST1-KSW-033105 Date Sampled: 03/31/2005 Time Sampled: 12:00 Sample Matrix: Soil	ENVIRONMENTAL SERVICES	Job Number: 209184
-	91.8 8.2 ND 2500 3500 16000 3200 1900 5300 2400 3900 ND 400 1600 300 ND 520	SAMPLE RESULT		PROJECT	LABORATORY
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	ASTM D-2216 8270C	CUSTONER: LAN
* In Description = Dry Wgt.	% Solids, Solid % Moisture, Solid % Moisture, Solid* Acemaphthene, Solid* Acemaphthene, Solid* Phenanthrene, Solid* Phenanthrene, Solid* Phenanthrene, Solid* Phenanthrene, Solid* Purene, Solid* Benzo(a)anthracene, Solid* Benzo(b)fluoranthene, Solid* Benzo(b)fluoranthene, Solid* Benzo(b)fluoranthene, Solid* Benzo(b)fluoranthene, Solid* Benzo(a)pyrene, Solid* Benzo(a)pyrene, Solid* Dibenzo(a,h)anthracene, Solid* Benzo(ghi)perylene, Solid* Benzo(ghi)perylene, Solid*	Job Number: 209184 CUSTOMER: LANDAW ENVISONMENTAL SERVICES Customer Sample ID: UST1-ESW-033105 Date Sampled: 03/31/2005 Time Sampled: 12:00 Sample Matrix Soil TEST MEINOD PARAMETER/TEST DESCRIPTION
· Page 8	92.3 7.7	LABORATORY TEST PROJECT: 3555:107-ATLAS Laborato Date Rec Time Rec SAMPLE RESULT Q FLAGS
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		Jamie Barr
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	ASTM D-2216 8270C	CUSTOMER: LANG CUSTOMER Customer Date Sam Time Sam Sample M
* In Description = Dry Wgt.	% Solids, Solid % Moisture, Solid Semivolatile Organics Naphthalene, Solid* Acenaphthene, Solid* Fluorene, Solid* Fluorene, Solid* Fluoranthene, Solid* Fluoranthene, Solid* Pyrene, Solid* Benzo(a)anthracene, Solid* Benzo(b)fluoranthene, Solid* Benzo(b)fluoranthene, Solid* Benzo(b)fluoranthene, Solid* Benzo(a)pyrene, Solid* Benzo(a)pyrene, Solid* Benzo(a,h)anthracene, Solid* Benzo(ghi)perylene, Solid* Benzo(ghi)perylene, Solid*	CUSTOMER: LANGAN ENVIRONMENTAL SERVICES Customer Sample [D: UST1-WSW-033105 Date Sampled: 03/31/2005 Time Sampled: Soil Test Method Parameter/Test description
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* In Description = Dry Wgt.	% Solids, Solid % Moisture, Solid Semivolatile Organics Naphthalene, Solid* Acenaphthene, Solid* Phenanthrene, Solid* Fluorene, Solid* Fluoranthene, Solid* Enzo(a)anthracene, Solid* Benzo(b)fluoranthene, Solid* Benzo(b)fluoranthene, Solid* Benzo(a)pyrene, Solid* Benzo(a)pyrene, Solid* Benzo(a)pyrene, Solid* Benzo(a)pyrene, Solid* Benzo(a)pyrene, Solid* Benzo(a)h)anthracene, Solid* Dibenzo(a,h)anthracene, Solid* Benzo(ghi)perylene, Solid*	JOB Number: 209184 ER: LANGAN ENVIRONNENTAL SERVICES Customer Sample ID: UST1-SSW-033105 Date Sampled: 03/31/2005 Time Sampled: 12:00 Sample Matrix: Soil PARAMETER/JEST DESCRIPTION
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Table 1 Samples For Data Validation Review Atlas Park Interim Remedial Measures Glendale, New York
Severn Trent Sample Delivery Group 209280

BLD28-T4E-041405	BLD28-T4D-041405	BLD28-T4C-041405	BLD28-T4B-041405	BLD28-T4A-041405	BLD28-T3E-041405	BLD28-T3D-041405	BLD28-T3C-041405	BLD28-T3B-041405	BLD28-T3A-041405	BLD28-T2E-041405	BLD28-T2D-041405	BLD28-T2C-041405	BLD28-T2B-041405	BLD28-T2A-041405	BLD28-T1E-041405	BLD28-T1D-041405	BLD28-T1C-041405	BLD28-T1B-041405	BLD28-T1A-041405		SAMPLE I.D.	
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Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil		MATRIX	
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	ASTM D-2216 6010B	TEST METHOD	CUSTOMER: LANG Customer Date San Time San	
* In Description = Dry Wgt.	% Solids, Solid % Moisture, Solid Metals Analysis (ICAP Trace) Arsenic, Solid* Barium, Solid* Chromium, Solid* Copper, Solid* Nickel, Solid* Selenium, Solid* Vanadium, Solid* Zinc, Solid*	PARAMETER/TEST DESERTRITOR	Job Number: 209280 CUSTOMER: LANGAN ERVIRGHMENTAL SERVICES Customer Sample ID: BLDG28-T1A-041405 Date Sampled: 04/14/2005 Time Sampled: 11:00 Sample Matrix: Soil	
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* In Description = Dry Wgt.

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LABORATORY TEST RESULTS

r		Title 11		
	ASTM 0-2216 6010B	TEST METHOD	CUSTOMER: LANK Customer Date San Time San Sample M	
	% Solids, Solid % Moisture, Solid Metals Analysis (ICAP Trace) Arsenic, Solid* Barium, Solid* Chromium, Solid* Copper, Solid* Nickel, Solid* Selenium, Solid* Vanadium, Solid* Zinc, Solid*	PARAMETER/TEST (CUSTOMER: LANGAM ENVIRONMENTAL SERVICES Customer Sample ID: BLDG28-T18-041405 Date Sampled: 04/14/2005 Time Sampled: 11:00 Sample Matrix: Soil	Job Number: 209280
		DESCRIPTION	405	
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	6010B	ASTM D-2216	TEST METHOD	Customer Sample Date Sampled Time Sampled Sample Matrix	CUSTOMER: LANG	
* In Description = Dry Wgt.	Metals Analysis (ICAP Trace) Arsenic, Solid* Barium, Solid* Chromium, Solid* Copper, Solid* Nickel, Solid* Selenium, Solid* Vanadium, Solid* Zinc, Solid*	% Solids, Solid % Moisture, Solid	PARAMETER/TEST DESCRIPTION	Customer Sample ID: BLDG28-T1C-041405 Date Sampled: 04/14/2005 Time Sampled: 11:00 Sample Matrix: Soil	CUSTOMER: LANGAN ERVIRONMENTAL SERVICES	Job Number: 209280
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	ASTM D-2216 6010B	CUSTOMER: LAW Customer Date Sar Time Sample >
* In Description = Dry Wgt.	% Solids, Solid % Moisture, Solid Metals Analysis (ICAP Trace) Arsenic, Solid* Barium, Solid* Chromium, Solid* Copper, Solid* Selenium, Solid* Yanadium, Solid* Zinc, Solid*	JOB Number: 209280 CUSTOMER: LANGAN ENVIRONMENTAL SERVICES Customer Sample ID: BLDG28-T1D-041405 Date Sampled: 04/14/2005 Time Sampled: 11:00 Sample Matrix: Soil TEST METHOD PARAMETER/TEST DESCRIPTION
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	6010B	ASTM D-2216	TEST METHOD	Customer Date Sam Time Sam Sample M
* In Description = Dry Wgt.	Metals Analysis (ICAP Trace) Arsenic, Solid* Enrium, Solid* Chromium, Solid* Copper, Solid* Nickel, Solid* Selenium, Solid* Vanadium, Solid* Zinc, Solid*	% Solids, Solid % Moisture, Solid	PARAMETER/JEST DESIRIPTION	Customer Sample ID: BLDG28-T1E-041405 Date Sampled: 04/14/2005 Time Sampled: 11:00 Sample Matrix: Soil
Page	4170 81500 15400 15300 ND 19900 71400	92.5 7.5	SAMPLE RESULT C	
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Date:04/27/2005

ATTN: Jamle Barn

CUSTOMER: LANGAN ENVIRONMENTAL SERVICES

Job Number: 209280

LABORATORY

TEST

RESULTS

PROJECT: 5555107-ATLAS

	ASTM D-2216 60108	TEST METHOD	Customer Date San Time San	CUSTOMER: LANC
* In Description = Dry Wgt.	% Solids, Solid % Moisture, Solid Metals Analysis (ICAP Trace) Arsenic, Solid* Barium, Solid* Chromium, Solid* Copper, Solid* Sickel, Solid* Selenium, Solid* Vanadium, Solid* Zinc, Solid*	PARAMETER/TEST DESCRIPTION	Customer Sample ID: BLDG28-T2A-041405 Date Sampled: 04/14/2005 Time Sampled: 11:00 Sample Matrix: Soi(Job Number: 209280
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9	94.7 5.3 3200 75600 10300 38300 12500 ND 16000 57300	SAMPLE RESULT		BOR/
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6	ASTM D-2216 6010B	TEST METHOD	Customer Sample Date Sampled Time Sampled Sample Matrix	CUSTOMER: LANG	
* In Description = Dry Wgt.	% Solids, Solid % Moisture, Solid Metals Analysis (ICAP Trace) Arsenic, Solid* Barium, Solid* Chromium, Solid* Copper, Solid* Nickel, Solid* Selenium, Solid* Vanadium, Solid* Zinc, Solid*	PARAMETER/TEST DESCRIPTION	Customer Sample ID: BLDG28-T2B-041405 Date Sampled: 04/14/2005 Time Sampled: 11:00 Sample Matrix: Soil	CUSTOMER: LANCAN ENVIRONMENTAL SERVICES	Job Number: 209280
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Page	95.8 4.2 4.2 4.2 96300 11500 15200 U 17900 76500	SAMPLE RESULT Q RI		PROJECT: 5555107-ATLAS	ORATORY
60		FLAGS	Laboratory Sample ID: 209280-7 Date Received: 04/15/2005 Time Received: 14:45	35107-ATLAS	TEST RESULT
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	97.8 2.2 2710 69900 9940 25900 11500 14700 37000	SAMPLE RESULT		PROJECT: 5555107-ATLAS	ABORATOR
Page 9	- A	Q FLAGS	70-	: 5555]10	Y T E
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	ASTN D-2216 6010B	DUSTOMER: LANGAN ENVIS CUSTOMER: LANGAN ENVIS Customer Sample Customer Sample Date Sampled Time Sampled Sample Matrix
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	0.10 0.10 0.10 9300 2320 3490 5810 18600 4650 23200	LTS LTS 10: 209280-9: 14:45
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	ASTM D-2216 6010B	TEST METHOD	Customer Sample Date Sampled Time Sampled Sample Matrix	CUSTOMER: LANG	
* In Description = Dry Wgt.	% Solids, Solid % Moisture, Solid Metals Analysis (ICAP Trace) Arsenic, Solid* Barium, Solid* Chromium, Solid* Copper, Solid* Nickel, Solid* Selenium, Solid* Vanadium, Solid* Zinc, Solid*	PARAMETER/TEST DESCRIBITION	1D: BLDG28-T2E-041405 : 04/14/2005 : 11:00	CUSTOMER: LANGAN ENVIRONMENTAL SERVICES	Job Number: 209280
Pe	95.9 4.1 5150 127000 13100 55200 18000 ND 21900 77500	SAMPLE RESULT		PROJECT:	LABORATORY
Page 11	2	Q FLAGS	La Da: Ti	5555107-AILAS	ыц П
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* In Description = Dry Wgt.	% Solids, Solid % Moisture, Solid Metals Analysis (ICAP Trace) Arsenic, Solid* Chromium, Solid* Copper, Solid* Nickel, Solid* Selenium, Solid* Vanadium, Solid* Zinc, Solid*	PARAMETER/TEST DESCRIPTION	Customer Sample ID: BLDG28-T3A-041405 Date Sampled: 04/14/2005 Time Sampled: 11:00 Sample Matrix: Soil	CUSTOMER: LANGAN ENVIRONMENTAL SERVICES	Job Number: 209280
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و	92.1 7.9 3940 81200 21400 33300 16400 79400	SAMPLE RESULT			ORATORY
Page 12		Q FLAGS	Lab Dat Tim	PROJECT: 5555107-ATLAS	T E S
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* In Description = Dry Wgt.	% Solids, Solid % Moisture, Solid Metals Analysis (ICAP Trace) Arsenic, Solid* Chromium, Solid* Copper, Solid* Nickel, Solid* Selenium, Solid* Vanadium, Solid* Zinc, Solid*	PARAMETER/TEST DESCRIPTION	ਯ	Job Number: 209280
	79.0 21.0 21.0 10800 24300 13400 13900 45100	SAMPLE RESULT	le s	7
Page 13		Q FLAGS	Laborato Date Reco	A TES
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* In Description = Dry Wgt.	% Moisture, Solid Metals Analysis (ICAP Trace) Arsenic, Solid* Chromium, Solid* Copper, Solid* Copper, Solid* Selenium, Solid* Vanadium, Solid* Zinc, Solid*	% Solids, Solid	PARAMETER, TEST DESCRIPTION	ID: BLDG28-T3C-041405: 04/14/2005: 11:00	Job Number: 209280
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e 14	T T		FLAGS	555507 Lab Day	S H L
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	ASTM D-2216 6010B	TEST METHOD	Customer Date Sam Time Sam Sample M	CUSTOMER: LANG	
* In Description = Dry Wgt.	% Solids, Solid % Moisture, Solid Metals Analysis (ICAP Trace) Arsenic, Solid* Barium, Solid* Chromium, Solid* Vanium, Solid* Vanadium, Solid* Zinc, Solid* Zinc, Solid*	PARAMETER/TEST DESCRIPTION	Customer Sample ID: BLDG28-T3D-041405 Date Sampled: 04/14/2005 Time Sampled: 11:00 Sample Matrix: Soil	CUSTOMER: EANGAN ENVIRONMENTAL SERVICES	Job Number: 209280
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	ASTM D-2216 6010B	TEST METHOD	Customer Date San Time San Sample M	CUSTOMER: LANG	
* In Description = Dry Wgt.	% Solids, Solid % Moisture, Solid Metals Analysis (ICAP Trace) Arsenic, Solid* Barium, Solid* Chromium, Solid* Copper, Solid* Selenium, Solid* Vanadium, Solid* Zinc, Solid*	PARAMETER/TEST DESCRIPTION	Customer Sample ID: BLDG28-T3E-041405 Date Sampled: 04/14/2005 Time Sampled: 11:00 Sample Matrix: Soil	CUSTOMER: LANGAN ENVIRONMENTAL SERVICES	Job Number: 209280
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	79.7 20.3 4290 75800 10000 39100 11800 ND 14500 69800	SAMPLE RESULT	,	PROJECT: 55551D7-ATLAS	ABORATOR
Page 16		Q FLAGS		T. 5555	۲ ۲
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	0.10 0.10 0.10 1370 206 381 896 493 4260	104	Laboratory Sample ID: Date Received: Time Received:		RESUL
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* In Description = Dry Wgt.	% Moisture, Solid Metals Analysis (ICAP Trace) Arsenic, Solid* Chromium, Solid* Copper, Solid* Vanadium, Solid* Vanadium, Solid* Zinc, Solid*	PARAMETER/TEST DESCRIPTION % Solids, Solid	Customer Sample ID: BLDG28-T4B-041405 Date Sampled: 04/14/2005 Time Sampled: 11:00 Sample Matrix: Soil	CUSTOMER: LANGAN ENVIRONMENTAL SERVICES	Job Number: 209280
	19 5330 91000 10900 14700 14700 15200 62600	SAMPLE RESULT			LABORA
Page	2	6.		PROJECT: 5555107-ATLAS	ATORY
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,	ASTM D-2216 6010B	CUSTOMER: EANG Customer Date Sam Time Sam Sample M
* In Description = Dry Wgt.	% Solids, Solid % Moisture, Solid Metals Analysis (ICAP Trace) Arsenic, Solid* Barium, Solid* Copper, Solid* Wickel, Solid* Selenium, Solid* Vanadium, Solid* Zinc, Solid*	JOB NUMBER: 209280 CUSTOMER: LANGAN EKVIRCHMENTAL SERVICES Customer Sample ID: BLDG28-T4C-041405 Date Sampled: 04/14/2005 Time Sampled: 11:00 Sample Matrix: Soil FARAMETER/TEST DESCRIPTION
Page 19	78.6 21.4 7670 207000 174200 74200 23500 ND 27500 185000	LABORATORY TEST PROJECT: 5555107-ATLAS Date Reco Time Reco
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7		6010B	TEST METHOD	Customer Sample Date Sampled Time Sampled Sample Matrix	CUSTOMER: LANG	
	* In Description = Dry Wgt.	% Solids, Solid % Moisture, Solid Metals Analysis (ICAP Trace) Arsenic, Solid* Chromium, Solid* Copper, Solid* Nickel, Solid* Selenium, Solid* Vanadium, Solid* Zinc, Solid*	PARAMETER/TEST DESCRIPTION	Customer Sample ID: BLDG28-T4D-041405 Date Sampled: 04/14/2005 Time Sampled: 11:00 Sample Matrix: Soil	CUSTOMER: LANGAN ENVIRONMENTAL SERVICES	Job Number: 209280
		77.4 22.6 21000 237000 19800 148000 19000 ND 59900 238000	SAMPLE RESULT		PROJECT	LABORATOR
	Page 20		Q FLAGS		PROJECT: 5555107-ATEAS	Υ
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	ASTM D-2216 6010B	TEST METHOD	Customer Sample Date Sampled Time Sampled Sample Matrix	CUSTOMER: LANGA	و
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	89.6 10.4 11700 248000 18500 120000 17800 40100 231000	SAMPLE RESULT		PROJECT: 5555107-AILAS	ABORATOR
Page i		Q FL		1: 555	≺
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Table 1 Samples For Data Validation Review Atlas Park - Parcel B Glendale, New York Severn Trent Sample Delivery Group 209281

BDLG28-T5E-041405	BDLG28-T5D-041405	BDLG28-T5B-041405	BDLG28-T5A-041405	SAMPLE I.D.
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4/14/2005	4/14/2005	4/14/2005 4/14/2005	4/14/2005	DATE SAMPLED
Soil	Soil	Soil	Soil	MATRIX
×	×÷	× ×	×	ANALYSES PERFORMED MET

MET Chromium, Copper, Nickel, Zinc, Barium, Arsenic, Selenium, Vanadium

	ASTM D-2216 6010B	TEST METHOD	Custom Date S Time S Sample	CUSTOMER: LA	
* In Description = Dry Wgt.	% Solids, Solid % Moisture, Solid Metals Analysis (ICAP Trace) Arsenic, Solid* Chromium, Solid* Copper, Solid* Selenium, Solid* Vanadium, Solid* Zinc, Solid*	PARAMETER/TEST DESCRIPTION		CUSTOMER: LANGAM ENVIRONMENTAL SERVICES	Job Number: 209281
Pa	96.5 3.5 3.5 104000 104000 17000 17100 78200	SAMPLE RESULT		PROJECT: 5555107-ATLAS	LABORATORY
Page 2	2	O FLACS	Le De Ti	5555107	гч m
	0.10 0.10 0.10 1410 213 393 925 509 1850 416 4400		y Sample ived		ST RESUL
	0.10 0.10 9250 3470 5780 5780 18500 4630 23100		209281- 04/15/20 14:45		SI
	<u> </u>	Notation			-
	49/Kg 49/Kg 49/Kg 49/Kg 49/Kg	STIMU.			Dates
	47344 47344 47463 47463 47463 47463 47463 47463	BATCH		ATTN: Janie Bann	Date:04/27/2005
	04/18/05 0000 04/18/05 0000 04/19/05 1417 04/19/05 1417 04/19/05 1417 04/19/05 1417 04/19/05 1417 04/19/05 1417 04/19/05 1417	DATE/TIME			
	17 00 7 1 17 7 7 1 17 17 17 17 17 17 17 17 17	TE C#			

b		
* In Description = Dry Wgt.	ASTM D-2216 % Solids, Solid % Moisture, Solid % Metals Analysis (ICAP Trace) Arsenic, Solid* Barium, Solid* Chromium, Solid* Copper, Solid* Nickel, Solid* Selenium, Solid* Vanadium, Solid* Zinc, Solid*	CUSTOMER: LANGAN ENVIRONMENTAL SERVICES Customer Sample 1D: BLDG28-T5B-041405 Date Sampled: 04/14/2005 Time Sampled: 11:00 Sample Matrix: Soil PARAMETER/TEST DESCRIPTION
Page 3	92.1 7.9 7.9 10900 ND 6710 10500 8	PROJECT: 5555107-ATEAS Laboratory Date Recei Time Recei
	0.10 0.10 0.10 0.10 0.10 9610 221 2400 408 961 528 6010 1920 432 432 4560 24000	EST RESULTS D7-MisAS Laboratory Sample ID: 209281-2 Date Received: 04/15/2005 Time Received: 14:45
	1 0 % ug/Kg 1 0 % ug/Kg 1	Notiting the property of the p
S	47344 47344 47463 47463 47463 47463 47463 47463 47463	Date:04/27/2005 ATTW: Jamie Barr UNITS BATCH DI
MADINE W	04/18/05 0000 rtm 04/18/05 0000 rtm 04/19/05 1500 rnp 04/19/05 1500 rnp 04/19/05 1500 rnp 04/19/05 1500 rnp 04/19/05 1500 rnp 04/19/05 1500 rnp 04/19/05 1500 rnp	DATE TIME

	6010B	ASTM D-2216	CONLISM 1831	Customer Sample Date Sampled Time Sampled Sample Matrix	CUSTOMER: LANGA	د
* In Description = Dry Wgt.	Metals Analysis (ICAP Trace) Arsenic, Solid* Barium, Solid* Chromium, Solid* Copper, Solid* Nickel, Solid* Selenium, Solid* Vanadium, Solid* Zinc, Solid*	% Solids, Solid % Moisture, Solid	HOLLEST DESCRIPTION	ID: BLDG28-T5C-04 : 04/14/2005 : 11:00 : Soil	CUSTOMER: TANGAN ENVIRONMENTAL SERVICES	Job Number: 209281
	5590 130000 11600 49200 14700 21700 111000	93.4 6.6	SAMPLE RESULT		PROJECT	ABORATOR
Page 4			Q FLAGS	La Ti	PROJECT: 5555107-ATLAS	Y T E
	1170 177 327 770 424 1540 347 3660	0.10 0.10	10 1	Laboratory Sample ID: Date Received: Time Received:	ATLAS	ST RESUL
	7700 (151) 1930 2890 4810 4810 15400 3850 19300	0.10 0.10	3	ID: 209281-3 : 04/15/2005		⊣ 50
	با د ند د د د س با د ند د د د س با د ند د د د س با د ند د د د د س با د ند د د د د د د د د د د د د د د د د د	-	NOTINATE			
	ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg	**	SELIND		WILLIAM:	Date:(
	47463 47463 47463 47463 47463 47463 47463	47344	BATCH DI		Jamie Barr	Date:04/27/2005
	04/19/05 1506 04/19/05 1506 04/19/05 1506 04/19/05 1506 04/19/05 1506 04/19/05 1506 04/19/05 1506	04/18/05 0000 04/18/05 0000	DATE/TIME			
2	96 qqn 80 qqq 80 qqn 80 qqq 80	00 rtm	77.0			

Moderate March

LABORATORY LEST RESULTS Dec. 104.72/2005 De			40000000		2000022	
ABORATORY TEST RESULTS Date:04/27/2005 Date:04/2005 Date:04/27/2005 Date		ASTM D-2216 6010B	TEST METHOD	Customer Date Sam Time Sam Sample M	CUSTOMER: LANG	
ABORATORY TEST RESULTS ABORATORY TEST ABORT ABORT TEST RESULTS ABORT TEST ABORT ALBORD ABORT TEST RESULTS ABORT TEST RESULTS ABORT TEST ABORT ALBORD ALBORD ABORT TEST ABORT ALBORD ALBORD ABORT TEST ABORT ALBORD In Description =	Solids, Solid Moisture, Sol Moisture, Solid* rsenic, Solid* hromium, Solid* opper, Solid* elenium, Solid* elenium, Solid* inc, Solid* inc, Solid*	PARAMETER/TEST DESCRIPTION	BLDG28-T50-0414 04/14/2005 11:00 Soil		Job Number: 209281	
#ESULIS Date:04/27/2005 **RESULIS **Pred: 04/15/2005 ved: 14:45 ATTAN: damie Barri ATTAN: dam		119 3756 197 1477 188 421 2144	SAMPLE RESULT		- TOBLORG	ABORATOR
#ESULIS Date:04/27/2005 **RESULIS **Pred: 04/15/2005 ved: 14:45 ATTAN: damie Barri ATTAN: dam			g FLAGS	- 	555510	1 1
Date:04/27/2005		0.10 0.10 0.10 1390 210 389 915 503 1830 412 4340	HOL	aboratory Sample I ate Received		T RESU
### BATCH DT DATE/TIME 47344 04/18/05 0000 47344 04/18/05 0000 47344 04/19/05 1512 47463 04/19/05 1512 47463 04/19/05 1512 47463 04/19/05 1512 47463 04/19/05 1512 47463 04/19/05 1512 47463 04/19/05 1512 47463 04/19/05 1512 47463 04/19/05 1512 47463 04/19/05 1512		0.10 0.10 9150 2290 3430 5720 5720 18300 4570 22900	7	D: 209281-4 : 04/15/2005 : 14:45		T 8
### BATCH DT DATE/TIME 47344 04/18/05 0000 47344 04/18/05 0000 47344 04/19/05 1512 47463 04/19/05 1512 47463 04/19/05 1512 47463 04/19/05 1512 47463 04/19/05 1512 47463 04/19/05 1512 47463 04/19/05 1512 47463 04/19/05 1512 47463 04/19/05 1512 47463 04/19/05 1512		Ž	OTTU		1700	
### BATCH DT DATE/TIME 47344 04/18/05 0000 47344 04/18/05 0000 47344 04/19/05 1512 47463 04/19/05 1512 47463 04/19/05 1512 47463 04/19/05 1512 47463 04/19/05 1512 47463 04/19/05 1512 47463 04/19/05 1512 47463 04/19/05 1512 47463 04/19/05 1512 47463 04/19/05 1512			CNUTS		ATTN	Date:0
04/18/05 0000 04/18/05 0000 04/19/05 1512 04/19/05 1512 04/19/05 1512 04/19/05 1512 04/19/05 1512 04/19/05 1512		47344 47344 47463 47463 47463 47463 47463 47463	- 1000000		damie B	4/27/2005
1512 1512 1512 1512 1512	۱	2,000,000	3		any	U U
			DATE/TIME			
	\$					

	ASTM D-2216 6010B	TEST METHOD	CUSTOMER: DANGAN ENVIR Customer Sample Date Sampled Time Sample Matrix	
* In Description = Dry Wgt.	% Solids, Solid % Moisture, Solid Metals Analysis (ICAP Trace) Arsenic, Solid* Barium, Solid* Copper, Solid* Nickel, Solid* Selenium, Solid* Vanadium, Solid* Zinc, Solid*	PARAMETER/TEST DESCRIPTION	ID: BLDG28-T5E-041405: 04/14/2005: 11:00	Job Number: 209281
	80.7 19.3 8130 147000 73400 15300 ND 27200 146000	SAMPLE RESULT	#ROJECT	LABORATORY
Page 6		g Flags	PROJECT: 5555107 &TLAS Laborato Date Rec	T II S
	0.10 0.10 1590 239 443 1040 573 2080 469 4950	10	ry Sample eived	S U I
	0.10 0.10 10400 2600 3900 6510 6510 20800 5210 26000	**	209281-5 04/15/2005 14:45	4
	2333333	MOTITATION		
	## ## ## ## ## ## ## ## ## ## ## ## ##	SLIND MOLIDIES	A THE	Date:0
	47344 47463 47463 47463 47463 47463 47463 47463	BATCH	ATTINY Lange Barn	Date:04/27/2005
SM/C	04/18/05 0000 04/18/05 0000 04/19/05 1518 04/19/05 1518 04/19/05 1518 04/19/05 1518 04/19/05 1518 04/19/05 1518	DT DATE/TIME		3
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Table 1 Samples For Data Validation Review Atlas Park - Parcel B Glendale, New York Severn Trent Sample Delivery Group 210440

			:		
×	Soil	8/9/2005	4	210440	T2-G-080905
×	Soil	8/9/2005	ω	210440	T1-SW2-080905
×	Soil	8/9/2005	2	210440	T1-SW1-080905
×	Soil	8/9/2005		210440	T1-BOT-080905
SVOC		SAMPLED		I.D.	
	MATRIX	DATE		LABORATORY	SAMPLE I.D.
ANALYSES PERFORMED	,				

SVOC Semivolatile

Semivolatile Organic Compounds

[е
	ASTM D-2216	TEST METHOD	Customer Sample Date Sampled Time Sampled Sample Matrix	STOMER: LANG
* In Description = Dry Wgt.	% Solids, Solid % Moisture, Solid % Moisture, Solid* Acenaphthalene, Solid* Fluorene, Solid* Phenanthrene, Solid* Phenanthrene, Solid* Enzo(a)anthracene, Solid* Benzo(b)fluoranthene, Solid* Benzo(b)fluoranthene, Solid* Benzo(c)pyrene, Solid* Benzo(a)pyrene, Solid* Benzo(a)pyrene, Solid* Benzo(a)pyrene, Solid* Benzo(a)pyrene, Solid* Benzo(b)fluoranthene, Solid*	PARAMETER/TEST DESCRIPTION	Customer Sample ID: T1-B07-080905 Date Sampled: 08/09/2005 Time Sampled: 10:45 Sample Matrix: Soil	CUSTOMER: LANGAN ENVIRONMENTAL SERVICES
	ND 13.0 ND 410 13.0 ND 410 250 550 560 430 380 150 260 150 55 190	SAMPLE RESULT		PROJECT:
Page 2	\f\f\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	Q FLAGS	La Da Ti	: 5555107-ATLAS
	0.10 0.10 0.10 65 62 49 44 62 48 51 48 110 42 47 42 42 42 42	MDL	Laboratory Sample ID: Date Received Time Received:	-ATLAS
	0.10 0.10 370 370 370 370 370 370 370 370 370 37	RL	ID: 210440-1: 08/10/2005: 09:30	
	1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000	DILUTION		
	## ## ## ## ## ## ## ## ## ## ## ## ##	STINU		ATTN:
,	53059 53059 53182 53182 53182 53182 53182 53182 53182 53182 53182 53182 53182 53182	BATCH		Jamie Barr
	08/12/05 0000 08/12/05 0000 08/12/05 2338 08/12/05 2338 08/12/05 2338 08/12/05 2338 08/12/05 2338 08/12/05 2338 08/12/05 2338 08/12/05 2338 08/12/05 2338 08/12/05 2338 08/12/05 2338 08/12/05 2338 08/12/05 2338 08/12/05 2338 08/12/05 2338	DI DATE/TIME		רו
	88 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	TECI	-	

Job Number: 210440

LABORATORY

TEST

RESULTS

Date:08/15/2005

	VG000	00			,
	,,,,,	ASTM D-2216 8270C	TEST METHOD	Customer Date San Time San Sample M	CUSTOMER: LANG
Benzo(k)fluoranthene, Solid* Benzo(a)pyrene, Solid* Indeno(1,2,3-cd)pyrene, Solid* Dibenzo(a,h)anthracene, Solid* Benzo(ghi)perylene, Solid*	Naphthalene, Solid* Acenaphthene, Solid* Fluorene, Solid* Phenanthrene, Solid* Anthracene, Solid* Fluoranthene, Solid* Pyrene, Solid* Pyrene, Solid* Benzo(a)anthracene, Solid* Chrysene, Solid* Benzo(b)fluoranthene, Solid*	% Solids, Solid % Moisture, Solid Semiyolatile Organics	PARAMETER/TEST DESCRIPTION	Customer Sample ID: T1-SW1-080905 Date Sampled: 08/09/2005 Time Sampled: 10:45 Sample Matrix: Soil	CUSTOMER: LANGAN ENVIRONMENTAL SERVICES
1500 890 330 1100	140 140 1700 390 2600 3200 1500 1800	88.6 11.4	SAMPLE RESULT		PROJECT:
₹.	4	4	Q FLAGS	I I	5555107-ATLAS
42 42 42 42	100 100	0.10 0.10	MDL	Laboratory Sample ID: Date Received: Time Received:	-ATLAS
370 370 370 370 370	370 370 370 370 370 370 370 370	0.10 0.10	RL	ID: 210440-2 : 08/10/2005 : 09:30	
1.00000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.00000		DILUTION		
00000					
63/6n 03/6n 03/6n 03/6n 03/6n 03/6n 03/6n		%4 %	SIINN		ATTN:
	19/Kg 19/Kg 19/Kg 19/Kg 19/Kg 19/Kg 19/Kg	% 53059 % 53059			Jamie
ug/Kg ug/Kg ug/Kg	ug/Kg 53182 08/14/05 ug/Kg 53182 08/14/05		STINU		

Job Number: 210440

LABORATORY

TEST

RESULTS

Date:08/15/2005

* In Description = Dry Wgt.

Page 3

Date Received		;			
Color Colo		8270c	ASTM D-2216	TEST METHOD	Customer Date Sam Time Sam Sample M
Date Received		Semivolatile Organics Naphthalene, Solid* Acenaphthene, Solid* Fluorene, Solid* Fhenanthrene, Solid* Anthracene, Solid* Fluoranthene, Solid* Pyrene, Solid* Benzo(a)anthracene, Solid* Benzo(b)fluoranthene, Solid* Benzo(b)fluoranthene, Solid* Benzo(a)pyrene, Solid* Benzo(a)pyrene, Solid* Dibenzo(a,h)anthracene, Solid* Benzo(ghi)perylene, Solid*		PARAMETER/TEST DESCRIPTION	** ** **
LAGS MDL RL DILUTION UNITS BATCH DT DATE/TIME 0.10 0.10 0.10 1 % 53059 61 350 1.00000 ug/Kg 53182 08/14/05 2239 42 350 1.00000 ug/Kg 53182 08/14/05 2239 43 350 1.00000 ug/Kg 53182 08/14/05 2239 44 350 1.00000 ug/Kg 53182 08/14/05 2239 45 350 1.00000 ug/Kg 53182 08/14/05 2239 46 350 1.00000 ug/Kg 53182 08/14/05 2239 47 350 1.00000 ug/Kg 53182 08/14/05 2239 48 350 1.00000 ug/Kg 53182 08/14/05 2239 49 350 1.00000 ug/Kg 53182 08/14/05 2239 40 350 1.00000 ug/Kg 53182 08/14/05 2239 41 350 1.00000 ug/Kg 53182 08/14/05 2239 42 350 1.00000 ug/Kg 53182 08/14/05 2239 43 350 1.00000 ug/Kg 53182 08/14/05 2239 44 350 1.00000 ug/Kg 53182 08/14/05 2239 45 350 1.00000 ug/Kg 53182 08/14/05 2239 46 350 1.00000 ug/Kg 53182 08/14/05 2239 47 350 1.00000 ug/Kg 53182 08/14/05 2239 48 350 1.00000 ug/Kg 53182 08/14/05 2239 49 350 1.00000 ug/Kg 53182 08/14/05 2239 40 350 1.00000 ug/Kg 53182 08/14/05 2239 40 350 1.00000 ug/Kg 53182 08/14/05 2239 41 350 1.00000 ug/Kg 53182 08/14/05 2239 42 350 1.00000 ug/Kg 53182 08/14/05 2239 43 350 1.00000 ug/Kg 53182 08/14/05 2239 44 350 1.00000 ug/Kg 53182 08/14/05 2239 45 350 1.00000 ug/Kg 53182 08/14/05 2239 46 350 1.00000 ug/Kg 53182 08/14/05 2239 47 350 1.00000 ug/Kg 53182 08/14/05 2239 48 350 1.00000 ug/Kg 53182 08/14/05 2239 49 350 1.00000 ug/Kg 53182 08/14/05 2239 40 350 1.00000 ug/Kg 53182 08/14/05 2239 41 350 1.00000 ug/Kg 53182 08/14/05 2239 42 350 1.00000 ug/Kg 53182 08/14/05 2239 43 350 1.00000 ug/Kg 53182 08/14/05 2239 44 350 1.00000 ug/Kg 53182 08/14/05 2239 45 350 1.00000 ug/Kg 53182 08/14/05 2239 46 350 1.00000 ug/Kg 53182 08/14/05 2239	71		92.1 7.9		
RL DILUTION UNITS BATCH DT DATE/TIME RL DILUTION UNITS BATCH DT DATE/TIME 10 0.10 1 % 53059 08/12/05 0000 10 0.10 1 % 53059 08/12/05 0000 10 0.10 1 % 53059 08/14/05 2239 350 1.00000 ug/kg 53182 08/14/05 2239					T Da
08/10/2005 09:30 RL DILUTION UNITS BATCH DT DATE/TIME RL DILUTION UNITS BATCH DT DATE/TIME 0.10 1 % 53059 0.100 1 1 % 53059 0.100 1 1 % 53059 0.100 0.100 1 % 53182 0.8/14/05 2239 350 1.00000 ug/Kg 53182 0.8/14/05 2239		61 61 62 63 64 64 64 64 64 64 64 64 64 64 64 64 64	0.10 0.10	MDL	Laboratory Sample ID: Date Received: Time Received:
UNITS BATCH DT DATE/TIME % 53059 08/12/05 0000 % 53182 08/14/05 2239 ug/Kg 53182 08/14/05 2239		350 350 350 350 350 350 350 350 350 350	0.10 0.10	RL	: 08/10/2005 : 09:30
UNITS BATCH DT DATE/TIME % 53059 08/12/05 0000 % 53182 08/14/05 2239 ug/Kg 53182 08/14/05 2239		1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000	<u></u>	DILUTION	
H DT DATE/TIME 08/12/05 0000 08/12/05 0000 08/14/05 2239 08/14/05 2239 08/14/05 2239 08/14/05 2239 08/14/05 2239 08/14/05 2239 08/14/05 2239 08/14/05 2239 08/14/05 2239 08/14/05 2239 08/14/05 2239 08/14/05 2239 08/14/05 2239 08/14/05 2239 08/14/05 2239 08/14/05 2239		63/6h 69/6h 69/6h 69/6 69/6 69/6 69/6 69/6	22 22	SIINO	
DATE/TIME 08/12/05 0000 08/12/05 0000 08/14/05 2239 08/14/05 2239 08/14/05 2239 08/14/05 2239 08/14/05 2239 08/14/05 2239 08/14/05 2239 08/14/05 2239 08/14/05 2239 08/14/05 2239 08/14/05 2239 08/14/05 2239 08/14/05 2239 08/14/05 2239 08/14/05 2239		53182 53182 53182 53182 53182 53182 53182 53182 53182 53182 53182 53182 53182 53182	53059 53059	ВАТСН	
11ME 00000 00000 00000 00000 00000 00000 0000		0000000000000	00	DT	
			I	DATE/TIME	
TECI epm epm rlm epm epm rlm epm				TEC	

In Description = Dry Wgt.

Page 4

Date:08/15/2005

PROJECT: 5555107-ATLAS

CUSTOMER: LANGAN ENVIRONMENTAL SERVICES

Job Number: 210440

LABORATORY

TESI

RESULTS

ATTN: Jamie Barr

	8270c	ASTM D-2216	TEST METHOD	Customer Date San Time San Sample N
* In Description = Dry Wgt.	Semivolatile Organics Naphthalene, Solid* Acenaphthene, Solid* Fluorene, Solid* Phenanthrene, Solid* Fluoranthene, Solid* Fluoranthene, Solid* Benzo(a)anthracene, Solid* Benzo(b)fluoranthene, Solid* Benzo(b)fluoranthene, Solid* Benzo(a)pyrene, Solid* Indeno(1,2,3-cd)pyrene, Solid* Dibenzo(a,h)anthracene, Solid* Benzo(ghi)perylene, Solid*	% Solids, Solid % Moisture, Solid	PARAMETER/TEST DESCRIPTION	Customer Sample ID: T2-G-080905 Date Sampled: 08/09/2005 Time Sampled: 10:45 Sample Matrix: Soil
	82 140 140 1100 280 1400 1600 840 890 970 430 430 790 470 150 540	85.5 14.5	SAMPLE RESULT	
Page 5	<u> </u>		Q FLAGS	Lab Dat Tin
	43 55 55 66 65 65 65 65 65 65 65 65 65 65	0.10 0.10	MDL	Laboratory Sample 10: Date Received Time Received
	380 380 380 380 380 380 380 380 380	0.10 0.10	RL	ID: 210440-4 : 08/10/2005 : 09:30
	1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000	٠	DILUTION	
	67/60 67/60 67/60 67/60 67/60 67/60 67/60 67/60 67/60	% %	SLINO	
_	53182 53182 53182 53182 53182 53182 53182 53182 53182	53059 53059	BATCH DT	
	08/14/05 2308 08/14/05 2308 08/14/05 2308 08/14/05 2308 08/14/05 2308 08/14/05 2308 08/14/05 2308 08/14/05 2308 08/14/05 2308 08/14/05 2308 08/14/05 2308 08/14/05 2308 08/14/05 2308	08/12/05 0000 08/12/05 0000	T DATE/TIME	
	8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	o rim	TEC)	

Date:08/15/2005

ATTN: Jamie Barr

CUSTOMER: LANGAN ENVIRONMENTAL SERVICES

Job Number: 210440

LABORATORY TEST

RESULTS

PROJECT: 5555107-ATLAS

Table 1 Samples For Data Validation Review Atlas Park - Parcel B Glendale, New York Spectrum Sample Delivery Group 55102

				AN	ANALYSES PERFORMED
SAMPLE I.D.	LABORATORY		DATE	MATRIX	NOC
	I.D.		SAMPLED		
RES#1-SS-120406	55102	_	12/5/2006	Air	×
RES#1-11-120406	55102	7	12/5/2006	Air	; ≽
RES#1-I2-120406	55102	3	12/5/2006	Air	₹ >
RES#4-I1-120406	55102	4	12/5/2006	Air	₹ ×
RES#4-12-120406	55102	2	12/5/2006	Air	: ×
RES#4-SS-120406	55102	9	12/5/2006	Air	: ×
VP-Outdoor	55102	7	12/5/2006	Air	×
81-32-SS-120406	55103	-	12/4/2006	Air	×
81-32-I1-120406	55103	7	12/4/2006	Air	: ×
81-32-12-120406	55103	m	12/4/2006	Air	: ×
81-16-SS-120406	55103	4	12/4/2006	Air	: ×
81-16-11-120406	55103	2	12/4/2006	Air	: ×
81-16-12-120406	55103	9	12/4/2006	Air	: ×
77AVE-Outdoor	55103	7.	12/4/2006	Air	: ×
Air 120506	55104	-	12/5/2006	Air	×
SV-N 120506	55104	7	12/5/2006	Air	×
SV-M 120506	55104	3	12/5/2006	Air	×

VOC Volatile Organic Compounds

Report Date: 20-Dec-06 11:55



SPECTRUM ANALYTICAL, INC.

Featuring HANIBAL TECHNOLOGY

Laboratory Report

Langan Engineering & Environmental Services 21 Penn Plaza; 360 West 31st Street, 8th Floor New York, NY 10001

Attn: Jamie Barr

Final Report

Re-Issued Report

Revised Report

Project: Atlas Park - Glendale Queens, NY Project #:5555113

Laboratory ID	Client Sample ID		<u>Matrix</u>	Date Sampled	Date Received
SA55102-01	RES#1-SS-120406		Air	05-Dec-06 14:34	06-Dec-06 12:00
SA55102-02	RES#1-I1-120406		Air	05-Dec-06 14:33	06-Dec-06 12:00
SA55102-03	RES#1-I2-120406	•	Air	05-Dec-06 14:30	06-Dec-06 12:00
SA55102-04	RES#4-I1-120406		Air	05-Dec-06 18:00	06-Dec-06 12:00
SA55102-05	RES#4-I2-120406	,	Air	05-Dec-06 18:02	06-Dec-06 12:00
SA55102-06	RES#4-SS-120406		Air	05-Dec-06 18:03	06-Dec-06 12:00
SA55102-07	VP-Outdoor		Air	05-Dec-06 18:10	06-Dec-06 12:00

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. These results relate only to the sample(s) as received.

All applicable NELAC requirements have been met

Please note that this report contains 28 pages of analytical data plus Chain of Custody documen(s).

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Massachusetts Certification # M-MA138/MA1110

Connecticut # PH-0777

Florida # E87600/E87936

Maine # MA138

New Hampshire # 2538/2972

New Jersey # MA011/MA012

New York # 11393/11840

Rhode Island #98

USDA # S-51435

Vermont # VT-11393

ACCORDANGE OF THE PARTY OF THE

Hanibal C. Tayeh, Ph.D.
President/Laboratory Director

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<u>Matrix</u> Air Collection Date/Time 05-Dec-06 14:34

Received 06-Dec-06

Method Ref. Air method TICs Prepared 09-Dec-06 Analyzed 10-Dec-06

CAS No.	Analyte(s)	Result	*RDL/Units	RT	Q	Dilution	Batch	Fla
ir Quality A	Analyses							
entatively Id	entified Compounds in Air	Prepared by m	ethod General Air P	rep				mro
	2,2,7,7-Tetramethyloctane	12.2	ppbv	P		10	6120711	TIC J
	Decane, 2,2-dimethyl-	19.9	ppbv			10	"	J
062238 - 14-6	Decane, 2,3,8-trimethyl-	83.1	ppbv			10	**	
	Decane, 3,7-dimethyl-	19.3	ppbv			10	н	J
	Heptane, 5-ethyl-2,2,3-trim	40.2	ppbv			10	11	J
PA TO-15		Prepared by m	ethod General Air Pr					J
115-07-1	Propene	BRL	5.00 ppbv	reħ		10	"	R01
75-71-8	Dichlorodifluoromethane (Freon12)	BRL	5.00 ppbv				11	U
	Chloromethane	BRL	5.00 ppbv			10		U
76-14-2	1,2-Dichlorotetrafluoroethane (Freon 114)					10	"	U
	Vinyl chloride	BRL	5.00 ppbv			10	"	U
	1,3-Butadiene	BRL	5.00 ppbv			10	"	U
	Bromomethane	BRL	5.00 ppbv			10	. "	U
	Chloroethane		5.00 ppbv			10	.,	U
	Acetone	BRL	5.00 ppbv			10	n	U
	Trichlorofluoromethane (Freon 11)	6.10	5.00 ppbv			10	"	
	Ethanol	BRL	5.00 ppbv			10	11	U
		154	5.00 ppbv			10	H	
	1,1-Dichloroethene	BRL	5.00 ppbv			10	11	U
	Methylene chloride	BRL	5.00 ppbv			10	**	U
	1,1,2-Trichlorotrifluoroethane (Freon 113)	BRL	5.00 ppbv			10	tr	U
	Carbon disulfide	BRL	5.00 ppbv			10		U
	trans-1,2-Dichloroethene	BRL	5.00 ppbv			10	11	U
	1,1-Dichloroethane	BRL	5.00 ppbv			10	"	U
	Methyl tert-butyl ether	BRL	5.00 ppbv			10	**	U
	Isopropyl alcohol	BRL	5.00 ppbv			10	11	U
	2-Butanone (MEK)	BRL	5.00 ppbv			10	**	U
	cis-1,2-Dichloroethene	BRL	5.00 ppbv			10	11	U
110-54-3	Hexane	BRL	5.00 ppbv			10	"	U
141-78-6	Ethyl acetate	BRL	5.00 ppbv			10	11	U
67-66-3	Chloroform	BRL	5.00 ppbv			10	31	
109-99-9	Tetrahydrofuran	BRL	5.00 ppbv			10	11	U U
107-06-2	1,2-Dichloroethane	BRL	5.00 ppbv			10	11	U
71-55-6	1,1,1-Trichloroethane	BRL	5.00 ppbv			10	**	
71-43-2	Benzene	BRL	5.00 ppbv			10	"	U
56-23-5	Carbon tetrachloride	BRL	5.00 ppbv			10		U
110-82-7	Cyclohexane	BRL	5.00 ppbv			10		U
	1,2-Dichloropropane	BRL	5.00 ppbv					U
	Bromodichloromethane	BRL	5.00 ppbv			10	"	U
	Trichloroethene	BRL				10		U
	n-Heptane	BRL	5.00 ppbv			10		U
	4-Methyl-2-pentanone (MIBK)	BRL	5.00 ppbv			10	11	U
		DICL	5.00 ppbv			10	U	U

Sample Identification
RES#1-SS-120406
SA55102-01

<u>Matrix</u> Air Collection Date/Time 05-Dec-06 14:34

Received 06-Dec-06

Method Ref. EPA TO-15 Prepared 09-Dec-06 Analyzed 10-Dec-06

		EPA 10-15	09-Dec-06	10-D	ec-06		WB		
CAS No.	Analyte(s)	Result	*RDL/Units	RT	Q	Dilution	Batch	Flag	
Air Quality	Analyses								
EPA TO-15		Prepared by m	ethod General Air P	rep				R01	
10061-01-5	cis-1,3-Dichloropropene	BRL	5.00 ppbv	•		10	6120711	U	
10061-02-6	trans-1,3-Dichloropropene	BRL	5.00 ppbv			10	n	U	
79-00-5	1,1,2-Trichloroethane	BRL	5.00 ppbv			10	11	U	
108-88-3	Toluene	5.30	5.00 ppbv			10	,,	Ŭ	
591-78-6	2-Hexanone (MBK)	BRL	5.00 ppbv			10	"	U	
124-48-1	Dibromochloromethane	BRL	5.00 ppbv			10	11	U	
106-93-4	1,2-Dibromoethane (EDB)	BRL	5.00 ppbv			10	11	U	
127-18-4	Tetrachloroethene	BRL	5.00 ppbv			10	11	U	
108-90-7	Chlorobenzene	BRL	5.00 ppbv			10	**	U	
100-41-4	Ethylbenzene	BRL	5.00 ppbv			10	n	U .	
1330-20-7	m,p-Xylene	BRL	5.00 ppbv			10	11	U	
75-25-2	Bromoform	BRL	5.00 ppbv			10	11	U	
100-42-5	Styrene	BRL	5.00 ppbv			10	11	U	
95-47-6	o-Xylene	BRL	5.00 ppbv			10	11	U	
79-34-5	1,1,2,2-Tetrachloroethane	BRL	5.00 ppbv			10	11	U	
108-67-8	1,3,5-Trimethylbenzene	BRL	5.00 ppbv			10	"	U	
622-96-8	4-Ethyltoluene	BRL	5.00 ppbv			10	**	U	
95-63-6	1,2,4-Trimethylbenzene	BRL	5.00 ppbv			10	n	U	
541-73-1	1,3-Dichlorobenzene	BRL	5.00 ppbv			10	11	U	
100-44-7	Benzyl chloride	BRL	5.00 ppbv			10	11	_	
106-46-7	1,4-Dichlorobenzene	BRL	5.00 ppbv			10	. 11	U	
95-50-1	1,2-Dichlorobenzene	BRL	5.00 ppbv			10	**	U	
120-82-1	1,2,4-Trichlorobenzene	BRL	5.00 ppbv			10	91	U T	_
	Hexachlorobutadiene	BRL	5.00 ppbv			10	**	. n2	C
460-00-4	Surrogate: 4-Bromofluorobenzene	102	75-125 %			10	11	U	

Matrix Air Collection Date/Time 05-Dec-06 14:33

Received 06-Dec-06

Method Ref. Air method TICs

Prepared 07-Dec-06 Analyzed 07-Dec-06

CAS No.	Analyte(s)	Result	*RDL/Units	RT	$\boldsymbol{\varrho}$	Dilution	Batch	Flag
Air Quality	Analyses							
	lentified Compounds in Air	Prepared by n	nethod General Air P	rep				mic.
015780-65-1	Acetoacetic acid, 1-thio-, S-a	2.02	ppbv	гор		1	6120588	TIC
106-97 - 8	Butane	1.62	ppbv			1	"	J
124-18-5	Decane	1.96	ppbv			1	"	J
629-78-7	Heptadecane	1.33	ppbv			1	"	J
138-86-3	Limonene	1.88	ppbv			1	n	J
1120-21-4	Undecane	2.32	ppbv			1	10	J
EPA TO-15			nethod General Air Pi			•		J
	Propene	BRL	0.500 ppbv	rep		1	17	
	Dichlorodifluoromethane (Freon12)	0.390	0.500 ppbv			1		U
	Chloromethane	BRL				1	"	J
	1,2-Dichlorotetrafluoroethane (Freon 114)	BRL	0.500 ppbv			1	"	U
	Vinyl chloride	BRL	0.500 ppbv 0.500 ppbv			1	"	U
	1,3-Butadiene	BRL	0.500 ppbv			1	"	U
	Bromomethane	BRL				1	"	U
75-00-3	Chloroethane	BRL	0.500 ppbv			1		U
67-64-1	Acetone	5.53	0.500 ppbv			1	"	\mathbf{U}
	Trichlorofluoromethane (Freon 11)	BRL	0.500 ppbv			1	**	
	Ethanol	530	0.500 ppbv			1	. "	U
	1,1-Dichloroethene	BRL	0.500 ppbv			1	**	Z.
	Methylene chloride		0.500 ppbv			1	н	U
	1,1,2-Trichlorotrifluoroethane (Freon 113)	BRL	0.500 ppbv			1	11	U
	Carbon disulfide	BRL	0.500 ppbv			1	U	\mathbf{U}
	trans-1,2-Dichloroethene	BRL	0.500 ppbv			1	"	U
	1,1-Dichloroethane	BRL	0.500 ppbv			· 1	11	U
	Methyl tert-butyl ether	BRL	0.500 ppbv			1	11	U
	Isopropyl alcohol	BRL	0.500 ppbv			1	11	\mathbf{U}
	2-Butanone (MEK)	1.74	0.500 ppbv			1	"	
	cis-1,2-Dichloroethene	0.480	0.500 ppbv			1	11	J
110-54-3		BRL	0.500 ppbv			1		U
	Ethyl acetate	0.460	0.500 ppbv			1	ti	J
	Chloroform	BRL	0.500 ppbv			1	Ħ	U
	Tetrahydrofuran	BRL	0.500 ppbv			1	**	U
	1,2-Dichloroethane	BRL	0.500 ppbv			1 .	11	U
		BRL	0.500 ppbv			1	11	U
	1,1,1-Trichloroethane	BRL	0.500 ppbv			1	п	U
	Benzene	BRL	0.500 ppbv			1	Ħ	U
	Carbon tetrachloride	BRL	0.500 ppbv			1	Ħ	\mathbf{U}
	Cyclohexane	BRL	0.500 ppbv			1	11	U
	1,2-Dichloropropane	BRL	0.500 ppbv			1	11	U
	Bromodichloromethane	BRL	0.500 ppbv			1	**	U
	Trichloroethene	BRL	0.500 ppbv			1	17	U
142-82-5	n-Heptane	0.580	0.500 ppbv			1	10	



Sample Identification
RES#1-I1-120406
SA55102-02

Client Project # 5555113 Method Ref.

EPA TO-15

<u>Matrix</u> Air Prepared

07-Dec-06

Collection Date/Time 05-Dec-06 14:33

Analyzed

07-Dec-06

Received 06-Dec-06 <u>Analyst</u>

WB

CAS No. Analyte(s)	Result	*RDL/Units	RT	Q	Dilution	Batch	Flag
Air Quality Analyses						_	
ED 4 EO 4 E							

CAS No.	Analyte(s)	Kesuit	*RDL/Units	RT	$\boldsymbol{\varrho}$	Dilution	Batch	Flag	
Air Quality A	analyses								
EPA TO-15		Prepared by n	nethod General Air Pr	ер					
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL	0.500 ppbv	•		1 .	6120588	U	
10061-01-5	cis-1,3-Dichloropropene	BRL	0.500 ppbv			1	n	U	
10061-02-6	trans-1,3-Dichloropropene	BRL	0.500 ppbv			1	H	U	
79-00-5	1,1,2-Trichloroethane	BRL	0.500 ppbv			1	17	U	
108-88-3	Toluene	2.00	0.500 ppbv			1	11		
591-78-6	2-Hexanone (MBK)	BRL	0.500 ppbv			1	17	U	
124-48-1	Dibromochloromethane	BRL	0.500 ppbv			1	11	U	
106-93-4	1,2-Dibromoethane (EDB)	BRL	0.500 ppbv			1	11	U	
127-18-4	Tetrachloroethene	BRL	0.500 ppbv			1	н	U	
108-90-7	Chlorobenzene	BRL	0.500 ppbv			1	**	U	
100-41-4	Ethylbenzene	BRL	0.500 ppbv			1	**	U	
1330-20-7	m,p-Xylene	0.570	0.500 ppbv			1	11		
75-25-2	Bromoform	BRL	0.500 ppbv			1	u	U	
100-42-5	Styrene	BRL	0.500 ppbv			1	11	U	
95-47-6	o-Xylene	BRL	0.500 ppbv			1	н	U	
79-34-5	1,1,2,2-Tetrachloroethane	BRL	0.500 ppbv			1	**	U	
108-67-8	1,3,5-Trimethylbenzene	BRL	0.500 ppbv			1	**	U	
622-96-8	4-Ethyltoluene	BRL	0.500 ppbv			1	**	U	
95-63-6	1,2,4-Trimethylbenzene	0.480	0.500 ppbv			1	11	J	
541-73-1	1,3-Dichlorobenzene	BRL	0.500 ppbv			1	n	U	
100-44-7	Benzyl chloride	BRL	0.500 ppbv			1	н	U	
106-46-7	1,4-Dichlorobenzene	BRL	0.500 ppbv			1	n .	U	
95 - 50-1	1,2-Dichlorobenzene	BRL	0.500 ppbv			1	er	U	
120-82-1	1,2,4-Trichlorobenzene	BRL	0.500 ppbv			1	"	υJ	
87 - 68-3	Hexachlorobutadiene	BRL	0.500 ppbv			1	**	U	
460-00-4	Surrogate: 4-Bromofluorobenzene	99.2	75-125 %				**		

<u>Matrix</u> Air Collection Date/Time 05-Dec-06 14:30

Received 06-Dec-06

Method Ref.
Air method TICs

Prepared 07-Dec-06 Analyzed 07-Dec-06

Analyst WB

						W	
CAS No.	Analyte(s)	Result	*RDL/Units	RT Q	Dilution	Batch	Flag
Air Quality A	Analyses						
75-37-6	Ethane, 1,1-difluoro-	78.9	ppbv		10	6120588	J
EPA TO-15		Prepared by m	ethod General Air P	ren			_
115-07-1		BRL	5.00 ppbv	юр	10	11	U
75-71-8	Dichlorodifluoromethane (Freon12)	BRL	5.00 ppbv		10	,	U
	Chloromethane	BRL	5.00 ppbv		10	11	บ
76-14 - 2	1,2-Dichlorotetrafluoroethane (Freon 114)	BRL	5.00 ppbv		10	11	บ
	Vinyl chloride	BRL	5.00 ppbv		10	11	U
106-99-0	1,3-Butadiene	BRL	5.00 ppbv		10	19	U
74-83-9	Bromomethane	BRL	5.00 ppby		10	н	ช
75-00-3	Chloroethane	BRL	5.00 ppbv		10	"	U
67-64-1	Acetone	9.80	5.00 ppbv		10	н	U
75-69-4	Trichlorofluoromethane (Freon 11)	BRL	5.00 ppbv		10	**	U
	Ethanol	1,380	5.00 ppbv		10	н	P (1
75 - 35 - 4	1,1-Dichloroethene	BRL	5.00 ppbv		10	11	บ
75-09-2	Methylene chloride	BRL	5.00 ppbv		10	11	U
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	BRL	5.00 ppbv		10	11	บ
	Carbon disulfide	BRL	5.00 ppbv		10	**	U
156-60-5	trans-1,2-Dichloroethene	BRL	5.00 ppbv		10	11	U
75-34-3	1,1-Dichloroethane	BRL	5.00 ppbv		10	н	U
1634-04-4	Methyl tert-butyl ether	BRL	5.00 ppbv		10	11	
67-63-0	Isopropyl alcohol	3.90	5.00 ppbv		10	"	U
78-93-3	2-Butanone (MEK)	BRL	5.00 ppbv		10	v	J
156-59-2	cis-1,2-Dichloroethene	BRL	5.00 ppbv		10	**	U U
110-54-3	Hexane	BRL	5.00 ppbv		10	"	U
141-78-6	Ethyl acetate	BRL	5.00 ppbv		10	n	
67-66-3	Chloroform	BRL	5.00 ppbv		10	11	U
109-99-9	Tetrahydrofuran	BRL	5.00 ppbv		10	н	U
107-06-2	1,2-Dichloroethane	BRL	5.00 ppbv		10	19	U
71-55-6	1,1,1-Trichloroethane	BRL	5.00 ppbv		10	**	U
71-43-2	Benzene	BRL	5.00 ppbv		10	"	U
56-23-5	Carbon tetrachloride	BRL	5.00 ppbv		10		U
110-82-7	Cyclohexane	BRL	5.00 ppbv		10	11	U
78-87-5	1,2-Dichloropropane	BRL	5.00 ppbv		10	н	U
75-27-4	Bromodichloromethane	BRL	5.00 ppbv		10	H	U
79-01-6	Trichloroethene	BRL	5.00 ppbv		10	317	U
142-82-5	n-Heptane	BRL	5.00 ppbv		10	n	U
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL	5.00 ppbv		10	11	U
	cis-1,3-Dichloropropene	BRL	5.00 ppbv		10	п	U
	trans-1,3-Dichloropropene	BRL	5.00 ppbv		10	11	U
	1,1,2-Trichloroethane	BRL	5.00 ppbv		10	"	U
108-88-3	Toluene	3.30	5.00 ppbv		10	• н	U
591-78-6	2-Hexanone (MBK)	BRL	5.00 ppbv		10	. 11	J U

Page 6 1 28

Sample Identification
RES#1-I2-120406
SA55102-03

<u>Matrix</u> Air Collection Date/Time 05-Dec-06 14:30

Received 06-Dec-06

Method Ref. EPA TO-15 Prepared 07-Dec-06 Analyzed 07-Dec-06

							",12	
CAS No.	Analyte(s)	Result	*RDL/Units	RT	Q	Dilution	Batch	Flag
Air Quality	Analyses				-	*******		
EPA TO-15		Prepared by me	thod General Air P	rep				
124-48-1	Dibromochloromethane	BRL	5.00 ppbv			10	6120588	U
106-93-4	1,2-Dibromoethane (EDB)	BRL	5.00 ppbv			10	U	U
127-18-4	Tetrachloroethene	BRL	5.00 ppbv			10	10	U
108-90-7	7 Chlorobenzene	BRL	5.00 ppbv			10	19	U
100-41-4	Ethylbenzene	BRL	5.00 ppbv			10	11	U
1330-20-7	m,p-Xylene	BRL	5.00 ppbv			10	11	U
75-25-2	2 Bromoform	BRL	5.00 ppbv			10	11	U
100-42-5	Styrene	BRL	5.00 ppbv			10	11	U
95-47-6	o-Xylene	BRL	5.00 ppbv			10	11	U
79-34-5	1,1,2,2-Tetrachloroethane	BRL	5.00 ppbv			10	H .	U.
108-67-8	3 1,3,5-Trimethylbenzene	BRL	5.00 ppbv			10	n	U
622-96-8	3 4-Ethyltoluene	BRL	5.00 ppbv			10	**	U
95-63-6	5 1,2,4-Trimethylbenzene	BRL	5.00 ppbv			10		U
541 - 73 - 1	1,3-Dichlorobenzene	BRL	5.00 ppbv			10	**	U
100-44-7	Benzyl chloride	BRL	5.00 ppbv			10	Ħ	U
106-46-7	1,4-Dichlorobenzene	BRL	5.00 ppbv			10	11	U
95-50-1	1,2-Dichlorobenzene	BRL	5.00 ppbv			10	Ħ	U
120-82-1	1,2,4-Trichlorobenzene	BRL	5.00 ppbv			10	19	υJ
87-68-3	Hexachlorobutadiene	BRL	5.00 ppbv			10	11	บ
460-00-4	Surrogate: 4-Bromofluorobenzene	98.4	75-125 %				**	Ü

Matrix Air Collection Date/Time 05-Dec-06 18:00 Received 06-Dec-06

Method Ref.
Air method TICs

Prepared 07-Dec-06 Analyzed 07-Dec-06 <u>Analyst</u> WB

CAS No.	Analyte(s)	Result	*RDL/U	nits	RT	ϱ	Dilution	Batch	Flag
Air Quality A	Analyses								
	Tentatively Identified Compounds	None found	pı	pbv			2	6120588	U
EPA TO-15	<u>:</u>	Prepared by m	ethod Genera	al Air Pr	en				
115-07-1	Propene	BRL	1.00 pg		-r		2	n	U
75-71-8	Dichlorodifluoromethane (Freon12)	BRL	1.00 pg				2	"	U
74-87-3	Chloromethane	BRL	1.00 pg				2	"	U
76-14-2	1,2-Dichlorotetrafluoroethane (Freon 114)	BRL	1.00 pg	•			2	11	U
75-01-4	Vinyl chloride	BRL	1.00 pg	_			2	9	U
106 - 99-0	1,3-Butadiene	BRL	1.00 pg				2	"	U
74-83-9	Bromomethane	BRL	1.00 pg				2	**	U
75-00-3	Chloroethane	BRL	1.00 pg				2	**	U
67-64-1	Acetone	7.98	1.00 pg				2	"	Ü
75-69-4	Trichlorofluoromethane (Freon 11)	BRL	1.00 pg				2	11	U
	Ethanol	320	1.00 pg	-			2	**	E/:
75-35-4	1,1-Dichloroethene	BRL	1.00 pp	-			2	"	V \
75-09-2	Methylene chloride	BRL	1.00 pj				2 .	"	U
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	BRL	1.00 p _I	-			2	11	U
	Carbon disulfide	BRL	1.00 pg				2	11	U
156-60-5	trans-1,2-Dichloroethene	BRL	1.00 pp				2	,,	U
75-34-3	1,1-Dichloroethane	BRL	1.00 p				2	"	U
1634-04-4	Methyl tert-butyl ether	BRL	1.00 pg				2	**	U
	Isopropyl alcohol	4.32	1.00 pp	_			2	н	U
78-93-3	2-Butanone (MEK)	BRL	1.00 pp				2	n	U
156-59-2	cis-1,2-Dichloroethene	BRL	1.00 pp				2	n	
110-54-3		BRL	1.00 pp				2	11	U
141-78-6	Ethyl acetate	BRL	1.00 pp				2	**	U
	Chloroform	BRL	1.00 pp				2	**	U
109-99-9	Tetrahydrofuran	BRL	1.00 pr				2	**	U
	1,2-Dichloroethane	BRL	1.00 pp				2	11	U
71-55-6	1,1,1-Trichloroethane	BRL	1.00 pr				2	ti	U
	Benzene	BRL	1.00 pp				2	н	U U
56-23-5	Carbon tetrachloride	BRL	1.00 pr				2	11	
110-82-7	Cyclohexane	BRL	1.00 pp				2	**	U
78-87-5	1,2-Dichloropropane	BRL	1.00 pr				2	n	U
	Bromodichloromethane	BRL	1.00 pp				2	11	U
79-01-6	Trichloroethene	BRL	1.00 pr				2	U	U
	n-Heptane	BRL	1.00 pg				2	,	U
	4-Methyl-2-pentanone (MIBK)	BRL	1.00 pp				2		U
	cis-1,3-Dichloropropene	BRL	1.00 pp	-			2	n	U
	trans-1,3-Dichloropropene	BRL	1.00 pp				2	,,	U
	1,1,2-Trichloroethane	BRL	1.00 pp				2	**	U
	Toluene	1.48	1.00 pp				2		U
	2-Hexanone (MBK)	BRL.	1.00 pp				2	,, H	U

Page 8 of 28 12 1

Sample Identification
RES#4-I1-120406
SA55102-04

Matrix Air

Collection Date/Time 05-Dec-06 18:00

Received 06-Dec-06

Method Ref.

Prepared

Analyzed

Analyst

		EPA TO-15	07-Dec-06		Dec-06		Anaiys WB	<u>iL</u>	
CAS No.	Analyte(s)	Result	*RDL/Units	RT	Q	Dilution	Batch	Flag	
Air Quality A	Analyses								
EPA TO-15		Prepared by m	ethod General Air Pi	ren					
124-48-1	Dibromochloromethane	BRL	1.00 ppbv			2	6120588	U	
106-93-4	1,2-Dibromoethane (EDB)	BRL	1.00 ppbv			2	11	U	
127-18-4	Tetrachloroethene	BRL	1.00 ppbv			2	19	U	
108-90-7	Chlorobenzene	BRL	1.00 ppbv			2	"	U	
100-41-4	Ethylbenzene	BRL	1.00 ppbv			2	11	U	
1330-20-7	m,p-Xylene	BRL	1.00 ppbv			2	Ħ	U	
75-25-2	Bromoform	BRL	1.00 ppbv			2	H	U	
100-42-5	Styrene	BRL	1.00 ppbv			2	11	U	
95-47-6	o-Xylene	BRL	1.00 ppbv			2	11	U	
79-34-5	1,1,2,2-Tetrachloroethane	BRL	1.00 ppbv			2	11	บ	
108-67-8	1,3,5-Trimethylbenzene	BRL	1.00 ppbv			2	"	U	-
622-96-8	4-Ethyltoluene	BRL	1.00 ppbv			2	11	U	
95-63-6	1,2,4-Trimethylbenzene	BRL	1.00 ppbv			2		U	
541-73-1	1,3-Dichlorobenzene	BRL	1.00 ppbv			2	**	U	
100-44-7	Benzyl chloride	BRL	1.00 ppbv			2	11	บ	
106-46-7	1,4-Dichlorobenzene	BRL	1.00 ppbv			2	н	U	
95-50-1	1,2-Dichlorobenzene	BRL	1.00 ppbv			2	"	U	
120-82-1	1,2,4-Trichlorobenzene	BRL	1.00 ppbv			2		-	
87-68-3	Hexachlorobutadiene	BRL	1.00 ppbv			2	11	ո ո Ղ	1tm
460-00-4	Surrogate: 4-Bromofluorobenzene	100	75-125 %			-	11	U	

<u>Matrix</u> Air Collection Date/Time 05-Dec-06 18:02

Received 06-Dec-06

Method Ref. Air method TICs Prepared 07-Dec-06 Analyzed 07-Dec-06

Analyst WB

CAS No.	Analyte(s)	Result	*RDL/Units	RT	Q	Dilution	Batch	Flag	
ir Quality A	Analyses								
	Tentatively Identified Compounds	None found	ppbv			10	6120588	U	
EPA TO-15]	Prepared by m	ethod General Air P	ren					
115-07-1	Propene ·	BRL	5.00 ppbv			10	"	U	
75-71-8	Dichlorodifluoromethane (Freon12)	BRL	5.00 ppbv			10	11	บ	
74-87-3	Chloromethane	BRL	5.00 ppbv			10	н	U	
76-14-2	1,2-Dichlorotetrafluoroethane (Freon 114)	BRL	5.00 ppbv			10	11	U	
75-01-4	Vinyl chloride	BRL	5.00 ppbv			10	11	U	
106-99-0	1,3-Butadiene	BRL	5.00 ppbv			10	11	U	
74-83-9	Bromomethane	BRL	5.00 ppbv			10	n	U	
75-00-3	Chloroethane	BRL	5.00 ppbv			10	ıı	U	
67-64-1	Acetone	17.5	5.00 ppbv			10	11	•	
75-69-4	Trichlorofluoromethane (Freon 11)	BRL	5.00 ppbv			10	"	U	
64-17-5	Ethanol	1,140	5.00 ppbv			10	**	Z.	Т
75-35-4	1,1-Dichloroethene	BRL	5.00 ppbv			10	н	U	7
75-09-2	Methylene chloride	BRL	5.00 ppbv			10	н	U	
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	BRL	5.00 ppbv			10	**	U	
	Carbon disulfide	BRL	5.00 ppbv			10	"	U	
156 - 60-5	trans-1,2-Dichloroethene	BRL	5.00 ppbv			10	11	U	
75-34-3	1,1-Dichloroethane	BRL	5.00 ppbv			10	"	U	
1634-04-4	Methyl tert-butyl ether	BRL	5.00 ppbv			10	11	U	
67-63-0	Isopropyl alcohol	10.6	5.00 ppbv			10	"	Ü	
78 - 93-3	2-Butanone (MEK)	BRL	5.00 ppbv			10	"	U	
156-59-2	cis-1,2-Dichloroethene	BRL	5.00 ppbv			10	н	U	
110-54-3	Hexane	BRL	5.00 ppbv			10	,,	U	
141-78-6	Ethyl acetate	BRL	5.00 ppbv			10	11	U	
67-66-3	Chloroform	BRL	5.00 ppbv			10	11	U	
109-99-9	Tetrahydrofuran	BRL	5.00 ppbv			10	11	U	
107-06-2	1,2-Dichloroethane	BRL	5.00 ppbv			10	11	U	
71-55-6	1,1,1-Trichloroethane	BRL	5.00 ppbv			10	11	U	
71-43-2	Benzene	BRL	5.00 ppbv			10	11	U	
56-23-5	Carbon tetrachloride	BRL	5.00 ppbv			10	"	U	
110-82-7	Cyclohexane	BRL	5.00 ppbv			10	**	U	
78-87-5	1,2-Dichloropropane	BRL	5.00 ppbv			10	11	U	
75-27-4	Bromodichloromethane	BRL	5.00 ppbv			10	11	U	
79-01-6	Trichloroethene	BRL	5.00 ppbv			10	11	บ	
142-82-5	n-Heptane	BRL	5.00 ppbv			10	н		
	4-Methyl-2-pentanone (MIBK)	BRL	5.00 ppbv			10	n	U U	
	cis-1,3-Dichloropropene	BRL	5.00 ppbv			10	11	U	
	trans-1,3-Dichloropropene	BRL	5.00 ppbv			10	11		
	1,1,2-Trichloroethane	BRL	5.00 ppbv			10	ıı	U	
108-88-3		3.00	5.00 ppbv			10	n	U	
	2-Hexanone (MBK)	BRL	5.00 ppbv			10	H	J	

Page 10 of **2**8

Sample Identi RES#4-I2-12 SA55102-05		<u>Client Project #</u> 5555113	<u>Matrix</u> Air	Collection Date/Time 05-Dec-06 18:02			Receive 06-Dec-		
		Method Ref. EPA TO-15	<u>Prepared</u> 07-Dec-06	<u>Analyzed</u> 07-Dec-06			<u>Analyst</u> WB		
CAS No.	Analyte(s)	Result	*RDL/Units	RT	Q	Dilution	Batch	Flag	
Air Quality A	Analyses								
EPA TO-15		Prepared by me	thod General Air	Prep					
124-48-1	Dibromochloromethane	BRL	5.00 ppbv			10	6120588	U	
106-93-4	1,2-Dibromoethane (EDB)	BRL	5.00 ppbv			10	"	บ	
127-18-4	Tetrachloroethene	BRL	5.00 ppbv			10	17	U	
108-90-7	Chlorobenzene	BRL	5.00 ppbv			10	n	IJ	
100-41 - 4	Ethylbenzene	BRL	5.00 ppbv			10	11	บ	
1330-20-7	m,p-Xylene	BRL	5.00 ppbv			10	11	U	
75-25-2	Bromoform	BRL	5.00 ppbv			10	91	บ	
100-42-5	Styrene	BRL	5.00 ppbv			10	tt	U	
95-47-6	o-Xylene	BRL	5.00 ppbv			10	**	U	
79-34-5	1,1,2,2-Tetrachloroethane	BRL	5.00 ppbv			10	0	U	
108-67-8	1,3,5-Trimethylbenzene	BRL	5.00 ppbv			10	ti	U	
622-96-8	4-Ethyltoluene	BRL	5.00 ppbv			10	11	U	
95-63-6	1,2,4-Trimethylbenzene	BRL	5.00 ppbv			10	17	_	
	1,3-Dichlorobenzene	BRL	5.00 ppbv			10	41	U U	
100-44-7	Benzyl chloride	BRL	5.00 ppbv			10	11		
106-46-7	1,4-Dichlorobenzene	BRL	5.00 ppbv			10	11	U	
95-50-1	1,2-Dichlorobenzene	BRL	5.00 ppbv			10	11	U	
	1,2,4-Trichlorobenzene	BRL	5.00 ppbv			10		υ ~ T	
87-68-3	Hexachlorobutadiene	BDI	5.00 ppbv			10	_	r_1	•

5.00 ppbv

75-125 %

BRL

98.4

10

87-68-3 Hexachlorobutadiene

460-00-4 Surrogate: 4-Bromofluorobenzene

<u>Matrix</u> Air Collection Date/Time 05-Dec-06 18:03

Received 06-Dec-06

Method Ref. Air method TICs Prepared 07-Dec-06 Analyzed 07-Dec-06

·							WD	
CAS No.	Analyte(s)	Result	*RDL/Units	RT	$\overline{\varrho}$	Dilution	Batch	Flag
Air Quality A	analyses							
<u> Tentatively Ide</u>	entified Compounds in Air	Prepared by n	nethod General Air Pr	en				TO
062238-14-6	Decane, 2,3,8-trimethyl-	6.62	ppbv	-r		1	6120588	TIC J
127204-12-0	Dodecane, 2,2,11,11-tetrame (01)	2.36	ppbv			1	11	J
3891 - 98-3	Dodecane, 2,6,10-trimethyl-	1.04	ppbv			1	11	J
	Heptane, 5-ethyl-2,2,3-trim	4.25	ppbv			1	II	J
	Undecane, 2,8-dimethyl-	2.97	ppbv			1	**	J
EPA TO-15		Prepared by n	nethod General Air Pr	en.				Ū
115-07-1	Propene	BRL	0.500 ppbv	ch		1	n	**
75-71-8	Dichlorodifluoromethane (Freon12)	0.530	0.500 ppbv			1	н	U
	Chloromethane	0.420	0.500 ppbv			1	"	7
76-14-2	1,2-Dichlorotetrafluoroethane (Freon 114)	BRL	0.500 ppbv			1	**	J
	Vinyl chloride	BRL	0.500 ppbv			1	н	U
106-99-0	1,3-Butadiene	BRL	0.500 ppbv			1	11	U
74-83-9	Bromomethane	BRL	0.500 ppbv			1	11	U
75-00-3	Chloroethane	BRL	0.500 ppbv			1	II.	U
67-64-1	Acetone	7.07	0.500 ppbv			1	11	U
75-69-4	Trichlorofluoromethane (Freon 11)	BRL	0.500 ppbv			1	11	
64-17-5		234	0.500 ppbv			1	11	U J
75-35-4	1,1-Dichloroethene	BRL	0.500 ppbv			1	17	k 1
75-09-2	Methylene chloride	BRL	0.500 ppbv			1	10	U
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	BRL	0.500 ppbv			1		U
	Carbon disulfide	BRL	0.500 ppbv			1	н	U
156-60-5	trans-1,2-Dichloroethene	BRL	0.500 ppbv			1		U
75-34-3	1,1-Dichloroethane	BRL	0.500 ppbv			1	19	U
1634-04-4	Methyl tert-butyl ether	BRL	0.500 ppbv			1	ur .	U
	Isopropyl alcohol	3.47	0.500 ppbv			1	"	U
78 - 93-3	2-Butanone (MEK)	0.390	0.500 ppbv				11	_
	cis-1,2-Dichloroethene	BRL	0.500 ppbv			1	н	J
110-54-3		BRL	0.500 ppbv			1	"	U
141-78-6	Ethyl acetate	BRL	0.500 ppbv			1	"	U
67-66-3	Chloroform	0.470	0.500 ppbv			1	"	U
109-99-9	Tetrahydrofuran	BRL	0.500 ppbv			1	"	J
	1,2-Dichloroethane	BRL	0.500 ppbv			1	 n	U
	1,1,1-Trichloroethane	BRL	0.500 ppbv			-	"	U
71-43-2		0.330	0.500 ppbv			1	"	U
	Carbon tetrachloride	BRL	0.500 ppbv	•		_	"	J
	Cyclohexane	BRL	0.500 ppbv			1	"	U
	1,2-Dichloropropane	BRL	0.500 ppbv				"	U
	Bromodichloromethane	BRL	0.500 ppbv			1	"	U
	Trichloroethene	BRL	0.500 ppbv			1	"	U
142-82-5		BRL				1		U
	4-Methyl-2-pentanone (MIBK)	BRL	0.500 ppbv 0.500 ppbv			1	11	\mathbf{U}

Sample Identification RES#4-SS-120406 SA55102-06		Client Project # Matrix 5555113 Air Method Ref. Prepared EPA TO-15 07-Dec-06		Collection Date/Time 05-Dec-06 18:03 Analyzed 07-Dec-06			Received 06-Dec-06 Analyst WB	
CAS No.	Analyte(s)	Result	*RDL/Units	RT	Q	Dilution	Batch	Flag
Air Quality A	Analyses							
EPA TO-15		Prepared by me	thod General Air	Prep				
10061-01-5	cis-1,3-Dichloropropene	BRL	0.500 ppbv	•		1	6120588	U
10061-02-6	trans-1,3-Dichloropropene	BRL	0.500 ppbv			1	.11	U
79-00-5	1,1,2-Trichloroethane	BRL	0.500 ppbv			1	11	U
108 - 88-3	Toluene	1.45	0.500 ppbv			1	11	_
591-78-6	2-Hexanone (MBK)	BRL	0.500 ppbv			1	11	U
124-48-1	Dibromochloromethane	BRL	0.500 ppbv			1	11	U
106-93-4	1,2-Dibromoethane (EDB)	BRL	0.500 ppbv			1	11	U
127 <u>-18</u> -4	Tetrachloroethene	BRL	0.500 ppby			1	11	IU
108-90-7	Chlorobenzene	BRL	0.500 ppbv			1	11	U
100-41-4	Ethylbenzene	BRL	0.500 ppbv			1	17	U
1330-20-7	m,p-Xylene	BRL	0.500 ppbv			1	"	U
75-25-2	Bromoform	BRL	0.500 ppbv			1	11	U
100-42-5	Styrene	BRL	0.500 ppbv			1	"	U
9 5-47- 6	o-Xylene	BRL	0.500 ppbv			1	11	U
79-34-5	1,1,2,2-Tetrachloroethane	BRL	0.500 ppbv			1	"	U
108-67-8	1,3,5-Trimethylbenzene	BRL	0.500 ppbv			1	**	U
622-96-8	4-Ethyltoluene	BRL	0.500 ppbv			1	11	U
95-63-6	1,2,4-Trimethylbenzene	BRL	0.500 ppbv			1	II	บ
541-73-1	1,3-Dichlorobenzene	BRL	0.500 ppbv			1	н	U
100-44-7	Benzyl chloride	BRL	0.500 ppbv			1	n	U

0.500 ppbv

0.500 ppbv

0.500 ppbv

0.500 ppbv

75-125 %

BRL

BRL

BRL

BRL

100

U

U

vJ

106-46-7 1,4-Dichlorobenzene

95-50-1 1,2-Dichlorobenzene

120-82-1 1,2,4-Trichlorobenzene

87-68-3 Hexachlorobutadiene

460-00-4 Surrogate: 4-Bromofluorobenzene

Kesubmittell SMIL 12/22/2009

Sample Identification VP-Outdoor SA55102-07 Client Project # 5555113

Matrix Air Collection Date/Time 05-Dec-06 18:10

Received 06-Dec-06

Method Ref. Air method TICs Prepared 07-Dec-06

Analyzed 19-Dec-06 Analyst KRL

CAS No.	Analyte(s)	Result		*RDI	/Units	RT	Q	Dilution	Batch	Flag
Air Quality A	Analyses									
	Tentatively Identified Compounds	None fou	nd		ppbv			. 1	6120588	U
EPA TO-15		Prepared by	y me	thod Gen	eral Air P	гер				
115-07-1	Propene	BRL		0.0900		-		1	"	U
75-71-8	Dichlorodifluoromethane (Freon12)	0.510	/	0.500	ppbv			1	u	
74-87-3	Chloromethane	0.965		0.0900	ppbv			1	u	
76-14-2	1,2-Dichlorotetrafluoroethane (Freon 114)	BRL		0.0900	ppbv			1	n	U
75-01-4	Vinyl chloride	BRL		0.0900	ppbv			1	n	U
106-99-0	1,3-Butadiene	BRL		0.0900	ppbv			1	Ħ	U
74-83-9	Bromomethane	BRL		0.0900	ppbv			1	n	U
75-00-3	Chloroethane	BRL		0.0900	ppbv			1	"	U
67-64-1	Acetone	2.00		0.0900	ppbv			1	"	
75-69-4	Trichlorofluoromethane (Freon 11)	0.667		0.0900	ppbv			1	"	
64-17-5	Ethanol	9.25		0.500	ppbv			1	**	
75-35-4	1,1-Dichloroethene	BRL		0.0900	ppbv			1	17	U
	Methylene chloride	0.255	IJ	0.0900	ppbv			1	17	B
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	0.196		0.0900	ppbv			. 1	17	
75-15-0	Carbon disulfide	BRL		0.0900	ppbv			1	11	U
156-60-5	trans-1,2-Dichloroethene	BRL		0.0900	ppbv			1	**	U
	1,1-Dichloroethane	BRL		0.0900	ppbv			1	"	U
1634-04-4	Methyl tert-butyl ether	BRL		0.0900	ppbv			1	Ħ	U
67-63-0	Isopropyl alcohol	1.10		0.500	ppbv			1	u	
78-93-3	2-Butanone (MEK)	0.346		0.0900	ppbv			1	11	
156-59-2	cis-1,2-Dichloroethene	BRL		0.0900	ppbv			1	"	U
110-54-3	Hexane	0.291		0.0900	ppbv			1	11	
141-78-6	Ethyl acetate	0.118		0.0900	ppbv			1	n	
67-66-3	Chloroform	BRL		0.0900	ppbv			1	**	U
109-99-9	Tetrahydrofuran	BRL		0.0900	ppbv			1	•	U
107-06-2	1,2-Dichloroethane	BRL		0.0900	ppbv			1	n	U
71-55-6	1,1,1-Trichloroethane	BRL		0.0900	ppbv			1	17	U
71-43-2	Benzene	0.587		0.0900	ppbv			1	•	
56-23-5	Carbon tetrachloride	0.248		0.0280	ppbv			1	"	
110-82-7	Cyclohexane	0.129		0.0900	ppbv			1	Ħ	
78-87-5	1,2-Dichloropropane	BRL		0.0900				1	11	U
75-27-4	Bromodichloromethane	BRL		0.0900				1	"	U
79-01-6	Trichloroethene	0.0581		0.0280				1	**	
142-82-5	n-Heptane	0.188		0.0900				1	17	
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		0.0900				1	11	U
10061-01-5	cis-1,3-Dichloropropene	BRL		0.0900				1	"	υ
10061-02-6	trans-1,3-Dichloropropene	BRL		0.0900				1	"	U
	1,1,2-Trichloroethane	BRL		0.0900				1	"	U
108-88-3	Toluene	0.510		0.500				1	"	J
591-78-6	2-Hexanone (MBK)	BRL		0.0900				1	n	, U
					-					\M

	•							
Sample Identi	fication	Client Project #	<u>Matrix</u>	Collection			Receive	_
VP-Outdoor SA55102-07		5555113	Air	05-Dec	-06 18:1	10	06-Dec-	06
3A33102-07		Method Ref.	Prepared	Ana	llyzed		Analys	<u>st</u>
		EPA TO-15	07-Dec-06	07-I	Dec-06	WB		
CAS No.	Analyte(s)	Result	*RDL/Units	RT	Q	Dilution	Batch	Flag
Air Quality A	analyses							
EPA TO-15		Prepared by me	thod General Air	Prep				
124-48-1	Dibromochloromethane	BRL	0.0900 ppbv	•		ı	6120588	U
106-93-4	1,2-Dibromoethane (EDB)	BRL	0.0900 ppbv			1	"	U
127-18-4	Tetrachloroethene	0.187	0.0900 ppbv			1	**	
108-90-7	Chlorobenzene	BRL	0.0900 ppbv			1	W.	U
100-41-4	Ethylbenzene	0.141	0.0900 ppbv			1	H	
1330-20-7	m,p-Xylene	0.463	0.0900 ppbv			1	11	
75-25-2	Bromoform	BRL	0.0900 ppbv			1	"	U
100-42-5	Styrene	BRL	0.0900 ppbv			1	"	U
95-47-6	o-Xylene	0.167	0.0900 ppbv			1	11	
79-34-5	1,1,2,2-Tetrachloroethane	BRL	0.0900 ppbv			1	ti	U
108-67-8	1,3,5-Trimethylbenzene	BRL	0.0900 ppbv			1	11	U
622-96-8	4-Ethyltoluene	BRL	0.0900 ppbv			1	"	U
95-63-6	1,2,4-Trimethylbenzene	0.205	0.0900 ppbv			1	"	
541-73-1	1,3-Dichlorobenzene	BRL	0.0900 ppbv			1	"	U
100-44-7	Benzyl chloride	BRL	0.0900 ppbv			1	n	U
106-46-7	1,4-Dichlorobenzene	BRL	0.0900 ppbv			1	n	U
95-50-1	1,2-Dichlorobenzene	BRL	0.0900 ppbv			1	"	U
120-82-1	1,2,4-Trichlorobenzene	BRL	0.0900 ppbv			1	"	υ, V

0.0900 ppbv

75-125 %

BRL

100

87-68-3 Hexachlorobutadiene

460-00-4 Surrogate: 4-Bromofluorobenzene

<u>Matrix</u> Air Collection Date/Time 05-Dec-06 18:10

Received 06-Dec-06

Method Ref. Air method TICs Prepared 07-Dec-06 Analyzed 19-Dec-06

Analyst KRL

CAS No.	Analyte(s)	Result	*RDL/Units	RT Q	Dilution	Batch	Flag
Air Quality A	_						
	Tentatively Identified Compounds	None found	ppbv		1	6120588	U
EPA TO-15		Prepared by m	nethod General Air Pr	rep			
	Propene	BRL	0.0900 ppbv	1	1	11	U
	Dichlorodifluoromethane (Freon12)	0.510	0.0900 ppbv		1	**	·
	Chloromethane	0.965	0.0900 ppbv		1	"	
76-14-2	1,2-Dichlorotetrafluoroethane (Freon 114)	BRL	0.0900 ppbv		1	"	U
	Vinyl chloride	BRL	0.0900 ppbv		1	**	บ
	1,3-Butadiene	BRL	0.0900 ppbv		1	lf .	U
	Bromomethane	BRL	0.0900 ppby			11	U
75-00-3	Chloroethane	BRL \	0.0900 ppbv		1	**	U
	Acetone	2.00	0.0900 ppbv		1	n	
	Trichlorofluoromethane (Freon 11)	0.667	0.0900 ppbv		1	11	
64-17-5	Ethanol	9.25	0.0900 ppbv		1	n	
	1,1-Dichloroethene	BRL	0.0900 ppbv		1	11	U
	Methylene chloride	0.255	0.0900 ppbv		1	**	Ü
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	0.196	0.0900 ppbv		1	tr	
	Carbon disulfide	BRL	0.0900 ppbv		1	11	U
	trans-1,2-Dichloroethene	BRL	0.0900 ppbv		1	"	U
	1,1-Dichloroethane	BRL	0.0900 ppbv		1	11	U
1634-04-4	Methyl tert-butyl ether	BRL	0.0900 ppbv	\	1	11	U
67-63-0	Isopropyl alcohol	1.10	0.0900 ppbv		1	n	·
	2-Butanone (MEK)	0.346	0.0900 ppbv		1	#	
156-59-2	cis-1,2-Dichloroethene	BRL	0.0900 ppbv	\	1	n	U
110-54-3	Hexane	0.291	0.0900 ppbv	\	1	**	U
141-78-6	Ethyl acetate	0.118	0.0900 ppbv	\	1	"	
	Chloroform	BRL	0.0900 ppbv	\	1	17	U
109-99-9	Tetrahydrofuran	BRL	0.0900 ppbv		1	tr	U
107-06-2	1,2-Dichloroethane	BRL	0.0900 ppbv	\	1		U
71-55-6	1,1,1-Trichloroethane	BRL	0.0900 ppbv	'	1	**	U
71-43-2	Benzene	0.587	0.0900 ppbv		1	11	. 0
56-23-5	Carbon tetrachloride	0.248	0.0280 ppbv		1	н	
	Cyclohexane	0.129	0.0900 ppbv		\ 1	11	
78-87-5	1,2-Dichloropropane	BRL	0.0900 ppbv		\1	"	¥ī
75-27-4	Bromodichloromethane	BRL	0.0900 ppbv		Ž		บ
79-01-6	Trichloroethene	0.0581	0.0280 ppbv		1	11	U
	n-Heptane	0.188	0.0900 ppbv		1	"	
	4-Methyl-2-pentanone (MIBK)	BRL	0.0900 ppbv		1	11	U
	cis-1,3-Dichloropropene	BRL	0.0900 ppbv		1	11	
10061-02-6	trans-1,3-Dichloropropene	BRL	0.0900 ppbv		1	\ "	U
	1,1,2-Trichloroethane	BRL	0.0900 ppbv		1	\ "	U
108-88-3		0.510	0.0900 ppbv		1	\ ,	U
	2-Hexanone (MBK)	BRL	0.0900 ppbv		•	1	

Sample Ident VP-Outdoor SA55102-07	<u>ification</u>	<u>Client Project #</u> 5555113	<u>Matrix</u> Air	Collection 05-Dec-			Receive 06-Dec-	-	
		Method Ref. EPA TO-15	<u>Prepared</u> 07-Dec-06	<u>Analyzed</u> 07-Dec-06			<u>Analyst</u> WB		
CAS No.	Analyte(s)	Result	*RDL/Units	RT	$\overline{\varrho}$	Dilution	Batch	Flag	
Air Quality A	Analyses								
EPA TO-15		Prepared by me	ethod General Air	Pren					
124-48-1	Dibromochloromethane	BRL.	0.0900 ppbv	rroh		1	6120588	¥ī	
106-93-4	1,2-Dibromoethane (EDB)	BRL	0.0900 ppbv			1	"	U	
127-18-4	Tetrachloroethene	0.187	0.0900 ppbv			1	н	U	
108-90-7	Chlorobenzene	BRL	0.0900 ppbv			1	11	**	
100-41-4	Ethylbenzene	0.141	0.0900 ppbv			1	н	U	
1330-20-7	m,p-Xylene	0.463	0.0900 ppbv			1	11		
75-25-2	Bromoform	BRL	0.0900 ppbv			1	n	**	
100-42-5	Styrene _	BRL	0.0900 ppby			. 1	11	U 	
95-47-6	o-Xylene	0.167	0.0900 ppbv	1000 M 100 M	Files William	1		U	
79-34-5	1,1,2,2-Tetrachloroethane	BRL	0.0900 ppbv			1	Ħ	W.T	
108-67-8	1,3,5-Trimethylbenzene	BRL	0.0900 ppbv			1	**	U	
622-96-8	4-Ethyltoluene	BRL	0.0900 ppbv			1	ŧr	U	
95-63-6	1,2,4-Trimethylbenzene	0.205	0.0900 ppbv			1	11	U	
541-73-1	1,3-Dichlorobenzene	BRL	0.0900 ppbv			1	11	T7	
100-44-7	Benzyl chloride	BRL	0.0900 ppbv			1	1)	U	
106-46-7	1,4-Dichlorobenzene	BRL	0.0900 ppbv			1	**	U	
95-50-1	1,2-Dichlorobenzene	BRL	0.0900 ppbv			1	11	U	
120-82-1	1,2,4-Trichlorobenzene	BRL	0.0900 ppbv			1	19	U T	
87-68-3	Heyachlorobutadiona	DDI	- PPDV			1	••	DJ (

0.0900 ppbv

75-125 %

BRL

100

87-68-3 Hexachlorobutadiene

Report Date: 20-Dec-06 12:01



☐ Final Report
☐ Re-Issued Report
☐ Revised Report

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

Laboratory Report

Langan Engineering & Environmental Services 21 Penn Plaza; 360 West 31st Street, 8th Floor New York, NY 10001

Attn: Jamie Barr

Project:Atlas Park - Queens, NY Project #:5555113

Labor	atory ID Client	Sample ID		<u>Matrix</u>		Date Sampled	Date Received
SA55	103-01 RES#2	-SS-120406		Air		05-Dec-06 07:34	06-Dec-06 09:33
SA55	103-02 RES#2	-I1-120406		Air		05-Dec-06 07:32	06-Dec-06 09:33
SA55	103-03 RES#2	-I2-120406		Air		05-Dec-06 07:30	06-Dec-06 09:33
SA:55	103-04 RES#3	-SS-120406	•	Air		05-Dec-06 07:46	06-Dec-06 09:33
		-I1-120406	1	Air	:	05-Dec-06 07:45	06-Dec-06 09:33
SA55	103-06 RES#3	-I2-120406		Air	•	05-Dec-06 07:49	06-Dec-06 09:33
SA55	103-07 77AVE	E-OUTDOOR		Air		05-Dec-06 07:50	06-Dec-06 09:33

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. These results relate only to the sample(s) as received.

All applicable NELAC requirements have been met

Please note that this report contains 28 pages of analytical data plus Chain of Custody document(s).

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New York # 11393/11840

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USDA # S-51435

Vermont # VT-11393

Authorized by:

Hanibal/C. Tayeh, Ph.D.

President/Laboratory Director

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Sample Identification
RES#2-SS-120406
SA55103-01

Matrix Air

Collection Date/Time 05-Dec-06 07:34

Received 06-Dec-06

Method Ref. Air method TICs Prepared 07-Dec-06

Analyzed 08-Dec-06

CAS No.	Analyte(s)	Result	*RDL/Units	RT	$\boldsymbol{\varrho}$	Dilution	Batch	Flag
Air Quality A	Analyses			·				
Tentatively Id	entified Compounds in Air	Prepared by m	ethod General Air Pi	ren				TIC
	Decane, 2,2,7-trimethyl-	20.2	ppbv	P		1	6120588	TIC J
5989-27-5	d-Limonene	6.02	ppbv			1	"	J
	Dodecane, 2,2,11,11-tetrame	48.2	ppbv			1	n	J
3891-98-3	Dodecane, 2,6,10-trimethyl-	14.4	ppbv			1	11	J
	Heptane, 2,2,4,6,6-pentamet (01)	10.1	ppbv			1	19	J
	Heptane, 2,2,4,6,6-pentamet (02)	5.81	ppbv			1	**	J J
013475-82-6	Heptane, 2,2,4,6,6-pentamet (03)	22.5	ppbv			1	**	J
	Heptane, 5-ethyl-2-methyl-	6.45	ppbv			1	11	_
	Hexane, 2,2,5-trimethyl-	71.3	ppbv		PROPERTY AND LAND	- -		J
	Octane, 6-ethyl-2-methyl-	19.1	ppbv			1	11	J
629-50-5	Tridecane	169	ppbv			1	#	J
	Undecane, 3-methyl-	32.2	ppbv		•	1	ti	J
	Undecane, 4-methyl-	4.54				_	11	J
017312-73-1	Undecane, 5,5-dimethyl-	3.88	ppbv ppbv			1	11	J
	Undecane, 5-methyl-	14.5	ppbv			1	,,	J
EPA TO-15	· · · · · · · · · · · · · · · · · · ·					1		J
115-07-1	Propens		ethod General Air Pr	rep				
	Dichlorodifluoromethane (Freon12)	BRL	0.500 ppbv			1	*1	\mathbf{U}
	Chloromethane	0.490	0.500 ppbv			1	11	J
	1,2-Dichlorotetrafluoroethane (Freon 114)	0.410	0.500 ppbv			1	n	J
			0.500 ppbv			1	11	U
	Vinyl chloride	BRL	0.500 ppbv			1	H	\mathbf{U}
	1,3-Butadiene	BRL	0.500 ppbv			1	H	\mathbf{U}
	Bromomethane	BRL	0.500 ppbv			1	11	U
	Chloroethane	BRL	0.500 ppbv			1	11	\mathbf{u}
	Acetone	11.2	0.500 ppbv			1	"	
	Trichlorofluoromethane (Freon 11)	0.400	0.500 ppbv			1	11	J
64-17-5		7.18	0.500 ppbv			1	11	
	1,1-Dichloroethene	BRL	0.500 ppbv			1	n	U.
	Methylene chloride	2.42	0.500 ppbv			1	"	
	1,1,2-Trichlorotrifluoroethane (Freon 113)		0.500 ppbv			1	n	\mathbf{U}
	Carbon disulfide	BRL	0.500 ppbv			1	11	U
	trans-1,2-Dichloroethene	BRL	0.500 ppbv			1	n	U
	1,1-Dichloroethane	BRL	0.500 ppbv			1	11	U
	Methyl tert-butyl ether	BRL	0.500 ppbv			1	**	U
	Isopropyl alcohol	0.710	0.500 ppbv			1	**	
	2-Butanone (MEK)	2.00	0.500 ppbv			1	11	
	cis-1,2-Dichloroethene	BRL	0.500 ppbv			1	**	U
110-54-3		BRL	0.500 ppbv			1	"	U
	Ethyl acetate	BRL	0.500 ppbv			1	11	U
	Chloroform	0.430	0.500 ppbv			1 .	и	J
109-99-9	Tetrahydrofuran	BRL	0.500 ppbv			1	. 11	U
								ر ا
								SM
							Page 2 o	f 28 🔪

<u>Sample Ident</u> RES#2-SS-1 2 SA55103-01		<u>Client Project #</u> 5555113	<u>Matrix</u> Air	Collection 05-Dec-0			Receive 06-Dec-		
		Method Ref. EPA TO-15	Prepared 07-Dec-06	<u>Anal</u> 08-De			<u>Analys</u> WB	<u>it</u>	
CAS No.	Analyte(s)	Result	*RDL/Units	RT	Q	Dilution	Batch	Flag	
Air Quality A	Analyses								
EPA TO-15		Prepared by me	thod General Air	Pren					
107-06-2	1,2-Dichloroethane	BRL	0.500 ppbv	ттор		1	6120588	U	
71-55-6	1,1,1-Trichloroethane	0.540	0.500 ppbv			1	"	U	
71-43-2	Benzene	0.430	0.500 ppbv			1	**	J	
56-23-5	Carbon tetrachloride	BRL	0.500 ppbv			1	,	U	
110-82-7	Cyclohexane	BRL	0.500 ppbv			1	"	U	
78-87 - 5	1,2-Dichloropropane	BRL	0.500 ppbv			1	"	_	
75-27-4	Bromodichloromethane	BRL	0.500 ppbv			1	,,	U U	
79-01-6	Trichloroethene	BRL	0.500_ppbv	The same of the sa		_ 1	,,	. U	
142-82-5	n-Heptane	0.400	0.500 ppbv			1		u J	
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL	0.500 ppbv			1	11	_	
	cis-1,3-Dichloropropene	BRL	0.500 ppbv			1	19	U U	
10061-02-6	trans-1,3-Dichloropropene	BRL	0.500 ppbv			1	,,	_	
79-00-5	1,1,2-Trichloroethane	BRL	0.500 ppbv			1		U	
108-88-3	Toluene	4.75	0.500 ppbv			1	lt .	U	
591-78-6	2-Hexanone (MBK)	BRL	0.500 ppbv			1	**	**	
124-48-1	Dibromochloromethane	BRL	0.500 ppbv			1	. 11	U	
106-93-4	1,2-Dibromoethane (EDB)	BRL	0.500 ppbv			1	11	U	
127-18-4	Tetrachloroethene	0.480	0.500 ppbv			1	11	U	
108-90-7	Chlorobenzene	BRL	0.500 ppbv			1	**	J	
100-41-4	Ethylbenzene	0.730	0.500 ppbv			1	H	U	
1330-20-7	m,p-Xylene	2.38	0.500 ppbv			1	n		
75-25-2	Bromoform	BRL	0.500 ppbv			1	11	T7	
100-42-5	Styrene	BRL	0.500 ppbv			1	"	U	
95-47-6	o-Xylene	0.800	0.500 ppbv			1	11	U	
79-34-5	1,1,2,2-Tetrachloroethane	BRL	0.500 ppbv			1	"	***	
108-67-8	1,3,5-Trimethylbenzene	0.320	0.500 ppbv			1	n	U	
622-96-8	4-Ethyltoluene	BRL	0.500 ppbv			1	**	J Ti	
95-63-6	1,2,4-Trimethylbenzene	0.790	0.500 ppbv			1		U	
541-73-1	1,3-Dichlorobenzene	BRL	0.500 ppbv			1	71	**	
100-44-7	Benzyl chloride	BRL	0.500 ppbv			1	**	U	
106-46-7	1,4-Dichlorobenzene	BRL	0.500 ppbv			1	11	U	
	1,2-Dichlorobenzene	BRL	0.500 ppbv			1	"	U	
120-82-1	1,2,4-Trichlorobenzene	BRL	0.500 ppbv			1	n	υ . ``	
87-68-3	Hexachlorobutadiene	BRL	0.500 ppbv			1	11	υJ	(
460-00-4	Surrogate: 4-Bromofluorobenzene	100	75-125 %			1		U	

Sample Identification
RES#2-I1-120406
SA55103-02

<u>Matrix</u> Air Collection Date/Time 05-Dec-06 07:32

Received 06-Dec-06

Method Ref. Air method TICs Prepared 07-Dec-06

Analyzed 07-Dec-06

CAS No.	Analyte(s)	Result	*RDL/Units	RT	$\overline{\varrho}$	Dilution	Batch	Flag
Air Quality A	Analyses							
Tentatively Id	lentified Compounds in Air	Prepared by m	nethod General Air Pr	en:				TT C
106-97-8	Butane	2.08	ppbv	· • p		1	6120588	TIC J
124-18-5	Decane	1.14	ppbv			1	11	J
5989-27-5	d-Limonene	3.72	ppbv			1 .	н	J
EPA TO-15		Prepared by m	nethod General Air Pr	en		,		Ū
115-07-1	Propene	BRL	0.500 ppbv	Сþ		1	11	U
75 - 71-8	Dichlorodifluoromethane (Freon12)	0.550	0.500 ppbv			1	er .	U
	Chloromethane	0.460	0.500 ppbv			1		J
76-14-2	1,2-Dichlorotetrafluoroethane-(Freon-114)	BRI					H	
75-01-4	Vinyl chloride	BRL	0.500 ppbv			1	H	U
106-99-0	1,3-Butadiene	BRL	0.500 ppbv			1	17	U
74-83 - 9	Bromomethane	BRL	0.500 ppbv			1	**	U
75-00-3	Chloroethane	BRL	0.500 ppbv			1	11	U
	Acetone	BRL	0.500 ppbv			1	11	U
75-69-4	Trichlorofluoromethane (Freon 11)	0.350	0.500 ppbv			1	п	J
64-17-5	Ethanol	127	0.500 ppbv			1	tt	XJ
75-35-4	1,1-Dichloroethene	BRL	0.500 ppbv			1	11	U
	Methylene chloride	0.600	0.500 ppbv			1	11	Ü
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	BRL	0.500 ppbv			1	"	U
75-15-0	Carbon disulfide	BRL	0.500 ppbv			1	н	U
156-60-5	trans-1,2-Dichloroethene	BRL	0.500 ppbv			1	. 11	U
	1,1-Dichloroethane	BRL	0.500 ppbv			1	11	U
1634-04-4	Methyl tert-butyl ether	BRL	0.500 ppbv			1	н	U
67-63-0	Isopropyl alcohol	15.3	0.500 ppbv			1	11	Ū
78-93-3	2-Butanone (MEK)	0.520	0.500 ppbv			1	н	
156-59-2	cis-1,2-Dichloroethene	BRL	0.500 ppbv			1	Ħ	U
110-54-3	Hexane	BRL	0.500 ppbv			1	"	U
141-78-6	Ethyl acetate	BRL	0.500 ppbv			1	"	บ
67-66-3	Chloroform	0.890	0.500 ppbv			1	**	Ü
	Tetrahydrofuran	BRL	0.500 ppbv			1	**	U
107-06-2	1,2-Dichloroethane	BRL	0.500 ppbv			1	н	U
71-55-6	1,1,1-Trichloroethane	BRL	0.500 ppbv			1	"	U
71-43-2	Benzene	0.370	0.500 ppbv			1	11	J
56-23-5	Carbon tetrachloride	BRL	0.500 ppbv			1	. "	U.
110-82-7	Cyclohexane	BRL	0.500 ppbv			1	11	U
78-87-5	1,2-Dichloropropane	BRL	0.500 ppbv			1	"	U
75-27-4	Bromodichloromethane	BRL	0.500 ppbv			1	11	บ
79-01-6	Trichloroethene	BRL	0.500 ppbv			1	н	บ
142-82-5	n-Heptane	BRL	0.500 ppbv			1	10	U
	4-Methyl-2-pentanone (MIBK)	BRL	0.500 ppbv			1		U
10061-01-5	cis-1,3-Dichloropropene	BRL	0.500 ppbv			1	11	U
10061-02-6	trans-1,3-Dichloropropene	BRL	0.500 ppbv			1	**	U

Sample Identi RES#2-I1-12		Client Project # 5555113	<u>Matrix</u> Air	Collection 05-Dec-			Receive 06-Dec-		
SA55103-02		Method Ref. EPA TO-15	Prepared 07-Dec-06		lyzed Dec-06		Analys WB	<u>t</u>	
CAS No.	Analyte(s)	Result	*RDL/Units	RT	Q	Dilution	Batch	Flag	
Air Quality A	Analyses						······································		
EPA TO-15		Prepared by me	thod General Air	Pren					
79-00-5	1,1,2-Trichloroethane	BRL	0.500 ppbv	1 1 Op		1	6120588	U	
108-88-3	Toluene	2.62	0.500 ppbv			1	"	U	
591-78-6	2-Hexanone (MBK)	BRL	0.500 ppbv			1	11	U	
124-48-1	Dibromochloromethane	BRL	0.500 ppbv			1	,,	U	
106-93-4	1,2-Dibromoethane (EDB)	BRL	0.500 ppbv			1	11	U	
127-18-4	Tetrachloroethene	BRL	0.500 ppbv			1	11	U	
108-90-7	Chlorobenzene	BRL	0.500 ppbv			1	н	บ	
100-41-4	Ethylbenzene	BRL	0.500 ppbv			1	11	. 10	
1330-20-7	m,p-Xylene	0.650	0.500 ppbv			1	"		•
75-25-2	Bromoform	BRL	0.500 ppbv			1	tr	U	
100-42-5	Styrene	BRL	0.500 ppbv			1	11	U	
95-47-6	o-Xylene	BRL	0.500 ppbv			1	11	บ	
79-34-5	1,1,2,2-Tetrachloroethane	BRL	0.500 ppbv			1	11	บ	
108-67-8	1,3,5-Trimethylbenzene	BRL	0.500 ppbv			1	11	บ	
622-96-8	4-Ethyltoluene	BRL	0.500 ppbv			1	"	U	
95-63-6	1,2,4-Trimethylbenzene	0.520	0.500 ppbv			1	11	Ü	
541-73-1	1,3-Dichlorobenzene	BRL	0.500 ppbv			1	"	U	
100-44-7	Benzyl chloride	BRL	0.500 ppbv			1	ır	U	
106-46-7	1,4-Dichlorobenzene	BRL	0.500 ppbv	•		1	11	บ	
95-50-1	1,2-Dichlorobenzene	BRL	0.500 ppbv			1	11	U	
120-82-1	1,2,4-Trichlorobenzene	BRL	0.500 ppbv			1	11	บู	C -
87-68-3	Hexachlorobutadiene	BRL	0.500 ppbv			1	"	n d	C
460-00-4	Surrogate: 4-Bromofluorobenzene	102	75-125 %			•	,,	U	

<u>Matrix</u> Air Collection Date/Time 05-Dec-06 07:30 Received 06-Dec-06

Method Ref. Air method TICs Prepared 07-Dec-06

Analyzed 07-Dec-06

CAS No.	Analyte(s)	Result	*RDL/Units	RT	Q	Dilution	Batch	Flag
Air Quality A	Analyses							· · · · · · · · · · · · · · · · · · ·
Tentatively Id	entified Compounds in Air	Prepared by m	nethod General Air P	rep				TIC
015780-65-1	Acetoacetic acid, 1-thio-,	3.25	ppbv			1	6120588	J
106-97 - 8	Butane	2.43	ppbv			1	11	J
124-18-5	Decane	1.09	ppbv			1	11	J
5989 - 27-5	d-Limonene	3.31	ppbv			1	н	J
75-28-5	Isobutane	38.4	ppbv			1	11	J
109-66-0	Pentane	1.25	ppbv			1	11	J
1120-21-4	Undecane	0.750	ppbv			1	11	J
EPA TO-15		Prepared by m	nethod-General Air P	ren				
115-07-1	Propene	BRL	0.500 ppbv	гор		1	"	U
75-71-8	Dichlorodifluoromethane (Freon12)	0.610	0.500 ppbv			. 1	п	Ü
	Chloromethane	0.510	0.500 ppbv			1	11	
76-14-2	1,2-Dichlorotetrafluoroethane (Freon 114)	BRL	0.500 ppbv			1	11	U
	Vinyl chloride	BRL	0.500 ppbv			1	"	U
106-99-0	1,3-Butadiene	BRL	0.500 ppbv			1	11	U
74-83-9	Bromomethane	BRL	0.500 ppbv			1	**	U
75-00-3	Chloroethane	BRL	0.500 ppbv			1	"	U
67-64-1	Acetone	9.31	0.500 ppbv			1	n	Ü
75-69-4	Trichlorofluoromethane (Freon 11)	0.470	0.500 ppbv			1	11	J
64-17-5	Ethanol .	184	0.500 ppbv			1	n	5 E/ 7
75-35-4	1,1-Dichloroethene	BRL	0.500 ppbv			1	*1	U U
75-09-2	Methylene chloride	0.540	0.500 ppbv			1	"	U
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	BRL	0.500 ppbv			1	**	U
	Carbon disulfide	BRL	0.500 ppbv			1	11	U
156-60-5	trans-1,2-Dichloroethene	BRL	0.500 ppbv			1	**	U
75-34-3	1,1-Dichloroethane	BRL	0.500 ppbv			I	17	U
1634-04-4	Methyl tert-butyl ether	BRL	0.500 ppbv			1	81	U
67-63-0	Isopropyl alcohol	37.4	0.500 ppbv			1	11	U
78-93-3	2-Butanone (MEK)	0.430	0.500 ppbv			1	11	J
156-59-2	cis-1,2-Dichloroethene	BRL	0.500 ppbv			1	"	U
110-54-3	Hexane	BRL	0.500 ppbv			1	н	U
141-78-6	Ethyl acetate	BRL	0.500 ppbv			1	11	
67-66-3	Chloroform	0.790	0.500 ppbv			1 .	Ħ	U
109-99-9	Tetrahydrofuran	BRL	0.500 ppbv			1	11	U
107-06-2	1,2-Dichloroethane	BRL	0.500 ppbv			1	11	
71-55-6	1,1,1-Trichloroethane	BRL	0.500 ppbv			1	19	U
71-43-2	Benzene	0.440	0.500 ppbv			1	n	U
56-23-5	Carbon tetrachloride	BRL	0.500 ppbv			1	n	J
110-82-7	Cyclohexane	BRL	0.500 ppbv			1	11	U
78-87-5	1,2-Dichloropropane	BRL	0.500 ppbv			1	n	U
	Bromodichloromethane	BRL	0.500 ppbv			1	17	U
79-01-6	Trichloroethene	BRL	0.500 ppbv			1		U U

Sample Identi RES#2-I2-12		Client Project # 5555113	<u>Matrix</u> Air	Collection Date 05-Dec-06 07		Receive 06-Dec-	_
SA55103-03		Method Ref. EPA TO-15	Prepared 07-Dec-06	<u>Analyzed</u> 07-Dec-06	;	Analys WB	<u>st</u>
CAS No.	Analyte(s)	Result	*RDL/Units	RT Q	Dilution	Batch	Flag
Air Quality A	Analyses						
EPA TO-15		Prepared by me	thod General Air	Pren			
142-82-5	n-Heptane	BRL	0.500 ppbv	110p	. 1	6120588	U -
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL	0.500 ppbv		1	"	U
	cis-1,3-Dichloropropene	BRL	0.500 ppbv		1	"	U
10061-02-6	trans-1,3-Dichloropropene	BRL	0.500 ppbv		1	17	บ
79-00-5	1,1,2-Trichloroethane	BRL	0.500 ppbv		1	**	U
108-88-3	Toluene	2.86	0.500 ppbv		1	,,	U
591-78-6	2-Hexanone (MBK)	BRL	0.500 ppbv		1	,,	U
124-48-1	Dibromochloromethane	BRL	0.500 ppbv		1	11	U
106-93-4	1,2-Dibromoethane (EDB)	BRL	0.500 ppbv		1		U
127-18-4	Tetrachloroethene	BRL	0.500 ppbv		1	11	บ
108-90-7	Chlorobenzene	BRL	0.500 ppbv		1	11	บ
100-41-4	Ethylbenzene	BRL	0.500 ppbv		1	**	บ
1330-20-7	m,p-Xylene	0.670	0.500 ppbv		1	**	U
75-25-2	Bromoform	BRL	0.500 ppbv		1	tr	U
100-42-5	Styrene	BRL	0.500 ppbv		1	Ħ	U
95-47-6	o-Xylene	BRL	0.500 ppbv		1	If	U
79-34-5	1,1,2,2-Tetrachloroethane	BRL	0.500 ppbv		1	п	U
108-67-8	1,3,5-Trimethylbenzene	BRL	0.500 ppbv		1	**	U .
622-96-8	4-Ethyltoluene	BRL	0.500 ppbv		1		U
95-63-6	1,2,4-Trimethylbenzene	0.530	0.500 ppbv		1	н	U
541-7 3-1	1,3-Dichlorobenzene	BRL	0.500 ppbv		1	"	U
100-44-7	Benzyl chloride	BRL	0.500 ppbv		1	н	
106-46-7	1,4-Dichlorobenzene	BRL	0.500 ppbv		1	11	U
	1,2-Dichlorobenzene	BRL	0.500 ppbv		1	п	U
	1,2,4-Trichlorobenzene	BRL	0.500 ppbv		1	11	U T
	Hexachlorobutadiene	BRI.	0.500 ppbv				n 1

0.500 ppbv

75-125 %

BRL

101

87-68-3 Hexachlorobutadiene

Sample Identification RES#3-SS-120406 SA55103-04

Client Project # 5555113

<u>Matrix</u> Air Collection Date/Time 05-Dec-06 07:46

Received 06-Dec-06

Method Ref. Air method TICs Prepared 09-Dec-06 Analyzed 10-Dec-06

Analyst WB

	T L	memod HCs	09-Dec-06	10-1	Jec-06		WB	
CAS No.	Analyte(s)	Result	*RDL/Units	RT	Q	Dilution	Batch	Flag
Air Quality A	Analyses							
Tentatively Id	lentified Compounds in Air	Prepared by me	thod General Air F	rep				TIC
	2,2,7,7-Tetramethyloctane	60.8	ppbv	.*		10	6120711	J
	Decane, 2,2,8-trimethyl-	20.4	ppbv			10	Ħ	J
	Decane, 2,2-dimethyl-	40.4	ppbv			10	н	J
062238-14-6	Decane, 2,3,8-trimethyl-	156	ppbv			10	n	J
013151-34-3	Decane, 3-methyl- (02)	12.9	ppbv			10	n	J
3891-98-3	Dodecane, 2,6,10-trimethyl-	16.3	ppbv			10	п	J
	Heptane, 2,2,4,6,6-pentamet	15.9	ppbv			10	**	J
	Heptane, 5-ethyl-2,2,3-trim	80.2	ppby			10		_ J
	Nonane, 3-methyl-5-propyl-	41.5	ppbv			10	17	J
	Tetradecane, 2,2-dimethyl-	14.7	ppbv			10	"	J
EPA TO-15		Prepared by me	thod General Air F	ren				
115-07-1	Propene	BRL	5.00 ppbv	rop		10	n	R01 U
75-71-8	Dichlorodifluoromethane (Freon12)	BRL	5.00 ppbv			10	**	U
74-87-3	Chloromethane	BRL	5.00 ppbv			10	•	U
76 - 14-2	1,2-Dichlorotetrafluoroethane (Freon 114)		5.00 ppbv			10	**	U
	Vinyl chloride	BRL	5.00 ppbv			10	"	
106-99-0	1,3-Butadiene	BRL	5.00 ppbv			10	н	U
	Bromomethane	BRL	5.00 ppbv			10	R	U
75-00-3	Chloroethane	BRL	5.00 ppbv			- 10	**	U
67-64-1	Acetone	15.2	5.00 ppbv				11	U
75-69-4	Trichlorofluoromethane (Freon 11)	BRL	5.00 ppbv			10	11	
	Ethanol	54.8	5.00 ppbv			10	"	U
	1,1-Dichloroethene	BRL	5.00 ppbv			10		
	Methylene chloride	BRL				10	17	U
	1,1,2-Trichlorotrifluoroethane (Freon 113)		5.00 ppbv			10	"	U
	Carbon disulfide	BRL	5.00 ppbv			10		U
	trans-1,2-Dichloroethene	BRL	5.00 ppbv			10	n 	U
	1,1-Dichloroethane	BRL	5.00 ppbv			10	"	U
	Methyl tert-butyl ether	BRL	5.00 ppbv			10	11	U
	Isopropyl alcohol	BRL	5.00 ppbv			10	11	U
	2-Butanone (MEK)	BRL	5.00 ppbv			10	II	U
	cis-1,2-Dichloroethene	BRL	5.00 ppbv			10	11	U
110-54-3		BRL	5.00 ppbv			10	H	U
	Ethyl acetate	BRL	5.00 ppbv			10	н	U
	Chloroform		5.00 ppbv		•	10	**	U
	Tetrahydrofuran	BRL	5.00 ppbv			10	"	U
	1,2-Dichloroethane	BRL	5.00 ppbv			10	"	U
	1,1,1-Trichloroethane	BRL	5.00 ppbv			10	11	U
	Benzene	BRL	5.00 ppbv			10	"	U
	Carbon tetrachloride	BRL	5.00 ppbv			10	**	U
		BRL	5.00 ppbv			10	н	U
110-04-/	Cyclohexane	BRL	5.00 ppbv			10	17	U

SM Page 8 pf 28

Sample Identi: RES#3-SS-12 SA55103-04		Client Project # 5555113	<u>Matrix</u> Air	Collection 05-Dec			Receive 06-Dec-	
7133103-04		Method Ref. EPA TO-15	<u>Prepared</u> 09-Dec-06	<u>Analyzed</u> 10-Dec-06			<u>Analyst</u> WB	
CAS No.	Analyte(s)	Result	*RDL/Units	RT	Q	Dilution	Batch	Flag
Air Quality A	analyses					3122		
EPA TO-15		Prepared by me	thod General Air	Pren				R01
78-87-5	1,2-Dichloropropane	BRL	5.00 ppbv	F		10	6120711	KUL
75-27-4	Bromodichloromethane	BRL	5.00 ppbv			10	**	U
79-01-6	Trichloroethene	BRL	5.00 ppbv			10	"	U
142-82-5	n-Heptane	BRL	5.00 ppbv			10	Ħ	U
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL	5.00 ppbv			10		U
10061-01-5	cis-1,3-Dichloropropene	BRL	5.00 ppbv			10	11	U
10061-02-6	trans-1,3-Dichloropropene	BRL	5.00 ppbv			10	11	U
79-00-5	1,1,2-Trichloroethane	BRL	5.00 ppbv			10	**	U
108-88-3	Toluene	BRL	5.00 ppbv			10	11	U
591 - 78-6	2-Hexanone (MBK)	BRL	5.00 ppbv			10	11	U
124-48-1	Dibromochloromethane	BRL	5.00 ppbv			10	11	U
106-93-4	1,2-Dibromoethane (EDB)	BRL	5.00 ppbv			10	"	U
127-18-4	Tetrachloroethene	BRL	5.00 ppbv			10	"	U
108-90-7	Chlorobenzene	BRL	5.00 ppbv			10	"	U
100-41-4	Ethylbenzene	BRL	5.00 ppbv			10	"	U
1330-20-7	m,p-Xylene	BRL	5.00 ppbv			10	**	U
75-25-2	Bromoform	BRL	5.00 ppbv			10	"	U
100-42-5	Styrene	BRL	5.00 ppbv			10	n	U
95-47 - 6	o-Xylene	BRL	5.00 ppbv			10	IF	U
79-34-5	1,1,2,2-Tetrachloroethane	BRL	5.00 ppbv			10	11	U
108-67-8	1,3,5-Trimethylbenzene	BRL	5.00 ppbv			10	**	U

5.00 ppbv

75-125 %

BRL

BRL

BRL

BRL

BRL

BRL

BRL

BRL

104

10

10

10

10

10

10

10

10

U

U

U

U

U

U

 \mathbf{U}

622-96-8 4-Ethyltoluene

100-44-7 Benzyl chloride

95-63-6 1,2,4-Trimethylbenzene

541-73-1 1,3-Dichlorobenzene

106-46-7 1,4-Dichlorobenzene

95-50-1 1,2-Dichlorobenzene

120-82-1 1,2,4-Trichlorobenzene

87-68-3 Hexachlorobutadiene

Matrix Air Collection Date/Time 05-Dec-06 07:45

Received 06-Dec-06

Method Ref. Air method TICs

Prepared 07-Dec-06 Analyzed 07-Dec-06

		r memod 11Cs	07-De	ec-06	07-1	Dec-06		WB	
CAS No.	Analyte(s)	Result	*RDI	/Units	RT	Q	Dilution	Batch	Flag
Air Quality A	nalyses								-
Tentatively Ide	ntified Compounds in Air	Prepared by me	thod Gen	eral Air Pr	en:				
115-11-7	1-Propene, 2-methyl-	6.38		ppbv	.op		1	6120588	TIC
123-86-4	Acetic acid, butyl ester	1.28		ppbv			1	11	J
106-97-8	Butane	2.72		ppbv			1	17	J
	Cyclohexane, (2-methylpropyl)-	1.25		ppbv			1	n	J
	Cyclopentanone, 2-methyl-	1.54		ppbv			1	11	J
124-18-5	Decane	3.48		ppbv			1	11	J
112-40-3	Dodecane	1.28		ppbv			1		J
75-37-6	Ethane, 1,1-difluoro-	8.44		ppbv			=	11	J
75-28-5		6.71		ppbv ppbv			_ 1	· ·	J
138-86-3	Limonene	1.65							J
111-84-2	Nonane	1.30		ppby			1	11	J
,	Octane, 2,6-dimethyl-	0.960		ppbv			1	"	J
1120-21-4		3.41		ppbv			1	"	J
EPA TO-15				ppbv			1	"	J
115-07-1	Propens	Prepared by me			ер				
		BRL	0.500				1	"	U
	Dichlorodifluoromethane (Freon12) Chloromethane	0.500	0.500				1	II .	
		0.540	0.500				1	Ħ	
	1,2-Dichlorotetrafluoroethane (Freon 114		0.500				1	"	\mathbf{v}
	Vinyl chloride	BRL	0.500				1	11	U
	1,3-Butadiene	BRL	0.500	ppbv			1	17	U
	Bromomethane	BRL	0.500	ppbv			1	11	U
	Chloroethane	BRL	0.500	ppbv			1	tr	U
67-64-1		11.5	0.500	ppbv			1	u ·	
	Trichlorofluoromethane (Freon 11)	0.300	0.500	ppbv			1	"	J
64-17-5		242	0.500	ppbv			1	11	KJ
	1,1-Dichloroethene	BRL	0.500	ppbv			1	"	U
	Methylene chloride	0.630	0.500	ppbv			1	ŧr	_
	1,1,2-Trichlorotrifluoroethane (Freon 113) BRL	0.500	ppbv			1	11	U
	Carbon disulfide	BRL	0.500	ppbv			1	n	U
	rans-1,2-Dichloroethene	BRL	0.500	ppbv			1	11	U
	1,1-Dichloroethane	BRL	0.500	ppbv			1	**	Ü
1634-04-4 I	Methyl tert-butyl ether	BRL	0.500	ppbv			1	11	บ
	sopropyl alcohol	48.3	0.500				1	11	U
	2-Butanone (MEK)	2.85	0.500				1	11	
156-59-2 c	cis-1,2-Dichloroethene	BRL	0.500				1	11	U
110-54 - 3 I		BRL	0.500				1		U
141-78-6 I	Ethyl acetate	BRL	0.500				1	It	
67-66-3	Chloroform	1.19	0.500	~ ~			1	71	U
109-99-9	Cetrahydrofuran	4.87	0.500				1	11	
107-06-2 1	,2-Dichloroethane	BRL	0.500				1	11	
71-55-6 1	,1,1-Trichloroethane	BRL	0.500				1	u	U
				rro,					U

<u>Sample Iden</u> RES#3-I1-1: SA55103-05	20406	Client Project # 5555113	<u>Matrix</u> Air	Collection 05-Dec			Receive 06-Dec-		
		Method Ref. EPA TO-15	<u>Prepared</u> 07-Dec-06		l <u>lyzed</u> Dec-06		Analys WB	<u>st</u>	
CAS No.	Analyte(s)	Result	*RDL/Units	RT	Q	Dilution	Batch	Flag	
Air Quality	Analyses								
EPA TO-15		Prepared by me	thod General Air	Pren					
71-43-2	2 Benzene	2.15	0.500 ppbv	110p		1	6120588		
56-23-5	5 Carbon tetrachloride	BRL	0.500 ppbv			1	11	U	
110-82-7	7 Cyclohexane	BRL	0.500 ppbv			1	11	U	
78-87-5	5 1,2-Dichloropropane	BRL	0.500 ppbv			1	"	U	
75-27-4	Bromodichloromethane	BRL	0.500 ppbv			1	"	U	
79 - 01-6	5 Trichloroethene	BRL	0.500 ppbv			1	"	U	
142-82-5	n-Heptane	0.620	0.500 ppbv	•		1	••	U	
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL	0,500 ppby			1	"	_ .	
10061-01-5	cis-1,3-Dichloropropene	BRL	0.500 ppbv			1	11	u TU	
10061-02-6	trans-1,3-Dichloropropene	BRL	0.500 ppbv			1	11	_	
79-00-5	1,1,2-Trichloroethane	BRL	0.500 ppbv			1	"	U	
108-88-3	Toluene	2.41	0.500 ppbv			1	"	U	
591 - 78-6	5 2-Hexanone (MBK)	BRL	0.500 ppbv			1	"	**	
124-48-1	Dibromochloromethane	BRL	0.500 ppbv			1	"	U	
106-93-4	1,2-Dibromoethane (EDB)	BRL	0.500 ppbv			1	"	U	
127-18-4	Tetrachloroethene	BRL	0.500 ppbv			1	17	U	
108-90-7	Chlorobenzene	BRL	0.500 ppbv			1	19	U	
100-41-4	Ethylbenzene	0.470	0.500 ppbv			1	n	U	
1330-20-7	m,p-Xylene	1.59	0.500 ppbv			1	11	J	
75-25-2	Bromoform	BRL	0.500 ppbv			1	n		
100-42-5	Styrene	1.97	0.500 ppbv			1	78	U	
95-47-6	o-Xylene	0.550	0.500 ppbv			1	н		
79-34 - 5	1,1,2,2-Tetrachloroethane	BRL	0.500 ppbv			_	11		
	1,3,5-Trimethylbenzene	BRL	0.500 ppbv			1	 It	U	
622-96-8	4-Ethyltoluene	BRL	0.500 ppbv			1		υ	
95-63-6	1,2,4-Trimethylbenzene	0.370	0.500 ppbv			1		U	
	1,3-Dichlorobenzene	BRL	0.500 ppbv			1		J	
100-44-7	Benzyl chloride	BRL	0.500 ppbv			1	"	U	
106-46-7	1,4-Dichlorobenzene	BRL	0.500 ppbv			1	**	U	
95-50-1	1,2-Dichlorobenzene	BRL	0.500 ppbv			1	"	U	
120-82-1	1,2,4-Trichlorobenzene	BRL	0.500 ppbv			1	"	U T	
87-68-3	Hexachlorobutadiene	BRL	0.500 ppbv			1	"	ո Ղ	C
460-00-4	Surrogate: 4-Bromoflyorobanzana	00.2	5.550 ppov			1	**	U	

99.2

75-125 %

Sample Identification
RES#3-I2-120406
SA55103-06

<u>Matrix</u> Air Collection Date/Time 05-Dec-06 07:49

Received 06-Dec-06

Method Ref. Air method TICs Prepared 07-Dec-06 Analyzed 07-Dec-06

			07-1060-00	U7-1.	Jec-06		WB		
CAS No.	Analyte(s)	Result	*RDL/Units	RT	Q	Dilution	Batch	Flag	
Air Quality A	analyses				·				
<u>Tentatively Ide</u>	entified Compounds in Air	Prepared by me	thod General Air F	reo				TELO	
	1RalphaPinene	1.46	ppbv	1		2	6120588	TIC J	
	Benzene, 1-ethyl-3-methyl-	1.82	ppbv			2	li .	J	
106 - 97-8	Butane	5.86	ppbv			2	**	J	
	Butane, 2,2,3,3-tetramethyl-	2.50	ppbv			2	11	J	
	Butane, 2-methyl-	466	ppbv			2	**	J	
	Cyclohexane, (2-methylpropyl)-	1.60	ppbv			2	**	J	
	Cyclopentanone, 2-methyl-	1.48	ppbv			2	tr	J	
124-18-5	Decane	4.94	ppby			2	IT	J	
75-37-6	Ethane, 1,1-difluoro-	60.7	ppbv			2	If	J	
111-84-2	Nonane	1.90	ppbv			2	"	J	
109-66-0	Pentane	2.68	ppbv			2	Ħ	J	
74-98-6	Propane	5.12	ppbv			2	Ħ	J	
1120-21-4	Undecane	3.54	ppbv			2	n	J	
EPA TO-15		Prepared by me	thod General Air P	ren				ŭ	
115-07-1	Propene	BRL	1.00 ppbv	P		2	н	U	
75-71-8	Dichlorodifluoromethane (Freon12)	BRL	1.00 ppbv			2	lt.	U	
74-87-3	Chloromethane	BRL	1.00 ppbv			2	l)	U	
76-14-2	1,2-Dichlorotetrafluoroethane (Freon 11	4) BRL	1.00 ppbv			2	11	U	
75-01-4	Vinyl chloride	BRL	1.00 ppbv			2	**	U	
106-99-0	1,3-Butadiene	BRL	1.00 ppbv			2	n	U	
74-83 - 9	Bromomethane	BRL	1.00 ppbv			2	"		
75-00-3	Chloroethane	BRL	1.00 ppbv			2	,,	U U	
67-64-1	Acetone	BRL	1.00 ppbv			2	11	U	
75-69-4	Trichlorofluoromethane (Freon 11)	BRL	1.00 ppbv	•		2	"	Ü	
64-17-5	Ethanol	640	1.00 ppbv			2	11	· ·	
75-35-4	1,1-Dichloroethene	BRL	1.00 ppbv			2	**	Λ 7	L
75-09-2	Methylene chloride	0.620	1.00 ppbv			2	н		
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 11	B) BRL	1.00 ppbv			2	11	J	
75-15-0	Carbon disulfide	BRL	1.00 ppbv			2	**	U U	
156-60-5	trans-1,2-Dichloroethene	BRL	1.00 ppbv			2	It.	U	
75-34-3	1,1-Dichloroethane	BRL	1.00 ppbv			2	•1	U	
1634-04-4	Methyl tert-butyl ether	BRL	1.00 ppbv			2	tt	U	
67-63-0	Isopropyl alcohol	23.6	1.00 ppbv			2	11	U	
78 - 93-3	2-Butanone (MEK)	7.00	1.00 ppbv			. 2	11		
156-59-2	cis-1,2-Dichloroethene	BRL	1.00 ppbv			. 2	11	TT	
110-54-3	Hexane	BRL	1.00 ppbv		i	2	11	U U	
141-78-6	Ethyl acetate	BRL	1.00 ppbv			2	11		
67-66-3	Chloroform	1.32	1.00 ppbv			2	n	U _e	
109-99-9	Tetrahydrofuran	2.28	1.00 ppbv			2			
107-06-2	1,2-Dichloroethane	BRL	1.00 ppbv			2	11	¥T	
71-55-6	1,1,1-Trichloroethane	BRL	1.00 ppbv			2	n	U U	



<u>Sample Identi</u> RES#3-I2-12 SA55103-06		Client Project # 5555113	<u>Matrix</u> Air	Collection 05-Dec			Receive 06-Dec-	
5A33103-00		Method Ref. EPA TO-15	Prepared 07-Dec-06	<u>Analyzed</u> 07-Dec-06			<u>Analys</u> WB	<u>st</u>
CAS No.	Analyte(s)	Result	*RDL/Units	RT	$\overline{\varrho}$	Dilution	Batch	Flag
Air Quality A	analyses							
EPA TO-15		Prepared by me	thod General Air	Pren				
71-43-2	Benzene	0.680	1.00 ppbv			2	6120588	J
56-23-5	Carbon tetrachloride	BRL	1.00 ppbv			2	11	U
110-82-7	Cyclohexane	BRL	1.00 ppbv			2		TU
78-87-5	1,2-Dichloropropane	BRL	1.00 ppbv	•		2	11	U
75-27-4	Bromodichloromethane	BRL	1.00 ppbv			2	11	U
79-01-6	Trichloroethene	BRL	1.00 ppbv			2	11	U
142-82-5	n-Heptane	0.700	1.00 ppbv			2	19	J
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL	1.00 ppbv			_ 2	11	U
10061-01-5	cis-1,3-Dichloropropene	BRL	1.00 ppbv			2	"	U
10061-02-6	trans-1,3-Dichloropropene	BRL	1.00 ppbv			2	ıı	U
79-00-5	1,1,2-Trichloroethane	BRL	1.00 ppbv			2	11	U
108-88-3	Toluene	22.2	1.00 ppbv			2	11	U
591-78-6	2-Hexanone (MBK)	BRL	1.00 ppbv			2	Ħ	U
124-48-1	Dibromochloromethane	BRL	1.00 ppbv			2	н	U
106-93-4	1,2-Dibromoethane (EDB)	BRL	1.00 ppbv			2	It	U
127-18-4	Tetrachloroethene	BRL	1.00 ppbv			2	11	U
108-90-7	Chlorobenzene	BRL	1.00 ppbv			2	11	U
100-41-4	Ethylbenzene	1.00	1.00 ppbv			2	11	U
1330-20-7	m,p-Xylene	2.42	1.00 ppbv			2	н	
	Bromoform	BRL	1.00 ppbv			2	"	U
100-42-5	Styrene	1.06	1.00 ppbv			2	n	Ü
95 - 47-6	o-Xylene	0.880	1.00 ppbv			2	17	J
79-34-5	1,1,2,2-Tetrachloroethane	BRL	1.00 ppbv			2	17	U
108-67-8	1,3,5-Trimethylbenzene	BRL	1.00 ppbv			2	11	U
622 - 96-8	4-Ethyltoluene	BRL	1.00 ppbv			2	. 11	U
	1,2,4-Trimethylbenzene	BRL	1.00 ppbv			2	11	U
541-73-1	1,3-Dichlorobenzene	BRL	1.00 ppbv			2	**	U
100-44-7	Benzyl chloride	BRL	1.00 ppbv			2	н	U
100 10 -								·

1.00 ppbv

1.00 ppbv

1.00 ppbv

1.00 ppbv

75-125 %

BRL

BRL

BRL

BRL

101

U

U

 \mathbf{U}

 $\mathbf{U}\mathbf{\mathcal{J}}$

cct

2

2

2

2

106-46-7 1,4-Dichlorobenzene

95-50-1 1,2-Dichlorobenzene

120-82-1 1,2,4-Trichlorobenzene

87-68-3 Hexachlorobutadiene

Sample Identification 77AVE-OUTDOOR SA55103-07

Client Project # 5555113

<u>Matrix</u> Air Collection Date/Time 05-Dec-06 07:50 Received 06-Dec-06

Method Ref. Air method TICs Prepared 07-Dec-06 Analyzed 07-Dec-06

		mounou 1.	.05	. ۵۲-۵	00-00	07-12	,cc-00		WD	
CAS No.	Analyte(s)	Result		*RDI	/Units	RT	Q	Dilution	Batch	Flag
Air Quality A	Analyses									
	Tentatively Identified Compounds	None fo	ound		ppbv			1	6120588	U
EPA TO-15		Prepared	by me	ethod Gen	eral Air Pı	ep				
115-07-1	Propene	BRL	•	0.0900				1	u	U
75-71-8	Dichlorodifluoromethane (Freon12)	0.500			ppbv			1	n	
74-87-3	Chloromethane	0.978		0.0900				1	**	
76-14-2	1,2-Dichlorotetrafluoroethane (Freon 114)	BRL		0.0900	ppbv			1	"	U
75-01-4	Vinyl chloride	BRL		0.0900	ppbv			1	n	U
106-99-0	1,3-Butadiene	BRL		0.0900	ppbv			1	n	U
74-83-9	Bromomethane	BRL		0.0900	ppbv			1	n	U
75-00-3	Chloroethane	BRL		0.0900	ppbv			1	n	U
67-64-1	Acetone	2.69		0.500	ppbv			1	17	
75-69-4	Trichlorofluoromethane (Freon 11)	0.603		0.0900	ppbv			1	11	
64-17-5	Ethanol	7.59		0.500	ppbv			1	**	
75-35-4	1,1-Dichloroethene	BRL		0.0900	ppbv			1	#	U
75-09-2	Methylene chloride	0.228	U	0.0900	ppbv		BL	1	n	
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	0.194		0.0900	ppbv	*		1	ű	
75-15-0	Carbon disulfide	BRL		0.0900	ppbv			1	н	U
156-60-5	trans-1,2-Dichloroethene	BRL		0.0900	ppbv			1	*1	U
75-34-3	1,1-Dichloroethane	BRL		0.0900	ppbv			1	**	U
1634-04-4	Methyl tert-butyl ether	BRL		0.0900	ppbv			1	н	U
67-63-0	Isopropyl alcohol	2.03		0.500	ppbv			1	11	
78-93-3	2-Butanone (MEK)	0.555		0.0900				1	**	
156-59-2	cis-1,2-Dichloroethene	BRL		0.0900				1	н	U
110-54-3	Hexane	0.314		0.0900				1	11	Ü
141-78-6	Ethyl acetate	0.172		0.0900				1	n	
67-66-3	Chloroform	BRL		0.0900				1	n	U
109-99-9	Tetrahydrofuran	BRL		0.0900				1	11	U
107-06-2	1,2-Dichloroethane	BRL		0.0900				1	"	U
71-55-6	1,1,1-Trichloroethane	BRL		0.0900				1	11	U
71-43-2	Benzene	0.571		0.0900				1	**	Ü
56-23-5	Carbon tetrachloride	0.245		0.0280				1	**	
110-82-7	Cyclohexane	0.145		0.0900				1	11	
78-87-5	1,2-Dichloropropane	BRL		0.0900				1	u	U
75-27-4	Bromodichloromethane	BRL		0.0900	• •			1	"	U
79-01-6	Trichloroethene	0.0286		0.0280				1	**	U
142-82-5	n-Heptane	0.177		0.0900				1	W.	
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		0.0900				1	11	U
10061-01-5	cis-1,3-Dichloropropene	BRL		0.0900				1	**	U
	trans-1,3-Dichloropropene	BRL		0.0900				1	n	U
	1,1,2-Trichloroethane	BRL		0.0900				1	11	U
108-88-3		0.860		0.500				1		U
	2-Hexanone (MBK)	BRL		0.0900				1	11	111
	• •			3.2200	FF = '			Wase	1/1/1	jU
								MIL	iU\W	•

Sample Identification
77AVE-OUTDOOR
SA55103-07

Matrix Air Collection Date/Time 05-Dec-06 07:50 Received 06-Dec-06

Method Ref. EPA TO-15 Prepared 07-Dec-06 Analyzed 07-Dec-06

CAS No.	Analyte(s)	Result	*RDL/Units	RT	Q	Dilution	Batch	Flag
Air Quality A	Analyses							
EPA TO-15		Prepared by 1	nethod General Air Pi	rep				
124-48-1	Dibromochloromethane	BRL	0.0900 ppbv	••		1	6120588	U
106-93-4	1,2-Dibromoethane (EDB)	BRL	0.0900 ppbv			1	11	U
127-18-4	Tetrachloroethene	0.135	0.0900 ppbv			1	11	
108-90-7	Chlorobenzene	BRL	0.0900 ppbv			1	**	U
100-41-4	Ethylbenzene	0.186	0.0900 ppbv			1	11	Ū
1330-20-7	m,p-Xylene	0.622	0.0900 ppbv			1		
75-25-2	Bromoform	BRL	0.0900 ppbv			1	**	U
100-42-5	Styrene	0.313	0.0900 ppbv			1	"	Ū
95-47-6	o-Xylene	0.222	0.0900 ppbv			1	н	
79-34-5	1,1,2,2-Tetrachloroethane	BRL	0.0900 ppbv			1	**	U
108-67-8	1,3,5-Trimethylbenzene	BRL	0.0900 ppbv			1	н	U
622 - 96-8	4-Ethyltoluene	BRL	0.0900 ppbv			1	11	U
95-63 - 6	1,2,4-Trimethylbenzene	0.219	0.0900 ppbv			1	*1	Ü
541-73-1	1,3-Dichlorobenzene	BRL	0.0900 ppbv			1	11	U
100-44-7	Benzyl chloride	BRL	0.0900 ppbv			1	17	U
106-46-7	1,4-Dichlorobenzene	BRL	0.0900 ppbv			1	11	U
95 - 50-1	1,2-Dichlorobenzene	BRL	0.0900 ppbv			1	,,	U
120-82-1	1,2,4-Trichlorobenzene	BRL	0.0900 ppbv			1	***	U
	Hexachlorobutadiene	BRL	0.0900 ppbv			ī	**	U
460-00-4	Surrogate: 4-Bromofluorobenzene	101	75-125 %			-	u	U

Sample Identification 77AVE-OUTDOOR SA55103-07

Client Project # 5555113

<u>Matrix</u> Air Collection Date/Time 05-Dec-06 07:50 Received 06-Dec-06

Method Ref. Air method TICs

Prepared 07-Dec-06 Analyzed 07-Dec-06

CAS No.	Analyte(s)	Result	*RDL/Units	RT Q	Dilution	Batch	Flag
Air Quality A	Analyses						
	Tentatively Identified Compounds	None found	ppbv		1	6120588	U
EPA TO-15		Prepared by m	ethod General Air P	ren			
	Propene	BRL	0.0900 ppbv	юр	1	"	U
	Dichlorodifluoromethane (Freon12)	0.500	0.0900 ppbv		1	**	·
	Chloromethane	0.978	0.0900 ppbv		1	17	
76-14-2	1,2-Dichlorotetrafluoroethane (Freon 114)	BRL	0.0900 ppbv		1	11	U
	Vinyl chloride	BRL	0.0900 ppbv		1	**	U
106-99-0	1,3-Butadiene	BRL	0.0900 ppbv		1	11	U
74-83-9	Bromomethane	BRL	0.0900 ppbv		11	11	u
75-00-3	Chloroethane	BRL	0.0900 ppbv		1	11	U
67-64-1	Acetone	2.69	0,0900 ppbv		1	н	
75-69-4	Trichlorofluoromethane (Freon 11)	0.603	0.0900 ppbv		1	"	
64 - 17 - 5	Ethanol	7.59	0.0900 ppbv		1	11	
75-35-4	1,1-Dichloroethene	BRL	0.0900 ppbv		1	н	U
75-09-2	Methylene chloride	0.228	0.0900 ppby		1	ır	
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	0.194	0.0900 ppbv		1	•	
75-15-0	Carbon disulfide	BRL	0.0900 ppbv		1	11	τ
156-60-5	trans-1,2-Dichloroethene	BRL	0.0900 ppbv		1	**	Į
75-34-3	1,1-Dichloroethane	BRL	Q.0900 ppbv		1	"	τ
1634-04-4	Methyl tert-butyl ether	BRL	0.0900 ppbv		1	н	τ
67-63-0	Isopropyl alcohol	2.03	0.0900 ppbv		1	n	
78-93-3	2-Butanone (MEK)	0.555	0.0900 ppbv	\	1	tt	
156-59-2	cis-1,2-Dichloroethene	BRL	0.0900 ppbv		1	"	τ
110-54-3	Hexane	0.314	0.0900 ppb	\	1	11	•
141-78-6	Ethyl acetate	0.172	0.0900 ppbv	\	1	11	
	Chloroform	BRL	0.0900 ppbv	` '	1	Ħ	τ
109-99-9	Tetrahydrofuran	BRL	0.0900 ppbv	\	1	н	τ
107-06-2	1,2-Dichloroethane	BRL	0.0900 ppbv		I	**	1
71-55-6	1,1,1-Trichloroethane	BRL	0.0900 ppbv		\ 1	11	1
71-43-2	. Benzene	0.571	0.0900 ppbv	\.	\ 1	11	
56-23-5	Carbon tetrachloride	0.245	0.0280 ppbv		1	n	
110-82-7	Cyclohexane	0.145	0.0900 ppbv		1	11	
78-87-5	1,2-Dichloropropane	BRL	0.0900 ppbv	\	1	Ħ	ì
75-27-4	Bromodichloromethane	BRL	0.0900 ppbv	\	1	. 11	1
79-01-6	Trichloroethene	0.0286	0.0280 ppbv	. \	1	\ "	
142-82-5	n-Heptane	0.177	0.0900 ppbv		1	\ "	
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL	0.0900 ppbv		1	\"	Ţ
	cis-1,3-Dichloropropene	BRL	0.0900 ppbv		1	/-	τ
	trans-1,3-Dichloropropene	BRL	0.0900 ppbv		1	/	τ
79-00-5	5 1,1,2-Trichloroethane	BRL	0.0900 ppbv		. 1	" \	ī
108-88-3	3 Toluene	0.860	0.0900 ppbv		1	" \	,
591-78-6	5 2-Hexanone (MBK)	BRL	0.0900 ppbv		1	, \	\ r



Sample Identi 77AVE-OUT SA55103-07		Client Project # 5555113 Method Ref. EPA TO-15	<u>Matrix</u> Air <u>Prepared</u> 07-Dec-06	Collection 05-Dec-0 Anal 07-De	06 07:5 <u>yzed</u>		Receive 06-Dec- Analys WB	06	
CAS No.	Analyte(s)	Result	*RDL/Units	RT	$\overline{\varrho}$	Dilution	Batch	Flag	
Air Quality A	Analyses								
EPA TO-15		Prepared by me	thod General Air	Dran					
124-48-1	Dibromochloromethane	BRL	0.0900 ppbv	тер		1	6120588		
106-93-4	1,2-Dibromoethane (EDB)	BRL	0.0900 ppbv			1	1120366	U	
127-18-4	Tetrachloroethene	0.135	0.0900 ppbv			1	**	U	
108-90-7	Chlorobenzene	BRL	0.0900 ppbv			1	11		
100-41-4	Ethylbenzene	0.186	0.0900 ppbv			1	"	U	
1330-20-7	m,p-Xylene	0.622	0.0900 ppbv			-	"		
	Bromoform	BRL	0.0900 ppbv			1			
100-42-5	Styrene	0.313	0.0900 ppbv 0.0900 ppbv			1	"	U	
	o-Xylene	0.222	0.0900 ppbv 0.0900 ppbv						
	1,1,2,2-Tetrachloroethane	BRL				1	н		
	1,3,5-Trimethylbenzene	BRL	0.0900 ppbv			1	11	U	
	4-Ethyltoluene	BRL	0.0900 ppbv			1	11	\mathbf{v}	
	1,2,4-Trimethylbenzene	0.219	0.0900 ppbv			1	11	U	
	1,3-Dichlorobenzene	BRL	0.0900 ppbv			1	н		
	Benzyl chloride	\	0.0900 ppbv			1	n	U	
	1,4-Dichlorobenzene	BRL	0.0900 ppbv			1	11	U	
	1,2-Dichlorobenzene	BRL	0.0900 ppbv			1	H	\mathbf{U}	
	1,2,4-Trichlorobenzene	BRL	0.0900 ppbv			1	17	\mathbf{U}	
	Hexachlorobutadiene	BRL	0.0900 ppbv			1	11	$v\mathcal{J}$	C
	Surrogate: 4-Bromofluorobenzene	BRL <i>101</i>	0.0900 ppbv			1	11	U	
			75-125 %				TI .		

Report Date: 20-Dec-06 12:26

Attn: Jamie Barr



Final Report ☐ Re-Issued Report ☐ Revised Report

SPECTRUM ANALYTICAL, INC. Featuring HANIBAL TECHNOLOGY

Laboratory Report

Langan Engineering & Environmental Services 21 Penn Plaza; 360 West 31st Street, 8th Floor New York, NY. 10001

Project: Atlas Park - Queens, NY Project #:5555113

Laboratory ID	Client Sample ID	•	<u>Matrix</u>	Date Sampled	Date Received
SA55104-01	Air 120506		Air	05-Dec-06 09:05	06-Dec-06 09:53
SA55104-02	SV-N 120506		Soil Vapor	05-Dec-06 09:39	06-Dec-06 09:53
SA55104-03	SV-M 120506		Soil Vapor	05-Dec-06 11:55	06-Dec-06 09:53

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. These results relate only to the sample(s) as received.

All applicable NELAC requirements have been met

Please note that this report contains 20 pages of analytical data plus Chain of Custody documen(s). This report may not be reproduced, except in full, without written approval from Spectrum Analytical Inc.

Massachusetts Certification # M-MA138/MA1110 Connecticut # PH-0777 Florida # E87600/E87936 Maine # MA138 New Hampshire # 2538/2972 New Jersey # MA011/MA012 New York # 11393/11840 Rhode Island #98 USDA # S-51435 Vermont # VT-11393



C. Tayeh, Ph.D. President/Laboratory Director

athorized

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Sample Ident: Air 120506 SA55104-01	ification
CAS No.	Analyte
Air Quality A	Analyses
	Tentativ
EPA TO-15 115-07-1	Propene

Client Project # 5555113

Method Ref.

Air method TICs

Matrix Air Collection Date/Time 05-Dec-06 09:05

Received 06-Dec-06 Analyst WB

Prepared Analyzed 08-Dec-06 08-Dec-06

				00 12	/CC-00		WB	
CAS No.	Analyte(s)	Result	*RDL/Units	RT	$\overline{\varrho}$	Dilution	Batch	Flag
Air Quality	Analyses							
	Tentatively Identified Compounds	None found	ppbv			1	6120687	U
EPA TO-15		Prepared by met	thod General Air	Dron		-	0120007	U
115-07-1	Propene	BRL	0.500 ppbv	e reb		1	n	~-
75 - 71-8	Dichlorodifluoromethane (Freon12)	0.580	0.500 ppbv			1	11	U
74-87-3	Chloromethane	0.440	0.500 ppbv			1	11	
76-14-2	1,2-Dichlorotetrafluoroethane (Freon 114)	BRL	0.500 ppbv			1	11	J
75-01-4	Vinyl chloride	BRL	0.500 ppbv			1	19	U
106-99-0	1,3-Butadiene	BRL	0.500 ppbv			1	11	U
74-83-9	Bromomethane	BRL	0,500 ppbv			1		U
75-00-3	Chloroethane	BRL	0.500 ppbv			1	n	U_
67-64-1	Acetone	6.20	0.500 ppbv			1	н	U
75-69-4	Trichlorofluoromethane (Freon 11)	BRL	0.500 ppbv			1	17	
	Ethanol	7.47	0.500 ppbv			1	"	U
75-35-4	1,1-Dichloroethene	BRL	0.500 ppbv					
75-09-2	Methylene chloride	BRL	0.500 ppbv			1	. 19	U
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	BRL	0.500 ppbv				"	U
	Carbon disulfide	BRL	0.500 ppbv			1		U
156-60-5	trans-1,2-Dichloroethene	BRL	0.500 ppbv			1	ir	U
	1,1-Dichloroethane	BRL	0.500 ppbv			1	 H	U
1634-04-4	Methyl tert-butyl ether	BRL	0.500 ppbv			1	"	U
67 - 63-0	Isopropyl alcohol	1.24	0.500 ppbv			1	"	U
78-93-3	2-Butanone (MEK)	0.950	0.500 ppbv			1		
	cis-1,2-Dichloroethene	BRL	0.500 ppbv			1	"	
110-54-3		BRL	0.500 ppbv			1	"	U
141-78-6	Ethyl acetate	BRL .	0.500 ppbv			1	"	U
	Chloroform	BRL	0.500 ppbv			1	"	U
109-99-9	Tetrahydrofuran	BRL				1	"	U
	1,2-Dichloroethane	BRL	0.500 ppbv			1	n	U
71-55-6	1,1,1-Trichloroethane	BRL	0.500 ppbv 0.500 ppbv			1	11	\mathbf{U}
	Benzene	BRL				1	11	U
56-23-5	Carbon tetrachloride	BRL	0.500 ppbv 0.500 ppbv			1	Ħ	U
110-82-7	Cyclohexane	BRL				1	lt .	U
78-87-5	1,2-Dichloropropane	BRL	0.500 ppbv 0.500 ppbv			1	11	U
	Bromodichloromethane	BRL				1	. "	U
79-01 - 6	Trichloroethene	BRL	0.500 ppbv 0.500 ppbv			1	"	U
142-82-5	n-Heptane	BRL				1	11	U
	4-Methyl-2-pentanone (MIBK)	BRL	0.500 ppbv			1	"	U
	cis-1,3-Dichloropropene	BRL	0.500 ppbv			1	"	U
	trans-1,3-Dichloropropene	BRL	0.500 ppbv			1	"	U
	1,1,2-Trichloroethane	BRL	0.500 ppbv			1	"	U
108-88-3		5.93	0.500 ppbv			1	"	U
	2-Hexanone (MBK)	BRL	0.500 ppbv			1	"	
		יוער	0.500 ppbv			1	n	\mathbf{U}

SM Page 2 of 20

Sample Identification Air 120506 SA55104-01		0506 5555113 A					Received 06-Dec-06	
		Method Ref. EPA TO-15	Prepared 08-Dec-06		<u>Analyzed</u> 08-Dec-06		<u>Analys</u> WB	<u>st</u>
CAS No.	Analyte(s)	Result	*RDL/Units	RT	$\overline{\varrho}$	Dilution	Batch	Flag
Air Quality	Analyses			· · · · · · · · · · · · · · · · · · ·			· · · · · · · · · · · · · · · · · · ·	
EPA TO-15		Prepared by me	thod General Air	Pren				
124-48-1	Dibromochloromethane	BRL	0.500 ppbv	тюр		1	6120687	U
106-93-4	1,2-Dibromoethane (EDB)	BRL	0.500 ppbv			1	1120007	
127-18-4	Tetrachloroethene	BRL	0.500 ppbv			1	n	U
108-90-7	Chlorobenzene	BRL	0.500 ppbv			1	Ħ	U U
100-41-4	Ethylbenzene	BRL	0.500 ppbv			1	II	_
1330-20-7	m,p-Xylene	0.940	0.500 ppbv			1	. 11	U
75-25-2	Bromoform	BRL	0.500 ppbv			1	11	U
100-42-5	Styrene	BRL	0.500 ppbv			1	n	_
95 - 47-6	o-Xylene	BRL	0.500 ppbv			1	н	u U
79-34-5	1,1,2,2-Tetrachloroethane	BRL	0.500 ppbv			1	11	U
108-67-8	1,3,5-Trimethylbenzene	BRL	0.500 ppbv			1	ı	U
622-96-8	4-Ethyltoluene	BRL	0.500 ppbv			1	II.	U
95-63-6	1,2,4-Trimethylbenzene	BRL	0.500 ppbv			1	"	U
541-73-1	1,3-Dichlorobenzene	BRL	0.500 ppbv			1	11	U
100-44-7	Benzyl chloride	BRL	0.500 ppbv			1	H	U
106-46-7	1,4-Dichlorobenzene	BRL	0.500 ppbv			1	II .	_
95-50-1	1,2-Dichlorobenzene	BRL	0.500 ppbv			1	11	U
120-82-1	1,2,4-Trichlorobenzene	BRL	0.500 ppbv			1	"	U
87-68-3	Hexachlorobutadiene	BRL	0.500 ppbv			1	U.	U
460 00 4	Surrogates A Burne de 1	a = =	Siese Ppov			1		U

102

75-125 %

SA55104-02	
CAS No.	Analyte

Client Project # 5555113 Method Ref.

Air method TICs

<u>Matrix</u> Soil Vapor Prepared 08-Dec-06

Collection Date/Time 05-Dec-06 09:39

Received 06-Dec-06

Analyzed 08-Dec-06

A des One = 124== A	Analyte(s)	Result	*RDL	/Units	RT	Q	Dilution	Batch	Flag
•	Analyses								
	entified Compounds in Air	Prepared by:	method Gen	eral Air P	rep				
	(Z)-4-Methyl-2-hexene	5.38		ppbv	20.30	72	1	6120687	TIC, J
	1-Octene, 3-ethyl-	19.0		ppbv	20.64	74	1	11	TIC, J
	3-Ethyl-2-hexene	8.04		ppbv	16.23	91	1	"	TIC, J
	3-Heptene, 4-ethyl-	5.95		ppbv	18.57	68	1	11	TIC, J
	Cyclohexane, 1,1-dimethyl-2	· 7.33		ppbv	23.11	76	1	"	TIC, J
	Heptane, 3-methylene- (01)	23.6		ppbv	15.97	94	1	17	TIC, J
001632-16-2	Heptane, 3-methylene- (02)	11.5		ppbv	18.93	78	1		TIC, J
	Nonane, 2-methyl-5-propyl-	11.7	····	ppbv	23.57	64	1	11	_TIC, J
	Nonane, 3-methylene-	13.2		ppbv	21.65	91	1	. 11	TIC, J
006795-79-5	Nonane, 5-methylene-	7.50		ppbv	21.31	86	1	11	TIC, J
	Undecane, 3,8-dimethyl-	5.93		ppbv	23.23	78	1	n	TIC, J
EPA TO-15		Prepared by	method Gene	eral Air P	ren				•
115-07-1	Propene	BRL	0.500		r		1	11	U
75 - 71-8	Dichlorodifluoromethane (Freon12)	0.520	0.500				1	11	U
	Chloromethane	BRL	0.500				1	"	U
76-14-2	1,2-Dichlorotetrafluoroethane (Freon 114)	BRL	0.500				1	11	U
75-01-4	Vinyl chloride	BRL	0.500				1	**	U
106-99-0	1,3-Butadiene	BRL	0.500				1	н	
74-83-9	Bromomethane	BRL	0.500				1	**	U
75-00-3	Chloroethane	BRL	0.500				1	n	U
67-64-1	Acetone	19.0	0.500				1	11	U
75-69-4	Trichlorofluoromethane (Freon 11)	0.400	0.500				1	"	Ę.
64-17-5		5.59	0.500				1	17	J
75-35-4	1,1-Dichloroethene	BRL	0.500				1	"	*1
75-09-2	Methylene chloride	BRL	0.500				1	n	U
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	BRL	0.500				1	,,	U
	Carbon disulfide	2.76	0.500				1	,,	U
156-60-5	trans-1,2-Dichloroethene	BRL	0.500				1	н	ν,
75 - 34-3	1,1-Dichloroethane	BRL	0.500				1	11	U
1634-04-4	Methyl tert-butyl ether	BRL	0.500				1	**	U
67-63-0	Isopropyl alcohol	BRL	0.500				1	11	U
	2-Butanone (MEK)	2.19	0.500				1	"	U
	cis-1,2-Dichloroethene	BRL	0.500				1	,,	
110-54-3		BRL	0.500				1	**	U
141-78-6	Ethyl acetate	BRL	0.500				1	11	U
67-66-3	Chloroform	BRL	0.500				1	"	U
109-99-9	Tetrahydrofuran	BRL	0.500				1	0	U
	1,2-Dichloroethane	BRL	0.500				1		U
	1,1,1-Trichloroethane	BRL	0.500				1		U
107-06-2			0.500				1	"	U J
107-06-2	Benzene	0.440					1		

EPA TO-15	08-1
Method Ref.	Pre
5555113	Soil
Client Project #	<u>M</u>
	5555113 <u>Method Ref.</u>

<u>Matrix</u>	Collection Date/Time	Received
oil Vapor	05-Dec-06 09:39	06-Dec-06
Prepared	Analyzed	<u>Analyst</u>
8-Dec-06	08-Dec-06	WB

CAS No.	Analyte(s)	Result	*RDL/Units	RT	$\overline{\varrho}$	Dilution	Batch	Flag
Air Quality	Analyses							- 7
EPA TO-15		Prepared by n	nethod General Air Pr	en				
110-82-7	Cyclohexane	BRL	0.500 ppbv	· •p		1	6120687	U
78-87-5	1,2-Dichloropropane	BRL	0.500 ppbv			1	"	U
75-27-4	Bromodichloromethane	BRL	0.500 ppbv			1	**	U
79-01-6	Trichloroethene	BRL	0.500 ppbv			1	11	U
142-82-5	n-Heptane	0.540	0.500 ppbv			1	"	U
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL	0.500 ppbv			1	**	U
10061-01-5	cis-1,3-Dichloropropene	BRL	0.500 ppbv			1	n	U
10061-02-6	trans-1,3-Dichloropropene	BRL	0.500 ppbv			1	"	
79-00-5	1,1,2-Trichloroethane	BRL	0.500 ppbv			1	0	U
108-88-3	Toluene	3.04	0.500 ppbv			1	11	U
591 - 78-6	2-Hexanone (MBK)	BRL	0.500 ppbv			1	11	**
124-48-1	Dibromochloromethane	BRL	0.500 ppbv			1	"	U
106-93-4	1,2-Dibromoethane (EDB)	BRL	0.500 ppbv			1	11	U U
127-18-4	Tetrachloroethene	0.990	0.500 ppbv			1	"	U
108-90-7	Chlorobenzene	BRL	0.500 ppbv			1	17	¥T
100-41-4	Ethylbenzene	0.860	0.500 ppbv			1	l)	U
1330-20-7	m,p-Xylene	2.96	0.500 ppbv			1	#	
75-25-2	Bromoform	BRL	0.500 ppbv			1	n	
100-42-5	Styrene	BRL	0.500 ppbv			1	11	U
95-47-6	o-Xylene	1.07	0.500 ppbv			1		U
79 - 34-5	1,1,2,2-Tetrachloroethane	BRL	0.500 ppbv			1	11	
108-67-8	1,3,5-Trimethylbenzene	0.560	0.500 ppbv			1		U
622-96-8	4-Ethyltoluene	0.330	0.500 ppbv			1	п	
95-63-6	1,2,4-Trimethylbenzene	1.28	0.500 ppbv			1		J
541-73-1	1,3-Dichlorobenzene	BRL	0.500 ppbv			1	"	
100-44-7	Benzyl chloride	BRL	0.500 ppbv			1		U
106-46-7	1,4-Dichlorobenzene	BRL	0.500 ppbv			1	,,	U
95-50-1	1,2-Dichlorobenzene	BRL	0.500 ppbv			1	 H	U
120-82-1	1,2,4-Trichlorobenzene	BRL	0.500 ppbv			_	"	U
87-68-3	Hexachlorobutadiene	BRL	0.500 ppbv			1	"	U
460-00-4	Surrogate: 4-Bromofluorobenzene	105	75-125 %			1	"	U

<u>Client Project #</u> 5555113

<u>Matrix</u> Soil Vapor Collection Date/Time 05-Dec-06 11:55

Received 06-Dec-06

Method Ref. Air method TICs

Prepared 09-Dec-06 Analyzed 10-Dec-06

CAS No.	Analyte(s)	Result	*RDL/Units	RT	Q	Dilution	Batch	Fla
Air Quality A	Analyses	"					Y	
	lentified Compounds in Air	Prepared by m	ethod General Air P	ren				mrc
010574-36-4	2-Hexene, 3-methyl-, (Z)-	17.5	ppbv	<u>r</u>		5	6120711	TIC J
	3-Ethyl-2-hexene	10.8	ppbv			5	"	J
	4-Decene, 8-methyl-, (E)-	9.40	ppbv			5	**	J
	cis-4-Decene	8.95	ppbv			5	O	J
050876-31-8	Cyclohexane, 1,1,3,5-tetram	9.75	ppbv			5	11	J
	Cyclohexane, 1,1-dimethyl-2	13.0	ppbv			. 5	11	J
	Heptadecane	8.65	ppbv			5	и	J
	Heptane, 3-ethyl-5-methylene-	26.6	ppbv			5	n	J
	Heptane, 3-methylene- (01)	34.3	ppbv			5	tr	J
	Heptane, 3-methylene- (02)	16.3	ppbv			5		J
051655-64-2	Nonane, 3-methylene-	23.0	ppbv			5	17	J
006795-79-5	Nonane, 5-methylene-	11.8	ppbv			5	"	J
<u>EPA TO-15</u>		Prepared by m	ethod General Air Pr	ren				
115-07-1	Propene	BRL	2.50 ppbv	юp		5	ři.	R01
75-71-8	Dichlorodifluoromethane (Freon12)	BRL	2.50 ppbv			5	II	U
	Chloromethane	BRL	2.50 ppbv			5	11	U
76-14-2	1,2-Dichlorotetrafluoroethane (Freon 114)	BRL	2.50 ppbv			5	tt	U
	Vinyl chloride	BRL	2.50 ppbv			5	н	U
106-99-0	1,3-Butadiene	BRL	2.50 ppbv			5	"	U
74-83-9	Bromomethane	BRL	2.50 ppbv			5	11	U
75-00-3	Chloroethane	BRL	2.50 ppbv			5 ·	"	U
67-64-1	Acetone	31.2	2.50 ppbv			5	u	U
75 - 69-4	Trichlorofluoromethane (Freon 11)	BRL	2.50 ppbv				"	
64-17 - 5	· · · · · · · · · · · · · · · · · · ·	7.50	2.50 ppbv			5	"	U
75 - 35-4	1,1-Dichloroethene	BRL	2.50 ppbv			5	"	
75-09-2	Methylene chloride	BRL	2.50 ppbv			5 5	"	U
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	BRL	2.50 ppbv			5	19	U
	Carbon disulfide	6.55	2.50 ppbv			5	 H	U
156-60-5	trans-1,2-Dichloroethene	BRL	2.50 ppbv			5	11	
75-34-3	1,1-Dichloroethane	BRL	2.50 ppbv			5	"	U
1634-04-4	Methyl tert-butyl ether	BRL	2.50 ppbv			5	n n	U
67-63-0	Isopropyl alcohol	BRL	2.50 ppbv			5	"	U
78-93 - 3	2-Butanone (MEK)	BRL	2.50 ppbv			5 5	"	U
156-59-2	cis-1,2-Dichloroethene	BRL	2.50 ppbv				11	U
110-54-3	Hexane	BRL	2.50 ppbv			5 5	"	U
141-78-6	Ethyl acetate	BRL	2.50 ppbv			5	11	U
67-66-3	Chloroform	BRL	2.50 ppbv			5 5	"	U
109-99-9	Tetrahydrofuran	BRL	2.50 ppbv				"	U
	1,2-Dichloroethane	BRL	2.50 ppbv			5	"	U
71-55-6	1,1,1-Trichloroethane	BRL	2.50 ppbv 2.50 ppbv			5	"	U
	Benzene		2.20 ppuv			5		U

Sample Identification
SV-M 120506
SA55104-03

Client Project #
5555113

<u>Matrix</u> Soil Vapor

Collection Date/Time 05-Dec-06 11:55

Received 06-Dec-06

Method Ref. EPA TO-15 Prepared 09-Dec-06

Analyzed 10-Dec-06

			09-1060-00	10-L	ec-06		WB	
CAS No.	Analyte(s)	Result	*RDL/Units	RT	$\overline{\varrho}$	Dilution	Batch	Flag
Air Quality A	Analyses							
EPA TO-15		Prepared by m	ethod General Air P	rom				
56-23-5	Carbon tetrachloride	BRL	2.50 ppbv	reb		_		R01
110-82-7	Cyclohexane	BRL	2.50 ppbv			5 5	6120711	U
78-87-5	1,2-Dichloropropane	BRL	2.50 ppbv			5	. "	U
	Bromodichloromethane	BRL	2.50 ppbv			5 5	" "	U
79-01-6	Trichloroethene	BRL	2.50 ppbv			5 5	"	U
142-82-5	n-Heptane	BRL	2.50 ppbv			5	"	U
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL	2.50 ppbv			5	"	U
	cis-1,3-Dichloropropene	BRL	2.50 ppbv			5 5	" "	U
10061-02-6	trans-1,3-Dichloropropene	BRL	2.50 ppbv	-		5		U
79-00-5	1,1,2-Trichloroethane	BRL	2.50 ppbv				"	U
108-88-3	Toluene	2.85	2.50 ppbv			5	"	U
591-78-6	2-Hexanone (MBK)	BRL .	2.50 ppbv			5 5	"	
124-48-1	Dibromochloromethane	BRL	2.50 ppbv			5	,,	U
106-93-4	1,2-Dibromoethane (EDB)	BRL	2.50 ppbv			5 5		U
127-18-4	Tetrachloroethene	1.55	2.50 ppbv			5	17	U
108-90-7	Chlorobenzene	BRL	2.50 ppbv			5	11	J
100-41-4	Ethylbenzene	BRL	2.50 ppbv			5	 H	U
1330-20-7	m,p-Xylene	3.35	2.50 ppbv			5	"	U
75-25-2	Bromoform	BRL	2.50 ppbv				,,	
100-42-5	Styrene	BRL	2.50 ppbv			5	" "	U
95-47 - 6	o-Xylene	BRL	2.50 ppbv			5	"	U
79-34-5	1,1,2,2-Tetrachloroethane	BRL	2.50 ppbv			5	 H	U
108-67-8	1,3,5-Trimethylbenzene	BRL	2.50 ppbv			5 5	"	U
622-96-8	4-Ethyltoluene	BRL	2.50 ppbv			5	"	U
95-63-6	1,2,4-Trimethylbenzene	1.80	2.50 ppbv			5	,,	U
541-73-1	1,3-Dichlorobenzene	BRL	2.50 ppbv			5	"	J
100-44-7	Benzyl chloride	BRL	2.50 ppbv			_		U
106-46-7	1,4-Dichlorobenzene	BRL	2.50 ppbv			5 5	,,	U
95-50-1	1,2-Dichlorobenzene	BRL	2.50 ppbv			5 5	11	U
120-82-1	1,2,4-Trichlorobenzene	BRL	2.50 ppbv			5 5	11	U
	Hexachlorobutadiene	BRL	2.50 ppbv			5	" H	U
460-00-4	Surrogate: 4-Bromofluorobenzene	104	75-125 %			. 3	. ,,	U

Table 1 Samples For Data Validation Review Atlas Park - Parcel B Glendale, New York Spectrum Delivery Group 55245

ANALYSES PERFORMED MATRIX VOC	Air X	Air X																
M/													·			·	·	
DATE SAMPLED	12/7/2006	12/7/2006	12/7/2006	12/6/2006	12/6/2006	12/6/2006	12/6/2006	12/6/2006	12/6/2006	12/6/2006	12/6/2006	12/6/2006	12/6/2006	12/6/2006	12/6/2006	12/6/2006	12/7/2006	
	∺	7	Э	4	ς	9	7	∞	6	10	11	12	13	14	15	16	17	
LABORATORY I.D.	55245	55245	55245	55245	55245	55245	55245	55245	55245	55245	55245	55245	55245	55245	55245	55245	55245	
SAMPLE I.D.	RES#5-12-120606	RES#5-I1-120606	RES#5-SS-120606	RES#6-I1-120506	RES#6-12-120506	RES#6-SS-120506	RES#7-I1-120506	RES#7-I2-120506	RES#7-SS-120506	RES#8-11-120506	RES#8-12-120506	RES#8-SS-120506	RES#9-I1-120506	RES#9-I2-120506	RES#9-SS-120506	77-AVE-OA-12/05/06	77-AVE-OAI-12/06/06	

VOC Volatile Organic Compounds

Report Date: 22-Dec-06 16:00



SPECTRUM ANALYTICAL, INC.

Featuring

HANIBAL TECHNOLOGY

Laboratory Report

Langan Engineering & Environmental Services 21 Penn Plaza; 360 West 31st Street, 8th Floor New York, NY 10001

Attn: Jamie Barr

Project:Atlas Park - Queens, NY Project #:5555113

Laboratory ID	Client Sample ID	<u>Matrix</u>	Date Sampled	Date Received
SA55245-01	RES#5-I2-120606	Air	07-Dec-06 09:28	08-Dec-06 09:50
SA55245-02	RES#5-I1-120606	Air	07-Dec-06 09:25	08-Dec-06 09:50
SA55245-03	RES#5-SS-120606	Air	07-Dec-06 09:26	08-Dec-06 09:50
SA55245-04	RES#6-I1-120506	Air	06-Dec-06 18:27	08-Dec-06 09:50
SA55245-05	RES#6-I2-120506	Air	06-Dec-06 18:18	08-Dec-06 09:50
SA55245-06	RES#6-SS-120506	Air	06-Dec-06 17:06	08-Dec-06 09:50
SA55245-07	RES#7-I1-120506	Air	06-Dec-06 18:58	08-Dec-06 09:50
SA55245-08	RES#7-I2-120506	Air	06-Dec-06 16:57	08-Dec-06 09:50
SA55245-09	RES#7-SS-120506	Air	06-Dec-06 18:18	08-Dec-06 09:50
SA55245-10	RES#8-I1-120506	Air	06-Dec-06 15:45	08-Dec-06 09:50
SA55245-11	RES#8-I2-120506	Air	06-Dec-06 14:01	08-Dec-06 09:50
SA55245-12	RES#8-SS-120506	Air	06-Dec-06 14:04	08-Dec-06 09:50
SA55245-13	RES#9-I1-120506	Air	06-Dec-06 14:12	08-Dec-06 09:50
SA55245-14	RES#9-I2-120506	Air	06-Dec-06 15:03	08-Dec-06 09:50
SA55245-15	RES#9-SS-120506	Air	06-Dec-06 16:40	08-Dec-06 09:50
SA55245-16	77AVE-OA-120506	Air	06-Dec-06 14:09	08-Dec-06 09:50
SA55245-17	77AVE-OA-120606	Air	07-Dec-06 08:48	08-Dec-06 09:50

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. These results relate only to the sample(s) as received.

All applicable NELAC requirements have been met

Please note that this report contains 48 pages of analytical data plus Chain of Custody documen(s).

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Massachusetts Certification # M-MA138/MA1110

Connecticut # PH-0777

Florida # E87600/E87936

Maine # MA138

New Hampshire # 2538/2972

New Jersey # MA011/MA012

New York # 11393/11840

Rhode Island #98

USDA # S-51435

Vermont # VT-11393



A thorized by:

Hanibal C. Tayeh, Ph.D. President/Laboratory Director

RESUBMITTAL

RCVD BY SMR 12/23/06 Final Report

☐ Re-Issued Report

☐ Revised Report

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FL Division: 8180 Woodland Center Boulevard • Tampa, FL 33614 • 1-888-497-5270 • 813-888-9507 • FAX 800-480-6435

Report Date: 20-Dec-06 16:51



Final Report
Re-Issued Report
Revised Report

SPECTRUM ANALYTICAL, INC.

Featuring

HANIBAL TECHNOLOGY

Laboratory Report

Langan Engineering & Environmental Services 21 Penn Plaza; 360 West 31st Street, 8th Floor

New York, NY 10001 Attn: Jamie Barr Project:Atlas Park - Queens, NY Project #:5555113

Laboratory ID	Client Sample ID		<u>Matrix</u>	Date Sampled	Date Received
SA55245-01	RES#5-I2-120606		Air	07-Dec-06 09:28	08-Dec-06 09:50
SA55245-02	RES#5-I1-120606	. \	Air	07-Dec-06 09:25	08-Dec-06 09:50
SA55245-03	RES#5-SS-120606		Air	07-Dec-06 09:26	08-Dec-06 09:50
SA55245-04	RES#6-I1-120506		Air	06-Dec-06 18:27	08-Dec-06 09:50
SA55245-05	RES#6-I2-120506		Air	06-Dec-06 18:18	08-Dec-06 09:50
SA55245-06	RES#6-SS-120506	1.1	Air	06-Dec-06 17:06	08-Dec-06 09:50
SA55245-07	RES#7-I1-120506		Air	06-Dec-06 18:58	08-Dec-06 09:50
SA55245-08	RES#7-I2-120506		Air	06-Dec-06 16:57	08-Dec-06 09:50
SA55245-09	RES#7-SS-120506		Air	06-Dec-06 18:18	08-Dec-06 09:50
SA55245-10	RES#8-I1-120506	•	Air	06-Dec-06 15:45	08-Dec-06 09:50
SA55245-11	RES#8-I2-120506		Air\	06-Dec-06 14:01	08-Dec-06 09:50
SA55245-12	RES#8-SS-120506		Air \	06-Dec-06 14:04	08-Dec-06 09:50
SA55245-13	RES#9-I1-120506		Air \	06-Dec-06 14:12	08-Dec-06 09:50
SA55245-14	RES#9-I2-120506		Air	06-Dec-06 15:03	08-Dec-06 09:50
SA55245-15	RES#9-SS-120506		Air	06-Dec-06 16:40	08-Dec-06 09:50
SA55245-16	77AVE-OA-120506		Air	\ 06-Dec-06 14:09	08-Dec-06 09:50
SA55245-17	77AVE-OA-120606		Air ·	\ 07-Dec-06 08:48	08-Dec-06 09:50
				\	

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. These results relate only to the sample(s) as received.

All applicable NELAC requirements have been met.

Please note that this report contains 48 pages of analytical data plus Chain of Custody document(s). This report may not be reproduced, except in full, without written approval from Spectrum Analytical, Inc.

Massachusetts Certification # M-MA138/MA1110

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New York # 11393/11840

Rhode Island # 98

USDA # S-51435

Vermont # VT-11393

ED IN ACCORDANCE

Hanibal C. Tayeh, Ph.D. President/Laboratory Director

Authorized

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Sample Identif RES#5-I2-12(•	Client Project # 5555113	<u>Matrix</u> Air	Collection 07-Dec-			Receive 08-Dec-	
SA55245-01	A	Method Ref. Air method TICs	Prepared 09-Dec-06		lyzed Dec-06		Analys WB	<u>st</u>
CAS No.	Analyte(s)	Result	*RDL/Units	RT	Q	Dilution	Batch	Flag
Air Quality A	analyses							
Tentatively Ide	entified Compounds in Air	Prepared by me	thod General Air	Prep				
•	Acetoacetic acid, 1-thio-,	4.88	ppbv	4.69	64	1	6120711	TIC, J
106-97-8	Butane	3.91	ppbv	5.35	80	1	11	TIC, J
	Decane, 2,2-dimethyl-	1.53	ppbv	23.02	72	1	11	TIC, J
5989-27-5	d-Limonene	2.97	ppbv	22.89	94	1	**	TIC, J
	Dodecane, 2,2,11,11-tetrame	4.20	ppbv	22.79	78	1	II	TIC, J
3891-98-3	Dodecane, 2,6,10-trimethyl-	1.10	ppbv	23.59	80	1	н	TIC, J
000544-85-4	Dotriacontane	1.48	ppbv	24.50	72	1	II.	TIC, J
75 - 37-6	Ethane, 1,1-difluoro-	2.01	ppbv	4.58	91	1	ij	TIC, J
062108-32-1	Heptane, 2,2,3,4,6,6-hexame	3.05	ppbv	21.19	64	1	n	TIC, J
	Heptane, 2,2,3,5-tetramethyl-	0.890	ppbv	21.56	64	1	н	TIC, J
	Heptane, 4-ethyl-2,2,6,6-te	3.41	ppbv	23.80	72	1	н	TIC, J
3522-94-9	Hexane, 2,2,5-trimethyl-	2.64	ppbv	23.70	72	1	11	TIC, J
	Isobutane	6.32	ppbv	5.04	59	1	н	TIC, J
	Nonane, 3,7-dimethyl-	3.00	ppbv	24.17	72	1	и	TIC, J
	Nonane, 3-methyl-5-propyl-	1.33	ppbv	24.63	72	1	n	TIC, J
109-66-0		1.32	ppbv	6.90	90	1	It	TIC, J
00-0	Tetradecane	1.40	ppbv	22.04	86	1		TIC, J
629-50-5	Tridecane	3.33	ppbv	23.22	72	1	11	TIC, J
J_J_JU=J	Undecane, 4-methyl-	0.860	ppbv	24.39	72	1	11	TIC, J
FPATO 15					, -	-		
EPA TO-15	Pronene	Prepared by me	thod General Air 0.500 ppbv	ı reh		1	n	U
115-07-1			0.500 ppbv 0.500 ppbv			1	**	J
	Dichlorodifluoromethane (Freon12) Chloromethane	0.490 0.470				1	"	J J
, , , , ,	1,2-Dichlorotetrafluoroethane (Freon 1)		0.500 ppbv 0.500 ppbv			1	11	J U
		•				1	. "	U
	Vinyl chloride	BRL	0.500 ppbv	•		1	11	บ บ
	1,3-Butadiene	BRL	0.500 ppbv			1	11	U
	Bromomethane	BRL	0.500 ppbv			1	11	U
	Chloroethane	BRL	0.500 ppbv			i I	 It	U
	Acetone	10.7	0.500 ppbv			•	H	
	Trichlorofluoromethane (Freon 11)	BRL	0.500 ppbv			1	*1	U 10/21
	Ethanol	203	0.500 ppbv			1	н	<u>ار</u> الر
	1,1-Dichloroethene	BRL	0.500 ppbv				11	U T'
	Methylene chloride	BRL	0.500 ppbv			1	R	U
	1,1,2-Trichlorotrifluoroethane (Freon 1		0.500 ppbv			1		U
	Carbon disulfide	BRL	0.500 ppbv			1	 	U
	trans-1,2-Dichloroethene	BRL	0.500 ppbv			1	"	U
	1,1-Dichloroethane	BRL	0.500 ppbv			1	"	U
	Methyl tert-butyl ether	BRL	0.500 ppbv			1	,,	U
	Isopropyl alcohol	4.06	0.500 ppbv	•		1	,,	
	2-Butanone (MEK)	0.640	0.500 ppbv			1	A	
156-59-2	cis-1,2-Dichloroethene	BRL	0.500 ppbv			1	<u> </u>	V n
	·				e,	Miles	Page 2	of 48

Sample Identi RES#5-I2-12		<u>Client Project #</u> 5555113	<u>Matrix</u> Air	Collection 07-Dec			Receive 08-Dec-	_
SA55245-01		Method Ref. EPA TO-15	Prepared 09-Dec-06		lyzed Dec-06		Analys WB	<u>t</u>
CAS No.	Analyte(s)	Result	*RDL/Units	RT	Q	Dilution	Batch	Flag
Air Quality A	Analyses							
EPA TO-15		Prepared by meth	od General Air	Prep				
110-54-3	Hexane	BRL	0.500 ppbv			1	6120711	U
141-78-6	Ethyl acetate	0.760	0.500 ppbv			1	н	
67-66-3	Chloroform	BRL	0.500 ppbv			1	II.	U
109-99-9	Tetrahydrofuran	BRL	0.500 ppbv			1	**	U
107-06-2	1,2-Dichloroethane	BRL	0.500 ppbv			1	#	U
71-55-6	1,1,1-Trichloroethane	BRL	0.500 ppbv			1	11	U
71-43-2	Benzene	0.620	0.500 ppbv			1	II .	
56-23-5	Carbon tetrachloride	BRL	0.500 ppbv			1		U
110-82-7	Cyclohexane	BRL	0.500 ppbv	•		1	ı u	U
	1,2-Dichloropropane	BRL	0.500 ppbv			1	ıı	υ
	Bromodichloromethane	BRL	0.500 ppbv			1	u	U
79-01-6	Trichloroethene	BRL	0.500 ppbv			I	u	υ
142-82-5	n-Heptane	0.400	0.500 ppbv			1	"	J
	4-Methyl-2-pentanone (MIBK)	BRL	0.500 ppbv			1	n	U
	cis-1,3-Dichloropropene	BRL	0.500 ppbv			1	н	U
	trans-1,3-Dichloropropene	BRL	0.500 ppbv			1	31	U
	1,1,2-Trichloroethane	BRL	0.500 ppbv			1	н	U
	Toluene	2.05	0.500 ppbv			1	11	
	2-Hexanone (MBK)	BRL	0.500 ppbv			1	11	บ
	Dibromochloromethane	BRL	0.500 ppbv			1	11	U
	1,2-Dibromoethane (EDB)	BRL	0.500 ppbv			1	n	U
	Tetrachloroethene	BRL	0.500 ppbv			1	11	U
	Chlorobenzene	BRL	0.500 ppbv			1	n	U
	Ethylbenzene	BRL	0.500 ppbv			1	**	U
	m,p-Xylene	0.770	0.500 ppbv			1	0	Ū
	Bromoform	BRL	0.500 ppbv			1	11	U
100-42-5		BRL	0.500 ppbv			1	11	U
	o-Xylene	BRL	0.500 ppbv			1	н	U
	1,1,2,2-Tetrachloroethane	BRL	0.500 ppbv			1	H	บ
	1,3,5-Trimethylbenzene	BRL	0.500 ppbv			1	11	U
	4-Ethyltoluene	BRL	0.500 ppbv			1	11	บ
	1,2,4-Trimethylbenzene	0.300	0.500 ppbv			1	n	J
	1,3-Dichlorobenzene	BRL	0.500 ppbv			1	IT	U
	Benzyl chloride	BRL	0.500 ppbv			1	11	U
	1,4-Dichlorobenzene	BRL	0.500 ppbv			1	**	υ
	1,2-Dichlorobenzene	BRL	0.500 ppbv			1	и	U
	1,2,4-Trichlorobenzene	BRL	0.500 ppbv			1		U
	Hexachlorobutadiene	BRL	0.500 ppbv		•	1	*1	· U
	Surrogate: 4-Bromofluorobenzene	106	75-125 %			•	н	

RES#5-I1-12		5555113	<u>Matrix</u> Air	Collection 07-Dec	n Date/T :-06 09:2		Receive 08-Dec-		
SA55245-02	A	Method Ref. Air method TICs	Prepared 09-Dec-06		alyzed Dec-06		Analys WB	<u>st</u>	
CAS No.	Analyte(s)	Result	*RDL/Units	RT	Q	Dilution	Batch	Flag	
Air Quality A	nalyses								
entatively Ide	entified Compounds in Air	Prepared by met	thod General A	ir Prep					
015780-65-1	Acetoacetic acid, 1-thio-,	5.03	ppbv	-	64	1	6120711	TIC, J	
106-97-8	Butane	3.65	ppbv	5.35	80	1		TIC, J	
	Decane, 2,2-dimethyl-	3.16	ppbv	22.79	78	1		TIC, J	
5989-27-5	d-Limonene	2.52	ppbv	22.88	94	1	11	TIC, J	
	Dodecane, 2,2,11,11-tetrame	1.25	ppbv	23.02	72	1	u	TIC, J	
3891-98-3	Dodecane, 2,6,10-trimethyl-	0.900	ppbv		64	1	II	TIC, J	
75-37-6	Ethane, 1,1-difluoro-	2.03	ppbv		90	1	11	TIC, J	
	Heptane, 4-ethyl-2,2,6,6-te	2.67	ppbv		59	1	H	TIC, J	
	Heptane, 5-ethyl-2,2,3-trim	2.06	ppbv		64	1	**	TIC, J	
544-76-3	Hexadecane	2.53	ppbv		86	1	11	TIC, J	
75-28-5	Isobutane	8.22	ppbv		59	1	11	TIC, J	
	Octane, 2,3,6,7-tetramethyl-	1.12	ppbv		53	1	11	TIC, J	
109-66-0	•	14.0	ppbv		90	1	11	TIC, J	
107-83-5	Pentane, 2-methyl-	1.18	ppbv		91	1	11	TIC, J	
	Pentane, 3-methyl-	0.820	ppbv		90	1	11	TIC, J	
	Tetradecane	1.35	ppbv		86	1	n	TIC, J	
1120-21-4		1.39	ppbv	24.50	76	1	11	TIC, J	
	Undecane, 3,8-dimethyl-	2.50			78	1	,,		
	Undecane, 3-methyl-	1.99	ppbv		78	1	11	TIC, J	
	- Ondocano, 3-methyl-		ppbv		76	1		TIC, J	
<u> PA TO-15</u>		Prepared by met		-					
115-07-1	•	BRL	0.500 ppbv			1	"	U	
	Dichlorodifluoromethane (Freon12)	0.480	0.500 ppbv			1		J	
	Chloromethane	0.490	0.500 ppbv			1	"	J	
	1,2-Dichlorotetrafluoroethane (Freon 11	•	0.500 ppbv			1		U	
	Vinyl chloride	BRL	0.500 ppbv			1	"	U	
	1,3-Butadiene	BRL	0.500 ppbv			1	11	· U	
	Bromomethane	BRL	0.500 ppbv			1	. "	U	
	Chloroethane	BRL	0.500 ppbv			1	11	U	
	Acetone	11.4	0.500 ppbv			1	11		
75-69-4	Trichlorofluoromethane (Freon 11)	BRL	0.500 ppbv			1	U	U	
64-17-5		160	0.500 ppbv			1	1)	EJ	<i></i>
7.5-35-4	1,1-Dichloroethene	BRL	0.500 ppbv			1	Ħ	U	
75-09-2	Methylene chloride	0.630	0.500 ppbv			i	11		
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 11	3) BRL	0.500 ppbv			1	11	U	
75-15-0	Carbon disulfide	BRL	0.500 ppbv			1	11	U	
156-60-5	trans-1,2-Dichloroethene	BRL	0.500 ppbv			1	"	U	
75-34-3	1,1-Dichloroethane	BRL	0.500 ppbv			1	II.	U	
1634-04-4	Methyl tert-butyl ether	BRL	0.500 ppbv			1		U	
67-63-0	Isopropyl alcohol	4.70	0.500 ppbv			1	n		
78-93-3	2-Butanone (MEK)	0.910	0.500 ppbv			1	11	:	
	cis-1,2-Dichloroethene	BRL	0.500 ppbv			1	19	. U	

Sample Identi RES#5-I1-12		Client Project # 5555113	<u>Matrix</u> Air	Collection 07-Dec-			Receive 08-Dec-	
SA55245-02		Method Ref. EPA TO-15	Prepared 09-Dec-06		lyzed ec-06		Analys WB	<u>it</u>
CAS No.	Analyte(s)	Result	*RDL/Units	RT	Q	Dilution	Batch	Flag
Air Quality A	Analyses							
EPA TO-15		Prepared by me	thod General Air	Pren				
110-54-3	Hexane	BRL	0.500 ppbv			1	6120711	U
141-78-6	Ethyl acetate	0.680	0.500 ppbv			1	**	
67-66-3	Chloroform	0.340	0.500 ppbv			1	#	J
109-99-9	Tetrahydrofuran	BRL	0.500 ppbv			1	**	U
107-06-2	1,2-Dichloroethane	BRL	0.500 ppbv			1	**	U
71-55-6	1,1,1-Trichloroethane	BRL	0.500 ppbv			1	"	U
71-43-2	Benzene	0.610	0.500 ppbv			1	11	
56-23-5	Carbon tetrachloride	BRL	0.500 ppbv			1	If	U
110-82-7	Cyclohexane	0.310	0.500 ppbv			·	11	J
78-87-5	1,2-Dichloropropane	BRL	0.500 ppbv			1	It	บ
75-27-4	Bromodichloromethane	BRL	0.500 ppbv			1	11	U
79-01-6	Trichloroethene	BRL	0.500 ppbv			1	n	U
142-82-5	n-Heptane	0.500	0.500 ppbv			1	п	
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL	0.500 ppbv			1 .	11	U
10061-01-5	cis-1,3-Dichloropropene	BRL	0.500 ppbv			1	н	U
	trans-1,3-Dichloropropene	BRL	0.500 ppbv			1	Ir	U
	1,1,2-Trichloroethane	BRL	0.500 ppbv			1	"	U
108-88-3		2.23	0.500 ppbv	•		1	II	·
591-78-6	2-Hexanone (MBK)	BRL	0.500 ppbv			1	11	υ
	Dibromochloromethane	BRL	0.500 ppbv			1	ır	U
106-93-4	1,2-Dibromoethane (EDB)	BRL	0.500 ppbv			1	u	U
	Tetrachloroethene	BRL	0.500 ppbv			1	11	U
108-90-7	Chlorobenzene	BRL	0.500 ppbv			1	**	บ
100-41-4	Ethylbenzene	0.300	0.500 ppbv			1	u	J
	m,p-Xylene	0.910	0.500 ppbv			1	п	•
	Bromoform	BRL	0.500 ppbv			1	ır	U
100-42-5		BRL	0.500 ppbv			1	11	บ
	o-Xylene	BRL	0.500 ppbv			1	u	บ
	1,1,2,2-Tetrachloroethane	BRL	0.500 ppbv			1	**	U
	1,3,5-Trimethylbenzene	BRL	0.500 ppbv			1		U
	4-Ethyltoluene	BRL	0.500 ppbv			1	н	บ
	1,2,4-Trimethylbenzene	0.320	0.500 ppbv			1		J
	1,3-Dichlorobenzene	BRL.	0.500 ppbv			1		U
	Benzyl chloride	BRL	0.500 ppbv			1		U
	1,4-Dichlorobenzene	BRL	0.500 ppbv			-1		υ
	1,2-Dichlorobenzene	BRL	0.500 ppbv			1	11	U
	1,2,4-Trichlorobenzene	BRL	0.500 ppbv			1	n	U
	Hexachlorobutadiene	BRL	0.500 ppbv			1	11	U
	Surrogate: 4-Bromofluorobenzene	106	75-125 %			•	n ·	U

Iyte(s) Ises Index Compounds in Air Inne, 2,2,8-trimethyl- Inne, 2,3,8-trimethyl- Inne, 2,6,7-trimethyl- Inne, 3-methyl- Inne, 3-methyl- Inne, 2,2,3,5-tetramethyl- Inne, 2,2,4,6,6-pentamet Inne, 2,2,5-trimethyl- Inne, 2,3,3-trimethyl- Inne, 2,3,3-trimethyl- Inne, 2,3,6,7-tetramethyl-	66.2 141 428 14.4 39.6 41.2 195 20.2 54.8 245	Prepared 10-Dec-06 *RDL/Units thod General Air ppbv ppbv ppbv ppbv ppbv ppbv ppbv ppb	11-D	78 78 72 72 78 72	20 20 20 20 20 20	6120810	Flag TIC, J TIC, J TIC, J TIC, J
ed Compounds in Air ane, 2,2,8-trimethylane, 2,3,8-trimethylane, 2,6,7-trimethylane, 3-methylane, 3-methylane, 3-methylane, 2,2,11,11-tetrame ecane, 3-methylane, 2,2,3,5-tetramethylane, 2,2,4,6,6-pentamet ane, 2,2,5-trimethylane, 3,3-dimethylane, 2,3,3-trimethylane, 2,3,3-trimeth	Prepared by met 66.2 141 428 14.4 39.6 41.2 195 20.2 54.8 245	thod General Air ppbv ppbv ppbv ppbv ppbv ppbv ppbv ppb	Prep 21.19 22.79 23.22 24.30 24.49 22.62 23.80	78 78 72 72 78 72	20 20 20 20	6120810	TIC, J TIC, J TIC, J
ted Compounds in Air ane, 2,2,8-trimethylane, 2,3,8-trimethylane, 2,3,8-trimethylane, 2,6,7-trimethylane, 3-methylane, 3-methylane, 3-methylane, 2,2,11,11-tetrame ecane, 3-methylane, 2,2,3,5-tetramethylane, 2,2,4,6,6-pentamet ane, 2,2,5-trimethylane, 3,3-dimethylane, 2,3,3-trimethylane, 2,2,5-trimethylane, 2,3,3-trimethylane, 2,3,3-trimet	66.2 141 428 14.4 39.6 41.2 195 20.2 54.8 245	ppbv ppbv ppbv ppbv ppbv ppbv ppbv	21.19 22.79 23.22 24.30 24.49 22.62 23.80	78 72 72 78 72	20 20 20	11 11	TIC, J TIC, J
ane, 2,2,8-trimethylane, 2,2-dimethylane, 2,3,8-trimethylane, 2,6,7-trimethylane, 3-methylane, 3-methylane, 3-methylane, 3-methylane, 3-methylane, 2,2,3,5-tetramethylane, 2,2,4,6,6-pentamet ane, 2,2,5-trimethylane, 3,3-dimethylane, 2,3,3-trimethylane, 2,3,3-trime	66.2 141 428 14.4 39.6 41.2 195 20.2 54.8 245	ppbv ppbv ppbv ppbv ppbv ppbv ppbv	21.19 22.79 23.22 24.30 24.49 22.62 23.80	78 72 72 78 72	20 20 20	11 11	TIC, J TIC, J
ane, 2,2-dimethylane, 2,3,8-trimethylane, 2,6,7-trimethylane, 3-methylaceane, 2,2,11,11-tetrame ecane, 3-methylatane, 2,2,3,5-tetramethylatane, 2,2,4,6,6-pentamet ane, 2,2,5-trimethylane, 3,3-dimethylane, 2,3,3-trimethylane, 2,3,3-trimethyl	141 428 14.4 39.6 41.2 195 20.2 54.8 245	ppbv ppbv ppbv ppbv ppbv ppbv	22.79 23.22 24.30 24.49 22.62 23.80	78 72 72 78 72	20 20 20	11 11	TIC, J TIC, J
ane, 2,3,8-trimethylane, 2,6,7-trimethylane, 3-methylaceane, 2,2,11,11-tetrame ecane, 3-methylatane, 2,2,3,5-tetramethylatane, 2,2,4,6,6-pentamet ane, 2,2,5-trimethylane, 3,3-dimethylane, 2,3,3-trimethylane, 2,3,3-trimet	428 14.4 39.6 41.2 195 20.2 54.8 245	ppbv ppbv ppbv ppbv ppbv	23.22 24.30 24.49 22.62 23.80	72 72 78 72	20 20	n	TIC, J
ane, 2,6,7-trimethyl- ane, 3-methyl- ecane, 2,2,11,11-tetrame ecane, 3-methyl- tane, 2,2,3,5-tetramethyl- tane, 2,2,4,6,6-pentamet ane, 2,2,5-trimethyl- ane, 3,3-dimethyl- ane, 2,3,3-trimethyl-	14.4 39.6 41.2 195 20.2 54.8 245	ppbv ppbv ppbv ppbv ppbv	24.30 24.49 22.62 23.80	72 78 72	20	n	
ane, 3-methyl- ecane, 2,2,11,11-tetrame ecane, 3-methyl- tane, 2,2,3,5-tetramethyl- tane, 2,2,4,6,6-pentamet ane, 2,2,5-trimethyl- ane, 3,3-dimethyl- ane, 2,3,3-trimethyl-	39.6 41.2 195 20.2 54.8 245	ppbv ppbv ppbv ppbv	24.49 22.62 23.80	78 72			TIC I
ecane, 2,2,11,11-tetrame ecane, 3-methyl- tane, 2,2,3,5-tetramethyl- tane, 2,2,4,6,6-pentamet ane, 2,2,5-trimethyl- ane, 3,3-dimethyl- ane, 2,3,3-trimethyl-	41.2 195 20.2 54.8 245	ppbv ppbv ppbv	22.62 23.80	72	20		iic, d
ecane, 3-methyl- tane, 2,2,3,5-tetramethyl- tane, 2,2,4,6,6-pentamet ane, 2,2,5-trimethyl- ane, 3,3-dimethyl- ane, 2,3,3-trimethyl-	195 20.2 54.8 245	ppbv ppbv	23.80			11	TIC, J
tane, 2,2,3,5-tetramethyl- tane, 2,2,4,6,6-pentamet ane, 2,2,5-trimethyl- ane, 3,3-dimethyl- ane, 2,3,3-trimethyl-	20.2 54.8 245	ppbv		72	20	n	TIC, J
tane, 2,2,4,6,6-pentamet ane, 2,2,5-trimethyl- ane, 3,3-dimethyl- ane, 2,3,3-trimethyl-	54.8 245		21.56	72	20	ti	TIC, J
ane, 2,2,5-trimethyl- ane, 3,3-dimethyl- une, 2,3,3-trimethyl-	245	ppbv		72	20	U	TIC, J
ane, 3,3-dimethyl- ane, 2,3,3-trimethyl-			23.02	64	20	Ħ	TIC, J
ine, 2,3,3-trimethyl-		ppbv	23.70	64	20	13	TIC, J
	33.2	ppbv	24.63	64	20	11	TIC, J
ine 2 3 6 7-tetromothy!	26.6	ppbv	22.05	83	20	If	TIC, J
, 4,5,0,7-wuamemyi-	17.0	ppbv	23.49	72	20	11	TIC, J
ecane	54.0	ppbv	23.59	72	20	11	TIC, J
ecane, 2,8-dimethyl-	135	ppbv	24.17	78	20	19	TIC, J
ecane, 4-methyl-	20.4	ppbv	24.39	53	20	n	TIC, J
	Prepared by met	thod General Air	Pren				
pene	BRL	10.0 ppbv	тюр		20	n	R01 U
lorodifluoromethane (Freon12)	BRL	10.0 ppbv			20	11	U
promethane	BRL	10.0 ppbv			20	11	บ
Dichlorotetrafluoroethane (Freon 1		10.0 ppbv			20	10	บ
/l chloride	BRL	10.0 ppbv			20	IJ	U
Butadiene	BRL	10.0 ppbv			20	. "	υ
nomethane	BRL	10.0 ppbv			20	и	U
proethane	BRL	10.0 ppbv			20	н	U
one	8.80	10.0 ppbv			20	11	
hlorofluoromethane (Freon 11)	BRL	10.0 ppbv			20	11	J
-							U
						"	**
						"	U
							U
	•						U
							U
							U
							U
•						11	U
- ·						11	U
						н	U
						It	U
							U
i acciaic						 D	U /
	BKL	10.0 ppbv			20	An	
[] n 2	nol Dichloroethene ylene chloride -Trichlorotrifluoroethane (Freon 1 on disulfide -1,2-Dichloroethene Dichloroethane yl tert-butyl ether opyl alcohol tanone (MEK) ,2-Dichloroethene ne acetate roform	Dichloroethene BRL ylene chloride BRL -Trichlorotrifluoroethane (Freon 113) BRL on disulfide BRL -1,2-Dichloroethene BRL Dichloroethane BRL yl tert-butyl ether BRL opyl alcohol BRL tanone (MEK) BRL ,2-Dichloroethene BRL ne BRL acetate BRL	acetate 30.4 10.0 ppbv plothloroethene BRL 10.0 ppbv BRL 10.0 ppbv 10.0 ppbv 10.0 ppbv BRL 10.0 ppbv Dichloroethane BRL 10.0 ppbv BRL 10.0 ppbv Dichloroethane BRL 10.0 ppbv Dichloroethane BRL 10.0 ppbv 30.4 10.0 ppbv Dichloroethene BRL 10.0 ppbv ylene chloride BRL 10.0 ppbv -Trichlorotrifluoroethane (Freon 113) BRL 10.0 ppbv on disulfide BRL 10.0 ppbv -1,2-Dichloroethene BRL 10.0 ppbv Dichloroethane BRL 10.0 ppbv yl tert-butyl ether BRL 10.0 ppbv opyl alcohol BRL 10.0 ppbv tanone (MEK) BRL 10.0 ppbv ne BRL 10.0 ppbv BRL 10.0 ppbv BRL 10.0 ppbv ppbv tanone (MEK) BRL 10.0 ppbv 30.4 10.0 ppbv Dichloroethene BRL 10.0 ppbv ylene chloride BRL 10.0 ppbv -Trichlorotrifluoroethane (Freon 113) BRL 10.0 ppbv on disulfide BRL 10.0 ppbv -1,2-Dichloroethene BRL 10.0 ppbv Dichloroethane BRL 10.0 ppbv Oyl tert-butyl ether BRL 10.0 ppbv opyl alcohol BRL 10.0 ppbv tanone (MEK) BRL 10.0 ppbv Dichloroethene BRL 10.0 ppbv nol 30.4 10.0 ppbv 20 Dichloroethene BRL 10.0 ppbv 20 Sylene chloride BRL 10.0 ppbv 20 -Trichlorotrifluoroethane (Freon 113) BRL 10.0 ppbv 20 on disulfide BRL 10.0 ppbv 20 -1,2-Dichloroethene BRL 10.0 ppbv 20 Dichloroethane BRL 10.0 ppbv 20 vyl tert-butyl ether BRL 10.0 ppbv 20 opyl alcohol BRL 10.0 ppbv 20 tanone (MEK) BRL 10.0 ppbv 20 2-Dichloroethene BRL 10.0 ppbv 20 ne BRL 10.0 ppbv 20 acetate BRL 10.0 ppbv 20	10.0 ppbv 20 " ppbv			

Sample Identi RES#5-SS-12		Client Project # 5555113	<u>Matrix</u> Air	Collection 07-Dec-			Receive 08-Dec-0	
SA55245-03		Method Ref. EPA TO-15	Prepared 10-Dec-06		lyzed Dec-06		Analys WB	<u>t</u>
CAS No.	Analyte(s)	Result	*RDL/Units	RT	Q	Dilution	Batch	Flag
Air Quality A	Analyses							
EPA TO-15		Prepared by me	thod General Air	Prep				R01
109-99-9	Tetrahydrofuran	BRL	10.0 ppbv	•		20	6120810	U
107-06-2	1,2-Dichloroethane	BRL	10.0 ppbv			20	(1	U
71-55-6	1,1,1-Trichloroethane	BRL	10.0 ppbv			20	ti	U
71-43-2	Benzene	BRL	10.0 ppbv			.20	tı	U
56-23-5	Carbon tetrachloride	BRL	10.0 ppbv			20	11	U
110-82-7	Cyclohexane	BRL	10.0 ppbv			20	п	U
78-87-5	1,2-Dichloropropane	BRL	10.0 ppbv			20		U
	Bromodichloromethane	BRL	10.0 ppbv			20	**	U
79-01-6	Trichloroethene	BRL	10.0 ppbv			20	· "	U
142-82-5	n-Heptane	BRL	10.0 ppbv			20	II .	U
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL	10.0 ppbv			20	11	U
	cis-1,3-Dichloropropene	BRL	10.0 ppbv			20	u	U
	trans-1,3-Dichloropropene	BRL	10.0 ppbv			20	ш	U
79-00-5	1,1,2-Trichloroethane	BRL	10.0 ppbv			20	Ħ	U
108-88-3	Toluene	BRL	10.0 ppbv			20	11	U
591-78-6	2-Hexanone (MBK)	BRL	10.0 ppbv			20	н	U
	Dibromochloromethane	BRL	10.0 ppbv		*	20	II	U
106-93-4	1,2-Dibromoethane (EDB)	BRL	10.0 ppbv			20	11	U
	Tetrachloroethene	BRL	10.0 ppbv			20	Iŧ	U
	Chlorobenzene	BRL	10.0 ppbv			20	н	U
100-41-4	Ethylbenzene	BRL	10.0 ppbv			20	11	U
	m,p-Xylene	BRL	10.0 ppbv			20	it	U
	Bromoform	BRL	10.0 ppbv			20	н	U
100-42-5	Styrene	BRL	10.0 ppbv			20	11	U
	o-Xylene	BRL	10.0 ppbv			20	u	U
	1,1,2,2-Tetrachloroethane	BRL	10.0 ppbv			20	**	U
	1,3,5-Trimethylbenzene	BRL	10.0 ppbv			20	п	U
	4-Ethyltoluene	BRL	10.0 ppbv			20	It	U
	1,2,4-Trimethylbenzene	BRL	10.0 ppbv			20	It	U
	1,3-Dichlorobenzene	BRL	10.0 ppbv			20	"	U
	Benzyl chloride	BRL	10.0 ppbv			20	tt.	บ
	1,4-Dichlorobenzene	BRL	10.0 ppbv			20	u	U
	1,2-Dichlorobenzene	BRL	10.0 ppbv			20		U
	1,2,4-Trichlorobenzene	BRL	10.0 ppbv			20	11	υ

BRL

104

10.0 ppbv

75-125 %

U

20

87-68-3 Hexachlorobutadiene

Sample Identi RES#6-I1-12		Client Project # 5555113	<u>Matrix</u> Air	Collection 06-Dec		·	Receive 08-Dec-	
A55245-04	A	Method Ref. Air method TICs	Prepared 09-Dec-06		<u>llyzed</u> Dec-06		Analys WB	<u>st</u>
CAS No.	Analyte(s)	Result	*RDL/Units	RT	Q	Dilution	Batch	Flag
Air Quality A	Analyses							
Tentatively Ide	entified Compounds in Air	Prepared by me	thod General Air	Prep				
106-97-8	Butane	2.88	ppbv	5.35	72	2	6120711	TIC. J
5989-27-5	d-Limonene	3.20	ppbv	22.89	94	2	II	TIC, J
75-28-5	Isobutane	4.88	ppbv	5.04	59	2	II.	TIC, J
91-20-3	Naphthalene	2.38	ppbv	26.61	91	2	u	TIC, J
109-66-0		1.92	ppbv	6.90	90	2	U	TIC, J
000107-51-7	Trisiloxane, octamethyl-	2.04	ppbv	18.83	90	2	**	TIC, J
PA TO-15		Prepared by met	thod General Air	Prep				
115-07-1	Propene	BRL	1.00 ppbv			2	n	U
75-71-8	Dichlorodifluoromethane (Freon12)	BRL	1.00 ppbv			2	11	U
74-87-3	Chloromethane	BRL	1.00 ppbv			2	n	U
76-14-2	1,2-Dichlorotetrafluoroethane (Freon 11	4) BRL	1.00 ppbv			2	n	U
75-01-4	Vinyl chloride	BRL	1.00 ppbv			2	o o	U
106-99-0	1,3-Butadiene	BRL	1.00 ppbv			2	н	U
74-83 - 9	Bromomethane	BRL	1.00 ppbv			2	R	U·
75-00-3	Chloroethane	BRL	1.00 ppbv			2	п	U
67-64-1	Acetone	10.1	1.00 ppbv			2	н	
75-69-4	Trichlorofluoromethane (Freon 11)	BRL	1.00 ppbv			2	ıı	U
64-17-5	Ethanol	353	1.00 ppbv			· 2	n	Æ
75-35-4	1,1-Dichloroethene	BRL	1.00 ppbv			2	"	Ű.
75-09-2	Methylene chloride	1.12	1.00 ppbv			2	н	
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 11	3) BRL	1.00 ppbv			2	.	U
75-15-0	Carbon disulfide	BRL	1.00 ppbv			2		U
156-60-5	trans-1,2-Dichloroethene	BRL	1.00 ppbv			2	17	U
75-34-3	I, I-Dichloroethane	BRL	1.00 ppbv			2	ti	U
1634-04-4	Methyl tert-butyl ether	BRL	1.00 ppbv			2	ti .	U
67-63-0	Isopropyl alcohol	4.50	1.00 ppbv			2	n	
78 - 93-3	2-Butanone (MEK)	0.680	1.00 ppbv			2	IF	J
156-59-2	cis-1,2-Dichloroethene	BRL	1.00 ppbv			2	t)	U
110-54-3	Hexane	BRL	1.00 ppbv			2	• 11	U
141-78-6	Ethyl acetate	1.92	1.00 ppbv			2	n	
67-66-3	Chloroform	BRL	1.00 ppbv			2	"	U
109-99-9	Tetrahydrofuran	BRL	1.00 ppbv			2	n	U
107-06-2	1,2-Dichloroethane	BRL	1.00 ppbv			2	Ð	U
	1,1,1-Trichloroethane	BRL	1.00 ppbv			2	u .	U
	Benzene	1.14	1.00 ppbv			2	Ħ	
	Carbon tetrachloride	BRL	1.00 ppbv			2	0	U
110-82-7	Cyclohexane	BRL	1.00 ppbv			2	15	U
	1,2-Dichloropropane	BRL	1.00 ppbv			2	Ħ	U
	Bromodichloromethane	BRL	1.00 ppbv			2	н	U
	Trichloroethene	BRL	1.00 ppbv			2	17	U
142-82-5	n-Heptane	BRL	1.00 ppbv			2	t)	ı.U
						M.	Tage 8	of 48

Sample Ident RES#6-I1-12 SA55245-04		Client Project # 5555113 Method Ref.	<u>Matrix</u> Air <u>Prepared</u>	Collection 06-Dec Ana		Received 08-Dec-06 Analyst		
		EPA TO-15	09-Dec-06		Dec-06		WB	1
CAS No.	Analyte(s)	Result	*RDL/Units	RT	Q	Dilution	Batch	Flag
Air Quality	Analyses							
EPA TO-15		Prepared by me	thod General Air	Pren				
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL	1.00 ppbv			2	6120711	U
10061-01-5	cis-1,3-Dichloropropene	BRL	1.00 ppbv			2	п	U
10061-02-6	trans-1,3-Dichloropropene	BRL	1.00 ppbv			2	11	U
79-00-5	1,1,2-Trichloroethane	BRL	1.00 ppbv			2	u	U
108-88-3	Toluene	3.96	1.00 ppbv			2	н	
591-78-6	2-Hexanone (MBK)	BRL	1.00 ppbv			2	ц	U
124-48-1	Dibromochloromethane	BRL	1.00 ppbv			2	n	U
106-93-4	1,2-Dibromoethane (EDB)	BRL	1.00 ppbv			2	и	U
127-18-4	Tetrachloroethene	BRL	1.00 ppbv			2	н	U
108-90-7	Chlorobenzene	BRL	1.00 ppbv			2	It	U
100-41-4	Ethylbenzene	BRL	1.00 ppbv			2	It	υ
1330-20-7	m,p-Xylene	1.30	1.00 ppbv			2	II	
75-25-2	Bromoform	BRL	1.00 ppbv			2	ti-	υ
100-42-5	Styrene	BRL	1.00 ppbv			2	Ħ	U
95-47-6	o-Xylene	BRL	1.00 ppbv			2	tr	U
79-34-5	1,1,2,2-Tetrachloroethane	BRL	1.00 ppbv			2	11	U
108-67-8	1,3,5-Trimethylbenzene	BRL	1.00 ppbv			2	н	U
622-96-8	4-Ethyltoluene	BRL	1.00 ppbv			2	71	U
95-63-6	1,2,4-Trimethylbenzene	BRL	1.00 ppbv			2	11	U
541-73-1	1,3-Dichlorobenzene	BRL	1.00 ppbv			2	n	U
100-44-7	Benzyl chloride	BRL	1.00 ppbv			2	11	U
106-46-7	1,4-Dichlorobenzene	7.94	1.00 ppbv			2	11	
95-50-1	1,2-Dichlorobenzene	BRL	1.00 ppbv			2	**	U
120-82-1	1,2,4-Trichlorobenzene	BRL	1.00 ppbv			2	н	U

BRL

106

1.00 ppbv

75-125 %

87-68-3 Hexachlorobutadiene

RES#6-12-120		Client Project # 5555113	<u>Matrix</u> Air	Collection 06-Dec-	<u>1 Date/T</u> -06 18:1		Receive 08-Dec-		
SA55245-05	A	Method Ref. Air method TICs	Prepared 10-Dec-06		lyzed Dec-06		Analy: WB	<u>st</u>	
CAS No.	Analyte(s)	Result	*RDL/Units	RT	Q	Dilution	Batch	Flag	
Air Quality A	analyses							-	
entatively Ide	entified Compounds in Air	Prepared by met	thod General Air	Ргер					
106-97-8	Butane	3.26	ppbv	5.34	78	2 .	6120810	TIC, J	
5989-27-5	d-Limonene	4.92	ppbv	22.88	94	2	11	TIC, J	
	Ethane, 1-chloro-1,1-difluoro-	1.38	ppbv	4.89	83	2	11	TIC, J	
75-28-5	Isobutane	5.98	ppbv	5.04	59	2	10	TIC, J	
109-66-0	Pentane	2.26	ppbv	6.90	78	2	t e	TIC, J	
000107-51-7	Trisiloxane, octamethyl-	3.64	ppbv	18.83	90	2	11	TIC, J	
EPA TO-15		Prepared by met	thod General Air	Prep					
115-07-1	-	BRL	1.00 ppbv			2	11	U	
75-71-8	Dichlorodifluoromethane (Freon12)	BRL	1.00 ppbv			2	11	U	
74-87-3	Chloromethane	BRL	1.00 ppbv			2	н	U	
76-14-2	1,2-Dichlorotetrafluoroethane (Freon 1)	4) BRL	1.00 ppbv			2	11	U	
75-01-4	Vinyl chloride	BRL	1.00 ppbv			2	и	U	
106-99-0	1,3-Butadiene	BRL	1.00 ppbv			2	**	U	
74-83-9	Bromomethane	BRL	1.00 ppbv			2	**	U	
75-00-3	Chloroethane	BRL	1.00 ppbv			2	u	U	
67-64-1	Acetone	BRL	1.00 ppbv			2	и	U	
75-69-4	Trichlorofluoromethane (Freon 11)	0.620	1.00 ppbv	.		2	И	J	
64-17-5		629	1.00 ppbv			2	:1	æ J	r 1
75-35-4	1,1-Dichloroethene	BRL	1.00 ppbv			2	**	U	i (
	Methylene chloride	1.14	1.00 ppbv			2	n	O	
	1,1,2-Trichlorotrifluoroethane (Freon 1		1.00 ppbv			2	11	U	
	Carbon disulfide	BRL	1.00 ppbv			2	**	U	
156-60-5	trans-1,2-Dichloroethene	BRL	1.00 ppbv			2	н	บ	
	1,1-Dichloroethane	BRL	1.00 ppbv			2	11	บ	
	Methyl tert-butyl ether	BRL	1.00 ppbv			2	Ð	บ	
	Isopropyl alcohol	5.28	1.00 ppbv			2	11	U	
	2-Butanone (MEK)	BRL	1.00 ppbv			2	11	U ·	
	cis-1,2-Dichloroethene	BRL	1.00 ppbv			2	11	U .	'
110-54-3		BRL	1.00 ppbv			2			
	Ethyl acetate	2.76	1.00 ppbv			2		U	
	Chloroform	BRL	1.00 ppbv			2		*1	
	Tetrahydrofuran	BRL				2	ų	U	
	1,2-Dichloroethane	BRL	1.00 ppbv 1.00 ppbv			2	"	U	
	1,1,1-Trichloroethane	BRL	• •			2	,	U	
	Benzene	1.28	1.00 ppbv			2	.,	U-	
	Carbon tetrachloride		1.00 ppbv				ı		
	Cyclohexane	BRL	1.00 ppbv			2 2	. "	U	
	1,2-Dichloropropane	BRL	1,00 ppbv					U	
	Bromodichloromethane	BRL	1.00 ppbv			2	ij	U	
	Trichloroethene	BRL	1.00 ppbv			2 2		U	
	n-Heptane	BRL BRL	1.00 ppbv			2		U	1
174-04-J		DKL	1.00 ppbv		•	2	**	U	₩
							M	1/12	W

Sample Identification
RES#6-I2-120506
SA55245-05

Client Project #
5555113

<u>Matrix</u> Air Collection Date/Time 06-Dec-06 18:18

Received 08-Dec-06

Method Ref. EPA TO-15 Prepared 10-Dec-06 Analyzed 10-Dec-06 Analyst WB

		EPA TO-15	10-Dec-06	10-E	Dec-06		WB	
CAS No.	Analyte(s)	Result	*RDL/Units	RT	Q	Dilution	Batch	Flag
Air Quality A	Analyses							
EPA TO-15		Prepared by me	ethod General Air Pr	rep				
	4-Methyl-2-pentanone (MIBK)	BRL	1.00 ppbv	•		2	6120810	U
	cis-1,3-Dichloropropene	BRL	1.00 ppbv			. 2	n	U
10061-02-6	trans-1,3-Dichloropropene	BRL	1.00 ppbv			2		U
79-00-5	1,1,2-Trichloroethane	BRL	1.00 ppbv			2	11	U
108-88-3	Toluene	7.44	1.00 ppbv			2	n	
591-78-6	2-Hexanone (MBK)	BRL	1.00 ppbv			2	11	U
124-48-1	Dibromochloromethane	BRL	1.00 ppbv			2	11	U
106-93-4	1,2-Dibromoethane (EDB)	BRL	1.00 ppbv			2	11	บ
127-18-4	Tetrachloroethene	BRL	1.00 ppbv			2	H	U
108-90-7	Chlorobenzene	BRL	1.00 ppby			2	*	U
100-41-4	Ethylbenzene	BRL	1.00 ppbv			2	11	U
1330-20-7	m,p-Xylene	1.40	1.00 ppbv			2	н	Ü
75-25-2	Bromoform	BRL	1.00 ppbv			2	11	U
100-42-5	Styrene	BRL	1.00 ppbv			2		U
95 - 47 - 6	o-Xylene	BRL	1.00 ppbv			2		U
79 - 34-5	1,1,2,2-Tetrachloroethane	BRL	1.00 ppbv			2	**	U
108-67-8	1,3,5-Trimethylbenzene	BRL	1.00 ppbv			2	n	U
622-96-8	4-Ethyltoluene	BRL	1.00 ppbv			2		U
95-63-6	1,2,4-Trimethylbenzene	BRL	1.00 ppbv			2	ŧ.	IJ
541-73-1	1,3-Dichlorobenzene	BRL	1.00 ppbv			2	u	บ
100-44-7	Benzyl chloride	BRL	1.00 ppbv			2	n	U
106-46-7	1,4-Dichlorobenzene	9.36	1.00 ppbv			2	ti.	U
95-50-1	1,2-Dichlorobenzene	BRL	1.00 ppbv			2	11	U
120-82-1	1,2,4-Trichlorobenzene	BRL	1.00 ppbv			2	11	U
	Hexachlorobutadiene	BRL	1.00 ppbv			2	n	U
	Surrogate: 4-Bromofluorobenzene	106	75-125 %				*1	U

Sample Identit RES#6-SS-12		Client Project # 5555113	<u>Matrix</u> Air	Collection 06-Dec			Receive 08-Dec-	
SA55245-06	A	Method Ref. ir method TICs	Prepared 10-Dec-06	· · · · · · · · · · · · · · · · · · ·	lyzed Dec-06		<u>Analys</u> WB	<u>st</u>
CAS No.	Analyte(s)	Result	*RDL/Units	RT	Q	Dilution	Batch	Flag
Air Quality A	nalyses							
Tentatively Ide	entified Compounds in Air	Prepared by me	thod General Air	Prep				
	Decane, 2,2-dimethyl-	51.4	ppbv	22.79	78	10	6120810	TIC, J
062238-14-6	Decane, 2,3,8-trimethyl-	162	ppbv	23.22	72	10	11	TIC,
13151-34-3	Decane, 3-methyl-	13.3	ppbv	24.49	. 78	10	Ħ	TIC,
629-78-7	Heptadecane	11.2	ppbv	24.63	72	10	**	TIC,
	Heptane, 2,2,3,5-tetramethyl-	7.60	ppbv	21.56	78	10	11	TIC,
	Heptane, 2,2,4,6,6-pentamet	15.8	ppbv	22.62	78	10	n	TIC,
	Heptane, 5-ethyl-2,2,3-trim	89.1	ppbv	23.70	72	10	n	TIC,
	Octane, 2,3,3-trimethyl-	10.0	ppbv	22.05	83	. 10	ti	TIC,
062016-14-2	Octane, 2,5,6-trimethyl-	26.1	ppby	21.19	64	10	11	TIC,
	Octane, 4-ethyl-	19.0	ppbv	23.59	72	10	ш	TIC,
	Octane, 6-ethyl-2-methyl-	46.9	ppbv	24.17	64	10	n	TIC,
	Tetradecane, 2,2-dimethyl-	20.0	ppbv	23.02	78	10	**	TIC,
EPA TO-15	roducouno, 2,2 dimoniji		thod General Ai		, ,			
115-07-1	Propene	BRL	5.00 ppbv	i i i cp		10	H	R01 U
	Dichlorodifluoromethane (Freon12)	BRL				10	n	U
	Chloromethane	BRL	5.00 ppbv			10	11	U
	1,2-Dichlorotetrafluoroethane (Freon 1)		5.00 ppbv			10	ır	
	•	BRL	5.00 ppbv			10	17	U
	Vinyl chloride		5.00 ppbv	•			n	U
	1,3-Butadiene	BRL	5.00 ppbv			10	n	U
	Bromomethane	BRL	5,00 ppbv			10	11	U
	Chloroethane	BRL	5.00 ppbv			10	"	U
	Acetone	BRL	5.00 ppbv			10		U
	Trichlorofluoromethane (Freon 11)	BRL	5.00 ppbv			10	"	U
• • • • •	Ethanol	68.0	5.00 ppbv			10		
	1,1-Dichloroethene	BRL	5.00 ppbv			10		U
	Methylene chloride	BRL	5.00 ppby			10	11	U
	1,1,2-Trichlorotrifluoroethane (Freon 1	•	5.00 ppbv			10	11	U
	Carbon disulfide	BRL	5.00 ppbv			10	11	U
	trans-1,2-Dichloroethene	BRL	5.00 ppbv			10	lt.	U
	1,1-Dichloroethane	BRL	5.00 ppbv			10	1#	U
1634-04-4	Methyl tert-butyl ether	BRL	5.00 ppbv			10	11	U
67-63-0	Isopropyl alcohol	BRL	5.00 ppbv			10	n	U
78-93-3	2-Butanone (MEK)	BRL	5.00 ppbv			10	н	U
156-59-2	cis-1,2-Dichloroethene	BRL	5.00 ppbv			10	н	U
110-54-3	Hexane	BRL	5.00 ppbv			10	11	U
141-78-6	Ethyl acetate	BRL	5.00 ppbv			10	11	U
67-66-3	Chloroform	BRL	5.00 ppbv			10	19	U
109-99-9	Tetrahydrofuran	BRL	5.00 ppbv			10	17	U
107-06-2	1,2-Dichloroethane	BRL	5.00 ppbv			10	er	U
71-55-6	1,1,1-Trichloroethane	BRL	5.00 ppbv			10	11	U
71-43-2	Benzene	BRL	5.00 ppbv			10	17	Ų
						<i>A</i> ,	. 11	11
						$\zeta m_{\tilde{N}}$	$\sqrt{3}$	1W
						りい	Bogg 12	of 10

<u>Sample Identi</u> RES#6-SS-12 SA55245-06		Client Project # 5555113 Method Ref. EPA TO-15	Matrix Air <u>Prepared</u> 10-Dec-06				Receive 08-Dec- Analys WB	06
CAS No.	Analyte(s)	Result	*RDL/Units	RT	Q	Dilution	Batch	Flag
Air Quality A	Analyses					···		
EPA TO-1 <u>5</u>	•	Prenared by me	thod General Air	Pren				R01
	Carbon tetrachloride	BRL	5.00 ppbv	F		10	6120810	U
110-82-7	Cyclohexane	BRL	5.00 ppbv			10	n	U
	1,2-Dichloropropane	BRL	5.00 ppbv			10	11	U
	Bromodichloromethane	BRL	5,00 ppbv			10	11	U
	Trichloroethene	BRL	5.00 ppbv			10	Ħ	U
142-82-5	n-Heptane	BRL	5.00 ppbv			10	**	U
	4-Methyl-2-pentanone (MIBK)	BRL	5.00 ppbv			10	n	U
	cis-1,3-Dichloropropene	BRL	5.00 ppbv			10	11	U
	trans-1,3-Dichloropropene	BRL	5.00 ppbv			10	II .	U
	1,1,2-Trichloroethane	BRL	5.00 ppbv			10	11	U
	Toluene	6.80	5.00 ppbv			10	U	
591-78-6	2-Hexanone (MBK)	BRL	5.00 ppbv			10	n	U
124-48-1	Dibromochloromethane	BRL	5.00 ppbv			10	u	U
106-93-4	1,2-Dibromoethane (EDB)	BRL	5.00 ppbv			10	+1	U
	Tetrachloroethene	BRL	5.00 ppbv			10	ш	U
108-90-7	Chlorobenzene	BRL	5.00 ppbv			10	11	U
100-41-4	Ethylbenzene	BRL	5.00 ppbv			10	**	U
	m,p-Xylene	BRL	5.00 ppbv			10	11	U
	Bromoform	BRL	5.00 ppbv			10	н	U
100-42-5	Styrene	BRL	5.00 ppbv			10	н	U
	o-Xylene	BRL	5.00 ppbv			10	tt.	U
	1,1,2,2-Tetrachloroethane	BRL	5.00 ppbv			10	11	U
	1,3,5-Trimethylbenzene	BRL	5.00 ppbv			10	**	U
	4-Ethyltoluene	BRL	5.00 ppbv			10	п	U
95-63-6	1,2,4-Trimethylbenzene	BRL	5.00 ppbv			10	11	U
	1,3-Dichlorobenzene	BRL	5.00 ppbv			10	19	U
	Benzyl chloride	BRL	5.00 ppbv			10	n	U
	1,4-Dichlorobenzene	BRL	5.00 ppbv			10	11	U
	1,2-Dichlorobenzene	BRL	5.00 ppbv			10	10	U
	1,2,4-Trichlorobenzene	BRL	5.00 ppbv			10	Ħ	U
	Hexachlorobutadiene	BRL	5.00 ppbv			10	n	U
460.00.4	0						**	

102

75-125 %

Sample Identi RES#7-I1-12		Client Project # 5555113	<u>Matrix</u> Air	Collection 06-Dec-		•	Receive 08-Dec-	
SA55245-07		Method Ref. Air method TICs	Prepared 10-Dec-06		<u>llyzed</u> Dec-06		Analy: WB	<u>st</u>
CAS No.	Analyte(s)	Result	*RDL/Units	RT	Q	Dilution	Batch	Flag
Air Quality A	Analyses							
Tentatively Id	entified Compounds in Air	Prepared by me	thod General Air	Prep				
106-97-8	Butane	1.27	ppbv	5.35	72	1	6120810	TIC. J
5989-27-5	d-Limonene	1.09	ppbv	22.89	94	1	н	TIC, J
75-28-5	Isobutane	1.45	ppbv	5.04	40	1	**	TIC, J
EPA TO-15		Prepared by me	thod General Air	Pren				
115-07-1	Propene	BRL	0.500 ppbv			1	11	U
75-71-8	Dichlorodifluoromethane (Freon12)	0.520	0.500 ppbv			ı	п	
74-87-3	Chloromethane	0.510	0.500 ppbv			ī	11	
76-14-2	1,2-Dichlorotetrafluoroethane (Freon	114) BRL	0.500 ppbv			1	11	U
	Vinyl chloride	BRL	0.500 ppbv			1	11	U
106-99-0	1,3-Butadiene	BRL	0.500 ppbv			1	н	บ
74-83-9	Bromomethane	BRL	0.500 ppbv			1	11	U
75-00-3	Chloroethane	BRL	0.500 ppbv			1.		U
67-64-1	Acetone	2.90	0.500 ppbv			1	н	U
75-69-4	Trichlorofluoromethane (Freon 11)	BRL	0.500 ppbv			1	п	U
64-17-5		215	0.500 ppbv			1	ıı	× R
75-35-4	1,1-Dichloroethene	BRL	0.500 ppbv			1		ע ע ע
75-09-2	Methylene chloride	0.300	0.500 ppbv			1	n n	j
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon		0.500 ppbv			1	н	U
	Carbon disulfide	BRL	0.500 ppbv			i	. и	U
156-60-5	trans-1,2-Dichloroethene	BRL	0.500 ppbv			1	n	U
75-34-3	1,1-Dichloroethane	BRL	0.500 ppbv			1	11	υ
1634-04-4	Methyl tert-butyl ether	BRL	0.500 ppbv			. 1	n	U
	Isopropyl alcohol	0.820	0.500 ppbv			1	It	U
	2-Butanone (MEK)	BRL	0.500 ppbv			1	11	· U
	cis-1,2-Dichloroethene	BRL	0.500 ppbv			1	u	U
110-54-3	Hexane	BRL	0.500 ppbv			- 1	"	บ
141-78-6	Ethyl acetate	BRL	0.500 ppbv			1	11	U .
	Chloroform	BRL	0.500 ppbv			1	"	บ
109-99-9	Tetrahydrofuran	BRL	0.500 ppbv			1	lt.	U
	1,2-Dichloroethane	BRL	0.500 ppbv			1	11	ย
	1,1,1-Trichloroethane	BRL	0.500 ppbv			1	11	U
	Benzene	0.520	0.500 ppbv			1	11	U
	Carbon tetrachloride	BRL	0.500 ppbv			1	"	U
110-82-7	Cyclohexane	BRL	0.500 ppbv			1	H	U
	1,2-Dichloropropane	BRL	0.500 ppbv			1	ŧi	บ
	Bromodichloromethane	BRL	0.500 ppbv			1	n	U
	Trichloroethene	BRL	0.500 ppbv			1	u	U
	n-Heptane	BRL	0.500 ppbv			ī	11	U
	4-Methyl-2-pentanone (MIBK)	BRL	0.500 ppbv			1	н	U
	cis-1,3-Dichloropropene	BRL	0.500 ppbv 0.500 ppbv			1	.,	
	trans-1,3-Dichloropropene	BRL	0.500 ppbv			1	**	U U
						an l	[Z]U	55h

Sample Identi		Client Project # 5555113	<u>Matrix</u> Air	Collection 06-Dec-			Receive 08-Dec-	
SA55245-07		Method Ref. EPA TO-15	Prepared 10-Dec-06		lyzed Dec-06		Analys WB	<u>t</u>
CAS No.	Analyte(s)	Result	*RDL/Units	RT	Q	Dilution	Batch	Flag
Air Quality A	Analyses		*					
EPA TO-15		Prepared by me	thod General Air	Prep				
79-00-5	1,1,2-Trichloroethane	BRL	0.500 ppbv	p		1	6120810	U
108-88-3	Toluene	1.38	0.500 ppbv			1	It	Ū
591-78-6	2-Hexanone (MBK)	BRL	0.500 ppbv			1	н	U
124-48-1	Dibromochloromethane	BRL	0.500 ppbv			1	**	U
106-93-4	1,2-Dibromoethane (EDB)	BRL	0.500 ppbv			1	u	U
127-18-4	Tetrachloroethene	BRL	0.500 ppbv			1	**	U
108-90-7	Chlorobenzene	BRL	0.500 ppbv			1	**	U
100-41-4	Ethylbenzene	BRL	0.500 ppbv			1	**	U
1330-20-7	m,p-Xylene	0.490	0.500 ppbv			1	п	J
75-25-2	Bromoform	BRL	0.500 ppbv			1	11	U
100-42-5	Styrene	BRL	0.500 ppbv			1	**	U
95-47-6	o-Xylene	BRL	0.500 ppbv			1	11	U
79-34-5	1,1,2,2-Tetrachloroethane	BRL	0.500 ppbv			1	It	U
108-67-8	1,3,5-Trimethylbenzene	BRL	0.500 ppbv			1		U
622-96-8	4-Ethyltoluene	BRL	0.500 ppbv			1	11	U
95-63-6	1,2,4-Trimethylbenzene	BRL	0.500 ppbv			1	11	υ
541-73-1	1,3-Dichlorobenzene	BRL	0.500 ppbv			1	11	U
100-44-7	Benzyl chloride	BRL	0.500 ppbv			1	n	U
106-46-7	1,4-Dichlorobenzene	BRL	0.500 ppbv			1	п	U
95-50-1	1,2-Dichlorobenzene	BRL	0.500 ppbv			1	11	U
120-82-1	1,2,4-Trichlorobenzene	BRL	0.500 ppbv			1	ti	U
87-68-3	Hexachlorobutadiene	BRL	0.500 ppbv			1	tr	U
460-00-4	Surrogate: 4-Bromofluorobenzene	106	75-125 %			-	H	J

RES#7-I2-12		5555113	<u>Mau ix</u> . Air	06-Dec	-06 16:5		08-Dec-	
SA55245-08	A	Method Ref. Air method TICs	Prepared 10-Dec-06	Ana	alyzed Dec-06		Analys WB	<u>st</u>
CAS No.	Analyte(s)	Result	*RDL/Unit	s RT	Q	Dilution	Batch	Flag
Air Quality A	Analyses							
Tentatively Id	entified Compounds in Air	Prepared by me	thod General A	ir Prep				
-	1,3-Butadiene, 2-methyl-	1.84	ppbv	-	96	2	6120810	TIC, J
106-97-8	Butane	1.42	ppbv		56	2	p	TIC, J
5989-27-5	d-Limonene	2.30	ppbv		94	2	*	TIC, J
75-37-6	Ethane, 1,1-difluoro-	1.50	ppbv	4.58	74	2	n	TIC, J
EPA TO-15		Prepared by me	thod General A	ir Pren				
115-07-1	Propene	BRL	1.00 ppbv			2	п	U
75-71-8	Dichlorodifluoromethane (Freon12)	BRL	1.00 ppbv			2	93	U
	Chloromethane	0.920	1.00 ppbv			2	**	J
76-14-2	1,2-Dichlorotetrafluoroethane (Freon 1		1.00 ppbv			2	11	U
75-01-4	Vinyl chloride	BRL	1.00 ppbv			2	11	U
106-99-0	1,3-Butadiene	BRL	1.00 ppby			2	11	U
74-83-9	Bromomethane	BRL	1.00 ppbv			2	11	U
75-00-3	Chloroethane	BRL	1.00 ppby			2		U
67-64-1	Acetone	5.18	1.00 ppbv			2	**	
75-69-4	Trichlorofluoromethane (Freon 11)	BRL	1.00 ppbv			2	"	U
64-17-5	Ethanol	688	1.00 ppbv			2	н	£
75-35-4	1,1-Dichloroethene	BRL	1.00 ppbv			2	,	U
75-09-2	Methylene chloride	BRL	1.00 ppbv			2		U
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 1	13) BRL	1.00 ppbv			2 .	t9	U
	Carbon disulfide	BRL	1.00 ppbv			2	u	U
156-60-5	trans-1,2-Dichloroethene	BRL	1.00 ppbv			2	n	U
75-34-3	1,1-Dichloroethane	BRL	1.00 ppbv			2	13	U
1634-04-4	Methyl tert-butyl ether	BRL	1.00 ppbv			2	"	U
67-63-0	Isopropyl alcohol	2.04	1.00 ppbv			2	"	
78-93 - 3	2-Butanone (MEK)	BRL	1.00 ppby			2	**	U
156-59-2	cis-1,2-Dichloroethene	BRL	1.00 ppby			2	"	U
110-54-3	Hexane	BRL	1.00 ppbv			2	Ħ	U
141-78-6	Ethyl acetate	BRL	1.00 ppbv			2	0	U
67-66-3	Chloroform	BRL	1.00 ppbv			2	tı	U
109-99-9	Tetrahydrofuran	BRL	1.00 ppby			2	u	U
107-06-2	1,2-Dichloroethane	BRL	1.00 ppbv			2	n	U
71-55-6	1,1,1-Trichloroethane	BRL	1.00 ppbv			2	н	U
71-43-2	Benzene	0.620	1.00 ppbv			2	11	J
56-23-5	Carbon tetrachloride	BRL	1.00 ppbv			2	"	U
110-82-7	Cyclohexane	BRL	1.00 ppbv			2	"	U
78-87-5	1,2-Dichloropropane	BRL	1.00 ppbv			2	**	U
75-27-4	Bromodichloromethane	BRL	1.00 ppbv			2	**	Ū
79-01-6	Trichloroethene	BRL	1.00 ppbv			2	lf.	U
142-82-5	n-Heptane	BRL	1.00 ppbv			2	n	U
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL	1.00 ppbv			2	b	U
10061-01-5	cis-1,3-Dichloropropene	BRL	1.00 ppbv			2	14	U

Client Project #

Matrix.

Collection Date/Time

Received

Sample Identification

Sample Identi		Client Project # 5555113	<u>Matrix</u> Air	Collection 06-Dec	<u>Date/T</u> -06 16:5		Receive 08-Dec-	_
SA55245-08		Method Ref. EPA TO-15	Prepared 10-Dec-06	Analyzed 10-Dec-06			Analyst WB	
CAS No.	Analyte(s)	Result	*RDL/Units	RT	Q	Dilution	Batch	Flag
Air Quality A	Analyses						•	
EPA TO-15		Prepared by me	thod General Air	Prep				
10061-02-6	trans-1,3-Dichloropropene	BRL	1.00 ppbv	•		2	6120810	U
79-00-5	1,1,2-Trichloroethane	BRL	1.00 ppbv			2	#	U
108-88-3	Toluene	2.68	1.00 ppbv			2	11	
591-78-6	2-Hexanone (MBK)	BRL	1.00 ppbv			2	R	U
124-48-1	Dibromochloromethane	BRL	1.00 ppbv			2	II	U
106-93-4	1,2-Dibromoethane (EDB)	BRL	1.00 ppbv			2	19	U
127-18-4	Tetrachloroethene	BRL	1.00 ppbv			2	n	U
108-90-7	Chlorobenzene	BRL	1.00 ppbv			2	n	U
100-41-4	Ethylbenzene	BRL	1.00 ppbv			2	н	U
1330-20-7	m,p-Xylene	BRL	1.00 ppbv			2	11	U
75-25-2	Bromoform	BRL	1.00 ppbv			2	#	U
100-42-5	Styrene	BRL	1.00 ppbv			2	U	U
95-47-6	o-Xylene	BRL	1.00 ppbv			2	U	U
79-34-5	1,1,2,2-Tetrachloroethane	BRL	1.00 ppbv			2	11	U
108-67-8	1,3,5-Trimethylbenzene	BRL	1.00 ppbv			2	**	U
622-96-8	4-Ethyltoluene	BRL	1.00 ppbv			. 2	**	U
95-63-6	1,2,4-Trimethylbenzene	BRL	1.00 ppby			2	11	U
541-73-1	1,3-Dichlorobenzene	BRL	1.00 ppbv			2	11	U
100-44-7	Benzyl chloride	BRL	1.00 ppbv	•		2	н	U
106-46-7	1,4-Dichlorobenzene	BRL	1.00 ppbv			2	н	U
95-50-1	1,2-Dichlorobenzene	BRL	1.00 ppbv			2	и	U
120-82-1	1,2,4-Trichlorobenzene	BRL	1.00 ppbv			2	"	U

BRL

104

1.00 ppbv

75-125 %

87-68-3 Hexachlorobutadiene

Sample Identi RES#7-SS-12		Client Project # 5555113	<u>Matrix</u> Air	Collection 06-Dec			Received 08-Dec-06		
SA55245-09	A	Method Ref. Air method TICs	Prepared 10-Dec-06		l <u>lyzed</u> Dec-06		Analys WB	<u>st</u>	
CAS No.	Analyte(s)	Result	*RDL/Units	RT	Q	Dilution	Batch	Flag	
Air Quality A	Analyses								
Tentatively Id	entified Compounds in Air	Prepared by met	thod General Air	Prep					
	Decane, 2,2-dimethyl-	63.5	ppbv	22.79	78	10	6120810	TIC, J	
13151-34-3	Decane, 3-methyl-	16.7	ppbv	24.49	83	10	11	TIC, J	
	Dodecane, 2,2,11,11-tetrame	24.6	ppbv	23.02	72	10	11	TIC, J	
	Dodecane, 3-methyl-	85.2	ppbv	23.80	72	10	"	TIC, J	
112-95-8	Eicosane	204	ppbv	23.22	64	10	11	TIC, J	
	Heptadecane, 2,6-dimethyl-	12.4	ppbv	22.05	72	10	II.	TIC, J	
	Heptane, 2,2,4,6,6-pentamet	20.0	ppbv	22.62	78	10	ıı	TIC, J	
	Heptane, 5-ethyl-2,2,3-trim	111	ppbv	23.70	64	10	11	TIC, J	
	Hexane, 2,2,3-trimethyl-	9.40	ppbv	21.56	53	10	и	TIC, J	
	Hexane, 2,2,5,5-tetramethyl-	32.3	ppbv	21.19	59	10	11	TIC, J	
	Octane, 2,3,6,7-tetramethyl-	7.30	ppbv	23.49	64	10	11	TIC, J	
	Octane, 4-ethyl-	23.5	ppbv	23.59	72	10	11	TIC, J	
	Octane, 6-ethyl-2-methyl-	57.7	ppbv	24.17	72	10	jr.	TIC, J	
EPA TO-15		Prepared by met	thod General Air	Dren					
115-07-1	Propene	BRL	5.00 ppby	Пор		10	и	R01 U	
	Dichlorodifluoromethane (Freon12)	BRL	5.00 ppbv			10	п	U	
	Chloromethane	BRL	5.00 ppbv			10	11	U	
	1,2-Dichlorotetrafluoroethane (Freon 11		5.00 ppbv			10	n	U	
	Vinyl chloride	BRL	5.00 ppbv			10	**		
	1,3-Butadiene	BRL	5.00 ppbv			10	H	U	
	Bromomethane	BRL	5.00 ppbv			10	Į.	U	
	Chloroethane	BRL	5.00 ppbv 5.00 ppbv			10		U	
	Acetone	8.00	5.00 ppbv 5.00 ppbv			10	н	U	
	Trichlorofluoromethane (Freon 11)	BRL	5.00 ppbv			10	,,	*1	
	Ethanol	14.6				10	11	U	
	1,1-Dichloroethene	BRL	5.00 ppbv			10	U	٠,	
	Methylene chloride	BRL	5.00 ppbv			10	"	U	
	1,1,2-Trichlorotrifluoroethane (Freon 1)		5.00 ppbv			10	"	U	
	Carbon disulfide	BRL	5.00 ppbv			10	"	U	
	trans-1,2-Dichloroethene	BRL	5.00 ppbv			10	n	U	
	1,1-Dichloroethane	BRL	5.00 ppbv 5.00 ppbv			10		U	
	Methyl tert-butyl ether	BRL	5.00 ppbv 5.00 ppbv			10	O.	U	
	Isopropyl alcohol	BRL	5.00 ppbv			10	0	U	
	2-Butanone (MEK)	BRL	5.00 ppbv			10	11	U	
	cis-1,2-Dichloroethene	BRL	5.00 ppbv			10	**	U	
110-54-3		BRL	5.00 ppbv 5.00 ppbv			10	,,	U	
	Ethyl acetate	BRL	5.00 ppbv 5.00 ppbv			10	n	U	
	Chloroform	BRL	5.00 ppbv 5.00 ppbv			10	"	U	
	Tetrahydrofuran	BRL	5.00 ppbv 5.00 ppbv			10	u	U	
	1,2-Dichloroethane	BRL	5.00 ppbv			10	"	U .	
	1,1,1-Trichloroethane	BRL	5.00 ppbv 5.00 ppbv			10	,	U	
,, 55-0	-,-,· 1.10.110100utuito	DICL	2.00 ppov			.10	. 1		
	•					1 my	-11	1W1	
							1761		

Sample Identification
RES#7-SS-120506
SA55245-09

Client Project # 5555113
Method Ref. EPA TO-15

Matrix Air Prepared 10-Dec-06 Collection Date/Time
06-Dec-06 18:18

Analyzed
11-Dec-06

Received 08-Dec-06 Analyst WB

CAS No.	Analyte(s)	Result	*RDL/Units	RT	Q	Dilution	Batch	Flag
Air Quality A	Analyses							
E <i>PA TO-15</i>		Prepared by m	ethod General Air Pr	ep				R01
71-43-2	Benzene	BRL	5.00 ppbv	-1-		10	6120810	ro1
56-23-5	Carbon tetrachloride	BRL	5.00 ppbv			10	11	U
110-82-7	Cyclohexane	BRL	5.00 ppbv			10	11	U
78-87-5	1,2-Dichloropropane	BRL	5.00 ppbv			10	11	U
75-27-4	Bromodichloromethane	BRL	5.00 ppbv			10	19	U
79-01 - 6	Trichloroethene	BRL	5.00 ppby			10	13	U
142-82-5	n-Heptane	BRL	5.00 ppbv			10	11	U
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL	5.00 ppbv			10	11	U
10061-01-5	cis-1,3-Dichloropropene	BRL	5.00 ppbv			10		U
10061-02-6	trans-1,3-Dichloropropene	BRL	5.00 ppbv			10	11	U
79-00-5	1,1,2-Trichloroethane	BRL	5.00 ppbv			10	н	U
108-88-3	Toluene	3.00	5.00 ppbv			10	u	J
591-78-6	2-Hexanone (MBK)	BRL	5.00 ppby			10	#	U
124-48-1	Dibromochloromethane	BRL	5.00 ppbv			10	n	U
106-93-4	1,2-Dibromoethane (EDB)	BRL	5.00 ppbv			10	11	U
127-18-4	Tetrachloroethene	BRL	5.00 ppbv			10		บ
108-90-7	Chlorobenzene	BRL	5.00 ppbv			10	ir .	U
100-41-4	Ethylbenzene	BRL	5.00 ppbv			10	н	U
1330-20-7	m,p-Xylene	BRL	5.00 ppbv			10	H	U
75-25-2	Bromoform	BRL	5.00 ppbv			10	11	บ
100-42-5	Styrene	BRL	5.00 ppbv			10	11	U
95-47 - 6	o-Xylene	BRL	5.00 ppbv			10	19	U
79-34 - 5	1,1,2,2-Tetrachloroethane	BRL	5.00 ppbv			10	н	U
108-67-8	1,3,5-Trimethylbenzene	BRL	5.00 ppbv			10	н	U
622-96-8	4-Ethyltoluene	BRL	5.00 ppbv			10	It	U
95-63-6	1,2,4-Trimethylbenzene	BRL	5.00 ppbv			10	\$1	U
541-73-1	1,3-Dichlorobenzene	BRL	5.00 ppbv			10	u	U
100-44-7	Benzyl chloride	BRL	5.00 ppbv			10	н	U
	1,4-Dichlorobenzene	BRL	5.00 ppbv			10	**	U
95-50-1	1,2-Dichlorobenzene	BRL	5.00 ppbv			10	11	U
	1,2,4-Trichlorobenzene	BRL	5.00 ppbv			10	"	U
	Hexachlorobutadiene	BRL	5.00 ppbv			10		U
460-00-4	Surrogate: 4-Bromofluorobenzene	103	75-125 %				11	U

ample Identification ES#8-I1-120506 A55245-10		Client Project # 5555113				Collection Date/Time 06-Dec-06 15:45				
433243-10	А	Method Ref. ir method TICs	Prepared 09-Dec-06		lyzed Dec-06		Analys WB	<u>st</u>		
CAS No.	Analyte(s)	Result	*RDL/Units	RT	Q	Dilution	Batch	Flag		
ir Quality A	nalyses									
entatively Ide	entified Compounds in Air	Prepared by me	thod General Air	Prep						
-	Benzene, 1-ethyl-3-methyl-	0.780	ppbv	20.92	94	1	6120711	TIC, J		
106-97-8	Butane	9.72	ppbv	5.34	80	1	"	TIC, J		
108-87-2	Cyclohexane, methyl-	2.23	ppbv	13.93	91	1	**	TIC, J		
96-37-7	Cyclopentane, methyl-	0.680	ppbv	10.64	87	1	n	TIC, J		
124-18-5	Decane	2.42	ppbv	22.04	96	1	11	TIC, J		
112-40-3	Dodecane	0.730	ppby	26.77	96	1	11	TIC, J		
75-37-6	Ethane, 1,1-difluoro-	2.40	ppbv	4.58	90	1	11	TIC, J		
589-34-4	Hexane, 3-methyl-	0.660	ppbv	12.27	91	1	tı.	TIC, J		
75-28-5	Isobutane	3.48	ppbv	5,04	59	1	11	TIC, J		
109-66-0	Pentane	1.58	ppbv	6.90	86	1	n	TIC, J		
107-83-5	Pentane, 2-methyl-	1.29	ppbv	8.71	90	1	11	TIC, J		
	Pentane, 3-methyl-	0.710	ppbv	9,16	90	1	11	TIC, J		
74-98-6	•	5.11	ppbv	4.68	56	1	u	TIC, J		
1120-21-4	•	1.38	ppbv	24.50	94	1	**	TIC, J		
PA TO-15								110,0		
115-07-1	Propere	BRL	thod General Air 0.500 ppbv	РГер		1		**		
	Dichlorodifluoromethane (Freon12)	0.730	0.500 ppbv			1	11	U		
	Chloromethane	0.430	0.500 ppbv 0.500 ppbv			1	11	*		
	1,2-Dichlorotetrafluoroethane (Freon 11					1	11	J		
	Vinyl chloride	•	0.500 ppbv			ı I		U		
	1,3-Butadiene	BRL	0.500 ppbv				н	U		
	Bromomethane	BRL	0.500 ppbv			1		U		
	Chloroethane	BRL	0.500 ppbv			1	"	U		
		BRL	0.500 ppbv			!		U		
67-64-1		11.2	0.500 ppbv			1				
	Trichlorofluoromethane (Freon 11)	0.390	0.500 ppbv			1	" ".	J-		
64-17-5		193	0.500 ppbv			1		EJ		
	1,1-Dichloroethene	BRL	0.500 ppbv			1		U		
	Methylene chloride	0.330	0.500 ppbv			1	ii 	J		
	1,1,2-Trichlorotrifluoroethane (Freon 11	•	0.500 ppbv			1		U		
	Carbon disulfide	BRL	0.500 ppbv			1	"	U		
	trans-1,2-Dichloroethene	BRL	0.500 ppbv			1		U		
	1,1-Dichloroethane	BRL	0.500 ppbv			. 1	11	U		
	Methyl tert-butyl ether	BRL	0.500 ppbv			1	D	U		
	Isopropyl alcohol	3.44	0.500 ppbv			1	н			
	2-Butanone (MEK)	0.970	0.500 ppbv			1	U			
	cis-1,2-Dichloroethene	BRL	0.500 ppbv			1	*1	U		
110-54-3		BRL	0.500 ppbv			1	ŧı	U		
	Ethyl acetate	BRL	0.500 ppbv			. 1	0	U		
	Chloroform	BRL	0.500 ppbv			1	"	U		
100 00 0	Tetrahydrofuran	BRL	0.500 ppbv			1	11	U		
	1,2-Dichloroethane	BRL	0.500 ppbv							

Sample Identification RES#8-I1-120506		Client Project # 5555113	<u>Matrix</u> Air	Collection Da 06-Dec-06		Receive 08-Dec-	
SA55245-10	·	Method Ref. EPA TO-15	Prepared 09-Dec-06	Analyze 09-Dec-	_	Analys WB	<u>st</u>
CAS No.	Analyte(s)	Result	*RDL/Units	RT	Q Dilution	Batch	Flag
Air Quality A	Analyses						
EPA TO-15		Prepared by me	thod General A	ir Prep			
71-55-6	1,1,1-Trichloroethane	BRL	0.500 ppbv	•	. 1	6120711	U
71-43-2	Benzene	0.910	0.500 ppbv		1	11	
56-23-5	Carbon tetrachloride	BRL	0.500 ppbv		1	**	U
110-82-7	Cyclohexane	0.360	0.500 ppbv		1	**	J
78-87 - 5	1,2-Dichloropropane	BRL	0.500 ppbv		1	**	U
75-27-4	Bromodichloromethane	BRL	0.500 ppbv		1	11	U
79-01-6	Trichloroethene	BRL	0.500 ppbv		1	11	U
142-82-5	n-Heptane	1.78	0.500 ppbv	•	1	u	_
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL	0.500 ppbv		I	"	U
10061-01-5	cis-1,3-Dichloropropene	BRL	0.500 ppbv		1	**	U
10061-02-6	trans-1,3-Dichloropropene	BRL	0.500 ppbv		1	11	U
79-00-5	1,1,2-Trichloroethane	BRL	0.500 ppbv		1	n	U
108-88-3	Toluene	4.85	0.500 ppbv		1	tt.	ū
591-78-6	2-Hexanone (MBK)	BRL	0.500 ppbv		1	0	U
124-48-1	Dibromochloromethane	BRL	0.500 ppbv		1	Ð	U
106-93-4	1,2-Dibromoethane (EDB)	BRL	0.500 ppbv		. 1	17	U
127-18-4	Tetrachloroethene	BRL	0.500 ppbv		1	ıt	U
108-90-7	Chlorobenzene	BRL	0.500 ppbv		1		U
100-41-4	Ethylbenzene	0.320	0.500 ppbv		1	11	J
	m,p-Xylene	1.09	0.500 ppbv		1	n	U
	Bromoform	BRL	0.500 ppbv	,	1	n	U
100-42-5	Styrene	BRL	0.500 ppbv		1	п	บ
	o-Xylene	0.400	0.500 ppbv		1	"	j
	1,1,2,2-Tetrachloroethane	BRL	0.500 ppbv		1	11	บ
	1,3,5-Trimethylbenzene	BRL	0.500 ppbv		ı I	tř	U
	4-Ethyltoluene	BRL	0.500 ppbv		1	п	บ
	1,2,4-Trimethylbenzene	0.780	0.500 ppbv			Ð	U
	1,3-Dichlorobenzene	BRL	0.500 ppbv		1	11	Ú
	Benzyl chloride	BRL	0.500 ppbv		1	*1	U
	1,4-Dichlorobenzene	BRL	0.500 ppbv		1	11	U
	1,2-Dichlorobenzene	BRL	0.500 ppbv		1	н ,	
	1,2,4-Trichlorobenzene	BRL	0.500 ppbv		1	н	U
120-02-1	r-inonotocolizone	DIVT	o.Jog ppov		1		U

0.500 ppbv

75-125 %

 ${\tt BRL}$

106

U

87-68-3 Hexachlorobutadiene

ES#8-I2-12(5555113	Air	06-Dec-			08-Dec-	
A55245-11	A	Method Ref. Air method TICs	Prepared 09-Dec-06		l <u>yzed</u> ec-06		Analys WB	<u>st</u>
CAS No.	Analyte(s)	Result	*RDL/Units	RT	Q	Dilution	Batch	Flag
ir Quality A	nalyses		,					
75-28-5	Isobutane	2.92	ppbv	5.04	42	4	6120711	TIC, J
PA TO-15		Prepared by me	thod General Air	Prep				
115-07-1	Propene	BRL	2.00 ppbv			4	II .	U
75-71-8	Dichlorodifluoromethane (Freon12)	1.84	2.00 ppbv			4		J
74-87-3	Chloromethane	BRL	2.00 ppbv			4	u	U
76-14-2	1,2-Dichlorotetrafluoroethane (Freon 1	l4) BRL	2.00 ppbv			4	eı	U
75-01-4	Vinyl chloride	BRL	2.00 ppbv			4	n	U
106-99-0	1,3-Butadiene	BRL	2.00 ppbv			4	11	U
74-83-9	Bromomethane	BRL	2.00 ppbv			4	u	U
75-00-3	Chloroethane	BRL	2.00 ppbv			4	**	U
67-64-1	Acetone	9.92	2.00 ppbv			4	**	
75-69-4	Trichlorofluoromethane (Freon 11)	BRL	2.00 ppbv			4	ıı	U
64-17-5	Ethanol	590	2.00 ppbv			4	"	e J
75-35-4	1,1-Dichloroethene	BRL	2.00 ppbv			4	11	U
75-09-2	Methylene chloride	BRL	2.00 ppbv			4	11	U
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 1	13) BRL	2.00 ppbv	·		4	11	U
75-15-0	Carbon disulfide	BRL	2.00 ppbv			4	**	U
156-60-5	trans-1,2-Dichloroethene	BRL	2.00 ppbv			4	11	U
75-34-3	1,1-Dichloroethane	BRL	2.00 ppbv			4	11	U
1634-04-4	Methyl tert-butyl ether	BRL	2.00 ppbv			4	. n	U
	Isopropyl alcohol	3.00	2.00 ppby			4	н	
	2-Butanone (MEK)	BRL	2.00 ppbv			4	u	U
	cis-1,2-Dichloroethene	BRL	2.00 ppbv			4	u	U
110-54-3	Hexane	BRL	2.00 ppbv			4	D	U
141-78-6	Ethyl acetate	1.32	2.00 ppbv			4	n	J
	Chloroform	BRL	2.00 ppbv			4	**	บ
109-99-9	Tetrahydrofuran	BRL	2.00 ppbv			4	#1	U
107-06-2	1,2-Dichloroethane	BRL	2.00 ppbv			4	n	U
71-55-6	1,1,1-Trichloroethane	BRL	2.00 ppbv			4	п	U
	Benzene	BRL	2.00 ppbv			4	11	U
56-23-5	Carbon tetrachloride	BRL	2.00 ppbv			4		บ
110-82-7	Cyclohexane	BRL	2.00 ppbv			4	It	U
	1,2-Dichloropropane	BRL	2.00 ppbv			4	n	ับ
	Bromodichloromethane	BRL	2.00 ppbv			4	tr	บ
79-01-6	Trichloroethene	BRL	2.00 ppbv			4	"	บ
142-82-5	n-Heptane	BRL	2.00 ppbv			4	41	U
	4-Methyl-2-pentanone (MIBK)	BRL	2.00 ppbv			4	H	U
	cis-1,3-Dichloropropene	BRL	2.00 ppbv			4	Ħ	U
	trans-1,3-Dichloropropene	BRL	2.00 ppbv			4	11	U
	1,1,2-Trichloroethane	BRL	2.00 ppbv			4	11	U
108-88-3		3.00	2.00 ppbv			4	16	-
	2-Hexanone (MBK)	BRL	2.00 ppbv			4	19	U

Client Project #

Matrix

Collection Date/Time

Received

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Sample Identification

Sample Identi: RES#8-I2-120 SA55245-11	_	Client Project # 5555113 Method Ref. EPA TO-15	Matrix Air Prepared 09-Dec-06				Receive 08-Dec- Analys WB	06
CAS No.	Analyte(s)	Result	*RDL/Units	RT	Q	Dilution	Batch	Flag
Air Quality A	Analyses							
EPA TO-15		Prepared by me	thod General Air	Prep				
124-48-1	Dibromochloromethane	BRL	2.00 ppbv			4	6120711	U
106-93-4	1,2-Dibromoethane (EDB)	BRL	2.00 ppbv			4	ŧŧ	U
127-18-4	Tetrachloroethene	BRL	2.00 ppbv			4		U
108-90-7	Chlorobenzene	BRL	2.00 ppbv			4	"	U
100-41-4	Ethylbenzene	BRL	2.00 ppbv		•	4	н	U
1330-20-7	m,p-Xylene	BRL	2.00 ppbv			4	11	U
75-25-2	Bromoform	BRL	2.00 ppbv			4	p	U
100-42-5	Styrene	BRL	2.00 ppbv			4	11	U
95-47-6	o-Xylene	BRL	2.00 ppbv			4	n	U
79-34-5	1,1,2,2-Tetrachloroethane	BRL	2.00 ppbv			4	**	U
108-67-8	1,3,5-Trimethylbenzene	BRL	2.00 ppbv			4	ij	U
622-96-8	4-Ethyltoluene	BRL	2.00 ppbv			4	Ħ	U
95-63-6	1,2,4-Trimethylbenzene	BRL	2.00 ppbv			4	Ħ	U
541-73-1	1,3-Dichlorobenzene	BRL	2.00 ppbv			4	II	U
100-44-7	Benzyl chloride	BRL	2.00 ppbv			4	lt .	U
106-46-7	1,4-Dichlorobenzene	BRL	2.00 ppbv			4	ii	U ·
95-50-1	1,2-Dichlorobenzene	BRL	2.00 ppbv			4	ıı	U
120-82-1	1,2,4-Trichlorobenzene	BRL	2.00 ppbv			4	11	U
87-68-3	Hexachlorobutadiene	BRL	2.00 ppbv			4	0	U ·
460-00-4	Surrogate: 4-Bromofluorobenzene	104	75-125 %				U	

Sample Identification RES#8-SS-120506 SA55245-12		Client Project # 5555113	<u>Matrix</u> Air	Collection 06-Dec			Receive 08-Dec-	
SA55245-12	A	Method Ref. Air method TICs	Prepared 09-Dec-06		<u>llyzed</u> Dec-06		Analys WB	<u>st</u>
CAS No.	Analyte(s)	Result	*RDL/Units	RT	Q	Dilution	Batch	Flag
Air Quality A	analyses							
Tentatively Ide	entified Compounds in Air	Prepared by me	thod General Air	Prep				
115-11-7	1-Propene, 2-methyl-	1.04	ppbv	5.25	90	1	6120711	TIC, J
106-97-8	Butane	2.05	ppbv	5.35	80	1	19	TIC, J
124-18-5	Decane	1.15	ppbv	22.04	94	1	Ħ	TIC, J
	Decane, 2,2-dimethyl-	1.39	ppbv	22.79	78	1	u	TIC, J
062238-14-6	Decane, 2,3,8-trimethyl-	3.74	ppbv	23.22	64	1	и	TIC, J
13151-34-3	Decane, 3-methyl-	2.56	ppbv	24.17	72	1		TIC, J
3891-98-3	Dodecane, 2,6,10-trimethyl-	0.840	ppbv	23.59	72	1	11	TIC, J
	Ethane, 1,1-difluoro-	0.690	ppbv	4.57	83	1	11	TIC, J
3522-94-9	Hexane, 2,2,5-trimethyl-	2.72	ppbv	23.70	72	1	ŋ	TIC, J
	Limonene	2.82	ppbv	22.88	94	1	U	TIC, J
	Pentane, 2-methyl-	0.710	ppbv ppbv	8.72	86	1	н	TIC, J
	Tetradecane, 2,2-dimethyl-	0.810	ppbv	23.02	72	1	11	TIC, J
1120-21-4	•	1.54	ppbv	24.50	76	1	11	
	Undecane, 2,9-dimethyl-	2.73		23.80	72	1	11	TIC, J
	ondodato, 2,5 uniterry		ppbv		12	1		TIC,
EPA TO-15	7		thod General Air	Prep				
115-07-1	•	BRL	0.500 ppbv			1	111	U
	Dichlorodifluoromethane (Freon12)	0.610	0.500 ppbv			1	11	
	Chloromethane	BRL	0.500 ppbv			1		U
	1,2-Dichlorotetrafluoroethane (Freon 11	.4) BRL	0.500 ppbv			1	11	U
75-01-4	Vinyl chloride	BRL	0.500 ppbv			1	II	U
106-99-0	1,3-Butadiene	BRL	0.500 ppbv			1	п	U
74-83-9	Bromomethane	BRL	0.500 ppbv			1	II	U
75-00-3	Chloroethane	BRL	0.500 ppbv			t	H .	U
67-64-1	Acetone	8.33	0.500 ppbv			1	11	
75-69-4	Trichlorofluoromethane (Freon 11)	0.320	0.500 ppbv			1	u	J
64-17-5	Ethanol	3.14	0.500 ppbv			1	11	
75-35-4	1,1-Dichloroethene	BRL	0.500 ppbv			1	n	U
75-09-2	Methylene chloride	BRL	0.500 ppbv			1	п.,	U
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 1)		0.500 ppbv			i	n	U
	Carbon disulfide	BRL	0.500 ppbv			1	ш	U
	trans-1,2-Dichloroethene	BRL	0.500 ppbv			1	11	U
	1,1-Dichloroethane	BRL	0.500 ppbv			1	u	U
	Methyl tert-butyl ether	BRL	0.500 ppbv			1	u	U
	Isopropyl alcohol	1.07	0.500 ppbv			Ī	Ħ	·
	2-Butanone (MEK)	0.930	0.500 ppbv			1	21	
	cis-1,2-Dichloroethene	BRL	0.500 ppbv			I	#1	*1
110-54-3		BRL	0.500 ppbv			1	11	U
	Ethyl acetate					1	*1	U
	Chloroform	BRL	0.500 ppbv			_	11	U
	Tetrahydrofuran	BRL	0.500 ppbv			1	41	U
	1,2-Dichloroethane	BRL	0.500 ppbv			1		U
107-00-2	1,2-Diemoroculane	BRL	0.500 ppbv		6	mynz	100	V u
						Inco	Page 24	of 48
							1 450 47	U. TU

Sample Identi RES#8-SS-12		Client Project # 5555113	<u>Matrix</u> Air	Collection 06-Dec-			Receive 08-Dec-	
SA55245-12		Method Ref. EPA TO-15	Prepared 09-Dec-06	<u>Ana</u> 09-D		<u>Analyst</u> WB		
CAS No.	Analyte(s)	Result	*RDL/Units	RT	Q	Dilution	Batch	Flag
Air Quality A	Analyses			,				
EPA TO-15		Prepared by me	thod General Air	Prep				
71-55-6	1,1,1-Trichloroethane	BRL	0.500 ppbv	•		1	6120711	U
71-43-2	Benzene	0.480	0.500 ppbv			1	IF	J
56-23-5	Carbon tetrachloride	BRL	0.500 ppbv			1	"	U
110-82-7	Cyclohexane	BRL	0.500 ppbv			1	ı,	U
78-87-5	1,2-Dichloropropane	BRL	0.500 ppbv			1	v	บ
75-27-4	Bromodichloromethane	BRL	0.500 ppbv			1	u	U
79-01-6	Trichloroethene	BRL	0.500 ppbv			1	U	U
142-82-5	n-Heptane	BRL	0.500 ppbv			I	ŧ	U
	4-Methyl-2-pentanone (MIBK)	BRL	0.500 ppbv			1	"	U
	cis-1,3-Dichloropropene	BRL	0.500 ppbv			1	n	U
	trans-1,3-Dichloropropene	BRL	0.500 ppbv			1	11	U
	1,1,2-Trichloroethane	BRL	0.500 ppbv			1	13	U
	Toluene	2.89	0.500 ppbv			1	tt.	U
591-78-6	2-Hexanone (MBK)	BRL	0.500 ppbv			1	11	U
	Dibromochloromethane	BRL	0.500 ppbv			1	11	U
	1,2-Dibromoethane (EDB)	BRL	0.500 ppbv			1	11	U
	Tetrachloroethene	1.01	0.500 ppbv			1	11	U
	Chlorobenzene	BRL	0.500 ppbv			1	11	**
	Ethylbenzene	0.350				-	11	U
	m,p-Xylene		0.500 ppbv			1	1)	J
	Bromoform	1.23	0.500 ppbv			1	11	
		BRL	0.500 ppbv			l .	"	U
100-42-5		BRL	0.500 ppbv			j	"	U
	o-Xylene	0.450	0.500 ppbv			1	" "	J
	1,1,2,2-Tetrachloroethane	BRL	0.500 ppbv			1	"	U
	1,3,5-Trimethylbenzene	BRL	0.500 ppbv			1		U
	4-Ethyltoluene	BRL	0.500 ppbv			1	11	U
	1,2,4-Trimethylbenzene	0.750	0.500 ppbv			I	11	
	1,3-Dichlorobenzene	BRL	0.500 ppbv			I	"	U
	Benzyl chloride	BRL	0.500 ppbv			1	"	U
	1,4-Dichlorobenzene	BRL	0.500 ppbv			1	н	U
	1,2-Dichlorobenzene	BRL	0.500 ppbv			i	11	U
	1,2,4-Trichlorobenzene	BRL	0.500 ppbv			1	11	U
	Hexachlorobutadiene	BRL	0.500 ppbv			1	н	U
460-00-4	Surrogate: 4-Bromofluorobenzene	105	75-125 %				11	

RES#9-I1-120		Client Project # 5555113	<u>Matrix</u> Air	Collection 06-Dec-			Receive 08-Dec-	_
SA55245-13	A	Method Ref. Air method TICs	Prepared 10-Dec-06		lyzed Dec-06		Analys WB	<u>st</u>
CAS No.	Analyte(s)	Result	*RDL/Units	RT	Q	Dilution	Batch	Flag
Air Quality A	analyses			•		<u> </u>		·
Tentatively Ide	entified Compounds in Air	Prepared by me	thod General Air	Pren				
-	Benzene, 1,3,5-trimethyl-	0.740	ppbv	22.61	76	1	6120810	TIC, J
	Benzene, 1-ethyl-2-methyl-	1.58	ppbv	20.92	95	1	0	TIC, J
106-97-8	•	2.90	ppbv	5.34	80	1	п	TIC, J
124-18-5	Decane	1.23	ppbv	22.04	95	1	u	TIC, J
5989-27-5	d-Limonene	2.80	ppbv	22.89	94	1	и	TIC, J
75-37-6	Ethane, 1,1-difluoro-	3.77	ppbv	4.58	90	1	и	TIC, J
	Isobutane	2.77	ppbv	5.04	53	1	11	TIC, J
109-66-0	Pentane	1,13	ppbv	6.90	90	1	11	TIC, J
	Pentane, 2-methyl-	0.640	ppbv	8.71	87	1	ı,	TIC, J
1120-21-4	•	0.640	ppbv	24.50	80	1		
EPA TO-15					00	•		TIC, J
115-07-1	Propere		thod General Air	Prep			II	
	Dichlorodifluoromethane (Freon12)	BRL	0.500 ppbv			1	" "	U
	Chloromethane	0.550	0.500 ppbv			1	"	
		0.460	0.500 ppbv			1		J
	1,2-Dichlorotetrafluoroethane (Freon 11	•	0.500 ppbv			1	"	U
	Vinyl chloride	BRL	0.500 ppbv			1	1)	U
	1,3-Butadiene	BRL	0.500 ppbv			1	"	U
	Bromomethane	BRL	0.500 ppbv]	**	U
	Chloroethane	BRL	0.500 ppbv			Ì	"	U
67-64-1		6.18	0.500 ppbv			I	0	
	Trichlorofluoromethane (Freon 11)	0.330	0.500 ppbv			1	"	J J
64-17-5		213	0.500 ppbv			1	n n	R J
	1,1-Dichloroethene	BRL	0.500 ppbv			1	H	U
	Methylene chloride	0.350	0.500 ppbv			1	11	J
	1,1,2-Trichlorotrifluoroethane (Freon 11	3) BRL	0.500 ppbv			1	n	U
	Carbon disulfide	BRL	0.500 ppbv			1	u.	U
	trans-1,2-Dichloroethene	BRL	0.500 ppbv			1	11	U
	1,1-Dichloroethane	BRL	0.500 ppbv			1	11	U
	Methyl tert-butyl ether	BRL	0.500 ppbv			• 1	**	U
	Isopropyl alcohol	5.63	0.500 ppbv			1	19	
	2-Butanone (MEK)	0.470	0.500 ppbv			1	n	J
	cis-1,2-Dichloroethene	BRL	0.500 ppbv			1	I#	U
110-54-3		BRL	0.500 ppbv			1	17	U
	Ethyl acetate	BRL	0.500 ppbv			1	I†	U
	Chloroform	0.530	0.500 ppbv			1	11	
	Tetrahydrofuran	BRL	0.500 ppbv			1	11	U
	1,2-Dichloroethane	BRL	0.500 ppbv			1	u	U
	1,1,1-Trichloroethane	BRL	0.500 ppbv			Ι,	Ħ	U
71-43-2		0.620	0.500 ppbv			1	11	
	Carbon tetrachloride	BRL	0.500 ppbv			1	Ħ	U
110-82-7	Cyclohexane	0.310	0.500 ppbv			1	19	J

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Sample Identification RES#9-I1-120506 SA55245-13		0506 5555113 A Method Ref. Prep		atrix Collection Date/Time Air 06-Dec-06 14:12 pared Analyzed Dec-06 10-Dec-06				<u>ed</u> 06 st
CAS No.	Analyte(s)	Result	*RDL/Units	RT	Q	Dilution	Batch	Flag
Air Quality A	Analyses							
EPA TO-15		Prepared by me	thod General Air	Prep				
78-87-5	1,2-Dichloropropane	BRL	0.500 ppbv			1	6120810	U
75-27-4	Bromodichloromethane	BRL	0.500 ppbv			1	н	U
79-01-6	Trichloroethene	BRL	0.500 ppby			1		U
142-82-5	n-Heptane	0.300	0.500 ppbv			1	н	J
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL	0.500 ppbv			1	11	U
10061-01-5	cis-1,3-Dichloropropene	BRL	0.500 ppbv			1	11	U
10061-02-6	trans-1,3-Dichloropropene	BRL	0.500 ppbv			1	11	U
	1,1,2-Trichloroethane	BRL	0.500 ppbv			1	11	υ
108-88-3	Toluene	2.55	0.500 ppbv			1	Ħ	
591-78-6	2-Hexanone (MBK)	BRL	0.500 ppbv			1	и	U
124-48-1	Dibromochloromethane	BRL	0.500 ppbv			1	n	U
106-93-4	1,2-Dibromoethane (EDB)	BRL	0.500 ppbv			1	11	U
127-18-4	Tetrachloroethene	BRL	0.500 ppbv			1	11	U
108-90-7	Chlorobenzene	BRL	0.500 ppbv			1	ir	U
100-41-4	Ethylbenzene	0.310	0.500 ppbv			1	D	J
	m,p-Xylene	0.990	0.500 ppbv			1	n	•
75-25-2	Bromoform	BRL	0.500 ppby			1	н	U
100-42-5	Styrene	BRL	0.500 ppbv			1	n.	บ
95-47-6	o-Xylene	0.360	0.500 ppbv			1	11	J
79-34-5	1,1,2,2-Tetrachloroethane	BRL	0.500 ppbv			1	н	U
108-67-8	1,3,5-Trimethylbenzene	0.680	0.500 ppbv			1	it.	Ū
	4-Ethyltoluene	0.460	0.500 ppbv			1	н	J
95-63-6	1,2,4-Trimethylbenzene	0.960	0.500 ppbv			1	It	· ·
	1,3-Dichlorobenzene	BRL	0.500 ppbv			1	н	U
100-44-7	Benzyl chloride	BRL	0.500 ppbv			1	n	U
	1,4-Dichlorobenzene	BRL	0.500 ppbv			1	н	U
95-50-1	1,2-Dichlorobenzene	BRL	0.500 ppbv			1	н	U
	1,2,4-Trichlorobenzene	BRL	0.500 ppbv			1	II .	U
	Hexachlorobutadiene	BRL	0.500 ppbv			1	n	บั

106

75-125 %

Sample Identif RES#9-I2-120		Client Project # 5555113	<u>Matrix</u> Air	Collection 06-Dec	Date/T -06 15:0		Receive 08-Dec-		
SA55245-14		Method Ref. Air method TICs	Prepared 10-Dec-06		l <u>yzed</u> Dec-06		Analys WB	<u>st</u>	
CAS No.	Analyte(s)	Result	*RDL/Units	RT	Q	Dilution	Batch	Flag	
Air Quality A	nalyses	***************************************						:	
Tentatively Ide	entified Compounds in Air	Prepared by me	thod General Air	Prep					
106-97-8	Butane	2.62	ppbv	5.35	72	2 '	6120810	TIC, J	
5989-27-5	d-Limonene	7.14	ppbv	22.88	94	2	17	TIC, J	
75-37-6	Ethane, 1,1-difluoro-	7.90	ppbv	4.58	90	2	**	TIC, J	
EPA TO-15		Prepared by me	thod General Air	Pren					
115-07-1	Propene	BRL	1.00 ppbv	- 1 4 P		2	11	U	
75-71-8	Dichlorodifluoromethane (Freon12)	BRL	1.00 ppbv			2	#	U	
74-87-3	Chloromethane	BRL	1.00 ppbv			2	и	U	
76-14-2	1,2-Dichlorotetrafluoroethane (Freon 1	14) BRL	1.00 ppbv			2	н	U	
	Vinyl chloride	BRL	1.00 ppbv			2	н	U	
106-99-0	1,3-Butadiene	BRL	1.00 ppbv			2	"	U	
74-83-9	Bromomethane	BRL	1.00 ppbv			2	н	U	
75-00-3	Chloroethane	BRL	1.00 ppbv			2	ч	U	
67-64-1	Acetone	8.32	1.00 ppbv			2	н	_	
75-69-4	Trichlorofluoromethane (Freon 11)	BRL	1.00 ppbv			2	11	w	
64-17-5	· · · · · · · · · · · · · · · · · · ·	630	1.00 ppbv			2	**		
75-35-4	1,1-Dichloroethene	BRL	1.00 ppbv			2	n	ט ע	(
75-09-2	Methylene chloride	BRL	1.00 ppbv			2	0	υ	
	1,1,2-Trichlorotrifluoroethane (Freon 1		1.00 ppbv	4		2	11	บ	
	Carbon disulfide	BRL.	1.00 ppbv			2	a a	บ	
156-60-5	trans-1,2-Dichloroethene	BRL	1.00 ppbv			2	11	U	
	1,1-Dichloroethane	BRL	1.00 ppbv			2	11	U	
	Methyl tert-butyl ether	BRL	1.00 ppbv			2	11	U	
	Isopropyl alcohol	9.28	1.00 ppbv			2	и	Ū	
	2-Butanone (MEK)	BRL	1.00 ppbv			2	11	U	
	cis-1,2-Dichloroethene	BRL	1.00 ppbv			2	11	บ	
110-54-3		BRL	1.00 ppbv			2	11	บ	
	Ethyl acetate	BRL	1.00 ppbv			2	н	บ	
	Chloroform	2.78	1.00 ppbv			2	и	U	
	Tetrahydrofuran	BRL	1.00 ppbv			2	11	υ	
	1,2-Dichloroethane	BRL	1.00 ppbv			2	10	บ	
	1,1,1-Trichloroethane	BRL	1.00 ppbv			2	11	บ	
71-43-2		BRL	1.00 ppbv			2		บ	
	Carbon tetrachloride	BRL	1.00 ppbv			2	n	บ	
	Cyclohexane	0.620	1.00 ppbv			2	11	J	
	1,2-Dichloropropane	BRL	1.00 ppbv 1.00 ppbv			2	п	U	
	Bromodichloromethane	BRL	1.00 ppbv			2	н	บ	
	Trichloroethene	BRL	1.00 ppbv			2	u	U.	
142-82-5	• • • • • • • • • • • • • • • • • • • •	BRL	1.00 ppbv			2	u	U	
	4-Methyl-2-pentanone (MIBK)	BRL	1.00 ppbv			2	11	บ	
							11		
10061-01-5	cis-1,3-Dichloropropene	BRL	1.00 ppbv			2	"	U	

Sample Identif		Client Project # 5555113	<u>Matrix</u> Air	Collection 06-Dec-			Receive 08-Dec-0	
SA55245-14		Method Ref. EPA TO-15	Prepared 10-Dec-06		<u>yzed</u> ec-06		Analys WB	<u>t</u> .
CAS No.	Analyte(s)	Result	*RDL/Units	RT	Q	Dilution	Batch	Flag
Air Quality A	nalyses			,				
EPA TO-15		Prepared by me	thod General Air	Prep				
79-00-5	1,1,2-Trichloroethane	BRL	1.00 ppbv	-		2	6120810	U
108-88-3	Toluene	3.24	1.00 ppbv			2	11	
591-78-6	2-Hexanone (MBK)	BRL	1.00 ppbv			2	If	U
124-48-1	Dibromochloromethane	BRL	1.00 ppbv			2	10	U
106-93-4	1,2-Dibromoethane (EDB)	BRL	1.00 ppbv			2	1)	U
127-18-4	Tetrachloroethene	BRL	1.00 ppbv			2	ij	U
108-90-7	Chlorobenzene	BRL	1.00 ppbv			2	U	U
100-41-4	Ethylbenzene	BRL	1.00 ppbv			2	"	U
1330-20-7	m,p-Xylene	BRL	1.00 ppbv			2	ıı	U
75-25-2	Bromoform	BRL	1.00 ppbv			2	u	U
100-42-5	Styrene	BRL	1.00 ppbv			2	H	U
95-47-6	o-Xylene	BRL	1.00 ppbv			2	10	U
79-34-5	1,1,2,2-Tetrachioroethane	BRL	1.00 ppbv			2	H	U
108-67-8	1,3,5-Trimethylbenzene	BRL	1.00 ppbv			2	II	U
622-96-8	4-Ethyltoluene	BRL	1.00 ppbv			2	If	U
95-63-6	1,2,4-Trimethylbenzene	0.700	1.00 ppbv			2	11	J
541 - 73-1	1,3-Dichlorobenzene	BRL	1.00 ppbv			2	и	U
100-44-7	Benzyl chloride	BRL	1.00 ppbv			2	11	U
106-46-7	1,4-Dichlorobenzene	BRL	1.00 ppbv			2	11	U
95-50-1	1,2-Dichlorobenzene	BRL	1.00 ppbv			2	31	U
120-82-1	1,2,4-Trichlorobenzene	BRL	1.00 ppbv			2	11	U
87-68-3	Hexachlorobutadiene	BRL	1.00 ppbv			2	0	U
460-00-4	Surrogate: 4-Bromofluorobenzene	104	75-125 %				Ħ	

<u> </u>	Client Project # 5555113	<u>Matri</u> Air		Collection 06-Dec-			Receive 08-Dec-	
A	Method Ref. ir method TICs	Prepar 09-Dec			lyzed ec-06		Analys WB	<u>st</u>
(s)	Result	*RDL/U	Units	RT	Q	Dilution	Batch	Flag
Compounds in Air	Prepared by me	thod Gener	al Air Pi	rep				
Tetramethyloctane	3.15		opbv	22.79	78	1	6120711	TIC,
	1.60	_	opbv	22.04	87	1	11	TIC,
2,2,9-trimethyl-	1.60		opby	23.02	72	1	ty.	TIC,
ene	5.15	_	opbv	22.89	94	1	11	TIC,
2,2,5-trimethyl-	5.99	-	opbv	23.70	64	1	17	TIC,
2,3,6,7-tetramethyl-	1.87	•	pbv	24.63	64	1	D.	TIC,
hexafluoro-	43.2	_	pbv	4.44	49	1	n	TIC,
e, 2,9-dimethyl-	5.68		pbv	23.80	72	1	11	TIC,
·	Prepared by me							110,
	BRL	0.500 p		ep		1	**	¥1
difluoromethane (Freon12)	0.480	0.500 p	-			1	п	U
ethane	BRL	0.500 p				. 1		J
lorotetrafluoroethane (Freon 114		0.500 p	-			-	11	U
loride	•	-	-			1		U
diene	BRL	0.500 p	•			I	"	U
ethane	BRL	0.500 p				1	ur	U
hane	BRL	0.500 p	-			1		U
nane	BRL	0.500 p	-			1		U
0	11.5	0.500 p				I		
ofluoromethane (Freon 11)	0.860	0.500 p				1	11	
	11.4	0.500 p				1	· D	
loroethene	BRL	0.500 p	•			1	11	U
ne chloride	BRL	0.500 p	-			1	11	U
chlorotrifluoroethane (Freon 11		0.500 p	-			1	11	U
lisulfide	BRL	0.500 p	pbv			1	н	U
-Dichloroethene	BRL	0.500 p	pbv			1	tt	U
loroethane	BRL	0.500 p				1	"	U
ert-butyl ether	BRL	0.500 p	pbv			1	11	U
l alcohol	2.75	0.500 p	pbv			1	н	
one (MEK)	0.610	0.500 p	pbv			I	II	
Pichloroethene	BRL	0.500 p	pbv			i	R	U
	BRL	0.500 p	pbv			1	и	U
etate	BRL	0.500 p	pbv			1	ti	U
rm	BRL	0.500 p	pbv			1	ŧı	U
rofuran	BRL	0.500 p	pbv			1	Ħ	U
loroethane	BRL	0.500 p	pbv			1	н	U
chloroethane	0.790	0.500 p	pbv			1	н	
	BRL	0.500 p	pbv			I	н	U
etrachloride	BRL	0.500 p	pbv			1	. #	U
ane	BRL	0.500 p	pbv			1	н	U
loropropane	BRL	-	-			1	**	U
chloromethane	BRL					1	# .	U
						,	,	AI
ane loropre	opane	BRL BRL	BRL 0.500 popune BRL 0.500 p	BRL 0.500 ppbv opane BRL 0.500 ppbv	BRL 0.500 ppbv ppane BRL 0.500 ppbv	BRL 0.500 ppbv ppane BRL 0.500 ppbv	BRL 0.500 ppbv 1 ppane BRL 0.500 ppbv 1	BRL 0.500 ppbv 1 " ppane BRL 0.500 ppbv 1 "

Sample Identi RES#9-SS-12 SA55245-15		<u>Client Project #</u> 5555113	<u>Matrix</u> Air	Collection 06-Dec-			Receive 08-Dec-	
5A33243-13		Method Ref. EPA TO-15	Prepared 09-Dec-06		<u>lyzed</u>)ec-06		<u>Analys</u> WB	<u>t</u>
CAS No.	Analyte(s)	Result	*RDL/Units	RT	Q	Dilution	Batch	Flag
Air Quality A	Analyses							
EPA TO-15		Prepared by me	thod General Air	Pren				
79-01 - 6	Trichloroethene	BRL	0.500 ppbv	P		1	6120711	U
142-82-5	n-Heptane	BRL	0.500 ppbv			1	11	U
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL	0.500 ppbv			1	n	U
10061-01-5	cis-1,3-Dichloropropene	BRL	0.500 ppbv			1	n	U
10061-02-6	trans-1,3-Dichloropropene	BRL	0.500 ppbv			I	U	U
79-00-5	1,1,2-Trichloroethane	BRL	0.500 ppbv			1	u	U
108-88-3	Toluene	1.07	0.500 ppbv			1	11	-
591-78-6	2-Hexanone (MBK)	BRL	0.500 ppbv			1	"	U
124-48-1	Dibromochloromethane	BRL	0.500 ppbv			1	11	U
106-93-4	1,2-Dibromoethane (EDB)	BRL	0.500 ppbv			1	н	U
127-18-4	Tetrachloroethene	17.9	0.500 ppbv			1	11	
108-90-7	Chlorobenzene	BRL	0.500 ppbv			1	n	U
100-41-4	Ethylbenzene	BRL	0.500 ppbv			1	v	U
1330-20-7	m,p-Xylene	1.20	0.500 ppbv			1	11	Ü
75-25-2	Bromoform	BRL	0.500 ppbv			1	н	U
100-42-5	Styrene	BRL	0.500 ppbv			1	II	U
95-47-6	o-Xylene	0.430	0.500 ppbv			1	11	j
79-34-5	1,1,2,2-Tetrachloroethane	BRL	0.500 ppbv			1	**	U
108-67-8	1,3,5-Trimethylbenzene	BRL	0.500 ppbv			1	17	บ
622-96-8	4-Ethyltoluene	BRL	0.500 ppbv			ı	ıı	U
95-63-6	1,2,4-Trimethylbenzene	0.900	0.500 ppbv			1	u	·
541-73-1	1,3-Dichlorobenzene	BRL	0.500 ppbv			1	H	U
100-44-7	Benzyl chloride	BRL	0.500 ppbv	•		I	11	U
106-46-7	1,4-Dichlorobenzene	BRL	0.500 ppbv			l	11	U
95-50-1	1,2-Dichlorobenzene	BRL	0.500 ppbv			1	tı	บ
120-82-1	1,2,4-Trichlorobenzene	BRL	0.500 ppby			1		U
87-68-3	Hexachlorobutadiene	BRL	0.500 ppby			1	11	U
460-00-4	Surrogate: 4-Bromofluorobenzene	105	75-125 %				н	J

Client Project # 5555113

<u>Matrix</u> Air

RESUBMITTAL Collection ONTENTESMR 1282360 Wed 06-Dec-06 14:09

08-Dec-06

Method Ref. EPA TO-15

Prepared 09-Dec-06

<u>Analyzed</u> 09-Dec-06 Analyst WB

CAS No.	Analyte(s)	Result	*RDL/Units	RT	$\boldsymbol{\varrho}$	Dilution	Batch	Flag
Air Quality A	Analyses		·					
EPA TO-15		Prepared by met	hod General Air	Prep				
115-07-1	Propene	BRL	0.0900 ppbv	-1-P		-1	6120711	U
75-71-8	Dichlorodifluoromethane (Freon12)	0.470 /	0.500 ppbv			1	"	J
	Chloromethane	0.999	0.0900 ppbv			1		J
76-14-2	1,2-Dichlorotetrafluoroethane (Freon 114)	BRL	0.0900 ppbv			1	. 11	U
	Vinyl chloride	BRL	0.0900 ppbv			1		U
	1,3-Butadiene	BRL	0.0900 ppbv			1	. "	•
	Bromomethane	BRL	0.0900 ppbv	* **		1	H	U
	Chloroethane	BRL	0.0900 ppbv			1	**	U
	Acetone	2.77	0.500 ppbv			1	н	U
	Trichlorofluoromethane (Freon 11)	0.626	0.0900 ppbv			1		
	Ethanol	7.00	0.500 ppbv			1		
	1,1-Dichloroethene	BRL /	0.0900 ppbv			1	,	
	Methylene chloride	0.329	0.0900 ppbv	ام	•	1		U
	1,1,2-Trichlorotrifluoroethane (Freon 113)	0.200 $\sqrt{}$		P -		1	. 0	
	Carbon disulfide	BRL	0.0900 ppbv		* .	1		
	trans-1,2-Dichloroethene		0.0900 ppbv			1		U
		BRL	0.0900 ppbv			1		U
	1,1-Dichloroethane	BRL	0.0900 ppbv			.1	"	U
	Methyl tert-butyl ether	BRL	0.0900 ppbv			1	H	U
	Isopropyl alcohol	0.282	0.0900 ppbv			1	. "	
	2-Butanone (MEK)	0.455	0.0900 ppbv		,	1	. "	
	cis-1,2-Dichloroethene	BRL	0.0900 ppbv			.1	"	U
110-54-3		BRL	0.0900 ppbv		٠.	1 .		U
	Ethyl acetate	0.129	0.0900 ppbv			1	**	
	Chloroform	BRL	0.0900 ppbv		•	1	"	U
	Tetrahydrofuran	BRL	0.0900 ppbv			.1	"	U
	1,2-Dichloroethane	BRL	0.0900 ppbv			. 1	Ħ	U
71-55-6	1,1,1-Trichloroethane	BRL /	0.0900 ppbv			1	m	U
71-43-2	Benzene	0.834	0.0900 ppbv			1	**	
	Carbon tetrachloride	0.262	0.0280 ppbv			1	**	
110-82-7	Cyclohexane	0.185 🗸	0.0900 ppbv			1	, . H	
78-87-5	1,2-Dichloropropane	BRL	0.0900 ppbv			1	Ħ	U
75-27-4	Bromodichloromethane	BRL /	0.0900 ppbv			1		U
79-01-6	Trichloroethene	0.0529	0.0280 ppbv			1	•	
142-82-5	n-Heptane	0.345	0.0900 ppbv			1, 1	u	
108-10-1	4-Methyl-2-pentanone (MIBK)	0.0963	0.0900 ppbv			1 .		
10061-01-5	cis-1,3-Dichloropropene	BRL	0.0900 ppbv			1	n	U
	trans-1,3-Dichloropropene	BRL	0.0900 ppbv			1	11	U
	1,1,2-Trichloroethane	BRL	0.0900 ppbv			1	,. II	U
108-88-3		0.950	0.500 ppbv			1		U
591-78-6	2-Hexanone (MBK)	BRL	0.0900 ppbv			1		U
•	Dibromochloromethane	BRL	0.0900 ppbv			1	n .	. U
			Ppot	11 to 11 to 12				ų,

Sample Identification 77AVE-OA-120506 SA55245-16		<u>Client Project #</u> 5555113	<u>Matrix</u> Air	Collection 06-Dec-0	RESUBN <u>Date/Bims</u> MR 16 14:09		
SA55245-16	•	Method Ref. EPA TO-15	Prepared 09-Dec-06	<u>Analy</u> 09-De		Analys WB	<u>it</u>
CAS No.	Analyte(s)	Result	*RDL/Units	RT	Q Dilution	a Batch	Flag
Air Quality A	Analyses						
EPA TO-15		Prepared by me	thod General Air	Pren			
106-93-4	1,2-Dibromoethane (EDB)	BRL	0.0900 ppbv	-	1	6120711	U
127-18-4	Tetrachloroethene	0.227	0.0900 ppbv		- 1	. 17	•
108-90-7	Chlorobenzene	BRL	0.0900 ppbv		.1		ŢŢ
100-41-4	Ethylbenzene	0.240	0.0900 ppbv		1.	. "	•
1330-20-7	m,p-Xylene	0.849	0.0900 ppbv		1	. "	
75-25-2	Bromoform	BRL	0.0900 ppbv		. 1		U
100-42-5	Styrene	0.188	0.0900 ppbv		1		
95-47-6	o-Xylene	0.298	0.0900 ppbv		1	, и	
79-34-5	1,1,2,2-Tetrachloroethane	BRL	0.0900 ppbv		1	н	U
108-67-8	1,3,5-Trimethylbenzene	0.158	0.0900 ppbv		1	"	
622-96-8	4-Ethyltoluene	0.115	0.0900 ppbv		1	"	•
95-63-6	1,2,4-Trimethylbenzene	0.369	0.0900 ppbv		1, 1	, 11	
541-73-1	1,3-Dichlorobenzene	BRL	0.0900 ppbv		1.		U ·
100-44-7	Benzyl chloride	BRL	0.0900 ppbv		1	m .	U
106-46-7	1,4-Dichlorobenzene	BRL	0.0900 ppbv		1	. 11	U
95-50-1	1,2-Dichlorobenzene	BRL	0.0900 ppbv		1	n n	Ū
120-82-1	1,2,4-Trichlorobenzene	BRL	0.0900 ppbv		1		U
87-68-3	Hexachlorobutadiene	BRL	0.0900 ppbv		1	17	U
460.00.4						•	

104

75-125 %

Sample Identif 77AVE-OA-1	-	Client Project # 5555113	<u>Matrix</u> Air	Collectio 06-Dec	n Date/T :-06 14:0		Receive 08-Dec-	
SA55245-16		Method Ref. EPA TO-15	Prepared 09-Dec-06		<u>alyzed</u> Dec-06		Analys WB	<u>it</u>
CAS No.	Analyte(s)	Result	*RDL/Units	RT	Q	Dilution	Batch	Flag
Air Quality A	nalyses							
<u>EPA TO-15</u>	<u> </u>	Prepared by I	nethod General Ai	r Prep				
115-07-1	-	BRL	0.0900 ppbv			1	6120711	U
75-71-8	Dichlorodifluoromethane (Freon12)	0.470	0.0900 ppbv			1	11	
74-87-3	Chloromethane	0.999	0.0900 ppbv			1	n	
76-14-2	1,2-Dichlorotetrafluoroethane (Freon 11	4) BRL	0.0900 ppbv			1	11	υ
75-01-4	Vinyl chloride	BRL	0.0900 ppbv			1	ıı	U
106-99-0	1,3-Butadiene	BRL	0.0900 ppbv			1	n	U
74-83-9	Bromomethane	BRL	0.0900 ppbv			1	**	U
75-00-3	Chloroethane	BRL	0.0900 ppbv			1	11	U
67-64-1	Acetone	2.77	0.0900 ppbv			1	II.	
75-69-4	Trichlorofluoromethane (Freon 11)	0.626	0.0900 ppbv			, 1	11	
64-17-5	Ethanol	7.00	0.0900 ppbv			1	IT	
75-35-4	1,1-Dichloroethene	BRL	0.0900 ppbv			1	υ.	U
75-09-2	Methylene chloride	0.329	0.0900 ppbv			1	11	
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 1)	13) 0.200	0.0900 ppbv			1	11	
75-15-0	Carbon disulfide	BRL	0.0900 ppbv			1	11	U
156-60-5	trans-1,2-Dichloroethene	BRL	0.0900 ppbv			ī	11	U
	1,1-Dichloroethane	BRL	0.0900 ppbv			1	11	U
	Methyl tert-butyl ether	BRL	0.0900 ppbv			1	10	U
	Isopropyl alcohol	0.282	0.0900 ppbv			1		
	2-Butanone (MEK)	0.455	0.0900 ppbv			1	IT	
	cis-1,2-Dichloroethene	BRL	0.0900 ppbv			1	n	U
110-54-3		BRL	0.0900 ppbv			1	11	U
	Ethyl acetate	0.129	0.0900 ppbv			1	u	
	Chloroform	BRL	0.0900 ppbv			1	u	U
	Tetrahydrofuran	BRL	0.0900 ppbv	\		1	ti .	U
	1,2-Dichloroethane	BRL	0.0900 ppbv			1	n	U
	1,1,1-Trichloroethane	BRL	0.0900 ppbv			1	11	U
	Benzene	0.834	0.0900 ppbv	·		1	11	U
	Carbon tetrachloride	0.262	0.0280 ppbv		\	1	**	
	Cyclohexane	0.185	0.0280 ppbv		\	\ i	n	
	1,2-Dichloropropane	BRL	0.0900 ppbv			\	"	U
	Bromodichloromethane	BRL	0.0900 ppbv				11	Ū
	Trichloroethene	0.0529	0.0280 ppbv			\'.	"	U
	n-Heptane					,,		
	4-Methyl-2-pentanone (MIBK)	0.345 0.0963	0.0900 ppbv 0.0900 ppbv			1	u.	
	cis-1,3-Dichloropropene	0.0963 BRL	0.0900 ppbv 0.0900 ppbv			1		*1
	trans-1,3-Dichloropropene	BRL				1	\ "	U
	1,1,2-Trichloroethane	BRL	0.0900 ppbv 0.0900 ppbv			1	\ "	U
108-88-3						1) <u>"</u>	U
100-00-3		0.950	0.0900 ppbv			1		
501 70 Z	2-Hexanone (MBK)	BRL	0.0900 ppbv			1	**	U

<u>Sample Identi</u> 77AVE-OA-1 SA55245-16		<u>Client Project #</u> 5555113	<u>Matrix</u> Air	Collection 1			Receive 08-Dec-	
		Method Ref. EPA TO-15	<u>Prepared</u> 09-Dec-06	<u>Anal</u> 09-De			Analys WB	<u>t</u>
CAS No.	Analyte(s)	Result	*RDL/Units	RT	Q	Dilution	Batch	Flag
Air Quality A	Analyses							
EPA TO-15		Prepared by me	ethod General Air	Ргер				
106-93-4	1,2-Dibromoethane (EDB)	BRL	0.0900 ppbv	F		1	6120711	U
127-18-4	Tetrachloroethene	0.227	0.0900 ppbv			1	**	
	Chlorobenzene	BRL	0.0900 ppbv			1	*1	U
100-41-4	Ethylbenzene	0.240	0.0900 ppbv			1	**	
1330-20-7	m,p-Xylene	0.849	0.0900 ppbv			1	11	
75-25-2	Bromoform	BRL	0.0900 ppbv			Ī	R	U
100-42-5	Styrene	0.188	0.0900 ppbv			1	н	
95-47-6	o-Xylene	0.298	0.0900 ppbv			1	11	
79-34-5	1,1,2,2-Tetrachloroethane	BRL	0.0900 ppbv			1	ŧŧ	U
108-67-8	1,3,5-Trimethylbenzene	0.158	0.0900 ppbv			1	U	
622-96-8	4-Ethyltoluene	0.115	0.0900 ppbv			1	11	
95-63-6	1,2,4-Trimethylbenzene	0.369	0.0900 ppbv			1	11	
541-73-1	1,3-Dichlorobenzene	BRL	0.0900 ppbv			1	II	U
100-44-7	Benzyl chloride	BRL	0.0900 ppbv			1	19	U
106-46-7	1,4-Dichlorobenzene	BRL	0.09Q0 ppbv			1	11	U
95 - 50-1	1,2-Dichlorobenzene	BRL	0.0900 ppbv			1	н	U
120-82-1	1,2,4-Trichlorobenzene	BRL	0.0900 pgbv			1	11	U
87-68-3	Hexachlorobutadiene	BRL	0.0900 ppb			1	11	U
460-00-4	Surrogate: 4-Bromofluorobenzene	104	75-125 %	\			u	-
					\	\.		
							\	

RESUBMITTAL Collection Date Pim SMR 12/23/26/ved Sample Identification Client Project # Matrix 77AVE-OA-120606 Air 5555113 07-Dec-06 08:48 08-Dec-06 SA55245-17 Method Ref. Prepared Analyzed **Analyst EPA TO-15** 09-Dec-06 09-Dec-06 WB CAS No. Analyte(s) Result *RDL/Units RTQ Dilution Batch Flag Air Quality Analyses EPA TO-15 Prepared by method General Air Prep 115-07-1 Propene BRL 0.0900 ppbv 6120711 U 75-71-8 Dichlorodifluoromethane (Freon12) 0.480 0.500 ppbv J 74-87-3 Chloromethane 0.460 0.500 ppbv 76-14-2 1,2-Dichlorotetrafluoroethane (Freon 114) BRL 0.0900 ppbv 75-01-4 Vinyl chloride BRL 0.0900 ppbv 106-99-0 1,3-Butadiene BRL 0.0900 ppbv T 74-83-9 Bromomethane BRL 0.0900 ppbv \mathbf{U} 75-00-3 Chloroethane BRL 0.0900 ppbv 67-64-1 Acetone 3.17 0.500 ppbv 75-69-4 Trichlorofluoromethane (Freon 11) 0.603 0.0900 ppbv 64-17-5 Ethanol 9.72 0.500 ppbv 75-35-4 1.1-Dichloroethene BRL 0.0900 ppbv 75-09-2 Methylene chloride 0.159 0.0900 ppbv BL 76-13-1 1,1,2-Trichlorotrifluoroethane (Freon 113) 0.198 0.0900 ppbv 75-15-0 Carbon disulfide BRL 0.0900 ppbv U 156-60-5 trans-1,2-Dichloroethene BRL 0.0900 ppbv U 75-34-3 1,1-Dichloroethane BRL 0.0900 ppbv Ù 1634-04-4 Methyl tert-butyl ether BRL 0.0900 ppbv U 67-63-0 Isopropyl alcohol 0.560 0.500 ppbv 78-93-3 2-Butanone (MEK) 0.418 0.0900 ppbv 156-59-2 cis-1,2-Dichloroethene BRL 0.0900 ppbv Ħ 110-54-3 Hexane BRL 0.0900 ppbv П 141-78-6 Ethyl acetate BRL 0.0900 ppbv IJ 67-66-3 Chloroform BRL 0.0900 ppbv U 109-99-9 Tetrahydrofuran BRL 0.0900 ppbv Ħ 107-06-2 1,2-Dichloroethane BRL 0.0900 ppbv U 71-55-6 1,1,1-Trichloroethane BRL 0.0900 ppbv H 71-43-2 Benzene 0.838 0.0900 ppbv 56-23-5 Carbon tetrachloride 0.252 -0.0280 ppbv 110-82-7 Cyclohexane 0.314 0.0900 ppbv 78-87-5 1,2-Dichloropropane BRL 0.0900 ppbv U 75-27-4 Bromodichloromethane BRL 0.0900 ppbv U 79-01-6 Trichloroethene 0.0414 0.0280 ppbv 142-82-5 n-Heptane 0.253 0.0900 ppbv 108-10-1 4-Methyl-2-pentanone (MIBK) BRL 0.0900 ppbv U 10061-01-5 cis-1,3-Dichloropropene BRL 0.0900 ppbv U 10061-02-6 trans-1,3-Dichloropropene BRL 0.0900 ppbv U 79-00-5 1,1,2-Trichloroethane BRL 0.0900 ppbv U

0.670

BRL

BRL

0.500 ppbv

0.0900 ppbv

0.0900 ppbv

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U

108-88-3 Toluene

591-78-6 2-Hexanone (MBK)

124-48-1 Dibromochloromethane

Sample Identification
77AVE-OA-120606
SA55245-17

Client Project # 5555113

<u>Matrix</u> Air

RESUBMITTAL Collection (Date/Bittle MR 12 Received 07-Dec-06 08:48 08-Dec-06 Analyzed

Method Ref. EPA TO-15

Prepared 09-Dec-06

09-Dec-06

Analyst WB

CAS No.	Analyte(s)	•	Result	*RDL/Units		RT		Q_	Dilution	Batch	Flag
Air Quality	Analyses										<u> </u>
EPA TO-15	· ·		Prepared by me	thod General Air	Pren	-					
106-93-4	1,2-Dibromoethane (EI	DB)	BRL	0.0900 ppbv	тр			•	1	6120711	IJ
127-18-4	Tetrachloroethene		0.123	0.0900 ppbv					1		
108-90-7	Chlorobenzene		BRL /	0.0900 ppbv		٠			1	**	U
100-41-4	Ethylbenzene		0.225	0.0900 ppbv	•				1 .	, ,	U
1330-20-7	m,p-Xylene		0.763	0.0900 ppbv					1	**	
	Bromoform		BRL	0.0900 ppbv		·:.	· .		1	. 11	
100-42-5	Styrene		0.0949	0.0900 ppbv					1		U
95-47-6	o-Xylene		0.273	0.0900 ppbv					1	**	
	1,1,2,2-Tetrachloroetha	ine	BRL	0.0900 ppbv					1		
	1,3,5-Trimethylbenzene		BRL	0.0900 ppbv			,		1	,,	U
	4-Ethyltoluene		BRL /	0.0900 ppbv					1	,	U
	1,2,4-Trimethylbenzene	e	0.348	0.0900 ppbv	• .				1		U
	1,3-Dichlorobenzene	,	BRL	0.0900 ppbv					1		
	Benzyl chloride		BRL			•			1	. "	U
	1,4-Dichlorobenzene		BRL	0.0900 ppbv					1	. "	Ū
	1,2-Dichlorobenzene		BRL	0.0900 ppbv					1		U
	1,2,4-Trichlorobenzene		BRL	0.0900 ppbv				٠,	1	"	U
	Hexachlorobutadiene	•		0.0900 ppbv					1	**	U
	· ·		BRL	0.0900 ppbv					.1	"	U
400-00-4	Surrogate: 4-Bromofluc	orooenzene	106	<i>75-125 %</i>						n	

Sample Identii 77AVE-OA-1		Client Project # 5555113	<u>Matrix</u> Air	Collection 07-Dec-			Receive 08-Dec-	
SA55245-17	•	Method Ref. EPA TO-15	Prepared 09-Dec-06		lyzed ec-06		Analys WB	<u>st</u>
CAS No.	Analyte(s)	Result	*RDL/Units	RT	Q	Dilution	Batch	Flag
Air Quality A	Analyses							
EPA TO-15		Prepared by me	ethod General Ai	r Prep				
115-07-1	Propene	BRL	0.0900 ppbv	•		1	6120711	U
75-71-8	Dichlorodifluoromethane (Freon12)	0.480	0.0900 ppbv			1	#	
74-87-3	Chloromethane	0.460	0.0900 ppbv			1	"	
76-14-2	1,2-Dichlorotetrafluoroethane (Freon 11	4) BRL	0.0900 ppbv			1	н	U
75-01-4	Vinyl chloride	BRL	0.0900 ppbv			1	IT	U
106-99-0	1,3-Butadiene	BRL	0.0900 ppbv			I	n	U
74-83-9	Bromomethane	BRL	0.0900 ppbv			1	n	U
75-00-3	Chloroethane	BRL	0.0900 ppbv			1	11	U
67-64-1	Acetone	3.17	0.0900 ppbv			1	11	
75-69-4	Trichlorofluoromethane (Freon 11)	0.603	0.0900 ppbv			1	11	
	Ethanol	9.72	0.0900 ppbv			1	H	
75-35-4	1,1-Dichloroethene	BRL	0.0900 ppbv			1	н	U
	Methylene chloride	0.159	0.0900 ppbv			1	11	_
	1,1,2-Trichlorotrifluoroethane (Freon 1	\	0.0900 ppbv			1	"	
	Carbon disulfide	BRL	0.0900 ppbv			1	ti	U
	trans-1,2-Dichloroethene	BRL	0.0900 ppbv			1	п	U
	1,1-Dichloroethane	BRL	0.0900 ppbv			1	11	U
	Methyl tert-butyl ether	BRL	0.0900 ppbv			1	It	U
	Isopropyl alcohol	0.560	0.0900 ppbv			1	. н	U
	2-Butanone (MEK)	0.418	0.0900 ppbv			1	n	
	cis-1,2-Dichloroethene	BRL	0.0900 ppby			1	II	U
110-54-3		BRL	\			1	lt.	U
	Ethyl acetate	BRL				1	"	U
	Chloroform	BRL				1	11	
			0.0900 ppbv			1	**	U
	Tetrahydrofuran 1,2-Dichloroethane	BRL	0.0900 ppbv			1	,	U
		BRL	0.0900 ppbv			1	,	U
	1,1,1-Trichloroethane	BRL	0.0900 ppbv	\		•	,	U
	Benzene	0.838	0.0900 ppbv	'	\	1	0	
	Carbon tetrachloride	0.252	0.0280 ppbv			1		
	Cyclohexane	0.314	0.0900 ppbv			1	**	
	1,2-Dichloropropane	BRL	0.0900 ppbv		\	1	и	U
	Bromodichloromethane	BRL	0.0900 ppbv		\			U
	Trichloroethene	0.0414	0.0280 ppbv			1	11	
	n-Heptane	0.253	0.0900 ppbv			1	n	
	4-Methyl-2-pentanone (MIBK)	BRL	0.0900 ppbv			\		U
	cis-1,3-Dichloropropene	BRL	0.0900 ppbv			\'.		U
	trans-1,3-Dichloropropene	BRL	0.0900 ppbv			/1	"	U
	1,1,2-Trichloroethane	BRL	0.0900 ppbv			/.	"	U
	Toluene	0.670	0.0900 ppbv		•	'\	и -	
	2-Hexanone (MBK)	BRL	0.0900 ppbv			. \		U
124-48-1	Dibromochloromethane	BRL	0.0900 ppbv			1 '	\	U

Sample Identity 7AVE-OA-1		Client Project # 5555113	<u>Matrix</u> Air	Collection Date 07-Dec-06 08		Receive 08-Dec-	
SA55245-17		Method Ref. EPA TO-15	Prepared 09-Dec-06	Analyzed 09-Dec-06	Analyst WB		
CAS No.	Analyte(s)	Result	*RDL/Units	RT Q	Dilution	Batch	Flag
Air Quality A	analyses						
EPA TO-15		Prepared by me	ethod General Air	Prep			
106-93-4	1,2-Dibromoethane (EDB)	BRL	0.0900 ppbv	-	1	6120711	U
127-18-4	Tetrachloroethene	0.123	0.0900 ppbv		1	n	
108-90-7	Chlorobenzene	BRL	0.0900 ppbv		1	"	U
100-41-4	Ethylbenzene	0.225	0,0900 ppbv		1	11	
1330-20-7	m,p-Xylene	0.763	0.0900 ppbv		1	ti .	
75-25-2	Bromoform	BRL	0.0900 ppbv		1	u	U
100-42-5	Styrene	0.0949	0.0900 ppbv		1	u	
95-47-6	o-Xylene	0.273	0.0900 ppbv		1	n	
79-34-5	1,1,2,2-Tetrachloroethane	BRL	0.0900 ppbv		1	ıt	U
108-67-8	1,3,5-Trimethylbenzene	BRL	0.0900 ppbv		1	**	U
622-96-8	4-Ethyltoluene	BRL	0.0900 ppbv		1	"	U
95 - 63-6	1,2,4-Trimethylbenzene	0.348	0.0900 ppbv		1	ii.	
541-73-1	1,3-Dichlorobenzene	BRL	0.0900 ppbv		1	u	U
100-44-7	Benzyl chloride	BRL	0.0900 ppbv		1	н	U
106-46-7	1,4-Dichlorobenzene	BRL	0.0900 ppbv		1	11	U
95-50-1	1,2-Dichlorobenzene	BRL	0.0900 ppbv		1	11	U
120-82-1	1,2,4-Trichlorobenzene	BRL	0.0900 ppbv		1	н	U
87-68-3	Hexachlorobutadiene	BRL	0.0900 ppbv		1	"	U
460-00-4	Surrogate: 4-Bromofluorobenzene	106	75-125 %			11	
			•				
				\	\		
					\		

Table 1 Samples For Data Validation Review Atlas Park - Parcel B Glendale, New York Spectrum Sample Delivery Group 55328

ANALYSES PERFORMED		VOC	×	×	×	×	×	×	×	×	×	×	×	
	MATRIX		Air Air	Air	Air									
	DATE	SAMPLED	12/8/2006	12/8/2006	12/8/2006	12/8/2006	12/8/2006	12/8/2006	12/8/2006	12/8/2006	12/6/2006	12/7/2006	12/7/2006	
				7	3	4	5	9	7	∞	6	10	11	
	LABORATORY	I.D.	55328	55328	55328	55328	55328	55328	55328	55328	55328	55328	55328	
	SAMPLE I.D.		RES#10-11-120706	RES#10-12-120706	RES#10-SS-120706	77AVE-OA2-120706	RES#11-I2-120706	RES#11-11-120706	RES#11-SS-120706	80ST-OA3-120706	RES#12-I2-120606	RES#12-11-120606	RES#12-SS-120606	

VOC Volatile Organic Compounds

Report Date: 22-Dec-06 15:37



SPECTRUM ANALYTICAL, INC. Featuring HANIBAL TECHNOLOGY Laboratory Report

Langan Engineering & Environmental Services 21 Penn Plaza; 360 West 31st Street, 8th Floor New York, NY 10001

Attn: Jamie Barr

Project: Atlas Park - Queens, NY Project #:5555113

		<u> </u>		1	
Laboratory ID	Client Sample ID	<u>Matrix</u>	Date Sampled	Date Received	
SA55328-01	RES#10-I1-120706	Air	08-Dec-06 08:19	09-Dec-06 10:50	
SA55328-02	RES#10-I2-120706	Air	08-Dec-06 09:02	09-Dec-06 10:50	
SA55328-03	RES#10-SS-120706	Air	08-Dec-06 08:20	09-Dec-06 10:50	
SA55328-04	77AVE-OA2-120706	Air	08-Dec-06 08:17	09-Dec-06 10:50	
SA55328-05	RES#11-I2-120706	Air	08-Dec-06 11:15	09-Dec-06 10:50	
SA55328-06	RES#11-I1-120706	Air	08-Dec-06 10:33	09-Dec-06 10:50	
SA55328-07	RES#11-SS-120706	Air	08-Dec-06 10:31	09-Dec-06 10:50	
SA55328-08	80ST-OA3-120706	Air	08-Dec-06 11:49	09-Dec-06 10:50	
SA55328-09	RES#12-I2-120606	Air	06-Dec-06 11:34	09-Dec-06 10:50	
SA55328-10	RES#12-I1-120606	Air	07-Dec-06 11:36	09-Dec-06 10:50	
SA55328-11	RES#12-SS-120606	Air	07-Dec-06 11:59	09-Dec-06 10:50	

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. These results relate only to the sample(s) as received.

All applicable NELAC requirements have been met

Please note that this report contains 36 pages of analytical data plus Chain of Custody document(s).

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Vermont # VT-11393

authorized by: Cayeh, Ph.D. President/Laboratory Director

RESUBMITTAL

☐ Re-Issued Report

☐ Revised Report

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Report Date: 20-Dec-06 17:00



SPECTRUM ANALYTICAL, INC.

Featuring

HANIBAL TECHNOLOGY

Laboratory Report

Langan Engineering & Environmental Services 21 Penn Plaza; 360 West 31st Street, 8th Floor New York, NY 10001

Attn: Jamie Barr

Project:Atlas Park - Queens, NY Project #:5555113

Laboratory ID	Client Sample ID	<u>Matrix</u>	Date Sampled	Date Received
SA55328-01	RES#10-I1-120706	Air	08-Dec-06 08:19	09-Dec-06 10:50
SA55328-02	RES#10-I2-120706	Air	08-Dec-06 09:02	09-Dec-06 10:50
SA55328-03	RES#10-SS-120706	Air	08-Dec-06 08:20	09-Dec-06 10:50
SA55328-04	77AVE-OA2-120706	Air	08-Dec-06 08:17	09-Dec-06 10:50
SA55328-05	RES#11-I2-120706	Air	08-Dec-06 11:15	09-Dec-06 10:50
SA55328-06	RES#11-I1-120706	Air	08-Dec-06 10:33	09-Dec-06 10:50
SA55328-07	RES#11-SS-120706	Air	08-Dec-06 10:31	09-Dec-06 10:50
SA55328-08	80ST-OA3-120706	Air	08-Dec-06 11:49	09-Dec-06 10:50
SA55328-09	RES#12-I2-120606	Air	06-Dec-06 11:34	09-Dec-06 10:50
SA55328-10	RES#12-I1-120606	Air	07-Dec-06 11:36	09-Dec-06 10:50
SA55328-11	RES#12-SS-120606	Air	07-Dec-06 11:59	09-Dec-06 10:50

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. These results relate only to the sample(s) as received.

All applicable NELAC requirements have been met.

Please note that this report contains 36 pages of analytical data plus Chain of Custody document(s).

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Maine # MA138

New Hampshire # 2538/2972

New Jersey # MA011/MA012

New York # 11393/11840

Rhode Island #98

USDA # S-51435

Vermont # VT-11393

Authorized y:

Hanibal C. Tayeh, Ph.D. President/Laboratory Director

Final Report

☐ Re-Issued Report

☐ Revised Report

Spectrum Analytical, Inc. is a NELAC accredited laboratory organization and meets NELAC testing standards. Use of the NELAC logo however does not insure that Spectrum is currently accredited for the specific method or analyte indicated. Please refer to our "Quality" web page at www.spectrum-analytical.com for a full listing of our current certifications and fields of accreditation. States in which Spectrum Analytical, Inc. holds NELAC certification are New York, New Hampshire, New Jersey and Florida. All analytical work for Volatile Organic and Air analysis are transferred to and conducted at our 830 Silver Street location (NH-2972, NY-11840, FL-E87936 and NJ-MA012).

Sample Identification RES#10-I1-120706 SA55328-01 Client Project # 5555113

Method Ref.

Air method TICs

<u>Matrix</u> Air

Prepared

11-Dec-06

RESUBMITTAL
Collection Date/Bines MR 12Rescived
08-Dec-06 08:19 09-Dec-06

Analyzed 11-Dec-06 Analyst WB

CAS No.	Analyte(s)	Result	*RDL/Ui	tits	RT	Q	Dilution	Batch	Flag
Air Quality A	Analyses								
<u>Tentatively</u> Id	entified Compounds in Air	Prepared by me	ethod General	l Air Pre	ep	•			
	1RalphaPinene	0.800		bv	20.53	97	1	6120906	TIC, J
106-97-8	Butane	2.48		bv	5.34	80	1	. #	TIC, J
5989-27-5	d-Limonene	2.88	pp	bv	22.89	94	1		TIC, J
112-40-3	Dodecane	3.32		bv	26.77	96	1 .		TIC, J
	Dodecane, 6-methyl-	0.900	pp	bv	27.12	83	1	**	TIC, J
75-37-6	Ethane, 1,1-difluoro-	1.38	pp	bv	4.58	91	1	н	TIC, J
	Octanal	0.720	pp	bv	21.65	83 .	. 1	**	TIC, J
1120-21-4	Undecane	0.800	pp	bv	24.50	95	1'.	n ·	TIC, J
EPA TO-15		Prepared by me	ethod General	l Air Pre	ero .				
115-07-1		BRL	0.500 pp				1	11	U
75-71-8	Dichlorodifluoromethane (Freon12)	0.500	0.500 pp				1	10	
74-87-3	Chloromethane	0.640	0.500 pp				1	**	
76-14-2	1,2-Dichlorotetrafluoroethane (Freon 114)	BRL	0.500 pp				1	11	. U
75-01-4	Vinyl chloride	BRL	0.500 pp				1	. 1)	. U
106-99-0	1,3-Butadiene	BRL	0.500 pp				1	n	U
74-83-9	Bromomethane	BRL	0.500 pp			•	1	•	U
75-00-3	Chloroethane	BRL	0.500 pp	bv			1	11	U
67-64-1	Acetone	8.00	0.500 pp	bv			1	. 17	
75-69-4	Trichlorofluoromethane (Freon 11)	BRL	0.500 pp				1	17	U
64-17-5	Ethanol	503	0.500 pp				1	11	JE J
75-35-4	1,1-Dichloroethene	BRL	0.500 pp				1	11	ับ
75-09-2	Methylene chloride	BRL	0.500 pp				1	**	U
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	BRL	0.500 pp				1	**	U
75-15-0	Carbon disulfide	BRL	0.500 pp				1	**	U
156-60-5	trans-1,2-Dichloroethene	BRL	0.500 pp				1	17	U
75-34-3	1,1-Dichloroethane	BRL	0.500 pp	bv			1	**	U
1634-04-4	Methyl tert-butyl ether	BRL	0.500 pp				1	. "	\mathbf{u}
67-63-0	Isopropyl alcohol	3.15	0.500 pp				1	19	
78-93-3	2-Butanone (MEK)	0.650	0.500 pp				1	19	
156-59-2	cis-1,2-Dichloroethene	BRL	0.500 pp				1	**	U
110-54-3	Hexane	BRL	0.500 pp				1	17	U
141-78-6	Ethyl acetate	BRL	0.500 pp			•	1		U
67-66-3	Chloroform	0.740	0.500 pp				1	. 11	
109-99-9	Tetrahydrofuran	BRL	0.500 pp			•	1	"	U
107-06-2	1,2-Dichloroethane	BRL	0.500 pp				1 .	. "	U
71-55-6	1,1,1-Trichloroethane	BRL	0.500 pp				1	If	U
71-43-2	Benzene	0.380	0.500 pp				1	H	· J
56-23-5	Carbon tetrachloride	BRL	0.500 pp				ĭ	"	U
110-82-7	Cyclohexane	BRL	0.500 pp				. 1	H	U
78-87-5	1,2-Dichloropropane	BRL	0.500 pp				1		U
	Bromodichloromethane	BRL	0.500 pp				1		U

Sample Identification RES#10-I1-120706 SA55328-01

Client Project # 5555113

<u>Matrix</u> Air

RESUBMITTAL Collection Date Bin SMR 12 Received 08-Dec-06 08:19

09-Dec-06

<u>Analyst</u> WB

Method Ref. EPA TO-15	Prepared 11-Dec-06	Analyzed 11-Dec-06	

CAS No.	Analyte(s)	Result	*RDL/Units	RT	Q	Dilution	Batch	Flag
Air Quality A	Analyses							
EPA TO-15		Prepared by me	ethod General Air Pr	ер				
79-01-6	Trichloroethene	BRL	0.500 ppbv	•		1	6120906	U
142-82-5	n-Heptane	BRL	0.500 ppbv			1	11	U
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL	0.500 ppbv			1	. 11	U
10061-01-5	cis-1,3-Dichloropropene	BRL	0.500 ppbv			1	. "	\mathbf{U}
10061-02-6	trans-1,3-Dichloropropene	BRL	0.500 ppbv			1	u	U
79-00-5	1,1,2-Trichloroethane	BRL	0.500 ppbv			1	w.	· U
108-88-3	Toluene	1.59	0.500 ppbv			1.	n	
591-78-6	2-Hexanone (MBK)	BRL	0.500 ppbv			1	n	U
124-48-1	Dibromochloromethane	BRL	0.500 ppbv			1	H	U
106-93-4	1,2-Dibromoethane (EDB)	BRL	0.500 ppbv	* *		1	"	U
127-18-4	Tetrachloroethene	BRL	0.500 ppbv			1	**	U.
108-90-7	Chlorobenzene	BRL	0.500 ppbv			1	n	U
100-41-4	Ethylbenzene	BRL	0.500 ppbv			1	n	U
1330-20-7	m,p-Xylene	0.420 ^M	0.500 ppbv	τ,		1	17	. J
75-25-2	Bromoform	BRL	0.500 ppbv			1	н	U
100-42-5	Styrene	BRL	0.500 ppbv			1	#	U
95-47-6	o-Xylene	BRL	0.500 ppbv			1	, n -	U
79-34-5	1,1,2,2-Tetrachloroethane	BRL	0.500 ppbv			1	**	U
108-67-8	1,3,5-Trimethylbenzene	BRL	0.500 ppbv			1 -	11	U
622-96-8	4-Ethyltoluene	BRL	0.500 ppbv		٠.	1	17	U
95-63-6	1,2,4-Trimethylbenzene	BRL	0.500 ppbv			1	11	U
541-73-1	1,3-Dichlorobenzene	BRL	0.500 ppbv			· 1	n	· U
100-44-7	Benzyl chloride	BRL	0.500 ppbv			1	11	U
106-46-7	1,4-Dichlorobenzene	BRL	0.500 ppbv			. 1 .	"	U
95-50-1	1,2-Dichlorobenzene	BRL	0.500 ppbv			1		U
120-82-1	1,2,4-Trichlorobenzene	BRL	0.500 ppbv			1	**	U
87-68-3	Hexachlorobutadiene	BRL	0.500 ppbv			1		U.
460-00-4	Surrogate: 4-Bromofluorobenzene	106	75-125 %					

Sample Identi RES#10-I1-12		Client Project # 5555113	<u>Matrix</u> Air	Collection 08-Dec-			Receive 09-Dec-		
SA55328-01	A	Method Ref. Air method TICs	Prepared 11-Dec-06		lyzed ec-06		Analy: WB	<u>st</u>	
CAS No.	Analyte(s)	Result	*RDL/Units	RT	Q	Dilution	Batch	Flag	
Air Quality A	Analyses								
Tentatively Ide	entified Compounds in Air	Prepared by me	thod General Air	Prep		·			
	IRalphaPinene	0.800	ppbv	20.53	97	1	6120906	TIC, J	
106-97-8	Butane	2.48	ppbv	5.34	80	1	ti	TIC, J	
5989-27-5	d-Limonene	2.88	ppbv	22.89	94	1	11	TIC, J	
112-40-3	Dodecane	3.32	ppbv	26.77	96	1	81	TIC, J	
	Dodecane, 6-methyl-	0.900	ppbv	27.12	83	1	11	TIC, J	
75-37-6	Ethane, 1,1-difluoro-	1.38	ppbv	4.58	91	1	11	TIC, J	
	Octanal	0.720	ppbv	21.65	83	1	11	TIC, J	
1120-21-4	Undecane	0.800	ppbv	24.50	95	1	**	TIC, J	
EPA TO-15			thod General Air	Dran				110,0	
115-07-1	Propene	BRL	0.500 ppbv	ттер		1	Ħ	บ	
	Dichlorodifluoromethane (Freon12)	0.500	Q.500 ppbv	•		1	ıı	U	
	Chloromethane	0.640	0.500 ppbv			1	п		
	1,2-Dichlorotetrafluoroethane (Freon 1)		0.500 ppbv			1	**	¥ I	
	Vinyl chloride	BRL	0.500 ppbv			1	11	U	
	1,3-Butadiene	BRL	0.500 ppbv			1	11	U	
	Bromomethane	BRL	`			1	11	U	
	Chloroethane		0.500 ppbv			-	11	U	
	Acetone	BRL	0.500 ppbv			1	,,	U	
		8.00	0.500 ppbv			1			
64-17-5	Trichlorofluoromethane (Freon 11)	BRL	0.500 ppbv			1		U /-	
		503	0.500 ppbv			1	H	X J	CK
	1,1-Dichloroethene	BRL	0.500 ppbv		\	1	n	U	
	Methylene chloride	BRL	0.500 ppbv			1	11	U	
	1,1,2-Trichlorotrifluoroethane (Freon 1)		0.500 ppbv			- 1	Ħ	U	
	Carbon disulfide	BRL	0.500 ppbv			1	".	U	
	trans-1,2-Dichloroethene	BRL	0.500 ppbv			1	11	U	
	1,1-Dichloroethane	BRL	0.500 ppbv			\ 1	11	U	
	Methyl tert-butyl ether	BRL	0.500 ppbv			\1	11	U	
	Isopropyl alcohol	3.15	0.500 ppbv			ì	*1		
	2-Butanone (MEK)	0.650	0.500 ppbv			1	11		
	cis-1,2-Dichloroethene	BRL	0.500 ppbv			1 /	"	U	
110-54-3		BRL	0.500 ppbv			1	\ "	U	
	Ethyl acetate	BRL	0.500 ppbv			1	/"	U	
	Chloroform	0.740	0.500 ppbv			1	'n		
	Tetrahydrofuran	BRL	0.500 ppbv			. 1	" /	U	
	1,2-Dichloroethane	BRL	0.500 ppbv			1	" \	U	
	1,1,1-Trichloroethane	BRL	0.500 ppbv			1	ų	U	
71 - 43-2		0.380	0.500 ppbv			1	**	J	
	Carbon tetrachloride	BRL	0.500 ppbv			1	n	\mathbf{U}	
	Cyclohexane	BRL	0.500 ppbv			1	,,	U	
78-87-5	1,2-Dichloropropane	BRL	0.500 ppbv			1	н	U	
75-27-4	Bromodichloromethane	BRL	0.500 ppbv			1	10	U	

Sample Identi RES#10-I1-1:		Client Project # 5555113	<u>Matrix</u> Air	Collection D 08-Dec-06		<u>Receive</u> 09-Dec-	
SA55328-01		Method Ref. EPA TO-15	Prepared 11-Dec-06	<u>Analyz</u> 11-Dec		<u>Analys</u> WB	<u>it</u>
CAS No.	Analyte(s)	Result	*RDL/Units	RT	Q Dilution	a Batch	Flag
Air Quality A	Analyses						
EPA TO-15		Prepared by me	thod General Air	Prep			
79-01-6	Trichloroethene	BRL	0.500 ppbv	•	1	6120906	U
142-82-5	n-Heptane	BRL	0.500 ppbv		1	н	U
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL	0.500 ppbv		1	н .	U
10061-01-5	cis-1,3-Dichloropropene	BRL	0.500 ppbv		1	в	U
10061-02-6	trans-1,3-Dichloropropene	BRL	0.500 ppbv		1	it	U
79-00-5	1,1,2-Trichloroethane	BRL	0.500 ppbv		1	11	U
108-88-3	Toluene	1.59	0.500 ppbv		1	t†	
591-78-6	2-Hexanone (MBK)	BRL	0.500 ppbv		1	11	U
124-48-1	Dibromochloromethane	BRL	0.500 ppbv		1	"	U
106-93-4	1,2-Dibromoethane (EDB)	BRI	0.500 ppbv		1	н	U
	Tetrachloroethene	BRL	0.500 ppbv		1	11	U
108-90-7	Chlorobenzene	BRL	0.500 ppbv		1	н	U
100-41-4	Ethylbenzene	BRL	0.500 ppbv		1	11	U
	m,p-Xylene	BRL	0.500 ppbv		1	n	U
	Bromoform	BRL	0.500 ppbv		1	11	
100-42-5		BRL	0.300 ppbv		1	13	U
	o-Xylene	BRL	0.500 ppbv		1	н	U
	1,1,2,2-Tetrachloroethane	BRL	0.500 ppbv		1	#1	U
	1,3,5-Trimethylbenzene	BRL	- 1		1	"	U
	4-Ethyltoluene	BRL	/		1	ır	U
	1,2,4-Trimethylbenzene	BRL	\		•	11	U
	1,3-Dichlorobenzene		0.500 ppbv \	\	1	11	U
	Benzyl chloride	BRL	0.500 ppbv		1	" H	U
	1,4-Dichlorobenzene	BRL	0.500 ppbv		1		U
		BRL	0.500 ppbv		1	и	U
	1,2-Dichlorobenzene	BRL	0.500 ppbv		1	11	U
	1,2,4-Trichlorobenzene Hexachlorobutadiene	BRL	0.500 ppbv			"	U
		BRL	0.500 ppbv		1	,,	U
460-00-4	Surrogate: 4-Bromofluorobenzene	106	75-125 %		\	11	
	•						
					\ .		
	,				\		
					\		
	•				\		
					\		
					/		
						\ .	

Sample Identific RES#10-I2-120		Client Project # 5555113	<u>Matrix</u> Air	Collection 08-Dec-			Receive 09-Dec-		
SA55328-02	F	Method Ref. Air method TICs	Prepared 12-Dec-06		lyzed Dec-06		Analys WB	<u>st</u>	
CAS No.	Analyte(s)	Result	*RDL/Units	RT	Q	Dilution	Batch	Flag	
Air Quality An	nalyses			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			·		
Tentatively Ider	ntified Compounds in Air	Prepared by me	thod General Air	Prep					
000115-10-6 I	Dimethyl ether	2.92	ppbv	4.90	74	4	6120944	TIC, J	
112-40-3 I	Dodecane	4.36	ppbv	26.77	96	4	н	TIC, J	
75-28-5 I	Isobutane	5.72	ppbv	5.04	59	4	n	TIC, J	
EPA TO-15		Prepared by me	thod General Air	Pren					
115-07-1 F	Propene	BRL	2.00 ppbv		_	. 4	п	U	
	Dichlorodifluoromethane (Freon12)	BRL	2.00 ppbv		•	4	и	U	
	Chloromethane	BRL	2.00 ppbv			4	н	บ	
76-14-2	I,2-Dichlorotetrafluoroethane (Freon 1		2.00 ppbv			4	n	U	
	Vinyl chloride	BRL	2.00 ppbv			4	и	U	
	1,3-Butadiene	BRL	2.00 ppbv			4	11	U	
	Bromomethane	BRL	2.00 ppbv			4	"	U	
	Chloroethane	BRL	2.00 ppbv 2.00 ppbv			4	ıı		
67-64-1		7.56				4		U	
	Trichlorofluoromethane (Freon 11)		2.00 ppbv				11		
64-17-5 H	•	BRL	2.00 ppbv			4 .)1	U T	_
		725 DDV	2.00 ppbv			4	11	#J	<i></i>
	1,1-Dichloroethene	BRL	2.00 ppbv			4	"	U	
	Methylene chloride	BRL	2.00 ppbv			4	"	U	
	1,1,2-Trichlorotrifluoroethane (Freon 1		2.00 ppbv			4		U	
	Carbon disulfide	BRL	2.00 ppbv			4	įi	U	
	trans-1,2-Dichloroethene	BRL	2.00 ppbv			4	ļi	U	
	1,1-Dichloroethane	BRL	2.00 ppbv			4	н	, U	
	Methyl tert-butyl ether	BRL	2.00 ppbv			4	II	U	
	Isopropyl alcohol	3.92	2.00 ppbv			4	11		
	2-Butanone (MEK)	BRL	2.00 ppbv			4	11	U	
	cis-1,2-Dichloroethene	BRL	2.00 ppbv	•		4	и	U	
110-54-3 I	Hexane	BRL	2.00 ppbv			4	11	U	
141-78-6 I	Ethyl acetate	3.80	2.00 ppbv			4	**		
67-66-3 (Chloroform	BRL	2.00 ppbv			4	н	U	
109-99-9	Tetrahydrofuran	BRL	2.00 ppbv			4	н	U	
107-06-2	1,2-Dichloroethane	BRL	2.00 ppbv			4	н	υ	
71-55-6	1,1,1-Trichloroethane	BRL	2.00 ppbv			4	п	U	
71-43-2 I	Benzene	BRL	2.00 ppbv			4	H	U	
56-23-5	Carbon tetrachloride	BRL	2.00 ppbv			4	н	U	
110-82-7	Cyclohexane	BRL	2.00 ppbv			4	141	U	
78-87-5	1,2-Dichloropropane	BRL	2.00 ppbv			4	#	U	
	Bromodichloromethane	BRL	2.00 ppbv	•		4	41	U	
	Trichloroethene	BRL	2.00 ppbv			4	11	U	
142-82-5 г	n-Heptane	BRL	2.00 ppbv			4		U	
	4-Methyl-2-pentanone (MIBK)	BRL	2.00 ppbv			4	н	U	
	cis-1,3-Dichloropropene	BRL	2.00 ppbv			4	11	U	
	trans-1,3-Dichloropropene	BRL	2.00 ppbv			4	0	TI	A
							SM Page 4	PETRIC	OV T
							P 3 0 P 2	በተ ነሱ	

		·						
Sample Identification RES#10-I2-120706 SASS228 02		Client Project # 5555113	<u>Matrix</u> Air	Collection 08-Dec-			Receive	
SA55328-02	20,00	Method Ref. EPA TO-15	Prepared 12-Dec-06	. Ana	ilyzed Dec-06		Analys WB	
CAS No.	Analyte(s)	Result	*RDL/Units	RT	Q	Dilution	Batch	Flag
Air Quality	Analyses						<u>.</u>	
EPA TO-15		Prepared by me	thod General Air	Prep				
79-00-5	1,1,2-Trichloroethane	BRL	2.00 ppbv	•		4	6120944	U
108-88-3	Toluene	1.84	2.00 ppbv			4	. "	J
591-78-6	2-Hexanone (MBK)	BRL	2.00 ppbv			4	D	U
124-48-1	Dibromochloromethane	BRL	2.00 ppbv			4	U	U
106-93-4	1,2-Dibromoethane (EDB)	BRL	2.00 ppbv			4	n	U
127-18-4	Tetrachloroethene	BRL	2.00 ppbv			4	u	U
108-90-7	Chlorobenzene	BRL	2.00 ppbv			4	H	U
100-41-4	Ethylbenzene	BRL	2.00 ppbv			4	н	U
1330-20-7	m,p-Xylene	BRL	2.00 ppbv			4	н	U
75-25-2	Bromoform	BRL	2.00 ppbv			4	ıı	U
100-42-5	Styrene	BRL	2.00 ppbv			4	"	U
95-47-6	o-Xylene	BRL	2.00 ppbv			4	и	U
79-34-5	1,1,2,2-Tetrachloroethane	BRL	2.00 ppbv			4	**	U
108-67-8	1,3,5-Trimethylbenzene	BRL	2.00 ppbv			4	#	U
622-96-8	4-Ethyltoluene	BRL	2.00 ppbv			4	u	U
95-63-6	1,2,4-Trimethylbenzene	BRL	2.00 ppbv			4	и	U
541-73-1	1,3-Dichlorobenzene	BRL	2.00 ppbv			4	tt.	U
100-44-7	Benzyl chloride	BRL	2.00 ppbv			4	n'	U
106-46-7	1,4-Dichlorobenzene	BRL	2.00 ppbv			4	Ħ	U
95-50-1	1,2-Dichlorobenzene	BRL	2.00 ppbv			4	н	U
120-82-1	1,2,4-Trichlorobenzene	BRL	2.00 ppbv			4	If	U
87-68-3	Hexachlorobutadiene	BRL	2.00 ppbv			4	11	U
			• •					-

106

75-125 %

460-00-4 Surrogate: 4-Bromofluorobenzene

Sample Identi RES#10-SS-1		<u>Client Project #</u> 5555113	<u>Matrix</u> Air	<u>Collectio</u> 08-De	on Date/7 c-06 08:		Receive 09-Dec-	
SA55328-03		<u>Method Ref.</u> Air method TICs	Prepared 12-Dec-0		Analyzed 12-Dec-06			<u>st</u>
CAS No.	Analyte(s)	Result	*RDL/Un	its RT	Q	Dilution	Batch	Flag
Air Quality A	Analyses							
Tentatively Id	entified Compounds in Air	Prepared by met	hod General	Air Prep				
98-86-2	Acetophenone	3.80	ppl	•	91	4	6120944	TIC,
527-53-7	Benzene, 1,2,3,5-tetramethyl-	3.04	ppt		90	4	н	TIC,
108-67-8	Benzene, 1,3,5-trimethyl-	10.1	ppl		87	4	и	TIC,
611-14-3	Benzene, 1-ethyl-2-methyl-	4.04	ppt		95	4	n	TIC,
	Benzene, 1-ethyl-3-methyl-	2.68	ppt	ov 21.45	91	4	"	TIC,
000100-66-3	Benzene, methoxy-	2.92	ppl	ov 19.44	98	4	"	TIC,
124-18-5	Decane	2.72	ppt	ov 22.04	95	4	n	TIC,
	Decane, 2,2-dimethyl-	3.24	ppb	ov 22.79	78	4	11	TIC,
3891-98-3	Dodecane, 2,6,10-trimethyl-	8.08	ppb	ov 23.22	83	4	n	TIC,
3522-94-9	Hexane, 2,2,5-trimethyl-	6.28	ppt	ov 23.70	64	4	n	TIC,
	Indane	7.00	ppt	ov 22.98	94	4	**	TIC,
138-86-3	Limonene	6.80	ppb	ον 22.89	94	4	u	TIC,
91-20-3	Naphthalene	15.1	ppb	οv 26.61	91	4	lt.	TIC,
1120-21-4	Undecane	4.44	ppb	v 24.50	81	4	IT	TIC,
EPA TO-15		Prepared by met	hod General	Air Prep				R01
115-07-1	Propene	BRL	2.00 ppt	•		4	**	U
75-71-8	Dichlorodifluoromethane (Freon12)	BRL	2.00 ppb			. 4	"	U
74-87-3	Chloromethane	BRL	2.00 ppb			4	**	U
76-14-2	1,2-Dichlorotetrafluoroethane (Freon 1	14) BRL	2.00 ppb			4	11	U
75-01-4	Vinyl chloride	BRL	2.00 ppb			4	11	U
106-99-0	1,3-Butadiene	BRL	2.00 ppb			4	11	U
74-83-9	Bromomethane	BRL	2.00 ppb			4	ti .	U
75-00-3	Chloroethane	BRL	2.00 ppb			4	В	U
67-64-1	Acetone	29.4	2.00 ppb			4	u	_
75-69-4	Trichlorofluoromethane (Freon 11)	4.52	2.00 ppb			4	n	
64-17-5	Ethanol	108	2.00 ppb			4	10	
75-35-4	1,1-Dichloroethene	BRL	2.00 ppb			4	ti	U
75-09-2	Methylene chloride	BRL	2.00 ppb			4	11	U
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 1	13) BRL	2.00 ppb			4	"	υ
75-15-0	Carbon disulfide	BRL	2.00 ppb			4	11	U
	trans-1,2-Dichloroethene	BRL	2.00 ppb			4	11	บ
							**	
156-60-5	1,1-Dichloroethane	BRL	2.00 ppb	V		4	"	IJ
156-60-5 75-34-3	1,1-Dichloroethane Methyl tert-butyl ether	BRL BRL	2.00 ppb 2.00 ppb			4	,,	U U
156-60-5 75-34-3 1634-04-4			2.00 ppb	v				
156-60-5 75-34-3 1634-04-4 67-63-0	Methyl tert-butyl ether	BRL		v v		4	**	U

BRL

 ${\tt BRL}$

 ${\tt BRL}$

BRL

BRL

2.00 ppbv

2.00 ppbv

2.00 ppbv.

2.00 ppbv

2.00 ppbv

U

110-54-3 Hexane

141-78-6 Ethyl acetate

67-66-3 Chloroform

109-99-9 Tetrahydrofuran

107-06-2 1,2-Dichloroethane

Sample Identification	Clie
RES#10-SS-120706	5
SA55328-03	Me

Client Project # 5555113	<u>Matrix</u> Air
Method Ref.	Prepared
EPA TO-15	12-Dec-06

Collection Date/Time 08-Dec-06 08:20

> Analyzed 12-Dec-06

09-Dec-06
Analyst
WB

Received

CAS No.	Analyte(s)	Result	*RDL/Units	RT	Q	Dilution	Batch	Flag
Air Quality A	Analyses						,	
EPA TO-15		Prepared by m	ethod General Air Pr	rep				R01
71-55-6	1,1,1-Trichloroethane	2.52	2.00 ppbv			4	6120944	NUL
71-43-2	Benzene	BRL	2.00 ppbv			4	11	U
56-23-5	Carbon tetrachloride	BRL	2.00 ppbv			4	*1	U
110-82-7	Cyclohexane	BRL	2.00 ppbv			4	Ħ	U
78-87-5	1,2-Dichloropropane	BRL	2.00 ppbv			4	n	U
75-27-4	Bromodichloromethane	BRL	2.00 ppbv			4	. 11	U
79-01-6	Trichloroethene	BRL	2.00 ppbv			4	11	U
142-82-5	n-Heptane	BRL	2.00 ppbv			4	u	U
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL	2.00 ppbv			4	п	U
10061-01-5	cis-1,3-Dichloropropene	BRL	2.00 ppbv			4	n	U
10061-02-6	trans-1,3-Dichloropropene	BRL	2.00 ppbv			4	n	U
79-00-5	1,1,2-Trichloroethane	BRL	2.00 ppbv			4	n.	U
108-88-3	Toluene	1.56	2.00 ppbv			4	11	J
591-78-6	2-Hexanone (MBK)	BRL	2.00 ppbv			4	ų	U
124-48-1	Dibromochloromethane	BRL	2.00 ppbv			4	"	U
106-93-4	1,2-Dibromoethane (EDB)	BRL	2.00 ppbv			4	11	U
127-18-4	Tetrachloroethene	2.04	2.00 ppbv			4	19	
108-90-7	Chlorobenzene	BRL	2.00 ppbv			4	n	U
100-41-4	Ethylbenzene	BRL	2.00 ppbv			4	n	U
1330-20-7	m,p-Xylene	2.24	2.00 ppbv			4	и	_
75-25-2	Bromoform	BRL	2.00 ppbv			4		U
100-42-5	Styrene	BRL	2.00 ppbv			4	"	U
95-47-6	o-Xylene	2.72	2.00 ppbv			4	n	Ü
79-34-5	1,1,2,2-Tetrachloroethane	BRL	2.00 ppbv			4		U
108-67-8	1,3,5-Trimethylbenzene	1.36	2.00 ppbv			4	н	J
622-96-8	4-Ethyltoluene	9.20	2.00 ppbv			4	n	
95-63-6	1,2,4-Trimethylbenzene	21.5	2.00 ppbv			4	11	
541-73-1	1,3-Dichlorobenzene	BRL	2.00 ppbv			4		U
100-44-7	Benzyl chloride	BRL	2.00 ppbv			4	n	U
106-46-7	1,4-Dichlorobenzene	BRL	2.00 ppbv			4	n	U
95-50-1	1,2-Dichlorobenzene	BRL	2.00 ppby			4	tr	U
120-82-1	1,2,4-Trichlorobenzene	BRL	2.00 ppbv			4	11	U
87-68-3	Hexachlorobutadiene	BRL	2.00 ppbv			4	11	U
460-00-4	Surrogate: 4-Bromofluorobenzene	108	75-125 %			•	11	U

Sample Identification 77AVE-OA2-120706 SA55328-04

Client Project # 5555113

Method Ref.

Air method TICs

<u>Matrix</u> Air

Prepared 11-Dec-06 RESUBMITTAL

Collection Original Birds MR 12828696ed
08-Dec-06 08:17 09-Dec-06

Analyzed 11-Dec-06

CAS No.	Analyte(s)	Result	*RL	L/Units		RT	$\boldsymbol{\varrho}_{\scriptscriptstyle 0}$	Dilution	Batch	Flag
Air Quality A	Analyses				· · · ·					
	Tentatively Identified Compounds	None foun	d	ppbv		*.		1 .	6120906	· 11
EPA TO-15		Prepared by	method Ge		- Pren					_
115-07-1	Propene	BRL		0 ppbv	ттор			1		U
75-71-8	Dichlorodifluoromethane (Freon12)	0.520		0 ppbv				1	10	U
	Chloromethane	0.990		0 ppbv				i		
76-14-2	1,2-Dichlorotetrafluoroethane (Freon 114)	BRL		0 ppbv				1	**	U
	Vinyl chloride	BRL		0 ppbv	1			1		U
106-99-0	1,3-Butadiene	BRL		0 ppbv				1	**	U
74-83-9	Bromomethane	BRL		0 ppbv				1	n	·U
75-00-3	Chloroethane	BRL		0 ppbv				1	n	
67-64-1	Acetone	3.72		o ppbv O ppbv				1		U
75-69-4	Trichlorofluoromethane (Freon 11)	0.604	*	0 ppbv				1	,	
	Ethanol	7.23) ppbv				1		
75-35-4	1,1-Dichloroethene	BRL		o ppbv O ppbv				1	tt	T .
	Methylene chloride	0.332		o ppov O ppbv				1		U BL
	1,1,2-Trichlorotrifluoroethane (Freon 113)	0.192		o ppov O ppbv				1		
	Carbon disulfide	BRL) ppbv		1,		1	,	
156-60-5	trans-1,2-Dichloroethene	BRL) ppbv				1		·U
	1,1-Dichloroethane	BRL) ppbv					. "	U
	Methyl tert-butyl ether	BRL					• .	1		U
	Isopropyl alcohol	0.640) ppbv				1		U
	2-Butanone (MEK)	0.655) ppbv) ppbv				1	,,	
	cis-1,2-Dichloroethene	BRL						1		*
110-54-3		BRL) ppbv				1		U
	Ethyl acetate	0.138		ppbv	÷			1		U
	Chloroform	BRL		ppbv				1		•
	Tetrahydrofuran) ppbv				1	#1	U
	1,2-Dichloroethane	BRL) ppbv				1	. "	U
	1,1,1-Trichloroethane	BRL) ppbv				1	11	U
	Benzene	BRL) ppbv				1	*1	U
	Carbon tetrachloride	0.612		ppbv	-			1	. "	
	Cyclohexane	0.250		ppbv				1		
	1,2-Dichloropropane	0.163		ppbv				1	**	
	Bromodichloromethane	BRL		ppbv				. 1	. "	· U
	Trichloroethene	BRL		ppbv			•	1		U
	n-Heptane	0.0331	0.0280					1	: #	
	-	0.190		ppbv			•	1	H ·	
	4-Methyl-2-pentanone (MIBK)	BRL	0.0900					j	**	U
	cis-1,3-Dichloropropene	BRL	0.0900		·			1	11	\mathbf{U}_{\cdot}
	trans-1,3-Dichloropropene	BRL	0.0900				٠.	1 .		U
	1,1,2-Trichloroethane	BRL	0.0900					1	11	U
108-88-3	•	0.590		ppbv				1 .	"	
391-78-6	2-Hexanone (MBK)	BRL	0.0900	ppbv				1	* H	U

Sample Identification 77AVE-OA2-120706 SA55328-04 Client Project # 5555113

Matrix Air RESUBMITTAL
Collection Date/Times MR 12Received
08-Dec-06 08:17 09-Dec-06

Method Ref. Prepared EPA TO-15 11-Dec-06

Analyzed 11-Dec-06

CAS No.	Analyte(s)	Result	*RDL/Units	RT	$\boldsymbol{\varrho}$	Dilution	Batch	Flag
Air Quality A	Analyses							
EPA TO-15		Prepared by r	nethod General Air Pr	ер				
124-48-1	Dibromochloromethane	BRL	0.0900 ppbv	_		1 .	6120906	U
106-93-4	1,2-Dibromoethane (EDB)	BRL	0.0900 ppbv			1 .	1 11	· U
127-18-4	Tetrachloroethene	0.113	0.0900 ppbv			1	#	
108-90-7	Chlorobenzene	BRL	0.0900 ppbv			1		U
100-41-4	Ethylbenzene	0.186	0.0900 ppbv			1	e .	
1330-20-7	m,p-Xylene	0.635	0.0900 ppbv			1	H	
75-25-2	Bromoform	BRL	0.0900 ppbv			1	**	U.
100-42-5	Styrene	0.297	0.0900 ppbv			1	11	
95-47-6	o-Xylene	0.222	0.0900 ppbv			1	10	
79-34-5	1,1,2,2-Tetrachloroethane	BRL	0.0900 ppbv			1		. U
108-67-8	1,3,5-Trimethylbenzene	0.112	0.0900 ppbv			1	. 11	
622-96-8	4-Ethyltoluene	BRL	0.0900 ppbv			1		U
95-63-6	1,2,4-Trimethylbenzene	0.249	0.0900 ppbv			1	**	
541-73-1	1,3-Dichlorobenzene	BRL	. 0.0900 ppbv			. 1	11	U
100-44-7	Benzyl chloride	BRL	0.0900 ppbv			1	11	U
106-46-7	1,4-Dichlorobenzene	0.169	0.0900 ppbv	•		1	, п	
95-50-1	1,2-Dichlorobenzene	BRL	0.0900 ppbv			1	11	U
120-82-1	1,2,4-Trichlorobenzene	BRL	0.0900 ppbv			1		. U
87-68-3	Hexachlorobutadiene	BRL	0.0900 ppbv			1		U
460-00-4	Surrogate: 4-Bromofluorobenzene	107	75-125 %				u	-

Client Project # 5555113

<u>Matrix</u> Air Collection Date/Time 08-Dec-06 08:17 Received 09-Dec-06

Method Ref. Air method TICs Prepared 11-Dec-06 Analyzed 11-Dec-06

CAS No.	Analyte(s)	Result	*RDL/Ui	nits RT	Q	Dilution	Batch	Flo
ir Quality A	Analyses							
	Tentatively Identified Compounds	None found	PF	obv		1	6120906	U
PA TO-15	1	Prepared by me	thod Genera	l Air Prep	*			
115-07-1		BRL	0.0900 pp	•		1	H	U
75-71-8	Dichlorodifluoromethane (Freon12)	0.520	0.0900 pp			1	н	
74-87-3	Chloromethane	0.990	0.0900 pp			1	11	
76-14-2	1,2-Dichlorotetrafluoroethane (Freon 114)	BRL	0.0900 pr			1	n	ι
	Vinyl chloride	BRL	0.0900 pp			ĺ	п	ι
106-99-0	1,3-Butadiene	BRL	0.0900 pr			1	μ	ι
74-83-9	Bromomethane	BRL	0.0900 pp			1	It	τ
75-00-3	Chloroethane	BRL	0.0900 рг			1	н	ι
67-64-1	Acetone	3.72	0.0900 pr			1	ti	
75 - 69-4	Trichlorofluoromethane (Freon 11)	0.604	0.0900 pp			1	711	
64-17-5	Ethanol	7.23	0.0900 pp			. 1	H	
75-35-4	1,1-Dichloroethene	BRL	0.0900 pr			1	11	τ
75-09-2	Methylene chloride	0.332	0,0900 pr			1	н	
	1,1,2-Trichlorotrifluoroethane (Freon 113)	0.192	0.09Q0 pr			1	n	
	Carbon disulfide	BRL	0.0900\pr			1	11	ŧ
156-60-5	trans-1,2-Dichloroethene	BRL	0.0900 p			1		ι
75-34-3	1,1-Dichloroethane	BRL	0.0900 pr	\		1	11	ī
1634-04-4	Methyl tert-butyl ether	BRL	0.0900 pp	`		1	ti .	Ţ
	Isopropyl alcohol	0.640	0.0900 pp	``		. 1	11	
	2-Butanone (MEK)	0.655	0.0900 pp	` `		1	n	
	cis-1,2-Dichloroethene	BRL	0.0900 pp	\		1	Ħ	τ
110-54-3		BRL	0.0900 pp	\		1	n	ι
141-78-6	Ethyl acetate	0.138	0.0900 pp	\		1	II	•
	Chloroform	BRL	0.0900 pp			1	II	ι
109-99-9	Tetrahydrofuran	BRL	0.0900 pp			1	11	į
	1,2-Dichloroethane	BRL	0.0900 pp			1	11	ľ
71-55-6	1,1,1-Trichloroethane	BRL	0.0900 pp			1	ti	ί
71-43-2	Benzene	0.612	0.0900 pp		\	\ 1	n	`
56-23-5	Carbon tetrachloride	0.250	0.0280 pp				**	
	Cyclohexane	0.163	0.0900 pp				и	
	1,2-Dichloropropane	BRL	0.0900 pp			/,	11	ι
	Bromodichloromethane	BRL	0.0900 pp			1	II	ι
79-01-6	Trichloroethene	0.0331	0.0280 pp			1	н	•
142-82-5	n-Heptane	0.190	0.0900 pp			1	\ "	
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL	0.0900 pp			1	\ "	ι
	cis-1,3-Dichloropropene	BRL	0.0900 pp			1	/"	ί
	trans-1,3-Dichloropropene	BRL	0.0900 pp			1	,,\	ι
	1,1,2-Trichloroethane	BRL	0.0900 pp			1	" \	ι
108-88-3		0.590	0.0900 pp			1	, \	` '
	2-Hexanone (MBK)	BRL	0.0900 pp			1	18	

es es emochloromethane enbromoethane (EDB) chloroethene cobenzene benzene	Method Ref. EPA TO-15 Result Prepared by me BRL BRL 0.113	Prepared 11-Dec-06 *RDL/Units ethod General Air 0.0900 ppbv 0.0900 ppbv	11-D	olyzed Dec-06	Dilution	Analysi WB Batch	<u>Flag</u>
es es emochloromethane (EDB) chloroethene cobenzene	Prepared by me BRL BRL	ethod General Air 0.0900 ppbv		Q	Dilution	Batch	Flag
emochloromethane bibromoethane (EDB) chloroethene obenzene	BRL BRL	0.0900 ppbv	Prep				
ribromoethane (EDB) chloroethene	BRL BRL	0.0900 ppbv	Prep				
ribromoethane (EDB) chloroethene	BRL BRL	0.0900 ppbv	•				
chloroethene obenzene	_	0.0900 ppby			1	6120906	U
robenzene	0.113	0.03 00 PPO.			1	u	U
		0.0900 ppbv	•		1	"	
benzene	BRL	0.0900 ppbv			1	lt.	U
\	0.186	0.0900 ppbv			1	н	
(ylene	0.635	0.0900 ppbv			1	и	
oform	BRL	0.0900 ppby			1	If	U
ne	0.297	0.0900 ppbv			1	"	
ene	0.222	0.0900 ppbv			1	**	
2-Tetrachloroethane	BRL	0.0900 ppbv			1	u	U
Trimethylbenzene	0.112				1	"	
yltoluene	BRL				1	()	U
Trimethylbenzene	0.249				1	19	
ichlorobenzene	BRL	• •			1	u	U
yl chloride	BRL				1	U.	U
ichlorobenzene	0.169	• • •			1	u	_
ichlorobenzene	BRL	\		•	1	tt	U
Trichlorobenzene	BRL	\			1	"	U
chlorobutadiene	BRL				1 .	U	U
gate: 4-Bromofluorobenzene	107	75-125 %				17	Ū
		\					
			/	\			
	Cylene oform ne ene 2-Tetrachloroethane Trimethylbenzene yltoluene Trimethylbenzene ichlorobenzene vl chloride ichlorobenzene ichlorobenzene Trichlorobenzene chlorobutadiene gate: 4-Bromofluorobenzene	Aylene oform both ne oform BRL ne 0.297 ene 0.222 2-Tetrachloroethane Trimethylbenzene yltoluene Trimethylbenzene ichlorobenzene lichloride ichlorobenzene ichlorobenzene ichlorobenzene BRL Trichlorobenzene BRL Trichlorobenzene BRL BRL BRL BRL BRL BRL BRL BRL	Cylene 0.635 0.0900 ppbv oform BRL 0.0900 ppbv ne 0.297 0.0900 ppbv ene 0.222 0.0900 ppbv 2-Tetrachloroethane BRL 0.0900 ppbv Trimethylbenzene 0.112 0.0900 ppbv yltoluene BRL 0.0900 ppbv Trimethylbenzene 0.249 0.0900 ppbv ichlorobenzene BRL 0.0900 ppbv ichloride BRL 0.0900 ppbv ichlorobenzene BRL 0.0900 ppbv ichlorobenzene BRL 0.0900 ppbv thlorobutadiene BRL 0.0900 ppbv thlorobutadiene BRL 0.0900 ppbv thlorobenzene 107 75-125 %	Sylene	Sylene	Sylene	Cylene

Sample Identi RES#11-I2-1		Client Project # 5555113	<u>Matrix</u> Air		Collection Date/Time 08-Dec-06 11:15					
SA55328-05	A	Method Ref. air method TICs	Prepared 11-Dec-06		Analyzed 12-Dec-06			<u>Analyst</u> WB		
CAS No.	Analyte(s)	Result	*RDL/Units	RT	Q	Dilution	Batch	Flag		
Air Quality A	Analyses					,				
Tentatively Id	entified Compounds in Air	Prepared by me	thod General Air	Prep						
106-97-8	Butane	1.70	ppbv	5.35	80	1	6120906	TIC, J		
	Cyclohexene, 1-methyl-4-(1	1.17	ppbv	24.31	98	1	II	TIC, J		
75-28-5	Isobutane	2.37	ppbv	5.04	59	I	II	TIC, J		
EPA TO-15		Prepared by me	thod General Air	r Pren						
	Propene	BRL	0.500 ppbv			1	**	U		
	Dichlorodifluoromethane (Freon12)	0.460	0.500 ppby			1	"	J		
74-87-3	Chloromethane	0.470	0.500 ppbv			1	н	J		
76-14-2	1,2-Dichlorotetrafluoroethane (Freon 11	4) BRL	0.500 ppbv			1	11	U		
75-01-4	Vinyl chloride	BRL	0.500 ppbv			. 1	11	U		
106-99-0	1,3-Butadiene	BRL	0.500 ppbv			1	11	U		
74-83-9	Bromomethane	BRL	0.500 ppbv			1	11	U		
75-00-3	Chloroethane	BRL	0.500 ppbv			1	n	U		
67 - 64-1	Acetone	3.57	0.500 ppbv			1	įt			
75-69-4	Trichlorofluoromethane (Freon 11)	BRL	0.500 ppbv			1	n	U		
64-17-5	Ethanol	60.0	0.500 ppbv			1	tt			
75-35-4	1,1-Dichloroethene	BRL	0.500 ppbv			1	п	U		
75-09-2	Methylene chloride	BRL	0.500 ppbv			1	Ħ	U		
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 1	13) BRL	0.500 ppbv			1	Ħ	U		
75-15-0	Carbon disulfide	BRL	0.500 ppbv			I	n	U		
156-60-5	trans-1,2-Dichloroethene	BRL	0.500 ppbv			1	Ħ	U		
75-34-3	1,1-Dichloroethane	BRL	0.500 ppbv			1	**	U		
1634-04-4	Methyl tert-butyl ether	BRL	0.500 ppbv			1	n	U		
67-63-0	Isopropyl alcohol	5.21	0.500 ppbv			1	n			
78-93-3	2-Butanone (MEK)	BRL	0.500 ppbv			1	11	U		
156-59-2	cis-1,2-Dichloroethene	BRL	0.500 ppbv			1	IT	U		
110-54-3	Hexane	BRL	0.500 ppbv			1	lt.	U		
141-78-6	Ethyl acetate	BRL	0.500 ppbv			1	11	U		
67-66-3	Chloroform	BRL	0.500 ppbv			· 1	**	U		
109-99-9	Tetrahydrofuran	BRL	0.500 ppbv			1	n	U		
107-06-2	1,2-Dichloroethane	BRL	0.500 ppbv			1	**	U		
71-55-6	1,1,1-Trichloroethane	BRL	0.500 ppbv			1	**	U		
71-43-2	Benzene	BRL	0.500 ppbv			1	н	υ		
EC 22 E	0.1									

0.500 ppbv

0.500 ppbv

0.500 ppbv

0.500 ppbv

 $0.500\ ppbv$

0.500 ppbv

0.500 ppbv

0.500 ppbv

0.500 ppbv

BRL

BRL

BRL

BRL

BRL

BRL

BRL

BRL

BRL

 \mathbf{U}

U

U

56-23-5 Carbon tetrachloride

78-87-5 1,2-Dichloropropane

10061-01-5 cis-1,3-Dichloropropene

10061-02-6 trans-1,3-Dichloropropene

79-01-6 Trichloroethene

142-82-5 n-Heptane

75-27-4 Bromodichloromethane

108-10-1 4-Methyl-2-pentanone (MIBK)

110-82-7 Cyclohexane

Sample Identification RES#11-I2-120706 SA55328-05				08-Dec Ana	Collection Date/Time 08-Dec-06 11:15 Analyzed 12-Dec-06			e <u>d</u> 06 e <u>t</u>
CAS No.	Analyte(s)	Result	*RDL/Units	RT	Q	Dilution	Batch	Flag
Air Quality	Analyses							
EPA TO-15		Prepared by me	thod General Air	Prep				
79-00-5	1,1,2-Trichloroethane	BRL	0.500 ppbv			1	6120906	U
108-88-3	Toluene	0.900	0.500 ppbv		•	1	**	
591-78-6	2-Hexanone (MBK)	BRL	0.500 ppbv			1	n	U
124-48-1	Dibromochloromethane	BRL	0.500 ppbv			1	10	U
106-93-4	1,2-Dibromoethane (EDB)	BRL	0.500 ppbv			1	n .	U
127-18-4	Tetrachloroethene	BRL	0.500 ppbv			1	n	U
108-90-7	Chlorobenzene	BRL	0.500 ppbv			1	IF	U
100-41-4	Ethylbenzene	BRL	0.500 ppbv			1	1)	U
1330-20-7	m,p-Xylene	BRL	0.500 ppbv			1	D	U
75-25-2	Bromoform	BRL	0,500 ppbv			1	11	U
100-42-5	Styrene	BRL	0.500 ppbv			1	п	U
95-47-6	o-Xylene	BRL	0.500 ppbv			1	n	U
79-34-5	1,1,2,2-Tetrachloroethane	BRL	0.500 ppbv			1	11	U
108-67-8	1,3,5-Trimethylbenzene	BRL	0.500 ppbv			1	11	U
622-96-8	4-Ethyltoluene	BRL	0.500 ppbv			1	11	U
95-63-6	1,2,4-Trimethylbenzene	BRL	0.500 ppbv			. 1	11	U
541-73-1	1,3-Dichlorobenzene	BRL	0.500 ppbv			1	11	U
100-44-7	Benzyl chloride	BRL	0.500 ppbv			1	н	U
106-46-7	1,4-Dichlorobenzene	BRL	0.500 ppbv			1	11	U
95-50-1	1,2-Dichlorobenzene	BRL	0.500 ppbv			1	н	บ
120-82-1	1,2,4-Trichlorobenzene	BRL	0.500 ppbv			1	н	U
07 (0 2	**		· ·					-

 ${\tt BRL}$

102

0.500 ppbv

75-125 %

87-68-3 Hexachlorobutadiene

460-00-4 Surrogate: 4-Bromofluorobenzene

Sample Identification RES#11-I1-120706 SA55328-06 Client Project # 5555113

Method Ref.

Air method TICs

Matrix Air

Prepared .

11-Dec-06

RESUBMITTAL
Collection Date Times MR 128266666
08-Dec-06 10:33 09-Dec-06

Analyzed 11-Dec-06

CAS No.	Analyte(s)	Result	*RDL/Uni	ts RT	Q	Dilution	Batch	Flag
Air Quality A		· <u> </u>					·	
•	entified Compounds in Air	Drenared by	nethod General.	A ir Dron				
106-97-8		1.47	ppb	•	72	1	6120906	TIC, J
	Isobutane	1.06	ppb		50	1	"	TIC, J
EPA TO-15								110,0
115-07-1	Propene	BRL	nethod General . 0.0900 ppb	-		1		*1
	Dichlorodifluoromethane (Freon12)	0.510	0.500 ppb		•	1	**	U
	Chloromethane	0.950	0.500 ppb 0.500 ppb			1		
	1,2-Dichlorotetrafluoroethane (Freon 114)	BRL	0.0900 ppb			1	**	U
	Vinyl chloride	BRL	0.0900 ppb			1.	•	U
	1,3-Butadiene	BRL	0.0900 ppb			1	н	ับ
	Bromomethane	BRL	0.0900 ppb			1		U
	Chloroethane	BRL	0.0900 ppb			1		U
	Acetone	2.23	0.500 ppb		•	1	. "	·
	Trichlorofluoromethane (Freon 11)	0.770	0.0900 ppb			1	н	
64-17-5		10.5	0.500 ppb			1	, н	
75-35-4	1,1-Dichloroethene	BRL	0.0900 ppb			1	н	U
	Methylene chloride		0.0900 ppb			1		BL
	1,1,2-Trichlorotrifluoroethane (Freon 113)		0.0900 ppb			1	н	. 0-
	Carbon disulfide	BRL	0.0900 ppb			1		U
	trans-1,2-Dichloroethene	BRL	0.0900 ppb			. 1	. #	U
	1,1-Dichloroethane	BRL	0.0900 ppb			1		U
	Methyl tert-butyl ether	BRL	0.0900 ppb			1	**	U
	Isopropyl alcohol	2.52	0.500 ppb			1		· ·
	2-Butanone (MEK)	0.382	0.0900 ppb		٠.	1	**	
	cis-1,2-Dichloroethene	BRL	0.0900 ppb			1	**	U
110-54-3		BRL	0.0900 ppb			. 1		·U
	Ethyl acetate	0.110	0.0900 ppb			.^		U
	Chloroform	BRL	0.0900 ppb			1		U
	Tetrahydrofuran	BRL	0.0900 ppb			1		U
	1,2-Dichloroethane	BRL	0.0900 ppb			1		
	1,1,1-Trichloroethane	BRL	0.0900 ppb 0.0900 ppb			1	,,	U
	Benzene	0.607	0.0900 ppb			1		U
	Carbon tetrachloride	0.262	0.0280 ppb			1	,,	٠
	Cyclohexane	0.241	0.0200 ppb			1		
	1,2-Dichloropropane	BRL	0.0900 ppb			.*		บ
	Bromodichloromethane	BRL	0.0900 ppb			1	**	U
	Trichloroethene	0.0391	0.0280 ppb			1		U
	n-Heptane	0.0391	0.0280 ppb 0.0900 ppb			1	**	
	4-Methyl-2-pentanone (MIBK)	BRL	0.0900 ppb 0.0900 ppb			1		¥Ť
	cis-1,3-Dichloropropene	BRL	0.0900 ppb 0.0900 ppb			1	. 10	U
	trans-1,3-Dichloropropene	BRL	0.0900 ppb 0.0900 ppb			1	**	U
	1,1,2-Trichloroethane	-	0.0900 ppb 0.0900 ppb			1		U

Sample Identification RES#11-I1-120706 SA55328-06 Client Project # 5555113

Method Ref.

EPA TO-15

<u>Matrix</u> Air

Prepared

11-Dec-06

RESUBMITTAL
Collection Date/TimesMR 12Received
08-Dec-06 10:33 09-Dec-06

Analyzed 11-Dec-06

CAS No.	Analyte(s)	Result	*RDL/Units	RT	$\boldsymbol{\varrho}$	Dilution	Batch	Flag
Air Quality A	Analyses							
EPA TO-15	•	Prepared by r	nethod General Air Pr	ер				
108-88-3	Toluene	0.896	0.0900 ppbv	7	٠.	1	6120906	
591-78-6	2-Hexanone (MBK)	BRL	0.0900 ppbv			. 1		U
124-48-1	Dibromochloromethane	BRL	0.0900 ppbv			. 1		· U
106-93-4	1,2-Dibromoethane (EDB)	BRL	0.0900 ppbv			1	17	U
127-18-4	Tetrachloroethene	0.168	0.0900 ppbv			1	17	
108-90-7	Chlorobenzene	BRL	0.0900 ppbv		-	1	10	U
100-41-4	Ethylbenzene	0.146	0.0900 ppbv			1	11	
1330-20-7	m,p-Xylene	0.443	0.0900 ppbv			1	11	
75-25-2	Bromoform	BRL	0.0900 ppbv			1		·U
100-42-5	Styrene	0.125	0.0900 ppbv			1	. "	
95-47-6	o-Xylene	0.163	0.0900 ppbv			1		
79-34-5	1,1,2,2-Tetrachloroethane	BRL	0.0900 ppbv			1	#	U
108-67-8	1,3,5-Trimethylbenzene	0.108	0.0900 ppbv			1	н	•
622-96-8	4-Ethyltoluene	BRL	0.0900 ppbv			1	н .	U
95-63-6	1,2,4-Trimethylbenzene	0.237	0.0900 ppbv			1	**	-
541-73-1	1,3-Dichlorobenzene	BRL	0.0900 ppbv			-1	**	U
100-44-7	Benzyl chloride	BRL	0.0900 ppbv		٠.	1		U
106-46-7	1,4-Dichlorobenzene	BRL	0.0900 ppbv			1	u	U
95-50-1	1,2-Dichlorobenzene	BRL	0.0900 ppbv			1		· II
120-82-1	1,2,4-Trichlorobenzene	BRL	0.0900 ppbv			1	n	U
	Hexachlorobutadiene	BRL	0.0900 ppbv			1	н	U
	Surrogate: 4-Bromofluorobenzene	107	75-125 %			• .	н .	U

Sample Identi RES#11-I1-1	•	Client Project # 5555113	<u>Matrix</u> Air	Collection 08-Dec-			Receive 09-Dec-	
SA55328-06	•	Method Ref. Air method TICs	Prepared 11-Dec-06		lyzed Dec-06		Analys WB	<u>st</u>
CAS No.	Analyte(s)	Result	*RDL/Units	RT	Q	Dilution	Batch	Flag
Air Quality A	Analyses							
Tentatively Id	lentified Compounds in Air	Prepared by me	thod General Air	Prep				
106-97-8	Butane	1.47	ppbv	5.35	72	1	6120906	TIC,
75-28-5	Isobutane	1.06	ppbv	5.04	50	1	"	TIC,
EPA TO-15		Prepared by me	thod General Air	Pren				·
	Propene	BRL	0.0900 ppbv	Пор		1		U
	Dichlorodifluoromethane (Freon12)	0.510	0.0900 ppbv			1	n	O
	Chloromethane	0.950	0.0900 ppbv			1	"	
76-14-2	1,2-Dichlorotetraflüoroethane (Freon 1		0.0900 ppby			1	17	U
	Vinyl chloride	BRL	0.0900 ppbv			. 1	ı,	U
	1,3-Butadiene	BRL	0.0900 ppbv			1	H	บ
74-83-9	Bromomethane	BRL	0.0900 ppbv			1		U
75-00-3	Chloroethane	BRL	0.0900 ppbv			1	11	U
67-64-1	Acetone	2.23	0.0900 ppbv			1	n	U
	Trichlorofluoromethane (Freon 11)	0.770	0.0900 ppbv			1	n	
	Ethanol	10,5	0.0900 ppbv			1	11	
	1,1-Dichloroethene	BRL	0.0900 ppbv 0.0900 ppbv			1	,,	.,
	Methylene chloride	0.255					"	U
	1,1,2-Trichlorotrifluoroethane (Freon	\	0.0900 ppbv			1		
	Carbon disulfide	BRL	0.0900 ppbv			1		
	trans-1,2-Dichloroethene		0.0900 ppbv			1		U
	1,1-Dichloroethane	BRL	0.0900 ppbv			1	,,	U
	Methyl tert-butyl ether	BRL	0.0900 ppbv			1		U
		BRL	0.0900 ppbv			1		U
	Isopropyl alcohol	2.52	0.0900 ppbx			I	#	
	2-Butanone (MEK)	0.382	0.0900 ppbv			. 1	"	
	cis-1,2-Dichloroethene	BRL	0.0900 ppbv			1	"	U
110-54-3		BRL	0.0900 ppbv			1	11	U
	Ethyl acetate	0.110	0.0900 ppby			1	n	
	Chloroform	BRL	0.0900 ppbv			1	n	U
	Tetrahydrofuran	BRL	0.0900 ppbv	`		1	19	U
	1,2-Dichloroethane	BRL	0.0900 ppbv			1	lt	U
	1,1,1-Trichloroethane	BRL	0.0900 ppbv		\	1	11	U
	Benzene	0.607	0.0900 ppbv		`	\ 1	11	
	Carbon tetrachloride	0.262	0.0280 ppbv			1	ti	
	Cyclohexane	0.241	0.0900 ppbv			/1	u	
	1,2-Dichloropropane	BRL	0.0900 ppbv			1	11	\mathbf{U}
	Bromodichloromethane	BRL	0.0900 ppbv			1	19	U
	Trichloroethene	0.0391	0.0280 ppbv			1	"	
	n-Heptane	0.249	0.0900 ppbv			1	\ "	
	4-Methyl-2-pentanone (MIBK)	BRL	0.0900 ppbv			1	\"	U
	cis-1,3-Dichloropropene	BRL	0.0900 ppbv			1	n/	U
	trans-1,3-Dichloropropene	BRL	0.0900 ppbv			ı	" \	U
79-00-5	1,1,2-Trichloroethane	BRL	0.0900 ppbv			1	11	U
								/
							Page 12	of 36

Sample Identification
RES#11-I1-120706
SA55328-06

Client Project #
5555113

<u>Matrix</u> Air Collection Date/Time 08-Dec-06 10:33 Received 09-Dec-06

Method Ref. EPA TO-15 Prepared 11-Dec-06 Analyzed 11-Dec-06

CAS No.	Analyte(s)	Result	*RDL/Units	RT	Q	Dilution	Batch	Flag
Air Quality A	Analyses							
EPA TO-15		Prepared by 1	nethod General Air Pr	ер				
108-88-3	Toluene	0.896	0.0900 ppbv	•		1	6120906	
591-78-6	2-Hexanone (MBK)	BRL	0.0900 ppbv			1	**	U
124-48-1	Dibromochloromethane	BRL	0.0900 ppbv			1	11	U
106-93-4	1,2-Dibromoethane (EDB)	BRL	0.0900 ppbv			1	**	U
127-18-4	Tetrachloroethene	0.168	0.0900 ppbv			1	#	
108-90-7	Chlorobenzene	BRL	0.0900 ppbv			1	n	U
100-41-4	Ethylbenzene	0.146	0.0900 ppbv			1	11	
1330-20-7	m,p-Xylene	0.443	0.0900 ppbv			1	н '	
75-25-2	Bromoform	BRL	0.0900 ppbv			1	II .	U
100-42-5	Styrene	.0.125	0.0900 ppbv			1	11	
95-47-6	o-Xylene	Q.163	0.0900 ppbv			1	It	
79-34-5	1,1,2,2-Tetrachloroethane	вкұ	0.0900 ppbv			1	11	U
108-67-8	1,3,5-Trimethylbenzene	0.108	0.0900 ppbv			1	10	
622-96-8	4-Ethyltoluene	BRL	0.0900 ppbv			1	11	U
95-63 - 6	1,2,4-Trimethylbenzene	0.237	0.0900 ppbv			I	н	
541-73-1	1,3-Dichlorobenzene	BRL	0.0900 ppbv			1	11	U
100-44-7	Benzyl chloride	BRL	0.0900 ppbv			1	ıı	U
106-46-7	1,4-Dichlorobenzene	BRL	0.09Q0 ppbv			1	11	U
95-50-1	1,2-Dichlorobenzene	BRL	0.0900 ppbv			1	11	U
120-82-1	1,2,4-Trichlorobenzene	BRL	0.0900 ppbv			1	11	U
87-68-3	Hexachlorobutadiene	BRL	0.0900 ppbv			1	10	U
460-00-4	Surrogate: 4-Bromofluorobenzene	107	75-125 %				it	

Sample Identi RES#11-SS-1		Client Project # 5555113	<u>Matrix</u> Air	Collection 08-Dec-			Received 09-Dec-06 Analyst WB		
SA55328-07	A	Method Ref. Air method TICs	Prepared 11-Dec-06		lyzed ec-06				
CAS No.	Analyte(s)	Result	*RDL/Unit	s RT	Q	Dilution	Batch	Flag	
Air Quality A	Analyses								
Tentatively Id	entified Compounds in Air	Prepared by me	thod General A	Air Prep					
	Decane, 3,7-dimethyl-	59.5	ppby	•	72	1	6120906	TIC, J	
	Dodecane, 2,2,11,11-tetrame	59.1	ppby		78	1	ii.	TIC, J	
056292-65-0	Dodecane, 2,5-dimethyl-	170	ppby		72	1	tt.	TIC, J	
	Dodecane, 3-methyl-	82.7	ppby		72	1	ij	TIC, J	
	Ethane, 1-chloro-1,1-difluoro-	74.9	ppby		43	1	n	TIC, J	
	Heptane, 2,2,3,5-tetramethyl-	8.79	ppby		74	1	11	TIC, J	
•	Heptane, 2,2,4,6,6-pentamet	18,2	ppby		83	1:	11	TIC, J	
	Heptane, 5-ethyl-2,2,3-trim	101	ppbv		78	i	11	TIC, J	
	Undecane, 3,9-dimethyl-	24.9	ppby		72	1	11	TIC, J	
	Undecane, 3-methyl-	26.6	ppby		78	1	11	TIC, J	
	Undecane, 4-methyl-	17.9	ppby		83	1	и	TIC, J	
EPA TO-15	•	Prepared by me						,0	
115-07-1	Propene	BRL	0.500 ppb	•		1	u u	Ū	
	Dichlorodifluoromethane (Freon12)	0,760	0.500 ppb			. 1	11	U	
	Chloromethane	BRL	0.500 ppb			1		y :	
	1,2-Dichlorotetrafluoroethane (Freon 1)		0.500 ppby			1	'n	U	
	Vinyl chloride	BRL	0.500 ppb			1	ti	U	
	1,3-Butadiene	BRL	0.500 ppby			1	n	U	
	Bromomethane	BRL	0.500 ppbs			1	n	U	
	Chloroethane	BRL	0.500 ppbs			1	u	U	
	Acetone	15.8	0.500 ppby			1	"	U	
	Trichlorofluoromethane (Freon 11)	0.390	0.500 ppbs			1	**		
	Ethanol	10.1	0.500 ppbs			1	11	J	
	1,1-Dichloroethene	BRL				1	*1		
	Methylene chloride		0.500 ppb			1	,,	U	
	1,1,2-Trichlorotrifluoroethane (Freon 1	BRL	0.500 ppb			1	"	U	
	Carbon disulfide	•	0.500 ppby			1	11	U	
	trans-1,2-Dichloroethene	BRL	0.500 ppb			1	11	U	
	1,1-Dichloroethane	BRL	0.500 ppbv			1	и	·U	
	Methyl tert-butyl ether	BRL	0.500 ppb			1		U	
	Isopropyl alcohol	BRL	0.500 ppby			1	11	U	
	2-Butanone (MEK)	19.1	0.500 ppb			1	и		
	cis-1,2-Dichloroethene	1.31	0.500 ppby			1	"		
110-54-3		BRL	0.500 ppb			1		U	
	Ethyl acetate	BRL	0.500 ppb			1	"	U	
	Chloroform	BRL	0.500 ppbs			1	,, It	U	
		BRL	0.500 ppby			1	"	U	
	Tetrahydrofuran	BRL	0.500 ppby			1.	" U	U	
	1,2-Dichloroethane	BRL	0.500 ppby			1	11	U	
	1,1,1-Trichloroethane Benzene	BRL	0.500 ppb			i	11	U	
		BRL	0.500 ppb			1		U	
30-23-3	Carbon tetrachloride	BRL	0.500 ppb	<i>'</i>		1	0	U	

Sample Identification
RES#11-SS-120706
SA55328-07

Client Project # 5555113

<u>Matrix</u> Air Collection Date/Time 08-Dec-06 10:31

Received 09-Dec-06

Method Ref. EPA TO-15 Prepared 11-Dec-06 Analyzed 12-Dec-06

CAS No.	Analyte(s)	Result	*RDL/Units	RT	Q	Dilution	Batch	Flag
Air Quality A	Analyses	· · · · · · · · · · · · · · · · · · ·		·		<u> </u>		
EPA TO-15		Prepared by n	nethod General Air P	rep				
110-82-7	Cyclohexane	BRL	0.500 ppbv	- Р		1 .	6120906	U
78-87-5	1,2-Dichloropropane	BRL	0.500 ppbv			1	11	U
75-27-4	Bromodichloromethane	BRL	0.500 ppbv			1	11	U
79-01-6	Trichloroethene	0.300	0.500 ppbv			1	11	J
142-82-5	n-Heptane	BRL	0.500 ppbv			1	и	U
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL	0.500 ppbv			1	14	U
10061-01-5	cis-1,3-Dichloropropene	BRL	0.500 ppbv			1	11	U
10061-02-6	trans-1,3-Dichloropropene	BRL	0.500 ppbv			1	"	U
	1,1,2-Trichloroethane	BRL	0.500 ppbv			1	u	U
108-88-3	Toluene	2.15	0.500 ppbv			1	"	Ü
591-78-6	2-Hexanone (MBK)	BRL	0.500 ppbv			1	"	U
124-48-1	Dibromochloromethane	BRL	0.500 ppbv			1	ţı.	U
106-93-4	1,2-Dibromoethane (EDB)	BRL	0.500 ppbv			1	n	U
127-18-4	Tetrachloroethene	0.340	0.500 ppbv			1	11	J
108-90 - 7	Chlorobenzene	BRL	0.500 ppbv			1	U	U
100-41-4	Ethylbenzene	0.450	0.500 ppbv			1	11	J
1330-20-7	m,p-Xylene	1.60	0.500 ppbv			1	11	J
75-25-2	Bromoform	BRL	0.500 ppbv			1	II.	U
100-42-5	Styrene	BRL	0.500 ppbv			1 .	11	U
95-47-6	o-Xylene	0.550	0.500 ppbv			1	11	U
79-34-5	1,1,2,2-Tetrachloroethane	BRL	0.500 ppbv			1	11	U
108-67-8	1,3,5-Trimethylbenzene	BRL	0.500 ppbv			1	11	U
622-96-8	4-Ethyltoluene	BRL	0.500 ppbv			1	н	บ
95-63 - 6	1,2,4-Trimethylbenzene	0.710	0.500 ppbv			1		U
541-73-1	1,3-Dichlorobenzene	BRL	0.500 ppby			1	11	*1
100-44-7	Benzyl chloride	BRL	0.500 ppbv			1	**	U
106-46-7	1,4-Dichlorobenzene	BRL	0.500 ppbv			1	**	U
95-50-1	1,2-Dichlorobenzene	BRL	0.500 ppbv			1	ff	U
120-82-1	1,2,4-Trichlorobenzene	BRL	0.500 ppbv			1	u	U
87-68-3	Hexachlorobutadiene	BRL	0.500 ppbv			1	11	U
460-00-4	Surrogate: 4-Bromofluorobenzene	109	7:5-125 %			ī	"	U

RESUBMITTAL

Sample Identification 80ST-OA3-120706 SA55328-08

Client Project # 5555113

Matrix Air

Collection Date/PimsMR 12/22/2016 ed 08-Dec-06 11:49

09-Dec-06

Method Ref. Air method TICs

Prepared 11-Dec-06

Analyzed 11-Dec-06

CAS No.	Analyte(s)	Result	*RDL	/Units		RT	Q	Dilution	Batch	Flag
Air Quality A							 _			
=	lentified Compounds in Air	Prepared by n	nethod Gene	eral Air	. Pre					
106-97-8		0.720	iculou Gein	ppbv	. 110	5.35	72	1	6120906	TIC,
	Isobutane	0.820		ppbv		5.04	42	1	"	TIC,
	Tridecane	0.920		ppbv		23.22	59	1		
					_		37	•		TIC,
<u>EPA TO-15</u>	Dromono	Prepared by n			Prej)				
	Propene	BRL	0.0900	-				1	. #	U
	Dichlorodifluoromethane (Freon12) Chloromethane	0.520	0.500				,	1	." H	_
	•	0.480	0.500					l .		J
	1,2-Dichlorotetrafluoroethane (Freon 114)	BRL	0.0900					1		· U
	Vinyl chloride	BRL	0.0900					1 .	н	U
	1,3-Butadiene	BRL	0.0900			* 1		1		U
	Bromomethane	BRL	0.0900					1		U
	Chloroethane	BRL	0.0900					1	"	U
	Acetone	4.02	0.500					1		
	Trichlorofluoromethane (Freon 11)	0.636	0.0900					1	**	
	Ethanol	19.4	0.500					1	. "	
	1,1-Dichloroethene	BRL	0.0900					1	11	ū
	Methylene chloride	0.550	0.0900	ppbv				1		
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	0.202	0.0900					1		
75-15-0	Carbon disulfide	BRL	0.0900	ppbv				1	H .	U
156-60-5	trans-1,2-Dichloroethene	BRL	0.0900	ppbv				1	H	U
75-34-3	1,1-Dichloroethane	BRL	0.0900	ppbv				1	11	U
1634-04-4	Methyl tert-butyl ether	BRL	0.0900	ppbv			٠. ٠.	1 -		U
67-63-0	Isopropyl alcohol	9.96	0.500	ppbv				1	. 11	
78-93-3	2-Butanone (MEK)	0.562	0.0900	ppbv				1	19	
156-59-2	cis-1,2-Dichloroethene	BRL	0.0900	ppbv				. 1	**	U
110-54-3	Hexane	BRL	0.0900	ppbv				1	12	U
141-78-6	Ethyl acetate	0.139	0.0900	ppbv				1	11	
67-66-3	Chloroform	BRL	0.0900	ppbv				1	11	U
109-99-9	Tetrahydrofuran	0.139	0.0900					1	n	
107-06-2	1,2-Dichloroethane	BRL	0.0900		٠.			1		U
71-55-6	1,1,1-Trichloroethane	BRL	0.0900					1	**	U
71-43-2	Benzene	0.370	0.500					1	19	J
56-23-5	Carbon tetrachloride	0.258	0.0280					1	. 17	Ū
110-82-7	Cyclohexane	0.269	0.0900					1		
	1,2-Dichloropropane	BRL	0.0900	,				. 1	, н	U
	Bromodichloromethane	BRL	0.0900					1	10	U
	Trichloroethene	0.0581	0.0280					.1	11	U
	n-Heptane	0.363	0.0200					1	. ,	
	4-Methyl-2-pentanone (MIBK)	BRL	0.0900				•	1,		*1
	cis-1,3-Dichloropropene	BRL	0.0900					1	**	U
	trans-1,3-Dichloropropene		0.0900							U
10001-02-0	Table 1,5 Diemotopropene	BRL	0.0500	ppov				-1		U A
								Ma	- 1/2	BU
			•					EMI.	17UV/	\mathcal{V}
									Page 16	of 36

Sample Identification 80ST-OA3-120706 SA55328-08

Client Project # 5555113

Matrix Air

Collection On Prins MR 12/22/206ed 08-Dec-06 11:49

09-Dec-06

RESUBMITTAL

Method Ref. EPA TO-15

Prepared 11-Dec-06

Analyzed 11-Dec-06

CAS No.	Analyte(s)	Result	*RDL/Units	RT	Q.	Dilution	Batch	Flag
Air Quality A	Analyses						· · · · · · · · · · · · · · · · · · ·	****
EPA TO-15		Prepared by r	nethod General Air Pr	ep				
79-00-5	1,1,2-Trichloroethane	BRL	0.0900 ppbv	- r		1	6120906	U
108-88-3	Toluene	0.910	0.500 ppbv		**	1	"	•
591-78-6	2-Hexanone (MBK)	BRL	0.0900 ppbv	*		1	11	U
124-48-1	Dibromochloromethane	BRL	0.0900 ppbv			1		U
106-93-4	1,2-Dibromoethane (EDB)	BRL	0.0900 ppbv			1		U
127-18-4	Tetrachloroethene	0.169	0.0900 ppbv			1		-
108-90-7	Chlorobenzene	BRL	0.0900 ppbv			1		U
100-41-4	Ethylbenzene	0.285	0.0900 ppbv			1		_
1330-20-7	m,p-Xylene	1.03	0.0900 ppbv			1	. "	
75-25-2	Bromoform	BRL	0.0900 ppbv			1		U
100-42-5	Styrene	BRL	0.0900 ppbv			1		U
95-47-6	o-Xylene	0.380	0.0900 ppbv			1	. 17	. •
79-34-5	1,1,2,2-Tetrachloroethane	BRL	0.0900 ppbv			1	н	U
108-67-8	1,3,5-Trimethylbenzene	0.179	0.0900 ppbv			1	н	Ū
622-96-8	4-Ethyltoluene	0.144	0.0900 ppbv			1	**	
95-63-6	1,2,4-Trimethylbenzene	0.493	0.0900 ppbv			1	"	
541-73-1	1,3-Dichlorobenzene	BRL	0.0900 ppbv			1		U
100-44-7	Benzyl chloride	BRL	0.0900 ppbv			1		U
106-46-7	1,4-Dichlorobenzene	BRL	0.0900 ppbv			1	"	U
95-50-1	1,2-Dichlorobenzene	BRL	0.0900 ppbv			1	11	·U
120-82-1	1,2,4-Trichlorobenzene	BRL	0.0900 ppbv			1		U
87-68-3	Hexachlorobutadiene	BRL	0.0900 ppbv			1	**	U
460-00-4	Surrogate: 4-Bromofluorobenzene	107	75-125 %		•		**	U

Client Project # 5555113

<u>Matrix</u> Air Collection Date/Time 08-Dec-06 11:49 Received 09-Dec-06

Method Ref. Air method TICs Prepared 11-Dec-06 Analyzed 11-Dec-06

			11-Dec-			ec-06		WB	
CAS No.	Analyte(s)	Result	*RDL/U	nits	RT	Q	Dilution	Batch	Flag
Air Quality A	Analyses								
entatively Ide	entified Compounds in Air	Prepared by me	ethod Genera	al Air Pre	р				
106-97-8	Butane	0.720	pj	pbv	5.35	72	1	6120906	TIC, J
75-28-5	Isobutane	0.820	pj	pbv	5.04	42	1	п	TIC, J
629-50-5	Tridecane	0.920	pj	pbv	23.22	59	1	u	TIC, J
EPA TO-15		Prepared by me	thod Genera	al Air Pre	p				
115-07-1	Propene	BRL	0.0900 pj		•		1	H	U
75-71-8	Dichlorodifluoromethane (Freon12)	0.520	0.0900 pj	pbv			1	n	
74-87-3	Chloromethane	0.480	0.0900 p	pbv			1	**	
76-14-2	1,2-Dichlorotetrafluoroethane (Freon 114)	BRL	0.0900 p	pbv			1	**	U
75-01-4	Vinyl chloride	BRL	0.0900 թյ	pbv ·			1	n	U
106-99-0	1,3-Butadiene	BRL	0.0900 pg	pbv			1	If	U
74-83-9	Bromomethane	BRL	0.0900 pj	pbv			1		U
75-00-3	Chloroethane	BRL	0.0900 pj	pbv			1	0	U-
67-64-1	Acetone	4,02	0.0900 pj	pbν			1	0	
75-69-4	Trichlorofluoromethane (Freon 11)	0.636	0.0900 p	pbv	*		1	**	
64-17-5	Ethanol	19.4	0.0900 p	pbv			1	II.	
75-35-4	1,1-Dichloroethene	BRL	0.0900 pj	pbv			1	Ħ	U
	Methylene chloride	0.550	🔪 0.0900 թյ	pbv			1	п	
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113	0.202	0.0900 pj	pbv			1	н	
75-15-0	Carbon disulfide	BRL	0.0900 pj	pbv			1	н	U
156-60-5	trans-1,2-Dichloroethene	BRL	14 0060.0	pbv			I	н	U
75-34-3	1,1-Dichloroethane	BRL	0.0900\p _l	pbv			I	**	U
1634-04-4	Methyl tert-butyl ether	BRL	0.0900 pj	þþν			1	11	U
67-63-0	Isopropyl alcohol	9.96	0.0900 pg	pbv			1	It	
78-93-3	2-Butanone (MEK)	0.562	0.0900 pj				1	н	
156-59-2	cis-1,2-Dichloroethene	BRL	0.0900 pr	pbv \			1	n	U
110-54-3	Hexane	BRL	0.0900 pg	pbv	\		1	11	U
141-78-6	Ethyl acetate	0.139	0.0900 pp	pbv			1	н	
67-66-3	Chloroform	BRL	0.0900 pr	pbv			I	11	U
109-99-9	Tetrahydrofuran	0.139	0.0900 pr	pbv			. 1	n	
107-06-2	1,2-Dichloroethane	BRL	0.0900 pp	pbv			1	11	U
71-55-6	1,1,1-Trichloroethane	BRL	0.0900 pp	pbv			1	н	U
71-43-2	Benzene	0.370	0.0900 pp	pbv			1	n	
56-23-5	Carbon tetrachloride	0.258	0.0280 pp	pbv			1	n	
110-82-7	Cyclohexane	0.269	0.0900 pp	pbv		/	, 1	U	
78-87-5	1,2-Dichloropropane	BRL	0.0900 pp	pbv			1	17	U
75-27-4	Bromodichloromethane	BRL	0.0900 pp	pbv			1	11	U
79-01-6	Trichloroethene	0.0581	0.0280 pp	pbv			\1	n	
	n-Heptane	0.363	0.0900 pp	pbv			ì	It	
	4-Methyl-2-pentanone (MIBK)	BRL	0.0900 pp	pbv			1	п	U
	cis-1,3-Dichloropropene	BRL	0.0900 pp	pbv			1	H	U
10061-02-6	trans-1,3-Dichloropropene	BRL	0.0900 pp	pbv			1	"	U
								\	

Sample Identification
80ST-OA3-120706
SA55328-08

Client Project # 5555113

<u>Matrix</u> Air Collection Date/Time 08-Dec-06 11:49 Received 09-Dec-06

Method Ref. EPA TO-15 Prepared 11-Dec-06 Analyzed 11-Dec-06

CAS No.	Analyte(s)	Result	*RDL/Units	RT	Q	Dilution	Batch	Flag
Air Quality A	Analyses							
EPA TO-15		Prepared by r	nethod General Air Pi	гер				
79-00-5	1,1,2-Trichloroethane	BRL	0.0900 ppbv			1	6120906	U
108-88-3	Toluene	0.910	0.0900 ppbv			1	11	
591-78-6	2-Hexanone (MBK)	BRL	0.0900 ppbv			1	#	U
124-48-1	Dibromochloromethane	BRL	0.0900 ppbv			1	ıı	U
106-93-4	1,2-Dibromoethane (EDB)	BRL	0.0900 ppbv			1	а	U
127-18-4	Tetrachloroethene	0.169	0.0900 ppbv			1	ш	
108-90-7	Chlorobenzene	BRL	0.0900 ppbv			1	и	U
100-41-4	Ethylbenzene	0.285	0.0900 ppbv			1	11	
1330-20-7	m,p-Xylene	1.03	0.0900 ppbv			1	**	
75-25-2	Bromoform	BRL	0.0900 ppbv			1	n	U
100-42-5	Styrene	BRL	0.0900 ppbv			1	п	U
95-47-6	o-Xylene	0.380	0.0900 ppbv			1	11	
79-34-5	1,1,2,2-Tetrachloroethane	BRL	0.0900 ppbv			1	U	U
108-67-8	1,3,5-Trimethylbenzene	0.179	0.0900 ppbv			1	**	
622-96-8	4-Ethyltoluene	0,144	0.0900 ppbv			1	"	
95-63-6	1,2,4-Trimethylbenzene	0.493	0.0900 ppbv			1	и	
541-73-1	1,3-Dichlorobenzene	BRL	0.0900 ppbv			1	н	U
100-44-7	Benzyl chloride	BRL	0.0900 ppbv			1	н	U
106-46-7	1,4-Dichlorobenzene	BRL	0.0900 ppbv			1	"	U
95-50-1	1,2-Dichlorobenzene	BRL	0.0900 ppbv			1	н	U
120-82-1	1,2,4-Trichlorobenzene	BRL	0.0900 ppbv			1	**	υ
87-68-3	Hexachlorobutadiene	BRL	0.0900 ppbv			1	ŧr	U
460-00-4	Surrogate: 4-Bromofluorobenzene	107	75-125 %				et	

<u>Sample Identif</u> RES#12-12-1 2 SA55328-09	***	Client Project # 5555113	<u>Matrix</u> Air	Collection 06-Dec			Receive 09-Dec-	_	
0/1000220-09		Method Ref. Air method TICs	Prepared 11-Dec-06		Analyzed 11-Dec-06		<u>Analyst</u> WB		
CAS No.	Analyte(s)	Result	*RDL/Units	RT	Q	Dilution	Batch	Flag	
Air Quality A	nalyses								
Tentatively Ide	entified Compounds in Air	Prepared by me	thod General Air	Pren					
106-97-8		3,51	ppbv	5.35	72	1	6120906	TIC, J	
108-87-2	Cyclohexane, methyl-	1.94	ppbv	13.93	96	1	**	TIC, J	
124-18-5	Decane	3,34	ppbv	22.04	97	1	"	TIC, J	
	Decane, 2,2,8-trimethyl-	2.51	ppbv	25,20	72	1	11	TIC, J	
13151-34-3	Decane, 3-methyl-	1.83	ppbv	24.99	72	1	**	TIC, J	
112-40-3	Dodecane	2.84	ppbv	26.78	96	1	11	TIC, J	
75-37-6	Ethane, 1,1-difluoro-	6.18	ppbv	4.58	90	1	н	TIC, J	
	Heptadecane	1.63	ppbv	23.22	64	1	н	TIC, J	
	Hexane, 3,3-dimethyl-	3.39	ppbv	24.63	78	1	и	TIC, J	
75-28-5	Isobutane	4.79	ppbv	5.05	50	1	n	TIC, J	
91-20-3	Naphthalene	1.66	ppbv	26.61	90	1	n	TIC, J	
	Octane, 3,6-dimethyl-	6.47	ppbv	26.24	78	1	u	TIC, J	
1120-21-4	•	6.27	ppbv	24.50	90	1		TIC, J	
7045-71-8	Undecane, 2-methyl-	1.83	ppbv	25,99	90	1	11	TIC, J	
EPA TO-15	,		- ·	. D				110,0	
115-07-1	Propens	BRL	thod General Air	rPrep		1	11	*1	
	Dichlorodifluoromethane (Freon12)		0.500 ppbv			•	п	U	
	Chloromethane	0.490	0.500 ppbv			. 1	н	J	
		0.470	0.500 ppbv			•	11	J 	
	1,2-Dichlorotetrafluoroethane (Freon 1	•	0.500 ppbv			1	н	U	
	Vinyl chloride	BRL	0.500 ppbv			1		U	
	1,3-Butadiene Bromomethane	BRL	0.500 ppbv			1		U	
	Chloroethane	BRL	0.500 ppbv			1	 H	U	
		BRL	0.500 ppbv			1		U	
	Acetone Trickless fluore models (F) 11)	11.0	0.500 ppbv	•		1			
	Trichlorofluoromethane (Freon 11)	BRL	0.500 ppbv			1		U 	,
64-17-5		369	0.500 ppbv			1	"	E J	<i>L</i>
	1,1-Dichloroethene	BRL	0.500 ppbv			1		U	
	Methylene chloride	0.370	0.500 ppbv			1	"	J	
	1,1,2-Trichlorotrifluoroethane (Freon 1	•	0.500 ppbv			I ,	"	U	
	Carbon disulfide	BRL	0.500 ppbv			1	" "	U	
	trans-1,2-Dichloroethene	BRL	0.500 ppbv			1	" "	U	
	I,1-Dichloroethane	BRL	0.500 ppbv			1		U	
	Methyl tert-butyl ether	BRL	0.500 ppbv			1	"	U	
	Isopropyl alcohol	14.5	0.500 ppbv			1	" "		
	2-Butanone (MEK)	1.70	0.500 ppbv			1	"		
	cis-1,2-Dichloroethene	BRL	0.500 ppbv			. 1	"	U	
110-54-3		BRL	0.500 ppbv			1		U	
	Ethyl acetate	BRL	0.500 ppbv			1	"	U	
	Chloroform	BRL	0.500 ppbv			1		U	
1 ロコーブブーグ	Tetrahydrofuran	BRL	0.500 ppbv			ı		U	$\Lambda \lambda$

BRL

0.500 ppbv

age 18 of 36

107-06-2 1,2-Dichloroethane

Sample Identification		Client Project #	<u>Matrix</u>	Collection			Receive	<u>:d</u>
RES#12-12-1	20606	5555113	Air	06-Dec-	06-Dec-06 11:34			06
SA55328-09		Method Ref. Prepared Prepared 11-Dec-06			Analyzed 11-Dec-06			<u>st</u>
CAS No.	Analyte(s)	Result	*RDL/Units	RT	Q	Dilution	Batch	Flag
Air Quality A	Analyses							***************************************
EPA TO-15		Prepared by me	thod General Air	Prep				
71-55-6	1,1,1-Trichloroethane	BRL	0.500 ppbv			1	6120906	U
71-43-2	Benzene	0.820	0.500 ppby			1	ų.	
56-23-5	Carbon tetrachloride	BRL	0.500 ppbv			1	"	U
110-82-7	Cyclohexane	0.420	0.500 ppbv			1	ŧı	J
78-87-5	1,2-Dichloropropane	BRL	0.500 ppbv			1	u	U
75-27-4	Bromodichloromethane	BRL	0.500 ppbv			I	u	U
79-01-6	Trichloroethene	BRL	0.500 ppbv			1	ti	U
142-82-5	n-Heptane	1.72	0.500 ppbv			1	u	
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL	0.500 ppbv			1	ti	U
10061-01-5	cis-1,3-Dichloropropene	BRL	0.500 ppbv			1	ti	U
10061-02-6	trans-1,3-Dichloropropene	BRL	0.500 ppbv			1	u	U
79-00-5	1,1,2-Trichloroethane	BRL	0.500 ppbv			ı	11	U
108-88-3	Toluene	8.16	0.500 ppbv	•		I	ti	
591-78-6	2-Hexanone (MBK)	BRL	0.500 ppbv			1	11	U
124-48-1	Dibromochloromethane	BRL	0.500 ppbv			1	**	U
106-93-4	1,2-Dibromoethane (EDB)	BRL	0.500 ppbv			1	**	U
127-18-4	Tetrachloroethene	BRL	0.500 ppbv			1	U	U
108-90-7	Chlorobenzene	BRL	0.500 ppbv			1	ti.	U
100-41-4	Ethylbenzene	0.430	0.500 ppbv			1	u	J
1330-20-7	m,p-Xylene	1.68	0.500 ppbv			1	11	
75-25-2	Bromoform	BRL	0.500 ppbv			1	#1	U
100-42-5	Styrene	BRL	0.500 ppbv			1	11	U
95-47-6	o-Xylene	0.930	0.500 ppbv			1	ti	
70 24 5	110000							

BRL

BRL

BRL

0.790

BRL

BRL

BRL

BRL

BRL

BRL

108

0.500 ppbv

75-125 %

U

U

U

U

U

U

U

U

U

79-34-5 1,1,2,2-Tetrachloroethane

108-67-8 1,3,5-Trimethylbenzene

95-63-6 1,2,4-Trimethylbenzene

541-73-1 1,3-Dichlorobenzene

106-46-7 1,4-Dichlorobenzene

95-50-1 1,2-Dichlorobenzene

120-82-1 1,2,4-Trichlorobenzene

87-68-3 Hexachlorobutadiene

460-00-4 Surrogate: 4-Bromofluorobenzene

622-96-8 4-Ethyltoluene

100-44-7 Benzyl chloride

Sample Identification RES#12-I1-120606 SA55328-10 Client Project # 5555113

Matrix Air Collection Date/Time 07-Dec-06 11:36 Received 09-Dec-06

Method Ref. Air method TICs Prepared 11-Dec-06 Analyzed 12-Dec-06 Analyst WB

							WD	
CAS No.	Analyte(s)	Result	*RDL/Units	RT	Q	Dilution	Batch	Flag
Air Quality A	analyses							
Tentatively Ide	entified Compounds in Air	Prepared by me	ethod General Air I	Prep				
	.alphaPinene	6.37	ppbv	20.53	97	1	6120906	TIC, J
611-14-3	Benzene, 1-ethyl-2-methyl-	2.45	ppbv	20.92	94	1	P	TIC, J
106-97-8	Butane	4.00	ppbv	5.35	80	1	n	TIC, J
108-87-2	Cyclohexane, methyl-	18.4	ppbv	13.93	96	1	n	TIC, J
124-18-5	Decane	7.14	ppbv	22.04	96	1	**	TIC, J
75-37-6	Ethane, 1,1-difluoro-	2.81	ppbv	4.58	91	1	n	TIC, J
	Heptane, 4-ethyl-2,2,6,6-te	4.58	ppbv	23.80	72	1	и.	TIC, J
591-76-4	Hexane, 2-methyl-	3.59	ppbv	11.97	95	1	н	TIC, J
589-34-4	Hexane, 3-methyl-	5.68	ppbv	12.27	91	1	и	TIC, J
75-28-5	Isobutane	5.04	ppbv	5.05	59	1	H	TIC, J
138-86-3	Limonene	3.40	ppbv	22.89	91	1	н	TIC, J
111-84-2	Nonane	2.74	ppbv	19.35	91	1	и	TIC, J
	Octane, 3,6-dimethyl-	5.94	ppbv	26.24	78	1	n	TIC, J
1120-21-4	Undecane	7.55	ppbv	24.50	93	1	9	TIC, J
EPA TO-15		Prepared by me	ethod General Air I	^o ren				
115-07-1	Propene	BRL	0.500 ppbv			1	ıı	U
	Dichlorodifluoromethane (Freon12)	0.480	0.500 ppbv			1	н	J
	Chloromethane	0.460	0.500 ppbv			1	11	J
76-14-2	1,2-Dichlorotetrafluoroethane (Freon 114		0.500 ppbv			1	и	U
	Vinyl chloride	BRL	0.500 ppbv			1	н	บ
	1,3-Butadiene	BRL	0.500 ppbv			1	"	U
	Bromomethane	BRL	0.500 ppbv			1	и	U
75-00-3	Chloroethane	BRL	0.500 ppbv			1	н	U
67-64-1	Acetone	14.5	0.500 ppbv			1	н	Ü
75-69-4	Trichlorofluoromethane (Freon 11)	BRL	0.500 ppby			1	11	U
	Ethanol	162	0.500 ppbv			1	11	· P
	1,1-Dichloroethene	BRL	0.500 ppby			1	11	n Z
	Methylene chloride	0.690	0.500 ppbv			1	н	Ü
	1,1,2-Trichlorotrifluoroethane (Freon 113		0.500 ppbv			1	11	Ü
	Carbon disulfide	BRL	0.500 ppbv			1	11	U
	trans-1,2-Dichloroethene	BRL	0.500 ppbv			1	11	U
	1,1-Dichloroethane	BRL	0.500 ppbv			1		บ
	Methyl tert-butyl ether	BRL	0.500 ppbv			1	"	U
	Isopropyl alcohol	10.2	0.500 ppbv			1		
	2-Butanone (MEK)	9.62	0.500 ppbv			1	ıı	
	cis-1,2-Dichloroethene	BRL	0.500 ppbv			1	11	U
110-54-3		2.36	0.500 ppbv			1		U
	Ethyl acetate	BRL	0.500 ppbv			1	17	U
	Chloroform	BRL	0.500 ppbv			1	n	บ
	Tetrahydrofuran	2.17	0.500 ppbv			1	11	U
	1,2-Dichloroethane	BRL	0.500 ppbv			ı I	11	U

Ship Rage (10)36

Sample Identification
RES#12-I1-120606
SA55328-10

Client Project # 5555113

Matrix Air Collection Date/Time 07-Dec-06 11:36 Received 09-Dec-06

Method Ref. EPA TO-15 Prepared

Analyzed 12-Dec-06

CAS No.	Analyte(s)	Result	*RDL/Units	RT	Q	Dilution	Batch	Flag
Air Quality A	Analyses							
EPA TO-15		Prepared by m	ethod General Air Pre	p p				
71-55-6	1,1,1-Trichloroethane	BRL	0.500 ppbv	•		1	6120906	U
71-43-2	Benzene	1.25	0.500 ppbv			1	*1	
56-23-5	Carbon tetrachloride	BRL	0.500 ppbv			1	*1	U
110-82-7	Cyclohexane	3.91	0.500 ppbv			1	11	
78-87-5	1,2-Dichloropropane	BRL	0.500 ppbv			1	ŧI	U
75-27-4	Bromodichloromethane	BRL	0.500 ppbv			1	и	U
79-01-6	Trichloroethene	BRL	0.500 ppbv			1	II	U
142-82-5	n-Heptane	15.2	0.500 ppbv			1	11	
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL	0.500 ppbv			1	п	U
10061-01-5	cis-1,3-Dichloropropene	BRL	0.500 ppbv			1	II	U
10061-02-6	trans-1,3-Dichloropropene	BRL	0.500 ppbv			ī	u	U
79-00-5	1,1,2-Trichloroethane	BRL	0.500 ppbv			1	u	U
108-88-3	Toluene	38.9	0.500 ppbv			1	u	
591-78-6	2-Hexanone (MBK)	BRL	0.500 ppbv			1	II	U
124-48-1	Dibromochloromethane	BRL	0.500 ppbv			1	11	U
106-93-4	1,2-Dibromoethane (EDB)	BRL	0.500 ppbv			I	. 18	U
127-18-4	Tetrachloroethene	BRL	0.500 ppbv			1	И	U
108-90-7	Chlorobenzene	BRL	0.500 ppbv			1	u *	U
100-41-4	Ethylbenzene	1.01	0.500 ppbv			1 -		
1330-20-7	m,p-Xylene	3.81	0.500 ppbv			1	11	
75-25-2	Bromoform	BRL	0.500 ppbv			1	It	U
100-42-5	Styrene	BRL	0.500 ppbv			1	и	U
95-47-6	o-Xylene	1.93	0.500 ppbv			1	II	
79-34-5	1,1,2,2-Tetrachloroethane	BRL	0.500 ppbv			1	11	U
108-67-8	1,3,5-Trimethylbenzene	0.710	0.500 ppbv			1	n	
622-96-8	4-Ethyltoluene	0.660	0.500 ppbv			1	ti	
95-63-6	1,2,4-Trimethylbenzene	2.48	0.500 ppbv			I	Ħ	
541-73-1	1,3-Dichlorobenzene	BRL	0.500 ppbv			1	Œ	U
100-44-7	Benzyl chloride	BRL	0.500 ppbv			i	11	U
106-46-7	1,4-Dichlorobenzene	BRL	0.500 ppbv			1	n	U
95-50-1	1,2-Dichlorobenzene	BRL	0.500 ppbv			i	u	U
120-82-1	1,2,4-Trichlorobenzene	BRL	0.500 ppbv			1	u .	U
87-68-3	Hexachlorobutadiene	BRL	0.500 ppbv			1	U	U
460-00-4	Surrogate: 4-Bromofluorobenzene	108	75-125 %				II	

Sample Identification Client Project # Matrix Collection Date/Time Received RES#12-SS-120606 07-Dec-06 11:59 09-Dec-06 5555113 Air SA55328-11 Method Ref. Prepared Analyzed <u>Analyst</u> Air method TICs 11-Dec-06 12-Dec-06 WB CAS No. Analyte(s) *RDL/Units RTResult Q Dilution Batch Flag Air Quality Analyses Tentatively Identified Compounds in Air Prepared by method General Air Prep 611-14-3 Benzene, 1-ethyl-2-methyl-0.780 20.92 94 6120906 TIC, J ppbv 108-87-2 Cyclohexane, methyl-1 6.96 13.93 96 ppbv TIC, J Cyclopentane, 1,2-dimethyl-... 0.790 12.76 90 1 ppbv TIC, J 124-18-5 Decane 22.04 91 1.84 ppby TIC, J Decane, 2,2-dimethyl-2.02 22.79 78 ppbv TIC, J Dodecane, 2,2,11,11-tetrame... 23.02 QΛ 1.06 ppbv TIC, J 3891-98-3 Dodecane, 2,6,10-trimethyl-0.980 23.59 ppbv 72 TIC, J 591-76-4 Hexane, 2-methyl-1.43 ppbv 11.96 95 TIC, J 589-34-4 Hexane, 3-methyl-2.19 12.27 94 ppbv TIC, J Nonane, 3-methyl-5-propyl-6.44 23 22 78 ppbv TIC, J 1120-21-4 Undecane 1.77 24.50 87 ppbv TIC, J EPA TO-15 Prepared by method General Air Prep 115-07-1 Propene BRL 0.500 ppbv U 75-71-8 Dichlorodifluoromethane (Freon12) 0.500 ppbv 0.490 J 74-87-3 Chloromethane 0.490 0.500 ppbv J 76-14-2 1,2-Dichlorotetrafluoroethane (Freon 114) BRL 0.500 ppbv U 75-01-4 Vinyl chloride BRL 0.500 ppbv U 106-99-0 1,3-Butadiene BRL 0.500 ppbv U 74-83-9 Bromomethane BRL 0.500 ppbv IJ 75-00-3 Chloroethane BRL 0.500 ppbv U 67-64-1 Acetone 4.87 0.500 ppbv 75-69-4 Trichlorofluoromethane (Freon 11) BRL 0.500 ppbv U 64-17-5 Ethanol 15.6 0.500 ppbv 75-35-4 1,1-Dichloroethene BRL 0.500 ppbv U 75-09-2 Methylene chloride BRL 0.500 ppbv U 76-13-1 1,1,2-Trichlorotrifluoroethane (Freon 113) BRL 0.500 ppbv U 75-15-0 Carbon disulfide BRL 0.500 ppbv H 156-60-5 trans-1,2-Dichloroethene BRL 0.500 ppbv U 75-34-3 1,1-Dichloroethane BRL 0.500 ppbv U 1634-04-4 Methyl tert-butyl ether BRL 0.500 ppbv U 67-63-0 Isopropyl alcohol 0.500 ppbv 0.900 78-93-3 2-Butanone (MEK) 1.87 0.500 ppbv 156-59-2 cis-1,2-Dichloroethene BRL 0.500 ppbv U 110-54-3 Hexane BRL 0.500 ppbv U 141-78-6 Ethyl acetate BRL 0.500 ppbv U 67-66-3 Chloroform BRL 0.500 ppbv U

0.680

BRL

BRL

0.590

BRL

0.500 ppbv

0.500 ppbv

0.500 ppbv

0.500 ppbv

0.500 ppbv

U

109-99-9 Tetrahydrofuran

71-43-2 Benzene

107-06-2 1,2-Dichloroethane

71-55-6 1,1,1-Trichloroethane

56-23-5 Carbon tetrachloride

Sample Identification RES#12-SS-120606 SA55328-11		2-SS-120606 5555113		Collection D 07-Dec-06 Analyz 12-Dec	5 11:59 zed	<u>e</u>	Received 09-Dec-06 <u>Analyst</u> WB	
CAS No.	Analyte(s)	Result	*RDL/Units	RT	Q i	Dilution	Batch	Flag
Air Quality Analyses								
EPA TO-15		Prepared by me	thod General Air	Prep				
110-82-7	Cyclohexane	1,48	0.500 ppbv			1 '	6120906	
78-87-5	1,2-Dichloropropane	BRL	0.500 ppbv			1	11	U
75-27-4	Bromodichloromethane	BRL	0.500 ppbv			1	#	U
79-01-6	Trichloroethene	BRL	0.500 ppbv			1	n	U
142-82-5	n-Heptane	5.92	0.500 ppbv			1	n	
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL	0.500 ppbv			1	"	U
10061-01-5	cis-1,3-Dichloropropene	BRL	0.500 ppby			1	н	U
10061-02-6	trans-1,3-Dichloropropene	BRL	0.500 ppbv			1	и	U
79-00-5	1,1,2-Trichloroethane	BRL	0.500 ppbv			1	н	U
108-88-3	Toluene	14.3	0.500 ppbv			1	11	
591-78-6	2-Hexanone (MBK)	BRL	0.500 ppbv			1	11	U
124-48-1	Dibromochloromethane	BRL	0.500 ppbv			1	11	U
106-93-4	1,2-Dibromoethane (EDB)	BRL	0.500 ppbv			1	tı	U
127-18-4	Tetrachloroethene	BRL	0.500 ppbv			1	u	U
108-90-7	Chlorobenzene	BRL	0.500 ppbv			1	н	U
100-41-4	Ethylbenzene	0.420	0.500 ppbv			1	ıı	J
1330-20-7	m,p-Xylene	1.44	0.500 ppbv			1	и	
75-25-2	Bromoform	BRL	0.500 ppbv			1	н	U
100-42-5	Styrene	BRL	0.500 ppbv			1	11	U
95-47 - 6	o-Xylene	0.600	0.500 ppbv			1	11	
79-34-5	1,1,2,2-Tetrachloroethane	BRL	0.500 ppbv			1	ıı	υ
108-67-8	1,3,5-Trimethylbenzene	BRL	0.500 ppbv			. 1	II	U
622-96-8	4-Ethyltoluene	BRL	0.500 ppbv			1	II .	U
95-63-6	1,2,4-Trimethylbenzene	0.910	0.500 ppbv			1	n	
	1,3-Dichlorobenzene	BRL	0.500 ppbv			1	n	U
100-44-7	Benzyl chloride	BRL	0.500 ppbv			1	11	U
106-46-7	1,4-Dichlorobenzene	BRL	0.500 ppbv			1	11	U
95-50-1	1,2-Dichlorobenzene	BRL	0.500 ppbv			1	It	U
120-82-1	1,2,4-Trichlorobenzene	BRL	0.500 ppbv			1	n	บ
87-68-3	Hexachlorobutadiene	BRL	0.500 ppbv			1.	n	U
460.00.4	C							-

108

75-125 %

460-00-4 Surrogate: 4-Bromofluorobenzene



Data Validation

Environmental Chemistry

Lab and Field Audits

Sampling Plans

January 5, 2006

Ms. Ilkay Cam-Spanos
Langan Engineering and Environmental
Services, Inc.
21 Penn Plaza
360 West 31st Street, Suite 900
New York, NY 10001-27279

Re:

Data Validation Report for SA35001

Atlas Park Project Glendale, New York

Dear Ms. Cam-Spanos:

The data usability summary report (DUSR), data validation summaries, and flagged data are attached to this letter for the Atlas Park project, Glendale, New York, for Spectrum Analytical Inc., sample delivery group (SDG) SA35001.

The data package contained the results for two soil samples. The "not detected" result for 2-butanone was qualified as "R" in sample SWVAULT-B1, and the "not detected" results for silver were qualified as "R" in both samples. The remainder of the data is acceptable and usable, with some results that are qualified as estimated (J).

As explained in the DUSR, the 2-butanone result that was flagged "R" was associated with initial and continuing calibrations that were method compliant, and the laboratory instruments responded to 2-butanone with "relative response factors" that were greater than 0.10. The 2-butanone data is qualified as "R" based solely on the data validation criteria. The data may be determined to be acceptable to the user based on the instrument response(s), the compliant calibrations, and/or other project-specific information that is not available to the data validator.

The attached lists are definitions of data validation acronyms and data validation qualifiers to assist you in interpreting the reviews. If you have any questions concerning these reports, please contact us at (518) 348-6995. Thank you for the opportunity to assist Langan Engineering and Environmental Services, Inc.

Sincerely,

Alpha Environmental Consultants, Inc.

Jean M. Neubeck

President

JMN:bms Attachment and enclosures

Z:\ALPHA E\DATAVAL PROJECTS\2005 PROJECTS\05505-GLENDALE\CAM-SPANOS LOT 1-3-06.DOC

Data Validation Qualifiers Used in the QA/QC Reviews for USEPA Region II

- U = Not detected. The associated number indicates the approximate sample concentration necessary to be detected significantly greater than the level of the highest associated blank.
- R = Unreliable result; data is rejected or unusable. Analyte may or may not be present in the sample. Supporting data or information is necessary to confirm the result.
- N = Tentative identification. Analyte is considered present. Special methods may be needed to confirm its presence or absence during future sampling efforts.
- J = Analyte is present. Reported value may be associated with a higher level of uncertainty than is normally expected with the analytical method.
- UJ = Not detected, quantitation limit may be inaccurate or imprecise.

Note: These qualifiers are used for data validation purposes. The data validation qualifiers may differ from the qualifiers that the laboratory assigns to the data. Refer to the laboratory analytical report for the definitions of the laboratory qualifiers.

Data Validation Acronyms

AA Atomic absorption, flame technique

BHC Hexachlorocyclohexane BFB Bromofluorobenzene

CCB Continuing calibration blank
CCC Calibration check compound
CCV Continuing calibration verification

CN Cyanide

CRDL Contract required detection limit
CRQL Contract required quantitation limit
CVAA Atomic adsorption, cold vapor technique

DCAA 2,4-Dichlophenylacetic acid

DCB Decachlorobiphenyl

DFTPP Decafluorotriphenyl phosphine ECD Electron capture detector

FAA Atomic absorption, furnace technique

FID Flame ionization detector FNP 1-Fluoronaphthalene GC Gas chromatography

GC/MS Gas chromatography/mass spectrometry

GPC Gel permeation chromatography

ICB Initial calibration blank

ICP Inductively coupled plasma-atomic emission spectrometer

ICV Initial calibration verification IDL Instrument detection limit

IS Internal standard

LCS Laboratory control sample

LCS/LCSD Laboratory control sample/laboratory control sample duplicate

MSA Method of standard additions
MS/MSD Matrix spike/matrix spike dun

MS/MSD Matrix spike/matrix spike duplicate
PID Photo ionization detector
PCB Polychlorinated biphenyl

QA Quality assurance
QC Quality control
RF Response factor

RPD Relative percent difference RRF Relative response factor

RRF(number) Relative response factor at concentration of the number following

RT Retention time

RRT Relative retention time SDG Sample delivery group

SPCC System performance check compound

TCX Tetrachloro-m-xylene %D Percent difference %R Percent recovery

%RSD Percent relative standard deviation



Data Validation

Environmental Chemistry

Lab and Field Audits

Sampling Plans

Data Usability Summary Report for Spectrum Analytical, Inc. Work Order SA36885

30 Soil Samples Collected November 5-8, 2005

Prepared by: Donald Anné December 27, 2005

The data packages contain the documentation required by NYSDEC ASP. The proper chain of custody procedures were followed by the samplers. All information appeared legible and complete. The data packs contained the results of TCL volatile analyses for 29 soil samples and the results for total lead analyses for 7 soil samples.

The overall performances of the analyses are acceptable. Spectrum Analytical, Inc. did fulfill the requirements of the analytical methods.

The data are mostly acceptable with some issues that are identified in the accompanying data validation reviews. The following data were flagged:

- The "not detected" results for acetone were flagged as "unusable" (R) in 16 soil samples listed on the attached table, because the response factors were below the allowable minimum in the associated initial and/or continuing calibrations.
- The "not detected" results for 2-butanone were flagged as "unusable" (R) in 20 soil samples listed on the attached table, because the response factors were below the allowable minimum in the associated initial and continuing calibrations.
- The results for acetone were flagged as "estimated" (J) in 13 soil samples listed in the attached table, because the response factors were below the allowable minimum in the associated continuing calibration.
- The results for 2-butanone were flagged as "estimates" (J) in 5 soil samples listed in the attached table, because the response factors were below the allowable minimum in the associated initial and continuing calibrations.

• The result for tetrachloroethene was flagged as "estimated" (J) in sample B8-5-9-9.5-110505 because the %D was above the allowable maximum in the associated continuing calibration.

All data that are not flagged rejected (R) are considered usable, with estimated (J) data associated with a higher level of quantitative uncertainty. Detailed information on data quality is included in the data validation reviews.

The "not detected" data that were qualified as "R" were associated with method-compliant calibrations, and the response factors for the two affected compounds were greater than 0.010. It is this reviewer's opinion that although the validation guidelines recommend that the data should be considered unusable, the "R" data may be acceptable to the user, based on the preceding facts and additional information that is not contained in the validation criteria. The user is cautioned that there is a higher degree of analytical uncertainty associated with the R-flagged data, because the relative response factors for those compounds were less than 0.050.

TABLE

DUSR SDG 36885

Summary of Flagged Data Due to Initial and/or Continuing Calibrations

Laboratory ID	Client Sample ID	acetone	2-butanone
SA36885-01	B8-2-9-9.5-110505	. R	
SA36885-02	B8-3-14.5-15-110505	<u> </u>	R
SA36885-03	·B8-4-8.5-9-110505	R	R
SA36885-04	B8-5-9-9.5-110505	J	
SA36885-05	B8-6-9-10-110605	R	R
SA36885-06	B8-6-14-15-110605	R	R
SA36885-07	B8-7-14-14.5-110505	Ĵ	<u> </u>
SA36885-08	B8-8-9-9.5-110505	R	R
SA36885-09	B8-9-8,5-9-110505	R	
SA36885-10	B8-10-14.5-15-110505	R ·	R
SA36885-11	B8-11-8.5-9-110505	ত	R
SA36885-12	B8-13-14-15-110605	R	R
SA36885-13	B8-18-11-12-110605	3	R
SA36885-14	B8-19-10-11-110605	Ţ	R
SA36885-15	B3-11-14.5-15-110405	Ř	R
SA36885-16	B3-14-11.5-12-110505	7	R
SA36885-17	B3-15-14.5-15-110505	R	R
SA36885-18	B3-16-8.5-9-110505	Ŕ	R
SA36885-19	B3-17-9-9.5-110505	J	R
SA36885-20	B3-17-14.5-15-110405	R	R
SA36885-21	B3-21-14.5-15-110405	R	R
SA36885-22	B3-24-14,5-15-110405		R
SA36885-23	B7-1-9.5-10-110805	R	•
SA36885-24	B7-1-9.5-10-110805		
SA36885-25	B7-2-11-11.5-110805	7	
SA36885-26	B7-3-4-4.5-110705	<u> </u>	J
SA36885-27	B7-4-13-13.5-110705	J	J
SA36885-28	B7-6-13-13.5-110805	.T	Ţ
SA36885-29	B7-7-4-4.5-110705	Ţ	Ť
SA36885-30	B7-8-12.5-13-110705	Ĵ	Ř



Data Validation

Environmental Chemistry

Lab and Field Audits

Sampling Plans

QA/QC Review of Volatiles Data for Spectrum Analytical, Inc. Work Order SA36885 29 Soil Samples Collected November 5-8, 2005

Prepared by: Donald Anné December 27, 2005

Holding Times: Samples were analyzed within NYSDEC holding times.

GC/MS Tuning and Mass Calibration: The BFB tuning criteria were within control limits.

Initial Calibration: The SPCCs and CCCs were within control limits for method 8260B.

The %RSDs for target compounds were below the allowable maximum (30%), as required. The average RRF for acetone (0.018) was below the allowable minimum (0.050) for HPV1 on 10-18-05, but was greater than 0.010. The average RRF for 2-butanone (0.033) was below the allowable minimum (0.050) for HPV6 on 11-11-05, but was greater than 0.010. Positive results for these two compounds should be considered estimates (J) and negative results unusable (R) in associated samples.

Continuing Calibration: The SPCCs and CCCs were within control limits for method 8260B.

The %Ds for bromoform (36.8%) and tetrachloroethene (28.0%) were above the allowable maximum (25%) on 11-11-05 (ccc1111a.D). The %Ds for chloromethane (35.5%), dibromochloromethane (26.2%), 4-methyl-2-pentanone (29.9%), and 1,2,3-trichloropropane (26.2%) were above the allowable maximum (25%) on 11-11-05 (LCS1111C.D). The %D for dibromochloromethane (31.0%) was above the allowable maximum (25%) on 11-12-05 (LCS111C.D). Positive results for these compounds should be considered estimates in associated samples.

The RRF50 for acetone (0.016) was below the allowable minimum (0.050) on 11-11-05 (ccc1111a.D), but was greater than 0.010. The RRF50 for acetone (0.017) was below the allowable minimum (0.050) on 11-14-05 (ccc1114b.D), but was greater than 0.010. The RRF50s for acetone (0.047) and 2-butanone (0.043) were below the allowable minimum (0.050) on 11-11-05 (LCS1111C.D), but were greater than 0.010. The RRF50s for acetone (0.032) and 2-butanone (0.036) were below the allowable minimum (0.050) on 11-12-05 (CCV1111X.D), but were greater than 0.010. Positive results for these two compounds should be considered estimates (J) and negative results unusable (R) in associated samples.

Page 1 of 2

Blanks: The analysis of the method blank reported target compounds as not detected.

<u>Internal Standard Area Summary</u>: The internal standard areas and retention times were within control limits.

<u>Surrogate Recovery</u>: The surrogate recoveries were within control limits for the soil samples.

Matrix Spike/Matrix Spike Duplicate: The relative percent differences were below the allowable maximums and the percent recoveries were within control limits for MS/MSD samples SA36929-01 and B8-2-9-9.5-110505.

Laboratory Control Sample: The relative percent differences (RPDs) for target compounds were below the allowable maximums, but the percent recoveries (%Rs) for chloromethane and vinyl chloride were above QC limits for LCS/LCSD sample 5110599-BS1. The RPDs for target compounds were below the allowable maximums, but the %R for bromoform was above QC limits for LCS/LCSD sample 5110758-BS1. The RPDs for target compounds were below the allowable maximums, but the %Rs for carbon tetrachloride and chloromethane were above QC limits for LCS/LCSD sample 5110854-BS1. The %R for chloromethane was above QC limits for LCS sample 5110601-BS1. Positive results for these compounds should be considered estimates (J) in associated samples.

<u>Compound ID</u>: Checked compounds were within GC quantitation limits. The mass spectra for detected compounds contained the primary and secondary ions, as outlined in the method.



Data Validation

Environmental Chemistry

Lab and Field Audits

Sampling Plans

QA/QC Review of Lead Data for Spectrum Analytical, Inc. Work Order SA36885 7 Soil Samples Collected November 7 and 8, 2005

Prepared by: Donald Anné December 27, 2005

Holding Times: Samples were analyzed within the NYSDEC holding times.

<u>Initial and Continuing Calibration Verification</u>: The percent recoveries for lead were within control limits (90-110%).

Blanks: The analyses for initial and continuing calibration blanks reported lead as not detected.

<u>ICP Interference Check Sample</u>: The percent recoveries for lead were within control limits (80-120%).

<u>Spike Sample Recovery</u>: The percent recoveries for lead (90.0% and 89.4%) were within control limits (75-125%) for MS/MSD sample B7-4-13-13.5-110705.

<u>Duplicates</u>: The relative percent difference for lead (2.67%) was below the allowable maximum (35%) for duplicate sample B7-3-4-4.5-110705, as required.

<u>Laboratory Control Sample</u>: The percent recoveries for lead (102% and 101%) were within QC limits for samples 5110612-SRM1 and 5510612-SRM2.

<u>ICP Serial Dilution</u>: The serial dilution data was not provided; therefore, %Ds could not be evaluated.

Percent Solids: The percent solids for soil samples were greater than 50%, as required.

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<u>Matrix</u> Soil

Collection Date/Time 05-Nov-05 10:45 Received 08-Nov-05

Method Ref. VOC Prepared 08-Nov-05

Analyzed 08-Nov-05

CAS No.	Analyte(s)	Result	*RDL/Units	RT	Q.	Dilution	Batch	Flag
Volatile Org	anic Compounds		e de la companya de La companya de la co		***************************************	***		
	VOC Extraction	Lab extracted	N/A			. 1	5110533	U
Volatile Orga	unic Compounds	Prepared by meth	od SW846 5030 S	Soil (hìgh lev	ďα		े हैं। अस्तिकार	
	1,1,2-Trichlorotrifluoroethane (Freon 113)	BRL	65.0 μg/kg dry	our (mgm iov	01)	50	5110854	°¥0C8 U
	Acetone	BRL	1300 μg/kg dry		R	50	11	บ
	Benzene	BRL	65.0 μg/kg dry		· ·	50	ц	บ
	2-Butanone (MEK)	BRL	650 μg/kg dry			50	, h	ับ
	Carbon disulfide	BRL	325 μg/kg dry			50	и	U
56-23-5	Carbon tetrachloride	BRL	65.0 μg/kg dry			50	10	U.
108-90-7	Chlorobenzene	BRL	65.0 μg/kg dry			50	н	บ
75-00-3	Chloroethane	BRL .	130 μg/kg dry	•		50	11	U
67-66-3	Chloroform	BRL	65.0 μg/kg dry			50	n	บ
124-48-1	Dibromochloromethane	BRL	65.0 μg/kg dry	•		50	**	U
95-50-1	1,2-Dichlorobenzene	BRL	65.0 μg/kg dry			50	11	U
541-73-1	1,3-Dichlorobenzene	BRL	65.0 μg/kg dry			50) r	บ
106-46-7	I,4-Dichlorobenzene	BRL	65.0 μg/kg dry			50	ļī	U
75-34-3	1,1-Dichloroethane	BRL	65.0 μg/kg dry			50	It	U
107-06-2	1,2-Dichloroethane	BRL	65.0 μg/kg dry	•		50	17	บ
75-35 - 4	1,1-Dichloroethene	BRL	65.0 μg/kg dry			50	ıŧ	U
156-60-5	trans-1,2-Dichloroethene	BRL	65.0 μg/kg dry			50	It	U
142-28-9	1,3-Dichloropropane	BRL .	65.0 μg/kg dry			50	ıı	U
100-41-4	Ethylbenzene	BRL	65.0 μg/kg dry			50		U
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL	650 μg/kg dry			50	11	· U
75-09-2	Methylene chloride	BRL	650 μg/kg dry			50	4	U
79-34-5	1,1,2,2-Tetrachloroethane	BRL	65.0 μg/kg dry			50	11	U
127-18-4	Tetrachloroethene	BRL	65.0 μg/kg dry			50	U	U
108-88-3	Toluene	BRL	65.0 μg/kg dry			50	n	U
	1,2,4-Trichlorobenzene	BRL	65.0 μg/kg dry			50	ır	U
71-55-6	1,1,1-Trichloroethane	BRL	65.0 μg/kg dry			50	If	U
79-01-6	Trichloroethene	BRL	65.0 μg/kg dry			50	п	U
96-18-4	1,2,3-Trichloropropane	BRL	65.0 µg/kg dry			50	. 11	U
	Vinyl chloride	BRL	65.0 μg/kg đry	2.3		50	11	U
	m,p-Xylene	BRL	130 μg/kg dry			50	71	U
٠.	o-Xylene	BRL	65.0 μg/kg dry			50	11	U
	Surrogate: 4-Bromofluorobenzene	98.4	70-130 %				н	
	Surrogate: Toluene-d8	106	70-130 %				ıı	
	Surrogate: 1,2-Dichloroethane-d4	105	70-130 %				11.	
1868-53-7	Surrogate: Dibromofluoromethane	102	70-I30 %				, н	

<u>Sample Identification</u> **B8-3-14.5-15-110505**SA36885-02

Client Project # 5555113

<u>Matrix</u> Soil Collection Date/Time 05-Nov-05 11:00 Received 08-Nov-05

Method Ref. VOC Prepared 08-Nov-05

Analyzed 08-Nov-05

CAS No.	Analyte(s)	Result	*RDL/Units	RT	Q. Q	Dilution	Batch	Flag
Volatile Orga	anic Compounds	<u> </u>		-			, ,	
	VOC Extraction	Lab extracted	N/A			1	5110533	U
Volatile Orga	inic Compounds	Prepared by meth	od SW846 5035	A Soil (lox	v level)			
	1,1,2-Trichlorotrifluoroethane (Freon 113)	BRL	4.9 μg/kg dry	-		1	5110601	U
	Acetone	BRL	97.1 μg/kg dry			1		υ
	Benzene	BRL	4.9 μg/kg dry			1	U	Ü
78-93-3	2-Butanone (MEK)	BRL	48.6 μg/kg dry		R	1	IJ	Ū
75-15-0	Carbon disulfide	BRL	24.3 μg/kg dry		4	1	tı	U
56-23-5	Carbon tetrachloride	BRL	4.9 μg/kg dry			1	n	U
108-90-7	Chlorobenzene	BRL	4.9 μg/kg dry			1	b	U
75-00-3	Chloroethane	BRL	9.7 μg/kg dry			1	17	U
67-66-3	Chloroform	BRL	4.9 μg/kg dry			1	11	U
124-48-1	Dibromochloromethane	BRL	4.9 μg/kg dry			1	Jt	U
95-50-1	1,2-Dichlorobenzene	BRL	4.9 μg/kg dry	,		1	D.	U
541-73-1	1,3-Dichlorobenzene	BRL	4.9 μg/kg dry			i	R	U
106-46-7	1,4-Dichlorobenzene	BRL	4.9 μg/kg dry			1	н	U
75-34-3	1,1-Dichloroethane	BRL	4.9 μg/kg dry	/		1	p	U
107-06-2	1,2-Dichloroethane	BRL	4.9 μg/kg dry	,		1	n	· Ų
75-35-4	1,1-Dichloroethene	BRL	4.9 μg/kg dry	,		1	υ .	U
156-60-5	trans-1,2-Dichloroethene	BRL	4.9 μg/kg dry			1	"	U
142-28-9	1,3-Dichloropropane	BRL	4.9 μg/kg dry			1	19	. ប
100-41-4	Ethylbenzene	BRL	4.9 μg/kg dry			1	и	U
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL	48.6 μg/kg dry			1	н	, U
75-09-2	Methylene chloride	9.8	48.6 μg/kg dry	,		1	"	VOC3, J
79-34-5	1,1,2,2-Tetrachloroethane	BRL	4.9 μg/kg dry			1	и	Ü
127-18-4	Tetrachloroethene	0.6	4.9 μg/kg dry	,		1	10	J
108-88-3	Toluene	BRL	4.9 μg/kg dry	7		1	II.	· u
120-82-1	1,2,4-Trichlorobenzene	BRL	4.9 μg/kg dry	7		1	n	U
71-55-6	1,1,1-Trichloroethane	BRL	4.9 μg/kg dry	7		1	*	U
79-01-6	Trichloroethene	0.5	4.9 μg/kg dry	,		1	12	J
96-18-4	1,2,3-Trichloropropane	BRL	4.9 μg/kg dry	7		1	11	U
75-01-4	Vinyl chloride	BRL	4.9 μg/kg dry	,		1	18	U
1330-20-7	m,p-Xylene	BRL	9.7 μg/kg dry			1	u	U
95-47-6	o-Xylene	BRL	4.9 μg/kg dry			1	11	U
460-00-4	Surrogate: 4-Bromofluorobenzene	101	70-130 %				. 11	<u>.</u>
2037-26-5	Surrogate: Toluene-d8	101	70-130 %				ŧı	
17060-07-0	Surrogate: 1,2-Dichloroethane-d4	110	70-130 %	-				
1868-53-7	Surrogate: Dibromofluoromethane	101	70-130 %			-	Ħ	
	· ·							

<u>Matrix</u> Soil Collection Date/Time 05-Nov-05 10:30 Received 08-Nov-05

Method Ref. VOC Prepared 08-Nov-05 Analyzed 08-Nov-05

CAS No.	Analyte(s)	Result	*RDL	/Units	RT	Q	Dilution	Batch	Flag
Volatile Org	anic Compounds				· · · · · · · · · · · · · · · · · · ·				
	VOC Extraction	Lab extracted		N/A			1	5110533	U
Volatile Orga	ni <u>c Compounds</u>	Prepared by meth	od SW8	346 5035A	Soil (lov	v level)			
	1,1,2-Trichlorotrifluoroethane (Freon 113)			μg/kg dry	(,,	1	5110601	U
	Acetone	BRL	121	μg/kg dry	-	A	1	19	U
71-43-2	Benzene	BRL	6.0	μg/kg dry			1 .	ı	U
78-93-3	2-Butanone (MEK)	BRL	60.5	μg/kg dry		R	1	ır	U
75-15-0	Carbon disulfide	BRL	30.2	μg/kg dry	•	Application .	1	н	บ
56-23-5	Carbon tetrachloride	BRL		μg/kg dry			1	11	υ
108-90-7	Chlorobenzene	BRL	6.0				1	ıt	Ū
75-00-3	Chloroethane	BRL	12.1	μg/kg dry			1	It	υ
67-66-3	Chloroform	BRL	6.0	μg/kg dry			1		ΰ
124-48-1	Dibromochloromethane	BRL	6.0	μg/kg dry			1	IF	ับ
95-50-1	1,2-Dichlorobenzene	BRL	6.0	μg/kg dry			1	IF.	U
541-73-1	1,3-Dichlorobenzene	BRL	6.0	μg/kg dry		,	1	и	ับ
106-46-7	1,4-Dichlorobenzene	BRL	6.0	μg/kg dry		·	1	· II	U
75-34-3	1,1-Dichloroethane	BRL	6.0	μg/kg dry			1	и	บ
107-06-2	1,2-Dichloroethane	BRL	6.0	μg/kg dry			1	и	U
75-35-4	1,1-Dichloroethene	BRL	6.0	μg/kg dry			1	11	U
156-60-5	trans-1,2-Dichloroethene	BRL	6.0	μg/kg dry			1	\$1	Ū
142-28-9	1,3-Dichloropropane	BRL	6.0	μg/kg dry			1	Ħ	บ
100-41-4	Ethylbenzene	BRL	6.0	μg/kg dry		·	1	'n	U
	4-Methyl-2-pentanone (MIBK)	BRL	60.5	μg/kg dry			1	u	· U
	Methylene chloride	16.5		μg/kg dry			1	n	VOC3,
	1,1,2,2-Tetrachloroethane	BRL	6.0	μg/kg dry			I	li.	U
127-18-4	Tetrachloroethene	BRL	6.0	μg/kg dry			1		U
108-88-3	Toluene	BRL	6.0	μg/kg dry			1	н	บ
120-82-1	1,2,4-Trichlorobenzene	BRL	6,0	μg/kg dry			1	tj	U
	1,1,1-Trichloroethane	BRL	6.0	μg/kg dry			1	11	Ü
79-01 - 6	Trichloroethene	BRL	6.0	μg/kg dry			1	п	υ
96-18-4	1,2,3-Trichloropropane	BRL		μg/kg dry			I	н	บ
	Vinyl chloride	BRL		μg/kg dry			. 1	í;	II.
	m,p-Xylene	BRL		μg/kg dry			1	If	U
	o-Xylene	BRL		μg/kg dry			1	. "	U
	Surrogate: 4-Bromofluorobenzene	101	70-1					и,	U
	Surrogate: Toluene-d8	99.2	70-1.					п	
	Surrogate: 1,2-Dichloroethane-d4	112	70-1.						
	Surrogate: Dibromofluoromethane	101	70-1.					11	

<u>Matrix</u> Soil Collection Date/Time 05-Nov-05 11:20 Received 08-Nov-05

Method Ref. VOC

Prepared 08-Nov-05 Analyzed 08-Nov-05

CAS No.	Analyte(s)	Result	*RDL/Units	RT	Q	Dilution	Batch	Flag
Volatile Orga	anic Compounds					· · · · · · · · · · · · · · · · · · ·		100
	VOC Extraction	Lab extracted	N/A.*		÷	1	5110533	U
Volatile Orga	nic Compounds	Prepared by me	ethod SW846 5035	Soil (low	level)			
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	BRL	5.5 μg/kg dry	,		1	5110601	U
67 - 64-1	Acetone	55.5	110 μg/kg dry	,		1	ır	VOC6, J
71-43-2	Benzene	BRL	5.5 μg/kg dry			1	It	U
78-93-3	2-Butanone (MEK)	BRL	54.9 μg/kg dry	,		1	fr ,	U
75-15-0	Carbon disulfide	BRL	27.5 μg/kg dry	•		1	15	U
56-23-5	Carbon tetrachloride	BRL	5.5 μg/kg dry	,		1	17	U
108-90-7	Chlorobenzene	BRL	5.5 μg/kg dry	,		1	ır	U
. 75-00-3	Chloroethane	BRL	11.0 µg/kg dry	,		1	If	U
67-66-3	Chloroform	BRL	5.5 µg/kg dry	•		1,	н	U
124-48-1	Dibromochloromethane	BRL	5.5 μg/kg dry			1	4	U
95-50-1	1,2-Dichlorobenzene	BRL	5.5 µg/kg dry	Ī		1		Ü
541-73-1	1,3-Dichlorobenzene	BRL	5.5 μg/kg dry	,		1	þi	U
106-46-7	1,4-Dichlorobenzene	BRL	5.5 µg/kg dry			1	It	U
75-34-3	1,1-Dichloroethane	BRL	5.5 μg/kg dry	,		1	11	U
107-06-2	1,2-Dichloroethane	BRL	5.5 μg/kg dry			1	Iŧ	U
75-35-4	1,1-Dichloroethene	BRL	5.5 µg/kg dry			1	19	U
156-60-5	trans-1,2-Dichloroethene	BRL	5.5 μg/kg dry	• •		1	10	U
142-28-9	1,3-Dichloropropane	BRL	5.5 µg/kg dry			1	n	Ū
100-41-4	Ethylbenzene	BRL	5.5 μg/kg dry	•		1	11	บ
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL	54.9 μg/kg dry	,		1	ч	· U
75-09-2	Methylene chloride	12.2	54.9 μg/kg dry			1	a	VOC3, J
79-34-5	1,1,2,2-Tetrachloroethane	BRL	5.5 μg/kg dry	,		ī	n	U
127-18-4	Tetrachloroethene	0.5	5.5 μg/kg dry			I	и .	J
108-88-3	Toluene	BRL	5.5 μg/kg dry	,	_	1	II.	U
120-82-1	1,2,4-Trichlorobenzene	BRL	5.5 µg/kg dry			1	н	U
71-55-6	1,1,1-Trichloroethane	BRL	5.5 μg/kg dry			1	п	υ
79-01-6	Trichloroethene	BRL	5.5 μg/kg dry			. 1	11	U
96-18-4	1,2,3-Trichloropropane	BRL	5.5 μg/kg dry			Ţ	ŋ	U
75-01-4	Vinyl chloride	BRL	5.5 μg/kg dry			1	O	U
1330-20-7	m,p-Xylene	BRL	11.0 μg/kg dry			1	ır	U
	o-Xylene	BRL	5.5 μg/kg dry			1	и.	Ü
460-00-4	Surrogate: 4-Bromofluorobenzene	100	70-130 %				IF	-
	Surrogate: Toluene-d8	99.2	70-130 %				4	
17060-07-0	Surrogate: 1,2-Dichloroethane-d4	112	70-130 %				п	
1868-53-7	Surrogate: Dibromofluoromethane	102	70-130 %				п	

<u>Matrix</u> Soil Collection Date/Time 06-Nov-05 12:25 Received 08-Nov-05

Method Ref. VOC Prepared 08-Nov-05 Analyzed 08-Nov-05

CAS No.	Analyte(s)	Result	*RDL	/Units	RT	Q	Dilution	Batch	Flag
Volatile Org	anic Compounds						•		
	VOC Extraction	Lab extracted		N/A			1	5110533	U
Volatile Orga	nic Compounds	Prepared by meth	od SW	846 5035A	Soil (lov	w level)			
	1,1,2-Trichlorotrifluoroethane (Freon 113)	BRL		μg/kg dry		, 10101)	1	5110601	U
	Acetone	BRL		μg/kg dry		R	1	17	. U
71-43-2	Benzene	BRL		μg/kg dry			1	n	Ü
78-93-3	2-Butanone (MEK)	BRL		μg/kg dry			. 1	ц	Ü
75-15-0	Carbon disulfide	BRL		μg/kg dry			1	ir	Ü
56-23-5	Carbon tetrachloride	BRL		μg/kg dry			1		บ
108-90-7	Chlorobenzène	BRL		μg/kg dry			ı	. "	Ü
75-00-3	Chloroethane	BRL		μg/kg dry			t	ır	U
67-66-3	Chloroform	BRL		μg/kg dry			1	ır	บ
124-48-1	Dibromochloromethane	BRL		μg/kg dry			1	Iŧ	U
95-50-1	1,2-Dichlorobenzene	BRL		μg/kg dry			1	n.	บ
541-73-1	1,3-Dichlorobenzene	BRL		μg/kg dry			1		U
106-46-7	1,4-Dichlorobenzene	BRL		μg/kg dry			1	н .	U
75-34-3	1,1-Dichloroethane	BRL		μg/kg dry			1	11	U
107-06-2	1,2-Dichloroethane	BRL		μg/kg dry			1	ц	U
75-35-4	1,1-Dichloroethene	BRL	5.9	μg/kg dry			1	п	U
156-60-5	trans-1,2-Dichloroethene	BRL	5.9	μg/kg dry			1	ш	U
142-28-9	1,3-Dichloropropane	BRL	5.9	μg/kg dry			1	, n	υ
100-41-4	Ethylbenzene	BRL	5.9	μg/kg dry	*		1	ø	U
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL	59.0	μg/kg dry			I	· n	. "
75-09-2	Methylene chloride	16.1	59.0	μg/kg dry			I	n	VOC3,
79-34-5	I,1,2,2-Tetrachloroethane	BRL	5.9	μg/kg dry			1		U
127-18-4	Tetrachloroethene	BRL	5,9	μg/kg dry		* 1	1	ч	Ü
108-88-3	Toluene	BRL	5.9	μg/kg dry			1	11	ΰ
120-82-1	1,2,4-Trichlorobenzene	BRL	5.9	μg/kg dry			1	n	U
71-55-6	1,1,1-Trichloroethane	BRL	5.9	μg/kg dry		-	1	, n	U
79-01-6	Trichloroethene	BRL	5.9	μg/kg dry			I	11	U
96-18-4	1,2,3-Trichloropropane	BRL		μg/kg dry	•		1	D	U
	Vinyl chloride	BRL		μg/kg dry			1	н	บ
	m,p-Xylene	BRL		μg/kg dry		-	1	н	U
	o-Xylene	BRL		μg/kg dry			1	. 11	U.
	Surrogate: 4-Bromofluorobenzene	102		30 %			. •	**	
	Surrogate: Toluene-d8	100		30 %				•	
	Surrogate: 1,2-Dichloroethane-d4	114		30 %				o ·	
	Surrogate: Dibromofluoromethane	102		30 %	•			n	

<u>Sample Identification</u> **B8-6-14-15-110605**SA36885-06

Client Project # 5555113

Method Ref.

Matrix Soil Collection Date/Time 06-Nov-05 13:00

Received 08-Nov-05

thod Ref. Prepared
VOC 08-Nov-05

Analyzed Analyst O8-Nov-05 YM

		TOTAL CONTRACTOR							
CAS No.	Analyte(s)	Result	*RDL	/Units	RT	Q	Dilution	Batch	Flag
Volatile Orga	anic Compounds								
	VOC Extraction	Lab extracted		N/A			1	5110533	U
Volatile Orga	nic Compounds	Prepared by meth	od SW8	346 5035A	Soil (lo	w level)			
	1,1,2-Trichlorotrifluoroethane (Freon 113)			μg/kg dry	*		1	5110601	U
	Acetone	BRL		μg/kg dry		R	1	Œ	U
71-43-2	Benzene	BRL		μg/kg dry			1 .	u	υ
78-93-3	2-Butanone (MEK)	BRL		μg/kg dry		R	1	11	U
75-15-0	Carbon disulfide	BRL		μg/kg dry			1 .	lt	U
56-23-5	Carbon tetrachloride	BRL		μg/kg dry			1	ù	Ü
108-90-7	Chlorobenzene	BRL		μg/kg dry			· 1	II.	U
75-00-3	Chloroethane	BRL		μg/kg dry			1	и	U
67-66-3	Chloroform	BRL		μg/kg dry			ī	n	Ü
124-48-1	Dibromochloromethane	BRL		μg/kg dry			1	U	U
95-50-1	1,2-Dichlorobenzene	BRL		μg/kg dry			1	a	U
541-73-1	1,3-Dichlorobenzene	BRL		μg/kg dry			1	u	U
	1,4-Dichlorobenzene	BRL		μg/kg dry			1	Œ	υ
75-34-3	1,1-Dichloroethane	BRL		μg/kg dry			• 1	tt	U
	1,2-Dichloroethane	BRL		μg/kg dry			1	**	U
	1,1-Dichloroethene	BRL		μg/kg dry			1	n	U
156-60-5	trans-1,2-Dichloroethene	BRL		μg/kg dry			1	*1	· U
	1,3-Dichloropropane	BRL		μg/kg dry			1	13	U
	Ethylbenzene	BRL		μg/kg dry			1	n	U
	4-Methyl-2-pentanone (MIBK)	BRL		μg/kg dry			1	IJ	, U
75-09-2	Methylene chloride	8.9		μg/kg dry			1	ıı	VOC3,
79-34-5	1,1,2,2-Tetrachloroethane	BRL		μg/kg dry			. 1	n	U
127-18-4	Tetrachloroethene	BRL		μg/kg dry			1	11	U
108-88-3	Toluene	BRL		μg/kg dry			1	**	Ū
120-82-1	1,2,4-Trichlorobenzene	BRL		μg/kg dry			1	ış	U
	1,1,1-Trichloroethane	BRL		μg/kg dry			1		Ū
	Trichloroethene	BRL		μg/kg dry			1	31	U
96-18-4	1,2,3-Trichloropropane	BRL		μg/kg dry			1	#	Ü
	Vinyl chloride	BRL		μg/kg dry			1	1+	ับ
	m,p-Xylene	BRL		μg/kg dry			1	gt.	U
	o-Xylene	BRL		μg/kg dry			1	w	U
	Surrogate: 4-Bromofluorobenzene	102		30 %		•		ir	_
	Surrogate: Toluene-d8	99.8		30 %				16	
	Surrogate: 1,2-Dichloroethane-d4	112		30 %				If	
	Surrogate: Dibromofluoromethane	102		30 %				"	

Client Project # 5555113 Method Ref. VOC

<u>Matrix</u> Soil

Collection Date/Time 05-Nov-05 10:15

Received 08-Nov-05

Prepared 08-Nov-05

Analyzed 08-Nov-05

<u>Analyst</u> ΥM

CAS No.	Analyte(s)	Result	*RDL	/Units	RT	Q	Dilution	Batch	Flag
Volatile Org	anic Compounds								
_	VOC Extraction	Lab extracted		N/A			1	5110533	U
Volatile Orga	mic Compounds	Prepared by meth	od SW8	346 5035A	Soil (lov	level)	· : 2 · · · ·	ant to	
-	1,1,2-Trichlorotrifluoroethane (Freon 113)			μg/kg dry	`		1	5110601	U
67-64-1	Acetone	60.1	134			-2	1	a	VOC6,
71-43-2	Benzene	BRL	6.7				1	u	υ
78-93-3	2-Butanone (MEK)	BRL	66.9			R	1	9	U
75-15-0	Carbon disulfide	BRL	33.4				ļ	n	U
56-23-5	Carbon tetrachloride	BRL	6.7				1	*1	U
108-90-7	Chlorobenzene	BRL	6.7				1	11	U
75-00-3	Chloroethane	BRL	13.4				1	Ħ	U
67-66-3	Chloroform	BRL	6.7				1	н	U
124-48-1	Dibromochloromethane	BRL	6.7				1	. п	U
95-50-1	1,2-Dichlorobenzene	BRL	6.7	μg/kg dry			1	я	U
541-73-1	1,3-Dichlorobenzene	BRL	6.7	μg/kg dry			1 .		U
106-46-7	1,4-Dichlorobenzene	BRL	6.7	μg/kg dry			1	п	U
75-34-3	1,1-Dichloroethane	BRL	6.7	μg/kg dry			I	IF	U
107-06-2	1,2-Dichloroethane	BRL	6.7	μg/kg dry			1	H	U
75-35-4	1,1-Dichloroethene	BRL	6.7	μg/kg dry			1	n	U
156-60-5	trans-1,2-Dichloroethene	BRL	6.7	μg/kg dry			1	19	U
142-28-9	1,3-Dichloropropane	BRL	6.7	μg/kg dry			1	, 11	U
100-41-4	Ethylbenzene	BRL	6.7	-			1	17	U
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL	66.9				1	If	· U
75-09-2	Methylene chloride	19.3	66.9	•			1	11	VOC3
79-34-5	1,1,2,2-Tetrachloroethane	BRL	6.7				1	11	U
127-18-4	Tetrachloroethene	1.3	6.7	μg/kg dry			1	. 9	J
108-88-3	Toluene	BRL	6.7	μg/kg dry			1	n	U
120-82-1	1,2,4-Trichlorobenzene	BRL	6.7	μg/kg dry			1	31	U
71-55-6	1,1,1-Trichloroethane	BRL	6.7	μg/kg dry			. 1	n	U
79-01-6	Trichloroethene	0.7	6.7	μg/kg dry			1	l)	J
96-18-4	1,2,3-Trichloropropane	BRL	6.7				1 .	u	Ü
75-01-4	Vinyl chloride	BRL	6.7	μ g/kg dry			I	IJ	11
1330-20-7	m,p-Xylene	BRL		μg/kg dry			1	В	U
	o-Xylene	BRL		μg/kg đry			1	ır	U
	Surrogate: 4-Bromofluorobenzene	101		30 %			-		
	Surrogate: Toluene-d8	99.2		30 %		-	•	н	
	Surrogate: 1,2-Dichloroethane-d4	108		30 %					
	Surrogate: Dibromofluoromethane	101		30 %		•		p	

<u>Matrix</u> Soil Collection Date/Time 05-Nov-05 08:30 Received 08-Nov-05

Method Ref. ...

Prepared 08-Nov-05 Analyzed 08-Nov-05

							and the second second		
CAS No.	Analyte(s)	Result	*RDI	/Units	RT	Q.	Dilution	Batch	Flag
 Volatile Orga	anic Compounds								
	VOC Extraction	Lab extracted		N/A			1	5110533	U
<u>Volatile Orga</u>	nic Compounds	Prepared by meth	od SW	846 5035A	Soil (lov	v level)			
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)			μg/kg dry	Ì	,	1	5110601	U
67-64-1	Acetone	BRL	105	μg/kg dry		ER.	1	н	U
71-43-2	Benzene	BRL	5.3	μg/kg dry			1	u ·	U
78-93-3	2-Butanone (MEK)	BRL	52.6	μg/kg dry		JR.	1	ц	U
75-15-0	Carbon disulfide	BRL	26.3	μg/kg dry			1	и	U
56-23-5	Carbon tetrachloride	BRL	5.3	μg/kg dry			1	н	υ
108-90-7	Chlorobenzene	BRL	5.3	μg/kg dry			1	If	U
75-00-3	Chloroethane	BRL	10.5	μg/kg dry			1	ıt	υ
67-66-3	Chloroform	BRL	5.3	μg/kg dry			1	It	U
124-48-1	Dibromochloromethane	BRL	5.3	μg/kg dry			1	IF	U
95-50-1	1,2-Dichlorobenzene	BRL	5.3	μg/kg dry			1	ír	U
541-73-1	1,3-Dichlorobenzene	BRL	5.3	μg/kg dry			1	It	U
106-46-7	1,4-Dichlorobenzene	BRL	5.3	μg/kg dry			1	If	U
75-34-3	1,1-Dichloroethane	BRL	5.3				1	"	U
107-06-2	1,2-Dichloroethane	BRL	5.3	μg/kg dry			1	lf	U
75-35-4	I,1-Dichloroethene	BRL	5.3	μg/kg dry			1	H	U
156-60-5	trans-1,2-Dichloroethene	BRL	5.3	μg/kg dry			1	ır	U
142-28-9	1,3-Dichloropropane	BRL	5.3	μg/kg dry			1	п	U
100-41-4	Ethylbenzene	BRL	5.3	μg/kg dry			1	71	U
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL	52.6	μg/kg dry		•	1	tt	· U
75-09-2	Methylene chloride	11.5	52.6	μg/kg dry			1	n	VOC3,
79-34-5	1,1,2,2-Tetrachloroethane	BRL	5.3	μg/kg dry		•	1	U	บ
127-18-4	Tetrachloroethene	BRL	5.3	μg/kg dry			. 1	н	U
108-88-3	Toluene	BRL	5.3	μg/kg đry			1	R	U
120-82-1	1,2,4-Trichlorobenzene	BRL	5.3	μg/kg dry			1	lt.	U
71-55-6	1,1,1-Trichloroethane	BRL	5.3	μg/kg dry			. 1		U
79-01-6	Trichloroethene	BRL	5.3	μg/kg dry			1	п	υ
96-18-4	1,2,3-Trichloropropane	BRL	5.3	μg/kg dry			1	h	U
75-01-4	Vinyl chloride	BRL		μg/kg dry			1	n .	U
1330-20-7	m,p-Xylene	BRL		μg/kg dry			. 1	11	U
95-47-6	o-Xylene	BRL		μg/kg dry			1	ч	Ū
460-00-4	Surrogate: 4-Bromofluorobenzene	101		30 %		-		н	_
	Surrogate: Toluene-d8	99.8		30 %				n	
17060-07-0	Surrogate: 1,2-Dichloroethane-d4	112		30 %		1.	1 7	n	
1868-53-7	Surrogate: Dibromofluoromethane	102		30 %	-			. "	

<u>Matrix</u> Soil Collection Date/Time 05-Nov-05 07:45 Received 08-Nov-05

Method Ref. VOC Prepared 08-Nov-05

Analyzed 08-Nov-05

CAS No.	Analyte(s)	Result	*RDL	/Units	RT	Q.	Dilution	Batch	Flag
Volatile Org	anic Compounds								
_	VOC Extraction	Lab extracted		N/A			1	5110533	Ų.
Volatile Orga	anic Compounds	Prepared by meth	od SW8	46 5030 Sc	oil (high le	vel)			VOC8
	1,1,2-Trichlorotrifluoroethane (Freon 113)			μg/kg dry	(6	,,	50	5110854	U
67-64-1	Acetone	BRL		μg/kg dry		#R#	50		U.
71-43-2	Benzene	27.0		μg/kg dry			50	II	J
78-93-3	2-Butanone (MEK)	BRL		μg/kg dry			50	ıı	บ
75-15-0	Carbon disulfide	BRL		μg/kg dry			50	п.,	υ
56-23-5	Carbon tetrachloride	BRL		μg/kg dry			50	н	U
108-90-7	Chlorobenzene	BRL	51.9	μg/kg dry			50	и	Ū
75-00-3	Chloroethane	BRL	104	μg/kg dry			- 50	ıt	U
67-66-3	Chloroform	BRL		μg/kg dry			50	и	U
124-48-1	Dibromochloromethane	BRL		μg/kg dry			50	н	U
95-50-1	1,2-Dichlorobenzene	BRL		μg/kg dry			50	. и	Ū
541-73-1	1,3-Dichlorobenzene	BRL		μg/kg dry			50	п	U
106-46-7	1,4-Dichlorobenzene	BRL		μg/kg dry			50	п	Ū
75-34-3	1,1-Dichloroethane	BRL		μg/kg dry			50	" .	U
107-06-2	2 1,2-Dichloroethane	BRL		μg/kg dry			50	n	Ū
75-35-4	1,1-Dichloroethene	BRL		μg/kg dry			50 .	н	U
156-60-5	trans-1,2-Dichloroethene	BRL	51.9	μg/kg dry			50	н	U
142-28-9	1,3-Dichloropropane	BRL		μg/kg dry			50	u	υ
100-41-4	Ethylbenzene	BRL		μg/kg dry			50	п	Ü
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		μg/kg dry			50	u	· U
75-09-2	Methylene chloride	BRL		μg/kg dry			50	u	U
79-34-5	1,1,2,2-Tetrachloroethane	BRL		μg/kg dry		i	50	n	U
127-18-4	Tetrachloroethene	46.2		μg/kg dry			50	н	J
108-88-3	Toluene	28.0		μg/kg dry			50		J
120-82-1	1,2,4-Trichlorobenzene	BRL		μg/kg dry			50	11	Ü
71-55-6	1,1,1-Trichloroethane	BRL		μg/kg dry			50	†1	U
79-01-6	Trichloroethene	38.9		μg/kg dry			50	21	J
96-18-4	1,2,3-Trichloropropane	BRL		μg/kg dry			50	n	U
75-01-4	Vinyl chloride	BRL		μg/kg dry	The Table		50	, u	U
1330-20-7	m,p-Xylene	BRL	104	μg/kg dry	***		50	II.	บ
	o-Xylene	BRL		μg/kg đry	1		50	I†	U
	Surrogate: 4-Bromofluorobenzene	102	70-13					n	ū
	Surrogate: Toluene-d8	109	70-13					B	
	Surrogate: 1,2-Dichloroethane-d4	108	70-13					. 11	
1868-53-7	Surrogate: Dibromofluoromethane	103	70-13		•			н	

<u>Matrix</u> Soil Collection Date/Time 05-Nov-05 09:00 Received 08-Nov-05

Method Ref. VOC Prepared 08-Nov-05 Analyzed 08-Nov-05

CAS No.	Analyte(s)	Result	*RDL	/Units	RT	Q	Dilution	Batch	Flag
Volatile Orga	anic Compounds					••			
_	VOC Extraction	Lab extracted		N/A			ī	5110533	υ
Volatile Orga	nic Compounds	Prepared by meth	od SW8	346 5035A	Soil (low	level)			VOC10
	1,1,2-Trichlorotrifluoroethane (Freon 113)			μg/kg dry	(10.,	,	1	5110601	U
67-64-1	Acetone	BRL		μg/kg dry			1	"	บ
71-43-2	Benzene	BRL	3.9				1	ш	U
78-93-3	2-Butanone (MEK)	BRL	39.4	μg/kg dry		-13 °	1	11	υ
75-15-0	Carbon disulfide	BRL	19.7			- Anna Carlot	1	71	U
56-23-5	Carbon tetrachloride	BRL	3.9				1	. #	U
108-90-7	Chlorobenzene	BRL	3.9	μg/kg dry			1	*11	Ū
75-00-3	Chloroethane	BRL	7.9	μg/kg dry			1	•	U
67-66-3	Chloroform	BRL	3.9	μg/kg dry			1	ų	U
124-48-1	Dibromochloromethane	BRL	3.9	μg/kg dry			1	u	U
95-50-1	1,2-Dichlorobenzene	BRL	3.9	μg/kg dry			1	n	U
541-73-1	1,3-Dichlorobenzene	BRL	3.9	μg/kg dry			1	(1	U
106-46-7	1,4-Dichlorobenzene	BRL	3.9	μg/kg dry			1	ч	Ü
75-34-3	1,1-Dichloroethane	BRL	3.9	μg/kg dry			1	n	U
107-06-2	1,2-Dichloroethane	BRL	3.9	μg/kg dry			1	11	U
75-35-4	1,1-Dichloroethene	BRL	3.9	μg/kg dry			1	н	U
156-60-5	trans-1,2-Dichloroethene	BRL	3.9	μg/kg dry			1	. 12	Ü
142-28-9	1,3-Dichloropropane	BRL .	3.9	μg/kg dry			1	IF	U
100-41-4	Ethylbenzene	BRL	3.9	μg/kg dry			Ī	41	U
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL	39.4	μg/kg dry			1	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	· U
	Methylene chloride	5.2	39.4				1	n	VOC3,
79-34-5	1,1,2,2-Tetrachloroethane	BRL	3.9	μg/kg dry			1	U	U U
127-18-4	Tetrachloroethene	0.7	3.9	μg/kg dry			1	B	J
108-88-3	Toluene	BRL	3.9	μg/kg dry			1	11	ับ
120-82-1	1,2,4-Trichlorobenzene	BRL	3.9	μg/kg dry			1		U
71-55-6	1,1,1-Trichloroethane	BRL	3.9	μg/kg dry			1	n	υ
79-01-6	Trichloroethene	0.4	3.9	μg/kg dry			I	,,	J
96-18-4	1,2,3-Trichloropropane	BRL	3.9	μg/kg dry		والمراسات والماسات	تراجيد	- _w p	U
75-01-4	Vinyl chloride	BRL		μg/kg dry	The second of th		1	0	U
1330-20-7	m,p-Xylene	BRL		μg/kg dry			1	u	U
	o-Xylene	BRL		μg/kg dry		٠	1	n	บ
460-00-4	Surrogate: 4-Bromofluorobenzene	104		30 %			-	п	·
	Surrogate: Toluene-d8	99.6		30 %				д	
	Surrogate: 1,2-Dichloroethane-d4	114		30 %	+			и	
	Surrogate: Dibromofluoromethane	102		30 %				41	

<u>Matrix</u> Soil Collection Date/Time 05-Nov-05 09:45 Received 08-Nov-05

Method Ref. VOC Prepared 08-Nov-05 Analyzed 08-Nov-05

CAS No.	Analyte(s)	Result	*RDL	/Units	RT	$Q_{_{\perp}}$	Dilution	Batch	Flag
olatile Orga	nnic Compounds								
	VOC Extraction	Lab extracted	. 1	N/A		•	1	5110533	U
olatile Orga	nic Compounds	Prepared by meth	od SW8	846 5035A	Soil (low	level)			
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	BRL	6.4	μg/kg dry	,	,	1	5110601	U ·
67-64-1	Acetone	106	128	μg/kg dry			1	19	VOC6,
71-43-2	Benzene	BRL	6.4	μg/kg dry			1	It	U
78-93-3	2-Butanone (MEK)	BRL	64.0	μg/kg dry		K	1	17	U
75-15-0	Carbon disulfide	BRL	32.0	μg/kg dry	٠		, 1	IF	U
56-23-5	Carbon tetrachloride	BRL	6.4	μg/kg dry			1	#	U
108-90-7	Chlorobenzene	BRL	6.4	μg/kg dry		•	+,1	U	U
75-00-3	Chloroethane	BRL	12.8	μg/kg dry			1 .	н	U
67 - 66-3	Chloroform	BRL	6.4	μg/kg dry			. 1 .	U	U
124-48-1	Dibromochloromethane	BRL	6.4	μg/kg dry			1	H	U
95-50-1	1,2-Dichlorobenzene	BRL	6.4	μg/kg dry			1	u	U
541-73-1	1,3-Dichlorobenzene	BRL	6.4	μg/kg dry			1	в .	U
106-46-7	1,4-Dichlorobenzene	BRL	6.4	μg/kg dry			1	15	U
75-34-3	1,1-Dichloroethane	BRL	6.4	μg/kg dry			1	11	U
107-06-2	1,2-Dichloroethane	BRL		μg/kg dry			1	11	U
75-35-4	1,1-Dichloroethene	BRL	6.4	μg/kg dry			1	"	U
156-60-5	trans-1,2-Dichloroethene	BRL	6.4	μg/kg dry			1	19	U
142-28-9	1,3-Dichloropropane	BRL	6.4	μg/kg dry			1	"	υ
100-41-4	Ethylbenzene	BRL		μg/kg dry			1	я	U
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		μg/kg dry			1	ĮI.	· U
75-09-2	Methylene chloride	19.7		μg/kg dry			1	u	VOC3,
79-34-5	1,1,2,2-Tetrachloroethane	BRL		μg/kg dry			I	1)	U
127-18-4	Tetrachloroethene	1.2		μg/kg dry		•	1	D	J
108-88-3	Toluene	BRL		μg/kg dry			1		U
120-82-1	1,2,4-Trichlorobenzene	BRL		μg/kg dry			I	II.	Ü
71-55-6	1,1,1-Trichloroethane	BRL		μg/kg dry		÷	1	Ir	Ū
79-01-6	Trichloroethene	BRL		μg/kg dry			ì		U
96-18-4	1,2,3-Trichloropropane	BRL		μg/kg dry			1	n	U
75-01-4	Vinyl chloride	BRL		μg/kg dry			1	ţi	U
1330-20-7	m,p-Xylene	BRL		μg/kg dry			I	н	U
	o-Xylene	BRL		μg/kg dry			1	n	ับ
	Surrogate: 4-Bromofluorobenzene	104		30 %					·
	Surrogate: Toluene-d8	99.4	70-1					ff.	
	Surrogate: 1,2-Dichloroethane-d4	114		30 %				ų	
	Surrogate: Dibromofluoromethane	102	70-1					lt.	

<u>Matrix</u> Soil Collection Date/Time 06-Nov-05 11:30

Received 08-Nov-05

Method Ref. VOC Prepared 08-Nov-05 Analyzed 08-Nov-05

CAS No.	Analyte(s)	Result	*RDL/U	Inits	RT	Q	Dilution	Batch	Flag
Volatile Orga	anic Compounds								
	VOC Extraction	Lab extracted	N	N/A			1	5110533	U
Volatile Orga	nic Compounds	Prepared by meth	od SW84	6 5035A	Soil (low	level)			
	1,1,2-Trichlorotrifluoroethane (Freon 113	•		ıg/kg dry	•		1	5110601	U
67-64-1	Acetone	BRL		ıg/kg dry		R	1	'n	U
71-43-2	Benzene	BRL	7.1 p	ιg/kg dry			1	n	υ
78-93 - 3	2-Butanone (MEK)	BRL	70.5 µ	ιg/kg dry		B	1	Įį.	υ
75-15-0	Carbon disulfide	BRL	35.3 μ	ıg/kg dry			1	n	υ
56-23-5	Carbon tetrachloride	BRL	7.1 µ	ıg/kg dry			1	a	v ·
108-90-7	Chlorobenzene	BRL		ıg/kg dry			1	u	υ
75-00-3	Chloroethane	BRL	14.1 p	ıg/kg dry			1	Œ	U
67-66-3	Chloroform	BRL	7.1 p	ıg/kg dry			1	11	U
124-48-1	Dibromochloromethane	BRL	7.1 µ	ıg/kg dry			1	u	U
95-50-1	1,2-Dichlorobenzene	BRL		ıg/kg dry			ı	n	U
541-73-1	1,3-Dichlorobenzene	BRL	7.1 µ	ıg/kg dry			1	п	· U
106-46-7	1,4-Dichlorobenzene	BRL	7.1 µ	ıg/kg dry			1	11	Ū
75-34-3	1,1-Dichloroethane	BRL		ıg/kg dry			1	u	U
107-06-2	1,2-Dichloroethane	BRL	7.1 µ	ıg/kg dry			1	•1	υ
75-35-4	I,1-Dichloroethene	BRL	7.1 µ	ıg/kg dry			1	•	U
156-60-5	trans-1,2-Dichloroethene	BRL	7.1 µ	ıg/kg dry			1	11	U
142-28-9	1,3-Dichloropropane	BRL	7.1	ıg/kg dry			- 1	и .	U
100-41-4	Ethylbenzene	BRL	7.1 µ	ıg/kg dry			, 1	11	U
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL	70.5 p	ıg/kg dry			1	11	. U
75-09-2	Methylene chloride	15.6	70.5 µ	ıg/kg dry			1	n	VOC3,
79-34-5	1,1,2,2-Tetrachloroethane	BRL	7.1 µ	ig/kg dry			1	. 11	υ
127-18-4	Tetrachloroethene	BRL	7.1 µ	ıg/kg dry			1	11	U
108-88-3	Toluene	BRL	7.1 p	ıg/kg dry			. 1	a	U
120-82-1	1,2,4-Trichlorobenzene	BRL		ıg/kg dry			I	U	U
71-55-6	1,1,1-Trichloroethane	BRL	7.1 µ	ıg/kg dry			1 .	17	U
79-01-6	Trichloroethene	BRL	7.1 µ	ıg/kg dry			1		U
96-18-4	1,2,3-Trichloropropane	BRL		ıg/kg dry			1	н	บ
75-01-4	Vinyl chloride	BRL	7.1 µ	ıg/kg dry			1	ıı	U
1330-20-7	m,p-Xylene	BRL	14.1 µ	ιg/kg dry			1	п	U
	o-Xylene	BRL		ıg/kg dry			1		U
	Surrogate: 4-Bromofluorobenzene	101	70-130					н	-
	Surrogate: Toluene-d8	99.0	70-130	0 %			•	и	
17060-07-0	Surrogate: 1,2-Dichloroethane-d4	111	70-130	0 %			·	U	
1868-53-7	Surrogate: Dibromofluoromethane	101	70-130	7 %				и .	

Matrix Soil

Collection Date/Time 06-Nov-05 10:30 Received 08-Nov-05

Method Ref. VOC Prepared 08-Nov-05 Analyzed 08-Nov-05

CAS No.	Analyte(s)	Result	*RDL	/Units	RT	Q	Dilution	Batch	Flag
Volatile Orga	nnic Compounds							······································	
	VOC Extraction	Lab extracted		N/A			1	5110533	U
Volatile Orga	nic Compounds	Prepared by meth	od SW8	46 5035A	Soil (low	level)			
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113	•		μg/kg dry	•	,	1	5110599	U
67-64-1	Acetone	86.5	116	μg/kg dry			1	R	VOC6,
71-43-2	Benzene	0.9		μg/kg dry			1	It	J
78-93-3	2-Butanone (MEK)	BRL	57.8	μg/kg dry		R	1	ıt	U
75-15-0	Carbon disulfide	1.1	28.9	μg/kg dry	4	#lade.	1	n	J
56-23-5	Carbon tetrachloride	BRL		μg/kg dry			1	u	υ
108-90-7	Chlorobenzene	BRL		μg/kg dry			1	n	U
75-00-3	Chloroethane	BRL	11.6	μg/kg dry			1	Ħ	υ
67-66-3	Chloroform	BRL		μg/kg dry			1	41	U
124-48-1	Dibromochloromethane	BRL	5.8	μg/kg dry			I	71	υ
95-50-1	1,2-Dichlorobenzene	BRL		μg/kg dry			1	ŧI	υ
541-73-1	1,3-Dichlorobenzene	BRL	5.8	μg/kg dry			1	11	U
106-46-7	I,4-Dichlorobenzene	BRL	5.8	μg/kg dry			1	ıı	Ū
75-34-3	1,1-Dichloroethane	BRL	5.8	μg/kg dry			1	u	υ
107-06-2	1,2-Dichloroethane	BRL		μg/kg dry			1	It	U
75-35-4	1,1-Dichloroethene	BRL		μg/kg dry			1	н	U
156-60-5	trans-1,2-Dichloroethene	BRL	5.8	μg/kg dry			1	n	U
142-28-9	1,3-Dichloropropane	BRL	5.8	μg/kg dry			1	H	U
100-41-4	Ethylbenzene	BRL	5.8	μg/kg dry			1.	ıt	U
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL	57.8	μg/kg dry			1	ıt	, U
75-09-2	Methylene chloride	16.7	57.8	μg/kg dry			1	**	VOC3,
79-34-5	1,1,2,2-Tetrachloroethane	BRL		μg/kg dry			1.	11	U
127-18-4	Tetrachloroethene	1.5	5.8	μg/kg dry			1	n	J
108-88-3	Toluene	0.9	5.8	μg/kg dry			1	n .	J
120-82-1	1,2,4-Trichlorobenzene	BRL		μg/kg dry			1	Ħ	U
71-55-6	1,1,1-Trichloroethane	BRL		μg/kg dry			1	u [']	U
79-01-6	Trichloroethene	1.2		μg/kg dry			1	ti .	J
96-18-4	1,2,3-Trichloropropane	BRL		μg/kg dry			1	п	U
75-01-4	Vinyl chloride	BRL		μg/kg dry			1	II	U
1330-20-7	m,p-Xylene	BRL		μg/kg dry			1	п	บ
	o-Xylene	BRL		μg/kg dry			1	п	U
460-00-4	Surrogate: 4-Bromofluorobenzene	98. <i>4</i>	70-1				•	ц	-
	Surrogate: Toluene-d8	98.0	70-1.					n	
	Surrogate: 1,2-Dichloroethane-d4	113	70-13		-			n	
	Surrogate: Dibromofluoromethane	103	70-13	30 %				'n	

<u>Matrix</u> Soil Collection Date/Time 06-Nov-05 08:45 Received 08-Nov-05

Method Ref. VOC Prepared 08-Nov-05 Analyzed 08-Nov-05

CAS No.	Analyte(s)	Result	*RDL	/Units	RT	Q.	Dilution	Batch	Flag
Volatile Orga	anic Compounds							•	
	VOC Extraction	Lab extracted		N/A		-	1	5110533	Ü
Volatile Orga	nic Compounds	Prepared by meth	od SW8	846 5035A	Soil (low l	evel)			
	1,1,2-Trichlorotrifluoroethane (Freon 113)			μg/kg dry	`	,	1	5110599	U
67-64-1	Acetone	158	13 I			3	1	n	VOC6
71-43-2	Benzene	BRL	6.5	μg/kg dry			1	a	Ū
78-93-3	2-Butanone (MEK)	BRL	65.4	μg/kg dry	:	ER#	i	**	υ
75-15-0	Carbon disulfide	BRL	32.7			-	. 1	11	U
56-23-5	Carbon tetrachloride	BRL	6.5	μg/kg dry	•		1	Ħ	U
108-90-7	Chlorobenzene	BRL	6.5				1	н	υ
75-00-3	Chloroethane	BRL	13.1	μg/kg dry			1	и	U
67-66-3	Chloroform	BRL	6.5	μg/kg dry			. 1	IF	U
124-48-1	Dibromochloromethane	BRL	6.5	μg/kg dry			1	ıı	U
95-50-1	1,2-Dichlorobenzene	BRL	6.5				1	It	Ų
541-73-1	1,3-Dichlorobenzene	BRL	. 6.5			٠.	1	10	U
106-46-7	1,4-Dichlorobenzene	BRL	6.5	- "			1	ij	U
75-34-3	1,1-Dichloroethane	BRL	6.5				1	U	U
107-06-2	1,2-Dichloroethane	BRL	6.5				I	н	บ
75-35-4	1,1-Dichloroethene	BRL	6.5				I	U	U
156-60-5	trans-1,2-Dichloroethene	BRL	6.5				1	n	ŭ
142-28-9	1,3-Dichloropropane	BRL	6.5				i	U	U
	Ethylbenzene	BRL	6.5				. 1	ш	U
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL	65.4	μg/kg dry			1	0	U
75 - 09-2	Methylene chloride	17.2		μg/kg dry			İ	н	VOC3, J
79-34-5	1,1,2,2-Tetrachloroethane	BRL		μg/kg dry	'		1	12	บ
127-18-4	Tetrachloroethene	2.4	6.5				1	n	j
108-88-3	Toluene	BRL	6.5				1.	IT	U
120-82-1	1,2,4-Trichlorobenzene	BRL	6.5				1	If	U
71-55-6	1,1,1-Trichloroethane	BRL	6.5				1	If	U
79-01-6	Trichloroethene	1.2	6.5	μg/kg đry			1	ų	J
96-18-4	1,2,3-Trichloropropane	BRL		μg/kg dry			1 ·	п	U
75-01-4	Vinyl chloride	BRL		μg/kg dry			1	. н	U
	m,p-Xylene	BRL		μg/kg dry			1	u	U
	o-Xylene	BRL		μg/kg dry			1	u	υ
	Surrogate: 4-Bromofluorobenzene	100		30 %			-	и	-
	Surrogate: Toluene-d8	100		30 %			•	II	
	Surrogate: 1,2-Dichloroethane-d4	113		30 %				ш	
	Surrogate: Dibromofluoromethane	103		30 %				и	•

<u>Matrix</u> Soil Collection Date/Time 04-Nov-05 14:45 Received 08-Nov-05

Method Ref. VOC Prepared 08-Nov-05 Analyzed 08-Nov-05

CAS No.	Analyte(s)	Result	*RDL/Un	its	RT	Q	Dilution	Batch	Flag
Volatile Org	anic Compounds				,				
-	VOC Extraction	Lab extracted	N/.	A			1	5110533	U
<u>Volatile Org</u> a	mic Compounds	Prepared by meth	od SW846	5035A S	Soil (low	level)			
_	1,1,2-Trichlorotrifluoroethane (Freon 113		4.9 μg		(1011	,	1	5110599	U
	Acetone	BRL		/kg dry		1	1	U	U
71-43-2	Benzene	BRL		/kg dry		4.4	1		U
78-93-3	2-Butanone (MEK)	BRL		/kg dry		₽.	i	n	U
75-15-0	Carbon disulfide	BRL	-	/kg dry		AND THE OWNER.	1	п	U
56-23-5	Carbon tetrachloride	BRL		/kg dry	-		1	iş.	U
108-90-7	Chlorobenzene	BRL		/kg dry			1	le .	U
75-00-3	Chloroethane	BRL		/kg dry			1	R	บ
67-66-3	Chloroform	BRL		/kg dry			i	н	U
124-48-1	Dibromochloromethane	BRL		/kg dry			. 1	a	U
95-50-1	1,2-Dichlorobenzene	BRL		/kg dry			1	н	Ü
541-73-1	1,3-Dichlorobenzene	BRL		/kg dry			1	u	U
106-46-7	1,4-Dichlorobenzene	BRL		/kg dry			1	n	υ
75-34-3	1,1-Dichloroethane	BRL		/kg dry			1	п	U
107-06-2	1,2-Dichloroethane	BRL	, -	/kg dry			1	11	U
75-35-4	1,1-Dichloroethene	BRL		/kg dry			1	17	U
156-60-5	trans-1,2-Dichloroethene	BRL		/kg dry			1	15	U
142-28-9	1,3-Dichloropropane	BRL		/kg dry			Ι .	. "	. U
100-41-4	Ethylbenzene	BRL		/kg dry			1	Ħ	υ
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		/kg dry			1	u	· U
75-09-2	Methylene chloride	15.9	48.6 μg/				1	11	VOC3,
79-34-5	1,1,2,2-Tetrachloroethane	BRL		kg dry			1	ь	U U
127-18-4	Tetrachloroethene	1.0		/kg dry			1	11	J
108-88-3	Toluene	BRL		/kg dry			1	ti	U
120-82-1	1,2,4-Trichlorobenzene	BRL		kg dry			1	п	υ
71-55-6	1,1,1-Trichloroethane	BRL		/kg dry			1	U	Ū
79-01-6	Trichloroethene	BRL		/kg dry			1	B	U
96-18-4	1,2,3-Trichloropropane	BRL		kg dry			1	11	U
75-01-4	Vinyl chloride	BRL		kg dry			1	n	U
1330-20-7	m,p-Xylene	BRL	9.7 μg/	-			1	"	U
	o-Xylene	BRL	4.9 μg/				1		U
	Surrogate: 4-Bromofluorobenzene	103	70-130 %				•	n .	U
	Surrogate: Toluene-d8	99.6	70-130 %					N.	-
17060-07-0	Surrogate: 1,2-Dichloroethane-d4	113	70-130 %					11	
1868-53-7	Surrogate: Dibromofluoromethane	103	70-130 %					*1	

<u>Matrix</u> Soil Collection Date/Time 05-Nov-05 12:20 Received 08-Nov-05

Method Ref. VOC

Prepared 08-Nov-05 Analyzed 08-Nov-05

CAS No.	Analyte(s)	Result	*RDI	L/Units	RT	Q.	Dilution	Batch	Flag
Volatile Org	anic Compounds					******	***************************************		
	VOC Extraction	Lab extracted		N/A			1	5110533	U
Volatile Orga	inic Compounds	Prepared by meth	od SW	846 5035A	Soil (low le	vel\			
	1,1,2-Trichlorotrifluoroethane (Freon 113)			μg/kg dry	7.22		এল =: -	5110599	 U
67-64-1	Acetone	160		μg/kg dry	ą.		1	ıŧ	VOC6
71-43-2	Benzene	0.6		μg/kg dry			1	19	J
78-93-3	2-Butanone (MEK)	BRL	55.9		į	R	1	ıt	υ
75-15-0	Carbon disulfide	1.4	28.0				1	Įł.	J
56-23-5	Carbon tetrachloride	BRL	5.6				1	It	U
108-90-7	Chlorobenzene	BRL	5.6	μg/kg dry			1	IP.	U
75-00-3	Chloroethane	BRL	11.2				1	It	U
67-66-3	Chloroform	BRL	5.6	μg/kg dry			1	ır	·U
124-48-1	Dibromochloromethane	BRL	5.6				1	II	U
95-50-1	1,2-Dichlorobenzene	BRL	5.6				1	1[Ū
541-73-1	1,3-Dichlorobenzene	BRL	5.6	· •			1	11	U
106-46-7	1,4-Dichlorobenzene	BRL	5.6	μg/kg dry			1	п	ับ
75-34-3	1,1-Dichloroethane	BRL		μg/kg dry			1		υ
107-06-2	1,2-Dichloroethane	BRL		μg/kg dry			1	it.	U
75-35-4	1,1-Dichloroethene	BRL					. 1	11	U
156-60-5	trans-1,2-Dichloroethene	BRL	5.6	μg/kg dry			1	n	U
142-28-9	1,3-Dichloropropane	BRL	5.6				1	a	U
100-41-4	Ethylbenzene	2.7	5.6	μg/kg dry			1	· "	j
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL	55.9				1	n	, n
75-09-2	Methylene chloride	15.0	55.9	μg/kg dry			ì	15	VOC3,
79-34-5	1,1,2,2-Tetrachloroethane	BRL	5.6		•		1	IP	υ
127-18-4	Tetrachloroethene	4.8		μg/kg dry			. 1	11	J
108-88-3	Toluene	BRL	5.6				1	n	U
120-82-1	1,2,4-Trichlorobenzene	BRL	5.6	μg/kg dry	•		1	· n	U
71-55-6	I,1,1-Trichloroethane	BRL	5.6	μg/kg dry			Ī	IP	U
79-01-6	Trichloroethene	2.9	5.6				ī	11	J
96-18-4	1,2,3-Trichloropropane	BRL		μg/kg dry			1	а	Ü
75-01-4	Vinyl chloride	BRL		μg/kg dry			1	n	บ
1330-20-7	m,p-Xylene	16.9		μg/kg dry			1	0	-
	o-Xylene	6.9		μg/kg dry			1	н	
460-00-4	Surrogate: 4-Bromofluorobenzene	98.6		30 %				к	
	Surrogate: Toluene-d8	98.4		30 %				п	
17060-07-0	Surrogate: 1,2-Dichloroethane-d4	114		30 %				ч	
1868-53-7	Surrogate: Dibromofluoromethane	104	70-1	30 %				ŧi	

<u>Matrix</u> Soil Collection Date/Time 05-Nov-05 12:45

Received 08-Nov-05

Method Ref. VOC Prepared 08-Nov-05 Analyzed 08-Nov-05

CAS No.	Analyte(s)	Result	*RDI	/Units	RT	Q.	Dilution	Batch	Flag
Volatile Orga	anic Compounds					·-		vn	
	VOC Extraction	Lab extracted		N/A			1	5110533	U
Volatile Orga	nic Compounds	Prepared by meth	od SW	846 5035A	Soil (low)	level)		<u> </u>	· Ertell Sin
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)			μg/kg dry		,	1	5110599	U
67-64-1	Acetone	BRL	85,0	μg/kg dry		R	1	II	U
71-43-2	Benzene	BRL	4.3	μg/kg đry			1	II	U
78-93-3	2-Butanone (MEK)	BRL	42.5	μg/kg dry			1	п	U
75-15-0	Carbon disulfide	BRL	21.3	μg/kg dry			1	ч	U
56-23-5	Carbon tetrachloride	BRL	4.3	μg/kg dry			1	71	Ü
108-90-7	Chlorobenzene	BRL	4.3	μg/kg dry			1	u	บ
75-00-3	Chloroethane	BRL	8.5	μg/kg dry			1	n	ย
67-66-3	Chloroform	BRL	4.3	μg/kg dry			1	If .	U
124-48-1	Dibromochloromethane	BRL	4.3	μg/kg dry			. 1	и	U
95-50-1	1,2-Dichlorobenzene	BRL	4.3	μg/kg dry			1	н	U
541-73-1	1,3-Dichlorobenzene	BRL	4.3	μg/kg dry			1	n.	υ
106-46-7	1,4-Dichlorobenzene	BRL	4.3	μg/kg dry			1		บ
75-34-3	1,1-Dichloroethane	BRL	4.3	μg/kg dry			1	n	ับ
107-06-2	1,2-Dichloroethane	BRL	4.3	μg/kg dry			1	, B	บ
75-35-4	1,1-Dichloroethene	BRL	4.3	μg/kg dry	-		1	It	U
156-60-5	trans-1,2-Dichloroethene	BRL	4.3	μg/kg dry			1	и	ับ
142-28-9	1,3-Dichloropropane	BRL	4.3	μg/kg dry	. •		1	n	U.
100-41-4	Ethylbenzene	BRL	4.3	μg/kg dry			1	-, н	ย
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL	42.5	μg/kg dry			1	17	, n
75-09-2	Methylene chloride	7.4	42.5	μg/kg dry			1 -		VOC3,
79-34-5	1,1,2,2-Tetrachloroethane	BRL	4.3	μg/kg dry			1	n.	U U
127-18-4	Tetrachloroethene	1.0	4.3	μg/kg dry			1	n	J
108-88-3	Toluene	BRL	4.3	μg/kg dry			1		Ü
120-82-1	1,2,4-Trichlorobenzene	BRL	4.3	μg/kg dry			1	п	U
71-55-6	1,1,1-Trichloroethane	BRL	4,3	μg/kg dry			1	n .	. บ
79-01-6	Trichloroethene	0.9	4.3	μg/kg dry			1 .	11	J
96-18-4	1,2,3-Trichloropropane	BRL		μg/kg dry			1	14	U
75-01-4	Vinyl chloride	BRL		μg/kg dry			1	н	U
1330-20-7	m,p-Xylene	BRL		μg/kg dry			1	u	
	o-Xylene	BRL		μg/kg dry			1	, n	U U
	Surrogate: 4-Bromofluorobenzene	101	70-1.					11	U
	Surrogate: Toluene-d8	99.8	70-1					n	
and the second second	Surrogate: 1,2-Dichloroethane-d4	114	70-13						
	Surrogate: Dibromofluoromethane	103	70-13					u	
	•			· •					

<u>Matrix</u> Soil Collection Date/Time 05-Nov-05 15:20

Received 08-Nov-05

Method Ref. VOC

Prepared 08-Nov-05 Analyzed 08-Nov-05

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CAS No.	Analyte(s)	Result	*RDL	/Units	RT Q	Dilution	Batch	Flag
Volatile Org	anic Compounds			·	<u></u>			
eres de la companya della companya de la companya de la companya della companya d	VOC Extraction	Lab extracted		N/A		1	5110533	U,
Volatile Org	anic Compounds	Prepared by meth	od SW	846 5035A	Soil (low level)			- menu
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	BRL		μg/kg đry	(1011 10101)	I	5110599	U
	Acetone	BRL	100		R	1	ji	U
71-43-2	2 Benzene	BRL	5.0	μg/kg dry	and the second	1	h	บ
78-93-3	3 2-Butanone (MEK)	BRL		μg/kg dry	R	1	71	U
75-15-0	Carbon disulfide	BRL		μg/kg dry	*216751	1	n	U
56-23-5	Carbon tetrachloride	BRL		μg/kg dry	150	ı	n	บ
108-90-7	Chlorobenzene	BRL		μg/kg dry		1	R	บ.
75-00-3	Chloroethane	BRL		μg/kg dry		1	ır	บ
67-66-3	Chloroform	BRL		μg/kg dry		1		υ
124-48-1	Dibromochloromethane	BRL		μg/kg dry		ì	11	บ
95-50-1	1,2-Dichlorobenzene	BRL		μg/kg dry		1	11	U
541-73-1	1,3-Dichlorobenzene	BRL		μg/kg dry		1	11	บ
106-46-7	1,4-Dichlorobenzene	BRL		μg/kg dry		1	0	บ
75- 34-3	1,1-Dichloroethane	BRL		μg/kg dry		1	II.	U
107-06-2	1,2-Dichloroethane	BRL		- '	,	1	ır	U
75-35-4	1,1-Dichloroethene	BRL		μg/kg dry		i	ц.	U
156-60-5	trans-1,2-Dichloroethene	BRL	5.0	μg/kg dry		I	11	U
142-28-9	1,3-Dichloropropane	BRL	5.0	μg/kg dry		1 .	. "	ับ
100-41-4	Ethylbenzene	BRL	5.0			1	н	บ
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL ·		μg/kg dry		1	U	, n
75-09-2	Methylene chloride	8.7		μg/kg dry		1	lt .	VOC3, J
79-34-5	1,1,2,2-Tetrachloroethane	BRL	5.0	μg/kg dry		1	и.	U
127-18-4	Tetrachloroethene	0.5	5.0	μg/kg dry		1	u	j
108-88-3	Toluene	BRL		μg/kg dry	¥]	н	U
120-82-1	1,2,4-Trichlorobenzene	BRL	5.0	μg/kg dry		I)r	U
71-55-6	1,1,1-Trichloroethane	BRL	5.0	μg/kg dry		1	u	U
79-01-6	Trichloroethene	BRL		μg/kg dry		1	u	ับ
96-18-4	1,2,3-Trichloropropane	BRL		μg/kg dry		1	п	U
75-01-4	Vinyl chloride	BRL	5.0	μg/kg dry		1	ц	U
1330-20-7	m,p-Xylene	BRL		μg/kg dry		1	я .	U
95-47-6	o-Xylene	BRL		μg/kg dry	÷	1	ri	บ
460-00-4	Surrogate: 4-Bromofluorobenzene	100	70-13				U	-
	Surrogate: Toluene-d8	99.0	70-13				II	
	Surrogate: 1,2-Dichloroethane-d4	114	70-13	30 %			ıt	
1868-53-7	Surrogate: Dibromofluoromethane	102	70-13	30 %			11	

Client Project # 5555113

Method Ref.

VOC

Matrix Soil Prepared

08-Nov-05

Collection Date/Time 05-Nov-05 13:15 Analyzed

08-Nov-05

Received 08-Nov-05 Analyst YM

CAS No.	Analyte(s)	Result	*RDL	/Units	RT	Q	Dilution	Batch	Flag
Volatile Orga	anic Compounds					• *			•
	VOC Extraction	Lab extracted		N/A			. 1	5110533	U
olatile Orga	nic Compounds	Prepared by metho	d SW	846 5035A	Soil (low	level)			ÝOC10
	1,1,2-Trichlorotrifluoroethane (Freon 113)			μg/kg dry	`		I	5110599	U
67-64-1	Acetone	41.4	78.2				i	н	VOC6,
71-43-2	Benzene	BRL	3.9	μg/kg dry			1	· в	U
78-93-3	2-Butanone (MEK)	BRL	39.1			3 80	1	12	U
75-15-0	Carbon disulfide	BRL	19.6	μg/kg dry			1	D	U
56-23-5	Carbon tetrachloride	BRL	3.9	μg/kg dry		****	20 mg 1 20 mg	B	ប
108-90-7	Chlorobenzene	BRL	3.9	μg/kg dry			1	n	U
	Chloroethane	BRL	7.8	μg/kg dry			1	н	U
67-66-3	Chloroform	BRL	3.9	μg/kg dry		-	1	п	U
124-48-1	Dibromochloromethane	BRL	3.9	μg/kg dry			1	n	U
95-50-1	1,2-Dichlorobenzene	BRL	3.9	μg/kg dry			1	11	U
541-73-1	1,3-Dichlorobenzene	BRL	3.9	μg/kg dry			1	11	U
106-46-7	1,4-Dichlorobenzene	BRL	3.9				1	и	U
75-34-3	1,1-Dichloroethane	BRL	3.9				i		บ
107-06-2	1,2-Dichloroethane	BRL	3.9				1	II	U
75-35-4	1,1-Dichloroethene	BRL	3.9	μg/kg dry			ī	13	U
156-60-5	trans-1,2-Dichloroethene	BRL	3.9				i	If	U
142-28-9	1,3-Dichloropropane	BRL	3.9				ī	It.	U
	Ethylbenzene	BRL	3.9				1	и	U
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL	39.1	•			i	в.	. U
	Methylene chloride	9.4	39.1	μg/kg dry			1	R	VOC3,
	1,1,2,2-Tetrachloroethane	BRL	3.9	μg/kg dry			1	17	U
127-18-4	Tetrachloroethene	BRL	3.9	μg/kg dry			I	u ,	U
108-88-3	Toluene	BRL	3.9	μg/kg dry			1	P	U
120-82-1	1,2,4-Trichlorobenzene	BRL	3.9	μg/kg dry			I	n,	IJ
	I,1,1-Trichloroethane	BRL	3.9				1	D .	บ
79-01-6	Trichloroethene	BRL	3.9	μg/kg dry			ī	**	U
96-18-4	1,2,3-Trichloropropane	BRL	3.9	μg/kg dry			1	. "	U
	Vinyl chloride	BRL		μg/kg dry			1	11	U
1330-20-7	m,p-Xylene	BRL		μg/kg dry			i	ø	บ
	o-Xylene	BRL		μg/kg dry			1	н :	U.
	Surrogate: 4-Bromofluorobenzene	101		30 %				n	•
	Surrogate: Toluene-d8	99.6		30 %					
	Surrogate: 1,2-Dichloroethane-d4	114		30 %				u,	
	Surrogate: Dibromofluoromethane	103		30 %				"	

<u>Matrix</u> Soil Collection Date/Time 04-Nov-05 15:00 Received 08-Nov-05

Method Ref. VOC Prepared 08-Nov-05 Analyzed 08-Nov-05

CAS No.	Analyte(s)	Result	*RDL	/Units	RT	Q.	Dilution	Batch	Flag
Volatile Orga	nnic Compounds					-,			
	VOC Extraction	Lab extracted		N/A			1	5110533	U
Volatile Orga	nic Compounds	Prepared by meth	od SW8	846 5035A	Soil (low	level)			VOC10
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	BRL		μg/kg dry	(,	1	5110599	Ü
67-64-1	Acetone	BRL		μg/kg dry		18	1	It	υ
71-43-2	Benzene	BRL	4.3	μg/kg dry		•	1		Ū
78-93-3	2-Butanone (MEK)	BRL	43.4	μg/kg dry		R	1	п.	U
75-15-0	Carbon disulfide	BRL		μg/kg dry			ĺ	, 4	U
56-23-5	Carbon tetrachloride	BRL	4.3	μg/kg dry			1	It ·	U
108-90-7	Chlorobenzene	BRL	4.3	μg/kg dry			ı	IP	Ŭ
75-00-3	Chloroethane	BRL	8.7	μg/kg dry			ī	ìı	U
67-66-3	Chloroform	BRL	4.3	μg/kg dry			1	11	U
124-48-1	Dibromochloromethane	BRL	4.3	μg/kg dry			1	a	υ
95-50-1	1,2-Dichlorobenzene	BRL	4.3	μg/kg dry			1	ti	Ū
541-73-1	1,3-Dichlorobenzene	BRL	4.3	μg/kg dry			1	u	U
106-46-7	1,4-Dichlorobenzene	BRL		μg/kg dry			1	п	Ü
75-34-3	1,1-Dichloroethane	BRL	4.3	μg/kg dry	,		.1	H	U
107-06-2	1,2-Dichloroethane	BRL	4.3	μg/kg dry			1	n	U
75-35-4	1,1-Dichloroethene	BRL		μg/kg dry			1	•	U
156-60-5	trans-1,2-Dichloroethene	BRL		μg/kg dry			1	n	บ
142-28-9	1,3-Dichloropropane	BRL		μg/kg dry			1	11	Ü
100-41-4	Ethylbenzene	BRL		μg/kg dry			1	U	Ü
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		μg/kg dry			1	n	, U
75-09-2	Methylene chloride	7.4		μg/kg dry			1	12	VOC3,
79-34-5	1,1,2,2-Tetrachloroethane	BRL		μg/kg dry			1	n	υ
127-18-4	Tetrachloroethene	0.9	4.3	μg/kg dry			Ī	н	J
108-88-3	Toluene	BRL	4.3	μg/kg dry			1	n	Ü
120-82-1	1,2,4-Trichlorobenzene	BRL	4.3	μg/kg dry			1	n	U
71-55-6	1,1,1-Trichloroethane	BRL	4.3	μg/kg dry			1	. н	U
79-01-6	Trichloroethene	BRL		μg/kg dry			1	n	U
96-18-4	1,2,3-Trichloropropane	BRL		μg/kg dry	,		1	,	υ
75-01-4	Vinyl chloride	BRL		μg/kg dry			1	16	II
	m,p-Xylene	BRL		μg/kg dry			1	11	υ
	o-Xylene	BRL		μg/kg dry			1	n	U
460-00-4	Surrogate: 4-Bromofluorobenzene	102	70-13				-	n	Ü
	Surrogate: Toluene-d8	99.2	70-13					U	
	Surrogate: 1,2-Dichloroethane-d4	117	70-13					n	
	Surrogate: Dibromofluoromethane	103	70-13					н	•

<u>Matrix</u> Soil Collection Date/Time 04-Nov-05 13:45 Received 08-Nov-05

Method Ref. VOC Prepared 08-Nov-05 Analyzed 08-Nov-05

CAS No.	Analyte(s)	Result	*RDL	/Units	RT	Q.	Dilution	Batch	Flag
Volatile Org	anic Compounds								
	VOC Extraction	Lab extracted		N/A			1	5110533	υ
olatile Orga	nic Compounds	Prepared by metho	od SW8	346 5035A	Soil (low	level)			VOCIO
	1,1,2-Trichlorotrifluoroethane (Freon 113)			μg/kg dry	•	,	1	5110599	บ
67-64-1	Acetone	BRL		μg/kg dry	,	R	1	. и	U
71-43-2	Benzene	BRL		μg/kg dry		,,	1	п	U
78-93-3	2-Butanone (MEK)	BRL		μg/kg dry		R	1	19	บ
75-15-0	Carbon disulfide	BRL	21.3	μg/kg dry			. 1	if	U
56-23-5	Carbon tetrachloride	BRL	4.3	μg/kg dry			1	10	· U
108-90-7	Chlorobenzene	BRL	4.3	μg/kg dry			1	Iŧ.	U
75-00-3	Chloroethane	BRL	8.5	μg/kg dry			1	It	U
67-66-3	Chloroform	BRL	4.3	μg/kg dry			1	п	U
124-48-1	Dibromochloromethane	BRL	4.3	μg/kg dry			1	п	U
95-50-1	1,2-Dichlorobenzene	BRL	4.3	μg/kg dry			1	п	υ
541-73-1	1,3-Dichlorobenzene	BRL	4.3	μg/kg dry			1	н	U
106-46-7	1,4-Dichlorobenzene	BRL	4.3	μg/kg dry			1		U
75-34-3	I,1-Dichloroethane	BRL	4.3	μg/kg dry			1	n.	U
107-06-2	1,2-Dichloroethane	BRL	4.3	μg/kg dry			1	п	U
75-35-4	1,1-Dichloroethene	BRL	4.3	μg/kg dry			1	11	U
156-60-5	trans-1,2-Dichloroethene	BRL		μg/kg dry			1	3 1	U
142-28-9	1,3-Dichloropropane	BRL	4.3	μg/kg dry			I	4)	U
100-41-4	Ethylbenzene	BRL		μg/kg dry		-	1	ij	U
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL	42.6	μg/kg dry			1	n	· U
75-09-2	Methylene chloride	9.2	42.6	μg/kg dry			I	U	VOC3
79-34-5	1,1,2,2-Tetrachloroethane	BRL	4.3	μg/kg dry			1	н	บ
127-18-4	Tetrachloroethene	2,2	4.3	μg/kg dry		-	1	В	J
108-88-3	Toluene	BRL	4.3	μg/kg đry			1	II	U
120-82-1	1,2,4-Trichlorobenzene	BRL		μg/kg dry			1	ţi.	Ü
71-55-6	1,1,1-Trichloroethane	BRL	4.3	μg/kg dry			1	н	U
79-01-6	Trichloroethene	BRL	4.3	μg/kg dry			1	á.	U
96-18-4	1,2,3-Trichloropropane	BRL	4.3	μg/kg dry			I	ti	Ü
75-01-4	Vinyl chloride	BRL		μg/kg dry			I	u	U
1330-20-7	m,p-Xylene	BRL .		μg/kg dry			1	11	Ū
	o-Xylene	BRL		μg/kg dry			1	n	บ
	Surrogate: 4-Bromofluorobenzene	103	70-1.	•				ıı	V
	Surrogate: Toluene-d8	99.8	70-1.					I†	
	Surrogate: 1,2-Dichloroethane-d4	11,6	70-13		•			п	
1868-53-7	Surrogate: Dibromofluoromethane	102	70-1					и	

Matrix SoilCollection Date/Time 04-Nov-05 13:15 Received 08-Nov-05

Method Ref. VOC Prepared 08-Nov-05 Analyzed 08-Nov-05

		····	٠.				-		
CAS No.	Analyte(s)	Result	*RDL	/Units	RT	Q .	Dilution	Batch	Flag
olatile Orga	anie Compounds								
	VOC Extraction	Lab extracted		N/A			1	5110533	U
olatile Orga	nic Compounds	Prepared by meth	od SW8	346 5035A	Soil (lov	v level)			
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)			μg/kg dry	`	,	1	5110599	U
67-64-1	Acetone	BRL	96.6	μg/kg dry		3 2	1	п	υ
71-43-2	Benzene	BRL	4.8	μg/kg dry			. 1	п	U
78-93-3	2-Butanone (MEK)	BRL	48.3	μg/kg dry		ER.	1	н	υ
75-15-0	Carbon disulfide	BRL	24.1	μg/kg dry			1	н	U
56-23-5	Carbon tetrachloride	BRL ·	4.8	μg/kg dry			1		U
108-90-7	Chlorobenzene	BRL	4.8	μg/kg dry			1	ч	U
75-00-3	Chloroethane	BRL	9.7	μg/kg dry			1	tt .	U
67-66-3	Chloroform	BRL	4.8	μg/kg dry			1	ţı	U
124-48-1	Dibromochloromethane	BRL	4.8	μg/kg dry			1	0	υ
95-50-1	1,2-Dichlorobenzene	BRL	4.8	μg/kg dry			1	IJ	Ū
541-73-1	1,3-Dichlorobenzene	BRL	4.8	μg/kg dry			1 .	Ó.	υ
106-46-7	1,4-Dichlorobenzene	BRL	4.8	μg/kg dry			1		U
75-34-3	1,1-Dichloroethane	BRL	4.8	μg/kg dry			1	ti .	U
107-06-2	1,2-Dichloroethane	BRL	4.8	μg/kg dry			1	17	U
75-35-4	1,1-Dichloroethene	BRL	4.8	μg/kg dry			1	u	Ū
156-60-5	trans-1,2-Dichloroethene	BRL	4.8	μg/kg dry			I	n	Ü
142-28-9	1,3-Dichloropropane	BRL	4.8	μg/kg dry			1	91	บ
100-41-4	Ethylbenzene	BRL	4.8	μg/kg dry			1	n	U
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		μg/kg dry			1	u	, υ
75-09-2	Methylene chloride	9.0	48.3	μg/kg dry			1	11	VOC3
79-34-5	1,1,2,2-Tetrachloroethane	BRL	4.8	μg/kg dry			1	ır	U
127-18-4	Tetrachloroethene	1.9		μg/kg dry			I	*1	J
108-88-3	Toluene	BRL		μg/kg dry			I	u -	บ
120-82-1	1,2,4-Trichlorobenzene	BRL		μg/kg dry			1	n	U
71-55-6	1,1,1-Trichloroethane	BRL		μg/kg dry			1		U
79-01-6	Trichloroethene	BRL		μg/kg dry			1	II.	U
96-18-4	1,2,3-Trichloropropane	BRL		μg/kg dry			1	ıı	U
75-01-4	Vinyl chloride	BRL		μg/kg dry			1	11	U
	m,p-Xylene	BRL		μg/kg dry			1	4)	U
	o-Xylene	BRL		μg/kg dry			1	Ħ	U
	Surrogate: 4-Bromofluorobenzene	104		30 %			-	H	U
	Surrogate: Toluene-d8	100		30 %				0 .	
	Surrogate: 1,2-Dichloroethane-d4	115		30 %		٠			
1868-53-7	Surrogate: Dibromofluoromethane	103		30 %				u	

<u>Matrix</u> Soil Collection Date/Time 08-Nov-05 10:45 Received 08-Nov-05

Method Ref. VOC Prepared 08-Nov-05 Analyzed 08-Nov-05

CAS No.	Analyte(s)	Result	*RDL/Units	RT Q	Dilution	Batch	Flag
Volatile Orga	anic Compounds		A STATE OF THE STA				
	VOC Extraction	Lab extracted	N/A		2 - 1 1	5110533	U
<u>Vo</u> latile Orga	nic Compounds	Prepared by met	hod SW846 5030 S	oil (high level)	•		
	1,1,2-Trichlorotrifluoroethane (Freon 113)		58.1 μg/kg dry	(8 11 11)	50	5110758	U
67-64-1	Acetone	BRL	1160 μg/kg dry	18.7	50	U	Ū
71-43-2	Benzene	BRL	58.1 μg/kg dry		50	Ŋ	Ū
78-93-3	2-Butanone (MEK)	BRL	581 μg/kg dry		50	R	บ
75-15-0	Carbon disulfide	BRL	291 μg/kg dry		50	B	Ū
56-23-5	Carbon tetrachloride	151	58.1 μg/kg dry		50	tf .	_
108-90-7	Chlorobenzene	BRL	58.1 μg/kg dry		50	ų	υ
75-00-3	Chloroethane	BRL	116 μg/kg dry		50	ut.	U
67-66-3	Chloroform	476	58.1 μg/kg dry		50	27	
124-48-1	Dibromochloromethane	BRL	58.1 μg/kg dry		50	u	υ
95-50-1	1,2-Dichlorobenzene	BRL	58.1 μg/kg dry		50	a	U
541-73-1	1,3-Dichlorobenzene	BRL	58.1 μg/kg dry		50	и,	Ū
106-46-7	1,4-Dichlorobenzene	BRL	58.1 μg/kg dry		50	Ir	U
75-34-3	1,1-Dichloroethane	BRL	58.1 μg/kg dry		50	п	υ
107-06-2	1,2-Dichloroethane	BRL	58.I μg/kg dry		50	п	Ü
75-35-4	1,1-Dichloroethene	BRL	58.1 μg/kg dry		50	н .	Ü
156-60-5	trans-1,2-Dichloroethene	BRL	58.1 μg/kg dry		50	н	บ
142-28-9	1,3-Dichloropropane	BRL	58.1 μg/kg dry		50	11	บ
100-41-4	Ethylbenzene	BRL	58.1 μg/kg dry		50	н	U
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL	581 μg/kg dry		50	11	· U
75-09-2	Methylene chloride	BRL	581 μg/kg dry		. 50		U
79-34-5	1,1,2,2-Tetrachloroethane	BRL	58.1 μg/kg dry		50	n	U
127-18-4	Tetrachloroethene	BRL	58.1 μg/kg dry		50	. B	ับ
108-88-3	Toluene	BRL	58.1 μg/kg dry		50	п	U
120-82-1	1,2,4-Trichlorobenzene	BRL	58.1 μg/kg dry		50	п .	Ū
71-55-6	1,1,1-Trichloroethane	BRL	58.1 μg/kg dry		50	11	U
79-01-6	Trichloroethene	BRL	58.1 μg/kg dry		50	÷i	U
96-18-4	1,2,3-Trichloropropane	BRL	58.1 μg/kg dry		50	0	U
75-01-4	Vinyl chloride	BRL	58.1 μg/kg dry		50	n	U
	m,p-Xylene	BRL	116 μg/kg dry		50	11	U
95-47-6	o-Xylene	BRL	58.1 μg/kg dry		50	. #	U
460-00-4	Surrogate: 4-Bromofluorobenzene	103	70-130 %			. и	-
	Surrogate: Toluene-d8	106	70-130 %"	•		. н	
17060-07-0	Surrogate: 1,2-Dichloroethane-d4	100	70-130 %			и	
1868-53-7	Surrogate: Dibromofluoromethane	100	70-130 %			ч	

Matrix Soil Collection Date/Time 08-Nov-05 09:30 Received 08-Nov-05

Method Ref. VOC Prepared 08-Nov-05 Analyzed 08-Nov-05

CAS No.	Analyte(s)	Result	*RDL	(Units	RT	Q	Dilution	Ratch	Flag
	anic Compounds			- 1770		×	47+444+016	DHICK	1 mg
Volatile Orga	VOC Extraction	Lab extracted		N/A			1 .	5110533	U
Volatile Orea	nic Compounds	Prepared by meth			Sail (low	/ level)	-		Ū
	1,1,2-Trichlorotrifluoroethane (Freon 113			μg/kg dry	3011 (10 N	10401)	. 1	5110599	U
	Acetone	166		μg/kg dry		3	1	11	VOC6
71-43-2	Benzene	BRL		μg/kg dry			1	ri .	บ
	2-Butanone (MEK)	12.9		μg/kg dry			i	u	VOC6,
	Carbon disulfide	0.6		μg/kg dry		ALCO COM	1	u	J
56-23-5	Carbon tetrachloride	BRL		μg/kg dry			1	n	U
108-90-7	Chlorobenzene	BRL		μg/kg dry			1	ij	บ
75-00-3	Chloroethane	BRL		μg/kg dry			1	п	U.
67-66-3	Chloroform	BRL		μg/kg dry			ī	19	บ
124-48-1	Dibromochloromethane	BRL		μg/kg dry			ī	н	U
95 - 50-1	1,2-Dichlorobenzene	BRL		μg/kg dry			. 1	п	υ
	1,3-Dichlorobenzene	BRL		μg/kg dry			I	n	บ
	1,4-Dichlorobenzene	BRL		μg/kg dry		•	1	19	U
75-34-3	1,1-Dichloroethane	BRL		μg/kg dry	•		1	*1	U
107-06-2	1,2-Dichloroethane	BRL		μg/kg dry			1	11	U
	1,1-Dichloroethene	BRL		μg/kg dry			1	н	U
156-60-5	trans-1,2-Dichloroethene	BRL		μg/kg dry			1	n	บ
	1,3-Dichloropropane	BRL		μg/kg dry			1	ц	U
	Ethylbenzene	BRL		μg/kg dry			1	u	บ
	4-Methyl-2-pentanone (MIBK)	BRL		μg/kg dry			1	n	יט
	Methylene chloride	17.2		μg/kg dry			1	ıţ	VOC3,
	1,1,2,2-Tetrachloroethane	BRL		μg/kg dry			Ī	11	τ σευ, . Τ
	Tetrachloroethene	BRL		μg/kg dry			1	ij.	υ
108-88-3	Toluene	BRL		μg/kg dry			. 1	н	U
120-82-1	1,2,4-Trichlorobenzene	BRL		μg/kg dry			1		ש
	1,1,1-Trichloroethane	BRL		μg/kg dry			. 1	R	บ
	Trichloroethene	BRL		μg/kg dry			1	и,	U
96-18-4	1,2,3-Trichloropropane	BRL		μg/kg dry			1	11	บ
	Vinyl chloride	BRL		μg/kg dry			1	**	บ
	m,p-Xylene	BRL		μg/kg dry			1	ŧ	U
	o-Xylene	BRL		μg/kg dry			1	11	บ
	Surrogate: 4-Bromofluorobenzene	101	70-13				•	ij	Ð
	Surrogate: Toluene-d8	100	70-13			* .		n.	
	Surrogate: 1,2-Dichloroethane-d4	114	70-13					'n	
	Surrogate: Dibromofluoromethane	103	. 70-13					11	

<u>Matrix</u> Soil Collection Date/Time 07-Nov-05 15:00 Received 08-Nov-05

Method Ref. VOC Prepared 08-Nov-05 Analyzed 08-Nov-05

		14 6.0			00 1(0) 05		1 141	
CAS No.	Analyte(s)	Result	*RDI	/Units	RT Q	Dilution	Batch	Flag
Volatile Orga	anic Compounds	e e			F 4,150.			
_	VOC Extraction	Lab extracted		N/A	jestie sijagitti.	- 1	5110533	_ U .
<u>Volatile Orga</u>	nic Compounds	Prepared by meth	od SW8	846 5035A	Soil (low level)	** .	Arrellin	•
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)			μg/kg dry		1	5110599	บ
67-64-1	Асетопе	143	108	μg/kg dry	37.	I	n	VOC6
71-43-2	Benzene	BRL	5.4	μg/kg dry		1	н	υ
78-93-3	2-Butanone (MEK)	6.7	54.0	μg/kg dry		1	п	VOC6, a
75-15-0	Carbon disulfide	BRL	27.0	μg/kg dry		1	n	U
56-23-5	Carbon tetrachloride	BRL	5,4	μg/kg dry		1	н.	U
108-90-7	Chlorobenzene	BRL	5.4	μg/kg dry		. 1	Iŝ	U
75-00-3	Chloroethane	BRL	10.8	μg/kg dry		1	*	U
67-66-3	Chloroform	BRL		μg/kg dry		1	и	U
124-48-1	Dibromochloromethane	BRL		μg/kg dry		1	п	Ü
95-50-1	1,2-Dichlorobenzene	BRL	5.4	μg/kg dry		1	ŧI	Ū
541-73-1	1,3-Dichlorobenzene	BRL		μg/kg dry		I	11	U
106-46-7	1,4-Dichlorobenzene	BRL		μg/kg dry		1	n	U
75-34-3	1,1-Dichloroethane	BRL		μg/kg dry		1	0	U
107-06-2	1,2-Dichloroethane	BRL		μg/kg dry		. 1	н	Ű
75-35-4	1,I-Dichloroethene	BRL		μg/kg dry		1	14	U
156-60-5	trans-1,2-Dichloroethene	BRL		μg/kg dry		1	#	U
142-28-9	1,3-Dichloropropane	BRL		μg/kg dry		i	. "	υ
100-41-4	Ethylbenzene	BRL		μg/kg dry	-	ī	11	บ
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		μg/kg dry		l	n	· U
75-09-2	Methylene chloride	15.1		μg/kg dry		1	n	VOC3, J
79-34-5	1,1,2,2-Tetrachloroethane	BRL		μg/kg dry		1 1	и .	U
127-18-4	Tetrachloroethene	BRL		μg/kg dry		ı	и	U
108-88-3	Toluene	BRL	5.4	μg/kg dry		I	a	U
120-82-1	1,2,4-Trichlorobenzene	BRL	5.4	μg/kg dry		1	(1	U
71-55-6	1,1,1-Trichloroethane	BRL	5.4	μg/kg dry		1		บ
79-01-6	Trichloroethene	BRL	5.4	μg/kg dry		1	It	บ
96-18-4	1,2,3-Trichloropropane	BRL		μg/kg dry		1	и	U
75-01-4	Vinyl chloride	BRI.		μg/kg dry		1	н	U
1330-20-7	m,p-Xylene	BRL		μg/kg dry		1	tl	Ü
95-47-6	o-Xylene	BRL		μg/kg dry	•	1	Ħ	U
460-00-4	Surrogate: 4-Bromofluorobenzene	100		30 %	•		n	7
2037-26-5	Surrogate: Toluene-d8	99.6	70-1.	30 %		-	#	
17060-07-0	Surrogate: 1,2-Dichloroethane-d4	117	70-1.				И	
1868-53-7	Surrogate: Dibromofluoromethane	104	70-1.	30 %			n	

Matrix Soil Collection Date/Time 07-Nov-05 11:30

Received 08-Nov-05

Method Ref. VOC Prepared 08-Nov-05 Analyzed 08-Nov-05

CAS No.	Analyte(s)	Result	*RDL	/Units	RT	Q.	Dilution	Batch	Flag
Volatile Org	anic Compounds		· · · · · ·	~##\}				that the part	
	VOC Extraction	Lab extracted		N/A			1	5110533	U
Volatile Orga	nic Compounds	Prepared by meth	od SW8	846 5035A	Soil (lo	w level)			
	1,1,2-Trichlorotrifluoroethane (Freon 113)	BRL		μg/kg dry	JUI (.U	10101)	1	5110599	U
	Acetone	75.3		μg/kg dry			1	"	VOC6,
71-43-2	Benzene	BRL ·		μg/kg dry		G	t	н	บ
78-93-3	2-Butanone (MEK)	5.0		μg/kg dry		T	. 1	11	VOC6,
	Carbon disulfide	BRL		•			1	n	U
56-23-5	Carbon tetrachloride	BRL	6.6	μg/kg dry			1	11	บ
108-90-7	Chlorobenzene	BRL		μg/kg dry			1	51	U
75-00-3	Chloroethane	BRL	13.2				1	ø	υ
67-66-3	Chloroform	BRL		μg/kg dry			1	11	U
124-48-1	Dibromochloromethane	BRL		μg/kg dry			1	I†	U
95-50-1	1,2-Dichlorobenzene	BRL	6.6	μg/kg dry			1	ır	บ
541-73-1	1,3-Dichlorobenzene	BRL	6.6	μg/kg dry			ı	ır	บ
106-46-7	1,4-Dichlorobenzene	BRL					1	lf .	U.
75-34-3	1, I-Dichloroethane	BRL					1	P	U.
107-06-2	1,2-Dichloroethane	BRL		μg/kg dry			1	11	ับ
75-35-4	1,1-Dichloroethene	BRL	6.6	μg/kg dry			1	н	U
156-60-5	trans-1,2-Dichloroethene	BRL	6.6	μg/kg dry			- 1	11	Ü
	1,3-Dichloropropane	BRL	6.6	μg/kg dry			1	9	U
	Ethylbenzene	BRL		μg/kg dry			1	H	U
	4-Methyl-2-pentanone (MIBK)	BRL		μg/kg dry			1	,	י ט
	Methylene chloride	12.3	66.1	μg/kg dry			ī	Ц	VOC3,
79-34-5	1,1,2,2-Tetrachloroethane	BRL		μg/kg dry			1	н	νοcs,.
-	Tetrachloroethene	BRL	6,6	μg/kg dry			1	п	U
108-88-3	Toluene	BRL	6.6	μg/kg dry			I	u	U
120-82-1	1,2,4-Trichlorobenzene	BRL	6.6	μg/kg dry			1	n	บ
	1,1,1-Trichloroethane	BRL		μg/kg dry			1	jt	บ
	Trichloroethene	BRL	6.6	μg/kg dry			1	Ħ	U
96-18-4	1,2,3-Trichloropropane	BRL		μg/kg dry			1	tt	ย
	Vinyl chloride	BRL		μg/kg dry			1	n	ย
	m,p-Xylene	BRL.		μg/kg dry			1	. 0	U
	o-Xylene	BRL		μg/kg dry			1	IJ	U
	Surrogate: 4-Bromofluorobenzene	103	70-13				•	ır	U
	Surrogate: Toluene-d8	99.6	70-13					11	
	Surrogate: 1,2-Dichloroethane-d4	115	70-1					n	
	Surrogate: Dibromofluoromethane	101	70-13					n	

Sample Identii B7-6-13-13.5-		Client Project # 5555113	<u>Ma</u> So		Collection Date/Time 08-Nov-05 08:40			Received 08-Nov-05	
SA36885-28		Method Ref. VOC	<u>Prep</u> 08-No			lyzed ov-05		Analy YM	
CAS No.	Analyte(s)	Result	*RDL	/Units	RT	Q	Dilution	Batch	Flag
Volatile Orga	nic Compounds								
_	VOC Extraction	Lab extracted		N/A			1	5110533	υ
Volatile Orgai	nic Compounds	Prepared by me	thod SW	846 5035	Soil (low	level)		•	
	1,1,2-Trichlorotrifluoroethane (Freon 1			μg/kg dry	•	10101)	1	5110599	U
	Acetone	253	135				1	ti	VOC6
71-43-2	Benzene	1.5	6.7				1	ŧı	J
78-93-3	2-Butanone (MEK)	179	67.3	μg/kg dry			1	n .	VOC6
	Carbon disulfide	1.0	33.7	-		September:	1	ŧı	J
56-23-5	Carbon tetrachloride	BRL	6.7	+			1		U
108-90-7	Chlorobenzene	BRL	6.7				1	11	บ
75-00-3	Chloroethane	BRL	13.5	μg/kg dry			1	*1	บ
67-66-3	Chloroform	BRL	6.7				1	31	υ
124-48-1	Dibromochloromethane	BRL	6.7				1	ŧ	บ
95-50-1	1,2-Dichlorobenzene	BRL	6.7		=		1	11	υ
541-73-1	1,3-Dichlorobenzene	BRL	6.7				1	h	U
106-46-7	1,4-Dichlorobenzene	BRL	6.7	μg/kg dry			1	н	υ
75-34-3	1,1-Dichloroethane	BRL	6.7				1	11	υ
107-06-2	1,2-Dichloroethane	BRL	6.7				1	п	บ
75-35-4	1,1-Dichloroethene	BRL	6.7				1	11	U
156-60-5	trans-1,2-Dichloroethene	BRL	6.7				1	Ħ	υ
142-28-9	1,3-Dichloropropane	BRL	6.7				1	71	U
100-41-4	Ethylbenzene	BRL	6.7				.1	U	U
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL	67.3				1	U	· v
75-09-2	Methylene chloride	24.4	67.3	μg/kg dry			1	· ·	VOC3,
79-34-5	1,1,2,2-Tetrachloroethane	BRL	6.7				I	11	U
127-18-4	Tetrachloroethene	₹ 0.7	6.7	µg/kg dгу			1	n	J
108-88-3	Toluene	BRL	6.7				1	п	บ
120-82-1	1,2,4-Trichlorobenzene	BRL	6.7				1	fl	Ü
71-55-6	1,1,1-Trichloroethane	BRL	6.7	•			- 1	11	Ū.
79-01-6	Trichloroethene	BRL	6.7				1	71	Ü
96-18-4	1,2,3-Trichloropropane	BRL	6.7				1	n	Ü
75-01-4	Vinyl chloride	BRL	6.7				1	п	Ü
1330-20-7	m,p-Xylene	BRL	13.5				resident in the second	pare of n	U
95-47-6	o-Xylene	BRL	6.7	μg/kg dry			1	11	U

91.8

95.4 120

108

70-130 %

7.0-130 %

70-130 %

70-130 %

2037-26-5 Surrogate: Toluene-d8

460-00-4 Surrogate: 4-Bromofluorobenzene

17060-07-0 Surrogate: 1,2-Dichloroethane-d4

1868-53-7 Surrogate: Dibromofluoromethane

Client Project # 5555113

<u>Matrix</u> Soil Collection Date/Time 07-Nov-05 13:45 Received 08-Nov-05

Method Ref. VOC Prepared 08-Nov-05 Analyzed 08-Nov-05

CAS No.	Analyte(s)	Result	*RDL	/Units	RT	Q	Dilution	Batch	Flag
Volatile Org	ganic Compounds								
	VOC Extraction	Lab extracted		N/A			I	5110533	U
Volatile Org	anic Compounds	Prepared by meth	od SW8	346 5035A	Soil (low	level)			
76-13-	1 1,1,2-Trichlorotrifluoroethane (Freon 113)			μg/kg dry		,	I	5110599	Ü
67 - 64-	1 Acetone	442	131	μg/kg dry		1	1	11	VOC6
71-43-2	2 Benzene	BRL	6.6	μg/kg dry			1	ıı	U
78-93-3	3 2-Butanone (MEK)	12.4	65.7	μg/kg dry			1	II.	VOC6, J
75-15-0	Carbon disulfide	BRL	32.9	μg/kg dry			1	11	U
56-23-	5 Carbon tetrachloride	BRL	6.6	μg/kg dry			1	н	U
108-90-7	7 Chlorobenzene	BRL	6.6	μg/kg dry			1	H	U
75-00-3	3 Chloroethane	BRL	13.1	μg/kg dry			1	1]	U
67-66-3	3 Chloroform	BRL	6.6	μg/kg dry			. 1	11	Ü
124-48-	Dibromochloromethane	BRL	6.6	μg/kg dry			1		U
95-50-1	1,2-Dichlorobenzene	BRL	6.6	μg/kg dry			. 1	n	Ü
541-73-1	1,3-Dichlorobenzene	BRL	6.6	μg/kg dry			1	n	U
106-46-1	7 I,4-Dichlorobenzene	BRL	6.6	μg/kg dry			1	n	Ü.
75-34-3	3 1,1-Dichloroethane	BRL	6.6	μg/kg dry			. 1	н	U
107-06-2	2 1,2-Dichloroethane	BRL	6.6	μg/kg dry			1	и	U
75-35-4	1,1-Dichloroethene	BRL	6.6	μg/kg dry			1	10	υ
156-60-	trans-1,2-Dichloroethene	BRL	6.6	μg/kg dry			1	11	IJ
142-28-9	7 1,3-Dichloropropane	BRL	6.6	μg/kg dry			1	71	Ü
100-41-4	Ethylbenzene	BRL	6.6	μg/kg dry			1	n	U.
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL	65.7	μg/kg dry			1	II .	·U
75-09-2	2 Methylene chloride	26.0	65.7	μg/kg dry			1	11	VOC3, J
79-34-5	1,1,2,2-Tetrachloroethane	BRL	6.6	μg/kg dry			I	II	υ
127-18-4	Tetrachloroethene	3.4	6.6	μg/kg dry			I	11	J
108-88-3	Toluene	BRL	6.6	μg/kg dry			1	n	U
120-82-1	1,2,4-Trichlorobenzene	BRL	6.6	μg/kg dry			1	ti	υ
71-55-6	1,1,1-Trichloroethane	BRL	6.6	μg/kg dry			1	11	U
79-01-6	Trichloroethene	BRL	6.6	μg/kg dry			1	р .	U
96-18-4	1,2,3-Trichloropropane	BRL		μg/kg dry			I	tr.	Ū
75-01-4	Vinyl chloride	BRL		μg/kg dry			1	ıı	บ
	m,p-Xylene	BRL		μg/kg dry			1	n	U
	o-Xylene	BRL		μg/kg dry			. 1	,,	U
460-00-4	Surrogate: 4-Bromofluorobenzene	89.4		30 %.				Ħ	-
	Surrogate: Toluene-d8	93.8		30 %				11	
17060-07-0	Surrogate: 1,2-Dichloroethane-d4	121		30 %			•	n	
1868-53-7	Surrogate: Dibromofluoromethane	108	70-1.	30 %				10	

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<u>Matrix</u> Soil Collection Date/Time 07-Nov-05 11:55 Received 08-Nov-05

Method Ref. VOC

Prepared 08-Nov-05 Analyzed 08-Nov-05

CAS No.	Analyte(s)	Result	*RDI	/Units	RT	$\boldsymbol{\varrho}_{\cdot}$	Dilution	Batch	Flag
Volatile Org	anic Compounds	,				,			
•	VOC Extraction	Lab extracted		N/A			1	5110533	U
Volatile Orga	inic Compounds	Prepared by meth	od SW	846 5035A	Soil (lov	v level)			
	1,1,2-Trichlorotrifluoroethane (Freon 113)			μg/kg dry	(·	, , , , ,	. 1	5110599	U
	Acetone	62.3	113				1.	p	VOC6,
71-43-2	Benzene	BRL	5.6				l	II.	υ
78-93-3	2-Butanone (MEK)	BRL	56.3			R	I	ı•	U
75-15-0	Carbon disulfide	BRL	28.2				1	17	U
56-23-5	Carbon tetrachloride	BRL	5.6				1	u	U
108-90-7	Chlorobenzene	BRL	5.6				1	n	U
75-00-3	Chloroethane	BRL	11.3	μg/kg dry			. 1	71	υ
67-66-3	Chloroform	BRL	5.6	μg/kg dry		• •	1	#1	Ü
124-48-1	Dibromochloromethane	BRL	5.6	μg/kg dry			1	11	U
95-50-1	1,2-Dichlorobenzene	BRL	5.6	μg/kg dry			I	ls .	U
541-73-1	1,3-Dichlorobenzene	BRL	5.6	μg/kg dry			1	. 10	U
106-46-7	1,4-Dichlorobenzene	BRL	5.6	μg/kg dry			1	. # .	U
75-34-3	1,1-Dichloroethane	BRL	5.6	μg/kg dry			1	п	U
107-06-2	1,2-Dichloroethane	BRL		μg/kg dry			1	ıı	U
75-35-4	1,1-Dichloroethene	BRL	5.6				1	u	. U
156-60-5	trans-1,2-Dichloroethene	BRL	5.6	μg/kg dry			1	п	U
142-28-9	1,3-Dichloropropane	BRL	5.6	μg/kg dry			1	U	· U
100-41-4	Ethylbenzene	BRL	5.6	μg/kg dry			1	U	U
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL	56.3				1	п	· U
75-09-2	Methylene chloride	16.7	56.3			•	1	u.	VOC3,
79-34-5	1,1,2,2-Tetrachloroethane	BRL	5.6	μg/kg dry			1		U
127-18-4	Tetrachloroethene	BRL	5.6	μg/kg dry			1	II .	U
108-88-3	Toluene	BRL	5.6	μg/kg dry			1	п	U
120-82-1	1,2,4-Trichlorobenzene	BRL	5.6	μg/kg dry			1	If	U
71-55-6	1,1,1-Trichloroethane	BRL	5.6	μg/kg dry			1	"	υ
79-01-6	Trichloroethene	BRL	5.6	μg/kg dry			1	II.	U
96-18-4	1,2,3-Trichloropropane	BRL	5.6	μg/kg dry			1	n	U
75-01-4	Vinyl chloride	BRL		μg/kg dry			1	υ	υ
	m,p-Xylene	BRL		μg/kg dry			1	D	U
	o-Xylene	BRL		μg/kg dry			1	u	U
460-00-4	Surrogate: 4-Bromofluorobenzene	103		30 %				п	
	Surrogate: Toluene-d8	100		30 %				n	
	Surrogate: 1,2-Dichloroethane-d4	121	70-1	30 %				. U	
1868-53-7	Surrogate: Dibromofluoromethane	101	70-1	30 %				н	



Data Validation

Environmental Chemistry

Lab and Field Audits

Sampling Plans

Data Usability Summary Report for Spectrum Analytical, Inc. Work Order SA37123

14 Soil Samples Collected November 8-10, 2005

Prepared by: Donald Anné January 3, 2006

The data packages contain the documentation required by NYSDEC ASP. The proper chain of custody procedures were followed by the samplers. All information appeared legible and complete. The data packs contained the results of TCL volatiles and lead analyses for 14 soil samples.

The overall performances of the analyses are acceptable. Spectrum Analytical, Inc. did fulfill the requirements of the analytical methods.

The data are mostly acceptable with some issues that are identified in the accompanying data validation reviews. The following data were flagged:

- The "not detected" results for acetone were flagged as "unusable" (R) in 12 soil samples listed on the attached table, because the response factors were below the allowable minimum in the associated initial and/or continuing calibrations.
- The "not detected" results for 2-butanone were flagged as "unusable" (R) in 2 soil samples listed on the attached table, because the response factors were below the allowable minimum in the associated initial and continuing calibrations.
- The results for acetone were flagged as "estimated" (J) in 12 soil samples listed in the attached table, because the response factors were below the allowable minimum in the associated initial and/or continuing calibrations.
- The results for 2-butanone were flagged as "estimated" (J) in 8 soil samples listed on the attached table, because the response factors were below the allowable minimum in the associated initial and continuing calibrations.

- The results for o-xylene and m,p-xylene in sample B7-5-12-12.5-110805 were flagged as estimates (J) because the percent recoveries for these compounds were above QC limits in the associated LCS/LCSD.
- The result for m,p-xylene in sample B-7-11-3.5-4-111005 was flagged as estimated (J) because the percent recoveries for m,p-xylene were above QC limits in the associated LCS/LCSD.
- The results for lead in the following samples were flagged as estimates (J) because the percent recoveries for lead were outside control limits in the associated MS/MSD samples.

B7-5-9-9.5-110805 B7-5-14-14.5-110805 B7-5S-3.5-4-110805 B7-5-12-12.5-110805 B7-5W-14-14.5-110805

All data that are not flagged rejected (R) are considered usable, with estimated (J) data associated with a higher level of quantitative uncertainty. Detailed information on data quality is included in the data validation reviews.

The "not detected" data that were qualified as "R" were associated with method-compliant calibrations, and the response factors for the two affected compounds were greater than 0.010. It is this reviewer's opinion that although the validation guidelines recommend that the data should be considered unusable, the "R" data may be acceptable to the user, based on the preceding facts and additional information that is not contained in the validation criteria. The user is cautioned that there is a higher degree of analytical uncertainty associated with the R-flagged data, because the relative response factors for those compounds were less than 0.050.

TABLE

DUSR SA37123

Summary of Flagged Data Due to Initial and/or Continuing Calibrations

Laboratory ID	Client Sample ID	acetone	2-butanone
SA37123-01	B7-18-11-11.5-110905	R	
SA37123-02	B7-1N-9.5-10-110905	J	<u>J</u>
SA37123-03	B7-5-9-9,5-110805	<u> </u>	
SA37123-04	B7-5-12-12.5-110805	J	
SA37123-05	B7-5-14-14.5-110805	J	3
SA37123-06	B7-5N-9-9.5-110905	J	J
SA37123-07	B7-5S-3.5-4-110805	<u> </u>	J
SA37123-08	B7-5E-9-9.5-110905	·	
SA37123-09	B7-5W-14-14.5-110805	R	والمرافقة المرافقة ال
SA37123-10	B7-9-3.5-5-110905	J	<u> </u>
SA37123-11	B7-10-8-10-111005		<u> </u>
SA37123-12	DUP-1-111005	j	<u> </u>
SA37123-13	B-7-11-8.5-9-111005	J	<u> </u>
SA37123-14	B-7-11-3.5-4-111005	R	J
SA37123-02 RE	B7-IN-9,5-10-110905R	E R	
SA37123-04RE	B7-5-12-12.5-110805R	E R	*****
SA37123-05RE	B7-5-14-14,5-110805 F	RE R	
SA37123-06 RE	87-5N-9-9.5-110905R	E R	· · · · · · · · · · · · · · · · · · ·
SA37123-07RE	B7-58-3,5-4-110805R	E R	
SA37123-11 RE	B7-10-8-10-111005RE	R	
SA37123-12RE	DUP-1-111005 RE	R	
SA37123-13RE	B-7-11-8,5-9-111005R	E R	
SA37123-14 RE	B-7-11-3.5-4-1110051	RE R	
SA37123-10RE	8-7-9-3,5-5-1109051	RE J	· · · · · · · · · · · · · · · · · · ·

Report Date: 18-Nov-05 17:05



SPECTRUM ANALYTICAL, INC. Featuring HANIBAL TECHNOLOGY

Laboratory Report

Langan Engineering & Environmental Services 21 Penn Plaza; 360 West 31st Street, 8th Floor New York, NY 10001

Attn: Jamie Barr

Project: Atlas Park - Glendale Oueens, NY Project #:5555113

Final Report

Re-Issued Report

Revised Report

Laboratory ID	Client Sample ID	<u>Matrix</u>	Date Sampled	Date Received
SA37123-01	B7-18-11-11.5-110905	Soil	09-Nov-05 09:20	14-Nov-05 09:55
SA37123-02	B7-1N-9.5-10-110905	Soil	09-Nov-05 08:40	14-Nov-05 09:55
SA37123-03	B7-5-9-9.5-110805	Soil	08-Nov-05 11:45	14-Nov-05 09:55
SA37123-04	B7-5-12-12.5-110805	Soil	08-Nov-05 11:55	14-Nov-05 09:55
SA37123-05	B7-5-14-14.5-110805	Soil	08-Nov-05 12:05	14-Nov-05 09:55
SA37123-06	B7-5N-9-9.5-110905	Soil	09-Nov-05 08:00	14-Nov-05 09:55
SA37123-07	B7-5S-3.5-4-110805	Soil	08-Nov-05 15:05	14-Nov-05 09:55
SA37123-08	B7-5E-9-9.5-110905	Soil	09-Nov-05 14:22	14-Nov-05 09:55
SA37123-09	B7-5W-14-14.5-110805	Soil	08-Nov-05 14:35	14-Nov-05 09:55
SA37123-10	B7-9-3.5-5-110905	Soil	09-Nov-05 11:00	14-Nov-05 09:55
SA37123-11	B7-10-8-10-111005	Soil	10-Nov-05 10:45	14-Nov-05 09:55
SA37123-12	DUP-1-111005	Soil	10-Nov-05 00:00	14-Nov-05 09:55
SA37123-13	B-7-11-8.5-9-111005	Soil	10-Nov-05 08:50	14-Nov-05 09:55
SA37123-14	B-7-11-3.5-4-111005	Soil	10-Nov-05 08:45	14-Nov-05 09:55

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. All applicable NELAC requirements have been met.

Please note that this report contains 98 pages of analytical data plus Chain of Custody document(s). This report may not be reproduced, except in full, without written approval from Spectrum Analytical, Inc.

Massachusetts Certification # M-MA138/MA1110

Connecticut # PH-0777

Florida # E87600/E87936

Maine # MA138

New Hampshire # 2538/2972

New York # 11393/11840

Rhode Island #98

USDA # S-51435

Vermont # VT-11393

thorized by:

Hanibal C. Tayeh, Ph.D. President/Laboratory Director

Spectrum Analytical, Inc. is a NELAC accredited laboratory organization and meets NELAC testing standards. Use of the NELAC logo however does not insure that Spectrum is currently accredited for the specific method indicated. Please refer to our "Quality" webpage at www.spectrum-analytical.com for a full listing of our current certifications.

ENVIRONMENTAL ANALYSES



Data Validation

Environmental Chemistry

Lab and Field Audits

Sampling Plans

QA/QC Review of Volatiles Data for Spectrum Analytical, Inc. Work Order SA37123 14 Soil Samples Collected November 8-10, 2005

Prepared by: Donald Anné January 3, 2006

<u>Holding Times</u>: Samples were analyzed within NYSDEC holding times.

GC/MS Tuning and Mass Calibration: The BFB tuning criteria were within control limits.

Initial Calibration: The SPCCs and CCCs were within control limits for method 8260B.

The %RSDs for target compounds were below the allowable maximum (30%), as required. The average RRF for acetone (0.018) was below the allowable minimum (0.050) for HP-1 on 10-18-05, but was greater than 0.010. The average RRF for 2-butanone (0.034) was below the allowable minimum (0.050) for HP-6 on 11-21-05, but was greater than 0.010. Positive results for these two compounds should be considered estimates (J) and negative results unusable (R) in associated samples.

Continuing Calibration: The SPCCs and CCCs were within control limits for method 8260B.

The %Ds for acetone (48.6%), dibromochloromethane (29.4%), 1,3-dichlorobenzene (31.3%), 2-hexanone (36.0%), 4-methyl-2-pentanone (40.6%), styrene (28.3%), and 1,2,4-trichlorobenzene (33.1%) were above the allowable maximum (25%) for HP-6 on 11-16-05 (CCV1115X.D). The %D for chloromethane (33.6%) was above the allowable maximum (25%) for HP-1 on 11-16-05 (lcs1116c.D). The %Ds for bromoform (34.8%) and dibromochloromethane (25.5%) were above the allowable maximum (25%) for HP-5 on 11-17-05 (ccc1117a.D). The %D for acetone (38.5%) was above the allowable maximum (25%) for HP-5 on 11-17-05 (ccc1117a.D). Positive results for these compounds should be considered estimates in associated samples.

The RRF50 for acetone (0.038) and 2-butanone (0.045) were below the allowable minimum (0.050) for HP-6 on 11-16-05 (CCV11115X.D), but was greater than 0.010. The RRF50 for acetone (0.017) was below the allowable minimum (0.050) for HP-1 on 11-16-05 (lcs1116c.D), but was greater than 0.010. The RRF50 for acetone (0.019) was below the allowable minimum (0.050) for HP-1 on 11-17-05 (ccc1117a.D), but was greater than 0.010. The RRF50 for acetone (0.032) was below the allowable minimum (0.050) for HP-5 on

Page 1 of 2

11-17-05 (ccc1117a.D), but was greater than 0.010. The RRF50 for acetone (0.017) was below the allowable minimum (0.050) for HP-1 on 11-17-05 (lcs1118b.D), but was greater than 0.010. Positive results for these two compounds should be considered estimates (J) and negative results unusable (R) in associated samples.

Blanks: The analyses of method blanks reported target compounds as not detected.

<u>Internal Standard Area Summary</u>: The internal standard areas and retention times were within control limits.

<u>Surrogate Recovery</u>: The surrogate recoveries were within control limits for the soil samples.

Matrix Spike/Matrix Spike Duplicate: The relative percent differences were below the allowable maximums and the percent recoveries were within QC limits for MS/MSD samples SA37177-04, SA37144-16, and B7-5-14-14.5-110805.

<u>Laboratory Control Sample</u>: The relative percent differences (RPDs) for target compounds were below the allowable maximums and the percent recoveries (%Rs) were within QC limits for LCS/LCSDs 5111167-BS, 5111179-BS, and 5111251-BS.

The RPDs for target compounds were below the allowable maximums, but the %R for chloromethane was above QC limits for LCS/LCSD 5111090-BS. The RPDs for target compounds were below the allowable maximums, but the %Rs for the following compounds were above QC limits for LCS/LCSD 5110981-BS.

dibromochloromethane 1,2-dichlorobenzene 1,2-dichloroethane 1,3-dichloropropane 4-methyl-2-pentanone 1,3-dichlorobenzene 1,1,2,2-tetrachloroethane vinyl chloride ethylbenzene

m,p-xylene vinyi chloride etnyibenzen

Positive results for the above compounds should be considered estimates (J) in associated samples.

<u>Field Duplicates</u>: The relative percent difference for acetone (106%) was above the allowable maximum (35%) for field pair B7-10-8-10-111005 and DUP-1-111005. Results for acetone in these two samples should be considered estimates (J).

<u>Compound ID</u>: Checked compounds were within GC quantitation limits. The mass spectra for detected compounds contained the primary and secondary ions, as outlined in the method.



Data Validation

Environmental Chemistry

Lab and Field Audits

Sampling Plans

QA/QC Review of Lead Data for Spectrum Analytical, Inc. Work Order SA37123 7 Soil Samples Collected November 8-10, 2005

Prepared by: Donald Anné January 3, 2006

Holding Times: Samples were analyzed within the NYSDEC holding time.

<u>Initial and Continuing Calibration Verification</u>: The percent recoveries for lead were within control limits (90-110%).

Blanks: The analyses for initial and continuing calibration blanks reported lead as not detected.

ICP Interference Check Sample: The percent recoveries for lead were within control limits (80-120%).

Spike Sample Recovery: The percent recoveries (%Rs) for lead (91.2% and 77.7%) were within control limits (75-125%) for MS/MSD sample B-7-11-3.5-4-111005.

One of two %Rs for lead (100% and 15.0%) was outside control limits (75-125%) for MS/MSD sample B7-9-3.5-5-110805. Two of two %Rs for lead (142% and 51.8%) were outside control limits (75-125%) for MS/MSD sample SA37177-04. Results for lead should be considered estimates (J) in associated samples.

<u>Duplicates</u>: The relative percent differences for lead were below the allowable maximum (35%) for duplicate samples B7-5-14-14.5-110805, DUP-1-111105, and SA37177-01, as required.

<u>Field Duplicates</u>: The relative percent difference for lead (5%) was below the allowable maximum (35%) for field pair B7-10-8-10-111005 and DUP-1-111005, as required (attached table).

<u>Laboratory Control Sample</u>: The percent recoveries for lead were within QC limits for batches 5110939, 5111194, and 5111096.

<u>ICP Serial Dilution</u>: The serial dilution data was not provided; therefore, %Ds could not be evaluated.

Percent Solids: The percent solids for soil samples were greater than 50%, as required.

E:\Alpha E\dataval projects\2005 Projects\05505-glendale\sa37123.pb.wpd

Volatles & Lead

<u>Calculations for Field Duplicate Relative Percent Difference (RPD)</u> SDG No. 5093024

S2= dup1-111005

			·
<u>Analyte</u>	<u>\$1</u>	<u>S2</u>	<u>RPD (%)</u>
acetone	1390	428	106%
2-butanone	4.3	ND	NC
methylene chloride	8.3	4.6	NC
tetrachloroethene	0.4	0.5	NC
lead	3.63	3.83	5%

S1= b7-10-8-10-111005

Bold results are below the RLs.

ND - Compound was reported as not detected.

NC - Not calculated, both results must be above the RL for valid %RPDs to be calculated.

Sample Identification
B7-1S-11-11.5-110905
SA37123-01

Client Project # 5555113

Method Ref.

VOC

Matrix Soil Prepared

14-Nov-05

Collection Date/Time 09-Nov-05 09:20

Analyzed

14-Nov-05

Received 14-Nov-05

> Analyst YM

CAS No.	Analyte(s)	Result	*RDL/Units	RT	Q Dilution	Batch	Flag
Volatile Orga	anic Compounds						
	VOC Extraction	Lab extracted	N/A		1	5110938	U
Volatile Orga	nic Compounds	Prepared by met	hod SW846 50	30 Soil (high leve	I)		
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	BRL	81.8 µg/kg		50	5111167	υ
67-64-1	Acetone	BRL R	1640 μg/k _ξ	g dry	50	39	บ
71-43-2	Benzene	BRL	81.8 µg/kg	g dry	50	ır	U
78-93-3	2-Butanone (MEK)	BRL	818 μg/kį	g dry	50	D	บ
75-15-0	Carbon_disulfide	BRL	409 μg/kg	g dry	50	n	Ū
56-23-5	Carbon.tetrachloride	BRL	81.8 μg/kg	g dry	50	et	บ
108-90-7	Chlorobenzene	BRL	81.8 μg/kį	g dry	50	11	υ
75-00-3	Chloroethane	BRL	164 μg/kį	g dry	. 50	п	Ų
67-66-3	Chloroform	274	81.8 μg/kį	g dry	50	n	
124-48-1	Dibromochloromethane	BRL	81.8 μg/kį	-	50	ţt	U
95-50-1	1,2-Dichlorobenzene	BRL	81.8 μg/kg		50	н	ซ
541-73-1	1,3-Dichlorobenzene	BRL	81.8 μg/kg	- ·	50	n	υ
	1,4-Dichlorobenzene	BRL	81.8 µg/kg	- •	50	я,	Ü
75-34-3	1,1-Dichloroethane	BRL	81.8 μg/kg	g dry	50	11	U
107-06-2	1,2-Dichloroethane	BRL	81.8 µg/k _l		50		υ
75-35-4	1,1-Dichloroethene	BRL	81.8 µg/kg	g dry	50	D	บ
156-60-5	trans-1,2-Dichloroethene	BRL	81.8 µg/kj	· ·	50	μ ·	U
142-28-9	1,3-Dichloropropane	BRL	81.8 μg/kg	g dry	50	u	บ
100-41-4	Ethylbenzene	BRL	81.8 μg/kg		50	ĮI.	U
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL	818 μg/kg		50	ĸ	· u
75-09-2	Methylene chloride	BRL	818 µg/kj		50	U	U
79-34-5	1,1,2,2-Tetrachloroethane	BRL	81.8 µg/k	•	50	n	ับ
127-18-4	Tetrachloroethene	BRL	81.8 µg/kj		50	U	U
108-88-3	Toluene	BRL	81.8 µg/k		50	ti	U
120-82-1	1,2,4-Trichlorobenzene	BRL	81.8 μg/kg	= '='	50	n	Ū.
	I,1,1-Trichloroethane	BRL	81.8 μg/kg		50	. я	บ
	Trichloroethene	BRL	81.8 μg/k _i		50	4	υ
96-18-4	1,2,3-Trichloropropane	BRL	81.8 μg/kg		50	α	U
	Vinyl chloride	BRL	81.8 μg/k		50	н	Ū
	m,p-Xylene	BRL	164 μg/k		50	ŧ	บ
	o-Xylene	BRL	81.8 μg/k		50	u	ับ
							~

105

108

99.8

100

70-130 %

70-130 %

70-130 %

70-130 %

460-00-4 Surrogate: 4-Bromofluorobenzene

17060-07-0 Surrogate: 1,2-Dichloroethane-d4

1868-53-7 Surrogate: Dibromofluoromethane

2037-26-5 Surrogate: Toluene-d8

Sample Identi B7-1N-9.5-10		Client Project # 5555113	<u>Matrix</u> Soil	Collection 09-Nov-			Receiv 14-Nov	
\$A37123-02	At the second second	Method Ref. VOC	Prepared 14-Nov-05		lyzed ov-05		<u>Analy</u> YM	
CAS No.	Analyte(s)	Result	*RDL/Units	RT	Q	Dilution	Batch	Flag
Volatile Orga	anic Compounds VOC Extraction	Lab extracted	N/A			ī	5110938	
Volatile Orga	mic Compounds	Prenared by met	hod SW846 5035	A Soil (low	level)			Ū
	1,1,2-Trichlorotrifluoroethane (Freon 1)		6.3 μg/kg dry	•	. • • • • • • •]	5110981	U
	Acetone	1,860	127 μg/kg dry			1	21	VOC6
71-43-2	Benzene	BRL	6.3 μg/kg dry			1	q	U
78-93-3	2-Butanone (MEK)	12.6	63.3 μg/kg dry			1	19	VOC6, J
	Carbon disulfide	BRL	31.7 μg/kg dry			1	и	U
56-23-5	Carbon tetrachloride	10.0	6.3 µg/kg dry			1	к	Ü
108-90-7	Chlorobenzene	BRL	6.3 μg/kg dry			1	12	U
75-00-3	Chloroethane	BRL	12.7 μg/kg dry			1		·U
67-66-3	Chloroform	74.5	6.3 μg/kg dry			I	м	
124-48-1	Dibromochloromethane	BRL	6.3 μg/kg dry			1 .	u	ับ
95-50-1	1,2-Dichlorobenzene	BRL	6.3 μg/kg dry			1	ч	บ
	1,3-Dichlorobenzene	BRL	6.3 μg/kg dry			1	И	U
	1,4-Dichlorobenzene	BRL	6.3 μg/kg dry			1	ıı	ซ
	1,1-Dichloroethane	BRL	6.3 μg/kg dry			1	la .	บ
•	1,2-Dichloroethane	BRL	6.3 μg/kg dry			1	il	U
	1,1-Dichloroethene	BRL	6.3 μg/kg dry			1	n	U
	trans-1,2-Dichloroethene	BRL	6.3 μg/kg dr			1	п	Ü
	1,3-Dichloropropane	BRL	6.3 μg/kg dry	•		1	n	U
	Ethylbenzene	BRL	6.3 μg/kg dry			1	н	Ų
	4-Methyl-2-pentanone (MIBK)	BRL	63.3 μg/kg dr			•. I	н	, n
	Methylene chloride	9.6	63.3 μg/kg dry			1	n	=
	1,1,2,2-Tetrachloroethane	BRL	6.3 μg/kg dr			i.	II.	VOC3, J
	Tetrachloroethene	3.6	6.3 μg/kg drj			1	и	Ü
	Toluene	BRL	6.3 μg/kg dr			1	п	J ••
	1,2,4-Trichlorobenzene	BRL				I	11	U
	1,1,1-Trichloroethane	0.8	6.3 μg/kg dry			1	н	Ū
	Trichloroethene	0.7	6.3 μg/kg dry			1	n	J
	1,2,3-Trichloropropane	BRL	6.3 μg/kg dry 6.3 μg/kg dry			1	п	J
	Vinyl chloride	BRL	•			I I	. н	U
	m,p-Xylene	BRL					,	U
	o-Xylene	BRL	12.7 μg/kg dry			1 .	ti	U
	Surrogate: 4-Bromofluorobenzene	103	6.3 μg/kg dr 70-130 %	<i>f</i>		1		U
	Surrogate: 4-Bromojiuorovenzene Surrogate: Toluene-d8	103 103	70-130 % 70-130 %				u ·	
	Surrogate: 1,2-Dichloroethane-d4	119	70-130 % 70-130 %				11 .	
	Surrogate: Dibromofluoromethane	106	70-130 % 70-130 %				II	
	mic Compounds RE		thod SW846 5030	Soil (black t	لأأمينه	B.5=-:		
	1,1,2-Trichlorotrifluoroethane (Freon 1		иноа 3 w 646 3030 73.8 µg/kg dr		evel	SA3712: 50	3-02RE1 5111179) v t
	Acetone	BRL R	73.6 µg/kg drj 1480 µg/kg drj			50 50	21111173	•
	Benzene	BRL				50 50	12	U
	3 2-Butanone (MEK)	BRL	73.8 μg/kg dr 738 μg/kg dr			50 ·	(3	U U
10-73-3	a samiono (umris)	שאנם	120 hRight	r		50		U

Sample Identification
B7-5-9-9.5-110805
SA37123-03

<u>Matrix</u> Soil Collection Date/Time 08-Nov-05 11:45 Received 14-Nov-05

Method Ref. VOC Prepared 14-Nov-05 Analyzed 14-Nov-05

Analyst YM

	·					. , ,,		* * * * *	
CAS No.	Analyte(s)	Result	*RDL	/Units	RT	Q.	Dilution	Batch	Flag
Volatile Orga	nic Compounds				•				
	VOC Extraction	Lab extracted		N/A			1	5110938	บ
<u>Volatile Orga</u>	nic Compounds	Prepared by metl	hod SW8	346 5030 Sc	oil (high le	vel)			R-05
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	-		μg/kg dry	` •	,	500	5111090	U
67-64-1	Acetone	9,740	14700	μg/kg dry			500	n	J
71-43-2	Benzene	BRL	734	μg/kg dry			500	и	U
78-93-3	2-Butanone (MEK)	BRL	7340	μg/kg dry			500	u	U
75-15-0	Carbon disulfide	BRL	3670	μg/kg dry			500	n	U
56-23-5	Carbon tetrachloride	BRL	734	μg/kg dry			500	11	U
108-90-7	Chlorobenzene	BRL		μg/kg dry			500	11	υ
75-00-3	Chloroethane	BRL	1470	μg/kg dry			500	ıı	U
67-66-3	Chloroform	514	734	μg/kg dry			500	Iŧ	J
124-48-1	Dibromochloromethane	BRL	734	μg/kg dry			500		U
95-50-1	1,2-Dichlorobenzene	BRL	734	μg/kg dry	-		500	ıı	υ
541-73-1	1,3-Dichlorobenzene	BRL	734	μg/kg dry			500	ıs	U
106-46-7	1,4-Dichlorobenzene	BRL	734	μg/kg dry			500	Ω	บ
75-34-3	1,1-Dichloroethane	BRL	734	μg/kg dry			500	и	υ
107-06-2	1,2-Dichloroethane	BRL	734	μg/kg dry			500	н	บ
75-35-4	1,1-Dichloroethene	BRL	734	μg/kg dry			500	(I	U
156-60-5	trans-1,2-Dichloroethene	BRL	734	μg/kg dry			500	IJ	U
142-28-9	1,3-Dichloropropane	BRL		μg/kg dry			500	n	U
100-41-4	Ethylbenzene	418	7 34	μg/kg dry			500	u	J
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		μg/kg dry			500	п	Ü
75-09-2	Methylene chloride	BRL	7340	μg/kg dry			500	H	υ
79-34-5	1,1,2,2-Tetrachloroethane	BRL	734	μg/kg dry			500	u	บ
127-18-4	Tetrachloroethene	BRL	734	μg/kg dry			500	u	U
108-88-3	Toluene	BRL		μg/kg dry			500	ıı	U
120-82-1	1,2,4-Trichlorobenzene	BRL		μg/kg dry			500	u	Ū
71-55-6	1,1,1-Trichloroethane	BRL		μg/kg dry			500	fi	บ
79-01-6	Trichloroethene	BRL		μg/kg dry			500	Ħ	Ü
96-18-4	1,2,3-Trichloropropane	BRL		μg/kg dry			500	n	U
75-01-4	Vinyl chloride	BRL		μg/kg dry			500	n	U
	m,p-Xylene	3,470		μg/kg dry			500	. a .	
	o-Xylene	4,120		μg/kg dry			500	tl	
	Surrogate: 4-Bromofluorobenzene	104		30 %				n	
2037-26-5	Surrogate: Toluene-d8	III		30 %				п.	
17060-07-0	Surrogate: 1,2-Dichloroethane-d4	117		30 %				U	-
1868-53-7	Surrogate: Dibromofluoromethane	109	70-1	30 %				ri	

<u>Sample Identification</u> B7-5-12-12.5-110805	Client Project # 5555113	<u>Matrix</u> Soil	Collection Date/Time 08-Nov-05 11:55		Received 14-Nov-05	
SA37123-04	Method Ref. VOC	<u>Prepared</u> 14-Nov-05	<u>Analyzed</u> 14-Nov-0		<u>Analy</u> YM	
CAS No. Analyte(s)	Result	*RDL/Units	RT Q	Dilution	Batch	Flag
Volatile Organic Compounds						
VOC Extraction	Lab extracted	N/A		1	5110938	υ
<u> Volatile Organic Compounds</u>	Prepared by met	hod SW846 5035	A Soil (low leve	l)		
76-13-1 1,1,2-Trichlorotrifluoroethane (Fred		6.2 μg/kg dr	у	1	5110981	ט
67-64-1 Acetone	330	125 μg/kg di	У	į	Я	VOC6
71-43-2 Benzene	BRL	6.2 μg/kg di	У	1	п	υ
78-93-3 2-Butanone (MEK)	12.5	62.4 μg/kg di	У	1	17	VOC6, J
75-15-0 Carbon disulfide	BRL	31.2 μg/kg di	у	1	ĸ	U
56-23-5 Carbon tetrachloride	1.0	6.2 μg/kg di	У	1	e	J
108-90-7 Chlorobenzene	BRL	6.2 μg/kg ds	У	I	u	υ
75-00-3 Chloroethane	BRL	12.5 μg/kg di	у	1	Ħ	υ
67-66-3 Chloroform	10.0	6.2 μg/kg di	у	I	Ħ	
124-48-1 Dibromochloromethane	BRL	6.2 μg/kg di	у	I	11	U
95-50-1 1,2-Dichlorobenzene	BRL	6.2 μg/kg di	У	. 1	и	U
541-73-1 1,3-Dichlorobenzene	BRL	6.2 μg/kg di	У	1	п	U
106-46-7 1,4-Dichlorobenzene	BRL	6.2 μg/kg di	'Y	1	и.	U
75-34-3 1,1-Dichloroethane	BRL	6.2 μg/kg di	у	1	n	υ
107-06-2 1,2-Dichloroethane	BRL	6.2 μg/kg di	y	I	Ħ	บ
75-35-4 1,1-Dichloroethene	BRL	6.2 μg/kg di	У	1	п	. U
156-60-5 trans-1,2-Dichloroethene	BRL	6.2 μg/kg di	y Y	1	п	υ
142-28-9 1,3-Dichloropropane	BRL	6.2 μg/kg di	y .	1	0	U
100-41-4 Ethylbenzene	BRL	6.2 μg/kg d	'Y	1	н	U
108-10-1 4-Methyl-2-pentanone (MIBK)	BRL	62.4 μg/kg di	y	1	n	` U
75-09-2 Methylene chloride	6.9	62.4 μg/kg di	y	1	, u	VOC3, J
79-34-5 1,1,2,2-Tetrachloroethane	BRL	6.2 μg/kg di	y	1	н	U
127-18-4 Tetrachloroethene	3.2	6.2 μg/kg di	y	i	n	J
108-88-3 Toluene	BRL	6.2 μg/kg di	y	1	u	U
120-82-1 1,2,4-Trichlorobenzene	BRL	6.2 μg/kg di	y	i	- 11	U
71-55-6 1,1,1-Trichloroethane	BRL	6.2 μg/kg di		ī	"	Ü
79-01-6 Trichloroethene	1.0	6.2 μg/kg di	y .	1	ţi	J
96-18-4 1,2,3-Trichloropropane	BRL	6.2 μg/kg d	y .	1	я	U
75-01-4 Vinyl chloride	BRL	6.2 μg/kg di	y .	1	41	U
1330-20-7 m,p-Xylene	3.6	12.5 μg/kg di	У	i	u	J
95-47-6 o-Xylene	4.8	6.2 μg/kg d	у .	1	II	j
460-00-4 Surrogate: 4-Bromofluorobenzene	112	70-130 %			It	
2037-26-5 Surrogate: Toluene-d8	104	70-130 %			IF	
17060-07-0 Surrogate: 1,2-Dichloroethane-d4	114	70-130 %			11	
1868-53-7 Surrogate: Dibromofluoromethane	101	70-130 %			. "	
Volatile Organic Compounds RE	Prepared by met	hod SW846 5030	Soil (high level)	SA3712	3-04RE1	
76-13-1 1,1,2-Trichlorotrifluoroethane (Free		73.0 μg/kg di		50	5111179	, υ
67-64-1 Acetone	BRL 🕵	1460 μg/kg di		50	В	บ
71-43-2 Benzene	BRL	73.0 μg/kg di		50	I2	U
78-93-3 2-Butanone (MEK)	BRL	730 μg/kg di	ry	50	U	U

<u>Sample Identiti</u> B7-5-14-14.5 -		Client Project # 5555113	<u>Matrix</u> Soil				<u>ed</u> -05
SA37123-05	Amerika di Kabupatèn Kabupatèn Kabupatèn Kabupatèn Kabupatèn Kabupatèn Kabupatèn Kabupatèn Kabupatèn Kabupatèn Kabupatèn Kabupatèn	Method Ref. VOC	<u>Prepared</u> 14-Nov-05	Analyzed 14-Nov-0		<u>Analy</u> YM	
CAS No.	Analyte(s)	Result	*RDL/Units	RT Q	Dilution	Batch	Flag
Volatile Orga	nic Compounds						
	VOC Extraction	Lab extracted	N/A		.]	5110938	U
<u>Volatile Orga</u> i	nic Compounds	Prepared by met	hod SW846 5035	A Soil (low level	1)		VOC10
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 11		4.6 μg/kg dr	•	1	5110981	
67-64-1	Acetone	387	92.4 μg/kg dr	у	1	U	VOC6
71-43-2	Benzene	BRL	4.6 μg/kg dr	у	1	n	U
78-93-3	2-Butanone (MEK)	9.6	46.2 μg/kg dr	у	1	п	VOC6, J
75-15-0	Carbon disulfide	BRL	23.1 μg/kg dr	у	1	•	บ
56-23-5	Carbon tetrachloride	BRL	4.6 μg/kg dr	у	1	q	U
10 8- 90-7	Chlorobenzene	BRL	4.6 μg/kg dr	у	1	11	U
75 - 00-3	Chloroethane	BRL	9.2 μg/kg dr	у	1	. a	U
67-66-3	Chloroform	0.5	4.6 μg/kg dr	y	j	н	J
124-48-1	Dibromochloromethane	BRL	4.6 μg/kg dr	у	1	If	υ
95-50-1	1,2-Dichlorobenzene	BRL	4.6 μg/kg dr	y	1	4	U
541-73-1	1,3-Dichlorobenzene	BRL	4.6 μg/kg dr		1	ti.	U .
106-46 - 7	1,4-Dichlorobenzene	BRL	4.6 μg/kg dr	y	1	11	U
75-34-3	1,1-Dichloroethane	BRL	4.6 μg/kg dr	y	1	ц	U
107-06-2	1,2-Dichloroethane	BRL	4.6 μg/kg dr	y	1	н	ŭ
75-35-4	1,1-Dichloroethene	BRL	4.6 μg/kg dr	•	1	ıı	υ
156-60-5	trans-1,2-Dichloroethene	BRL	4.6 μg/kg dr		I	n	ับ
142-28-9	1,3-Dichloropropane	BRL	4.6 μg/kg dr		1	н	U
100-41-4	Ethylbenzene	BRL	4.6 μg/kg dr	•	I	н	U
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL	46.2 μg/kg dr	y	· I	14	· υ
75-09-2	Methylene chloride	5.4	46.2 μg/kg dr		I ·	lı	VOC3, J
79-34-5	1,1,2,2-Tetrachloroethane	BRL	4.6 μg/kg dr	y	1	μ	U
127-18-4	Tetrachloroethene	0.9	4.6 μg/kg dr	y	1	11	J
108-88-3	Toluene	BRL	4.6 μg/kg dr	у	1	H.	U
120-82-1	I,2,4-Trichlorobenzene	BRL	4.6 μg/kg dr	y	1	P	U
71-55-6	1,1,1-Trichloroethane	BRL	4.6 μg/kg dr		1	н	U
79-01-6	Trichloroethene	BRL	4.6 μg/kg dr		1	t)	U
96-18-4	1,2,3-Trichloropropane	BRL	4.6 μg/kg dr	y	1	11	U
75-01-4	Vinyl chloride	BRL	4.6 μg/kg dr	у	1	Ħ	U
1330-20-7	m,p-Xylene	BRL	9.2 μg/kg dr	У	1	13	U
95-47-6	o-Xylene	BRL	4.6 μg/kg dr	y	1	И	U
460-00-4	Surrogate: 4-Bromofluorobenzene	106	70-130 %			19	
2037-26-5	Surrogate: Toluene-d8	105	70-130 %	•		ĮI	
17060-07-0	Surrogate: 1,2-Dichloroethane-d4	111	70-130 %			n	
1868-53-7	Surrogate: Dibromofluoromethane	102	70-130 %			19	
<u>Volatile</u> Orga	nic Compounds RE	Prepared by met	hod SW846 5030	Soil (high level)	SA3712	3-05RE1	
	1,1,2-Trichlorotrifluoroethane (Freon 11		53.1 μg/kg dr	. •	50 50	5111179	υ
	Acetone	BRL 🐍	1060 μg/kg dr		50	. 11	บ
71-43-2	Benzene	BRL	53.1 µg/kg dr		50	11	U
78-93-3	2-Butanone (MEK)	BRL	531 μg/kg dr	•	50		U

Sample Identification B7-5N-9-9.5-110905		Client Project # 5555113	<u>Matrix</u> Soil	Collection Date/Time 09-Nov-05 08:00			Received 14-Nov-05		
SA37123-06	in the second of the second se	Method Ref. VOC	Prepared 14-Nov-05		l <u>yzed</u> lov-05		Analy YM	_	
CAS No.	Analyte(s)	Result	*RDL/Units	RT	Q	Dilution	Batch	Flag	
Volatile Orga	anic Compounds								
	VOC Extraction	Lab extracted	N/A			1	5110938	U	
<u>Volatile Orga</u>	nic Compounds	Prepared by met	hod SW846 5035	A Soil (low	level)			VOC10	
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon		5.4 μg/kg di	-	,	1	5110981		
67-64-1	Acetone	615	107 μg/kg d	ry		1	"	VOC6	
71-43-2	Benzene	BRL	5.4 μg/kg d	гу		1	IP.	υ	
78-93-3	2-Butanone (MEK)	9.4	53.6 μg/kg d	ry		I		YOC6, J	
75-15-0	Carbon disulfide	BRL	26.8 µg/kg d	ry		1	ĸ	υ	
56-23-5	Carbon tetrachloride	2.9	5.4 μg/kg d			1	Ħ	J	
108-90-7	Chlorobenzene	BRL	5.4 μg/kg d	•		1	\$I	υ	
75-00-3	Chloroethane	BRL	10.7 μg/kg đ			I	u	U	
67 - 66-3	Chloroform	15.5	5.4 μg/kg d	=		1	ži	~	
124-48-1	Dibromochloromethane	BRL	5.4 μg/kg d			1	11	U	
95-50-1	1,2-Dichlorobenzene	BRL	5.4 μg/kg d	•		1	а	υ	
	1,3-Dichlorobenzene	BRL	5.4 μg/kg d	•		1	11	υ	
	1,4-Dichlorobenzene	BRL	5.4 μg/kg d	=		1	II	υ	
	1,1-Dichloroethane	BRL	5.4 μg/kg d	-		1	п	U	
	1,2-Dichloroethane	BRL	5.4 μg/kg d	· ·		I	19	ซ	
	1,1-Dichloroethene	BRL	5.4 μg/kg d	=		1	и	U	
	trans-1,2-Dichloroethene	BRL	5.4 μg/kg d			1	n	Ü	
	1,3-Dichloropropane	BRL	5.4 μg/kg đ	-		1.	n	_	
	Ethylbenzene	BRL	5.4 μg/kg d 5.4 μg/kg d	· ·		1	п	U	
	4-Methyl-2-pentanone (MIBK)	BRL	53.6 μg/kg d	-		I	n	U	
	Methylene chloride	8.2	53.6 μg/kg d			1 . I	Is	U	
	1,1,2,2-Tetrachloroethane	BRL		=		-		VOC3, J	
	Tetrachloroethene	10.1	5.4 μg/kg d			1		ប	
	Toluene		5.4 μg/kg d	-		I	,,		
		BRL	5.4 μg/kg d	=		1	ı,	U	
	1,2,4-Trichlorobenzene 1,1,1-Trichloroethane	BRL	5.4 μg/kg d				.,	U	
	Trichloroethene	BRL 4.7	5.4 μg/kg d	7		1	ı,	U	
			5.4 μg/kg d			1		J	
	1,2,3-Trichloropropane	BRL	5.4 μg/kg d	· ·		1	п.	U	
	Vinyl chloride	BRL	5.4 μg/kg d	-		I	n 	U	
	m,p-Xylene	BRL	10.7 μg/kg d	•		1	U	ប	
	o-Xylene	BRL	5.4 μg/kg d	гу		I	. "	U	
	Surrogate: 4-Bromofluorobenzene	106	70-130 %				ti		
	Surrogate: Toluene-d8	104	70-130 %				ţı 		
	Surrogate: 1,2-Dichloroethane-d4	112	70-130 %				11		
	Surrogate: Dibromofluoromethane	102	70-130 %				11	•	
	mic Compounds RE		hod SW846 5030		level)	SA37123	3-06RE1		
	1,1,2-Trichlorotrifluoroethane (Freon		63.7 μg/kg d			50	5111179	U	
	Acetone	BRL	1270 μg/kg d			50	n	υ.	
	Benzene	BRL	63.7 μg/kg d			50	#I	U	
78-93-3	2-Butanone (MEK)	BRL	637 μg/kg d	гу		50	11	U	

Sample Identi B7-5S-3.5-4-1		<u>ient Project #</u> 5555113	<u>Matrix</u> Soil	Collection I 08-Nov-0			<u>Receiv</u> 14-Nov	_
SA37123-07	engang berendak dan 1988 dan 1988. Indikan dan 1988 dan 1988 dan 1988 dan 1988 dan 1988 dan 1988 dan 1988 dan Pengangan pengangan	Vethod Ref. VOC	Prepared 14-Nov-05	Analy 14-No		t et et e	<u>Analy</u> YM	
CAS No.	Analyte(s)	Result	*RDL/Units	RT	Q.	Dilution	Batch	Flag
Volatile Orga	anic Compounds				,			
	VOC Extraction	Lab extracted	N/A			i	5110938	Ù
<u>Volatile Orga</u>	nic Compounds	Prepared by met	thod SW846 5035A	Soil (low le	vel)			VOC10
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113		4.0 μg/kg dry	,	·	I	5110981	
67-64-1	Acetone	264	80.9 μg/kg dry			1	ч	VOC6
71-43-2	Benzene	0.9	4.0 μg/kg dry			1	11	J
78 - 93-3	2-Butanone (MEK)	7.1	40.5 μg/kg dry			1	47	VOC6, J
75-15-0	Carbon disulfide	0.7	20.2 μg/kg dry			1	11	J
56-23-5	Carbon tetrachloride	0.5	4.0 μg/kg dry			1	n	J
10 8 -90-7	Chlorobenzene	BRL	4.0 μg/kg dry			1	п	U
75-00-3	Chloroethane	BRL	8.1 μg/kg dry			1	Ħ	υ
67-66-3	Chloroform	15.9	4.0 μg/kg dry			1	R	
124-48-1	Dibromochloromethane	BRL	4.0 μg/kg dry			· 1	11	U
95-50-1	1,2-Dichlorobenzene	BRL	4.0 μg/kg dry			1	11	บ
541-73-1	1,3-Dichlorobenzene	BRL	4.0 μg/kg dry			1	4	ט
106-46-7	1,4-Dichlorobenzene	BRL	4.0 µg/kg dry			1	и	บ
75-34-3	1,1-Dichloroethane	BRL	4.0 μg/kg dry			ī	и	ט
107-06-2	1,2-Dichloroethane	BRL	4.0 μg/kg dry			1	Ir	Ü
75-35-4	1,1-Dichloroethene	BRL	4.0 μg/kg dry			1	Ir	U
156-60-5	trans-1,2-Dichloroethene	BRL	4.0 μg/kg dry			1	#	U
142-28-9	1,3-Dichloropropane	BRL	4.0 μg/kg dry			1	15	U
100-41-4	Ethylbenzene	BRL	4.0 μg/kg dry			1	ц	U
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL	40.5 μg/kg dry			1	и	' U
75-09-2	Methylene chloride	2.3	40.5 μg/kg dry			1	п	VOC3, J
79-34-5	1,1,2,2-Tetrachloroethane	BRL	4.0 μg/kg dry			. 1	31	U
127-18-4	Tetrachloroethene	BRL	4.0 μg/kg dry			1	O .	Ū
108-88-3	Toluene	0.7	4.0 μg/kg dry			1	н	j
120-82-1	1,2,4-Trichlorobenzene	BRL	4.0 μg/kg dry			1	, н	Ū
71-55-6	1,1,1-Trichloroethane	BRL	4.0 μg/kg dry			1	u	Ü
	Trichloroethene	BRL	4.0 μg/kg dry			1	u	บ
96-18-4	1,2,3-Trichloropropane	BRL	4.0 μg/kg dry			1	н	Ū
	Vinyl chloride	BRL	4.0 μg/kg dry			1	R	บ
	m,p-Xylene	BRL	8.1 µg/kg dry			1	ts.	บ
	o-Xylene	BRL	4.0 μg/kg dry			1	ır	U
460-00-4	Surrogate: 4-Bromofluorobenzene	105	70-130 %				17	·
	Surrogate: Toluene-d8	103	70-130 %				11	
The second secon	Surrogate: 1,2-Dichloroethane-d4	114	70-130 %				п	
1868-53-7	Surrogate: Dibromofluoromethane	103	70-130 %		÷		И	
Volatile Orga	nic Compounds RE	Prepared by met	hod SW846 5030 S	oil (high lex	æľ\	SA37123	07024	
	1,1,2-Trichlorotrifluoroethane (Freon 113		58.9 μg/kg dry	(mBii 101		SA37123 50	5-07KE1 5111179	υ
	Acetone	BRL	1180 μg/kg dry			50	11	ซ
	Benzene	BRL	58.9 μg/kg dry			50	II	U
	2-Butanone (MEK)	BRL	589 μg/kg dry			50		U

<u>Matrix</u> Soil Collection Date/Time 09-Nov-05 14:22 Received 14-Nov-05

Method Ref. VOC

Prepared 14-Nov-05

Analyzed 14-Nov-05 Analyst YM

CAS No.	Analyte(s)	Result	*RDL/Units	RT	Q	Dilution	Batch	Flag
Volatile Orga	anic Compounds							
	VOC Extraction	Lab extracted	N/A			1	5110938	U
olatile Orga	nic Compounds	Prepared by meth	od SW846 5030	Soil (high	level)			
-	1,1,2-Trichlorotrifluoroethane (Freon 113)	BRL	63.8 μg/kg dr		10 (01)	50	5111167	υ
67-64-1	Acetone	704	1280 μg/kg dr	•		50	4	j
71-43-2	Benzene	BRL	63.8 µg/kg dr			50	11	บ
78-93-3	2-Butanone (MEK)	BRL	638 μg/kg dr	•		50	н	U
75-15-0	Carbon disulfide	BRL	319 μg/kg dr			50	п	U
56-23-5	Carbon tetrachloride	5,460	63.8 μg/kg dr	-		50		Ü
108-90-7	Chlorobenzene	BRL	63.8 μg/kg dr	=		50	11	U
75-00-3	Chloroethane	BRL	128 μg/kg dr	-		50	u	U
67-66-3	Chloroform	19,300	63.8 μg/kg dr	-		50	n	U
124-48-1	Dibromochloromethane	BRL	63.8 μg/kg dr			50	ti	υ
95-50-1	1,2-Dichlorobenzene	BRL	63.8 μg/kg dr			50	u	. บ
	1,3-Dichlorobenzene	BRL	63.8 μg/kg dr			50	0	υ
	1,4-Dichlorobenzene	BRL	63.8 μg/kg dr			50	9.	U
	1,1-Dichloroethane	BRL	63.8 μg/kg dr			50	11	U
	1,2-Dichloroethane	BRL	63.8 μg/kg dr	-		50	(t	U
	I,I-Dichloroethene	BRL	63.8 μg/kg dr			50	к	U
	trans-1,2-Dichloroethene	BRL	63.8 μg/kg dr			50	11	ט
	1,3-Dichloropropane	BRL	63.8 μg/kg dr	•		50	11	U
	Ethylbenzene	BRL	63.8 μg/kg dr			50	SI	
	4-Methyl-2-pentanone (MIBK)	BRL	638 μg/kg dr	_		50	п	ซ ซ
	Methylene chloride	34.4	638 μg/kg dr			50	п	VOC:
	1,1,2,2-Tetrachloroethane	BRL	63.8 μg/kg dr			50	n	U
	Tetrachloroethene	374	63.8 μg/kg dr			50	U	U
108-88-3		BRL	63.8 μg/kg dr			50	11	**
	1,2,4-Trichlorobenzene	BRL	63.8 μg/kg dr			50	u	U
	1,1,1-Trichloroethane	34.4	63.8 μg/kg dr			50	1 1 ·	U
•	Trichloroethene	1,370	63.8 µg/kg dr			50	ti	J
	I,2,3-Trichloropropane	BRL	63.8 μg/kg dr			50	Ħ	
	Vinyl chloride	BRL	63.8 μg/kg dr			50	и	U
	m,p-Xylene	40.2	128 μg/kg dr			50 50	tı	U
	o-Xylene	BRL	63.8 μg/kg dr			50 50	D	J
	Surrogate: 4-Bromofluorobenzene	103	70-130 %	y		Ju		U
	Surrogate: Toluene-d8	106	70-130 % 70-130 %				p	
	Surrogate: 1,2-Dichloroethane-d4	104	70-130 %				11	
,	Surrogate: Dibromofluoromethane	102	70-130 % 70-130 %				și	

<u>Matrix</u> Soil Collection Date/Time 08-Nov-05 14:35 Received 14-Nov-05

Method Ref. VOC Prepared 14-Nov-05 Analyzed 14-Nov-05 Analyst YM

CAS No.	Analyte(s)	Result	*RDL/Un	ilts	RT	Q.	Dilution	Batch	Flag
Volatile Orga	anic Compounds				······································				
	VOC Extraction	Lab extracted	N/	Ά			1	5110938	υ
Volatile Orga	nic Compounds	Prepared by meth	od SW846	5030 So	il (high le	veD			¥/O.O0
	1,1,2-Trichlorotrifluoroethane (Freon 113)		72.1 μg		(5 10	10.,	50	5111167	VOC8
67-64-1	Acetone	BRL	1440 μg				50	n	บ
71-43-2	Benzene	BRL	72.1 μg				50	ti	บ
78-93-3	2-Butanone (MEK)	BRL	• -	/kg dry			50	şi	Ū
75-15-0	Carbon disulfide	BRL	361 μg	- •			50	n	U
56-23-5	Carbon tetrachloride	BRL	72.1 μg				50	ir	บ
108-90-7	Chlorobenzene	BRL	72.1 μg	-			50	11	υ
75-00-3	Chloroethane	BRL	144 μg				50	и .	ับ
67-66-3	Chloroform	49.8	72.1 µg				50	п	J
124-48-1	Dibromochloromethane	BRL	72.1 μg	-			50	ir .	บ
95 -5 0-1	1,2-Dichlorobenzene	BRL	72.1 μg				50	a	υ
541-73-1	1,3-Dichlorobenzene	BRL	72.1 μg				50	şi	บ
106-46-7	1,4-Dichlorobenzene	BRL	72.1 μg				50	н	U
75-34-3	1,1-Dichloroethane	BRL .	72.1 μg				50	, Jr	U
107-06-2	1,2-Dichloroethane	BRL	72.1 µg				50	n	Ü
75-35-4	1,1-Dichloroethene	BRL	72.1 µg				50	si	U
156-60-5	trans-1,2-Dichloroethene	BRL	72.1 μg				50	11	U
142-28-9	1,3-Dichloropropane	BRL	72.1 µg				50	n	บ
100-41-4	Ethylbenzene	BRL	72.1 μg				50	R	υ
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL	721 μg				50	. 0	, Ω
75-09-2	Methylene chloride .	BRL	721 μg				50	n	U
79-34-5	1,1,2,2-Tetrachloroethane	BRL		/kg dry			50	II	บ
127-18-4	Tetrachloroethene	57.7	72.1 μg				50	я .	J.
108-88-3	Toluene	BRL	72.1 µg			·	50	4	U
120-82-1	1,2,4-Trichlorobenzene	BRL	72.1 µg				50	ti .	U
71-55-6	1,1,1-Trichloroethane	BRL	72.1 μg				50	a .	υ
79-01-6	Trichloroethene	BRL	72.1 µg				50	Ħ	Ü
96-18-4	1,2,3-Trichloropropane	BRL	72.1 µg				50	tı	U
75-01-4	Vinyl chloride	BRL	72.I μg	/kg dry			50	U	U
1330-20-7	m,p-Xylene	BRL	144 μg				50	Ħ	υ
95-47-6	o-Xylene	BRL	72.1 μg				50	В	บ
460-00-4	Surrogate: 4-Bromofluorobenzene	101	70-130 9		-			u	•
	Surrogate: Toluene-d8	107	70-130 9					D	
17060-07-0	Surrogate: 1,2-Dichloroethane-d4	105	70-130 9					16 .	
1868-53-7	Surrogate: Dibromofluoromethane	102	70-130 9	%				п	

Sample Ident B7-9-3.5-5-1		Client Project # 5555113	<u>Matrix</u> Soil	Collection Date/T 09-Nov-05 11:0		Receiv 14-Nov	
SA37123-10	Security Sec	Method Ref. VOC	Prepared 14-Nov-05	Analyzed 14-Nov-05	, et a . e.	Analy YM	st ik kerik
CAS No.	Analyte(s)	Result	*RDL/Units	RT Q	Dilution	Batch	Flag
Volatile Org	anic Compounds			· · · · · · · · · · · · · · · · · · ·			
	VOC Extraction	Lab extracted	N/A		1	5110938	U
<u> Volatile Orga</u>	<u>inic Compounds</u>	Prepared by metl	nod SW846 5035	A Soil (low level)			
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 11		5.0 μg/kg dr ₎	•	1 .	5110981	U
67-64-1	Acetone	3,620	101 μg/kg dry	<i>!</i>	1	11	VOC6
71-43-2	Benzene	0.6	5.0 μg/kg dry	,	1	41	J
78-93-3	2-Butanone (MEK)	8.9	50.3 μg/kg dry	,	1	'n	VOC6, J
75-15-0	Carbon disulfide	BRL	25.1 μg/kg dry	,	i	n	บ
56-23-5	Carbon tetrachloride	BRL	5.0 μg/kg dry	,	1	41	U
108-90-7	Chlorobenzene	BRL	5.0 μg/kg dry	,	1	4	U
75-00-3	Chloroethane	BRL	10.1 μg/kg dr ₃	,	1	u	U
67-66-3	Chloroform	0.9	5.0 μg/kg dry	,	1	#1	J
124-48-1	Dibromochloromethane	BRL	5.0 μg/kg dry		ĭ	п	บ
95-50-1	1,2-Dichlorobenzene	BRL	5.0 μg/kg dry		1	11	บ
541-73-1	1,3-Dichlorobenzene	BRL	5.0 μg/kg dry		1		บ
106-46-7	1,4-Dichlorobenzene	BRL	5.0 μg/kg dry		1	n	บ
75-34-3	1,1-Dichloroethane	BRL	5.0 μg/kg dry		1	и	บ
107-06-2	1,2-Dichloroethane	BRL	5.0 μg/kg dry		1	м	ย
	I,1-Dichloroethene	BRL	5.0 μg/kg dry		1	n	ט
156-60-5	trans-1,2-Dichloroethene	BRL	5.0 μg/kg dry		1	u	Ü
	1,3-Dichloropropane	BRL	5.0 μg/kg dry		1	, II	U
	Ethylbenzene	BRL	5.0 μg/kg dry		I	11	ับ
	4-Methyl-2-pentanone (MIBK)	BRL	50.3 μg/kg dry		1	11	์ บ
	Methylene chloride	5.2	50.3 μg/kg dry		1	11	VOC3, J
	1,1,2,2-Tetrachloroethane	BRL	5.0 μg/kg dry		ì	п	
	Tetrachloroethene	0.7	5.0 μg/kg dry		1	п	U
108-88-3	Toluene	BRL	5.0 μg/kg dry		1	n	j
120-82-1	1,2,4-Trichlorobenzene	BRL	5.0 μg/kg dry		1	R	U
	1,1,1-Trichloroethane	0.6	5.0 μg/kg dry		1	.10	U
	Trichloroethene	BRL	5.0 μg/kg dry		1	11	j
	1,2,3-Trichloropropane	BRL			,	ı.	U .
	Vinyl chloride	BRL					Ų
	m,p-Xylene	BRL.	5.0 μg/kg dry 10.1 μg/kg dry		1	" "	U
	o-Xylene	BRL	,,,,,		I		U
•	Surrogate: 4-Bromofluorobenzene	94.4	5.0 μg/kg dry	•	1		U
•	Surrogate: Toluene-d8	101	70-130 %			"	
	Surrogate: 1,2-Dichloroethane-d4	112	70-130 % 70-130 %			"	
	Surrogate: Dibromofluoromethane	112 105	70-130 % 70-130 %			". N	
						**	
		rrepared by meth	od SW846 5030		SA37123		
	1,1,2-Trichlorotrifluoroethane (Freon 11.	Annual contribution	58.3 μg/kg dry		50	5111179	U
	Acetone	638	1170 μg/kg dry		50	R	J
	Benzene	BRL	58.3 μg/kg dry		50	ıı	U
78-93-3	2-Butanone (MEK)	BRL	583 μg/kg dry	ı	50	В	U

Volatile Organic Volatile Organic 76-13-1 1,1 67-64-1 Ac 71-43-2 Be 78-93-3 2-1 75-15-0 Ca 56-23-5 Ca 108-90-7 Ch 75-00-3 Ch 67-66-3 Ch 124-48-1 Di 95-50-1 1,2 541-73-1 1,3 106-46-7 1,4 75-34-3 1,1 107-06-2 1,2 75-35-4 1,1 156-60-5 tra 142-28-9 1,3 100-41-4 Eti	OC Extraction Compounds 1,2-Trichlorotrifluoroethane (Freon 1 cetone enzene Butanone (MEK) arbon disulfide arbon tetrachloride nlorobenzene nloroethane nloroform	1,390 BRL 4.3 BRL BRL BRL BRL	sthod SW8 4.2 84.7 4.2 42.3 21.2	N/A 846 50354 µg/kg dry µg/kg dry µg/kg dry	RT A Soil (lo	nalyzed Nov-05 Q w level)	Dilution 1 1 1 1 1	Analy. YM Batch 5110938	Flag U VOC10 U
Volatile Organic Volatile Organic 76-13-1 1,1 67-64-1 Ac 71-43-2 Be 78-93-3 2-1 75-15-0 Ca 56-23-5 Ca 108-90-7 Ch 75-00-3 Ch 67-66-3 Ch 124-48-1 Di 95-50-1 1,2 541-73-1 1,3 106-46-7 1,4 75-34-3 1,1 107-06-2 1,2 75-35-4 1,1 156-60-5 tra 142-28-9 1,3 100-41-4 Eti	c Compounds OC Extraction Compounds 1,2-Trichlorotrifluoroethane (Freon 1 cetone enzene Butanone (MEK) arbon disulfide arbon tetrachloride alorobenzene aloroethane aloroform	Lab extracted Prepared by me 13) BRL 1,390 BRL 4.3 BRL BRL BRL BRL BRL	sthod SW8 4.2 84.7 4.2 42.3 21.2	N/A 846 5035,/ µg/kg dry µg/kg dry µg/kg dry µg/kg dry	A Soil (lo		I 1 1	5110938 5110981	U VOC10 U
76-13-1 1,1 67-64-1 Ac 71-43-2 Be 78-93-3 2-1 75-15-0 Ca 56-23-5 Ca 108-90-7 Ch 75-00-3 Ch 67-66-3 Ch 124-48-1 Di 95-50-1 1,2 541-73-1 1,3 106-46-7 1,4 75-34-3 1,1 107-06-2 1,2 75-35-4 1,1 156-60-5 tra 142-28-9 1,3 100-41-4 Eti	OC Extraction Compounds 1,2-Trichlorotrifluoroethane (Freon 1 cetone enzene Butanone (MEK) arbon disulfide arbon tetrachloride nlorobenzene nloroethane nloroform	Prepared by me 13) BRL 1,390 BRL 4.3 BRL BRL BRL BRL BRL	4.2 84.7 4.2 42.3 21.2	846 5035/ µg/kg dry µg/kg dry µg/kg dry µg/kg dry		w level)	1	5110981	VOC10
76-13-1 1,1 67-64-1 Ac 71-43-2 Be 78-93-3 2-1 75-15-0 Ca 56-23-5 Ca 108-90-7 Ch 75-00-3 Ch 67-66-3 Ch 124-48-1 Di 95-50-1 1,2 541-73-1 1,3 106-46-7 1,4 75-34-3 1,1 107-06-2 1,2 75-35-4 1,1 156-60-5 tra 142-28-9 1,3 100-41-4 Eti	Compounds 1,2-Trichlorotrifluoroethane (Freon 1 cetone enzene Butanone (MBK) arbon disulfide arbon tetrachloride hlorobenzene hloroethane	Prepared by me 13) BRL 1,390 BRL 4.3 BRL BRL BRL BRL BRL	4.2 84.7 4.2 42.3 21.2	846 5035/ µg/kg dry µg/kg dry µg/kg dry µg/kg dry		w level)	1	5110981	VOC10
76-13-1 1,1 67-64-1 Ac 71-43-2 Be 78-93-3 2-1 75-15-0 Ca 56-23-5 Ca 108-90-7 Ch 75-00-3 Ch 67-66-3 Ch 124-48-1 Di 95-50-1 1,2 541-73-1 1,3 106-46-7 1,4 75-34-3 1,1 107-06-2 1,2 75-35-4 1,1 156-60-5 tra 142-28-9 1,3 100-41-4 Eti	1,2-Trichlorotrifluoroethane (Freon 1 cetone enzene Butanone (MEK) arbon disulfide arbon tetrachloride alorobenzene aloroethane aloroform	13) BRL 1,390 BRL 4.3 BRL BRL BRL BRL BRL	4.2 84.7 4.2 42.3 21.2	μg/kg dry μg/kg dry μg/kg dry μg/kg dry		w level)	1		U
67-64-1 Ac 71-43-2 Be 78-93-3 2-1 75-15-0 Ca 56-23-5 Ca 108-90-7 Ch 75-00-3 Ch 67-66-3 Ch 124-48-1 Di 95-50-1 1,2 541-73-1 1,3 106-46-7 1,4 75-34-3 1,1 107-06-2 1,2 75-35-4 1,1 156-60-5 tra 142-28-9 1,3 100-41-4 Eti	cetone enzene Butanone (MBK) arbon disulfide arbon tetrachloride alorobenzene aloroethane aloroform	13) BRL 1,390 BRL 4.3 BRL BRL BRL BRL BRL	4.2 84.7 4.2 42.3 21.2	μg/kg dry μg/kg dry μg/kg dry μg/kg dry			1		U
71-43-2 Be 78-93-3 2-1 75-15-0 Ca 56-23-5 Ca 108-90-7 Ch 75-00-3 Ch 67-66-3 Ch 124-48-1 Di 95-50-1 1,2 541-73-1 1,3 106-46-7 1,4 75-34-3 1,1 107-06-2 1,2 75-35-4 1,1 156-60-5 tra 142-28-9 1,3 100-41-4 Eti	enzene Butanone (MBK) arbon disulfide arbon tetrachloride alorobenzene aloroethane aloroform	BRL 4.3 BRL BRL BRL BRL	84.7 4.2 42.3 21.2	μg/kg dry μg/kg dry μg/kg dry	,		•	It	=
78-93-3 2-1 75-15-0 Ca 56-23-5 Ca 108-90-7 Ch 75-00-3 Ch 67-66-3 Ch 124-48-1 Di 95-50-1 1,2 541-73-1 1,3 106-46-7 1,4 75-34-3 1,1 107-06-2 1,2 75-35-4 1,1 156-60-5 tra 142-28-9 1,3 100-41-4 Eti	Butanone (MEK) arbon disulfide arbon tetrachloride alorobenzene aloroethane aloroform	4.3 BRL BRL BRL	4.2 42.3 21.2	μg/kg dry μg/kg dry	,		1		VOC6
75-15-0 Ca 56-23-5 Ca 108-90-7 Ch 75-00-3 Ch 67-66-3 Ch 124-48-1 Di 95-50-1 1,2 541-73-1 1,3 106-46-7 1,4 75-34-3 1,1 107-06-2 1,2 75-35-4 1,1 156-60-5 tra 142-28-9 1,3	arbon disulfide arbon tetrachloride nlorobenzene nloroethane nloroform	BRL BRL BRL	42.3 21.2	μg/kg dry			į.	It	บ
56-23-5 Ca 108-90-7 Ch 75-00-3 Ch 67-66-3 Ch 124-48-1 Di 95-50-1 1,2 541-73-1 1,3 106-46-7 1,4 75-34-3 1,1 107-06-2 1,2 75-35-4 1,1 156-60-5 tra 142-28-9 1,3 100-41-4 Eti	arbon tetrachloride nlorobenzene nloroethane nloroform	BRL BRL	21.2				1	ŧŧ	VOC6,
108-90-7 Ch 75-00-3 Ch 67-66-3 Ch 124-48-1 Di 95-50-1 1,2 541-73-1 1,3 106-46-7 1,4 75-34-3 1,1 107-06-2 1,2 75-35-4 1,1 156-60-5 tra 142-28-9 1,3 100-41-4 Eti	nlorobenzene nloroethane nloroform	BRL		μg/kg dry			1	u	υ
75-00-3 Ch 67-66-3 Ch 124-48-1 Di 95-50-1 1,2 541-73-1 1,3 106-46-7 1,4 75-34-3 1,1 107-06-2 1,2 75-35-4 1,1 156-60-5 tra 142-28-9 1,3 100-41-4 Eti	nloroethane nloroform			μg/kg dry			l	11	U
67-66-3 Ch 124-48-1 Di 95-50-1 1,2 541-73-1 1,3 106-46-7 1,4 75-34-3 1,1 107-06-2 1,2 75-35-4 1,1 156-60-5 tra 142-28-9 1,3 100-41-4 Eti	nioroform		4.2	μg/kg dry			1	II	. U
124-48-1 Di 95-50-1 1,2 541-73-1 1,2 106-46-7 1,4 75-34-3 1,1 107-06-2 1,2 75-35-4 1,1 156-60-5 tra 142-28-9 1,3 100-41-4 Eti		BRL	8.5	μg/kg dry	r		ĺ	11	บ
95-50-1 1,2 541-73-1 1,3 106-46-7 1,4 75-34-3 1,1 107-06-2 1,2 75-35-4 1,1 156-60-5 tra 142-28-9 1,3 100-41-4 Eti	-	BRL		μg/kg dry			ī	н	Ū
541-73-1 1,3 106-46-7 1,4 75-34-3 1,1 107-06-2 1,2 75-35-4 1,1 156-60-5 tra 142-28-9 1,3 100-41-4 Eti	ibromochloromethane	BRL		μg/kg dry			1	И	υ
106-46-7 1,4 75-34-3 1,1 107-06-2 1,2 75-35-4 1,1 156-60-5 tra 142-28-9 1,3 100-41-4 Ett	2-Dichlorobenzene	BRL,		μg/kg dry			1 -		U
75-34-3 1,1 107-06-2 1,2 75-35-4 1,1 156-60-5 tra 142-28-9 1,3 100-41-4 Eti	3-Dichlorobenzene	BRL	4.2	μg/kg dry	•		1	ft	U
107-06-2 1,2 75-35-4 1,1 156-60-5 tra 142-28-9 1,3 100-41-4 Eti	4-Dichlorobenzene	BRL	4.2	μg/kg dry			I	u	U
75-35-4 1,1 156-60-5 tra 142-28-9 1,3 100-41-4 Etl	1-Dichloroethane	BRL	4.2	μg/kg dry	•		1	, ü	Ü
156-60-5 tra 142-28-9 1,3 100-41-4 Etl	2-Dichloroethane	BRL	4.2	μg/kg dry	,		1	11	U
142-28-9 1,3 100-41-4 Etl	1-Dichloroethene	BRL	4.2	μg/kg dry	ı.		1	a a	υ
100-41-4 Eti	ans-1,2-Dichloroethene	BRL	4.2	μg/kg dry	,		1	п	U
	3-Dichloropropane	BRL	4.2	μg/kg dry	,		1	ıt	บ
		BRL	4.2	μg/kg dry			1	п	υ
	Methyl-2-pentanone (MIBK)	BRL	42.3	μg/kg dry	•		. 1	ļi	, N
	ethylene chloride	8.3	42.3	µg/kg dгу			1	11	VOC3,
and the second s	1,2,2-Tetrachloroethane	BRL	4.2	μg/kg dry			1	n	ับ
127-18-4 Te	trachloroethene	0.4	4.2	μg/kg dry			1	u	J
108-88-3 To		BRL	4.2	μg/kg dry			1	и	U
	2,4-Trichlorobenzene	BRL	4.2	μg/kg dry			1	10	U
=	1,1-Trichloroethane	BRL	4.2	μg/kg dry			1	u	υ
	ichloroethene	BRL	4.2	μg/kg dry			I	в .	. υ
	2,3-Trichloropropane	BRL	4.2	μ g/kg dry			1	h	U
75-01-4 Vi	· ·	BRL	4.2	μg/kg dry			1	н	U
1330-20-7 m,	* •	BRL	8.5	μg/kg dry			1	н	Ū
95-47-6 o-7	-	BRL	_	μg/kg dry			1	п	บ
	rrogate: 4-Bromofluorobenzene	106	7Ő-1.				٠	U	
	rrogate: Toluene-d8	104	70-1.					II	
	rrogate: 1,2-Dichloroethane-d4 rrogate: Dibromofluoromethane	110 102	70-1. 70-1.					10	

63.1 µg/kg dry

1260 μg/kg dry

63.1 μg/kg dry

631 μg/kg dry

BRL

BRL

BRL

BRL

5111179

U

U

υ

50

50

50

50

67-64-1 Acetone

71-43-2 Benzene

78-93-3 2-Butanone (MEK)

76-13-1 1,1,2-Trichlorotrifluoroethane (Freon 113)

<u>Sample Identi</u> DUP-1-1110 0 SA37123-12		Client Project # 5555113	Matrix Collection Do Soil 10-Nov-05		Receiv 14-Nov	
JAJ/125-12	100 (100 (100 (100 (100 (100 (100 (100	Method Ref. VOC	Prepared Analyz 14-Nov-05 14-Nov		<u>Analy</u> YM	
CAS No.	Analyte(s)	Result	*RDL/Units RT	Q Dilution	Batch	Flag
Volatile Orga	anic Compounds					
	VOC Extraction	Lab extracted	N/A	1 ·	5110938	U
	nic Compounds		ood SW846 5035A Soil (low lev	/el)		
	1,1,2-Trichlorotrifluoroethane (Freon	•	4.8 μg/kg dry	1	5110981	U
	Acetone	428	96.9 μg/kg dry	1	11	VOC6
	Benzene	BRL	4.8 μg/kg dry	1	ıt	U
	2-Butanone (MEK)	BRL 🥵	48.5 μg/kg dry	1	ı	U
	Carbon disulfide	BRL	24.2 μg/kg dry	1	н	U
	Carbon tetrachloride	BRL	4.8 μg/kg dry	1	, tt	U
108-90-7	Chlorobenzene	BRL	4.8 μg/kg dry	1	tr	υ
	Chloroethane	BRL	9.7 μg/kg dry	1	u	U
67-66-3	Chloroform	BRL	4.8 μg/kg dry	1	. "	บ
	Dibromochloromethane	BRL	4.8 μg/kg dry	1	It ·	υ
	1,2-Dichlorobenzene	BRL	4.8 μg/kg dry	1	u	U
541-73-1	1,3-Dichlorobenzene	BRL	4.8 μg/kg dry	1	К	U
106-46-7	1,4-Dichlorobenzene	BRL	4.8 μg/kg dry	1	ıt	υ
75-34-3	1,1-Dichloroethane	BRL	4.8 μg/kg dry	1	ij	U
107-06-2	1,2-Dichloroethane	BRL	4.8 μg/kg dry	1	n	U
75-35-4	1,1-Dichloroethene	BRL	4.8 μg/kg dry	1	19	U
156-60-5	trans-1,2-Dichloroethene	BRL	4.8 μg/kg dry	1	ı	U
	1,3-Dichloropropane	BRL	4.8 μg/kg dry	1	It	U
100-41-4	Ethylbenzene	BRL	4.8 μg/kg dry	. 1	ıı	υ
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL	48.5 μg/kg dry	1	IP	· U
75-09-2	Methylene chloride	4.6	48.5 μg/kg dry	1	и	VOC3, 3
79-34-5	1,1,2,2-Tetrachloroethane	BRL	4.8 μg/kg dry	1	1t	U
127-18-4	Tetrachloroethene	0.5	4.8 μg/kg dry	. 1	п	J
108-88-3	Toluene	BRL	4.8 μg/kg dry	1	11	U
120-82-1	1,2,4-Trichlorobenzene	BRL	4.8 μg/kg dry	1	tt .	บ
71-55-6	1,1,1-Trichloroethane	BRL	4.8 μg/kg dry	1 .	n	U
79- 01-6	Trichloroethene	BRL	4.8 μg/kg dry	1	U	U
96-18-4	1,2,3-Trichloropropane	BRL	4.8 μg/kg dry	1	ħ	U
75-01-4	Vinyl chloride	BRL	4.8 μg/kg dry	1	н	U
1330-20-7	m,p-Xylene	BRL	9.7 μg/kg dry	1	п.	υ
95-47-6	o-Xylene	BRL	4.8 μg/kg dry	1	. "	U
	Surrogate: 4-Bromofluorobenzene	107	70-130 %		u	
	Surrogate: Toluene-d8	103	70-130 %		B.	
	Surrogate: 1,2-Dichloroethane-d4	111	70-130 %			
1868-53-7	Surrogate: Dibromofluoromethane	103	70-130 %		B	
<u>′olatile Orga</u>	nic Compounds RE	Prepared by meth	od SW846 5030 Soil (high leve	el) SA3712	3-12RE1	
76-13-1	1,1,2-Trichlorotrifluoroethane (Freen		56.2 μg/kg dry	50	5111251	υ
67.64.1		DDI # O	1100 7 1			

BRL

55.1

BRL

1120 μg/kg dry

56.2 μg/kg dry

562 μg/kg dry

U

U

O-01, J

50

50

50

67-64-1 Acetone

71-43-2 Веплепе

78-93-3 2-Butanone (MEK)

Sample Identi B-7-11-8.5-9-	5-9-111005 5555113 Soil 10-Noy-05 08			Receiv 14-Nov			
SA37123-13		Method Ref. VOC	Prepared 14-Nov-05	Analyzed 14-Nov-05		<u>Analy</u> YM	
CAS No.	Analyte(s)	Result	*RDL/Units	RT Q	Dilution	Batch	Flag
Volatile Orga	anic Compounds		· -				
	VOC Extraction	Lab extracted	N/A		1	5110938	U
<u> Volatile Orga</u>	nic Compounds	Prepared by meti	hod SW846 5035.A	Soil (low level)			
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 1)	13) BRL	7.6 μg/kg dry		1	5110981	υ
67-64-1	Acetone	1,020	152 μg/kg dry		1	If	VOC6
71-43-2	Benzene	BRL	7.6 μg/kg dry		1	tt	υ
78 - 93 -3	2-Butanone (MEK)	BRL 🤾	75.8 μg/kg dry		1	10	U
75-15-0	Carbon disulfide	BRL	37.9 μg/kg dry		1	ıţ	U
56-23-5	Carbon tetrachloride	BRL	7.6 µg/kg dry		1	R	Ü
108-90-7	Chlorobenzene	BRL	7.6 μg/kg dry		1	п	U
75-00-3	Chloroethane	BRL	15.2 μg/kg dry		I	п	บ
67-66-3	Chloroform	0.8	7.6 μg/kg dry		1	tr	J
124-48-1	Dibromochloromethane	BRL	7.6 μg/kg dry		1	'n	י ט
95-50-1	1,2-Dichlorobenzene	BRL	7.6 μg/kg dry		1	N	U
541-73-1	1,3-Dichlorobenzene	BRL	7.6 μg/kg dry		1	п	บ
106-46-7	1,4-Dichlorobenzene	BRL	7.6 μg/kg dry		1		U
75-34-3	1,1-Dichloroethane	BRL	7.6 µg/kg dry		1	н	U
107-06-2	1,2-Dichloroethane	BRL	7.6 μg/kg dry		1		
	1,1-Dichloroethene	BRL	7.6 μg/kg dry		1	'n	U
	trans-1,2-Dichloroethene	BRL	7.6 μg/kg dry		. 1	9	ŭ
	1,3-Dichloropropane	BRL	7.6 μg/kg dry		I	: a	U
	Ethylbenzene	BRL	7.6 µg/kg dry		I	u	υ ••
	4-Methyl-2-pentanone (MIBK)	BRL	75.8 μg/kg dry		Ī	u	, U
	Methylene chloride	5.9	75.8 μg/kg dry		1	п	U
	1,1,2,2-Tetrachloroethane	BRL	7.6 μg/kg dry		1	11	VOC3, J
	Tetrachloroethene	BRL	7.6 μg/kg dry			11	Ŭ
108-88-3		BRL	7.6 μg/kg dry		l	,	U
	1,2,4-Trichlorobenzene	BRL	, ·	÷	1		U
	1,1,1-Trichloroethane	BRL	7.6 μg/kg dry		1	 H	υ
	Trichloroethene	BRL	7.6 μg/kg dry		I	n	U
	1,2,3-Trichloropropane	BRL	7.6 μg/kg dry		I		บ
	Vinyl chloride	BRL	7.6 μg/kg dry		1	r. It	υ
	m,p-Xylene	BRL.	7.6 μg/kg dry		1	"	บ
	o-Xylene		15.2 μg/kg dry		l -		U
	Surrogate: 4-Bromofluorobenzene	BRL 108	7.6 μg/kg dry		1	и 1	U
	Surrogate: Toluene-d8	104	70-130 %			21	
	Surrogate: 1,2-Dichloroethane-d4	104 109	70-130 %				
	Surrogate: Dibromofluoromethane	101	70-130 % 70-130 %			n	
						•	
		Prepared by meth	od SW846 5030 S	soil (high level)	SA37123		
	1,1,2-Trichlorotrifluoroethane (Freon 11		78.8 μg/kg dry		50	5111251	U
	Acetone	BRL	1580 μg/kg dry		50	It	Ū
	Benzene	BRL	78.8 μg/kg dry		50	ıı .	ָּט
/8-93-3	2-Butanone (MEK)	71.7	788 μg/kg dry		50	11	J

Sample Identification B-7-11-3.5-4-111005		lient Project # 5555113	<u>Matrix</u> Soil	Collection Da 10-Nov-05		<u>Receiv</u> 14-Nov	
SA37123-14	A CANADA CONTRACTOR OF THE CON	Method Ref. VOC	<u>Prepared</u> 14-Nov-05	<u>Analyz</u> 14-Nov		<u>Analy</u> YM	
CAS No.	Analyte(s)	Result	*RDL/Units	RT	Q Dilution	Batch	Flag
Volatile Orga	anic Compounds						
	VOC Extraction	Lab extracted	N/A		I	5110938	U
<u>Volatile Orga</u>	nic Compounds	Prepared by met	hod SW846 503	5A Soil (low lev	vel)		YOC10
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113		4.9 μg/kg d	-	1	5110981	
67-64-1	Acetone	BRL 💨	98.3 μg/kg d	ry	I	u	U
71-43-2	Benzene	0.6	4,9 μg/kg d	ry	1	ti	. J
78-93-3	2-Butanone (MEK)	7.9	49.1 μg/kg d	ry	1	31	VOC6, J
75-15-0	Carbon disulfide	0.6	24.6 μg/kg d	ry	1	ı	J
56 - 23 - 5	Carbon tetrachloride	BRL	4.9 μg/kg d	ry .	1	Ħ	ប
108-90-7	Chlorobenzene	BRL	4.9 μg/kg d	ry	I	п	υ
75-00-3	Chloroethane	BRL	9.8 μg/kg d	lry	I	ĮI.	υ
67-66-3	Chloroform	BRL	4.9 μg/kg d	iry	1	13	υ
124-48-1	Dibromochloromethane	BRL	4.9 μg/kg d	iry	I	н	U
95-50-1	1,2-Dichlorobenzene	BRL	4.9 μg/kg d	lry	1	II	U
541-73-1	1,3-Dichlorobenzene	BRL	4.9 μg/kg d		1	u	U
106-46-7	1,4-Dichlorobenzene	BRL	4.9 μg/kg d		1	tı	U
75-34-3	1,1-Dichloroethane	BRL	4.9 μg/kg d	=	1	н	Ü
107-06-2	1,2-Dichloroethane	BRL	4.9 μg/kg d	-	1	a	U
75-35-4	1,1-Dichloroethene	BRL	4.9 μg/kg d	-	1	41	U
156-60-5	trans-1,2-Dichloroethene	BRL	4.9 μg/kg d		1	11	U
142-28-9	1,3-Dichloropropane	BRL	4.9 μg/kg d	-	1	al a	U
100-41-4	Ethylbenzene	BRL	4.9 μg/kg c	•	1	n	U
108-10-1	4-Methyl-2-pentanone (MIBK)	1,5	49.1 μg/kg c			п	VOC6, J
75-09-2	Methylene chloride	4.3	49.1 μg/kg c		. 1	,,	VOC3, J
79-34-5	1,1,2,2-Tetrachloroethane	BRL	4.9 μg/kg d		1	ħ	U
127-18-4	Tetrachloroethene	BRL	4.9 μg/kg d		. 1		ΰ
108-88-3	Toluene	2.3	4.9 μg/kg c	-	1	, к	j
120-82-1	1,2,4-Trichlorobenzene	BRL	4.9 µg/kg c		1	ti	ប
	1,1,1-Trichloroethane	BRL	4.9 μg/kg d	-	1		U
	Trichloroethene	BRL	4.9 μg/kg d	-	1	0	บ
96-18-4	1,2,3-Trichloropropane	BRL	4.9 μg/kg d		Ī	н	บ
	Vinyl chloride	BRL	4.9 μg/kg c		1	u	U
	m,p-Xylene	1.2	9.8 μg/kg d	=	1	n	j
	o-Xylene	BRL	4.9 μg/kg d		1	D	ับ
	Surrogate: 4-Bromofluorobenzene	96.6	70-130 %	,	•	n	Ü
the second second second	Surrogate: Toluene-d8	101	70-130 %			*	
	Surrogate: 1,2-Dichloroethane-d4	113	70-130 %			Ħ	
	Surrogate: Dibromofluoromethane	106	70-130 %			μ	
	anic Compounds RE	Prepared by met		0 Soil (bigh law	۰ ۱	 - :	
_	1,1,2-Trichlorotrifluoroethane (Freon 113		67.9 μg/kg č	· ·	SA3712 50	3-14RE1 5111251	11
	Acetone	BRL	07.9 μg/kg c	•	50	3111431	_
	Benzene	BRL	67.9 μg/kg c		50	u	ע יי
	2-Butanone (MEK)	BRL				п.	U
10-23-3	2-Datatione (MDEA)	ידעני	679 μg/kg c	й λ	50	••	υ

Sample Identification B7-5-9-9.5-110805		Client Project # 5555113	<u>Matrix</u> Soil	Collection Date/Time 08-Nov-05 11:45			Received 14-Nov-05		
	Section 1991	Art of the second	Method Ref. SW846 6010B	Prepared 15-Nov-05		i <u>lyzed</u> Nov-05		Analys HB	
CAS No.	Analyte(s)		Result	*RDL/Units	RT	Q	Dilution	Batch	Flag
Total Metal 7439-92-	ls by EPA 6000/700 1 Lead	0 Series Method	476 476	0.853 mg/kg	•		1	5110939	

Sample Identification
B7-5-12-12.5-110805
SA37123-04

<u>Matrix</u> Soil Collection Date/Time 08-Nov-05 11:55 Received 14-Nov-05

Method Ref. SW846 6010B Prepared 15-Nov-05 Analyzed 17-Nov-05

Analyst HB

CAS No. Analyte(s)	Result	*RDL/Units	RT	Q	Dilution	Batch	Flag
Total Metals by EPA 6000/7000 Series Methods					_		
7439-92-1 Lead	22.9	0.868 mg/kg dry			1	5110939	

Sample Identification	
B7-5-14-14.5-110805	
SA37123-05	

<u>Matrix</u> Soil Collection Date/Time 08-Nov-05 12:05 Received 14-Nov-05

Method Ref. SW846 6010B

Prepared 15-Nov-05 Analyzed 17-Nov-05 Analyst HB

CAS No.	Analyte(s)	Resul	t	*RDL/Ui	nits	RT	Q	Dilution	Batch	Flag
Total Metal 7439-92-	s by EPA 6000/7000 Serie	s Methods 4.69	7	0.786 m	- +			1	5110939	

Sample Identification
B7-5S-3.5-4-110805
SA37123-07

Client Project #	5
5555113	

<u>Matrix</u> Soil Collection Date/Time 08-Nov-05 15:05 Received 14-Nov-05

Method Ref. SW846 6010B Prepared 16-Nov-05 Analyzed 17-Nov-05 Analyst RE

		5 W 640 0010D	10-1404-02	17-1404-03			KE		
CAS No. Analyte(s)		Result	*RDL/Units	RT.	Q	Dilution	Batch	Flag	
Total Metals by EPA 6000/7000 Series Methods 7439-92-1 Lead		s 56.4	0,784 mg/kg		٠	1	5111194		
7439-92-1 Lead		30.4	0.764 mg/kg dry			1	3111194		

Sample Identification
B7-5W-14-14.5-110805
SA37123-09

<u>Matrix</u> Soil Collection Date/Time 08-Nov-05 14:35 Received 14-Nov-05

Method Ref. SW846 6010B Prepared 15-Nov-05 Analyzed 17-Nov-05 Analyst HB

						•			
CAS No. Analyte(s)	Resu	lt	*RDL/Units	RT	Q	Dilution	Batch	Flag	
Total Metals by EPA 6000/7000 7439-92-1 Lead	Series Methods 86.5		0.897 mg/kg dry			1	5110939		



Hydrology

Remediation

Water Supply

Data Usability Summary Report for Spectrum Analytical, Inc. Work Order SA39969 10 Soil Samples Collected January 25, 2006

Prepared by: Donald Anné March 24, 2006

The data packages contain the documentation required by NYSDEC ASP. The proper chain of custody procedures were followed by the samplers. All information appeared legible and complete. The data packs contained the results of volatile, semi-volatile, PCB, pesticide, herbicide, metal and cyanide analyses for 10 soil samples.

The overall performances of the analyses are acceptable. Spectrum Analytical, Inc. did fulfill the requirements of the analytical methods.

The data are mostly acceptable with some issues that are identified in the accompanying data validation reviews. The following data were flagged:

- The "not detected" volatile results for acetone in samples EP-B3F-1 and EP-B3F-2 were flagged as "unusable" (R) because the response factors were below the allowable minimum in the associated initial and continuing calibrations.
- The positive volatile results for acetone in the following samples were flagged as "estimated" (J) because the response factors were below the allowable minimum in the associated initial and continuing calibrations.

EP-B3F-3

EP-B3F-4

EP-B3F-5

EP-B3F-6

EP-B3F-7

EP-B3F-8

EP-B3F-9

EP-B3F-10

- The "not detected" semi-volatile results for benzoic acid in all ten soil samples were flagged as "estimated" (J) because the percent recovery for benzoic acid was below the QC limits in LCS 6011377-BS1.
- All results for antimony, arsenic, barium and mercury were flagged as "estimated" (J) in the ten soil samples because the percent recoveries for these metals were below control limits (75-125%) but were greater than 10% in MS/MSD sample SA39967-02.

Page 1 of 2

- Positive results for lead, copper, and potassium were flagged as "estimated" (J) in the ten soil samples because the relative percent differences for these metals were above the allowable maximum (35%) in duplicate sample SA39967-02.
- All results for sodium were flagged as "estimated" (J) in the ten soil samples because the
 percent recovery for sodium was below control limits (80-120%) in laboratory control
 sample 6011337-BS1.
- All results for iron were flagged as "estimated" (J) in the ten soil samples because the percent recoveries for iron were below QC limits in standard reference material samples 6011337-SRM1 and 6011337-SMR2.

All data that are not flagged rejected (R) are considered usable, with estimated (J) data associated with a higher level of quantitative uncertainty. Detailed information on data quality is included in the data validation reviews.

It should be noted that the "not detected" acetone data were qualified as "R" based on validation criteria alone. These data, however, were associated with method-compliant calibrations, and the response factors for acetone greater than 0.010 (the method-compliant allowable minimum). It is this reviewer's opinion that, although the validation guidelines recommend that the data should be considered unusable, the "R" data may be acceptable to the user, based on the preceding facts and additional information that is not contained in the validation criteria. The user is cautioned that there is a higher degree of analytical uncertainty associated with the R-flagged data, because the relative response factors for those compounds were less than 0.050.



Hydrology

Remediation

Water Supply

QA/QC Review of Volatiles Data for Spectrum Analytical, Inc. Work Order SA39969 10 Soil Samples Collected January 25, 2006

Prepared by: Donald Anné March 24, 2006

Holding Times: Samples were analyzed within NYSDEC holding times.

GC/MS Tuning and Mass Calibration: The BFB tuning criteria were within control limits.

Initial Calibration: The SPCCs and CCCs were within control limits for method 8260B.

The %RSDs for target compounds were below the allowable maximum (30%), as required.

The average RRF for acetone (0.032) was below the allowable minimum (0.050) for HPV4 on 01-17-06, but was greater than 0.010 (the method-compliant allowable minimum). Positive results for acetone should be considered estimates (J) and negative results unusable (R) in associated samples.

Continuing Calibration: The SPCCs and CCCs were within control limits for method 8260B.

The %D for acetone (62.9%) was above the allowable maximum (25%) on 01-27-06 (lcs0127a.D). Positive results for acetone should be considered estimates (J) in associated samples.

The RRF50 for acetone (0.023) was below the allowable minimum (0.050), but was greater than 0.010 on 01-27-05 (lcs0127a.D). Positive results for acetone should be considered estimates (J) and negative results unusable (R) in associated samples.

Blanks: The analysis of the method blank reported target compounds as not detected.

<u>Internal Standard Area Summary</u>: The internal standard areas and retention times were within control limits.

Surrogate Recovery: The surrogate recoveries were within control limits for the soil samples.

- Matrix Spike/Matrix Spike Duplicate: The relative percent differences were below the allowable maximums, and the percent recoveries were within control limits for MS/MSD sample SA40242-06. Note: The associated MS/MSD data is from work order no. SA40242.
- <u>Laboratory Control Sample</u>: The relative percent differences for target compounds were below the allowable maximums, but 1 of 2 %Rs for 1,2,4-trichlorobenzene was above QC limits for LCS/LCSD 6011397-BS1. Positive results for 1,2,4-trichlorobenzene should be considered estimates (J) in associated samples.
- <u>Compound ID</u>: Checked compounds were within GC quantitation limits. The mass spectra for detected compounds contained the primary and secondary ions, as outlined in the method.



Hydrology

Remediation

Water Supply

QA/QC Review of Semi-Volatiles Data for Spectrum Analytical, Inc. Work Order SA39969 10 Soil Samples Collected January 25, 2006

Prepared by: Donald Anné March 24, 2006

Holding Times: Samples were extracted and analyzed within NYSDEC holding times.

GC/MS Tuning and Mass Calibration: The DFTPP tuning criteria were within control limits.

Initial Calibration: The SPCCs and CCCs were within control limits for method 8270C.

The average RRFs for target compounds were above the allowable minimum (0.050) and the %RSDs were below the allowable maximum (30%), as required.

Continuing Calibration: The SPCCs and CCCs were within control limits for method 8270C.

The RRF100s for target compounds were above the allowable minimum (0.050), as required.

The %D for hexachlorocyclopentadiene (27.7%) was above the allowable maximum (25%) on 01-28-06 (SC50127.D). Positive results for hexachlorocyclopentadiene should be considered estimates (J) in associated samples.

<u>Blanks</u>: The analysis of the method blank reported target compounds as not detected.

<u>Internal Standard Area Summary</u>: The internal standard areas and retention times were within control limits.

<u>Surrogate Recovery</u>: One of three acid extractable surrogate recoveries for sample EP-B3F-5 and EP-B3F-8 was below control limits, but was not less than 10%. No action is taken for one surrogate recovery per fraction outside control limits, provided no recovery is less than 10%.

Matrix Spike/Matrix Spike Duplicate: The relative percent differences were below the allowable maximums and the percent recoveries were within control limits for MS/MSD sample SA39970-05.

Page 1 of 2

- <u>Duplicate</u>: The analyses of sample and duplicate SA39970-05 reported target compounds as not detected; therefore, valid relative percent differences could not be calculated. The analyses for the laboratory duplicates were acceptable.
- <u>Laboratory Control Sample</u>: The percent recovery for benzoic acid was below QC limits for LCS sample 6011377-BS1. All results for benzoic acid should be considered estimates (J) in associated soil samples.
- <u>Compound ID</u>: Checked compounds were within GC quantitation limits. The mass spectra for detected compounds contained the primary and secondary ions, as outlined in the method.



Hydrology

Remediation

Water Supply

QA/QC Review of Pesticide Data for Spectrum Analytical, Inc. Work Order SA39969 10 Soil Samples Collected January 25, 2006

Prepared by: Donald Anné March 24, 2006

Holding Times: Samples were extracted and analyzed within NYSDEC holding times.

Blanks: The analysis of the method blank reported target pesticides as not detected.

Surrogate Recovery: The surrogate recoveries were within QC limits for the soil samples.

Matrix Spike/Matrix Spike Duplicate: The relative percent differences were below the allowable maximum and the percent recoveries were within QC limits for MS/MSD sample EP-B3F-10.

<u>Duplicate</u>: The sample and duplicate analyses for sample EP-B3F-10 reported target pesticides as not detected; therefore, relative percent differences could not be calculated. The analyses of the sample and duplicate are acceptable.

<u>Laboratory Control Sample</u>: The percent recoveries for target pesticides were within QC limits for LCS sample 6011382-BS1.

<u>Initial Calibration</u>: The %RSDs for applicable target pesticides were below the allowable maximum (20%), or the correlation coefficients were above the allowable minimums, as required.

Continuing Calibration: The percent recoveries for target pesticides were within QC limits (85-115%).

<u>DDT/Endrin Breakdown Check</u>: The percent breakdowns were below the allowable maximum (20%) for 4,4'-DDT and endrin, as required.

<u>Pesticide Analytical Sequence</u>: This data is not applicable. The laboratory used internal standards to quantitate sample results.

<u>Pesticide Identification Summary for Single Component Analytes</u>: Checked surrogate results were within GC quantitation limits. The detections of single component pesticide were confirmed on a second dissimilar column..

<u>Pesticide Identification Summary for Multicomponent Analytes</u>: There were no detected concentrations of multi-component target pesticides reported in the soil samples.



Hydrology

Remediation

Water Supply

QA/QC Review of PCB Aroclor Data for Spectrum Analytical, Inc. Work Order SA39969 10 Soil Samples Collected January 25, 2006

Prepared by: Donald Anné March 24, 2006

Holding Times: Samples were extracted and analyzed within NYSDEC holding times.

Blanks: The analysis of the method blank reported target aroclors as not detected.

Surrogate Recovery: The surrogate recoveries were within QC limits for the soil samples.

<u>Duplicate</u>: The sample and duplicate analyses for sample EP-B3F-10 reported target arcolors as not detected; therefore, relative percent differences could not be calculated. The analyses of the sample and duplicate are acceptable.

Matrix Spike/Matrix Spike Duplicate: The relative percent differences for aroclor-1016 and aroclor-1260 were below the allowable maximum, and the percent recoveries were within QC limits for MS/MSD sample EP-B3F-10.

<u>Laboratory Control Sample</u>: The percent recoveries for aroclor-1260 and aroclor-1016 were within QC limits for LCS sample 6011380-BS1.

<u>Initial Calibration</u>: The average %RSDs for target aroclors were below the allowable maximum (20%) for primary and confirmation columns, as required.

Continuing Calibration: Percent recoveries for target aroclors were within QC limits (85-115%).

<u>PCB Analytical Sequence</u>: This data is not applicable. The laboratory used internal standards to quantitate sample results.

<u>PCB Identification Summary for Multi-Component Analytes</u>: Checked surrogates were within GC quantitation limits. The detections of aroclors were confirmed on a second dissimilar column.

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Hydrology

Remediation

Water Supply

QA/QC Review of Herbicide Data for Spectrum Analytical, Inc. Work Order SA39969 10 Soil Samples Collected January 25, 2006

Prepared by: Donald Anné March 24, 2006

Holding Times: Samples were extracted and analyzed within NYSDEC holding times.

Blanks: The analysis of the method blank reported 2,4-D; 2,4,5-T; and 2,4,5-TP as not detected.

Surrogate Recovery: The surrogate recoveries were within QC limits for the soil samples.

Matrix Spike/Matrix Spike Duplicate: MS/MSD data were not provided in this data pack. No action is taken on MS/MSD data alone to qualify or reject an entire set of samples.

<u>Duplicate</u>: The sample and duplicate analyses for sample EP-B3F-10 reported target herbicides as not detected; therefore, relative percent differences could not be calculated. The analyses of the sample and duplicate are acceptable.

<u>Laboratory Control Sample</u>: The percent recoveries for target herbicides were within QC limits for LCS sample 6011387-BS1.

<u>Initial Calibration</u>: The %RSDs for 2,4-D; 2,4,5-T; and 2,4,5-TP were below the allowable maximum (20%), or the correlation coefficients were above the allowable minimums, as required.

Continuing Calibration: The percent recoveries for 2,4-D; 2,4,5-T; and 2,4,5-TP were within QC limits (85-115%).

<u>Herbicide Identification Summary</u>: Checked surrogates were within GC quantitation limits. There were no detected concentrations of 2,4-D; 2,4,5-T; and 2,4,5-TP reported in the soil samples.



Hydrology

Remediation

Water Supply

QA/QC Review of TAL Metals Data for Spectrum Analytical, Inc. Work Order SA39969 10 Soil Samples Collected January 25, 2006

Prepared by: Donald Anné March 24, 2006

Holding Times: Samples were analyzed within the NYSDEC holding times.

<u>Initial and Continuing Calibration Verification</u>: The percent recoveries for target metals and cyanide were within control limits (80-120% for Hg, 90-110% for all other metals).

<u>Blanks</u>: The analyses for initial and continuing calibration blanks reported target metals and cyanide as below the CRDLs, as required. The preparation blank contained iron (1.83 mg/kg) and potassium (11.1 mg/kg) above the reporting limit. Results for iron and potassium that are less than ten times the preparation blank level should be reported as unusable (R) in associated samples.

ICP Interference Check Sample: The percent recoveries for target metals were within control limits (80-120%).

Spike Sample Recovery: The percent recoveries for antimony (23.2% and 15.5%), arsenic (61.3%), barium (70.2%), and mercury (45.9% and 45.9%) were below control limits (75-125%) for soil MS/MSD sample SA39967-02. All results for antimony, arsenic, barium, and mercury should be considered estimates (J).

<u>Duplicates</u>: The relative percent difference (RPD) for antimony (48.6%) was above the allowable maximum (35%) for MS/MSD sample SA39967-02. Positive results for antimony should be considered estimates (J).

The RPDs for antimony (50.0%), lead (38.4%), copper (39.0%), and potassium (43.0%) were above the allowable maximum (35%) for soil duplicate sample SA39967-01. Positive results for these metals should be considered estimates (J).

<u>Laboratory Control Sample</u>: The percent recovery for sodium (73%) was below control limits (80-120%) for soil LCSs 6011337-BS1. All results for sodium should be considered estimates (J).

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Standard Reference Material: The percent recoveries for iron were below QC limits for 6011337-SRM1 and 6011337-SRM2. All results for iron should be considered estimates (J).

ICP Serial Dilution: The serial dilution data was not provided; therefore, %Ds could not be evaluated.

Instrument Detection Limits: The IDLs were at or below CRDLs, as required.

Percent Solids: The percent solids for the soil samples were greater than 50%, as required.



Hydrology

Remediation

Water Supply

QA/QC Review of Cyanide Data for Spectrum Analytical, Inc. Work Order SA39969 10 Soil Samples Collected January 25, 2006

> Prepared by: Donald Anné March 24, 2006

Holding Times: Samples were analyzed within the NYSDEC holding times.

<u>Initial and Continuing Calibration Verification</u>: The percent recoveries for cyanide were within control limits (90-110%).

Blanks: The analyses of the calibration and method blanks reported total cyanide as not detected.

Spike Sample Recovery: The percent recoveries for cyanide were within control limits (75-125%) in MS/MSD sample EP-B3F-1.

<u>Duplicates</u>: The relative percent difference for cyanide was below the allowable maximum (20%) in the MS/MSD sample EP-B3F-1, as required.

<u>Laboratory Control Sample</u>: The percent recoveries for cyanide were within control limits (80-120%) in samples 6011515-BS1 and 6011515-BS2.

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Hydrology

Remediation

Water Supply

Data Usability Summary Report for Spectrum Analytical, Inc. Work Order SA40242 7 Soil Samples Collected January 31 and February 1, 2006

Prepared by: Donald Anné March 24, 2006

The data packages contain the documentation required by NYSDEC ASP. The proper chain of custody procedures were followed by the samplers. All information appeared legible and complete. The data packs contained the results of volatile, semi-volatile, PCB, pesticide, herbicide, metal and cyanide analyses for 4 soil samples and the results for only volatile analyses for 3 samples.

The overall performances of the analyses are acceptable. Spectrum Analytical, Inc. did fulfill the requirements of the analytical methods.

The data are mostly acceptable with some issues that are identified in the accompanying data validation reviews. The following data were flagged:

- The "not detected" volatile results for acetone in all seven soil samples were flagged as "unusable" (R) because the response factors were below the allowable minimum in the associated initial and continuing calibrations.
- The positive volatile results for 2-butanone in the following samples were flagged as "estimated" (J) because the relative percent difference was above the allowable maximum in LCS/LCSD 6020354-BS1.

B3-PIPE1-1-013106

B3-PIPE2-1-013106

B3-PIPE3-0.5-013106

- The "not detected" results for antimony were flagged as "estimated" (J) in the four soil samples because the percent recoveries for antimony were below control limits (75-125%) but were greater than 10% in MS/MSD sample EP-B3F-12.
- Positive results for calcium, magnesium, and zinc were flagged as "estimated" (J) in the four soil samples because the relative percent differences for these metals were above the allowable maximum (35%) in duplicate sample EP-B3F-11.

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• Positive results for cadmium were flagged as "estimated" (J) in the four soil samples because the percent recoveries for cadmium were above control limits (80-120%) in laboratory control sample 6020096-BS1 and QC limits in standard reference material sample 6020096-SMR2.

All data that are not flagged rejected (R) are considered usable, with estimated (J) data associated with a higher level of quantitative uncertainty. Detailed information on data quality is included in the data validation reviews.

It should be noted that the "not detected" acetone data were qualified as "R" based on validation criteria alone. These data, however, were associated with method-compliant calibrations, and the response factors for acetone greater than 0.010 (the method-compliant allowable minimum). It is this reviewer's opinion that, although the validation guidelines recommend that the data should be considered unusable, the "R" data may be acceptable to the user, based on the preceding facts and additional information that is not contained in the validation criteria. The user is cautioned that there is a higher degree of analytical uncertainty associated with the R-flagged data, because the relative response factors for those compounds were less than 0.050.



Hydrology

Remediation

Water Supply

QA/QC Review of Volatiles Data for Spectrum Analytical, Inc. Work Order SA40242 7 Soil Samples Collected January 31 and February 1, 2006

Prepared by: Donald Anné March 24, 2006

Holding Times: Samples were analyzed within NYSDEC holding times.

GC/MS Tuning and Mass Calibration: The BFB tuning criteria were within control limits.

Initial Calibration: The SPCCs and CCCs were within control limits for method 8260B.

The %RSDs for target compounds were below the allowable maximum (30%), as required.

The average RRF for acetone (0.032) was below the allowable minimum (0.050) for HPV4 on 01-17-06, but was greater than 0.010 (the method-compliant allowable minimum). The average RRF for acetone (0.019) was below the allowable minimum (0.050) for HPV1 on 01-31-06, but was greater than 0.010. Positive results for acetone should be considered estimates (J) and negative results unusable (R) in associated samples.

Continuing Calibration: The SPCCs and CCCs were within control limits for method 8260B.

The %Ds for chloromethane (28.0%) and dibromochloromethane (27.5%) were above the allowable maximum (25%) on 02-07-06 (CCC0207.D). The %Ds for acetone (53.0%) and bromoform (48.3%) were above the allowable maximum (25%) on 02-07-06 (lcs0207a.D). Positive results for acetone should be considered estimates (J) in associated samples.

The RRF50 for acetone (0.016) was below the allowable minimum (0.050), but was greater than 0.010 on 02-07-05 (CCC0207.D). The RRF50 for acetone (0.025) was below the allowable minimum (0.050), but was greater than 0.010 on 02-07-05 (lcs0207a.D). Positive results for acetone should be considered estimates (J) and negative results unusable (R) in associated samples.

- <u>Blanks</u>: Method blank 6020354-BLK1 contained a trace of 2-butanone (5.2 ug/kg). Results for 2-butanone that are less than ten times the method blank level should be reported as not detected in associated samples.
- <u>Internal Standard Area Summary</u>: The internal standard areas and retention times were within control limits.
- Surrogate Recovery: The surrogate recoveries were within control limits for the soil samples.
- Matrix Spike/Matrix Spike Duplicate: The relative percent differences were below the allowable maximums, and the percent recoveries were within control limits for MS/MSD sample B3-PIPE1-1-013106.
- <u>Laboratory Control Sample</u>: The relative percent differences(RPDs) for target compounds were above the allowable maximums and the percent recoveries (%Rs) for target compounds were within QC limits for LCS/LCSD 6020355-BS1.
 - The %Rs for target compounds were within QC limits, but the RPDs for acetone and 2-butanone were above the allowable maximums for LCS/LCSD 6020354-BS1. Positive results for acetone and 2-butanone should be considered estimates (J) in associated samples.
- <u>Compound ID</u>: Checked compounds were within GC quantitation limits. The mass spectra for detected compounds contained the primary and secondary ions, as outlined in the method.



Hydrology

Remediation

Water Supply

QA/QC Review of Semi-Volatiles Data for Spectrum Analytical, Inc. Work Order SA40242 4 Soil Samples Collected February 1, 2006

Prepared by: Donald Anné March 24, 2006

Holding Times: Samples were extracted and analyzed within NYSDEC holding times.

GC/MS Tuning and Mass Calibration: The DFTPP tuning criteria were within control limits.

<u>Initial Calibration</u>: The SPCCs and CCCs were within control limits for method 8270C.

The average RRFs for target compounds were above the allowable minimum (0.050) and the %RSDs were below the allowable maximum (30%), as required.

Continuing Calibration: The SPCCs and CCCs were within control limits for method 8270C.

The RRF100s for target compounds were above the allowable minimum (0.050), as required.

The %D for 2,4-dinitrophenol (33.4%) was above the allowable maximum (25%) on 02-06-06 (SCC70206.D). Positive results for 2,4-dinitrophenol should be considered estimates (J) in associated samples.

Blanks: The analysis of the method blank reported target compounds as not detected.

Internal Standard Area Summary: The internal standard areas and retention times were within control limits.

Surrogate Recovery: The surrogate recoveries were within control limits for the soil samples.

Matrix Spike/Matrix Spike Duplicate: The relative percent differences were below the allowable maximums and the percent recoveries were within control limits for MS/MSD sample EP-B3F-13.

- <u>Duplicate</u>: The analyses of sample and duplicate EP-B3F-13 reported target compounds as not detected; therefore, valid relative percent differences could not be calculated. The analyses for the laboratory duplicates were acceptable.
- <u>Laboratory Control Sample</u>: The percent recovery for hexachlorocyclopentadiene was below QC limits for LCS sample 6020325-BS1. All results for hexachlorocyclopentadiene should be considered estimates (J) in associated soil samples.
- <u>Compound ID</u>: Checked compounds were within GC quantitation limits. The mass spectra for detected compounds contained the primary and secondary ions, as outlined in the method.



Hydrology

Remediation

Water Supply

QA/QC Review of Pesticide Data for Spectrum Analytical, Inc. Work Order SA40242 4 Soil Samples Collected February 1, 2006

Prepared by: Donald Anné March 24, 2006

Holding Times: Samples were extracted and analyzed within NYSDEC holding times.

Blanks: The analysis of the method blank reported target pesticides as not detected.

Surrogate Recovery: The surrogate recoveries were within QC limits for the soil samples.

Matrix Spike/Matrix Spike Duplicate: The relative percent differences were below the allowable maximum and the percent recoveries were within QC limits for MS/MSD sample EP-B3F-14.

<u>Duplicate</u>: The sample and duplicate analyses for sample EP-B3F-14 reported target pesticides as not detected; therefore, relative percent differences could not be calculated. The analyses of the sample and duplicate are acceptable.

<u>Laboratory Control Sample</u>: The percent recoveries for target pesticides were within QC limits for LCS sample 6020111-BS1.

<u>Initial Calibration</u>: The %RSDs for applicable target pesticides were below the allowable maximum (20%), or the correlation coefficients were above the allowable minimums, as required.

Continuing Calibration: The percent recoveries for b-BHC (124%) and d-BHC (117%) were above QC limits (85-115%) on 02-06-06 @ 09:30. The percent recovery for b-BHC (122%) was above QC limits (85-115%) on 02-06-06 @ 09:39. Positive results for b-BHC and d-BHC should be considered estimates (J) in associated samples.

<u>DDT/Endrin Breakdown Check</u>: The percent breakdowns were below the allowable maximum (20%) for 4,4'-DDT and endrin, as required.

- <u>Pesticide Analytical Sequence</u>: This data is not applicable. The laboratory used internal standards to quantitate sample results.
- <u>Pesticide Identification Summary for Single Component Analytes</u>: Checked surrogate results were within GC quantitation limits. The detections of single component pesticide were confirmed on a second dissimilar column..
- <u>Pesticide Identification Summary for Multicomponent Analytes</u>: There were no detected concentrations of multi-component target pesticides reported in the soil samples.



Hydrology

Remediation

Water Supply

QA/QC Review of PCB Aroclor Data for Spectrum Analytical, Inc. Work Order SA40242 4 Soil Samples Collected February 1, 2006

Prepared by: Donald Anné March 24, 2006

Holding Times: Samples were extracted and analyzed within NYSDEC holding times.

Blanks: The analysis of the method blank reported target aroclors as not detected.

Surrogate Recovery: The surrogate recoveries were within QC limits for the soil samples.

<u>Duplicate</u>: The sample and duplicate analyses for sample SA40216-01 reported target arcolors as not detected; therefore, relative percent differences could not be calculated. The analyses of the sample and duplicate are acceptable.

Matrix Spike/Matrix Spike Duplicate: The relative percent differences for aroclor-1016 and aroclor-1260 were below the allowable maximum, and the percent recoveries were within QC limits for MS/MSD sample SA40216-01.

<u>Laboratory Control Sample</u>: The percent recoveries for aroclor-1260 and aroclor-1016 were within QC limits for LCS sample 6020071-BS1.

<u>Initial Calibration</u>: The average %RSDs for target aroclors were below the allowable maximum (20%) for primary and confirmation columns, as required.

Continuing Calibration: Percent recoveries for target aroclors were within QC limits (85-115%).

<u>PCB Analytical Sequence</u>: This data is not applicable. The laboratory used internal standards to quantitate sample results.

<u>PCB Identification Summary for Multi-Component Analytes</u>: Checked surrogates were within GC quantitation limits. The detections of aroclors were confirmed on a second dissimilar column.

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Hydrology

Remediation

Water Supply

QA/QC Review of Herbicide Data for Spectrum Analytical, Inc. Work Order SA40242 4 Soil Samples Collected February 1, 2006

Prepared by: Donald Anné March 24, 2006

Holding Times: Samples were extracted and analyzed within NYSDEC holding times.

Blanks: The analysis of the method blank reported 2,4-D; 2,4,5-T; and 2,4,5-TP as not detected.

Surrogate Recovery: The surrogate recoveries were within QC limits for the soil samples.

Matrix Spike/Matrix Spike Duplicate: MS/MSD data were not provided in this data pack. No action is taken on MS/MSD data alone to qualify or reject an entire set of samples.

<u>Duplicate</u>: The sample and duplicate analyses for sample EP-B3F-13 reported target herbicides as not detected; therefore, relative percent differences could not be calculated. The analyses of the sample and duplicate are acceptable.

<u>Laboratory Control Sample</u>: The percent recoveries for target herbicides were within QC limits for LCS sample 6020259-BS1.

<u>Initial Calibration</u>: The %RSDs for 2,4-D; 2,4,5-T; and 2,4,5-TP were below the allowable maximum (20%), or the correlation coefficients were above the allowable minimums, as required.

Continuing Calibration: The percent recoveries for 2,4-D; 2,4,5-T; and 2,4,5-TP were within QC limits (85-115%).

<u>Herbicide Identification Summary</u>: Checked surrogates were within GC quantitation limits. There were no detected concentrations of 2,4-D; 2,4,5-T; and 2,4,5-TP reported in the soil samples.



Hydrology

Remediation

Water Supply

QA/QC Review of TAL Metals Data for Spectrum Analytical, Inc. Work Order SA40242 4 Soil Samples Collected February 1, 2006

Prepared by: Donald Anné March 24, 2006

Holding Times: Samples were analyzed within the NYSDEC holding times.

<u>Initial and Continuing Calibration Verification</u>: The percent recoveries for target metals and cyanide were within control limits (80-120% for Hg, 90-110% for all other metals).

Blanks: The analyses for initial and continuing calibration blanks reported target metals and cyanide as below the CRDLs, as required. The preparation blank contained calcium (6.78 mg/kg), iron (20.3 mg/kg), and potassium (25.7 mg/kg) above the reporting limit. Results for calcium, iron, and potassium that are less than ten times the preparation blank level should be reported as unusable (R) in associated samples.

<u>ICP Interference Check Sample</u>: The percent recoveries for target metals were within control limits (80-120%).

<u>Spike Sample Recovery</u>: The percent recoveries for antimony (32.2% and 40.1%) and mercury (45.9% and 45.9%) were below control limits (75-125%) for soil MS/MSD sample EP-B3F-12. All results for antimony should be considered estimates (J).

<u>Duplicates</u>: The relative percent differences (RPDs) for target metals were below the allowable maximum (35%) for MS/MSD sample EP-B3F-12, as required.

The RPDs for calcium (54.4%), cadmium (89.0%), magnesium (74.9%), and zinc (48.5%) were above the allowable maximum (35%) for MS/MSD sample EP-B3F-11. Positive results for these metals should be considered estimates (J).

<u>Laboratory Control Sample</u>: The percent recovery for cadmium (126%) was above control limits (80-120%) for soil LCSs 6020096-BS1. Positive results for cadmium should be considered estimates (J).

Standard Reference Material: The percent recovery for cadmium was above QC limits for 6020096-SRM2. Positive results for cadmium should be considered estimates (J).

ICP Serial Dilution: The serial dilution data was not provided; therefore, %Ds could not be evaluated.

Instrument Detection Limits: The IDLs were at or below CRDLs, as required.

Percent Solids: The percent solids for the soil samples were greater than 50%, as required.



Hydrology

Remediation

Water Supply

QA/QC Review of Cyanide Data for Spectrum Analytical, Inc. Work Order SA40242 4 Soil Samples Collected February 1, 2006

Prepared by: Donald Anné March 24, 2006

Holding Times: Samples were analyzed within the NYSDEC holding times.

<u>Initial and Continuing Calibration Verification</u>: The percent recoveries for cyanide were within control limits (90-110%).

Blanks: The analyses of the calibration and method blanks reported total cyanide as not detected.

Spike Sample Recovery: The percent recoveries for cyanide were within control limits (75-125%) in MS/MSD sample EP-B3F-11.

<u>Duplicates</u>: The relative percent difference for cyanide was below the allowable maximum (20%) in the MS/MSD sample EP-B3F-11, as required.

<u>Laboratory Control Sample</u>: The percent recoveries for cyanide were within control limits (80-120%) in samples 6020371-BS1 and 6020371-BS2.

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QA/QC Review of Cyanide Data for Spectrum Analytical, Inc. Work Order SA40316 Two Soil Samples Collected February 2, 2006

Prepared by: Donald Anné July 13, 2006

<u>Holding Times</u>: Samples were analyzed within the NYSDEC holding times.

<u>Initial and Continuing Calibration Verification</u>: The percent recoveries for cyanide were within control limits (90-110%).

Blanks: The analyses of the calibration and method blanks reported total cyanide as not detected.

Spike Sample Recovery: The percent recoveries for cyanide were within control limits (75-125%) in MS/MSD sample SA40242-01.

<u>Duplicates</u>: The relative percent difference for cyanide was below the allowable maximum (20%) in the MS/MSD sample SA40242-01, as required.

<u>Laboratory Control Sample</u>: The percent recoveries for cyanide were within control limits (80-120%) in samples 6020371-BS1 and 6020371-BS2.



QA/QC Review of Cyanide Data for Spectrum Analytical, Inc. Work Order SA40434 One Soil Sample Collected February 6, 2006

Prepared by: Donald Anné December 14, 2006

<u>Holding Times</u>: Sample EP-B3F-17 was analyzed within the NYSDEC holding times.

<u>Initial and Continuing Calibration Verification</u>: The percent recoveries for cyanide were within control limits (90-110%).

Blanks: The analyses of the calibration and method blanks reported total cyanide as not detected.

<u>Spike Sample Recovery</u>: The percent recoveries for cyanide were within control limits (75-125%) in MS/MSD sample SA40488-01.

<u>Duplicates</u>: The relative percent difference for cyanide was below the allowable maximum (20%) in the MS/MSD sample SA40488-01, as required.

<u>Laboratory Control Sample</u>: The percent recoveries for cyanide were within control limits (80-120%) in samples 6020371-BS1 and 6020371-BS2.



Data Usability Summary Report for Spectrum Analytical, Inc. Work Order SA40434 7 Soil Samples and 4 Concrete Samples Collected February 3-6, 2006

Prepared by: Donald Anné December 14, 2006

The data packages contain the documentation required by NYSDEC ASP. The proper chain of custody procedures were followed by the samplers. All information appeared legible and complete. The data packs contained the results of volatile, semi-volatile, PCB, pesticide, herbicide, metal and cyanide analyses for 1 soil sample; results for volatile and PCB analyses for 5 soil samples and 4 concrete samples; and the results for only volatile analyses for 1 soil sample.

The overall performances of the analyses are acceptable. Spectrum Analytical, Inc. did fulfill the requirements of the analytical methods.

The data are mostly acceptable with some issues that are identified in the accompanying data validation reviews. The following data were flagged:

- The positive volatile results for acetone in samples EP-B3F-17 and B3-PIPE5-4-020306 were flagged as "estimated" (J) because the response factors for acetone were below the allowable minimum in the associated initial and continuing calibrations.
- The "not detected" volatile results for tert-butanol and 1,4-dioxane in sample B3-PIPE5-020306 were flagged as "unusable" (R) because the response factors for these compounds were below the allowable minimum in the associated initial and continuing calibrations.
- The positive results for 2-butanone were flagged as "not detected" (U) in samples EP-B3F-17 and B3-PIPE5-020306, because the concentrations of 2-butanone in the samples were not significantly greater (more than ten times) than the level in the associated method blank.
- The positive volatile results for 1,2,4-trimethylbenzene and 1,3,5-trimethylbenzene in the sample B3-PIPE5-4-020306 were flagged as "estimated" (J) because the %Ds for these compounds were above the allowable maximum in the associated continuing calibration.

- The positive results for antimony, barium ,and zinc were flagged as "estimated" (J) in sample EP-B3F-17 because the percent recoveries for these metals were below control limits (75-125%) but were greater than 10% in MS/MSD sample SA40432-01.
- Positive results for lead and potassium were flagged as "estimated" (J) in sample EP-B3F-17 because the relative percent differences for these metals were above the allowable maximum (35%) in duplicate sample SA40432-01.
- The positive result for cadmium was flagged as "estimated" (J) in sample EP-B3F-17 because the percent recoveries for cadmium were above control limits (80-120%) in laboratory control sample 6020379-BS1 and QC limits in standard reference material sample 6020379-SMR2.

All data that are not flagged rejected (R) are considered usable, with estimated (J) data associated with a higher level of quantitative uncertainty. Detailed information on data quality is included in the data validation reviews.



QA/QC Review of Herbicide Data for Spectrum Analytical, Inc. Work Order SA40434 One Soil Sample Collected February 6, 2006

Prepared by: Donald Anné December 14, 2006

<u>Holding Times</u>: Sample EP-B3F-17 was extracted and analyzed within NYSDEC holding times.

<u>Blanks</u>: The analysis of the method blank reported 2,4-D; 2,4,5-T; and 2,4,5-TP as not detected.

Surrogate Recovery: The surrogate recoveries were within QC limits for sample EP-B3F-17.

Matrix Spike/Matrix Spike Duplicate: MS/MSD data were not provided in this data pack. No action is taken on MS/MSD data alone to qualify or reject an entire set of samples.

<u>Duplicate</u>: The sample and duplicate analyses for sample SA40362-16 reported target herbicides as not detected; therefore, relative percent differences could not be calculated. The analyses of the sample and duplicate are acceptable.

<u>Laboratory Control Sample</u>: The percent recoveries for target herbicides were within QC limits for LCS 6020496-BS1.

<u>Initial Calibration</u>: The %RSDs for 2,4-D; 2,4,5-T; and 2,4,5-TP were below the allowable maximum (20%), or the correlation coefficients were above the allowable minimums, as required.

<u>Continuing Calibration</u>: The percent recoveries for 2,4-D; 2,4,5-T; and 2,4,5-TP were within QC limits (85-115%).

<u>Herbicide Identification Summary</u>: Checked surrogates were within GC quantitation limits. There were no detected concentrations of 2,4-D; 2,4,5-T; and 2,4,5-TP reported in sample EP-B3F-17.



QA/QC Review of TAL Metals Data for Spectrum Analytical, Inc. Work Order SA40434 One Soil Sample Collected February 6, 2006

Prepared by: Donald Anné December 14, 2006

<u>Holding Times</u>: Sample EP-B3F-17 was analyzed within the NYSDEC holding times.

<u>Initial and Continuing Calibration Verification</u>: The percent recovery for cadmium in the ICV was above control limits (90-110%). Positive results for cadmium should be considered estimates (J).

Blanks: The analyses for initial and continuing calibration blanks reported target metals as below the CRDLs, as required. The preparation blank contained calcium (7.50 mg/kg), manganese (0.280 mg/kg), and potassium (14.2 mg/kg) above the reporting limit. Results for calcium, manganese, and potassium that are less than ten times the preparation blank level should be reported as unusable (R) in associated samples.

<u>ICP Interference Check Sample</u>: The percent recoveries for cadmium were above control limits (80-120%). Positive results for cadmium should be considered estimates (J).

<u>Spike Sample Recovery</u>: The percent recoveries for antimony (42.3% and 45.6%), barium (30.8% and 40.6%), and zinc (69.8% and 47.5%) were below control limits (75-125%), but were above 10% for soil MS/MSD sample SA40432-01. All results for antimony, barium, and zinc should be considered estimates (J).

<u>Duplicates</u>: The relative percent differences (RPDs) for target metals were below the allowable maximum (35%) for MS/MSD sample SA40432-01, as required.

The RPDs for antimony (46.5%), barium (78.2%), lead (46.8%), and potassium (57.9%) were above the allowable maximum (35%) for duplicate sample SA40432-01. Positive results for these metals should be considered estimates (J).

- <u>Laboratory Control Sample</u>: The percent recovery for cadmium (122%) was above control limits (80-120%) for soil LCS 6020379-BS1. Positive results for cadmium should be considered estimates (J).
- Standard Reference Material: The percent recovery for cadmium was above QC limits for 6020379-SRM2. Positive results for cadmium should be considered estimates (J).
- <u>ICP Serial Dilution</u>: The serial dilution data was not provided; therefore, %Ds could not be evaluated.

<u>Instrument Detection Limits</u>: The IDLs were at or below CRDLs, as required.

<u>Percent Solids</u>: The percent solids for sample EP-B3F-17 was greater than 50%, as required.



QA/QC Review of PCB Aroclor Data for Spectrum Analytical, Inc. Work Order SA40434 6 Soil Samples and 4 Concrete Samples Collected February 3-6, 2006

Prepared by: Donald Anné December 14, 2006

<u>Holding Times</u>: Samples were extracted and analyzed within NYSDEC holding times.

<u>Blanks</u>: The analysis of the method blank reported target aroclors as not detected.

<u>Surrogate Recovery</u>: The surrogate recoveries were within QC limits for soil and concrete samples.

<u>Duplicate</u>: The relative percent differences for detected aroclors were below the allowable maximum (35%) for duplicate sample SA40479-01, as required.

Matrix Spike/Matrix Spike Duplicate: The relative percent differences for aroclor-1016 and aroclor-1260 were below the allowable maximum, and the percent recoveries were within QC limits for MS/MSD sample SA40432-01.

<u>Laboratory Control Sample</u>: The percent recoveries for aroclor-1260 and aroclor-1016 were within QC limits for LCSs 6020400-BS1 and 6020449-BS1.

<u>Initial Calibration</u>: The average %RSDs for target aroclors were below the allowable maximum (20%) for primary and confirmation columns, as required.

Continuing Calibration: Percent recoveries for target aroclors were within QC limits (85-115%).

<u>PCB Analytical Sequence</u>: This data is not applicable. The laboratory used internal standards to quantitate sample results.

<u>PCB Identification Summary for Multi-Component Analytes</u>: Checked surrogates were within GC quantitation limits. The detections of aroclors were confirmed on a second dissimilar column.



QA/QC Review of Pesticide Data for Spectrum Analytical, Inc. Work Order SA40434 One Soil Sample Collected February 6, 2006

Prepared by: Donald Anné December 14, 2006

<u>Holding Times</u>: Sample EP-B3F-17 was extracted and analyzed within NYSDEC holding times.

<u>Blanks</u>: The analysis of the method blank reported target pesticides as not detected.

<u>Surrogate Recovery</u>: The surrogate recoveries were within QC limits for sample EP-B3F-17.

Matrix Spike/Matrix Spike Duplicate: The relative percent differences were below the allowable maximum and the percent recoveries were within QC limits for MS/MSD sample SA40293-07.

<u>Duplicate</u>: The sample and duplicate analyses for sample SA40293-07 reported target pesticides as not detected; therefore, relative percent differences could not be calculated. The analyses of the sample and duplicate are acceptable.

<u>Laboratory Control Sample</u>: The percent recoveries for target pesticides were within QC limits for LCS 6020424-BS1.

<u>Initial Calibration</u>: The %RSDs for applicable target pesticides were below the allowable maximum (20%), or the correlation coefficients were above the allowable minimums, as required.

<u>Continuing Calibration</u>: The percent recoveries for target pesticides were within QC limits (85-115%), as required.

<u>DDT/Endrin Breakdown Check</u>: The percent breakdowns were below the allowable maximum (20%) for 4,4'-DDT and endrin, as required.

- <u>Pesticide Analytical Sequence</u>: This data is not applicable. The laboratory used internal standards to quantitate sample results.
- <u>Pesticide Identification Summary for Single Component Analytes</u>: Checked compound results were within GC quantitation limits. The detections of single component pesticides were confirmed on a second dissimilar column.
- <u>Pesticide Identification Summary for Multicomponent Analytes</u>: There were no detected concentrations of multi-component target pesticides reported in sample EP-B3F-17.



QA/QC Review of Semi-Volatiles Data for Spectrum Analytical, Inc. Work Order SA40434 One Soil Sample Collected February 6, 2006

Prepared by: Donald Anné December 14, 2006

Holding Times: Sample EP-B3F-17 was extracted and analyzed within NYSDEC holding times.

GC/MS Tuning and Mass Calibration: The DFTPP tuning criteria were within control limits.

<u>Initial Calibration</u>: The SPCCs and CCCs were within control limits for method 8270C.

The average RRFs for target compounds were above the allowable minimum (0.050) and the %RSDs were below the allowable maximum (30%), as required.

Continuing Calibration: The SPCCs and CCCs were within control limits for method 8270C.

The RRF100s for target compounds were above the allowable minimum (0.050), as required.

The %D for bis(2-chloroisopropyl)ether (29.0%) was above the allowable maximum (25%) on 02-09-06 (SCC70209.D). Positive results for bis(2-chloroisopropyl)ether should be considered estimates (J) in associated samples.

Blanks: The analysis of the method blank reported target compounds as not detected.

<u>Internal Standard Area Summary</u>: The internal standard areas and retention times were within control limits.

Surrogate Recovery: The surrogate recoveries were within control limits for sample EP-B3F-17.

Matrix Spike/Matrix Spike Duplicate: The relative percent differences were below the allowable maximums and the percent recoveries were within control limits for MS/MSD sample SA40410-01.

<u>Duplicate</u>: The analyses of sample and duplicate SA40410-01 reported target compounds as not detected; therefore, valid relative percent differences could not be calculated. The analyses for the laboratory duplicates were acceptable.

<u>Laboratory Control Sample</u>: The percent recoveries were within QC limits for LCS 6020500-BS1.

<u>Compound ID</u>: Checked compounds were within GC quantitation limits. The mass spectra for detected compounds contained the primary and secondary ions, as outlined in the method.



QA/QC Review of Volatiles Data for Spectrum Analytical, Inc. Work Order SA40434 7 Soil Samples and 4 Concrete Samples Collected February 3-6, 2006

Prepared by: Donald Anné December 14, 2006

Holding Times: Samples were analyzed within NYSDEC holding times.

GC/MS Tuning and Mass Calibration: The BFB tuning criteria were within control limits.

Initial Calibration: The SPCCs and CCCs were within control limits for method 8260B.

The %RSDs for target compounds were below the allowable maximum (30%), as required.

The average RRFs for acetone (0.032), tert-butanol (0.027), and 1,4-dioxane (0.002) were below the allowable minimum (0.050) for HPV4 on 01-17-06. Positive results for these compounds should be considered estimates (J) and negative results unusable (R) in associated samples.

Continuing Calibration: The SPCCs and CCCs were within control limits for method 8260B.

The %Ds for 1,2,4-trichlorobenzene (27.0%), 1,2,4-trimethylbenzene (36.7%), and 1,3,5-trichlorobenzene (27.6%) were above the allowable maximum (25%) on 02-09-06 (ccc0209b.D). Positive results for these compounds should be considered estimates (J) in associated samples.

The RRF50s for acetone (0.034), tert-butanol (0.024), and 1,4-dioxane (0.002) were below the allowable minimum (0.050) on 02-09-06 (ccc0209b.D). Positive results for these compounds should be considered estimates (J) and negative results unusable (R) in associated samples.

<u>Blanks</u>: Method blank 6020555-BLK1 contained a trace of 2-butanone (3.9 ug/kg). Results for 2-butanone that are less than ten times the method blank level should be reported as not detected in associated samples.

- <u>Internal Standard Area Summary</u>: The internal standard areas and retention times were within control limits.
- <u>Surrogate Recovery</u>: The surrogate recoveries were within control limits for soil and concrete samples.
- Matrix Spike/Matrix Spike Duplicate: The relative percent differences were below the allowable maximums, and the percent recoveries were within control limits for MS/MSD samples TB5-0.5-020606 and TBC3-020306.
- <u>Laboratory Control Sample</u>: The relative percent differences(RPDs) for target compounds were below the allowable maximums and the percent recoveries (%Rs) for target compounds were within QC limits for LCS/LCSDs 6020559-BS1 and 6020560-BS1.

The RPDs for target compounds were below the allowable maximums, but the %Rs for 2,2-dichloropropane and 1,2,4-trimethylbenzene were above QC limitsfor LCS/LCSD 6020555-BS1. Positive results for 2,2-dichloropropane and 1,2,4-trimethylbenzene should be considered estimates (J) in associated samples.

<u>Compound ID</u>: Checked compounds were within GC quantitation limits. The mass spectra for detected compounds contained the primary and secondary ions, as outlined in the method.



QA/QC Review of Cyanide Data for Spectrum Analytical, Inc. Work Order SA40488 4 Soil Samples Collected February 7, 2006

Prepared by: Donald Anné December 14, 2006

<u>Holding Times</u>: Samples were analyzed within the NYSDEC holding times.

<u>Initial and Continuing Calibration Verification</u>: The percent recoveries for cyanide were within control limits (90-110%).

<u>Blanks</u>: The analyses of the calibration and method blanks reported total cyanide as not detected.

<u>Spike Sample Recovery</u>: The percent recoveries for cyanide were within control limits (75-125%) in MS/MSD sample EP-B3F-18.

<u>Duplicates</u>: The relative percent difference for cyanide was below the allowable maximum (20%) in the MS/MSD sample EP-B3F-18, as required.

<u>Laboratory Control Sample</u>: The percent recoveries for cyanide were within control limits (80-120%) in samples 6020606-BS1 and 6020606-BS2.



Data Usability Summary Report for Spectrum Analytical, Inc. Work Order SA40488 4 Soil Samples Collected February 7, 2006

Prepared by: Donald Anné December 14, 2006

The data packages contain the documentation required by NYSDEC ASP. The proper chain of custody procedures were followed by the samplers. All information appeared legible and complete. The data packs contained the results of volatile, semi-volatile, PCB, pesticide, herbicide, metal and cyanide analyses for 4 soil samples.

The overall performances of the analyses are acceptable. Spectrum Analytical, Inc. did fulfill the requirements of the analytical methods.

The data are mostly acceptable with some issues that are identified in the accompanying data validation reviews. The following data were flagged:

- The "not detected" volatile results for acetone in all four soil samples were flagged as "unusable" (R) because the response factors for acetone were below the allowable minimum in the associated initial and continuing calibrations.
- The positive results for 2-butanone were flagged as "not detected" (U) in all four soil samples, because the concentrations of 2-butanone in the samples were not significantly greater (more than ten times) than the level in the associated method blank.
- The positive results for antimony and potassium were flagged as "estimated" (J) in all four soil samples because the percent recoveries for these metals were outside control limits (75-125%) but were greater than 10% in MS/MSD sample EP-B3F-19.
- The positive results for mercury were flagged as "estimated" (J) in samples EP-B3F-18 and EP-B3F-20 because the one of two percent recoveries for mercury was above control limits (75-125%) in MS/MSD sample EP-B3F-19.

• Positive results for sodium were flagged as "estimated" (J) in all four soil samples because the relative percent difference for sodium was above the allowable maximum (35%) and the percent recoveries were above control limits in MS/MSD sample EP-B3F-19.

All data that are not flagged rejected (R) are considered usable, with estimated (J) data associated with a higher level of quantitative uncertainty. Detailed information on data quality is included in the data validation reviews.



QA/QC Review of Herbicide Data for Spectrum Analytical, Inc. Work Order SA40488 4 Soil Samples Collected February 7, 2006

Prepared by: Donald Anné December 14, 2006

<u>Holding Times</u>: Samples were extracted and analyzed within NYSDEC holding times.

<u>Blanks</u>: The analysis of the method blank reported 2,4-D; 2,4,5-T; and 2,4,5-TP as not detected.

<u>Surrogate Recovery</u>: The surrogate recoveries were within QC limits for soil samples.

Matrix Spike/Matrix Spike Duplicate: MS/MSD data were not provided in this data pack. No action is taken on MS/MSD data alone to qualify or reject an entire set of samples.

<u>Duplicate</u>: The sample and duplicate analyses for sample SA40362-16 reported target herbicides as not detected; therefore, relative percent differences could not be calculated. The analyses of the sample and duplicate are acceptable.

<u>Laboratory Control Sample</u>: The percent recoveries for target herbicides were within QC limits for LCS 6020496-BS1.

<u>Initial Calibration</u>: The %RSDs for 2,4-D; 2,4,5-T; and 2,4,5-TP were below the allowable maximum (20%), or the correlation coefficients were above the allowable minimums, as required.

<u>Continuing Calibration</u>: The percent recoveries for 2,4-D; 2,4,5-T; and 2,4,5-TP were within QC limits (85-115%).

<u>Herbicide Identification Summary</u>: Checked surrogates were within GC quantitation limits. There were no detected concentrations of 2,4-D; 2,4,5-T; and 2,4,5-TP reported in the soil samples.



QA/QC Review of TAL Metals Data for Spectrum Analytical, Inc. Work Order SA40488 4 Soil Samples Collected February 7, 2006

Prepared by: Donald Anné December 14, 2006

<u>Holding Times</u>: Samples were analyzed within the NYSDEC holding times.

<u>Initial and Continuing Calibration Verification</u>: The percent recoveries for TAL metals were within control limits (80-120% for Hg, 90-110% for all other metals).

Blanks: The analyses for initial and continuing calibration blanks reported target metals as below the CRDLs, as required. The preparation blank contained iron (0.805 mg/kg) and potassium (11.7 mg/kg) above the reporting limit. Results for iron and potassium that are less than ten times the preparation blank level should be reported as unusable (R) in associated samples.

<u>ICP Interference Check Sample</u>: The percent recoveries for applicable TAL metals were within control limits (80-120%).

Spike Sample Recovery: The percent recoveries for antimony (28.3% and 29.1%), mercury (182%), sodium (150% and 244%), and potassium (145% and 129%) were outside control limits (75-125%), but were above 10% for soil MS/MSD sample EP-B3F-19. All results for antimony and positive results for mercury, sodium, and potassium should be considered estimates (J).

<u>Duplicates</u>: The relative percent differences (RPDs) for target metals were below the allowable maximum (35%) for duplicate sample EP-B3F-18, as required.

The RPDs for mercury (42.6%) and sodium (39.8%) were above the allowable maximum (35%) for MS/MSD sample EP-B3F-19. Positive results for mercury and sodium should be considered estimates (J).

<u>Laboratory Control Sample</u>: The percent recoveries for TAL metals were within control limits (80-120%) for soil LCSs 6020483-BS1 and 6020484-BS1.

<u>Standard Reference Material</u>: The percent recoveries for TAL metals were within QC limits for 6020483-SRM1, 6020483-SMR2, and 6020484-SRM1.

<u>ICP Serial Dilution</u>: The serial dilution data was not provided; therefore, %Ds could not be evaluated.

<u>Instrument Detection Limits</u>: The IDLs were at or below CRDLs, as required.

Percent Solids: The percent solids for samples were greater than 50%, as required.



QA/QC Review of PCB Aroclor Data for Spectrum Analytical, Inc. Work Order SA40488 4 Soil Samples Collected February 7, 2006

Prepared by: Donald Anné December 14, 2006

<u>Holding Times</u>: Samples were extracted and analyzed within NYSDEC holding times.

<u>Blanks</u>: The analysis of the method blank reported target aroclors as not detected.

<u>Surrogate Recovery</u>: The surrogate recoveries were within QC limits for soil and concrete samples.

<u>Duplicate</u>: The sample and duplicate analyses for sample SA40405-46 reported target PCBs as not detected; therefore, relative percent differences could not be calculated. The analyses of the sample and duplicate are acceptable.

Matrix Spike/Matrix Spike Duplicate: The relative percent differences for aroclor-1016 and aroclor-1260 were below the allowable maximum, and the percent recoveries were within QC limits for MS/MSD sample SA40405-46.

<u>Laboratory Control Sample</u>: The percent recoveries for aroclor-1260 and aroclor-1016 were within QC limits for LCS 6020505-BS1.

<u>Initial Calibration</u>: The average %RSDs for target aroclors were below the allowable maximum (20%) for primary and confirmation columns, as required.

Continuing Calibration: Percent recoveries for target aroclors were within QC limits (85-115%).

<u>PCB Analytical Sequence</u>: This data is not applicable. The laboratory used internal standards to quantitate sample results.

<u>PCB Identification Summary for Multi-Component Analytes</u>: Checked surrogates were within GC quantitation limits. The analyses of soil samples reported target aroclors as not detected.



QA/QC Review of Pesticide Data for Spectrum Analytical, Inc. Work Order SA40488 4 Soil Samples Collected February 7, 2006

Prepared by: Donald Anné December 14, 2006

<u>Holding Times</u>: Samples were extracted and analyzed within NYSDEC holding times.

<u>Blanks</u>: The analysis of the method blank reported target pesticides as not detected.

<u>Surrogate Recovery</u>: The surrogate recoveries were within QC limits for the soil samples.

Matrix Spike/Matrix Spike Duplicate: The relative percent differences were below the allowable maximum and the percent recoveries were within QC limits for MS/MSD sample SA40293-07. Note: The MS/MSD associated with these samples is from data pack SA40434.

<u>Duplicate</u>: The sample and duplicate analyses for sample SA40476-08 reported target pesticides as not detected; therefore, relative percent differences could not be calculated. The analyses of the sample and duplicate are acceptable.

<u>Laboratory Control Sample</u>: The percent recoveries for target pesticides were within QC limits for LCS 6020594-BS1.

<u>Initial Calibration</u>: The %RSDs for applicable target pesticides were below the allowable maximum (20%), or the correlation coefficients were above the allowable minimums, as required.

<u>Continuing Calibration</u>: The percent recoveries for target pesticides were within QC limits (85-115%), as required.

<u>DDT/Endrin Breakdown Check</u>: The percent breakdowns were below the allowable maximum (20%) for 4,4'-DDT and endrin, as required.

- <u>Pesticide Analytical Sequence</u>: This data is not applicable. The laboratory used internal standards to quantitate sample results.
- <u>Pesticide Identification Summary for Single Component Analytes</u>: Checked compound results were within GC quantitation limits. There were no detected concentrations of single component pesticides reported in the soil samples.
- <u>Pesticide Identification Summary for Multicomponent Analytes</u>: There were no detected concentrations of multi-component target pesticides reported in the soil samples.



QA/QC Review of Semi-Volatiles Data for Spectrum Analytical, Inc. Work Order SA40488 4 Soil Samples Collected February 7, 2006

Prepared by: Donald Anné December 14, 2006

<u>Holding Times</u>: Samples were extracted and analyzed within NYSDEC holding times.

GC/MS Tuning and Mass Calibration: The DFTPP tuning criteria were within control limits.

Initial Calibration: The SPCCs and CCCs were within control limits for method 8270C.

The average RRFs for target compounds were above the allowable minimum (0.050) and the %RSDs were below the allowable maximum (30%), as required.

Continuing Calibration: The SPCCs and CCCs were within control limits for method 8270C.

The RRF100s for target compounds were above the allowable minimum (0.050), as required.

The %D for bis(2-chloroisopropyl)ether (29.0%) was above the allowable maximum (25%) on 02-09-06 (SCC70209.D). Positive results for bis(2-chloroisopropyl)ether should be considered estimates (J) in associated samples.

Blanks: The analysis of the method blank reported target compounds as not detected.

<u>Internal Standard Area Summary</u>: The internal standard areas and retention times were within control limits.

Surrogate Recovery: The surrogate recoveries were within control limits for the soil samples.

Matrix Spike/Matrix Spike Duplicate: The relative percent differences were below the allowable maximums and the percent recoveries were within control limits for MS/MSD sample SA40410-01.

<u>Duplicate</u>: The analyses of sample and duplicate SA40410-01 reported target compounds as not detected; therefore, valid relative percent differences could not be calculated. The analyses for the laboratory duplicates were acceptable.

<u>Laboratory Control Sample</u>: The percent recoveries were within QC limits for LCS 6020500-BS1.

<u>Compound ID</u>: Checked compounds were within GC quantitation limits. The mass spectra for detected compounds contained the primary and secondary ions, as outlined in the method.



QA/QC Review of Volatiles Data for Spectrum Analytical, Inc. Work Order SA40488 4 Soil Samples Collected February 7, 2006

Prepared by: Donald Anné December 14, 2006

<u>Holding Times</u>: Samples were analyzed within NYSDEC holding times.

GC/MS Tuning and Mass Calibration: The BFB tuning criteria were within control limits.

Initial Calibration: The SPCCs and CCCs were within control limits for method 8260B.

The %RSDs for target compounds were below the allowable maximum (30%), as required.

The average RRF for acetone (0.032) was below the allowable minimum (0.050) for HPV4 on 01-17-06. Positive results for acetone should be considered estimates (J) and negative results unusable (R) in associated samples.

Continuing Calibration: The SPCCs and CCCs were within control limits for method 8260B.

The %Ds for target compounds were below the allowable maximum (25%), as required.

The RRF50 for acetone (0.034) was below the allowable minimum (0.050) on 02-09-06 (ccc0209b.D). Positive results for acetone should be considered estimates (J) and negative results unusable (R) in associated samples.

<u>Blanks</u>: Method blank 6020555-BLK1 contained a trace of 2-butanone (3.9 ug/kg). Results for 2-butanone that are less than ten times the method blank level should be reported as not detected in associated samples.

<u>Internal Standard Area Summary</u>: The internal standard areas and retention times were within control limits.

Surrogate Recovery: The surrogate recoveries were within control limits for the soil samples.

- Matrix Spike/Matrix Spike Duplicate: The relative percent differences were below the allowable maximums, and the percent recoveries were within control limits for MS/MSD samples TB5-0.5-020606 and TBC3-020306. Note: The MS/MSD associated with these samples is from data pack SA40434.
- <u>Laboratory Control Sample</u>: The relative percent differences for target compounds were below the allowable maximums and the percent recoveries for target compounds were within QC limits for LCS/LCSD 6020555-BS1.
- <u>Compound ID</u>: Checked compounds were within GC quantitation limits. The mass spectra for detected compounds contained the primary and secondary ions, as outlined in the method.



Hydrology

Remediation

Water Supply

March 10, 2006

Ms. Dipa Chavan
Langan Engineering and Environmental
Services, Inc.
21 Penn Plaza
360 West 31st Street, 8th Floor
New York, NY 10001-27279

Re:

Data Validation Reports

Glendale, New York Project

February 2006 Soil and Concrete Sampling Event

Dear Ms. Chavan:

The data validation summaries and data usability summary report (DUSR) for the February 2006 soil and concrete event are attached to this letter for the Glendale, New York project. The data were acceptable for Spectrum Analytical, Work Order Number SA40557, with minor issues that are identified in the validation summaries. There were no data that were flagged as unusable (R) or estimated (J).

I have included a list of data validation qualifiers and acronyms to assist you in interpreting the reports. If you have any questions concerning this report, please contact us at (518) 348-6995. Thank you for the opportunity to assist Langan Engineering and Environmental Services, Inc.

Sincerely,

Alpha Geoscience

Donald C. Anné Senior Chemist

DCA:dca attachments

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Data Validation Acronyms

AA Atomic absorption, flame technique

BHC Hexachlorocyclohexane BFB Bromofluorobenzene

CCB Continuing calibration blank
CCC Calibration check compound
CCV Continuing calibration verification

CN Cyanide

CRDL Contract required detection limit
CRQL Contract required quantitation limit
CVAA Atomic adsorption, cold vapor technique

DCAA 2,4-Dichlophenylacetic acid

DCB Decachlorobiphenyl

DFTPP Decafluorotriphenyl phosphine

ECD Electron capture detector

FAA Atomic absorption, furnace technique

FID Flame ionization detector FNP 1-Fluoronaphthalene GC Gas chromatography

GC/MS Gas chromatography/mass spectrometry

GPC Gel permeation chromatography

ICB Initial calibration blank

ICP Inductively coupled plasma-atomic emission spectrometer

ICV Initial calibration verification IDL Instrument detection limit

IS Internal standard

LCS Laboratory control sample

LCS/LCSD Laboratory control sample/laboratory control sample duplicate

MSA Method of standard additions
MS/MSD Matrix spike/matrix spike duplicate

PID Photo ionization detector
PCB Polychlorinated biphenyl
PCDD Polychlorinated dibenzodioxins
PCDF Polychlorinated dibenzofurans

QA Quality assurance
QC Quality control
RF Response factor

RPD Relative percent difference RRF Relative response factor

RRF(number) Relative response factor at concentration of the number following

RT Retention time

RRT Relative retention time SDG Sample delivery group

SPCC System performance check compound

TCX Tetrachloro-m-xylene
%D Percent difference
%R Percent recovery

%RSD Percent relative standard deviation

Data Validation Qualifiers Used in the QA/QC Reviews for USEPA Region II

- U = Not detected. The associated number indicates the approximate sample concentration necessary to be detected significantly greater than the level of the highest associated blank.
- R = Unreliable result; data is rejected or unusable. Analyte may or may not be present in the sample. Supporting data or information is necessary to confirm the result.
- N = Tentative identification. Analyte is considered present. Special methods may be needed to confirm its presence or absence during future sampling efforts.
- J = Analyte is present. Reported value may be associated with a higher level of uncertainty than is normally expected with the analytical method.
- UJ = Not detected, quantitation limit may be inaccurate or imprecise.

Note: These qualifiers are used for data validation purposes. The data validation qualifiers may differ from the qualifiers that the laboratory assigns to the data. Refer to the laboratory analytical report for the definitions of the laboratory qualifiers.



Hydrology

Remediation

Water Supply

Data Usability Summary Report for Spectrum Analytical, Inc. Work Order SA40557 2 Soil Samples and 5 Concrete Samples Collected February 8, 2006

Prepared by: Donald Anné March 10, 2006

The data packages contain the documentation required by NYSDEC ASP. The proper chain of custody procedures were followed by the samplers. All information appeared legible and complete. The data packs contained the results of volatile and PCB analyses for 2 soil samples and 5 concrete samples.

The overall performances of the analyses are acceptable. Spectrum Analytical, Inc. did fulfill the requirements of the analytical methods.

The data are acceptable with some minor issues that are identified in the accompanying data validation reviews which did not resulting in the flagging of data. There were no data that were flagged as either rejected (R) or estimated (J). All data are considered usable. Detailed information on data quality is included in the data validation reviews.

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Hydrology

Remediation

Water Supply

QA/QC Review of Volatiles Data for Spectrum Analytical, Inc. Work Order SA40557 2 Soil Samples and 5 Concrete Samples Collected February 8, 2006

Prepared by: Donald Anné March 10, 2006

Holding Times: Samples were analyzed within NYSDEC holding times.

GC/MS Tuning and Mass Calibration: The BFB tuning criteria were within control limits.

Initial Calibration: The SPCCs and CCCs were within control limits for method 8260B.

The average RRF for target compounds were above the allowable minimum (0.050) and the %RSDs were below the allowable maximum (30%), as required.

Continuing Calibration: The SPCCs and CCCs were within control limits for method 8260B.

The RRF50 for target compounds were above the allowable minimum (0.050), as required.

The %Ds for bromoform (25.9%) was above the allowable maximum (25%) for HP-6 on 02-11-06 (LCS0210A.D). The %Ds for bromoform (25.7%) was above the allowable maximum (25%) for HP-6 on 02-14-06 (LCS0214A.D). Positive results for bromoform should be considered estimates (J) in associated samples.

Blanks: The analyses of the method blanks reported target compounds as not detected.

<u>Internal Standard Area Summary</u>: The internal standard areas and retention times were within control limits.

Surrogate Recovery: The surrogate recoveries were within control limits for the soil samples.

Matrix Spike/Matrix Spike Duplicate: The relative percent differences were below the allowable maximums, and the percent recoveries were within control limits for MS/MSD sample TB10-020806.

Page 1 of 2

- <u>Laboratory Control Sample</u>: The relative percent differences for target compounds were below the allowable maximums, and the percent recoveries were within QC limits for LCS/LCSDs 6020665-BS1 and 6020779-BS1.
- <u>Compound ID</u>: Checked compounds were within GC quantitation limits. The mass spectra for detected compounds contained the primary and secondary ions, as outlined in the method.



Hydrology

Remediation

Water Supply

QA/QC Review of PCB Aroclor Data for Spectrum Analytical, Inc. Work Order SA40557 2 Soil Samples and 5 Concrete Samples Collected February 8, 2006

Prepared by: Donald Anné March 10, 2006

Holding Times: Samples were extracted and analyzed within NYSDEC holding times.

Blanks: The analysis of the method blank reported target aroclors as not detected.

- <u>Surrogate Recovery</u>: One of two surrogate recoveries for sample TB13-020806 was above QC limits. Positive results for TB13-020806 should be considered estimates (J).
- <u>Duplicate</u>: The sample and duplicate analyses for samples SA40510-01 and TB13-020806 reported target arcolors as not detected; therefore, relative percent differences could not be calculated. The analyses of the sample and duplicate are acceptable.
- Matrix Spike/Matrix Spike Duplicate: The relative percent differences for aroclor-1016 and aroclor-1260 were below the allowable maximum, and the percent recoveries were within QC limits for MS/MSD sample SA40510-01.
- <u>Laboratory Control Sample</u>: The percent recoveries for aroclor-1260 and aroclor-1016 were within QC limits for LCS sample 6020596-BS1 and 6020692-BS1.
- <u>Initial Calibration</u>: The average %RSDs for target aroclors were below the allowable maximum (20%) for primary and confirmation columns, as required.
- Continuing Calibration: The percent recoveries for the continuing calibration check samples were within QC limits (85-115%).
- <u>PCB Analytical Sequence</u>: This data is not applicable. The laboratory used internal standards to quantitate sample results.
- <u>PCB Identification Summary for Multi-Component Analytes</u>: Checked surrogates were within GC quantitation limits. The detections of aroclors were confirmed on a second dissimilar column.

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Hydrology

Remediation

Water Supply

March 13, 2006

Ms. Dipa Chavan
Langan Engineering and Environmental
Services, Inc.
21 Penn Plaza
360 West 31st Street, 8th Floor
New York, NY 10001-27279

Re:

Data Validation Reports

Glendale, New York Project

February 2006 Soil and Air Sampling Events

Dear Ms. Chavan:

The data validation summaries and data usability summary reports (DUSRs) for the February 2006 soil and air sampling events are attached to this letter for the Glendale, New York project. The data were acceptable for Spectrum Analytical, Work Order Numbers SA40619 and SA40938, with minor issues that are identified in the validation summaries. There were no data that were flagged as unusable (R).

I have included a list of data validation qualifiers and acronyms to assist you in interpreting the reports. If you have any questions concerning this report, please contact us at (518) 348-6995. Thank you for the opportunity to assist Langan Engineering and Environmental Services, Inc.

Sincerely,

Alpha Geoscience

Donald C. Ame

Donald C. Anné Senior Chemist

DCA:dca attachments

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Data Validation Acronyms

AA Atomic absorption, flame technique

BHC Hexachlorocyclohexane BFB Bromofluorobenzene

CCB Continuing calibration blank
CCC Calibration check compound
CCV Continuing calibration verification

CN Cyanide

CRDL Contract required detection limit
CRQL Contract required quantitation limit
CVAA Atomic adsorption, cold vapor technique

DCAA 2,4-Dichlophenylacetic acid

DCB Decachlorobiphenyl

DFTPP Decafluorotriphenyl phosphine ECD Electron capture detector

FAA Atomic absorption, furnace technique

FID Flame ionization detector FNP 1-Fluoronaphthalene GC Gas chromatography

GC/MS Gas chromatography/mass spectrometry

GPC Gel permeation chromatography

ICB Initial calibration blank

ICP Inductively coupled plasma-atomic emission spectrometer

ICV Initial calibration verification IDL Instrument detection limit

IS Internal standard

LCS Laboratory control sample

LCS/LCSD Laboratory control sample/laboratory control sample duplicate

MSA Method of standard additions

MS/MSD Matrix spike/matrix spike duplicate

PID Photo ionization detector
PCB Polychlorinated biphenyl
PCDD Polychlorinated dibenzodioxins
PCDF Polychlorinated dibenzofurans

QA Quality assurance QC Quality control RF Response factor

RPD Relative percent difference RRF Relative response factor

RRF(number) Relative response factor at concentration of the number following

RT Retention time

RRT Relative retention time SDG Sample delivery group

SPCC System performance check compound

TCX Tetrachloro-m-xylene
%D Percent difference
%R Percent recovery

%RSD Percent relative standard deviation

Data Validation Qualifiers Used in the QA/QC Reviews for USEPA Region II

- U = Not detected. The associated number indicates the approximate sample concentration necessary to be detected significantly greater than the level of the highest associated blank.
- R = Unreliable result; data is rejected or unusable. Analyte may or may not be present in the sample. Supporting data or information is necessary to confirm the result.
- N = Tentative identification. Analyte is considered present. Special methods may be needed to confirm its presence or absence during future sampling efforts.
- J = Analyte is present. Reported value may be associated with a higher level of uncertainty than is normally expected with the analytical method.
- UJ = Not detected, quantitation limit may be inaccurate or imprecise.

Note: These qualifiers are used for data validation purposes. The data validation qualifiers may differ from the qualifiers that the laboratory assigns to the data. Refer to the laboratory analytical report for the definitions of the laboratory qualifiers.



Hydrology

Remediation

Water Supply

Data Usability Summary Report for Spectrum Analytical, Inc. Work Order SA40619 3 Soil Samples Collected February 9, 2006

> Prepared by: Donald Anné March 13, 2006

The data packages contain the documentation required by NYSDEC ASP. The proper chain of custody procedures were followed by the samplers. All information appeared legible and complete. The data packs contained the results of volatile and PCB analyses for three soil samples.

The overall performances of the analyses are acceptable. Spectrum Analytical, Inc. did fulfill the requirements of the analytical methods.

The data are acceptable with one issue that is identified in the accompanying data validation reviews. The following data were flagged:

• The "not detected" volatile result for bromoform in sample TB18-020906 was flagged as "estimated" (J) because the percent recoveries for bromoform were below the QC limits for LCS/LCSD 6020664-BS1.

All data are considered usable, with estimated (J) data associated with a higher level of quantitative uncertainty. Detailed information on data quality is included in the data validation reviews.

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Hydrology

Remediation

Water Supply

QA/QC Review of Volatiles Data for Spectrum Analytical, Inc. Work Order SA40619 3 Soil Samples Collected February 9, 2006

Prepared by: Donald Anné March 13, 2006

Holding Times: Samples were analyzed within NYSDEC holding times.

GC/MS Tuning and Mass Calibration: The BFB tuning criteria were within control limits.

Initial Calibration: The SPCCs and CCCs were within control limits for method 8260B.

The average RRF for target compounds were above the allowable minimum (0.050) and the %RSDs were below the allowable maximum (30%), as required.

Continuing Calibration: The SPCCs and CCCs were within control limits for method 8260B.

The RRF50 for target compounds were above the allowable minimum (0.050), as required.

The %Ds for bromoform (59.7%) was above the allowable maximum (25%) for HPV4 on 02-11-06 (lcs0211b.D). Positive results for bromoform should be considered estimates (J) in associated samples.

Blanks: The analyses of the method blanks reported target compounds as not detected.

<u>Internal Standard Area Summary</u>: The internal standard areas and retention times were within control limits.

<u>Surrogate Recovery</u>: The surrogate recoveries were within control limits for the soil samples.

Matrix Spike/Matrix Spike Duplicate: The relative percent differences were below the allowable maximums, and the percent recoveries were within control limits for MS/MSD sample TB17-020906.

<u>Laboratory Control Sample</u>: The relative percent differences (%RPDs) for target compounds were below the allowable maximums, and the percent recoveries (%Rs) were within QC limits for LCS/LCSD 6020882-BS1.

The %RPDs for target compounds were below the allowable maximums, but the %Rs for bromoform were below QC limits and 1 of 2 %Rs for chloromethane was above QC limits for LCS/LCSD 6020664-BS1. All results for bromoform and positive results for chloromethane should be considered estimates (J) in associated samples.

<u>Compound ID</u>: Checked compounds were within GC quantitation limits. The mass spectra for detected compounds contained the primary and secondary ions, as outlined in the method.



Hydrology

Remediation

Water Supply

QA/QC Review of PCB Aroclor Data for Spectrum Analytical, Inc. Work Order SA40619 3 Soil Samples Collected February 9, 2006

Prepared by: Donald Anné March 13, 2006

Holding Times: Samples were extracted and analyzed within NYSDEC holding times.

Blanks: The analysis of the method blank reported target aroclors as not detected.

Surrogate Recovery: The surrogate recoveries were within QC limits for environmental samples.

- <u>Duplicate</u>: The sample and duplicate analyses for sample TB18-020906 reported target arcolors as not detected; therefore, relative percent differences could not be calculated. The analyses of the sample and duplicate are acceptable.
- Matrix Spike/Matrix Spike Duplicate: The relative percent differences for aroclor-1016 and aroclor-1260 were below the allowable maximum, and the percent recoveries were within QC limits for MS/MSD sample TB18-020906.
- <u>Laboratory Control Sample</u>: The percent recoveries for aroclor-1260 and aroclor-1016 were within QC limits for LCS samples 6020693-BS1 and 6020692-BS1.
- <u>Initial Calibration</u>: The average %RSDs for target aroclors were below the allowable maximum (20%) for primary and confirmation columns, as required.
- <u>Continuing Calibration</u>: The percent recoveries for the continuing calibration check samples were within QC limits (85-115%).
- <u>PCB Analytical Sequence</u>: This data is not applicable. The laboratory used internal standards to quantitate sample results.
- <u>PCB Identification Summary for Multi-Component Analytes</u>: Checked surrogates were within GC quantitation limits. The analyses for samples in this data pack reported target aroclors as not detected.

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Hydrology

Remediation

Water Supply

Data Usability Summary Report for Spectrum Analytical, Inc. Work Order SA40938 Two Air Samples and One Trip Blank Collected February 15, 2006

> Prepared by: Donald Anné March 13, 2006

The data packages contain the documentation required by NYSDEC ASP. The proper chain of custody procedures were followed by the samplers. All information appeared legible and complete. The data packs contained the results of TO15 volatile analyses for two air samples and one trip blank.

The overall performances of the analyses are acceptable. Spectrum Analytical, Inc. did fulfill the requirements of the analytical methods.

The data are mostly acceptable with some minor issues that are identified in the accompanying data validation reviews. The following data were flagged:

- Results for 1,2,4-trichlorobenzene in both samples and the trip blank were flagged as "estimated" (J), because the percent recovery for 1,2,4-trichlorobenzene was below QC limits for LCS sample 6021397-BS1.
- The positive result for tetrachloroethene in sample B3-SV40(05)-021506 was flagged as "estimated" (J), because the %D for tetrachloroethene was above the allowable maximum for the associated continuing calibration.
- The positive result for chloromethene in sample AMOUT-021506 was flagged as "estimated" (J), because the %D for chloromethene was above the allowable maximum for the associated continuing calibration.
- The positive volatile result for methylene chloride were flagged as "not detected" (U) for both air samples because the concentrations of methylene chloride were not significantly greater (more than ten times) than the level in the associated trip blank.

Page 1 of 2

• The positive volatile result for isopropyl alcohol were flagged as "not detected" (U) for both air samples because the concentrations of isopropyl alcohol were not significantly greater (more than five times) than the level in the associated trip blank.

All data are considered usable, with estimated (J) data associated with a higher level of quantitative uncertainty. Detailed information on data quality is included in the data validation review.



Hydrology

Remediation

Water Supply

QA/QC Review of Volatiles Data for Spectrum Analytical, Inc. Work Order SA40938 Two Air Samples and One Trip Blank Collected February 15, 2006

> Prepared by: Donald Anné March 13, 2006

Holding Times: Samples were analyzed within the EPA recommended holding times.

GC/MS Tuning and Mass Calibration: The BFB tuning criteria were within control limits.

<u>Initial Calibration</u>: The average RRFs for target compounds were above the allowable minimum (0.050) and the %RSDs were below the allowable maximum (30%), as required.

Continuing Calibration: The RRF10s for target compounds were above the allowable minimum (0.050), as required.

The %Ds for chloromethane (27.7%), tetrachloroethene (28.8%), hexachlorobutadiene (28.4%), and 1,2,4-trichlorobenzene (49.2%) were above the allowable maximum (25%) on 02-22-06 (A19244.D). Positive results for these compounds should be considered estimates (J) in associated samples.

Blanks: The analysis of the method blank reported target compounds as not detected. Trip blank TB-021506 contained trace of methylene chloride (0.36 ppbv) and isopropyl alcohol (0.41 ppbv). Results for methylene chloride that are less than ten times the trip blank level should be reported as not detected (U) in associated samples. Results for isopropyl alcohol that are less than five times the trip blank level should be reported as not detected (U) in associated samples.

<u>Internal Standard Area Summary</u>: The internal standard areas and retention times were within control limits.

<u>Surrogate Recovery</u>: The surrogate recoveries were within control limits for air samples.

<u>Laboratory Duplicate</u>: The relative percent differences for applicable target compounds were below the allowable maximum for duplicate sample 6021397-DUP1.

Page 1 of 2

- <u>Laboratory Control Sample</u>: The percent recovery for 1,2,4-trichlorobenzene was below QC limits for LCS sample 6021397-BS1. Results for 1,2,4-trichlorobenzene should be considered estimates (J) in associated samples.
- <u>Compound ID</u>: Checked compounds were within GC quantitation limits. The mass spectra for detected compounds contained the primary and secondary ions, as outlined in the method.



Hydrology

Remediation

Water Supply

March 14, 2006

Ms. Dipa Chavan
Langan Engineering and Environmental
Services, Inc.
21 Penn Plaza
360 West 31st Street, 8th Floor
New York, NY 10001-27279

Re:

Data Validation Reports
Glendale, New York Project

February 2006 Soil and Ground Water Sampling Event

Dear Ms. Chavan:

The data validation summary and data usability summary report (DUSR) for the January 2006 soil and ground water sampling event are attached to this letter for the Glendale, New York project. The data were mostly acceptable for Spectrum Analytical, Work Order Number SA40836, with issues that are identified in the validation summaries. There were volatile data in data pack SA40836 that were flagged as unusable (R). The data were rejected because of low response factors for those compounds. The data is rejected based solely on the validation guidance criteria. The rejected data may be determined to be acceptable to the user based on additional information that is not contained in the data validation criteria.

I have included a list of data validation qualifiers and acronyms to assist you in interpreting the reports. If you have any questions concerning this report, please contact us at (518) 348-6995. Thank you for the opportunity to assist Langan Engineering and Environmental Services, Inc.

Sincerely,

Alpha Geoscience

Donald C. Ame

Donald C. Anné Senior Chemist

DCA:dca attachments

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Data Validation Qualifiers Used in the QA/QC Reviews for USEPA Region II

- U = Not detected. The associated number indicates the approximate sample concentration necessary to be detected significantly greater than the level of the highest associated blank.
- R = Unreliable result; data is rejected or unusable. Analyte may or may not be present in the sample. Supporting data or information is necessary to confirm the result.
- N = Tentative identification. Analyte is considered present. Special methods may be needed to confirm its presence or absence during future sampling efforts.
- J = Analyte is present. Reported value may be associated with a higher level of uncertainty than is normally expected with the analytical method.
- UJ = Not detected, quantitation limit may be inaccurate or imprecise.

Note: These qualifiers are used for data validation purposes. The data validation qualifiers may differ from the qualifiers that the laboratory assigns to the data. Refer to the laboratory analytical report for the definitions of the laboratory qualifiers.

Data Validation Acronyms

AA Atomic absorption, flame technique

BHC Hexachlorocyclohexane BFB Bromofluorobenzene

CCB Continuing calibration blank
CCC Calibration check compound
CCV Continuing calibration verification

CN Cyanide

CRDL Contract required detection limit
CRQL Contract required quantitation limit
CVAA Atomic adsorption, cold vapor technique

DCAA 2,4-Dichlophenylacetic acid

DCB Decachlorobiphenyl

DFTPP Decafluorotriphenyl phosphine

ECD Electron capture detector

FAA Atomic absorption, furnace technique

FID Flame ionization detector FNP 1-Fluoronaphthalene GC Gas chromatography

GC/MS Gas chromatography/mass spectrometry

GPC Gel permeation chromatography

ICB Initial calibration blank

ICP Inductively coupled plasma-atomic emission spectrometer

ICV Initial calibration verification IDL Instrument detection limit

IS Internal standard

LCS Laboratory control sample

LCS/LCSD Laboratory control sample/laboratory control sample duplicate

MSA Method of standard additions
MS/MSD Matrix spike/matrix spike duplicate

PID Photo ionization detector
PCB Polychlorinated biphenyl
PCDD Polychlorinated dibenzodioxins

PCDF Polychlorinated dibenzofurans

QA Quality assurance
QC Quality control
RF Response factor

RPD Relative percent difference RRF Relative response factor

RRF(number) Relative response factor at concentration of the number following

RT Retention time

RRT Relative retention time SDG Sample delivery group

SPCC System performance check compound

TCX Tetrachloro-m-xylene
%D Percent difference
%R Percent recovery

%RSD Percent relative standard deviation



Hydrology

Remediation

Water Supply

Data Usability Summary Report for Spectrum Analytical, Inc. Work Order SA39560 38 Soil Samples, 1 Ground Water Sample and 1 Trip Blank Collected February 10-14, 2006

Prepared by: Donald Anné March 14, 2006

The data package contains the documentation required by NYSDEC ASP. The proper chain of custody procedures were followed by the samplers. All information appeared legible and complete. The data pack contained the results of volatile analyses for 38 soil samples, 1 ground water sample, and 1 trip blank.

The overall performances of the analyses are acceptable. Spectrum Analytical, Inc. did fulfill the requirements of the analytical methods.

The data are acceptable with one issue that is identified in the accompanying data validation review. The following data were flagged:

- The "not detected" results for butyl alcohol and 1,4-dioxane were flagged as "unusable" (R) in all 38 soil samples, the ground water sample, and the trip blank because the response factors for butyl alcohol and 1,4-dioxane were below the allowable minimum in the associated initial and continuing calibrations.
- The "not detected" results for tetrahydrofuran were flagged as "unusable" (R) in all 38 soil samples because the response factors for tetrahydrofuran were below the allowable minimum in the associated continuing calibrations.
- The "not detected" results for acetone were flagged as "unusable" (R) in 10 soil samples, the ground water sample, and the trip blank because the response factors for acetone were below the allowable minimum in the associated initial and continuing calibrations.
- The "not detected" result for 2-butanone was flagged as "unusable" (R) in sample B3-PIPE30-4-21006 because the response factors for 2-butanone were below the allowable minimum in the associated initial calibration.

- The "not detected" result for tert-amyl methyl ether was flagged as "unusable" (R) in sample B3-PIPE30-4-21006 because the response factor for tert-amyl methyl ether was below the allowable minimum in the associated continuing calibration.
- Positive results for acetone were flagged as "estimated" (J) in 28 soil samples because the response factors for acetone were below the allowable minimum in the associated initial and continuing calibrations.
- Positive results for 2-butanone were flagged as "estimated" (J) in 19 soil samples because the %Ds for 2-butanone were above the allowable maximum in the associated continuing calibrations.
- The "not detected" result for the following compounds were flagged as "estimated" (J) in aqueous samples MW66-021406 and TB-021406 because the percent recoveries for these compounds were below QC limits for aqueous LCS/LCSD 6021135-BS1.

bromomethane

2,2-dichloropropane

trans-1,3-dichloropropene

2-hexanone

tert-amyl methyl ether

ethyl tert-butyl ether

All data that are not flagged rejected (R) are considered usable, with estimated (J) data associated with a higher level of quantitative uncertainty. Detailed information on data quality is included in the data validation reviews.



Hydrology

Remediation

Water Supply

QA/QC Review of Volatiles Data for Spectrum Analytical, Inc. Work Order SA40836 38 Soil Samples, 1 Ground Water Sample, and 1 Trip Blank Collected February 10-14, 2006

Prepared by: Donald Anné March 14, 2006

Holding Times: Samples were analyzed within NYSDEC holding times.

GC/MS Tuning and Mass Calibration: The BFB tuning criteria were within control limits.

Initial Calibration: The SPCCs and CCCs were within control limits for method 8260B.

The %RSDs for target compounds were below the allowable maximum (30%), as required.

The average RRFs for acetone (0.015), 2-butanone (0.019), butyl alcohol (0.020), and 1,4-dioxane (0.002) were below the allowable minimum (0.050) for HPV3 on 02-21-06. The average RRFs for acetone (0.033), butyl alcohol (0.020), and 1,4-dioxane (0.002) were below the allowable minimum (0.050) for HPV4 on 02-08-06. The average RRFs for acetone (0.020), butyl alcohol (0.018), and 1,4-dioxane (0.002) were below the allowable minimum (0.050) for HPV7 on 02-13-06. Positive results for these compounds should be considered estimates (J) and negative results unusable (R) in associated samples.

Continuing Calibration: The SPCCs and CCCs were within control limits for method 8260B.

The %Ds for acetone (28.4%), acrylonitrile (28.9%), bromoform (41.0%), 2-butanone (36.4%), 2-hexanone (29.1%), 4-methyl-2-pentanone (36.5%), tetrahydrofuran (35.7%), and 1,4-dioxane (50.0%) were above the allowable maximum (25%) on 02-17-06 (lcs0217a.D). The %Ds for bromoform (32.8%), bromomethane (37.0%), 2-butanone (37.0%), tetrahydrofuran (37.5%), butyl alcohol (28.6%), and 1,4-dioxane (50.0%) were above the allowable maximum (25%) on 02-17-06 (lcs0217b.D). The %Ds for bromoform (41.0%), 2-butanone (36.8%), 2-hexanone (31.3%), 4-methyl-2-pentanone (30.5%), and tetrahydrofuran (32.1%) were above the allowable maximum (25%) on 02-18-06 (lcs0218a.D).

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The %Ds for dichlrodifluoromethane (32.8%) and tetrahydrofuran (29.0%) were above the allowable maximum (25%) on 02-22-06 (LCS0222A.D). The %Ds for the following compounds were above the allowable maximum (25%) on 02-21-06 (ccc0221.D).

bromoform (27.6%)

2-butanone (49.4%)

chloromethane (29.5%)

trans-1,3-dichloropropene (32.2%)

methyl tert-butyl ether (30.9%)

tert-amyl methyl ether (76.5%)

di-isopropyl ether (36.8%)

bromomethane (79.5%)

2,2-dichloropropane (70.4%)

2-hexanone (26.1%)

4-methyl-2-pentanone (28.7%)

ethyl tert-butyl ether (36.8%)

butyl alcohol (77.8%)

Positive results for the above compounds should be considered estimates (J) in associated samples.

The RRF50 for acetone (0.019), tetrahydrofuran (0.036), butyl alcohol (0.016), and 1,4-dioxane (0.001) were below the allowable minimum (0.050) on 02-17-06 (lcs0217a.D). The RRF50 for acetone (0.017), tetrahydrofuran (0.035), butyl alcohol (0.015), and 1,4-dioxane (0.001) were below the allowable minimum (0.050) on 02-17-06 (lcs0217b.D). The RRF50 for acetone (0.018), tetrahydrofuran (0.038), butyl alcohol (0.016), and 1,4-dioxane (0.001) were below the allowable minimum (0.050) on 02-18-06 (lcs0218a.D). The RRF50 for acetone (0.018), tetrahydrofuran (0.041), tert-amyl methyl ether (0.038), butyl alcohol (0.004), and 1,4-dioxane (0.002) were below the allowable minimum (0.050) on 02-21-06 (ccc0221.D). The RRF20 for acetone (0.009),butyl alcohol (0.017), and 1,4-dioxane (0.002) were below the allowable minimum (0.050) on 02-22-06 (LCS0222A.D). Positive results for these compounds should be considered estimates (J) and negative results unusable (R) in associated samples.

Blanks: The analyses of the method and trip blanks reported target compounds as not detected.

<u>Internal Standard Area Summary</u>: The internal standard areas and retention times were within control limits.

<u>Surrogate Recovery</u>: The surrogate recoveries were within control limits for the soil samples.

Matrix Spike/Matrix Spike Duplicate: The relative percent differences were below the allowable maximums, and the percent recoveries were within control limits for MS/MSD samples SA40619-03 and SA40915-01.

<u>Laboratory Control Sample</u>: The relative percent differences (RPDs) were below the allowable maximum and the percent recoveries (%Rs) were within QC limits for soil LCS/LCSD 6021257-BS1.

The %RPDs for target compounds were below the allowable maximums, but the %Rs for bromoform were above QC limits for soil LCS/LCSDs 6021004-BS1, 6021051-BS1, and 6021078-BS1 and the %Rs for tetrahydrofuran were below QC limits for soil LCS/LCSDs 6021004-BS1 and 6021051-BS1. Positive results for bromoform and all results for tetrahydrofuran should be considered estimates (J) in associated soil samples.

The %RPD for 2-butanone were below the allowable maximums for aqueous LCS/LCSD 6021135-BS1. Positive results for 2-butanone should be considered estimates (J) in associated aqueous samples.

The %Rs for the following compounds were below QC limits for aqueous LCS/LCSD 6021135-BS1. All results for these compounds should be considered estimates (J) in associated aqueous samples.

bromomethane

2,2-dichloropropane

trans-1,3-dichloropropene

2-hexanone butyl alcohol

tert-amyl methyl ether

ethyl tert-butyl ether

<u>Compound ID</u>: Checked compounds were within GC quantitation limits. The mass spectra for detected compounds contained the primary and secondary ions, as outlined in the method.

LETTER OF TRANSMITTAL

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ALPHA GEOSCIENCE

679 Plank Road Clifton Park, NY 12065 (518) 348 -6995 Phone (518) 348-6966 FAX

ALPH GEOSCIE		((518) 348-69	66 FAX	•
TO:	Ms Dipa Chavan Langan Engineering & Environmental Services, Inc. 21 Penn Plaza		FROM:	Don Anne'	
			DATE:	3/14/2006	
		aza 31st Street, 8th Floor	SUBJECT:	Data Validation	
New York, NY 10001-27279				Glendale, NY Feb 06' Soil and Ground Water Sampling	
WE ARE TRANSMITTING THE FOLLOWING ITEMS:			Photograph		Letter(s)
			Maps/Plans Report(s)	;	X Disk(s) X Other: Data Packs
Originals	Copies			scription of Materia	
1		Spectrum Analytical Data P	ack, Work Ord	ier Number SA408	336
				. <u>.</u>	
	These Materi	als are Transmitted:			
	 	_For your use For your approval			Approved as submitted Approved as noted
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Hydrology

Remediation

Water Supply

Data Usability Summary Report for Spectrum Analytical, Inc. Work Order SA41326

4 Soil Samples Collected February 23, 2006

Prepared by: Donald Anné March 27, 2006

The data package contains the documentation required by NYSDEC ASP. The proper chain of custody procedures were followed by the samplers. All information appeared legible and complete. The data pack contained the results of TCL volatile analyses for 4 soil samples.

The overall performances of the analyses are acceptable. Spectrum Analytical, Inc. did fulfill the requirements of the analytical methods.

The data are acceptable with one issue that is identified in the accompanying data validation review. The following data were flagged:

- The positive results for acetone were flagged as "estimated" (J) in samples B7-SE-11-13-022306 and B7-SE-15-17-022306 because the response factors for acetone were below the allowable minimum in the associated initial calibration.
- The "not detected" results for 2-butanone were flagged as "unusable" (R) in all four soil samples because the response factors for 2-butanone were below the allowable minimum in the associated initial and continuing calibrations.
- The "not detected" results for acetone were flagged as "unusable" (R) in samples B7-SE-19-21-022306 and B7-SE-26-28-022306 because the response factors for acetone were below the allowable minimum in the associated initial calibration.
- The positive results for carbon disulfide were flagged as "not detected" (U) in all four soil samples, because the concentrations of carbon disulfide in the samples were not significantly greater (more than ten times) than the level in the associated method blank.

All data that are not flagged rejected (R) are considered usable, with estimated (J) data associated with a higher level of quantitative uncertainty. Detailed information on data quality is included in the data validation reviews.

Page 1 of 2

The "not detected" data that were qualified as "R" were associated with method-compliant calibrations, and the response factors for the affected compounds were greater than 0.010. It is this reviewer's opinion that although the validation guidelines recommend that the data should be considered unusable, the "R" data may be acceptable to the user, based on the preceding facts and additional information that is not contained in the validation criteria. The user is cautioned that there is a higher degree of analytical uncertainty associated with the R-flagged data, because the relative response factors for those compounds were less than 0.050.



Hydrology

Remediation

Water Supply

QA/QC Review of Volatiles Data for Spectrum Analytical, Inc. Work Order SA41326

4 Soil Samples Collected February 23, 2006

Prepared by: Donald Anné March 27, 2006

Holding Times: Samples were analyzed within NYSDEC holding times.

GC/MS Tuning and Mass Calibration: The BFB tuning criteria were within control limits.

Initial Calibration: The SPCCs and CCCs were within control limits for method 8260B.

The %RSDs for target compounds were below the allowable maximum (30%), as required.

The average RRF for acetone (0.036) and 2-butanone (0.018) were below the allowable minimum (0.050) for HPV6 on 03-03-06, but was greater than 0.010 (the method-compliant allowable minimum). Positive results for acetone and 2-butanone should be considered estimates (J) and negative results unusable (R) in associated samples.

Continuing Calibration: The SPCCs and CCCs were within control limits for method 8260B.

The %Ds for acetone (44.4%), 2-butanone (50.3%), carbon disulfide (138.2%), and 4-methyl-2-pentanone (%) were above the allowable maximum (25%) on 03-10-06 (CCC0310A.D). Positive results for these two compounds should be considered estimates in associated samples.

The RRF50 for 2-butanone (0.041) was below the allowable minimum (0.050) on 03-03-06 (LCS0303A.D), but was greater than 0.010. Positive results for 2-butanone should be considered estimates (J) and negative results unusable (R) in associated samples.

<u>Blanks</u>: Method blank, 6030198-BLK1, contained a trace of carbon disulfide (2.1 ug/L). Results for carbon disulfide that are less than five times the method blank level should be reported as not detected in associated high level samples.

<u>Internal Standard Area Summary</u>: The internal standard areas and retention times were within control limits.

Surrogate Recovery: The surrogate recoveries were within control limits for the soil samples.

- <u>Matrix Spike/Matrix Spike Duplicate</u>: The relative percent differences were below the allowable maximums and the percent recoveries were within control limits for MS/MSD SA41147-01.
- <u>Laboratory Control Sample</u>: The relative percent differences for target compounds were below the allowable maximums, but the %Rs (percent recoveries) for carbon disulfide and 4-methyl-2-pentanone were above QC limits for LCS/LCSD 6030198-BS1. Positive results for these two compounds should be considered estimates (J) in associated soil samples.
- <u>Compound ID</u>: Checked compounds were within GC quantitation limits. The mass spectra for detected compounds contained the primary and secondary ions, as outlined in the method.



Hydrology

Remediation

Water Supply

Data Usability Summary Report for Spectrum Analytical, Inc. Work Order SA41575 10 Soil Samples, 1 Ground Water Sample, 1 Field Blank, and 1 Trip Blank Collected February 28 and March 1, 2006

Prepared by: Donald Anné March 27, 2006

The data package contains the documentation required by NYSDEC ASP. The proper chain of custody procedures were followed by the samplers. All information appeared legible and complete. The data pack contained the results of TCL volatile analyses for 10 soil samples, 1 ground water sample, 1 field blank, and 1 trip blank.

The overall performances of the analyses are acceptable. Spectrum Analytical, Inc. did fulfill the requirements of the analytical methods.

The data are acceptable with one issue that is identified in the accompanying data validation review. The following data were flagged:

- The positive results for acetone were flagged as "estimated" (J) in samples TB-022806 and FB-022806 because the response factors for acetone were below the allowable minimum in the associated initial and continuing calibrations.
- The positive results for acetone were flagged as "estimated" (J) in the following samples because the %D for acetone was above the allowable maximum in the associated continuing calibration.

AOC2-B3-SSW-030106 AOC2-B3-ESW-030106 AOC2-B3-WSW-030106

The "not detected" results for 2-butanone were flagged as "unusable" (R) in the following samples because the response factors for 2-butanone were below the allowable minimum in the associated initial calibrations.

> AOC1-B3-EP-030106 AOC1-B3-ESW-030106

- AOC1-B3-NSW-030106

AOC1-B3-SSW-030106

AOC1-B3-WSW-030106

AOC2-B3-SSW-030106

AOC2-B3-ESW-030106 AOC2-B3-WSW-030106 • The "not detected" results for acetone were flagged as "unusable" (R) in the following samples because the response factors for acetone were below the allowable minimum in the associated initial and continuing calibrations.

MW66-022806

AOC2-B3-EP-030106

AOC2-B3-NSW-030106

• The positive results for acetone were flagged as "not detected" (U) in samples TB-022806 and FB-022806 because the concentrations of acetone in the samples were not significantly greater (more than ten times) than the level in the associated method blank.

All data that are not flagged rejected (R) are considered usable, with estimated (J) data associated with a higher level of quantitative uncertainty. Detailed information on data quality is included in the data validation reviews.

The "not detected" data that were qualified as "R" were associated with method-compliant calibrations, and the response factors for the affected compounds were greater than 0.010. It is this reviewer's opinion that although the validation guidelines recommend that the data should be considered unusable, the "R" data may be acceptable to the user, based on the preceding facts and additional information that is not contained in the validation criteria. The user is cautioned that there is a higher degree of analytical uncertainty associated with the R-flagged data, because the relative response factors for those compounds were less than 0.050.



Hydrology

Remediation

Water Supply

QA/QC Review of Volatiles Data for Spectrum Analytical, Inc. Work Order SA41575 10 Soil Samples, 1 Ground Water Sample, 1 Field Blank, and 1 Trip Blank Collected February 28 and March 1, 2006

Prepared by: Donald Anné March 27, 2006

Holding Times: Samples were analyzed within NYSDEC holding times.

GC/MS Tuning and Mass Calibration: The BFB tuning criteria were within control limits.

Initial Calibration: The SPCCs and CCCs were within control limits for method 8260B.

The %RSDs for target compounds were below the allowable maximum (30%), as required. The average RRF for acetone (0.029) was below the allowable minimum (0.050) for HPV1 on 02-27-06, but was greater than 0.010 (the method-compliant allowable minimum). The average RRF for 2-butanone (0.040) was below the allowable minimum (0.050) for HPV6 on 03-02-06, but was greater than 0.010. The average RRF for acetone (0.020) was below the allowable minimum (0.050) for HPV7 on 02-13-06, but was greater than 0.010. Positive results for acetone and 2-butanone should be considered estimates (J) and negative results unusable (R) in associated samples.

Continuing Calibration: The SPCCs and CCCs were within control limits for method 8260B.

The %D for carbon tetrachloride (29.3%) was above the allowable maximum (25%) on 03-06-06 (lcs0306b.D). The %D for acetone (43.0%) was above the allowable maximum (25%) on 03-09-06 (lcs0309b.D). The %Ds for 2-butanone (88.2%) and 4-methyl-2-pentanone (69.3%) were above the allowable maximum (25%) on 03-09-06 (CCC0309A.D). The %Ds for acetone (36.2%), 2-butanone (157.9%), and 4-methyl-2-pentanone (116.1%) were above the allowable maximum (25%) on 03-10-06 (CCC0310A.D). Positive results for these two compounds should be considered estimates in associated samples.

The RRF20 for acetone (0.021) was below the allowable minimum (0.050) on 03-06-06 (lcs0306b.D), but were greater than 0.010. The RRF20 for acetone (0.024) was below the allowable minimum (0.050) on 03-09-06 (lcs0309b.D), but was greater than 0.010. The RRF50 for acetone (0.026) was below the allowable minimum (0.050) on 03-09-06 (bsd0309.D), but was greater than 0.010. Positive results for acetone should be considered estimates (J) and negative results unusable (R) in associated samples.

Page 1 of 2

- Blanks: Method blank, 6030264-BLK1, contained traces of acetone (3.8 ug/L) and 2-butanone (2.4 ug/L). Method blank, 6030477-BLK1, contained a trace of acetone (2.6 ug/L). Method blank, 6030483-BLK1, contained a trace of 2-butanone (0.8 ug/L). Results for acetone and 2-butanone that are less than ten times the method blank level should be reported as not detected in associated high level samples.
- <u>Internal Standard Area Summary</u>: The internal standard areas and retention times were within control limits.
- Surrogate Recovery: The surrogate recoveries were within control limits for the soil samples.
- Matrix Spike/Matrix Spike Duplicate: The relative percent differences (RPDs) were below the allowable maximums and the percent recoveries (%Rs) were within control limits for aqueous MS/MSD sample SA41609-01 and soil MS/MSD SA41490-04.
 - The RPDs were below the allowable maximums, but 2 of 10 %Rs were above control limits for aqueous MS/MSD sample SA41412-11. No action is taken on MS/MSD data alone to qualify or reject an entire set of samples.
- <u>Laboratory Control Sample</u>: The relative percent differences (RPDs) for target compounds were below the allowable maximums and the percent recoveries (%Rs) were within QC limits for the aqueous LCS/LCSDs 6030477-BS1 and soil LCS/LCSD 6030483-BS1.
 - The RPDs for target compounds were below the allowable maximums, but the %Rs for acetone, 2-butanone, and 4-methyl-2-pentaone were above QC limits for the soil LCS/LCSD 6030507-BS1. The RPD for 4-methyl-2-pentanone was above the allowable maximums, but the %Rs for 2-butanone and 4-methyl-2-pentaone were above QC limits for the soil LCS/LCSD 6030550-BS1. Positive results for these compounds should be considered estimates (J) in associated soil samples.
 - The RPDs for target compounds were below the allowable maximums, but 1 of 2 %Rs fro vinyl chloride was above QC limits for the aqueous LCS/LCSD 6030264-BS1. Positive results for vinyl chloride should be considered estimates (J) in associated aqueous samples.
- <u>Compound ID</u>: Checked compounds were within GC quantitation limits. The mass spectra for detected compounds contained the primary and secondary ions, as outlined in the method.

LETTER OF TRANSMITTAL



ALPHA GEOSCIENCE

679 Plank Road Clifton Park, NY 12065 (518) 348 -6995 Phone (518) 348-6966 FAX

GEOSCIE I	NCE					
TO:	Ms Ilkay Cam-Spanos Langan Engineering & Environmental		FROM:	Don Anne'		
		es, Inc.	DATE:	3/27/2006		
	360 West 3	31st Street, 8th Floor	SUBJECT:	Data Validation		
		NY 10001-27279		Glendale, NY		
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Hydrology

Remediation

Water Supply

March 24, 2006

Ms. Ilkay Cam-Spanos
Langan Engineering and Environmental
Services, Inc.
21 Penn Plaza
360 West 31st Street, 8th Floor
New York, NY 10001-27279

Re:

Data Validation Reports Glendale, New York Project

January-March 2006 Soil and Ground Water Sampling Events

Dear Ms. Cam-Spanos:

The data validation summaries and data usability summary report (DUSR) for the January-March 2006 soil and ground water sampling events are attached to this letter for the Glendale, New York project. The data were mostly acceptable for Spectrum Analytical, Work Order Numbers SA39969, SA40242, SA41326, and SA41575 with issues that are identified in the validation summaries. There were volatile data in all data packs that were flagged as unusable (R). As explained in the DUSR, the volatile results that were flagged "R" were associated with initial and continuing calibrations that were method compliant, and the laboratory instruments responded to acetone with "relative response factors" that were greater than 0.010. The volatile data are qualified as "R" based solely on the data validation criteria. The data may be determined to be acceptable to the user based on the instrument response(s), the compliant calibrations, and/or other project-specific information that is not available to the data validator.

I have included a list of data validation qualifiers and acronyms to assist you in interpreting the reports. If you have any questions concerning this report, please contact us at (518) 348-6995. Thank you for the opportunity to assist Langan Engineering and Environmental Services, Inc.

Sincerely,

Alpha Geoscience

Donald C. Anné Senior Chemist

DCA:dca attachments

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Data Validation Acronyms

AA Atomic absorption, flame technique

BHC Hexachlorocyclohexane BFB Bromofluorobenzene

CCB Continuing calibration blank
CCC Calibration check compound
CCV Continuing calibration verification

CN Cyanide

CRDL Contract required detection limit
CRQL Contract required quantitation limit
CVAA Atomic adsorption, cold vapor technique

DCAA 2,4-Dichlophenylacetic acid

DCB Decachlorobiphenyl

DFTPP Decafluorotriphenyl phosphine

ECD Electron capture detector

FAA Atomic absorption, furnace technique

FID Flame ionization detector FNP 1-Fluoronaphthalene GC Gas chromatography

GC/MS Gas chromatography/mass spectrometry

GPC Gel permeation chromatography

ICB Initial calibration blank

ICP Inductively coupled plasma-atomic emission spectrometer

ICV Initial calibration verification IDL Instrument detection limit

IS Internal standard

LCS Laboratory control sample

LCS/LCSD Laboratory control sample/laboratory control sample duplicate

MSA Method of standard additions
MS/MSD Matrix spike/matrix spike duplicate

PID Photo ionization detector
PCB Polychlorinated biphenyl
PCDD Polychlorinated dibenzodioxins
PCDF Polychlorinated dibenzofurans

QA Quality assurance QC Quality control RF Response factor

RPD Relative percent difference RRF Relative response factor

RRF(number) Relative response factor at concentration of the number following

RT Retention time

RRT Relative retention time SDG Sample delivery group

SPCC System performance check compound

TCX Tetrachloro-m-xylene %D Percent difference %R Percent recovery

%RSD Percent relative standard deviation

Data Validation Qualifiers Used in the QA/QC Reviews for USEPA Region II

- U = Not detected. The associated number indicates the approximate sample concentration necessary to be detected significantly greater than the level of the highest associated blank.
- R = Unreliable result; data is rejected or unusable. Analyte may or may not be present in the sample. Supporting data or information is necessary to confirm the result.
- N = Tentative identification. Analyte is considered present. Special methods may be needed to confirm its presence or absence during future sampling efforts.
- J = Analyte is present. Reported value may be associated with a higher level of uncertainty than is normally expected with the analytical method.
- UJ = Not detected, quantitation limit may be inaccurate or imprecise.

Note: These qualifiers are used for data validation purposes. The data validation qualifiers may differ from the qualifiers that the laboratory assigns to the data. Refer to the laboratory analytical report for the definitions of the laboratory qualifiers.



QA/QC Review of Cyanide Data for Spectrum Analytical, Inc. Work Order SA42415 One Soil Sample Collected March 23, 2006

Prepared by: Donald Anné December 14, 2006

<u>Holding Times</u>: Sample B3ER-032306 was analyzed within the NYSDEC holding times.

<u>Initial and Continuing Calibration Verification</u>: The percent recoveries for cyanide were within control limits (90-110%).

<u>Blanks</u>: The analyses of the calibration and method blanks reported total cyanide as not detected.

<u>Spike Sample Recovery</u>: The percent recoveries for cyanide were within control limits (75-125%) in MS/MSD sample B3ER-032306.

<u>Duplicates</u>: The relative percent difference for cyanide was below the allowable maximum (20%) in the MS/MSD sample B3ER-032306, as required.

<u>Laboratory Control Sample</u>: The percent recoveries for cyanide were within control limits (80-120%) in sample 6031557-BS1.



Data Usability Summary Report for Spectrum Analytical, Inc. Work Order SA42415 One Soil Sample Collected March 23, 2006

Prepared by: Donald Anné December 14, 2006

The data packages contain the documentation required by NYSDEC ASP. The proper chain of custody procedures were followed by the samplers. All information appeared legible and complete. The data packs contained the results of volatile, semi-volatile, PCB, pesticide, herbicide, metal and cyanide analyses for one soil sample.

The overall performances of the analyses are acceptable. Spectrum Analytical, Inc. did fulfill the requirements of the analytical methods.

The data are mostly acceptable with some issues that are identified in the accompanying data validation reviews. The following data were flagged:

- The "not detected" volatile results for acetone and 2-butanone in sample B3ER-032306 were flagged as "unusable" (R) because the response factors for these two compounds were below the allowable minimum in the associated initial and continuing calibrations.
- The "not detected" pesticide result for d-BHC in sample B3ER-032306 was flagged as "estimated" (J) because the percent recovery for d-BHC was below QC limits in the associated LCS 6031455-BS1.
- The "not detected" result for antimony was flagged as "estimated" (J) in sample B3ER-032306 because the percent recoveries for antimony were below control limits (75-125%) but were greater than 10% in MS/MSD sample SA42403-02.
- The positive results for calcium, magnesium, manganese, and potassium were flagged as "estimated" (J) in sample B3ER-032306 because the percent recoveries for these metals were above control limits (75-125%) in MS/MSD sample SA42403-02.
- The positive results for aluminum, barium, sodium, and zinc were flagged as "estimated" (J) in sample B3ER-032306 because the percent recoveries for these metals were above control limits (75-125%) in LCS 6031396-BS1.

• Positive results for copper and lead were flagged as "estimated" (J) in sample B3ER-032306 because the relative percent differences for copper and lead were above the allowable maximum (35%) in duplicate sample SA42415-01.

All data that are not flagged rejected (R) are considered usable, with estimated (J) data associated with a higher level of quantitative uncertainty. Detailed information on data quality is included in the data validation reviews.



QA/QC Review of Herbicide Data for Spectrum Analytical, Inc. Work Order SA42415 One Soil Sample Collected March 23, 2006

Prepared by: Donald Anné December 14, 2006

<u>Holding Times</u>: Sample B3ER-032306 was extracted and analyzed within NYSDEC holding times.

Blanks: The analysis of the method blank reported 2,4-D; 2,4,5-T; and 2,4,5-TP as not detected.

<u>Surrogate Recovery</u>: The surrogate recoveries were within QC limits for sample B3ER-032306.

Matrix Spike/Matrix Spike Duplicate: MS/MSD data were not provided in this data pack. No action is taken on MS/MSD data alone to qualify or reject an entire set of samples.

<u>Duplicate</u>: The sample and duplicate analyses for sample SA42452-06 reported target herbicides as not detected; therefore, relative percent differences could not be calculated. The analyses of the sample and duplicate are acceptable.

<u>Laboratory Control Sample</u>: The relative percent differences for target herbicides were below the allowable maximums and the percent recoveries for target compounds were within QC limits for LCS/LCSD 6031456-BS1.

<u>Initial Calibration</u>: The %RSDs for 2,4-D; 2,4,5-T; and 2,4,5-TP were below the allowable maximum (20%), or the correlation coefficients were above the allowable minimums, as required.

<u>Continuing Calibration</u>: The percent recoveries for 2,4-D; 2,4,5-T; and 2,4,5-TP were within QC limits (85-115%).

<u>Herbicide Identification Summary</u>: Checked surrogates were within GC quantitation limits. There were no detected concentrations of 2,4-D; 2,4,5-T; and 2,4,5-TP reported in sample B3ER-032306.



QA/QC Review of TAL Metals Data for Spectrum Analytical, Inc. Work Order SA42415 One Soil Sample Collected March 23, 2006

Prepared by: Donald Anné December 14, 2006

<u>Holding Times</u>: Sample B3ER-032306 was analyzed within the NYSDEC holding times.

<u>Initial and Continuing Calibration Verification</u>: The percent recoveries for TAL metals were within control limits (80-120% for Hg, 90-110% for all other metals).

<u>Blanks</u>: The analyses for initial and continuing calibration blanks reported target metals as below the CRDLs, as required. The preparation blank contained the following metals above the reporting limit. Results for these metals that are less than ten times the preparation blank level should be reported as unusable (R) in associated samples.

aluminum (5.74 mg/kg) calcium (45.6 mg/kg) iron (1.97 mg/kg) magnesium (10.3 mg/kg) manganese (0.605 mg/kg) potassium (32.4 mg/kg)

<u>ICP Interference Check Sample</u>: The percent recoveries for applicable TAL metals were within control limits (80-120%).

Spike Sample Recovery: The percent recoveries for antimony (61.0% and 59.9%), calcium (161% and 143%), manganese (149%), and potassium (130%) were outside control limits (75-125%), but were above 10% for soil MS/MSD sample SA42403-02. All results for antimony and positive results for calcium, manganese, and potassium should be considered estimates (J).

<u>Duplicates</u>: The relative percent differences (RPDs) for target metals were below the allowable maximum (35%) for MS/MSD sample SA42403-02, as required.

The RPDs for copper (134%), lead (69.5%), and zinc (69.5%) were above the allowable maximum (35%) for duplicate sample SA42403-01. Positive results for these metals should be considered estimates (J).

- <u>Laboratory Control Sample</u>: The percent recoveries for aluminum, barium, sodium, and zinc were above control limits (80-120%) for soil LCS 6031396-BS1. Positive results for these metals should be considered estimates (J).
- Standard Reference Material: The percent recoveries for sodium and barium were above QC limits for 6031396-SRM1 and 6031396-SRM2. Positive results for sodium and barium should be considered estimates (J).
- <u>ICP Serial Dilution</u>: The serial dilution data was not provided; therefore, %Ds could not be evaluated.

<u>Instrument Detection Limits</u>: The IDLs were at or below CRDLs, as required.

<u>Percent Solids</u>: The percent solids for sample B3ER-032306 were greater than 50%, as required.



QA/QC Review of PCB Aroclor Data for Spectrum Analytical, Inc. Work Order SA42415 One Soil Sample Collected March 23, 2006

Prepared by: Donald Anné December 14, 2006

<u>Holding Times</u>: Sample B3ER-032306 was extracted and analyzed within NYSDEC holding times.

Blanks: The analysis of the method blank reported target aroclors as not detected.

<u>Surrogate Recovery</u>: The surrogate recoveries were within QC limits for sample B3ER-032306.

<u>Duplicate</u>: The sample and duplicate analyses for sample SA42403-02 reported target PCBs as not detected; therefore, relative percent differences could not be calculated. The analyses of the sample and duplicate are acceptable.

Matrix Spike/Matrix Spike Duplicate: The relative percent differences for aroclor-1016 and aroclor-1260 were below the allowable maximum, and the percent recoveries were within QC limits for MS/MSD sample SA42403-02.

<u>Laboratory Control Sample</u>: The relative percent differences for aroclor-1016 and aroclor-1260 were below the allowable maximum, and the percent recoveries were within QC limits for LCS 6031450-BS1.

<u>Initial Calibration</u>: The average %RSDs for target aroclors were below the allowable maximum (20%) for primary and confirmation columns, as required.

Continuing Calibration: Percent recoveries for target aroclors were within QC limits (85-115%).

<u>PCB Analytical Sequence</u>: This data is not applicable. The laboratory used internal standards to quantitate sample results.

<u>PCB Identification Summary for Multi-Component Analytes</u>: Checked surrogates were within GC quantitation limits. The detections of aroclors were confirmed on a second dissimilar column

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QA/QC Review of Pesticide Data for Spectrum Analytical, Inc. Work Order SA42415 One Soil Sample Collected March 23, 2006

Prepared by: Donald Anné December 14, 2006

<u>Holding Times</u>: Sample B3ER-032306 was extracted and analyzed within NYSDEC holding times.

<u>Blanks</u>: The analysis of the method blank reported target pesticides as not detected.

<u>Surrogate Recovery</u>: The surrogate recoveries were within QC limits for sample B3ER-032306.

Matrix Spike/Matrix Spike Duplicate: This data was not provided in this data pack. No action is taken on MS/MSD data alone to qualify or reject an entire set of samples.

<u>Laboratory Control Sample</u>: The percent recovery for d-BHC was below QC limits for LCS 6031455-BS1. All results for d-BHC should be considered estimates (J) in associated samples.

<u>Initial Calibration</u>: The %RSDs for applicable target pesticides were below the allowable maximum (20%), or the correlation coefficients were above the allowable minimums, as required.

Continuing Calibration: The percent recovery for b-BHC (120%) was above QC limits (85-115%) on 03-28-06. The percent recovery for b-BHC (123%) was above QC limits (85-115%) on 03-29-06. Positive results for b-BHC should be considered estimates (J) in associated samples.

<u>DDT/Endrin Breakdown Check</u>: The percent breakdowns were below the allowable maximum (20%) for 4,4'-DDT and endrin, as required.

<u>Pesticide Analytical Sequence</u>: This data is not applicable. The laboratory used internal standards to quantitate sample results.

<u>Pesticide Identification Summary for Single Component Analytes</u>: Checked compound results were within GC quantitation limits. There were no detected concentrations of single component pesticides reported in sample B3ER-032306.

<u>Pesticide Identification Summary for Multicomponent Analytes</u>: There were no detected concentrations of multi-component target pesticides reported in sample B3ER-032306.



QA/QC Review of Semi-Volatiles Data for Spectrum Analytical, Inc. Work Order SA42415 One Soil Sample Collected March 23, 2006

Prepared by: Donald Anné December 14, 2006

Holding Times: Sample B3ER-032306 was extracted and analyzed within NYSDEC holding times.

GC/MS Tuning and Mass Calibration: The DFTPP tuning criteria were within control limits.

<u>Initial Calibration</u>: The SPCCs and CCCs were within control limits for method 8270C.

The average RRFs for target compounds were above the allowable minimum (0.050) and the %RSDs were below the allowable maximum (30%), as required.

Continuing Calibration: The SPCCs and CCCs were within control limits for method 8270C.

The RRF100s for target compounds were above the allowable minimum (0.050), as required.

The %D for di-n-octylphthalate (30.7%) was above the allowable maximum (25%) on 03-27-06 (SCC70327.D). Positive results for di-n-octylphthalate should be considered estimates (J) in associated samples.

Blanks: The analysis of the method blank reported target compounds as not detected.

<u>Internal Standard Area Summary</u>: The internal standard areas and retention times were within control limits.

Surrogate Recovery: The surrogate recoveries were within control limits for sample B3ER-032306.

Matrix Spike/Matrix Spike Duplicate: The relative percent differences were below the allowable maximums and the percent recoveries were within control limits for MS/MSD sample SA42403-02.

<u>Duplicate</u>: The analyses of sample and duplicate SA42403-02 reported target compounds as not detected; therefore, valid relative percent differences could not be calculated. The analyses for the laboratory duplicates were acceptable.

<u>Laboratory Control Sample</u>: The percent recoveries were within QC limits for LCS 6031453-BS1.

<u>Compound ID</u>: Checked compounds were within GC quantitation limits. The mass spectra for detected compounds contained the primary and secondary ions, as outlined in the method.



QA/QC Review of Volatiles Data for Spectrum Analytical, Inc. Work Order SA42415 One Soil Sample Collected March 23, 2006

Prepared by: Donald Anné December 14, 2006

Holding Times: Sample B3ER-032306 were analyzed within NYSDEC holding times.

GC/MS Tuning and Mass Calibration: The BFB tuning criteria were within control limits.

Initial Calibration: The SPCCs and CCCs were within control limits for method 8260B.

The %RSDs for target compounds were below the allowable maximum (30%), as required.

The average RRFs for acetone (0.036) and 2-butanone (0.018) were below the allowable minimum (0.050) for HPV6 on 03-03-06. Positive results for these two compounds should be considered estimates (J) and negative results unusable (R) in associated samples.

Continuing Calibration: The SPCCs and CCCs were within control limits for method 8260B.

The %D for 2-butanone (33.2%) was below the allowable maximum (25%) on 03-27-06 (CCC0327A.D). Positive results for 2-butanone should be considered estimates (J) in associated samples.

The RRF50s for acetone (0.043) and 2-butanone (0.039) were below the allowable minimum (0.050) on 03-27-06 (CCC0327A.D). Positive results for these two compounds should be considered estimates (J) and negative results unusable (R) in associated samples.

<u>Blanks</u>: The analysis of the method blank reported target compounds as not detected.

<u>Internal Standard Area Summary</u>: The internal standard areas and retention times were within control limits.

<u>Surrogate Recovery</u>: The surrogate recoveries were within control limits for sample B3ER-032306.

- Matrix Spike/Matrix Spike Duplicate: This data was not provided in this data pack. No action is taken on MS/MSD data alone to qualify or reject an entire set of samples.
- <u>Laboratory Control Sample</u>: The relative percent differences for target compounds were below the allowable maximums and the percent recoveries for target compounds were within QC limits for LCS/LCSD 6031475-BS1.
- <u>Compound ID</u>: Checked compounds were within GC quantitation limits. The mass spectra for detected compounds contained the primary and secondary ions, as outlined in the method.



Hydrology

Remediation

Water Supply

September 25, 2006

Ms. Sandhya Pagilla
Langan Engineering and Environmental
Services, Inc.
21 Penn Plaza
360 West 31st Street, 8th Floor
New York, NY 10001-27278

Re:

Data Validation Reports Glendale, New York Project August 2006 Soil Sampling Event

Dear Ms. Pagilla:

The data validation summaries and data usability summary report (DUSR) for the August 2006 soil sampling event are attached to this letter for the Glendale, New York project. The data were mostly acceptable for Spectrum Analytical, Work Order Number SA48982 with issues that are identified in the validation summaries. There were volatile data in the data pack that were flagged as unusable (R). The data were flagged unusable (R) due to low response factors for those compounds. The data is rejected based solely on the validation guidance criteria. The rejected data may be determined to be acceptable to the user based on additional information that is not contained in the data validation criteria.

I have included a list of data validation qualifiers and acronyms to assist you in interpreting the reports. If you have any questions concerning this report, please contact us at (518) 348-6995. Thank you for the opportunity to assist Langan Engineering and Environmental Services, Inc.

Sincerely, Alpha Geoscience

Donald Anné Senior Chemist

DCA:dca attachments

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Data Validation Qualifiers Used in the QA/QC Reviews for USEPA Region II

- U = Not detected. The associated number indicates the approximate sample concentration necessary to be detected significantly greater than the level of the highest associated blank.
- R = Unreliable result; data is rejected or unusable. Analyte may or may not be present in the sample. Supporting data or information is necessary to confirm the result.
- N = Tentative identification. Analyte is considered present. Special methods may be needed to confirm its presence or absence during future sampling efforts.
- J = Analyte is present. Reported value may be associated with a higher level of uncertainty than is normally expected with the analytical method.
- UJ = Not detected, quantitation limit may be inaccurate or imprecise.

Note: These qualifiers are used for data validation purposes. The data validation qualifiers may differ from the qualifiers that the laboratory assigns to the data. Refer to the laboratory analytical report for the definitions of the laboratory qualifiers.

Data Validation Acronyms

AA Atomic absorption, flame technique

BHC Hexachlorocyclohexane BFB Bromofluorobenzene

CCB Continuing calibration blank
CCC Calibration check compound
CCV Continuing calibration verification

CN Cyanide

CRDL Contract required detection limit
CRQL Contract required quantitation limit
CVAA Atomic adsorption, cold vapor technique

DCAA 2,4-Dichlophenylacetic acid

DCB Decachlorobiphenyl

DFTPP Decafluorotriphenyl phosphine

ECD Electron capture detector

FAA Atomic absorption, furnace technique

FID Flame ionization detector FNP 1-Fluoronaphthalene GC Gas chromatography

GC/MS Gas chromatography/mass spectrometry

GPC Gel permeation chromatography

ICB Initial calibration blank

ICP Inductively coupled plasma-atomic emission spectrometer

ICV Initial calibration verification IDL Instrument detection limit

IS Internal standard

LCS Laboratory control sample

LCS/LCSD Laboratory control sample/laboratory control sample duplicate

MSA Method of standard additions

MS/MSD Matrix spike/matrix spike duplicate

PID Photo ionization detector
PCB Polychlorinated biphenyl
PCDD Polychlorinated dibenzodioxins

PCDF Polychlorinated dibenzofurans
QA Quality assurance
QC Quality control

RF Response factor

RPD Relative percent difference RRF Relative response factor

RRF(number) Relative response factor at concentration of the number following

RT Retention time

RRT Relative retention time SDG Sample delivery group

SPCC System performance check compound

TCX Tetrachloro-m-xylene %D Percent difference %R Percent recovery

%RSD Percent relative standard deviation



Hydrology

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Data Usability Summary Report for Spectrum Analytical, Inc. Work Order SA48982 Four Soil Samples Collected August 3, 2006

> Prepared by: Donald Anné September 25, 2006

The data packages contain the documentation required by NYSDEC ASP. The proper chain of custody procedures were followed by the samplers. All information appeared legible and complete. The data pack contained the results of PCB analyses for two soil samples and the following analyses for two other soil samples.

Total and TCLP volatiles

Total and TCLP semi-volatiles

PCBs

Petroleum Hydrocarbons

Total and TCLP metals

Cyanide

Hexavalent chromium

Trivalent chromium

Sulfide

Total organic carbon

requirements of the analytical methods.

The overall performances of the analyses are acceptable. Spectrum Analytical, Inc. did fulfill the

The data are mostly acceptable with some issues that are identified in the accompanying data validation reviews. The following data were flagged:

- The "not detected" volatile results for 2-butanone in total volatile samples Bldg3-Coned-SW-DO-4 and Bldg3-Coned-NW-DO-4 were flagged as "unusable" (R) because the response factors for 2-butanone were below the allowable minimum in the associated initial and continuing calibrations.
- The "not detected" volatile result for acetone in total volatile sample Bldg3-Coned-SW-DO-4 was flagged as "unusable" (R) and the positive result for acetone in total volatile sample Bldg3-Coned-NW-DO-4 was flagged as "estimated" (J) because the response factors for acetone were below the allowable minimum in the associated initial and continuing calibrations.
- The positive volatile results for tetrachloroethene in total volatile samples Bldg3-Coned-SW-DO-4 and Bldg3-Coned-NW-DO-4 were flagged as "estimated" (J) because one of four surrogate recoveries was above control limits for these two samples.

Page 1 of 2

- The "not detected" semi-volatile results for six compounds in total sample Bldg-Coned-NW-DO-4 were flagged as "estimated" (J) because the internal standard (IS5) that is used to quantitated the results was below control limits for total sample Bldg-Coned-NW-DO-4.
- The "not detected" semi-volatile results for 1,4-dichlorobenzene, hexachlorobutadiene, and hexachloroethane in TCLP samples Bldg-Coned-SW-DO-4 and Bldg-Coned-NW-DO-4 were flagged as "estimated" (J) because the percent recoveries for these compounds were below QC limits in the TCLP LCS 6080305-BS1.

All data that are not flagged rejected (R) are considered usable, with estimated (J) data associated with a higher level of quantitative uncertainty. Detailed information on data quality is included in the data validation reviews.

It should be noted that the "not detected" acetone and 2-butanone data were qualified as "R" based on validation criteria alone. These data, however, were associated with method-compliant calibrations, and the response factors for acetone and 2-butanone were greater than 0.010 (the method-compliant allowable minimum). It is this reviewer's opinion that, although the validation guidelines recommend that the data should be considered unusable, the "R" data may be acceptable to the user, based on the preceding facts and additional information that is not contained in the validation criteria. The user is cautioned that there is a higher degree of analytical uncertainty associated with the R-flagged data, because the relative response factors for those compounds were less than 0.050.



Hydrology

Remediation

Water Supply

QA/QC Review of Total and TCLP Volatiles Data for Spectrum Analytical, Inc. Work Order SA48982 Two Soil Samples Collected August 3, 2006

Prepared by: Donald Anné September 25, 2006

<u>Holding Times</u>: Total volatile samples were analyzed within NYSDEC holding times and TCLP samples were prepared and analyzed within NYSDEC holding times.

GC/MS Tuning and Mass Calibration: The BFB tuning criteria were within control limits.

Initial Calibration: The SPCCs and CCCs were within control limits for method 8260B.

The %RSDs for target compounds were below the allowable maximum (30%), as required.

The average RRFs for acetone (0.022) and 2-butanone (0.017) were below the allowable minimum (0.050) for HPV6 on 07-15-06. Positive results for these two compounds should be considered estimates (J) and negative results unusable (R) in associated samples.

Continuing Calibration: The SPCCs and CCCs were within control limits for method 8260B.

The %D for acetone (52.7%) and 1,1,2-trichloroethane (63.9%) were above the allowable maximum (25%) on 08-05-06 (LCS0804E.D). Positive results for these two compounds should be considered estimates (J) in associated samples.

The RRF50 for acetone (0.014) and 2-butanone (0.017) were below the allowable minimum (0.050) on 08-05-06 (LCS0804E.D). Positive results for these two compounds should be considered estimates (J) and negative results unusable (R) in associated samples.

<u>Blanks</u>: The analyses of total and TCLP method blanks reported target compounds as not detected.

<u>Internal Standard Area Summary</u>: The internal standard areas and retention times were within control limits.

- <u>Surrogate Recovery</u>: One of four surrogate recoveries for total samples Bldg3-Coned-SW-DO-4 and Bldg3-Coned-NW-DO-4 was above control limits. Positive results for total volatile samples Bldg3-Coned-SW-DO-4 and Bldg3-Coned-NW-DO-4 should be considered estimates (J).
- Matrix Spike/Matrix Spike Duplicate: The relative percent differences were below the allowable maximums and the percent recoveries were within control limits for MS/MSD sample SA48862-01.
- <u>Laboratory Control Sample</u>: The relative percent differences for target volatiles were below the allowable maximum and the percent recoveries were within QC limits for the TCLP LCS/LCSD 6080444-BS1 and total LCS/LCSD 6080371-BS1.
- <u>Compound ID</u>: Checked compounds were within GC quantitation limits. The mass spectra for detected compounds contained the primary and secondary ions, as outlined in the method.



Hydrology

Remediation

Water Supply

QA/QC Review of Total and TCLP Semi-Volatiles Data for Spectrum Analytical, Inc. Work Order SA48982 Two Soil Samples Collected August 3, 2006

Prepared by: Donald Anné September 25, 2006

<u>Holding Times</u>: Total semi-volatile samples were extracted and analyzed within NYSDEC holding times and TCLP samples were prepared, extracted, and analyzed within NYSDEC holding times.

GC/MS Tuning and Mass Calibration: The DFTPP tuning criteria were within control limits.

Initial Calibration: The SPCCs and CCCs were within control limits for method 8270C.

The average RRFs for target compounds were above the allowable minimum (0.050) and the %RSDs were below the allowable maximum (30%), as required.

Continuing Calibration: The SPCCs and CCCs were within control limits for method 8270C.

The RRF100s for target compounds were above the allowable minimum (0.050) and the %Ds were below the allowable maximum (25%), as required.

Blanks: The analyses of total and TCLP method blanks reported target compounds as not detected.

Internal Standard Area Summary: The internal standard retention times were within control limits. One of six internal standard areas (IS5) for total sample Bldg3-Coned-NW-DO-4 was below control limits. Results for sample Bldg-Coned-NW-DO-4 that were quantitated using internal standard IS5 should be considered estimates (J).

<u>Surrogate Recovery</u>: The surrogate recoveries were within control limits for environmental samples.

Matrix Spike/Matrix Spike Duplicate: The relative percent differences were below the allowable maximums and the percent recoveries were within control limits for total MS/MSD sample SA48972-03.

<u>Duplicate</u>: The analyses for the laboratory duplicates for total and TCLP samples were acceptable.

<u>Laboratory Control Sample</u>: The percent recoveries (%Rs) were within QC limits for the total LCS 6080310-BS1.

The %Rs for 1,4-dichlorobenzene, hexachlorobutadiene, and hexachloroethane were below QC limits for the TCLP LCS 6080305-BS1. All results for these three compounds should be considered estimates (J) in TCLP samples.

Compound ID: Checked compounds were within GC quantitation limits. The mass spectra for detected compounds contained the primary and secondary ions, as outlined in the method.



Hydrology

Remediation

Water Supply

QA/QC Review of Petroleum Hydrocarbon Data for Spectrum Analytical, Inc. Work Order SA48982 Two Soil Samples Collected August 3, 2006

Prepared by: Donald Anné September 25, 2006

Holding Times: Samples were extracted and analyzed within NYSDEC holding times.

Blanks: The analysis of the method blank reported target petroleum hydrocarbons as not detected.

Surrogate Recovery: The surrogate recoveries were within QC limits for the water samples.

<u>Laboratory Control Sample</u>: The percent recovery for fuel oil #2 was within QC limits for LCS 6080309-BS1.

<u>Duplicate</u>: The analyses of the duplicates of sample SA48972-01 reported target petroleum hydrocarbons as not detected; therefore, valid relative percent differences could not be calculated. The analyses for the duplicates were acceptable.

<u>Initial Calibration</u>: The correlation coefficients for target petroleum hydrocarbons were above the allowable minimum (0.995).

<u>Continuing Calibration</u>: The percent recoveries for target petroleum hydrocarbons were within QC limits (85-115%).

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Hydrology

Remediation

Water Supply

QA/QC Review of PCB Aroclor Data for Spectrum Analytical, Inc. Work Order SA48982 Four Soil Samples Collected August 3, 2006

Prepared by: Donald Anné September 25, 2006

Holding Times: Samples were extracted and analyzed within NYSDEC holding times.

Blanks: The analysis of the method blank reported target aroclors as not detected.

Surrogate Recovery: The surrogate recoveries were within QC limits for the water samples.

- Matrix Spike/Matrix Spike Duplicate: The relative percent differences for aroclor-1016 and aroclor-1260 were below the allowable maximum, and the percent recoveries were within QC limits for MS/MSD sample SA49036-01.
- <u>Laboratory Control Sample</u>: The relative percent differences for aroclor-1016 and aroclor-1260 were below the allowable maximum, and the percent recoveries were within QC limits for LCS/LCSD 6080421-BS1.
- <u>Duplicate</u>: The analyses of the duplicates of sample SA49036-01 reported target aroclors as not detected; therefore, valid relative percent differences could not be calculated. The analyses for the duplicates were acceptable.
- <u>Initial Calibration</u>: The average %RSDs for target aroclors were below the allowable maximum (20%) for primary and confirmation columns, as required.
- Continuing Calibration: Percent recoveries for target aroclors were within QC limits (85-115%).
- <u>PCB Analytical Sequence</u>: This data is not applicable. The laboratory used internal standards to quantitate sample results.
- <u>PCB Identification Summary for Multi-Component Analytes</u>: Checked surrogates were within GC quantitation limits. The analyses of samples in this data pack reported target aroclors as not detected.

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Hydrology

Remediation

Water Supply

QA/QC Review of Total and TCLP Metals Data for Spectrum Analytical, Inc. Work Order SA48982 Two Soil Samples Collected August 3, 2006

Prepared by: Donald Anné September 25, 2006

- <u>Holding Times</u>: Samples for total metals were analyzed within the NYSDEC holding times and TCLP samples were prepared and analyzed within NYSDEC holding times.
- <u>Initial and Continuing Calibration Verification</u>: The percent recoveries for target metals were within control limits (80-120% for Hg, 90-110% for all other metals).
- <u>Blanks</u>: The analyses for initial and continuing calibration blanks reported target metals as below the CRDLs, as required. The total soil and TCLP preparation blanks reported target metals as not detected.
- ICP Interference Check Sample: The percent recoveries for target metals were within control limits (80-120%).
- <u>Spike Sample Recovery</u>: The percent recoveries (%Rs) for target total metals were within control limits (75-125%) for soil MS/MSD samples Bldg3-Coned-SW-DO-4 and Bldg3-Coned-NW-DO-4.
 - The %Rs for TCLP metals were within control limits (75-125%) for soil MS/MSD sample Bldg3-Coned-SW-DO-4.
- <u>Duplicates</u>: The relative percent differences for target total metals were below the allowable maximum (35%) for MS/MSD sample Bldg3-Coned-SW-DO-4 and Bldg3-Coned-NW-DO-4, and duplicate sample Bldg3-Coned-SW-DO-4 and Bldg3-Coned-NW-DO-4.
 - The RPDs for TCLP metals were below the allowable maximum (35%) for MS/MSD sample Bldg3-Coned-SW-DO-4 and duplicate sample Bldg3-Coned-SW-DO-4.
- <u>Laboratory Control Sample</u>: The percent recoveries for target total metals were within control limits (80-120%) for total soil LCS 6080282-BS1.

Page 1 of 2

The percent recoveries for TCLP metals were within control limits (80-120%) for TCLP LCSs 6080406-BS1, 6080407-BS1, and 6080465-BS1.

<u>Standard Reference Material</u>: The percent recoveries for target total metals were within QC limits for 6080292-SRM1, 6080292-SRM2, and 6080293-SRM1.

<u>ICP Serial Dilution</u>: The serial dilution data was not provided; therefore, %Ds could not be evaluated.

<u>Instrument Detection Limits</u>: The IDLs were at or below CRDLs, as required.

Percent Solids: The percent solids for the soil samples were greater than 50%, as required.



Hydrology

Remediation

Water Supply

QA/QC Review of Cyanide and Sulfide Data for Spectrum Analytical, Inc. Work Order SA48982 Two Soil Samples Collected August 3, 2006

Prepared by: Donald Anné September 25, 2006

Holding Times: Samples were analyzed within the NYSDEC holding times.

Blanks: The analysis of the method blank reported cyanide and sulfide as not detected.

<u>Duplicates</u>: The relative percent differences for cyanide and sulfide were below the allowable maximum (35%) in duplicate sample SA48906-02, as required.

<u>Laboratory Control Sample</u>: The percent recoveries for cyanide and sulfide were within control limits in the LCS.

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Hydrology

Remediation

Water Supply

QA/QC Review of Trivalent and Hexavalent Chromium Data for Spectrum Analytical, Inc. Work Order SA48982 Two Soil Samples Collected August 3, 2006

Prepared by: Donald Anné September 25, 2006

Holding Times: Samples were analyzed within the NYSDEC holding times.

Blanks: The analysis of the method blank reported cyanide and sulfide as not detected.

Spike Sample Recovery: The percent recoveries for hexavalent chromium were within control limits (75-125%) for soil MS/MSD samples Bldg3-Coned-NW-DO-4.

<u>Duplicates</u>: The relative percent differences for trivalent and hexavalent chromium were below the allowable maximum (35%) in MS/MS sample Blgd3-Coned-NW-DO-4 and duplicate samples Bldg3-Coned-SW-DO-4 and Blgd3-Coned-NW-DO-4, as required.

<u>Laboratory Control Sample</u>: The percent recoveries for hexavalent chromium was within control limits in LCS 6080385-BS1.

<u>Standard Reference Material</u>: The percent recovery for hexavalent chromium was within QC limits for 6080385-SRM1.

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Hydrology

Remediation

Water Supply

QA/QC Review of Total Organic Carbon Data for Spectrum Analytical, Inc. Work Order SA48982 Two Soil Samples Collected August 3, 2006

Prepared by: Donald Anné September 25, 2006

Holding Times: Samples were analyzed within the NYSDEC holding times.

Blanks: The analyses of method blanks reported total organic carbon (TOC) as not detected.

Standard Reference Material: The percent recoveries for TOC were within QC limits for 6080469-SRM1, 6080469-SRM2, 6080469-SRM3, and 6080469-SRM4.

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Hydrology

Remediation

Water Supply

October 24, 2006

Ms. Sandhya Pagilla
Langan Engineering and Environmental
Services, Inc.
21 Penn Plaza
360 West 31st Street, 8th Floor
New York, NY 10001-27278

Re:

Data Validation Reports Glendale, New York Project September 2006 Air Sampling Event

Dear Ms. Pagilla:

The data validation summary and data usability summary report (DUSR) for the September 2006 air sampling event are attached to this letter for the Glendale, New York project. The data were acceptable for Spectrum Analytical, Work Order Number SA51984, with no issues identified in the validation summary. There were no data that were flagged as unusable (R) or estimated (J).

I have included a list of data validation qualifiers and acronyms to assist you in interpreting the reports. If you have any questions concerning this report, please contact us at (518) 348-6995. Thank you for the opportunity to assist Langan Engineering and Environmental Services, Inc.

Sincerely,

Alpha Geoscience

Donald C. Anné Senior Chemist

DCA:dca attachments

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Data Validation Acronyms

AA Atomic absorption, flame technique

BHC Hexachlorocyclohexane BFB Bromofluorobenzene

CCB Continuing calibration blank
CCC Calibration check compound
CCV Continuing calibration verification

CN Cyanide

CRDL Contract required detection limit
CRQL Contract required quantitation limit
CVAA Atomic adsorption, cold vapor technique

DCAA 2,4-Dichlophenylacetic acid

DCB Decachlorobiphenyl

DFTPP Decafluorotriphenyl phosphine

ECD Electron capture detector

FAA Atomic absorption, furnace technique

FID Flame ionization detector FNP 1-Fluoronaphthalene GC Gas chromatography

GC/MS Gas chromatography/mass spectrometry

GPC Gel permeation chromatography

ICB Initial calibration blank

ICP Inductively coupled plasma-atomic emission spectrometer

ICV Initial calibration verification IDL Instrument detection limit

IS Internal standard

LCS Laboratory control sample

LCS/LCSD Laboratory control sample/laboratory control sample duplicate

MSA Method of standard additions
MS/MSD Matrix spike/matrix spike duplicate

PID Photo ionization detector
PCB Polychlorinated biphenyl
PCDD Polychlorinated dibenzodioxins
PCDF Polychlorinated dibenzofurans

QA Quality assurance QC Quality control RF Response factor

RPD Relative percent difference RRF Relative response factor

RRF(number) Relative response factor at concentration of the number following

RT Retention time

RRT Relative retention time SDG Sample delivery group

SPCC System performance check compound

TCX Tetrachloro-m-xylene
%D Percent difference
%R Percent recovery

%RSD Percent relative standard deviation

Data Validation Qualifiers Used in the QA/QC Reviews for USEPA Region II

- U = Not detected. The associated number indicates the approximate sample concentration necessary to be detected significantly greater than the level of the highest associated blank.
- R = Unreliable result; data is rejected or unusable. Analyte may or may not be present in the sample. Supporting data or information is necessary to confirm the result.
- N = Tentative identification. Analyte is considered present. Special methods may be needed to confirm its presence or absence during future sampling efforts.
- J = Analyte is present. Reported value may be associated with a higher level of uncertainty than is normally expected with the analytical method.
- UJ = Not detected, quantitation limit may be inaccurate or imprecise.

Note: These qualifiers are used for data validation purposes. The data validation qualifiers may differ from the qualifiers that the laboratory assigns to the data. Refer to the laboratory analytical report for the definitions of the laboratory qualifiers.



Hydrology

Remediation

Water Supply

Data Usability Summary Report for Spectrum Analytical, Inc. Work Order SA51984

8 Air Samples Collected September 28, 2006

Prepared by: Donald Anné October 24, 2006

The data package contains the documentation required by NYSDEC ASP. The proper chain of custody procedures were followed by the samplers. All information appeared legible and complete. The data pack contained the results of TO15 volatile analysis for 8 air samples.

The overall performances of the analyses are acceptable. Spectrum Analytical, Inc. did fulfill the requirements of the analytical method.

The data are all acceptable and considered usable. There were no data flagged as estimated (J) or unusable (R) in this data pack. Detailed information on data quality is included in the data validation review.



Hydrology

Remediation

Water Supply

QA/QC Review of Volatiles Data for Spectrum Analytical, Inc. Work Order SA51984 8 Air Samples Collected September 28, 2006

Prepared by: Donald Anné October 24, 2006

Holding Times: Samples were analyzed within the EPA recommended holding times.

GC/MS Tuning and Mass Calibration: The BFB tuning criteria were within control limits.

<u>Initial Calibration</u>: The average RRFs for target compounds were above the allowable minimum (0.050) and the %RSDs were below the allowable maximum (30%), as required.

Continuing Calibration: The RRF50s for target compounds were above the allowable minimum (0.050) and the %Ds were below the allowable maximum (25%), as required.

<u>Blanks</u>: The analyses of the preparation and method blanks reported target compounds as not detected.

<u>Internal Standard Area Summary</u>: The internal standard areas and retention times were within control limits.

<u>Surrogate Recovery</u>: The surrogate recoveries were within control limits for air samples and trip blank.

<u>Field Duplicates</u>: The analyses of the laboratory duplicates, sample OSV-4A-, reported target volatiles as not detected; therefore, valid relative percent differences could not be calculated. The analyses for the laboratory duplicate pair were acceptable.

<u>Laboratory Control Sample</u>: The percent recoveries for target compounds were within QC limits for LCSs 6100271-BS1 and 6100375-BS1.

<u>Compound ID</u>: Checked compounds were within GC quantitation limits. The mass spectra for detected compounds contained the primary and secondary ions, as outlined in the method.

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Hydrology

Remediation

Water Supply

October 30, 2006

Ms. Sandhya Pagilla
Langan Engineering and Environmental
Services, Inc.
21 Penn Plaza
360 West 31st Street, 8th Floor
New York, NY 10001-27278

Re:

Data Validation Reports Glendale, New York Project October 2006 Air Sampling Event

Dear Ms. Pagilla:

The data validation summaries and data usability summary reports (DUSRs) for the October 2006 air sampling event are attached to this letter for the Glendale, New York project. The data were acceptable for Spectrum Analytical, Work Order Numbers SA52611 and SA56275, with no issues identified in the validation summary. There were no data that were flagged as unusable (R) or estimated (J).

I have included a list of data validation qualifiers and acronyms to assist you in interpreting the reports. If you have any questions concerning this report, please contact us at (518) 348-6995. Thank you for the opportunity to assist Langan Engineering and Environmental Services, Inc.

Sincerely,

Alpha Geoscience

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Donald C. Anné Senior Chemist

DCA:dca attachments

Data Validation Acronyms

AA Atomic absorption, flame technique

BHC Hexachlorocyclohexane BFB Bromofluorobenzene

CCB Continuing calibration blank
CCC Calibration check compound
CCV Continuing calibration verification

CN Cyanide

CRDL Contract required detection limit
CRQL Contract required quantitation limit
CVAA Atomic adsorption, cold vapor technique

DCAA 2,4-Dichlophenylacetic acid

DCB Decachlorobiphenyl

DFTPP Decafluorotriphenyl phosphine ECD Electron capture detector

FAA Atomic absorption, furnace technique

FID Flame ionization detector FNP 1-Fluoronaphthalene GC Gas chromatography

GC/MS Gas chromatography/mass spectrometry

GPC Gel permeation chromatography

ICB Initial calibration blank

ICP Inductively coupled plasma-atomic emission spectrometer

ICV Initial calibration verification IDL Instrument detection limit

IS Internal standard

LCS Laboratory control sample

LCS/LCSD Laboratory control sample/laboratory control sample duplicate

MSA Method of standard additions
MS/MSD Matrix spike/matrix spike duplicate

PID Photo ionization detector
PCB Polychlorinated biphenyl
PCDD Polychlorinated dibenzodioxins
PCDF Polychlorinated dibenzofurans

QA Quality assurance
QC Quality control
RF Response factor

RPD Relative percent difference RRF Relative response factor

RRF(number) Relative response factor at concentration of the number following

RT Retention time

RRT Relative retention time SDG Sample delivery group

SPCC System performance check compound

TCX Tetrachloro-m-xylene
%D Percent difference
%R Percent recovery

%RSD Percent relative standard deviation

Data Validation Qualifiers Used in the QA/QC Reviews for USEPA Region II

- U = Not detected. The associated number indicates the approximate sample concentration necessary to be detected significantly greater than the level of the highest associated blank.
- R = Unreliable result; data is rejected or unusable. Analyte may or may not be present in the sample. Supporting data or information is necessary to confirm the result.
- N = Tentative identification. Analyte is considered present. Special methods may be needed to confirm its presence or absence during future sampling efforts.
- J = Analyte is present. Reported value may be associated with a higher level of uncertainty than is normally expected with the analytical method.
- UJ = Not detected, quantitation limit may be inaccurate or imprecise.

Note: These qualifiers are used for data validation purposes. The data validation qualifiers may differ from the qualifiers that the laboratory assigns to the data. Refer to the laboratory analytical report for the definitions of the laboratory qualifiers.



Hydrology

Remediation

Water Supply

Data Usability Summary Report for Spectrum Analytical, Inc. Work Order SA52611

4 Air Samples Collected October 13, 2006

Prepared by: Donald Anné October 30, 2006

The data package contains the documentation required by NYSDEC ASP. The proper chain of custody procedures were followed by the samplers. All information appeared legible and complete. The data pack contained the results of TO15 volatile analysis for 4 air samples.

The overall performances of the analyses are acceptable. Spectrum Analytical, Inc. did fulfill the requirements of the analytical method.

The data are all acceptable and considered usable. There were no data flagged as estimated (J) or unusable (R) in this data pack. Detailed information on data quality is included in the data validation review.



Hydrology

Remediation

Water Supply

QA/QC Review of Volatiles Data for Spectrum Analytical, Inc. Work Order SA52611 4 Air Samples Collected October 13, 2006

Prepared by: Donald Anné October 30, 2006

Holding Times: Samples were analyzed within the EPA recommended holding times.

GC/MS Tuning and Mass Calibration: The BFB tuning criteria were within control limits.

<u>Initial Calibration</u>: The average RRFs for target compounds were above the allowable minimum (0.050) and the %RSDs were below the allowable maximum (30%), as required.

Continuing Calibration: The RRF50s for target compounds were above the allowable minimum (0.050) and the %Ds were below the allowable maximum (25%), as required.

<u>Blanks</u>: The analyses of the preparation and method blanks reported target compounds as not detected.

<u>Internal Standard Area Summary</u>: The internal standard areas and retention times were within control limits.

<u>Surrogate Recovery</u>: The surrogate recoveries were within control limits for air samples and trip blank.

<u>Duplicates</u>: The analyses of the laboratory duplicates, sample AMOUT, reported target volatiles as either not detected or below reporting limits; therefore, valid relative percent differences could not be calculated. The analyses for the laboratory duplicate pair were acceptable.

<u>Laboratory Control Sample</u>: The percent recoveries for target compounds were within QC limits for LCS 6101170-BS1.

<u>Compound ID</u>: Checked compounds were within GC quantitation limits. The mass spectra for detected compounds contained the primary and secondary ions, as outlined in the method.

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Hydrology

Remediation

Water Supply

Data Usability Summary Report for Spectrum Analytical, Inc. Work Order SA52675

2 Air Samples Collected October 16, 2006

Prepared by: Donald Anné October 30, 2006

The data package contains the documentation required by NYSDEC ASP. The proper chain of custody procedures were followed by the samplers. All information appeared legible and complete. The data pack contained the results of TO15 volatile analysis for 2 air samples.

The overall performances of the analyses are acceptable. Spectrum Analytical, Inc. did fulfill the requirements of the analytical method.

The data are all acceptable and considered usable. There were no data flagged as estimated (J) or unusable (R) in this data pack. Detailed information on data quality is included in the data validation review.

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Hydrology

Remediation

Water Supply

QA/QC Review of Volatiles Data for Spectrum Analytical, Inc. Work Order SA52675 2 Air Samples Collected October 16, 2006

Prepared by: Donald Anné October 30, 2006

Holding Times: Samples were analyzed within the EPA recommended holding times.

GC/MS Tuning and Mass Calibration: The BFB tuning criteria were within control limits.

<u>Initial Calibration</u>: The average RRFs for target compounds were above the allowable minimum (0.050) and the %RSDs were below the allowable maximum (30%), as required.

Continuing Calibration: The RRF50s for target compounds were above the allowable minimum (0.050) and the %Ds were below the allowable maximum (25%), as required.

<u>Blanks</u>: The analyses of the preparation and method blanks reported target compounds as not detected.

<u>Internal Standard Area Summary</u>: The internal standard areas and retention times were within control limits.

<u>Surrogate Recovery</u>: The surrogate recoveries were within control limits for air samples and trip blank.

<u>Duplicates</u>: The analyses of the laboratory duplicates, sample SA52611-04, reported target volatiles as not detected; therefore, valid relative percent differences could not be calculated. The analyses for the laboratory duplicate pair were acceptable.

<u>Laboratory Control Sample</u>: The percent recoveries for target compounds were within QC limits for LCS 6101170-BS1.

<u>Compound ID</u>: Checked compounds were within GC quantitation limits. The mass spectra for detected compounds contained the primary and secondary ions, as outlined in the method.

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Hydrology

Remediation

Water Supply

November 3, 2006

Ms. Sandhya Pagilla
Langan Engineering and Environmental
Services, Inc.
21 Penn Plaza
360 West 31st Street, 8th Floor
New York, NY 10001-27278

Re:

Data Validation Reports Glendale, New York Project October 2006 Air Sampling Event

Dear Ms. Pagilla:

The data validation summary and data usability summary report (DUSR) for the October 2006 air sampling event are attached to this letter for the Glendale, New York project. The data were acceptable for Spectrum Analytical, Work Order Number SA53083, with no issues identified in the validation summary. There were no data that were flagged as unusable (R) or estimated (J).

I have included a list of data validation qualifiers and acronyms to assist you in interpreting the reports. If you have any questions concerning this report, please contact us at (518) 348-6995. Thank you for the opportunity to assist Langan Engineering and Environmental Services, Inc.

Sincerely,

Alpha Geoscience

Donald C. Anné Senior Chemist

DCA:dca attachments

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Data Validation Acronyms

AA Atomic absorption, flame technique

BHC Hexachlorocyclohexane BFB Bromofluorobenzene

CCB Continuing calibration blank
CCC Calibration check compound
CCV Continuing calibration verification

CN Cyanide

CRDL Contract required detection limit
CRQL Contract required quantitation limit
CVAA Atomic adsorption, cold vapor technique

DCAA 2,4-Dichlophenylacetic acid

DCB Decachlorobiphenyl

DFTPP Decafluorotriphenyl phosphine ECD Electron capture detector

FAA Atomic absorption, furnace technique

FID Flame ionization detector FNP 1-Fluoronaphthalene GC Gas chromatography

GC/MS Gas chromatography/mass spectrometry

GPC Gel permeation chromatography

ICB Initial calibration blank

ICP Inductively coupled plasma-atomic emission spectrometer

ICV Initial calibration verification IDL Instrument detection limit

IS Internal standard

LCS Laboratory control sample

LCS/LCSD Laboratory control sample/laboratory control sample duplicate

MSA Method of standard additions
MS/MSD Matrix spike/matrix spike duplicate

PID Photo ionization detector
PCB Polychlorinated biphenyl
PCDD Polychlorinated dibenzodioxins
PCDF Polychlorinated dibenzofurans

QA Quality assurance QC Quality control RF Response factor

RPD Relative percent difference RRF Relative response factor

RRF(number) Relative response factor at concentration of the number following

RT Retention time

RRT Relative retention time SDG Sample delivery group

SPCC System performance check compound

TCX Tetrachloro-m-xylene %D Percent difference %R Percent recovery

%RSD Percent relative standard deviation

Data Validation Qualifiers Used in the QA/QC Reviews for USEPA Region II

- U = Not detected. The associated number indicates the approximate sample concentration necessary to be detected significantly greater than the level of the highest associated blank.
- R = Unreliable result; data is rejected or unusable. Analyte may or may not be present in the sample. Supporting data or information is necessary to confirm the result.
- N = Tentative identification. Analyte is considered present. Special methods may be needed to confirm its presence or absence during future sampling efforts.
- J = Analyte is present. Reported value may be associated with a higher level of uncertainty than is normally expected with the analytical method.
- UJ = Not detected, quantitation limit may be inaccurate or imprecise.

Note: These qualifiers are used for data validation purposes. The data validation qualifiers may differ from the qualifiers that the laboratory assigns to the data. Refer to the laboratory analytical report for the definitions of the laboratory qualifiers.



Hydrology

Remediation

Water Supply

Data Usability Summary Report for Spectrum Analytical, Inc. Work Order SA53083

3 Air Samples Collected October 24, 2006

Prepared by: Donald Anné November 3, 2006

The data package contains the documentation required by NYSDEC ASP. The proper chain of custody procedures were followed by the samplers. All information appeared legible and complete. The data pack contained the results of TO15 volatile analysis for 3 air samples.

The overall performances of the analyses are acceptable. Spectrum Analytical, Inc. did fulfill the requirements of the analytical method.

The data are all acceptable and considered usable. There were no data flagged as estimated (J) or unusable (R) in this data pack. Detailed information on data quality is included in the data validation review.

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Hydrology

Remediation

Water Supply

QA/QC Review of Volatiles Data for Spectrum Analytical, Inc. Work Order SA53083 3 Air Samples Collected October 24, 2006

Prepared by: Donald Anné November 3, 2006

Holding Times: Samples were analyzed within the EPA recommended holding times.

GC/MS Tuning and Mass Calibration: The BFB tuning criteria were within control limits.

<u>Initial Calibration</u>: The average RRFs for target compounds were above the allowable minimum (0.050) and the %RSDs were below the allowable maximum (30%), as required.

Continuing Calibration: The RRF50s for target compounds were above the allowable minimum (0.050) and the %Ds were below the allowable maximum (25%), as required.

<u>Blanks</u>: The analyses of the preparation and method blanks reported target compounds as not detected.

<u>Internal Standard Area Summary</u>: The internal standard areas and retention times were within control limits.

<u>Surrogate Recovery</u>: The surrogate recoveries were within control limits for air samples and trip blank.

<u>Duplicates</u>: The analyses of the laboratory duplicates, sample SA52996-01, reported target volatiles as not detected; therefore, valid relative percent differences could not be calculated. The analyses for the laboratory duplicate pair were acceptable.

<u>Laboratory Control Sample</u>: The percent recoveries for target compounds were within QC limits for LCS 6101890-BS1.

<u>Compound ID</u>: Checked compounds were within GC quantitation limits. The mass spectra for detected compounds contained the primary and secondary ions, as outlined in the method.

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Hydrology

Remediation

Water Supply

December 12, 2006

Ms. Sandhya Pagilla
Langan Engineering and Environmental
Services, Inc.
21 Penn Plaza
360 West 31st Street, 8th Floor
New York, NY 10001-27278

Re:

Data Validation Reports Glendale, New York Project November 2006 Air Sampling Event

Dear Ms. Pagilla:

The data validation summary and data usability summary report (DUSR) for the November 2006 air sampling event are attached to this letter for the Glendale, New York project. The data were mostly acceptable for Spectrum Analytical, Work Order Numbers SA54596 and SA54671 with minor issues that are identified in the validation summaries. There were no data that were flagged as unusable (R) in these data packs.

I have included a list of data validation qualifiers and acronyms to assist you in interpreting the reports. If you have any questions concerning this report, please contact us at (518) 348-6995. Thank you for the opportunity to assist Langan Engineering and Environmental Services, Inc.

Sincerely, Alpha Geoscience

Donald Anné Senior Chemist

DCA:dca attachments

Data Validation Acronyms

AA Atomic absorption, flame technique

BHC Hexachlorocyclohexane BFB Bromofluorobenzene

CCB Continuing calibration blank
CCC Calibration check compound
CCV Continuing calibration verification

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CVAA Atomic adsorption, cold vapor technique

DCAA 2,4-Dichlophenylacetic acid

DCB Decachlorobiphenyl

DFTPP Decafluorotriphenyl phosphine

ECD Electron capture detector

FAA Atomic absorption, furnace technique

FID Flame ionization detector FNP 1-Fluoronaphthalene GC Gas chromatography

GC/MS Gas chromatography/mass spectrometry

GPC Gel permeation chromatography

ICB Initial calibration blank

ICP Inductively coupled plasma-atomic emission spectrometer

ICV Initial calibration verification IDL Instrument detection limit

IS Internal standard

LCS Laboratory control sample

LCS/LCSD Laboratory control sample/laboratory control sample duplicate

MSA Method of standard additions
MS/MSD Matrix spike/matrix spike duplicate

Polychlorinated dibenzofurans

PID Photo ionization detector PCB Polychlorinated biphenyl PCDD Polychlorinated dibenzodioxins

QA Quality assurance
QC Quality control
RF Response factor

PCDF

RPD Relative percent difference RRF Relative response factor

RRF(number) Relative response factor at concentration of the number following

RT Retention time

RRT Relative retention time SDG Sample delivery group

SPCC System performance check compound

TCX Tetrachloro-m-xylene %D Percent difference %R Percent recovery

%RSD Percent relative standard deviation

Data Validation Qualifiers Used in the QA/QC Reviews for USEPA Region II

- U = Not detected. The associated number indicates the approximate sample concentration necessary to be detected significantly greater than the level of the highest associated blank.
- R = Unreliable result; data is rejected or unusable. Analyte may or may not be present in the sample. Supporting data or information is necessary to confirm the result.
- N = Tentative identification. Analyte is considered present. Special methods may be needed to confirm its presence or absence during future sampling efforts.
- J = Analyte is present. Reported value may be associated with a higher level of uncertainty than is normally expected with the analytical method.
- UJ = Not detected, quantitation limit may be inaccurate or imprecise.

Note: These qualifiers are used for data validation purposes. The data validation qualifiers may differ from the qualifiers that the laboratory assigns to the data. Refer to the laboratory analytical report for the definitions of the laboratory qualifiers.



Hydrology

Remediation

Water Supply

Data Usability Summary Report for Spectrum Analytical, Inc. Work Order SA54596

4 Air Samples Collected November 21, 2006

Prepared by: Donald Anné December 12, 2006

The data package contains the documentation required by NYSDEC ASP. The proper chain of custody procedures were followed by the samplers. All information appeared legible and complete. The data pack contained the results of TO-15 volatile analysis for 4 air samples.

The overall performances of the analyses are acceptable. Spectrum Analytical, Inc. did fulfill the requirements of the analytical method.

The data are acceptable with minor issues that are identified in the accompanying data validation review. The following data were flagged:

- All results for chloromethane, carbon disulfide, hexane, and ethyl acetate were flagged as "estimated" (J) in all four air samples because the percent recoveries for these compounds were below the QC limits for LCS 6111838-BS1.
- The positive results for 1,3,5-trimethylbenzene were flagged as "estimated" (J) in samples OSV-B-112106, OSV-C-112106, and OSV-D-112106 because the percent recovery for 1,3,5-trimethylbenzene was above the QC limits for LCS 6111838-BS1.
- The positive results for 1,2,4-trimethylbenzene were flagged as "estimated" (J) in the four air samples because the percent recovery for 1,2,4-trimethylbenzene was above the QC limits for LCS 6111838-BS1.
- The positive results for 1,4-dichlorobenzene were flagged as "estimated" (J) in samples OSV-C-112106 and OSV-D-112106 because the percent recovery for 1,4-dichlorobenzene was above the QC limits for LCS 6111838-BS1.
- The positive results for ethanol were flagged as "estimated" (J) in the four air samples because the %D for ethanol was above the allowable maximum (25%) for the associated continuing calibration.

Page 1 of 2

• The positive results for isopropyl alcohol were flagged as "estimated" (J) in samples OSV-A-112106 and OSV-B-112106 because the percent recovery for isopropyl alcohol was above the QC limits for LCS 6111838-BS1.

All data are considered usable, with estimated (J) data associated with a higher level of quantitative uncertainty. Detailed information on data quality is included in the data validation reviews.



Hydrology

Remediation

Water Supply

QA/QC Review of Volatiles Data for Spectrum Analytical, Inc. Work Order SA54596 4 Air Samples Collected November 21, 2006

Prepared by: Donald Anné December 12, 2006

Holding Times: Samples were analyzed within the EPA recommended holding times.

GC/MS Tuning and Mass Calibration: The BFB tuning criteria were within control limits.

<u>Initial Calibration</u>: The average RRFs for target compounds were above the allowable minimum (0.050) and the %RSDs were below the allowable maximum (30%), as required.

Continuing Calibration: The RRF50s for target compounds were above the allowable minimum (0.050), as required.

The %Ds for the following compounds were above the allowable maximum (25%) on 11-27-06 (0612008-CCV1). Positive results for these compounds should be considered estiamtes (J) in associated samples.

propene (34.0%)

chloromethane (30.7%)

vinyl chloride (27.8%)

1,3-butadiene (29.1%)

chloroethane (29.1%)

ethanol (29.1%)

isopropyl alcohol (36.8%)

hexachlorobutadiene (61.0%)

ethyl acetate (27.3%)

1,2,4-trichlorobenzene (43.2%)

<u>Blanks</u>: The analyses of the preparation and method blanks reported target compounds as not detected.

<u>Internal Standard Area Summary</u>: The internal standard areas and retention times were within control limits.

<u>Surrogate Recovery</u>: The surrogate recoveries were within control limits for air samples and trip blank.

<u>Duplicates</u>: The relative percent differences for applicable compounds were below the allowable maximum (30%) for laboratory duplicate sample OSV-D-112106, as required.

Page 1 of 2

<u>Laboratory Control Sample</u>: The percent recoveries for following compounds were above QC limits for LCS 6111838-BS1. Positive results for these compounds should be considered estimates (J) in associated samples.

bromoform

1,3,5-trimethylbenzene

1,2,4-trimethylbenzene

1,3-dichlorobenzene

1,4-dichlorobenzene

1,2-dichlorobenzene

1,2,4-trichlorobenzene

hexachlorobutadiene

The percent recoveries for chloromethane, carbon disulfide, hexane, and ethyl acetate were below QC limits for LCS 6111838-BS1. All results for these compounds should be considered estimates (J) in associated samples.

Compound ID: Checked compounds were within GC quantitation limits. The mass spectra for detected compounds contained the primary and secondary ions, as outlined in the method.



Hydrology

Remediation

Water Supply

Data Usability Summary Report for Spectrum Analytical, Inc. Work Order SA54671

10 Air Samples Collected November 27, 2006

Prepared by: Donald Anné December 12, 2006

The data package contains the documentation required by NYSDEC ASP. The proper chain of custody procedures were followed by the samplers. All information appeared legible and complete. The data pack contained the results of TO-15 volatile analysis for 10 air samples.

The overall performances of the analyses are acceptable. Spectrum Analytical, Inc. did fulfill the requirements of the analytical method.

The data are acceptable with one minor issues that is identified in the accompanying data validation review. The following data were flagged:

• The "not detected" results for carbon disulfide and ethyl acetate were flagged as "estimated" (J) in the four air samples because the percent recoveries for these compounds were below the QC limits for LCS 6111928-BS1.

All data are considered usable, with estimated (J) data associated with a higher level of quantitative uncertainty. Detailed information on data quality is included in the data validation reviews.



Hydrology

Remediation

Water Supply

QA/QC Review of Volatiles Data for Spectrum Analytical, Inc. Work Order SA54671 10 Air Samples Collected November 27, 2006

Prepared by: Donald Anné December 12, 2006

Holding Times: Samples were analyzed within the EPA recommended holding times.

GC/MS Tuning and Mass Calibration: The BFB tuning criteria were within control limits.

<u>Initial Calibration</u>: The average RRFs for target compounds were above the allowable minimum (0.050) and the %RSDs were below the allowable maximum (30%), as required.

Continuing Calibration: The RRF50s for target compounds were above the allowable minimum (0.050) and the %Ds were below the allowable maximum (25%), as required.

<u>Blanks</u>: The analyses of the preparation and method blanks reported target compounds as not detected.

<u>Internal Standard Area Summary</u>: The internal standard areas and retention times were within control limits.

<u>Surrogate Recovery</u>: The surrogate recoveries were within control limits for air samples and trip blank.

<u>Duplicates</u>: The relative percent differences for applicable compounds were below the allowable maximum (30%) for laboratory duplicate sample SV-G-Air-112706, as required.

<u>Laboratory Control Sample</u>: The percent recoveries for carbon disulfide and ethyl acetate were below QC limits for LCS 6111928-BS1. All results for these compounds should be considered estimates (J) in associated samples.

<u>Compound ID</u>: Checked compounds were within GC quantitation limits. The mass spectra for detected compounds contained the primary and secondary ions, as outlined in the method.

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Data Usability Summary Report Atlas Park - Parcel B

December 26, 2006

Environmental Data Quality, Inc. 967 East Swedesford Road, Suite 404 Exton, Pennsylvania 19341

File No.: T00.60.01

Data Usability Summary Report Atlas Park - Parcel B

December 26, 2006

Shawne M. Kodgers

President

Environmental Data Quality, Inc. 967 East Swedesford Road, Suite 404 Exton, Pennsylvania 19341

File No.: T00.60.01

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ATTACHMENT 1 ANALYSIS RESULT FORMS

ATTACHMENT 2 METHODOLOGY REFERENCES

EXECUTIVE SUMMARY

This analytical data usability summary report is based on the review of data generated for air and soil samples.

The samples were analyzed for organic and inorganic parameters specified in Table 1. Spectrum Analytical, Inc., Agawam, Massachusetts performed the analyses. The sample analyses were performed according to methods referenced in "Test Methods for Evaluating Solid Wastes", SW-846, third edition, Promulgated Updates II, IIA, and III, June 1997.

Results have been validated or qualified according to general guidance provided in Region II "Validating Volatile Organic Compounds by SW-846 Method 8260B", SOP HW-24, Revision 1, June 1999, "Validating Canisters of Volatile Organics in Ambient Air", HW-18, Revision 0, August 1994, "Validating Semivolatile Organic Compounds by SW-846 Method 8270C", SOP HW-22 Revision 2, June 2001, "Validating Pesticide/PCB Compounds by SW-846 Method 8080A", SOP HW-23, Revision 0, May 1995, "Evaluation of Metals Data for the CLP Program", SOP HW-2, Revision 13, September 2005.

The organic and inorganic analyses were performed acceptably, but required qualifying statements. The aspects of the data that required qualification are identified in this report for all of the samples that received a data validation review.

Results for volatile compounds were qualified for the air and soil samples due to their presence in associated blanks. Other qualifications to the data were due to the suspected presence of interferences, as evidenced by matrix spike recoveries, dual column precision, and laboratory duplicate results.

1.0

This analytical data usability summary report is based on the review of data generated for air and soil samples.

The samples were analyzed for organic and inorganic parameters specified in Table 1. Spectrum Analytical, Inc., Agawam, Massachusetts performed the analyses. The sample analyses were performed according to methods referenced in "Test Methods for Evaluating Solid Wastes", SW-846, third edition, Promulgated Updates II, IIA, and III, June 1997.

Results have been validated or qualified according to general guidance provided in Region II "Validating Volatile Organic Compounds by SW-846 Method 8260B", SOP HW-24, Revision 1, June 1999, "Validating Semivolatile Organic Compounds by SW-846 Method 8270C", SOP HW-22 Revision 2, June 2001, "Validating Pesticide/PCB Compounds by SW-846 Method 8080A", SOP HW-23, Revision 0, May 1995, "Validating Chlorinated Herbicides by Gas Chromatography", HW-17, Revision 1.3, November 1994, and "Evaluation of Metals Data for the CLP Program", SOP HW-2, Revision 11, January 1992.

The organic and inorganic analyses were performed acceptably, but required qualifying statements. The aspects of the data that required qualification are identified in this report for all of the samples that received a data validation review.

Completeness of data deliverables and method compliance for all samples is discussed in Section 2.0. Qualifications to data are summarized in Sections 3.0 and 4.0. Analysis result forms presenting the validated and qualified results for the samples receiving the data validation are included in Attachment 1.

2.0 COMPLETENESS AND METHOD COMPLIANCE

During the course of the quality assurance data validation review, an evaluation of the completeness of the data deliverables provided by the laboratory and compliance to the specified method protocols was performed. Data deliverables that were determined to be either incomplete or incorrect were required to be resubmitted by the laboratory. Deviations from the protocols in the required analysis methods were evaluated to determine the impact, if any on the analysis results reported by the laboratory. Qualifications to the data resulting from method deviations are discussed fully for the samples receiving the comprehensive review in the Sections 3.0 and 4.0.

2.1 DATA DELIVERABLE COMPLETENESS

2.1.1 Organic Analyses

- Samples VP-Outdoor and 77AVE-Outdoor 77-AVE-OA-12/05/06 and 77-AVE-OAI-12/06/06, 77AVE-OA2-120706, RES#11-I1-120706, and 80ST-OA3-120706 were re-analyzed by the laboratory using Select Ion Monitoring (SIM) in order to detect trace levels of certain compounds. The laboratory analysis reports presented results from both the full scan and SIM analysis. The Reporting Limits for SIM analyses were incorrectly presented for results from the full scan analyses. Additionally, standard and quality control data (laboratory method blank, laboratory control sample, etc.) supporting the SIM analyses was absent from the data package. The laboratory was contacted and provided revised results for the samples that presented the correct Reporting Limits for each compound. Standard and quality control data associated with the SIM analyses was also provided.
- Review of the raw data indicated the presence of m/p-xylene in sample RES#10-I1-120706) at a concentration of 0.42ppbv, which is above the method detection limit of 0.246 ppbv. A positive result, however, was not reported for toluene for this sample. The laboratory was contacted and provided a revised analysis result form for the sample.

2.1.2 Inorganic Analyses

The data deliverables were complete.

2.2 METHOD COMPLIANCE

There were no deviations from the procedures specified in the organic and inorganic methodologies.

The findings offered in this report are based on a review of the analytical data reported according to New York State Department of Environmental Conservation Analytical Services Protocol (NYSDEC ASP) Category B.

The data validation included an assessment of the following items: chain of custody documentation, holding times, laboratory method, trip, and field blank results, surrogate recoveries, matrix spike recoveries, bromofluorobenzene and decafluorotriphenylphosphine mass tuning data, initial and continuing calibration summaries, internal standard performance, and evaluation of sample chromatograms.

The organic analyses were performed acceptably, but require qualifying statements. It is recommended that the data only be used according to the qualifying statements presented below. Any data that are not discussed in this report should be considered qualitatively and quantitatively valid, based on the items evaluated. Validated and/or qualified results for the samples are provided in Attachment 1.

3.1 ORGANIC DATA QUALIFIERS

3.1.1 Air Samples

- The positive methylene chloride results for samples VP-Outdoor and 77AVE-Outdoor are qualitatively invalid due to the presence of this compound in associated laboratory method and/or field blanks. USEPA protocol requires positive results for common contaminants, such as methylene chloride, that are less than or equal to ten times the associated blank contamination level, to be considered qualitatively invalid. Results for the samples are greater than the quantitation limits, and are marked "U".
- The positive methylene chloride results for samples 77-AVE-OA-12/05/06 and 77-AVE-OAI-12/06/06 are qualitatively invalid due to the presence of this compound in associated laboratory method and/or field blanks. USEPA protocol requires positive results for common contaminants, such as methylene chloride, that are less than or equal to ten times the associated blank contamination level, to be considered qualitatively invalid. Results for the samples are greater than the quantitation limits, and are marked "U".
- The positive methylene chloride results for samples 77AVE-OA2-120706 and RES#11-I1-120706 are qualitatively invalid due to the presence of this compound in associated laboratory method and/or field blanks. USEPA protocol requires positive results for common

- contaminants, such as methylene chloride, that are less than or equal to ten times the associated blank contamination level, to be considered qualitatively invalid. Results for the samples are greater than the quantitation limits, and are marked "U".
- The quantitation limits for volatile compound 1, 2, 4-trichlorobenzene for all samples, except Air 120506, SV-N 120506, VP-Outdoor, 77AVE-Outdoor, and SV-M 120506 s should be considered quantitative estimates. The continuing calibration precision criterion (the percent difference between initial and continuing calibration Relative Response Factors (RRF) ≤ 20 percent) was exceeded for this compound. This indicates a lack of instrument stability. The nondetected results for the samples have been marked "UJ".
- Positive ethanol results for samples RES#1-I1-120406, RES#1-I2-120406, RES#4-I1-120406, RES#4-I2-120406, RES#4-I2-120406, RES#4-I2-120406, 81-32-I1-120406, 81-32-I2-120406, and 81-16-I1-120406, 81-16-I2-120406 should be considered quantitative estimates. The responses for this compound exceeded the linear range of the GC/MS instrument for the initial undiluted analyses. The laboratory did not re-analyze the samples at dilutions. The affected results have been marked with "J" qualifiers to indicate that they are quantitative estimates.
- Positive ethanol results for samples RES#5-I2-120606, RES#5-I1-120606, RES#6-I1-120506, RES#6-I2-120506, RES#7-I1-120506, RES#7-I2-120506, RES#8-I1-120506, RES#8-I1-120506, RES#9-I1-120506, and RES#9-I2-120506 should be considered quantitative estimates. The responses for this compound exceeded the linear range of the GC/MS instrument for the initial undiluted analyses. The laboratory did not re-analyze the samples at dilutions. The affected results have been marked with "J" qualifiers to indicate that they are quantitative estimates.
- Positive ethanol results for samples RES#10-I1-120706, RES#10-I2-120706, RES#12-I2-120606, and RES#12-I1-120606should be considered quantitative estimates. The responses for this compound exceeded the linear range of the GC/MS instrument for the initial undiluted analyses. The laboratory did not re-analyze the samples at dilutions. The affected results have been marked with "J" qualifiers to indicate that they are quantitative estimates.

3.1.2 Soil Samples

• Positive acetone and methylene chloride results for samples contained in SDG 208881 are qualitatively invalid due to the presence of these compounds in associated laboratory method and/or field blanks. USEPA protocol requires positive results for common

contaminants, such as acetone or methylene chloride, that are less than or equal to ten times the associated blank contamination level, to be considered qualitatively invalid. Replacing results that are less than the quantitation limit with the quantitation limit has indicated this. Results that are greater than the quantitation limits are marked "U".

• The following positive results and quantitation limits are biased low quantitative estimates, and may be higher than reported. Low recoveries for these compounds were obtained for the associated laboratory control sample analysis. The low recovery indicates inefficiencies with the sample extraction/analytical processes. The positive results for the affected compounds have been marked with "J" qualifiers to indicate that they are biased low quantitative estimates. Quantitation limits are marked "UJ".

Compound	Samples With Qualified Results
Vinyl Chloride	CONED-WSW-022305
Toluene	All Samples
Chlorobenzene	CONED-SSW-022305, CONED-BOT1- 022305, CONED-BOT2-022305
Ethylbenzene	CONED-WSW-022305
Xylenes, (Total)	CONED-SSW-022305, CONED-BOT1- 022305, CONED-BOT2-022305

• The following pesticide compounds were reported by the laboratory at concentrations less than the quantitation limit. Poor precision (greater that 100 % difference between results) was observed for these analytes on the dual chromatographic columns used for sample analysis. The laboratory for reporting purposes used the lower concentration for these compounds. The positive pesticide compounds should be considered non-detected at the quantitation limit. The results have been replaced with the quantitation limit and marked "U".

Sample	Affected Compounds
CONED-SSW-022305	Endosulfan II
CONED-WSW-022305	4,4'-DDT
CONED-BOT1-022305	beta-BHC, gamma-BHC
CONED-BOT2-022305	beta-BHC, Heptachlor epoxide, alpha-Chlordane

• For the following samples, a lack of precision (greater than 40 % difference between results) was observed for this analyte on the dual chromatographic columns used for sample analysis. As required by USEPA protocol, the laboratory for reporting purposes used the lower concentration for these compounds. The result has been marked with "J" qualifiers to indicate that it is a quantitative estimate

Sample	Affected Compounds
CONED-SSW-022305	4,4'-DDT, alpha-Chlordane
CONED-BOT1-022305	4,4'-DDT
CONED-BOT2-022305	Endosulfan sulfate, 4,4'-DDT

• The results for heptachlor epoxide and endosulfan sulfate were reported for sample CONED-BOT1-022305 at a concentration greater than the quantitation limit. Poor precision (greater that 100 % difference between results) was observed for these analytes on the dual chromatographic columns used for sample analysis. The laboratory for reporting purposes used the lower concentration for these compounds. The positive results have been rejected, and should be considered suspect. The results have been marked "R" to indicate that they are suspect.

3.1.1 General Data Qualifiers

• Compounds that were qualitatively identified at concentrations below their respective Quantitation Limits (QLs) have been marked with "J" qualifiers to indicate that they are quantitative estimates.

4.0 INORGANIC DATA

The findings offered in this report are based on a review of the analytical data reported according to New York State Department of Environmental Conservation Analytical Services Protocol (NYSDEC ASP) Category B.

The data validation included an assessment of the following items: chain of custody documentation, holding times, and summaries of laboratory method blank, field blank, and calibration blank results, calibration verification results, matrix spike results, laboratory duplicate analysis results, Inductively Coupled Plasma Emission (ICP) Spectroscopy serial dilution results, ICP interference check sample results and laboratory control sample results.

The inorganic analyses were performed acceptably, and require no qualifying statements, based on the deliverables reviewed. The data should be considered qualitatively and quantitatively valid, based on the items evaluated. Validated and/or qualified results for the samples are provided in Attachment 1.

4.1 INORGANIC DATA QUALIFIERS

- The positive results reported for lead, manganese, mercury, sodium, and vanadium for the samples contained in SDG 208881 are quantitative estimates. The laboratory duplicate precision criterion was exceeded for these analytes. This lack of precision may be due to sample heterogeneity. The positive results for the analytes in these samples have been marked with "J" qualifiers indicate that they are quantitative estimates.
- The antimony and thallium positive results and detection limits for the samples contained in SDG 208881 are biased low quantitative estimates, and may be higher than reported. Low recoveries for these analytes were obtained for the associated matrix spike analysis. The low recoveries indicate the presence of interferences in samples of similar matrix. The positive results for antimony and thallium have been marked with "J" qualifiers to indicate that they are biased low quantitative estimates. Detection limits are marked "UJ".
- The arsenic positive results for the samples contained in SDG 209280 are biased high quantitative estimates, and may be higher than reported. A high recovery for this analyte was obtained for the associated matrix spike analysis. The high recovery indicates the presence of interferences in samples of similar matrix. The positive

- results for arsenic have been marked with "J" qualifiers to indicate that they are biased high quantitative estimates.
- The arsenic positive results and detection limits for the samples contained in SDG 209281 are biased low quantitative estimates, and may be higher than reported. A low recovery for this analyte was obtained for the associated matrix spike analysis. The low recovery indicates the presence of interferences in samples of similar matrix. The positive results for arsenic have been marked with "J" qualifiers to indicate that they are biased low quantitative estimates. Detection limits are marked "UJ".

5.0 SUMMARY

The organic and inorganic analyses described in this analytical data usability summary report were performed acceptably, but required qualifying statements. The aspects of the data that required qualification are identified in this report.

Attachment 1 Analysis Results Forms - Chemtech Sample Delivery Group T5335

Attachment 1 Analysis Results Forms – Spectrum Analytical Sample Delivery Group SA55102 Attachment 1 Analysis Results Forms – Spectrum Analytical Sample Delivery Group SA55245 Attachment 1 Analysis Results Forms – Spectrum Analytical Sample Delivery Group SA55328 Attachment 2 Methodology References

METHODOLOGY REFERENCES

Analysis	Reference
Volatile Organic Compound	"Test Methods for Evaluating Solid Waste, Physical/Chemical Methods (SW-846)", Third Edition, Final (Promulgated) Updates II, IIA, and III, June 1997, Method 8260B
Volatile Organic Compound in Air	"Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air", EPA/625/R-96/010b, second edition, January 1999, Method TO-15
Semivolatile Organic Compounds	"Test Methods for Evaluating Solid Waste, Physical/Chemical Methods (SW-846)", Third Edition, Final (Promulgated) Updates II, IIA, and III, June 1997, Method 8270C
Pesticide Compounds	"Test Methods for Evaluating Solid Waste, Physical/Chemical Methods (SW-846)", Third Edition, Final (Promulgated) Updates II, IIA, and III, June 1997, Method 8081A
Polychlorinated Biphenyl Constituents	"Test Methods for Evaluating Solid Waste, Physical/Chemical Methods (SW-846)", Third Edition, Final (Promulgated) Updates II, IIA, and III, June 1997, Method 8082
Total Metals (Except Mercury)	"Test Methods for Evaluating Solid Waste, Physical/Chemical Methods (SW-846)", Third Edition, Final (Promulgated) Updates II, IIA, and III, June 1997, Method 6010B
Mercury	"Test Methods for Evaluating Solid Waste, Physical/Chemical Methods (SW-846)", Third Edition, Final (Promulgated) Updates II, IIA, and III, June 1997, Method 7470A /7471A
Cyanide	"Test Methods for Evaluating Solid Waste, Physical/Chemical Methods (SW-846)", Third Edition, Final (Promulgated) Updates II, IIA, and III, June 1997, Method 9012A

Table I Samples For Data Validation Review Atlas Park - Parcel B Glendale, New York CHEMTECH Sample Delivery Group T5335

				ANALYSES PERFORMED
SAMPLE I.D.	LABORATORY		DATE	
	I.D.		SAMPLED	MET
Bldg 28 Pipe Trench-North End	T5335	-	10/19/2005	×
Bldg 28 Pipe Trench-South End	T5335	7	10/19/2005	×
Bldg 28 Pipe Trench-Center	T5335	33	10/19/2005	×

MET Arsenic, Barium, Chromium, Copper, Nickel, Selenium, Vanadium, Zinc



284 Sheffield Street, Mountainside, NJ 07092 Phone: 908-789-8900 Fax: 908-789-8922

Report of Analysis

Client: Langua Engineering and Environmental Ser Date Collected: 10/19/2005 Atlas Park 5555107 Date Received: 10/21/2005 Project:

SDG No.: T5335 Client Sample **BLDG28PIPETRENCH-NORTHEN** ID: Lab Sample ID: Matrix: SOIL

T5335-01 % Solids: 85.30

CAS No.	Analyte	Conc.	Qualifier	Units	DL	Dilution	Date Prep	Date Anal.	Method
7440-38-2	Arsenic	_{5.280} √		mg/Kg	0.460	1	10/25/2005	10/26/2005	EPA SW-846 6010
7440-39-3	Barium	95.3		mg/Kg	0.084	1	10/25/2005	10/26/2005	EPA SW-846 6010
7440-47-3	Chromium	13.6		mg/Kg	0.103	1	10/25/2005	10/26/2005	EPA SW-846 6010
7440-50-8	Copper	58.2		mg/Kg	0.076	1	10/25/2005	10/26/2005	EPA SW-846 6010
7440-02-0	Nickel	11.5		mg/Kg	0.143	1	10/25/2005		EPA SW-846 6010
782-49-2	Selenium	0.400	U	mg/Kg	0.400	1	10/25/2005	10/26/2005	EPA SW-846 6010
440-62-2	Vanadium	20.6		mg/Kg		1	10/25/2005		EPA SW-846 6010
440-66-6	Zinc	151		mg/Kg		1	10/25/2005	• •	EPA SW-846 6010
Comments:				_ -					

U = Not Detected

DL = Method Detection Limit or Instrument Detection Limit

J = Estimated Value

B = Analyte Found In Associated Method Blank

N = Presumptive Evidence of a Compound



284 Sheffield Street, Mountainaide, NJ 07092 Phone: 908-789-5900 Fax: 908-789-8822

Report of Analysis

Client: Langan Engineering and Environmental Ser

Date Collected:

10/19/2005

Project:

Atlas Park 5555107

Date Received:

10/21/2005

Client Sample

BLDG28PIPETRENCH-SOUTHEN

SDG No.: Matrix: T5335

ID: Lab Sample ID:

T5335-02

% Solids:

SOIL 86.90

CAS No.	Analyte	Conc.	Qualifier	Units	DL	Dilution	Date Prep	Date Anal.	Method
7440-38-2	Arsenic	5.190	•	mg/Kg	0.442	1	10/25/2005	10/26/2005	EPA SW-846 6010
7440-39-3	Barium	102		mg/Kg	0.081	1	10/25/2005	10/26/2005	EPA SW-846 6010
7440-4 7 -3	Chromium	14.9		mg/Kg	0.099	1	10/25/2005	10/26/2005	EPA SW-846 6010
7440-50-8	Соррег	64.9		mg/Kg	0.073	1	10/25/2005	10/26/2005	EPA SW-846 6010
7440-02-0	Nickel	13.5		mg/Kg	0.138	1	10/25/2005	10/26/2005	EPA SW-846 6010
7782-49-2	Selenium	0.403 /	J .	mg/Kg	0.385	1	10/25/2005	10/26/2005	EPA SW-846 6010
7440-62-2	Vanadium	22.7 /		mg/Kg	0.068	1	10/25/2005	10/26/2005	EPA SW-846 6010
7440-66-6	Zinc	234√		mg/Kg	0.081	1	10/25/2005	10/26/2005	EPA SW-846 6010

3m 2004

B = Analyte Found In Associated Method Blank

N = Presumptive Evidence of a Compound



284 Sheffield Street, Mountainside, NJ 07092 Phone: 905-789-8900 Fax: 906-789-8922

Report of Analysis

Client: Langan Engineering and Environmental Ser

Date Collected:

10/19/2005

Project:

Atlas Park 5555107

Date Received:

10/21/2005

Client Sample

BLDG28PIPETRENCH-CENTER

SDG No.:

T5335

ID: Lab Sample ID:

ile ID: T5335-03

Matrix:

SOIL

%	Solids:
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87.40

CAS No.	Analyte	Conc.	Qualifier	Units	DL	Dilution	Date Prep	Date Anal.	Method
7440-38-2	Arsenic	22.4		mg/Kg	0.444	1	10/25/2005	10/26/2005	EPA SW-846 6010
7440-39-3	Barium	247		mg/Kg	0.082	1	10/25/2005	10/26/2005	EPA SW-846 6010
7440-47-3	Chromium	13.7		mg/Kg	0.100	1.	10/25/2005	10/26/2005	EPA SW-846 6010
7440-50-8	Copper	168		mg/Kg	0.074	1	10/25/2005	10/26/2005	EPA SW-846 6010
7440-02-0	Nickel	11.6		mg/Kg	0.138	1	10/25/2005	10/26/2005	EPA SW-846 6010
7782-49-2	Selenium	0.386	U	mg/Kg	0.386	1	10/25/2005	10/26/2005	EPA SW-846 6010
7440-62-2	Vanadium	37.2		mg/Kg	0.068	1	10/25/2005	10/26/2005	EPA SW-846 6010
7440-66-6	Zinc	216		mg/Kg	0.082	1	10/25/2005	10/26/2005	EPA SW-846 6010
Comments:								,	



U = Not Detected

DL = Method Detection Limit or Instrument Detection Limit

J = Estimated Value

B = Analyte Found In Associated Method Blank

N = Presumptive Evidence of a Compound