Table 3-1
Basis for Receptor-Specific P&W Screening Levels by Exposure Medium
P&W VCAP, Connecticut Facilities

	Exposure Media/Pathways					
Exposure Media:	**Soil**	**Trench Air**	**Indoor Air**	**Surface Water**	**Sediment**	**Groundwater**
Exposure Pathways:	**Ingestion and Dermal**	**Inhalation**	**Inhalation**	**Ingestion and Dermal**	**Ingestion and Dermal**	**Dermal**
Basis for P&W Screening Level Approach:	USEPA SSLs for Ingestion[1]	USEPA SSLs for Inhalation	Direct Measurement and CT Groundwater Volatilization RSRs[2]	CT Criteria	USEPA SSLs for Ingestion[1]	USEPA (1989)
Target Risk/ Concentration	TCR[3] = 10^{-6}; THQ[4] = 1.0	OSHA PELs/Other Occupational Exposure Levels	1% of the lowest Occupational Exposure Levels; TCR[3] = 10^{-6} and THQ[4] = 1.0	N/A[5]	TCR[3] = 10^{-6}; THQ[4] = 1.0	TCR[3] = 10^{-6}; THQ[4] = 1.0
Receptors						
Excavating Laborers	✓	✓				✓
Groundskeepers	✓					
Indoor Workers			✓			
Maintenance Workers	✓	✓	✓			✓
Samplers	✓		✓	✓	✓	
Trespassers	✓			✓	✓	
On-Site Recreators	✓		✓			
Off-Site Recreators				✓	✓	
Off-Site Residents			✓			

Notes:

1. *Only ingestion effects were considered for VOCs. Both ingestion and dermal effects were considered for all other chemicals.*
2. *Direct indoor air measurements will be conducted on-site and compared to 1% of the lowest occupational exposure levels to evaluate potential indoor air exposure. Off-site exposure will be evaluated using CT RSRs.*
3. *TCR=Target Cancer Risk*
4. *THQ=Target Hazard Quotient*
5. *N/A=Not applicable*

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Table 3-2
Generic P&W Soil Screening Levels (SSLs) Based on Trench Air Inhalation
P&W VCAP, Connecticut Facilities

Parameter[1]	Generic P&W SSL Based on Trench Air Inhalation - Excavating Laborers and Maintenance Workers (mg/kg)
VOCs	
1,1,1,2-Tetrachloroethane	NC [4]
1,1,1-Trichloroethane	1,200 [2]
1,1,2,2-Tetrachloroethane	2,000 [2]
1,1,2-Trichloroethane	1,800 [2]
1,1-Dichloroethane	1,700 [2]
1,1-Dichloroethene	1,500 [2]
1,2,3-Trichloropropane	1,700 [2]
1,2-Dichloroethane	1,800 [2]
1,2-Dichloroethene (cis)	1,200 [2]
1,2-Dichloroethene (trans)	3,100 [2]
1,2-Dichloropropane	1,100 [2]
1,3-Dichloropropene	690
1,4-Dioxane	27,270 [6]
2-Butanone (MEK)	34,000 [2]
Acetone	100,000 [2]
Acetonitrile	162,610
Acrylonitrile	4,000
Benzene	827
Bromodichloromethane (Dichlorobromomethane)	NC [4]
Bromoform	1,900 [2]
Carbon Disulfide	1,520 [2]
Carbon Tetrachloride	1,100 [2]
Chlorobenzene	680 [2]
Chloroethane	1,600 [2]
Chloroform	2,800 [2]
Chloroprene (beta-Chloroprene)	6,820 [6]
Dichlorodifluoromethane	340 [2]
Ethylbenzene	400 [2]
Ethylene Dibromide (EDB)	11,700
Isobutyl Alcohol (Isobutanol)	40,000 [2]
Methacrylonitrile	2,700
Methyl bromide (Bromomethane)	1,300
Methyl isobutyl ketone (4-Methyl-2-pentanone)	17,000
Methyl-tert-butyl-ether (MTBE)	1,800 [2,5]
Methylene Chloride	2,400 [2]
Propionitrile	1,060 [6]
Styrene	1,500 [2]
Tetrachloroethene	230 [2]
Toluene	650 [2]
Trichloroethene	1,300 [2,3]
Trichlorofluoromethane	1,980 [2]

Table 3-2
Generic P&W Soil Screening Levels (SSLs) Based on Trench Air Inhalation
P&W VCAP, Connecticut Facilities

Parameter[1]	Generic P&W SSL Based on Trench Air Inhalation - Excavating Laborers and Maintenance Workers (mg/kg)
Vinyl Acetate	9,200 [2]
Vinyl Chloride	272
Xylenes	410 [2]

Notes:

1. *List includes VOCs for which USEPA has developed Soil Screening Levels; and VOCs detected in any medium in prior sampling conducted at the VCAP facilities that are also on the VCAP analytical list (included as Appendix B of Oct./Nov. Progress Report).*
2. *SSL based on Soil Saturation Concentration (C-sat) when EPA or calculated health-based SSL was greater than C-sat.*
3. *Note that Unit Risk Factor used to derive SSL was a 1994 Interim toxicity criteria provided by the Superfund Health Risk Technical Support Center, ECAO. However, final SSL based on C-sat since calculated health-based value was greater than C-sat.*
4. *NC - No occupational air exposure levels were available, hence a SSL could not be calculated. If this chemical is detected at the VCAP facilities, an occupational air exposure level and a SSL may later be developed.*
5. *The calculated health-based SSL was compared to C-sat for ethylether, since a C-sat value for MTBE was not available.*
6. *Published values for volatilization factor (VF) and C-sat were not available. Used VF and C-sat for vinyl chloride, since the VF for vinyl chloride is the most health-protective.*

Table 3-3
Generic P&W Groundwater Screening Levels (SLs) Based on Trench Air Inhalation
P&W VCAP, Connecticut Facilities

Parameter[1]	Generic P&W SL for Excavating Laborers and Maintenance Workers (µg/l)
VOCs	
1,1,1,2-Tetrachloroethane	NC [3]
1,1,1-Trichloroethane	1,330,000 [2]
1,1,2,2-Tetrachloroethane	943,941
1,1,2-Trichloroethane	1,193,174
1,1-Dichloroethane	5,060,000 [2]
1,1-Dichloroethene	523,564
1,2,3-Trichloropropane	7,852,721 [4]
1,2-Dichloroethane	5,454,546
1,2-Dichloroethene (cis)	3,500,000 [2]
1,2-Dichloroethene (trans)	3,500,000 [2]
1,2-Dichloropropane	2,800,000 [2]
1,3-Dichloropropene	119,165
1,4-Dioxane	22,782,641
2-Butanone (MEK)	23,993,691
Acetone	109,082,235
Acetonitrile	8,781,048
Acrylonitrile	134,936
Benzene	78,743
Bromodichloromethane (Dichlorobromomethane)	NC [3]
Bromoform	134,589
Carbon Disulfide	1,649,889
Carbon Tetrachloride	793,000 [2]
Chlorobenzene	472,000 [2]
Chloroethane	5,740,000 [2]
Chloroform	1,289,326
Chloroprene (beta-Chloroprene)	2,355,816 [4]
Dichlorodifluoromethane	280,000 [2]
Ethylbenzene	169,000 [2]
Ethylene dibromide (EDB)	3,400,000 [2]
Isobutyl Alcohol (Isobutanol)	7,852,721
Methacrylonitrile	78,449 [4]
Methyl Bromide (Bromomethane)	102,204
Methyl isobutyl ketone (4-Methyl-2-pentanone)	11,894,850
Methyl-t-butyl ether (MTBE)	51,600 [2]
Methylene Chloride	13,000,000 [2]
Propionitrile	366,460 [4]
Styrene	310,000 [2]
Tetrachloroethene	200,000 [2]
Toluene	526,000 [2]
Trichloroethene	1,100,000 [2]
Trichlorofluoromethane	1,100,000 [2]

Table 3-3
Generic P&W Groundwater Screening Levels (SLs) Based on Trench Air Inhalation
P&W VCAP, Connecticut Facilities

Parameter[1]	Generic P&W SL for Excavating Laborers and Maintenance Workers (µg/l)
Vinyl Acetate	916,151 [4]
Vinyl Chloride	68,058
Xylenes	200,000 [2]

Notes:

1. *List includes VOCs for which USEPA has developed Soil Screening Levels; and VOCs detected in any medium in prior sampling conducted at the VCAP facilities that are also on the VCAP analytical list (included as Appendix B of Oct./Nov. Progress Report).*
2. *Indicates that the calculated health-based SL was greater than the aqueous Solubility Limit for the chemical. Therefore, the proposed SL is the chemical's Solubility Limit.*
3. *NC - No occupational air exposure levels were available, hence a SL could not be calculated. If this chemical is detected at the VCAP facilities, an occupational air exposure and a SL may be developed later.*
4. *Screening level computed using the most conservative/highest Henry's Law constant (specifically, constant for Dichlorodifluoromethane), since the Henry's Law constant was not available for this chemical.*

Table 3-4
Generic P&W Indoor Air Screening Levels (SLs)
P&W VCAP, Connecticut Facilities

Parameter[1]	Most Stringent Occupational Indoor Air Level[2] (mg/m³)	Generic P&W Indoor Air SLs[4] (mg/m³)
VOCs		
1,1,1,2-Tetrachloroethane	NA [3]	NA [3]
1,1,1-Trichloroethane	1900	19
1,1,2,2-Tetrachloroethane	6.9	0.069
1,1,2-Trichloroethane	45	0.45
1,1-Dichloroethane	400	4
1,1-Dichloroethene	20	0.2
1,2,3-Trichloropropane	60	0.6
1,2-Dichloroethane	4	0.04
1,2-Dichloroethene (cis)	790	7.9
1,2-Dichloroethene (trans)	790	7.9
1,2-Dichloropropane	347	3.47
1,3-Dichloropropene	4.5	0.045
1,4-Dioxane	90	0.9
2-Butanone (MEK)	590	5.9
Acetone	590	5.9
Acetonitrile	34	0.34
Acrylonitrile	4.3	0.043
Benzene	0.32	0.0032
Bromodichloromethane (Dichlorobromomethane)	NA [3]	NA [3]
Bromoform	5	0.05
Carbon Disulfide	3	0.03
Carbon Tetrachloride	31	0.31
Chlorobenzene	46	0.46
Chloroethane	264	2.64
Chloroform	49	0.49
Chloroprene (beta-Chloroprene)	36	0.36
Dichlorodifluoromethane	4950	49.5
Ethylbenzene	434	4.34
Ethylene Dibromide (EDB)	156	1.56
Isobutyl Alcohol (Isobutanol)	150	1.5
Methacrylonitrile	2.7	0.027
Methyl Bromide (Bromomethane)	3.9	0.039
Methyl isobutyl ketone (4-Methyl-2-pentanone)	205	2.05
Methyl-tert-butyl-ether (MTBE)	144	1.44
Methylene Chloride	174	1.74
Propionitrile	14	0.14
Styrene	85	0.85
Tetrachloroethene	170	1.7
Toluene	188	1.88
Trichloroethene	269	2.69
Trichlorofluoromethane	5600	56

Table 3-4
Generic P&W Indoor Air Screening Levels (SLs)
P&W VCAP, Connecticut Facilities

Parameter[1]	Most Stringent Occupational Indoor Air Level[2] (mg/m^3)	Generic P&W Indoor Air SLs[4] (mg/m^3)
Vinyl Acetate	35	0.35
Vinyl chloride	2.6	0.026
Xylenes	434	4.34

Notes:

1. *List includes VOCs for which USEPA has developed Soil Screening Levels; and VOCs detected in any medium in prior sampling conducted at the VCAP facilities that are also on the VCAP analytical list (included as Appendix B of Oct./Nov. Progress Report).*
2. *Lowest of OSHA PELs, NIOSH RELs, and ACGIH TLVs were used (ACGIH Guide to Occupational Exposure Values, 1998).*
3. *NA - Indicates value not available. If this compound is detected at the VCAP facilities, an occupational air exposure level may be later developed.*
4. *Proposed screening level is 1% of a chemical's most stringent occupational indoor air level.*

Table 3-5
Generic P&W Off-Site Groundwater Screening Levels (SLs)
Based on Residential Indoor Air Inhalation
P&W VCAP, Connecticut Facilities

Parameter[1]	Generic P&W Off-Site Groundwater SLs[2] (µg/L)
VOCs	
1,1,1,2-Tetrachloroethane	12
1,1,1-Trichloroethane	20,400
1,1,2,2-Tetrachloroethane	23
1,1,2-Trichloroethane	8,000
1,1-Dichloroethane	34,600
1,1-Dichloroethene	1
1,2,3-Trichloropropane	NT [3]
1,2-Dichloroethane	21
1,2-Dichloroethene (cis)	2,732 [2]
1,2-Dichloroethene (trans)	5,465 [2]
1,2-Dichloropropane	14
1,3-Dichloropropene	6
1,4-Dioxane	17,754 [2]
2-Butanone (MEK)	50,000
Acetone	50,000
Acetonitrile	3,088,611 [2]
Acrylonitrile	104 [2]
Benzene	215
Bromodichloromethane (Dichlorobromomethane)	23 [2]
Bromoform	920
Carbon Disulfide	212 [2]
Carbon Tetrachloride	16
Chlorobenzene	1,800
Chloroethane	NT [3]
Chloroform	287
Chloroprene (beta-Chloroprene)	NT [3]
Dichlorodifluoromethane	47 [2,4]
Ethylbenzene	50,000
Ethylene Dibromide (EDB)	4
Isobutyl Alcohol (Isobutanol)	246 [2,4]
Methacrylonitrile	5 [5]
Methyl Bromide (Bromomethane)	226 [2]
Methyl isobutyl ketone (4-Methyl-2-pentanone)	50,000
Methyl-tert-butyl-ether (MTBE)	50,000
Methylene Chloride	50,000
Propionitrile	NT [3]
Styrene	580
Tetrachloroethene	1,500
Toluene	23,500
Trichloroethene	219
Trichlorofluoromethane	4,334 [2]

Table 3-5
Generic P&W Off-Site Groundwater Screening Levels (SLs)
Based on Residential Indoor Air Inhalation
P&W VCAP, Connecticut Facilities

Parameter[1]	Generic P&W Off-Site Groundwater SLs[2] (µg/L)
Vinyl Acetate	47 [2,4]
Vinyl Chloride	2
Xylenes	21,300

Notes:

1. *List includes VOCs for which USEPA has developed Soil Screening Levels; and VOCs detected in any medium in prior sampling conducted at the VCAP facilities that are also on the VCAP analytical list (included as Appendix B of Oct./Nov. Progress Report).*
2. *Same as CT groundwater volatilization RSR; for chemicals with no published numeric RSR values, a value was calculated using CT RSR methodology and default input data.*
3. *NT - Toxicity factor not available to calculate SL.*
4. *Screening level computed using the most conservative/highest Henry's Law constant (specifically, constant for Dichlorodifluoromethane), since the Henry's Law constant was not available for this chemical.*
5. *The VCAP PQL is used as the screening level since the health-based SL was lower than the PQL.*

Table 3-6
Generic P&W Surface Water Screening Levels (SLs)
P&W VCAP, Connecticut Facilities

Parameter[4]	Aquatic Life/Human Health-Based Surface Water SLs[5] (µg/l)	VCAP Practical Quantitation Limit (PQL) (µg/l)	Generic P&W Surface Water SLs[6] (µg/l)
VOCs			
1,1,1,2-Tetrachloroethane	NP[7]	1	1 [8]
1,1,1-Trichloroethane	NP[7]	5	5 [8]
1,1,2,2-Tetrachloroethane	0.17 [1]	0.5	0.5
1,1,2-Trichloroethane	0.6 [1]	5	5
1,1-Dichloroethane	NP[7]	5	5 [8]
1,1-Dichloroethene	0.057 [1]	1	1
1,2,3-Trichloropropane	NP[7]	5	5 [8]
1,2-Dichloroethane	0.38 [1]	1	1
1,2-Dichloroethene (cis)	NP[7]	5	5 [8]
1,2-Dichloroethene (trans)	NP[7]	5	5 [8]
1,2-Dichloropropane	NP[7]	5	5 [8]
1,3-Dichloropropene	10 [1]	0.5	10
1,4-Dioxane	NP[7]	150	150 [8]
2-Butanone (MEK)	NP[7]	100	100 [8]
Acetone	NP[7]	100	100 [8]
Acetonitrile	NP[7]	100	100 [8]
Acrylonitrile	0.059 [1]	0.5	0.5
Benzene	1.2 [1]	1	1.2
Bromodichloromethane (Dichlorobromomethane)	0.27 [1]	5	5
Bromoform	4.3 [1]	4	4.3
Carbon Disulfide	NP[7]	5	5 [8]
Carbon Tetrachloride	0.25 [1]	5	5
Chlorobenzene	680 [1]	5	680
Chloroethane	NP[7]	10	10 [8]
Chloroform	5.7 [1]	5	5.7
Chloroprene (beta-Chloroprene)	NP[7]	5	5 [8]
Dichlorodifluoromethane	NP[7]	5	5 [8]
Ethylbenzene	3100 [1]	5	3100
Ethylene Dibromide (EDB)	NP[7]	0.05	0.05 [8]
Isobutyl Alcohol (Isobutanol)	NP[7]	50	50 [8]
Methacrylonitrile	NP[7]	5	5 [8]
Methyl Bromide (Bromomethane)	48 [1]	10	48
Methyl isobutyl ketone (4-Methyl-2-pentanone)	NP[7]	5	5 [8]
Methyl-tert-butyl-ether (MTBE)	NP[7]	5	5 [8]
Methylene Chloride	4.7 [1]	5	5
Propionitrile	NP[7]	5	5 [8]
Styrene	NP[7]	5	5 [8]
Tetrachloroethene	0.8 [1]	5	5
Toluene	6800 [1]	5	6800
Trichloroethene	2.7 [1]	5	5
Trichlorofluoromethane	NP[7]	5	5 [8]
Vinyl Acetate	NP[7]	5	5 [8]
Vinyl Chloride	2 [1]	2	2
Xylenes	NP[7]	5	5 [8]

Table 3-6
Generic P&W Surface Water Screening Levels (SLs)
P&W VCAP, Connecticut Facilities

Parameter[4]	Aquatic Life/Human Health-Based Surface Water SLs[5] (µg/l)	VCAP Practical Quantitation Limit (PQL) (µg/l)	Generic P&W Surface Water SLs[6] (µg/l)
SVOCs			
1,2,4-Trichlorobenzene	NP[7]	10	10 [8]
1,2-Dichlorobenzene	2700 [1]	10	2700
1,3-Dichlorobenzene	400 [1]	10	400
1,4-Dichlorobenzene	400 [1]	10	400
2,4,5-Trichlorophenol	NP[7]	10	10 [8]
2,4,6-Trichlorophenol	2.1 [1]	10	10
2,4-Dichlorophenol	93 [1]	10	93
2,4-Dimethylphenol	NP[7]	10	10 [8]
2,4-Dinitrophenol	70 [1]	50	70
2,4-Dinitrotoluene	0.11 [1]	10	10
2,6-Dinitrotoluene	NP[7]	10	10 [8]
2-Chlorophenol	NP[7]	10	10 [8]
2-Methylnaphthalene	NP[7]	10	10 [8]
2-Methylphenol	NP[7]	10	10 [8]
3,3-Dichlorobenzidines	0.04 [1]	20	20
4-Nitrophenol	NP[7]	50	50 [8]
7,12-Dimethylbenzo(a)anthracene	NP[7]	10	10 [8]
Acenapthene	NP[7]	10	10 [8]
Acetophenone	NP[7]	10	10 [8]
Anthracene	9600 [1]	10	9600
Benzo(a)anthracene	0.0028 [1]	0.06	0.06
Benzo(a)pyrene	0.0028 [1]	0.2	0.2
Benzo(b)flouranthene	0.0028 [1]	0.08	0.08
Benzo(g,h,i)perylene	0.0028 [1]	10	10
Benzo(k)flouranthene	0.0028 [1]	0.3	0.3
Benzyl alcohol	NP[7]	20	20 [8]
Bis(2-chloroethoxy)methane	NP[7]	10	10 [8]
Bis(2-chloroethyl)ether	0.031 [1]	10	10
Bis(2-ethylhexyl)phthalate	1.8 [1]	2	2
Butyl benzyl phthalate	NP[7]	10	10 [8]
Carbazole	NP[7]	10	10 [8]
Chrysene	0.0028 [1]	10	10
Di-n-butyl phthalate	2700 [1]	10	2700
Di-n-octyl phthalate	NP[7]	10	10 [8]
Dibenzo(a,h)anthracene	0.0028 [1]	10	10
Dibenzofuran	NP[7]	10	10 [8]
Diethylphthalate	23000 [1]	10	23000
Dimethoate	NP[7]	10	10 [8]
Dimethylphthalate	313000 [1]	10	313000
Diphenylamine	NP[7]	10	10 [8]
Disulfoton	NP[7]	10	10 [8]
Flouranthene	300 [1]	10	300
Fluorene	1300 [1]	10	1300
Hexachlorobenzene	0.00075 [1]	0.077	0.077

Table 3-6
Generic P&W Surface Water Screening Levels (SLs)
P&W VCAP, Connecticut Facilities

Parameter[4]	Aquatic Life/Human Health-Based Surface Water SLs[5] (µg/l)	VCAP Practical Quantitation Limit (PQL) (µg/l)	Generic P&W Surface Water SLs[6] (µg/l)
Hexachlorocyclopentadiene	240 [1]	10	240
Hexachloroethane	1.9 [1]	3	3
Indeno(1,2,3-cd)pyrene	0.0028 [1]	10	10
Isophorone	8.4 [1]	10	10
N-Nitrosodi-n-propylamine	NP[7]	10	10 [8]
N-Nitroso-dimethylamine	0.00069 [1]	10	10
N-Nitroso-diphenylamine	5 [1]	10	10
Naphthalene	NP[7]	10	10 [8]
Nitrobenzene	17 [1]	10	17
o,o,o-triethyl phosphorothioate	NP[7]	10	10 [8]
Pentachloroethane	NP[7]	10	10 [8]
Pentachlorophenol	0.28 [1]	1	1
Phenacetine	NP[7]	10	10 [8]
Phenol	NP[7]	10	10 [8]
Phorate	NP[7]	10	10 [8]
Pyrene	960 [1]	10	960
Pyridine	NP[7]	10	10 [8]
Pesticides/PCBs			
2,4-D. (2,4-Dichlorophenoxyacetic acid)	NP[7]	70	70 [8]
Alachlor	NP[7]	2	2 [8]
Aldrin	0.00013 [1]	0.05	0.05
alpha-HCH (alpha-BHC)	NP[7]	0.05	0.05 [8]
beta-HCH (beta-BHC)	NP[7]	0.05	0.05 [8]
Chlordane	0.00057 [1]	0.05	0.05
DDD	0.00083 [1]	0.1	0.1
DDE	0.00059 [1]	0.1	0.1
DDT	0.00059 [1]	0.1	0.1
Dieldrin	0.00014 [1]	0.002	0.002
Endosulfan	0.056 [2]	0.05	0.056
Endosulfan Sulfate	0.93 [1]	0.1	0.93
Endrin	0.0023 [2]	0.1	0.1
Endrin Aldehyde	0.76 [1]	0.1	0.76
Endrin Ketone	NP[7]	0.1	0.1 [8]
Famphur	NP[7]	10	10 [8]
gamma-BHC (Lindane)	0.019 [1]	0.05	0.05
Heptachlor	0.00021 [1]	0.05	0.05
Heptachlor Epoxide	0.0001 [1]	0.05	0.05
Methoxychlor	NP[7]	0.5	0.5 [8]
PCBs	4.40E-05 [1]	0.5	0.5
Toxaphene	0.0002 [2]	1	1
Inorganics			
Aluminum	NP[7]	200	200 [8]
Antimony	14 [1]	6	14
Arsenic	NP[7]	4	4 [8]
Barium	NP[7]	200	200 [8]

Table 3-6
Generic P&W Surface Water Screening Levels (SLs)
P&W VCAP, Connecticut Facilities

Parameter[4]	Aquatic Life/Human Health-Based Surface Water SLs[5] (µg/l)	VCAP Practical Quantitation Limit (PQL) (µg/l)	Generic P&W Surface Water SLs[6] (µg/l)
Beryllium	0.0077 [1]	4	4
Cadmium	0.66 [2]	5	5
Chromium (total)	NP[7]	10	10 [8]
Chromium (VI)	11 [2]	10	11
Cobalt	NP[7]	50	50 [8]
Copper	14.3 [3]	25	25
Cyanide	5.2 [2]	5	5.2
Iron	NP[7]	100	100 [8]
Lead	1.3 [2]	3	3
Magnesium	NP[7]	5,000	5,000 [8]
Manganese	NP[7]	15	15 [8]
Mercury	0.012 [2]	0.2	0.2
Nickel	88 [2]	40	88
Selenium	5 [2]	5	5
Silver	1.2 [3]	10	10
Thallium	1.7 [1]	5	5
Tin	NP[7]	250	250 [8]
Titanium	NP[7]	10	10 [8]
Vanadium	NP[7]	50	50 [8]
Zinc	12.3 [2]	20	20

Notes:

1. *State of Connecticut's human health-based criteria that is protective of consumption of water and organisms.*
2. *State of Connecticut's aquatic life criteria for freshwater that is protective of chronic health effects.*
3. *State of Connecticut's aquatic life criteria for freshwater that is protective of acute health effects.*
4. *List includes chemicals/analytes for which USEPA has developed Soil Screening Levels; and chemicals/analytes detected in any medium in prior sampling conducted at the VCAP facilities that are also on the VCAP analytical list (included as Appendix B of Oct./Nov. Progress Report).*
5. *Lower of the aquatic life (freshwater) and the protection of human health (consumption of both water and organisms) criteria promulgated by the State of Connecticut.*
6. *The PQL is used as the screening level, if the aquatic life/human health-based screening level was lower than the PQL.*
7. *NP - No surface water criteria has been promulgated by the State of Connecticut for this chemical.*
8. *Aquatic life/human health-based screening level not available, hence the PQL will be used as a conservative screening level.*

Table 3-7
Generic P&W Groundwater Screening Levels (SLs) Based on Surface Water Protection
P&W VCAP, Connecticut Facilities

Parameter[1]	Connecticut's Groundwater Criteria Based on Surface Water Protection[2] (µg/l)	VCAP Practical Quantitation Limit (PQL) (µg/l)	Generic P&W Groundwater SLs Based on Surface Water Protection (µg/l)
VOCs			
1,1,1,2-Tetrachloroethane	NP [3]	1	10 [4]
1,1,1-Trichloroethane	62,000	5	62,000
1,1,2,2-Tetrachloroethane	110	0.5	110
1,1,2-Trichloroethane	1,260	5	1,260
1,1-Dichloroethane	NP [3]	5	50 [4]
1,1-Dichloroethene	96	1	96
1,2,3-Trichloropropane	NP [3]	5	50 [4]
1,2-Dichloroethane	2,970	1	2,970
1,2-Dichloroethene (cis)	NP [3]	5	50 [4]
1,2-Dichloroethene (trans)	NP [3]	5	50 [4]
1,2-Dichloropropane	NP [3]	5	50 [4]
1,3-Dichloropropene	34,000	0.5	34,000
1,4-Dioxane	NP [3]	150	1,500 [4]
2-Butanone (MEK)	NP [3]	100	1,000 [4]
Acetone	NP [3]	100	1,000 [4]
Acetonitrile	NP [3]	100	1,000 [4]
Acrylonitrile	20	0.5	20
Benzene	710	1	710
Bromodichloromethane (Dichlorobromomethane)	NP [3]	5	50 [4]
Bromoform	10,800	4	10,800
Carbon Disulfide	NP [3]	5	50 [4]
Carbon Tetrachloride	132	5	132
Chlorobenzene	420,000	5	420,000
Chloroethane	NP [3]	10	100 [4]
Chloroform	14,100	5	14,100
Chloroprene (beta-Chloroprene)	NP [3]	5	50 [4]
Dichlorodifluoromethane	NP [3]	5	50 [4]
Ethylbenzene	580,000	5	580,000
Ethylene dibromide (EDB)	NP [3]	0.05	0.5 [4]
Isobutyl alcohol (Isobutanol)	NP [3]	50	500 [4]
Methacrylonitrile	NP [3]	5	50 [4]
Methyl Bromide (Bromomethane)	NP [3]	10	100 [4]
Methyl isobutyl ketone (4-Methyl-2-pentanone)	NP [3]	5	50 [4]
Methyl-tert-butyl-ether (MTBE)	NP [3]	5	50 [4]
Methylene Chloride	48,000	5	48,000
Propionitrile	NP [3]	5	50 [4]
Styrene	NP [3]	5	50 [4]
Tetrachloroethene	88	5	88
Toluene	4,000,000	5	4,000,000
Trichloroethene	2,340	5	2,340
Trichlorofluoromethane	NP [3]	5	50 [4]
Vinyl Acetate	NP [3]	5	50 [4]
Vinyl Chloride	15,750	2	15,750
Xylenes	NP [3]	5	50 [4]

Table 3-7
Generic P&W Groundwater Screening Levels (SLs) Based on Surface Water Protection
P&W VCAP, Connecticut Facilities

Parameter[1]	Connecticut's Groundwater Criteria Based on Surface Water Protection[2] (µg/l)	VCAP Practical Quantitation Limit (PQL) (µg/l)	Generic P&W Groundwater SLs Based on Surface Water Protection (µg/l)
VOCs			
1,1,1,2-Tetrachloroethane	NP [3]	1	10 [4]
1,1,1-Trichloroethane	62,000	5	62,000
1,1,2,2-Tetrachloroethane	110	0.5	110
1,1,2-Trichloroethane	1,260	5	1,260
1,1-Dichloroethane	NP [3]	5	50 [4]
1,1-Dichloroethene	96	1	96
1,2,3-Trichloropropane	NP [3]	5	50 [4]
1,2-Dichloroethane	2,970	1	2,970
1,2-Dichloroethene (cis)	NP [3]	5	50 [4]
1,2-Dichloroethene (trans)	NP [3]	5	50 [4]
1,2-Dichloropropane	NP [3]	5	50 [4]
1,3-Dichloropropene	34,000	0.5	34,000
1,4-Dioxane	NP [3]	150	1,500 [4]
2-Butanone (MEK)	NP [3]	100	1,000 [4]
Acetone	NP [3]	100	1,000 [4]
Acetonitrile	NP [3]	100	1,000 [4]
Acrylonitrile	20	0.5	20
Benzene	710	1	710
Bromodichloromethane (Dichlorobromomethane)	NP [3]	5	50 [4]
Bromoform	10,800	4	10,800
Carbon Disulfide	NP [3]	5	50 [4]
Carbon Tetrachloride	132	5	132
Chlorobenzene	420,000	5	420,000
Chloroethane	NP [3]	10	100 [4]
Chloroform	14,100	5	14,100
Chloroprene (beta-Chloroprene)	NP [3]	5	50 [4]
Dichlorodifluoromethane	NP [3]	5	50 [4]
Ethylbenzene	580,000	5	580,000
Ethylene dibromide (EDB)	NP [3]	0.05	0.5 [4]
Isobutyl alcohol (Isobutanol)	NP [3]	50	500 [4]
Methacrylonitrile	NP [3]	5	50 [4]
Methyl Bromide (Bromomethane)	NP [3]	10	100 [4]
Methyl isobutyl ketone (4-Methyl-2-pentanone)	NP [3]	5	50 [4]
Methyl-tert-butyl-ether (MTBE)	NP [3]	5	50 [4]
Methylene Chloride	48,000	5	48,000
Propionitrile	NP [3]	5	50 [4]
Styrene	NP [3]	5	50 [4]
Tetrachloroethene	88	5	88
Toluene	4,000,000	5	4,000,000
Trichloroethene	2,340	5	2,340
Trichlorofluoromethane	NP [3]	5	50 [4]
Vinyl Acetate	NP [3]	5	50 [4]
Vinyl Chloride	15,750	2	15,750
Xylenes	NP [3]	5	50 [4]

Table 3-7
Generic P&W Groundwater Screening Levels (SLs) Based on Surface Water Protection
P&W VCAP, Connecticut Facilities

Parameter[1]	Connecticut's Groundwater Criteria Based on Surface Water Protection[2] (µg/l)	VCAP Practical Quantitation Limit (PQL) (µg/l)	Generic P&W Groundwater SLs Based on Surface Water Protection (µg/l)
SVOCs			
1,2,4-Trichlorobenzene	NP [3]	10	100 [4]
1,2-Dichlorobenzene	1,710,000	10	1,710,000
1,3-Dichlorobenzene	26,000	10	26,000
1,4-Dichlorobenzene	26,000	10	26,000
2,4,5-Trichlorophenol	NP [3]	10	100 [4]
2,4,6-Trichlorophenol	NP [3]	10	100 [4]
2,4-Dichlorophenol	15,800	10	15,800
2,4-Dimethylphenol	NP [3]	10	100 [4]
2,4-Dinitrophenol	NP [3]	50	500 [4]
2,4-Dinitrotoluene	NP [3]	10	100 [4]
2-6-Dinitrotoluene	NP [3]	10	100 [4]
2-Chlorophenol	NP [3]	10	100 [4]
2-Methylnaphthalene	NP [3]	10	100 [4]
2-Methylphenol	NP [3]	10	100 [4]
3,3-Dichlorobenzidine	NP [3]	20	200 [4]
4-Nitrophenol	NP [3]	50	500 [4]
7,12-Dimethylbenzo(a)anthracene	NP [3]	10	100 [4]
Acenaphthene	0.3	10	10 [5]
Acetophenone	NP [3]	10	100 [4]
Anthracene	1,100,000	10	1,100,000
Benzo(a)anthracene	0.3	0.2	0.3
Benzo(a)pyrene	0.3	0.08	0.3
Benzo(b)fluoranthene	0.3	0.08	0.3
Benzo(g,h,i)perylene	NP [3]	0.06	0.6 [4]
Benzo(k)fluoranthene	0.3	0.3	0.3
Benzyl alcohol	NP [3]	20	200 [4]
Bis(2-chloroethoxy)methane	NP [3]	10	100 [4]
Bis(2-chloroethyl)ether	42	10	42
Bis(2-ethyl hexyl)phthalate	59	2	59
Butyl benzyl phthalate	NP [3]	10	100 [4]
Carbazole	NP [3]	10	100 [4]
Chrysene	NP [3]	10	100 [4]
Di-n-butyl phthalate	120,000	10	120,000
Di-n-octyl phthalate	NP [3]	10	100 [4]
Dibenz(a,h)anthracene	NP [3]	10	100 [4]
Dibenzofuran	NP [3]	10	100 [4]
Diethylphthalate	NP [3]	10	100 [4]
Dimethoate	NP [3]	10	100 [4]
Dimethylphthalate	NP [3]	10	100 [4]
Diphenylamine	NP [3]	10	100 [4]
Disulfoton	NP [3]	10	100 [4]
Fluoranthene	3,700	10	3,700
Fluorene	140,000	10	140,000
Hexachlorobenzene	0.077	0.077	0.077

Table 3-7
Generic P&W Groundwater Screening Levels (SLs) Based on Surface Water Protection
P&W VCAP, Connecticut Facilities

Parameter[1]	Connecticut's Groundwater Criteria Based on Surface Water Protection[2] (µg/l)	VCAP Practical Quantitation Limit (PQL) (µg/l)	Generic P&W Groundwater SLs Based on Surface Water Protection (µg/l)
Hexachlorocyclopentadiene	NP [3]	10	100 [4]
Hexachloroethane	89	3	89
Ideno(1,2,3-cd)pyrene	NP [3]	10	100 [4]
Isophorone	NP [3]	10	100 [4]
N-Nitroso-di-n-propylamine	NP [3]	10	100 [4]
N-Nitroso-dimethylamine	NP [3]	10	100 [4]
N-Nitroso-diphenylamine	NP [3]	10	100 [4]
Naphthalene	NP [3]	10	100 [4]
Nitrobenzene	NP [3]	10	100 [4]
o,o,o-triethyl phosphorothioate	NP [3]	10	100 [4]
Pentachloroethane	NP [3]	10	100 [4]
Pentachlorophenol	NP [3]	1	10 [4]
Phenacetine	NP [3]	10	100 [4]
Phenol	92,000,000	10	92,000,000
Phorate	NP [3]	10	100 [4]
Pyrene	110,000	10	110,000
Pyridine	NP [3]	10	100 [4]
Pesticides/PCBs			
2,4-D. (2,4-Dichlorophenoxyacetic acid)	NP [3]	70	700 [4]
Alachlor	NP [3]	2	20 [4]
Aldrin	NP [3]	0.05	0.5 [4]
alpha-HCH (alpha-BHC)	NP [3]	0.05	0.5 [4]
beta-HCH (beta-BHC)	NP [3]	0.05	0.5 [4]
Chlordane	0.3	0.05	0.3
DDD	NP [3]	0.1	1 [4]
DDE	NP [3]	0.1	1 [4]
DDT	NP [3]	0.1	1 [4]
Dieldrin	0.1	0.002	0.1
Endosulfan	NP [3]	0.05	0.5 [4]
Endosulfan Sulfate	NP [3]	0.1	1 [4]
Endrin	0.1	0.1	0.1
Endrin Aldehyde	NP [3]	0.1	1 [4]
Endrin Ketone	NP [3]	0.1	1 [4]
Famphur	NP [3]	10	100 [4]
gamma-BHC (Lindane)	NP [3]	0.05	0.5 [4]
Heptachlor	0.05	0.05	0.05
Heptachlor Epoxide	0.05	0.05	0.05
Methoxychlor	NP [3]	0.5	5 [4]
PCBs	0.5	0.5	0.5
Toxaphene	1	1	1
Inorganics			
Aluminum	NP [3]	200	2,000 [4]
Antimony	86,000	6	86,000
Arsenic	4	4	4
Barium	NP [3]	200	2,000 [4]

GW limits for dermal contact
* Laborers, Maintenance Wkr, Utility W

Table 3-8
Generic P&W Groundwater Screening Levels (SLs) Based on Dermal Contact
P&W VCAP, Connecticut Facilities

Parameter[4]	Health-Based Groundwater SL for Excavating Laborers and Maintenance Workers[1] (µg/l)		VCAP Practical Quantitation Limit (PQL) (µg/l)	Generic P&W Groundwater SL for Excavating Laborers and Maintenance Workers[5] (µg/l)
VOCs				
1,1,1,2-Tetrachloroethane	5,000	C	1	5,000
1,1,1-Trichloroethane	1,330,000 [3]	N	5	1,330,000
1,1,2,2-Tetrachloroethane	1,887	C	0.5	1,887
1,1,2-Trichloroethane	7,143	C	5	7,143
1,1-Dichloroethane	5,060,000 [3]	N	5	5,060,000
1,1-Dichloroethene	357	C	1	357
1,2,3-Trichloropropane	77	C	5	77
1,2-Dichloroethane	7,143	C	1	7,143
1,2-Dichloroethene (cis)	1,098,901	N	5	1,098,901
1,2-Dichloroethene (trans)	1,098,901	N	5	1,098,901
1,2-Dichloropropane	5,000	C	5	5,000
1,3-Dichloropropene	3,448	C	0.5	3,448
1,4-Dioxane	769,231	C	150	769,231
2-Butanone (MEK)	147,058,824	N	100	147,058,824
Acetone	212,765,957	N	100	212,765,957
Acetonitrile	11,904,762	N	100	11,904,762
Acrylonitrile	4,545	C	0.5	4,545
Benzene	1,064	C	1	1,064
Bromodichloromethane (Dichlorobromomethane)	9,091	C	5	9,091
Bromoform	163,934	C	4	163,934
Carbon Disulfide	243,902	N	5	243,902
Carbon Tetrachloride	1,190	C	5	1,190
Chlorobenzene	472,000 [3]	N	5	472,000
Chloroethane	5,740,000 [3]	N	10	5,740,000
Chloroform	4,348	C	5	4,348
Chloroprene (beta-chloroprene)	2,439,024	N	5	2,439,024
Dichlorodifluoromethane	280,000 [3]	N	5	280,000
Ethylbenzene	121,951	N	5	121,951
Ethylene dibromide (EDB)	12	C	0.05	12
Isobutyl Alcohol (Isobutanol)	156,250,000	N	50	156,250,000
Methacrylonitrile	NT [2]		5	5
Methyl Bromide (Bromomethane)	476,190	N	10	476,190
Methyl isobutyl ketone (4-Methyl-2-pentanone)	NT [2]		5	*5
Methyl-tert-butyl-ether (MTBE)	51,600 [3]	N	5	51,600
Methylene Chloride	100,000	C	5	100,000
Propionitrile	NT [2]		5	5
Styrene	310,000 [3]	N	5	310,000
Tetrachloroethene	179	C	5	179
Toluene	243,902	N	5	243,902
Trichloroethene	31,250	N	5	31,250
Trichlorofluoromethane	1,100,000 [3]	N	5	1,100,000
Vinyl Acetate	20,000,000 [3]	N	5	20,000,000
Vinyl Chloride	244	C	2	244
Xylenes	200,000 [3]	N	5	200,000

Table 3-8
Generic P&W Groundwater Screening Levels (SLs) Based on Dermal Contact
P&W VCAP, Connecticut Facilities

Parameter[4]	Health-Based Groundwater SL for Excavating Laborers and Maintenance Workers[1] (µg/l)		VCAP Practical Quantitation Limit (PQL) (µg/l)	Generic P&W Groundwater SL for Excavating Laborers and Maintenance Workers[5] (µg/l)
SVOCs				
1,2,4-Trichlorobenzene	30,000 [3]	N	10	30,000
1,2-Dichlorobenzene	156,000 [3]	N	10	156,000
1,3-Dichlorobenzene	123,000 [3]	N	10	123,000
1,4-Dichlorobenzene	1,149	C	10	1,149
2,4,5-Trichlorophenol	555,556	N	10	555,556
2,4,6-Trichlorophenol	2,632	C	10	2,632
2,4-Dichlorophenol	30,303	N	10	30,303
2,4-Dimethylphenol	111,111	N	10	111,111
2,4-Dinitrophenol	384,615	N	50	384,615
2,4-Dinitrotoluene	667	C	10	667
2,6-Dinitrotoluene	1,000	C	10	1,000
2-Chlorophenol	90,909	N	10	90,909
2-Methylnaphthalene	NT [2]		10	10
2-Methylphenol	1,886,792	N	10	1,886,792
3,3-Dichlorobenzidine	222	C	20	222
4-Nitrophenol	6,250,000	N	50	6,250,000
7,12-Dimethylbenz(a)anthracene	NT [2]		10	10
Acenaphthene	3,420 [3]	N	10	3,420
Acetophenone	22,222,222	N	10	22,222,222
Anthracene	45 [3]	N	10	45
Benzo(a)anthracene	2.9	C	0.06	2.9
Benzo(a)pyrene	0.2	C	0.2	0.2
Benzo(b)fluoranthene	2	C	0.08	2
Benzo(g,h,i)perylene	NT [2]		10	10
Benzo(k)fluoranthene	4.3 [3]	C	0.3	4.3
Benzyl alcohol	800,000 [3]	N	20	800,000
Bis(2-chloroethoxy)methane	NT [2]		10	10
Bis(2-chloroethyl)ether	714	C	10	714
Bis(2-ethylhexyl)phthalate	285 [3]	C	2	285
Butyl benzyl phthalate	42,200 [3]	N	10	42,200
Carbazole	83	C	10	83
Chrysene	1.8 [3]	C	10	10
Di-n-butyl phthalate	3,333,333	N	10	3,333,333
Di-n-octyl phthalate	3,000 [3]	N	10	3,000
Dibenzo(a,h)anthracene	0.083	C	10	10
Dibenzofuran	29,412	N	10	29,412
Diethylphthalate	896,000 [3]	N	10	896,000
Dimethoate	1,162,791	N	10	1,162,791
Dimethylphthalate	4,320,000 [3]	N	10	4,320,000
Diphenylamine	370,370	N	10	370,370
Disulfoton	1,667	N	10	1,667
Fluoranthene	206 [3]	N	10	206
Fluorene	1,690 [3]	N	10	1,690
Hexachlorobenzene	6 [3]	C	0.077	6

Table 3-8
Generic P&W Groundwater Screening Levels (SLs) Based on Dermal Contact
P&W VCAP, Connecticut Facilities

Parameter[4]	Health-Based Groundwater SL for Excavating Laborers and Maintenance Workers[1] (µg/l)		VCAP Practical Quantitation Limit (PQL) (µg/l)	Generic P&W Groundwater SL for Excavating Laborers and Maintenance Workers[5] (µg/l)
Hexachlorocyclopentadiene	2,100 [3]	N	10	2,100
Hexachloroethane	5,882	C	3	5,882
Indeno(1,2,3-c,d)pyrene	0.53 [3]	C	10	10
Isophorone	434,783	C	10	434,783
N-Nitroso-di-n-propylamine	83	C	10	83
N-Nitroso-dimethylamine	128	C	10	128
N-Nitroso-diphenylamine	17,241	C	10	17,241
Naphthalene	NT [2]		10	10
Nitrobenzene	45,455	N	10	45,455
o,o,o-triethyl phosphorothioate	NT [2]		10	10
Pentachloroethane	NT [2]		10	10
Pentachlorophenol	22	C	1	22
Phenacetine	NT [2]		10	10
Phenol	45,454,545	N	10	45,454,545
Phorate	NT [2]		10	10
Pyrene	132 [3]	N	10	132
Pyridine	625,000	N	10	625,000
Pest/PCB				
2,4-D. (2,4-Dichlorophenoxyacetic acid)	620,000 [3]	N	70	620,000
Alachlor	43	C	2	43
Aldrin	63	C	0.05	63
alpha-HCH (alpha-BHC)	29	C	0.05	29
beta-HCH (beta-BHC)	50	C	0.05	50
Chlordane	50	C	0.05	50
DDD	50	C	0.1	50
DDE	40 [3]	C	0.1	40
DDT	5 [3]	C	0.1	5
Dieldrin	6.7	C	0.002	6.7
Endosulfan	7,143	N	0.05	7,143
Endosulfan Sulfate	NT [2]		0.1	0.1
Endrin	24 [3]	N	0.1	24
Endrin Aldehyde	NT [2]		0.1	0.1
Endrin Ketone	NT [2]		0.1	0.1
Famphur	NT [2]		10	10
gamma-BHC (Lindane)	91	C	0.05	91
Heptachlor	67	C	0.05	67
Heptachlor Epoxide	350 [3]	C	0.05	350
Methoxychlor	NT [2]		0.5	0.5
PCBs	1.5	C	0.5	1.5
Toxaphene	NT [2]		1	1
Inorganics				
Aluminum	1,219,512,195	N	200	1,219,512,195
Antimony	47,619	N	6	47,619
Arsenic	2,174	C	4	2,174
Barium	4,347,826	N	200	4,347,826

Table 3-8
Generic P&W Groundwater Screening Levels (SLs) Based on Dermal Contact
P&W VCAP, Connecticut Facilities

Parameter[4]	Health-Based Groundwater SL for Excavating Laborers and Maintenance Workers[1] (µg/l)		VCAP Practical Quantitation Limit (PQL) (µg/l)	Generic P&W Groundwater SL for Excavating Laborers and Maintenance Workers[5] (µg/l)
Beryllium	7.7	C	4	7.7
Cadmium	30,303	N	5	30,303
Chromium (total)	625,000	N	10	625,000
Chromium (VI)	625,000	N	10	625,000
Cobalt	71,428,571	N	50	71,428,571
Copper	29,400,000	N	25	29,400,000
Cyanide	17,543,860	N	5	17,543,860
Iron	370,370,370	N	100	370,370,370
Lead	NT [2]		3	NR [6]
Magnesium	NT [2]		5000	5,000
Manganese	833,000	N	15	833,000
Mercury	12,821	N	0.2	12,821
Nickel	1,333,333	N	40	1,333,333
Selenium	5,882,353	N	5	5,882,353
Silver	1,818,182	N	10	1,818,182
Thallium	NT [2]		5	5
Tin	714,285,714	N	250	714,285,714
Titanium	NT [2]		10	10
Vanadium	2,564,103	N	50	2,564,103
Zinc	90,909,091	N	20	90,909,091

Notes:

1. *N: SL based on noncarcinogenic effects (with a Target Hazard Quotient of 1).*
   C: SL based on carcinogenic effects (with a Target Risk of 1×10^{-6}).
2. *NT - Indicates no toxicity factors available*
3. *Indicates that the calculated health-based SL was greater than the Solubility Limit - therefore Solubility Limit used as default.*
4. *List includes chemicals/analytes for which USEPA has developed Soil Screening Levels; and chemicals/analytes detected in any medium in prior sampling conducted at the VCAP facilities that are also on the VCAP analytical list (included as Appendix B of Oct./Nov. Progress Report).*

Table 3-9
Summary of Exposure Parameter Values by Receptor for Pratt and Whitney Generic Soil Screening Levels P&W VCAP, Connecticut Facilities

Non-Carcinogens			Soil Ingestion and Dermal Contact						
Parameter	Description	Units	Excavating Laborer	Grounds-keeper	Maintenance Worker	Sampler	Trespasser	OnSite Recreator	Off-Site Recreator
THQ	Target Hazard Quotient	unitless	1	1	1	1	1	1	1
AT	Averaging Time	yr	25	8	25	25	0.25*	25	0.25*
BW	Body Weight	kg	70	70	70	70	59	70	59
ED	Exposure Duration	yr	25	8	25	25	1	25	1
EF	Exposure Frequency	d/yr	50	160	12	50	26	78	26
IR	Ingestion Rate	mg/d	200	100	50	50	50	50	50
FS	Fraction from Source	unitless	1	1	1	1	1	1	1
AF	Dermal Adherence Factor	mg/cm^2	0.041	0.016	0.016	0.016	0.06	0.01	0.06
SA	Skin Contact Area	cm^2/event	4,443	4,443	4,443	4,443	5,800	4,443	5,800
CF1	Conversion Factor	d/yr	365	365	365	365	365	365	365
CF2	Conversion Factor	kg/mg	1.0E-06	1.0E-06	1.0E-06	1.0E-06	1.0E-06	1.0E-06	1.0E-06

Carcinogens			Soil Ingestion and Dermal Contact						
Parameter	Parameter	Units	Excavating Laborer	Grounds-keeper	Maintenance Worker	Sampler	Trespasser	OnSite Recreator	Off-Site Recreator
TR	Target Risk	unitless	1.0E-06	1.0E-06	1.0E-06	1.0E-06	1.0E-06	1.0E-06	1.0E-06
AT	Averaging Time	yr	70	70	70	70	70	70	70
BW	Body Weight	kg	70	70	70	70	59	70	59
ED	Exposure Duration	yr	25	8	25	25	5	25	5
EF	Exposure Frequency	d/yr	50	160	12	50	26	78	26
IR	Ingestion Rate	mg/d	200	100	50	50	50	50	50
FS	Fraction from Source	unitless	1	1	1	1	1	1	1
AF	Dermal Adherence Factor	mg/cm^2	0.041	0.016	0.016	0.016	0.06	0.01	0.06
SA	Skin Contact Area	cm^2/event	4,443	4,443	4,443	4,443	5,800	4,443	5,800
CF1	Conversion Factor	d/yr	365	365	365	365	365	365	365
CF2	Conversion Factor	kg/mg	1.0E-06	1.0E-06	1.0E-06	1.0E-06	1.0E-06	1.0E-06	1.0E-06

*Notes: * - Since this represents a short-term exposure, sub-chronic, non-carcinogenic risks due to exposure over one summer were evaluated.*

Table 3-10

Generic P & W Soil Screening Levels (SSLs) Based on Soil Ingestion and Dermal Contact[5] (mg/kg)
P&W VCAP, Connecticut Facilities

Compound[4]	Basis for Screening Level[1]	Excavating Laborer	Grounds keeper	Maintenance Worker	Sampler	Trespasser	On-Site Recreator	Off-Site Recreator
VOCs								
1,1,1,2-Tetrachloroethane	C	274	491	4,662	982	8,834	736	8,834
1,1,1-Trichloroethane	N	91,467	56,000	NR [2]	364,000	144,947	224,000	144,947
1,1,2,2-Tetrachloroethane	C	34	60	570	120	1,080	90	1,080
1,1,2-Trichloroethane	C	123	220	2,090	440	3,960	330	3,960
1,1-Dichloroethane	N	254,800	156,000	NR [2]	NR [2]	NR [2]	624,000	NR [2]
1,1-Dichloroethene	C	11	20	190	40	360	30	360
1,2,3-Trichloropropane	C	1.0	1.8	17	4	33	3	33
1,2-Dichloroethane	C	78	140	1,330	280	2,520	210	2,520
1,2-Dichloroethene (cis)	N	25,480	15,600	421,200	101,400	414,135	62,400	414,135
1,2-Dichloroethene (trans)	N	52,267	32,000	864,000	208,000	828,269	128,000	828,269
1,2-Dichloropropane	C	101	180	1,710	360	3,240	270	3,240
1,3-Dichloropropene	C	45	80	760	160	1,440	120	1,440
1,4-Dioxane	C	648	1,160	11,020	2,320	20,880	1,740	20,880
2-Butanone (MEK)	N	NR [2]	960,000	NR [2]	NR [2]	NR [2]	NR [2]	NR [2]
Acetone	N	254,800	156,000	NR [2]	NR [2]	NR [2]	624,000	NR [2]
Acetonitrile	N	15,680	9,600	259,200	62,400	248,481	38,400	248,481
Acrylonitrile	C	13	24	224	47	425	35	425
Benzene	C	246	440	4,180	880	7,920	660	7,920
Bromodichloromethane (Dichlorobromomethane)	C	112	200	1,900	400	3,600	300	3,600
Bromoform	C	905	1,620	15,390	3,240	29,160	2,430	29,160
Carbon disulfide	N	254,800	156,000	NR [2]	NR [2]	414,135	624,000	414,135
Carbon tetrachloride	C	56	100	950	200	1,800	150	1,800
Chlorobenzene	N	52,267	32,000	864,000	208,000	82,827	128,000	82,827
Chloroethane	N	NR [2]	640,000	NR [2]	NR [2]	NR [2]	NR [2]	NR [2]
Chloroform	C	1,117	2,000	19,000	4,000	36,000	3,000	36,000
Chloroprene	N	52,267	32,000	864,000	208,000	82,827	128,000	82,827
Dichlorodifluoromethane	N	522,667	320,000	NR [2]	NR [2]	NR [2]	NR [2]	NR [2]
Ethyl ether (Diethyl Ether)	N	522,667	320,000	NR [2]	NR [2]	NR [2]	NR [2]	NR [2]
Ethylbenzene	N	254,800	156,000	NR [2]	NR [2]	414,135	624,000	414,135
Ethylene dibromide (EDB)	C	0.08	0.15	1.4	0.3	2.7	0.2	2.7

Table 3-10

Generic P & W Soil Screening Levels (SSLs) Based on Soil Ingestion and Dermal Contact[5] (mg/kg)
P&W VCAP, Connecticut Facilities

Compound[4]	Basis for Screening Level[1]	Excavating Laborer	Grounds keeper	Maintenance Worker	Sampler	Trespasser	On-Site Recreator	Off-Site Recreator
Isobutyl alcohol (Isobutanol)	N	784,000	480,000	NR [2]	NR [2]	NR [2]	NR [2]	NR [2]
Methacrylonitrile	N	261	160	4,320	1,040	4,141	640	4,141
Methyl bromide (Bromomethane)	N	3,593	2,200	59,400	14,300	5,798	8,800	5,798
Methyl isobutyl ketone (4-Methyl-2-pentanone)	C	71,501	128,000	NR [2]	256,000	NR [2]	192,000	NR [2]
Methyl tert-butyl Ether (MTBE)	N	13,067	8,000	216,000	52,000	20,707	32,000	20,707
Methylene chloride	C	950	1,700	16,150	3,400	30,600	2,550	30,600
Propionitrile		NT [6]	NT [6]	NT [6]	NT [6]	NT [6]	NT [6]	NT [6]
Styrene	N	522,667	320,000	NR [2]	NR [2]	828,269	NR [2]	828,269
Tetrachloroethene	C	134	240	2,280	480	4,320	360	4,320
Toluene	N	522,667	320,000	NR [2]	NR [2]	NR [2]	NR [2]	NR [2]
Trichloroethene	C	648	1,160	11,020	2,320	20,880	1,740	20,880
Trichlorofluoromethane	N	784,000	480,000	NR [2]	NR [2]	NR [2]	NR [2]	NR [2]
Vinyl acetate	N	NR [2]	NR [2]	NR [2]	NR [2]	NR [2]	NR [2]	NR [2]
Vinyl chloride	C	3.4	6	57	12	108	9	108
Xylenes	N	NR [2]	NR [2]	NR [2]	NR [2]	NR [2]	NR [2]	NR [2]
SVOCs								
1,2,4-Trichlorobenzene	N	23,365	14,570	368,971	88,826	24,418	57,283	24,418
1,2-Dichlorobenzene	N	209,687	130,760	NR [2]	797,160	219,765	514,080	219,765
1,3-Dichlorobenzene	N	213,282	133,002	NR [2]	810,826	217,323	522,893	217,323
1,4-Dichlorobenzene	C	277	504	4,494	946	5,698	744	5,698
2,4,5-Trichlorophenol	N	233,652	145,704	NR [2]	888,264	NR [2]	572,832	NR [2]
2,4,6-Trichlorophenol	C	594	1,083	9,654	2,032	12,431	1,597	12,431
2,4-Dichlorophenol	N	6,890	4,296	108,799	26,192	7,325	16,891	7,325
2,4-Dimethylphenol	N	47,929	29,888	756,864	182,208	488,366	117,504	488,366
2,4-Dinitrophenol	N	4,793	2,989	75,686	18,221	4,884	11,750	4,884
2,4-Dinitrotoluene	C	9.2	17	150	32	211	25	211
2,6-Dinitrotoluene	C	9.2	17	150	32	211	25	211
2-Chlorophenol	N	11,683	7,285	184,486	44,413	122,092	28,642	122,092
2-Methylnaphthalene		NT [6]	NT [6]	NT [6]	NT [6]	NT [6]	NT [6]	NT [6]
2-Methylphenol	N	116,826	72,852	NR [2]	444,132	NR [2]	286,416	NR [2]
3,3-Dichlorobenzidine	C	10.2	19	166	35	235	28	235

Table 3-10

Generic P & W Soil Screening Levels (SSLs) Based on Soil Ingestion and Dermal Contact[5] (mg/kg)
P&W VCAP, Connecticut Facilities

Compound[4]	Basis for Screening Level[1]	Excavating Laborer	Grounds keeper	Maintenance Worker	Sampler	Trespasser	On-Site Recreator	Off-Site Recreator
4-Nitrophenol	N	148,578	92,653	NR [2]	564,845	151,394	364,262	151,394
7,12-Dimethylbenz(a)anthracene		NT [6]	NT [6]	NT [6]	NT [6]	NA	NT [6]	NT [6]
Acenaphthene	N	140,790	87,796	NR [2]	535,236	NR [2]	345,168	NR [2]
Acetophenone	N	239,643	149,440	NR [2]	911,040	NR [2]	587,520	NR [2]
Anthracene	N	688,973	429,640	NR [2]	NR [2]	NR [2]	NR [2]	NR [2]
Benzo(a)anthracene	C	9.2	17	150	32	187	25	187
Benzo(a)pyrene	C	0.90	1.6	14	3	17	2	17
Benzo(b)fluoranthene	C	9.2	17	150	32	187	25	187
Benzo(g,h,i)perylene		NT [6]	NT [6]	NT [6]	NT [6]	NA	NT [6]	NT [6]
Benzo(k)fluoranthene	C	92	168	1,498	315	1,873	248	1,873
Benzyl alcohol	N	718,928	448,320	NR [2]	NR [2]	NR [2]	NR [2]	NR [2]
bis(2-Chloroethoxy)methane		NT [6]	NT [6]	NT [6]	NT [6]	NT [6]	NT [6]	NT [6]
Bis(2-chloroethyl)ether	C	6.1	11	100	21	124	17	124
Bis(2-ethylhexyl)phthalate	C	471	859	7,656	1,612	9,767	1,267	9,767
Butyl benzyl phthalate	N	479,285	298,880	NR [2]	NR [2]	NR [2]	NR [2]	NR [2]
Carbazole	C	328	598	5,326	1,121	6,837	881	6,837
Chrysene	C	902	1,644	14,647	3,084	18,732	2,424	18,732
Di-n-butyl phthalate	N	233,652	145,704	NR [2]	888,264	244,183	572,832	244,183
Di-n-octyl phthalate	N	47,929	29,888	756,864	182,208	49,952	117,504	49,952
Dibenz(a,h)anthracene	C	0.92	1.7	15	3	19	2	19
Dibenzofuran	N	9,586	5,978	151,373	36,442	9,767	23,501	9,767
Diethylphthalate	N	NR [2]	NR [2]	NR [2]	NR [2]	NR [2]	NR [2]	NR [2]
Dimethoate	N	479	299	7,569	1,822	488	1,175	488
Dimethylphthalate	N	NR [2]	NR [2]	NR [2]	NR [2]	NR [2]	NR [2]	NR [2]
Diphenylamine	N	59,911	37,360	946,080	227,760	61,046	146,880	61,046
Disulfoton	N	96	60	1,514	364	98	235	98
Fluoranthene	N	92,862	57,908	NR [2]	353,028	976,733	227,664	976,733
Fluorene	N	92,862	57,908	NR [2]	353,028	976,733	227,664	976,733
Hexachlorobenzene	C	4.1	7	67	14	85	11	85
Hexachlorocyclopentadiene	N	16,475	10,274	260,172	62,634	170,928	40,392	170,928
Hexachloroethane	C	471	859	7,656	1,612	9,767	1,267	9,767

Table 3-10

Generic P & W Soil Screening Levels (SSLs) Based on Soil Ingestion and Dermal Contact[5] (mg/kg)
P&W VCAP, Connecticut Facilities

Compound[4]	Basis for Screening Level[1]	Excavating Laborer	Grounds keeper	Maintenance Worker	Sampler	Trespasser	On-Site Recreator	Off-Site Recreator
Ideno(1,2,3-cd)pyrene	C	9.2	17	150	32	187	25	187
Isophorone	C	6,864	12,516	111,515	23,477	143,940	18,452	143,940
N-Nitrosodi-n-propylamine	C	0.92	1.7	15	3	20	2	20
N-Nitrosodimethylamine	C	0.13	0.23	2.1	0.4	2.7	0.3	2.7
N-Nitrosodiphenylamine	C	1,332	2,428	21,637	4,555	27,907	3,580	27,907
Naphthalene	N	92,862	57,908	NR [2]	353,028	97,673	227,664	97,673
Nitrobenzene	N	1,168	729	18,449	4,441	12,209	2,864	12,209
o,o,o-triethyl phosphorothioate		NT [6]	NT [6]	NT [6]	NT [6]	NT [6]	NT [6]	NT [6]
Pentachloroethane		NT [6]	NT [6]	NT [6]	NT [6]	NT [6]	NT [6]	NT [6]
Pentachlorophenol	C	27	51	421	89	997	74	997
Phenacetine		NT [6]	NT [6]	NT [6]	NT [6]	NT [6]	NT [6]	NT [6]
Phenol	N	NR [2]	877,960	NR [2]	NR [2]	NR [2]	NR [2]	NR [2]
Phorate	N	479	299	7,569	1,822	488	1,175	488
Pyrene	N	68,897	42,964	NR [2]	261,924	732,549	168,912	732,549
Pyridine	N	2,396	1,494	37,843	9,110	24,418	5,875	24,418
Pest/PCBs								
2,4-D. (2,4-Dichlorophenoxyacetic acid)	N	23,964	14,944	378,432	91,104	24,418	58,752	24,418
Alachlor	C	82	149	1,327	279	1,709	220	1,709
Aldrin	C	0.41	0.7	7	1.4	8.0	1.1	8.0
alpha-HCH (alpha-BHC)	C	1.02	1.9	17	4	22	3	22
beta-HCH (beta-BHC)	C	4.1	7	67	14	76	11	76
Chlordane	C	5.4	10	90	19	140	14	140
DDD	C	31	56	499	105	570	83	570
DDE	C	20	37	333	70	402	55	402
DDT	C	22	39	364	77	564	58	564
Dieldrin	C	0.41	0.7	7	1.4	8.5	1.1	8.5
Endosulfan	N	14,079	8,780	222,329	53,524	14,651	34,517	14,651
Endosulfan Sulfate		NT [6]	NT [6]	NT [6]	NT [6]	NT [6]	NT [6]	NT [6]
Endrin	N	689	430	10,880	2,619	733	1,689	733
Endrin Aldehyde		NT [6]	NT [6]	NT [6]	NT [6]	NT [6]	NT [6]	NT [6]
Endrin Ketone		NT [6]	NT [6]	NT [6]	NT [6]	NT [6]	NT [6]	NT [6]

Table 3-10

Generic P & W Soil Screening Levels (SSLs) Based on Soil Ingestion and Dermal Contact[5] (mg/kg)
P&W VCAP, Connecticut Facilities

Compound[4]	Basis for Screening Level[1]	Excavating Laborer	Grounds keeper	Maintenance Worker	Sampler	Trespasser	On-Site Recreator	Off-Site Recreator
Famphur		NT [6]	NT [6]	NT [6]	NT [6]	NT [6]	NT [6]	NT [6]
gamma-HCH (Lindane)	C	5.1	9	83	18	105	14	105
Heptachlor	C	1.02	1.9	17	4	23	3	23
Heptachlor epoxide	C	0.72	1.3	12	2	15	1.9	15
Methoxychlor	N	11,683	7,285	184,486	44,413	12,209	28,642	12,209
PCBs	C[7]	3.2	6	51	11	42	9	42
Toxaphene	C	6.1	11	100	21	124	17	124
Inorganics								
Aluminum	N	NR [2]	NR [2]	NR [2]	NR [2]	NR [2]	NR [2]	NR [2]
Antimony	N	1,004	616	16,506	3,974	1,549	2,458	1,549
Arsenic	C	4.3	8	73	15	128	12	128
Barium	N	178,050	109,230	NR [2]	704,990	271,031	436,040	271,031
Berylium	C	1.1	2.0	19	4	34	3	34
Cadmium	N	2,546	1,559	42,060	10,126	4,113	6,234	4,113
Chromium (total)	N	12,625	7,745	207,652	49,990	77,437	30,919	77,437
Chromium (VI)	N	12,625	7,745	207,652	49,990	77,437	30,919	77,437
Cobalt	N	155,389	95,328	NR [2]	615,264	232,312	380,544	232,312
Copper	N	95,823	58,786	NR [2]	379,413	143,259	234,669	143,259
Cyanide	N	51,796	31,776	851,904	205,088	77,437	126,848	77,437
Iron	N	776,944	476,640	NR [2]	NR [2]	NR [2]	NR [2]	NR [2]
Lead3	N	1,750	1,750	1,750	1,750	1,750	1,750	1,750
Magnesium		NT [6]	NT [6]	NT [6]	NT [6]	NT [6]	NT [6]	NT [6]
Manganese	N	129,491	79,440	NR [2]	512,720	193,593	317,120	193,593
Mercury	N	745	457	12,246	2,948	1,162	1,823	1,162
Nickel	N	51,796	31,776	851,904	205,088	77,437	126,848	77,437
Selenium	N	12,625	7,745	207,652	49,990	19,359	30,919	19,359
Silver	N	12,625	7,745	207,652	49,990	19,359	30,919	19,359
Thallium		NT [6]	NT [6]	NT [6]	NT [6]	NT [6]	NT [6]	NT [6]
Tin	N	NR [2]	953,280	NR [2]	NR [2]	NR [2]	NR [2]	NR [2]
Titanium		NT [6]	NT [6]	NT [6]	NT [6]	NT [6]	NT [6]	NT [6]
Vanadium	N	17,805	10,923	292,842	70,499	27,103	43,604	27,103

Table 3-10

Generic P & W Soil Screening Levels (SSLs) Based on Soil Ingestion and Dermal Contact[5] (mg/kg)
P&W VCAP, Connecticut Facilities

Compound[4]	Basis for Screening Level[1]	Excavating Laborer	Grounds keeper	Maintenance Worker	Sampler	Trespasser	On-Site Recreator	Off-Site Recreator
Zinc	N	744,571	456,780	NR [2]	NR [2]	NR [2]	NR [2]	NR [2]

Notes:

1. *N : SSL based on non-carcinogenic effects (with a Target Hazard Quotient of 1).*
   C : SSL based on carcinogenic effects (with a Target Risk of 1×10^{-6}*).*
2. *NR - No Risk. Calculated Screening Level exceeds* 1×10^{6} *mg/kg,*
   indicating that this compound does not pose a risk to this receptor at any concentration.
3. *Industrial screening levels for Lead were derived from the following reference:*
   USEPA, 1996. Recommendations of the Technical Review Workgroup for Lead for an Interim Approach to Assessing Risks Associated with Adult Exposures to Lead in Soil. December, 1996.
4. *The compounds in this list are those for which USEPA has published Soil Screening Levels in the USEPA Soil Screening Guidance.*
5. *Generic Dermal Absorption factors were used for SVOCs (10%) and Inorganics (1%), as discussed in Appendix C.*
   Note that dermal contact was not considered for VOCs.
6. *NT - No toxicity factors available to calculate screening levels.*
7. *Screening level basis for Trespasser and Off-Site Recreator is non-carcinogenic effects.*

Table 3-11
Development of DPR Threshold Soil Concentrations
P&W VCAP, Connecticut Facilities

Parameter[1]	Draft Contained-In Policy Soil Concentration[2] (mg/kg)	P&W SSL for Inhalation of Trench Air (mg/kg)	P&W SSL for Ingestion & Dermal Contact Excavating Laborer (mg/kg)	P&W SSL for Ingestion & Dermal Contact Maintenance Worker (mg/kg)	DPR Threshold Soil Concentration (mg/kg)
VOCs					
1,1,1,2-Tetrachloroethane	2	NC	274	4,662	2
1,1,1-Trichloroethane	400	1,200	91,467	NR	400
1,1,2,2-Tetrachloroethane	1	2,000	34	570	1
1,1,2-Trichloroethane	10	1,800	123	2,090	10
1,1-Dichloroethane	140	1,700	254,800	NR	140
1,1-Dichloroethene	9.5	580	11	190	9.5
1,2,3-Trichloropropane	0.82	1,700	1.0	17	0.82
1,2-Dichloroethane	10	1,800	78	1,330	10
1,2-Dichloroethene (cis)	140	1,200	25,480	421,200	140
1,2-Dichloroethene (trans)	200	1,200	52,267	864,000	200
1,2-Dichloropropane	10	1,100	101	1,710	10
1,3-Dichloropropene	1	770	45	760	1
1,4-Dioxane	520	27,270	648	11,020	520
2-Butanone (MEK)	1,000	34,000	NR	NR	1,000
Acetone	1,000	100,000	254,800	NR	1,000
Acetonitrile	210	162,610	15,680	259,200	210
Acrylonitrile	1	3,900	13	224	1
Benzene	10	827	246	4,180	10
Bromodichloromethane (Dichlorobromomethane)	92	NC	112	1,900	92
Bromoform	8	1,900	905	15,390	8
Carbon Disulfide	3,500	1,520	254,800	NR[2]	1,520
Carbon Tetrachloride	10	1,100	56	950	10
Chlorobenzene	1,000	680	52,267	864,000	680
Chloroethane	14,000	1,600	NR	NR[2]	1,600
Chloroform	120	2,800	1,117	19,000	120
Chloroprene (beta-Chloroprene)	700	6,820	52,267	864,000	700
Dichlorodifluoromethane	7,000	340	522,667	NR[2]	340
Ethyl ether (Diethyl Ether)	7,000	1,840	522,667	NR[2]	1,840
Ethylbenzene	1,000	400	254,800	NR[2]	400
Ethylene dibromide (EDB)	0.067	NC	0.08	1.4	0.067
Isobutyl alcohol (Isobutanol)	10,500	40,000	784,000	NR[2]	10,500
Methacrylonitrile	3.5	2,440	261	4,320	3.5
Methyl Bromide (Bromomethane)	49	1,290	3,593	59,400	49
Methyl isobutyl ketone (4-Methyl-2-pentanone)	700	NC	71,501	NR[2]	700
Methyl-tert-butyl Ether (MTBE)	200	1,800	13,067	216,000	200
Methylene Chloride	10	2,400	950	16,150	10
Propionitrile	NA	1,060	NT	NT[6]	1,060
Styrene	200	1,500	522,667	NR[2]	200
Tetrachloroethene	14	230	134	2,280	14
Toluene	1,000	650	522,667	NR[2]	650
Trichloroethene	10	1,300	648	11,020	10
Trichlorofluoromethane	10,500	1,980	784,000	NR[2]	1,980
Vinyl Acetate	35,000	9,200	NR	NR[2]	9,200
Vinyl Chloride	3	1,200	3.4	57	3
Xylenes	1,000	410	NR	NR[2]	410
SVOCs					
1,2,4-Trichlorobenzene	350	N/A	23,365	368,971	350
1,2-Dichlorobenzene	310	N/A	209,687	NR[2]	310

Table 3-11
Development of DPR Threshold Soil Concentrations
P&W VCAP, Connecticut Facilities

Parameter[1]	Draft Contained-In Policy Soil Concentration[2] (mg/kg)	P&W SSL for Inhalation of Trench Air (mg/kg)	P&W SSL for Ingestion & Dermal Contact Excavating Laborer (mg/kg)	P&W SSL for Ingestion & Dermal Contact Maintenance Worker (mg/kg)	DPR Threshold Soil Concentration (mg/kg)
1,3-Dichlorobenzene	1,000	N/A	213,282	NR[2]	1,000
1,4-Dichlorobenzene	150	N/A	277	4,494	150
2,4,5-Trichlorophenol	8,000	N/A	233,652	NR[2]	8,000
2,4,6-Trichlorophenol	40	N/A	594	9,654	40
2,4-Dichlorophenol	100	N/A	6,890	108,799	100
2,4-Dimethylphenol	700	N/A	47,929	756,864	700
2,4-Dinitrophenol	70	N/A	4,793	75,686	70
2-4-Dinitrotoluene	2.6	N/A	9.2	150	2.6
2,6-Dinitrotoluene	8.4	N/A	9.2	150	8.4
2-Chlorophenol	100	N/A	11,683	184,486	100
2-Methylnaphthalene	NA	N/A	NT	NT[6]	330[3]
2-Methylphenol	1,750	N/A	116,826	NR[2]	1,750
3,3-Dichlorobenzidine	13	N/A	10.2	166	10.2
4-Nitrophenol	2,170	N/A	148,578	NR[2]	2,170
7,12-Dimethylbenz(a)anthracene	NA	N/A	NT	NT[6]	330[3]
Acenaphthene	2,100	N/A	140,790	NR[2]	2,100
Acetophenone	3,500	N/A	239,643	NR[2]	3,500
Anthracene	2,500	N/A	688,973	NR[2]	2,500
Benz(a)anthracene	7.8	N/A	9.2	150	7.8
Benzo(a)pyrene	1	N/A	0.90	14	0.90
Benzo(b)fluoranthene	7.8	N/A	9.2	150	7.8
Benzo(g,h,i)perylene	NA	N/A	NT	NT[6]	330[3]
Benzo(k)fluoranthene	78	N/A	92	1,498	78
Benzyl alcohol	10,500	N/A	718,928	NR[2]	10,500
Bis(2-chloroethoxy)methane	NA	N/A	NT	NT[6]	330[3]
Bis(2-chloroethyl)ether	5.2	N/A	6.1	100	5.2
Bis(2-ethylhexyl)phthalate	100	N/A	471	7,656	100
Butyl benzyl phthalate	2,000	N/A	479,285	NR[2]	2,000
Carbazole	286	N/A	328	5,326	286
Chrysene	784	N/A	902	14,647	784
Di-n-butyl phthalate	1,400	N/A	233,652	NR[2]	1,400
Di-n-octyl phthalate	200	N/A	47,929	756,864	200
Dibenz(a,h)anthracene	0.8	N/A	0.92	15	0.8
Dibenzofuran	140	N/A	9,586	151,373	140
Diethylphthalate	28,000	N/A	NR	NR[2]	28,000
Dimethoate	7	N/A	479	7,569	7
Dimethylphthalate	350,000	N/A	NR	NR[2]	350,000
Diphenylamine	875	N/A	59,911	946,080	875
Disulfoton	1.4	N/A	96	1,514	1.4
Fluoranthene	560	N/A	92,862	NR[2]	560
Fluorene	560	N/A	92,862	NR[2]	560
Hexachlorobenzene	2.6	N/A	4.1	67	2.6
Hexachlorocyclopentadiene	245	N/A	16,475	260,172	245
Hexachloroethane	60	N/A	471	7,656	60
Ideno(1,2,3-cd)pyrene	7.84	N/A	9.2	150	7.84
Isophorone	6,024	N/A	6,864	111,515	6,024
N-Nitroso-di-n-propylamine	0.82	N/A	0.92	15	0.82
N-Nitrosodimethylamine	0.11	N/A	0.13	2.1	0.11
N-Nitrosodiphenylamine	1,168	N/A	1,332	21,637	1,168

Table 3-11
Development of DPR Threshold Soil Concentrations
P&W VCAP, Connecticut Facilities

Parameter[1]	Draft Contained-In Policy Soil Concentration[2] (mg/kg)	P&W SSL for Inhalation of Trench Air (mg/kg)	P&W SSL for Ingestion & Dermal Contact Excavating Laborer (mg/kg)	P&W SSL for Ingestion & Dermal Contact Maintenance Worker (mg/kg)	DPR Threshold Soil Concentration (mg/kg)
Naphthalene	560	N/A	92,862	NR[2]	560
Nitrobenzene	40	N/A	1,168	18,449	40
o,o,o-triethyl phosphorothioate	NA	N/A	NT	NT[4]	330[3]
Pentachloroethane	NA	N/A	NT	NT[4]	330[3]
Pentachlorophenol	48	N/A	27	421	27
Phenacetine	NA	N/A	NT	NT[4]	330[3]
Phenol	2,500	N/A	NR	NR[2]	2,500
Phorate	7	N/A	479	7,569	7
Pyrene	400	N/A	68,897	NR[2]	400
Pyridine	100	N/A	2,396	37,843	100
Pest/PCBs					
2,4-D. (2.4-Dichlorophenoxyacetic acid)	200	N/A	23,964	378,432	200
Alachlor	71.54	N/A	82	1,327	71.54
Aldrin	0.34	N/A	0.41	7	0.34
alpha-HCH (alpha-BHC)	0.91	N/A	1.02	17	0.91
beta-HCH (beta-BHC)	3.2	N/A	4.1	67	3.2
Chlordane	0.6	N/A	5.4	90	0.6
DDD	24	N/A	31	499	24
DDE	17	N/A	20	333	17
DDT	17	N/A	22	364	17
Dieldrin	0.36	N/A	0.41	7	0.36
Endosulfan	210	N/A	14,079	222,329	210
Endosulfan Sulfate	NA	N/A	NT	NT[4]	3.3[3]
Endrin	0.4	N/A	689	10,880	0.4
Endrin Aldehyde	NA	N/A	NT	NT[4]	3.3[3]
Endrin Ketone	NA	N/A	NT	NT[4]	3.3[3]
Famphur	NA	N/A	NT	NT[4]	3.3[3]
gamma-HCH (Lindane)	4.4	N/A	5.1	83	4.4
Heptachlor	0.16	N/A	1.02	17	0.16
Heptachlor epoxide	0.16	N/A	0.72	12	0.16
Methoxychlor	200	N/A	11,683	184,486	200
PCBs	1	N/A	3.2	51	1
Toxaphene	5.2	N/A	6.1	100	5.2
Inorganics					
Aluminum	35,000	N/A	NR	NR[2]	35,000
Antimony	12	N/A	1,004	16,506	12
Arsenic	10	N/A	4.3	73	4.3
Barium	2,000	N/A	178,050	NR[2]	2,000
Beryllium	2	N/A	1.1	19	1.1
Cadmium	20	N/A	2,546	42,060	20
Chromium (total)	100	N/A	12,625	207,652	100
Chromium (VI)	100	N/A	12,625	207,652	100
Cobalt	2,100	N/A	155,389	NR[2]	2,100
Copper	2,600	N/A	95,823	NR[2]	2,600
Cyanide	400	N/A	51,796	851,904	400
Iron	10,500	N/A	776,944	NR[2]	10,500
Lead	100	N/A	1,750	1,750	100
Magnesium	NA	N/A	NT	NT[4]	38[3]
Manganese	1,750	N/A	129,491	NR	1,750

Table 3-11
Development of DPR Threshold Soil Concentrations
P&W VCAP, Connecticut Facilities

Parameter[1]	Draft Contained-In Policy Soil Concentration[2] (mg/kg)	P&W SSL for Inhalation of Trench Air (mg/kg)	P&W SSL for Ingestion & Dermal Contact Excavating Laborer (mg/kg)	P&W SSL for Ingestion & Dermal Contact Maintenance Worker (mg/kg)	DPR Threshold Soil Concentration (mg/kg)
Mercury	4	N/A	745	12,246	4
Nickel	200	N/A	51,796	851,904	200
Selenium	20	N/A	12,625	207,652	20
Silver	100	N/A	12,625	207,652	100
Thallium	10	N/A	NT	NT[4]	10
Tin	21,000	N/A	NR	NR[2]	21,000
Titanium	NA	N/A	NT	NT[4]	100[3]
Vanadium	100	N/A	17,805	292,842	100
Zinc	10,000	N/A	744,571	NR[2]	10,000

Notes:

1. *List includes chemicals/analytes for which USEPA has developed Soil Screening Levels; and chemicals/analytes detected in any medium in prior sampling conducted at the VCAP facilities.*
2. *Lower of: 1) CTDEP's Industrial/Commercial Direct Exposure Criteria and 2) lower of either the Toxicity Characteristic concentration from 40 CFR 261.24, Table 1 (if available) and the CTDEP GA Pollutant Mobility Criteria x 100. For chemicals with no tabulated numeric values of Direct Exposure Criteria and Pollutant Mobility Criteria, numeric values were calculated using the methodology specified in the CT RSRs.*
3. *The VCAP PQL will be used as the DPR threshold concentrations; these thresholds could be revised as toxicity factors become available or are developed.*

NA: Draft Contained-In Policy Concentration not available.

NC: OSHA PEL/Other Occupational Exposure Level not available to calculate SL (refer to Table 3-2)

N/A - Not Applicable since only VOCs are expected to volatalize into trench air.

NT: Toxicity Factor not readily available to calculate SL (refer to Table 3-10)

NR - No Risk. Calculated Screening Level exceeds 1×10^6 *mg/kg (refer to Table 3-10), indicating that this compound does not pose a risk to this receptor at any concentration.*

Table 3-12
Development of DPR Threshold Groundwater Concentrations
P&W VCAP, Connecticut Facilities

Parameter[1]	Draft Contained-In Policy Groundwater Concentrations[2] (µg/l)	P&W Screening Level for Inhalation of Wet Trench Air (µg/l)	P&W Screening Level for Dermal Contact with Groundwater (µg/l)	DPR Threshold Groundwater Concentrations (µg/l)
VOCs				
1,1,1,2-Tetrachloroethane	100	NC [6]	5,000	100
1,1,1-Trichloroethane	20,000	1,330,000	1,330,000	20,000
1,1,2,2-Tetrachloroethane	50	943,941	1,887	50
1,1,2-Trichloroethane	500	1,193,174	7,143	500
1,1-Dichloroethane	7,000	5,060,000	5,060,000	7,000
1,1-Dichloroethene	700	523,564	357	357
1,2,3-Trichloropropane	50	7,852,721	77	50
1,2-Dichloroethane	500	5,454,546	7,143	500
1,2-Dichloroethene (cis)	7,000	3,500,000	1,098,901	7,000
1,2-Dichloroethene (trans)	10,000	3,500,000	1,098,901	10,000
1,2-Dichloropropane	500	2,800,000	5,000	500
1,3-Dichloropropene	50	119,165	3,448	50
1,4-Dioxane	31,800	22,782,641	769,231	31,800
2-Butanone (MEK)	200,000	23,993,691	147,058,824	200,000
Acetone	70,000	109,082,235	212,765,957	70,000
Acetonitrile	10,500	8,781,048	11,904,762	10,500
Acrylonitrile	50	134,936	4,545	50
Benzene	500	78,743	1,064	500
Bromodichloromethane (Dichlorobromomethane)	5,645	NC [6]	9,091	5,645
Bromoform	400	134,589	163,934	400
Carbon Disulfide	175,000	1,649,889	243,902	175,000
Carbon Tetrachloride	500	793,000	1,190	500
Chlorobenzene	100,000	472,000	472,000	100,000
Chloroethane	700,000	5,740,000	5,740,000	700,000
Chloroform	6,000	1,289,326	4,348	4,348
Chloroprene (beta-chloroprene)	35,000	2,355,816	2,439,024	35,000
Dichlorodifluoromethane	350,000	280,000	280,000	280,000
Ethylbenzene	70,000	169,000	121,951	70,000
Ethylene dibromide (EDB)	5	3,400,000	12	5
Isobutyl Alcohol (Isobutanol)	525,000	7,852,721	156,250,000	525,000
Methacrylonitrile	175	78,449	5 [3]	5 [3]
Methyl Bromide (Bromomethane)	2,450	102,204	476,190	2,450
Methyl isobutyl ketone (4-Methyl-2-pentanone)	35,000	11,894,850	5 [3]	5 [3]
Methyl-tert-butyl-ether (MTBE)	10,000	51,600	51,600	10,000
Methylene Chloride	500	13,000,000	100,000	500
Propionitrile	NA [5]	366,460	5 [3]	5 [3]
Styrene	10,000	310,000	310,000	10,000
Tetrachloroethene	700	200,000	179	179
Toluene	100,000	526,000	243,902	100,000
Trichloroethene	500	1,100,000	31,250	500
Trichlorofluoromethane	525,000	1,100,000	1,100,000	525,000
Vinyl Acetate	1,750,000	916,151	20,000,000	916,151
Vinyl Chloride	200	68,058	244	200
Xylenes	53,000	200,000	200,000	53,000

Table 3-12
Development of DPR Threshold Groundwater Concentrations
P&W VCAP, Connecticut Facilities

Parameter[1]	Draft Contained-In Policy Groundwater Concentrations[2] (µg/l)	P&W Screening Level for Inhalation of Wet Trench Air (µg/l)	P&W Screening Level for Dermal Contact with Groundwater (µg/l)	DPR Threshold Groundwater Concentrations (µg/l)
SVOCs				
1,2,4-Trichlorobenzene	17,500	N/A [7]	30,000	17,500
1,2-Dichlorobenzene	60,000	N/A [7]	156,000	60,000
1,3-Dichlorobenzene	60,000	N/A [7]	123,000	60,000
1,4-Dichlorobenzene	7,500	N/A [7]	1,149	1,149
2,4,5-Trichlorophenol	400,000	N/A [7]	555,556	400,000
2,4,6-Trichlorophenol	2,000	N/A [7]	2,632	2,000
2,4-Dichlorophenol	2,000	N/A [7]	30,303	2,000
2,4-Dimethylphenol	35,000	N/A [7]	111,111	35,000
2,4-Dinitrophenol	3,500	N/A [7]	384,615	3,500
2,4-Dinitrotoluene	130	N/A [7]	667	130
2,6-Dinitrotoluene	515	N/A [7]	1,000	515
2-Chlorophenol	3,600	N/A [7]	90,909	3,600
2-Methylnaphthalene	NA [5]	N/A [7]	10 [3]	10 [3]
2-Methylphenol	87,500	N/A [7]	1,886,792	87,500
3,3-Dichlorobenzidine	778	N/A [7]	222	222
4-Nitrophenol	108,500	N/A [7]	6,250,000	108,500
7,12-Dimethylbenz(a)anthracene	NA [5]	N/A [7]	10 [3]	10 [3]
Acenaphthene	105,000	N/A [7]	3,420	3,420
Acetophenone	175,000	N/A [7]	22,222,222	175,000
Anthracene	200,000	N/A [7]	45	45
Benzo(a)anthracene	6	N/A [7]	2.9	2.9
Benzo(a)pyrene	20	N/A [7]	0.2	0.2
Benzo(b)fluoranthene	8.0	N/A [7]	2	2
Benzo(g,h,i)perylene	NA [5]	N/A [7]	10 [3]	10 [3]
Benzo(k)fluoranthene	50	N/A [7]	4.3	4.3
Benzyl alcohol	525,000	N/A [7]	800,000	525,000
Bis(2-chloroethoxy)methane	NA [5]	N/A [7]	10 [3]	10 [3]
Bis(2-chloroethyl)ether	1,200	N/A [7]	714	714
Bis(2-ethylhexyl)phthalate	200	N/A [7]	285	200
Butyl benzyl phthalate	100,000	N/A [7]	42,200	42,200
Carbazole	17,500	N/A [7]	83	83
Chrysene	47,945	N/A [7]	10 [3]	10 [3]
Di-n-butylphthalate	70,000	N/A [7]	3,333,333	70,000
Di-n-octylphthalate	10,000	N/A [7]	3,000	3,000
Dibenzo(a,h)anthracene	48	N/A [7]	10 [3]	10 [3]
Dibenzofuran	7,000	N/A [7]	29,412	7,000
Diethylphthalate	1,400,000	N/A [7]	896,000	896,000
Dimethoate	350	N/A [7]	1,162,791	350
Dimethylphthalate	17,500,000	N/A [7]	4,320,000	4,320,000
Diphenylamine	43,750	N/A [7]	370,370	43,750
Disulfoton	70	N/A [7]	1,667	70
Fluoranthene	28,000	N/A [7]	206	206
Fluorene	28,000	N/A [7]	1,690	1,690
Hexachlorobenzene	130	N/A [7]	6	6

Table 3-12
Development of DPR Threshold Groundwater Concentrations
P&W VCAP, Connecticut Facilities

Parameter[1]	Draft Contained-In Policy Groundwater Concentrations[2] (µg/l)	P&W Screening Level for Inhalation of Wet Trench Air (µg/l)	P&W Screening Level for Dermal Contact with Groundwater (µg/l)	DPR Threshold Groundwater Concentrations (µg/l)
Hexachlorocyclopentadiene	12,250	N/A [7]	2,100	2,100
Hexachloroethane	3,000	N/A [7]	5,882	3,000
Indeno(1,2,3-c,d)pyrene	479	N/A [7]	10 [3]	10 [3]
Isophorone	368,421	N/A [7]	434,783	368,421
N-Nitroso-di-n-propylamine	50	N/A [7]	83	50
N-Nitroso-dimethylamine	6.9	N/A [7]	128	6.9
N-Nitroso-diphenylamine	71,429	N/A [7]	17,241	17,241
Naphthalene	28,000	N/A [7]	10 [3]	10 [3]
Nitrobenzene	2,000	N/A [7]	45,455	2,000
o,o,o-triethyl phosphorothioate	NA [5]	N/A [7]	10 [3]	10 [3]
Pentachloroethane	NA [5]	N/A [7]	10 [3]	10 [3]
Pentachlorophenol	100,000	N/A [7]	22	22
Phenacetine	NA [5]	N/A [7]	10 [3]	10 [3]
Phenol	400,000	N/A [7]	45,454,545	400,000
Phorate	350	N/A [7]	10 [3]	10 [3]
Pyrene	20,000	N/A [7]	132	132
Pyridine	5,000	N/A [7]	625,000	5,000
Pesticides/PCBs				
2,4-D. (2,4-Dichlorophenoxyacetic acid)	10,000	N/A [7]	620,000	10,000
Alachlor	200	N/A [7]	43	43
Aldrin	21	N/A [7]	63	21
alpha-HCH (alpha-BHC)	56	N/A [7]	29	29
beta-HCH (beta-BHC)	194	N/A [7]	50	50
Chlordane	30	N/A [7]	50	30
DDD	1,458	N/A [7]	50	50
DDE	1,029	N/A [7]	40	40
DDT	1,029	N/A [7]	5	5
Dieldrin	0.2	N/A [7]	6.7	0.2
Endosulfan	10,500	N/A [7]	7,143	7,143
Endosulfan Sulfate	NA [5]	N/A [7]	0.1 [3]	0.1 [3]
Endrin	20	N/A [7]	24	20
Endrin Aldehyde	NA [5]	N/A [7]	0.1 [3]	0.1 [3]
Endrin Ketone	NA [5]	N/A [7]	0.1 [3]	0.1 [3]
Famphur	NA [5]	N/A [7]	10 [3]	10 [3]
gamma-HCH (Lindane)	269	N/A [7]	91	91
Heptachlor	8	N/A [7]	67	8
Heptachlor Epoxide	8	N/A [7]	350	8
Methoxychlor	10,000	N/A [7]	0.5 [3]	0.5 [3]
PCBs	50	N/A [7]	1.5	1.5
Toxaphene	500	N/A [7]	1 [3]	1 [3]
Inorganics				
Aluminum	1,750,000	N/A [7]	1,219,512,195	1,750,000
Antimony	600	N/A [7]	47,619	600
Arsenic	5,000	N/A [7]	2,174	2,174
Barium	100,000	N/A [7]	4,347,826	100,000

Table 3-12
Development of DPR Threshold Groundwater Concentrations
P&W VCAP, Connecticut Facilities

Parameter[1]	Draft Contained-In Policy Groundwater Concentrations[2] (µg/l)	P&W Screening Level for Inhalation of Wet Trench Air (µg/l)	P&W Screening Level for Dermal Contact with Groundwater (µg/l)	DPR Threshold Groundwater Concentrations (µg/l)
Beryllium	400	N/A [7]	7.7	7.7
Cadmium	1,000	N/A [7]	30,303	1,000
Chromium (total)	5,000	N/A [7]	625,000	5,000
Chromium (VI)	NA [5]	N/A [7]	625,000	625,000
Cobalt	105,000	N/A [7]	71,428,571	105,000
Copper	130,000	N/A [7]	29,400,000	130,000
Cyanide	200,000	N/A [7]	17,543,860	200,000
Iron	525,000	N/A [7]	370,370,370	525,000
Lead	5,000	N/A [7]	NR [4]	5,000
Magnesium	NA [5]	N/A [7]	5,000 [3]	5000 [3]
Manganese	87,500	N/A [7]	833,000	87,500
Mercury	200	N/A [7]	12,821	200
Nickel	10,000	N/A [7]	1,333,333	10,000
Selenium	1,000	N/A [7]	5,882,353	1,000
Silver	5,000	N/A [7]	1,818,182	5,000
Thallium	500	N/A [7]	5 [3]	5 [3]
Tin	1,050,000	N/A [7]	714,285,714	1,050,000
Titanium	NA [5]	N/A [7]	10 [3]	10 [3]
Vanadium	5,000	N/A [7]	2,564,103	5,000
Zinc	50,000	N/A [7]	90,909,091	50,000

Notes:

1. *List includes chemicals/analytes for which USEPA has developed Soil Screening Levels; and chemicals/analytes detected in any medium in prior sampling conducted at the VCAP facilities that are also on the VCAP analytical list (included as Appendix B of Oct./Nov. Progress Report).*
2. *The Toxicity Characteristic Concentration from 40 CFR 261.24, Table 1, if available, or 100 x CTDEP's groundwater criteria. For chemicals with no tabulated groundwater criteria in the CT RSRs, criteria were developed using the methodology specified in the RSRs.*
3. *The VCAP PQL will be used as the DPR threshold concentration; these thresholds could be revised as toxicity factors become available or are developed.*
4. *NR - Dermal contact with lead in groundwater is not expected to pose any health risk for these receptors.*
5. *NA: Draft Contained-In Policy Concentration could not be calculated*
6. *NC: OSHA PEL/Other Occupational Exposure Level not available to calculate SL (refer to Table 3-3).*
7. *N/A - Not Applicable since only VOCs are expected to volatalize into trench air.*

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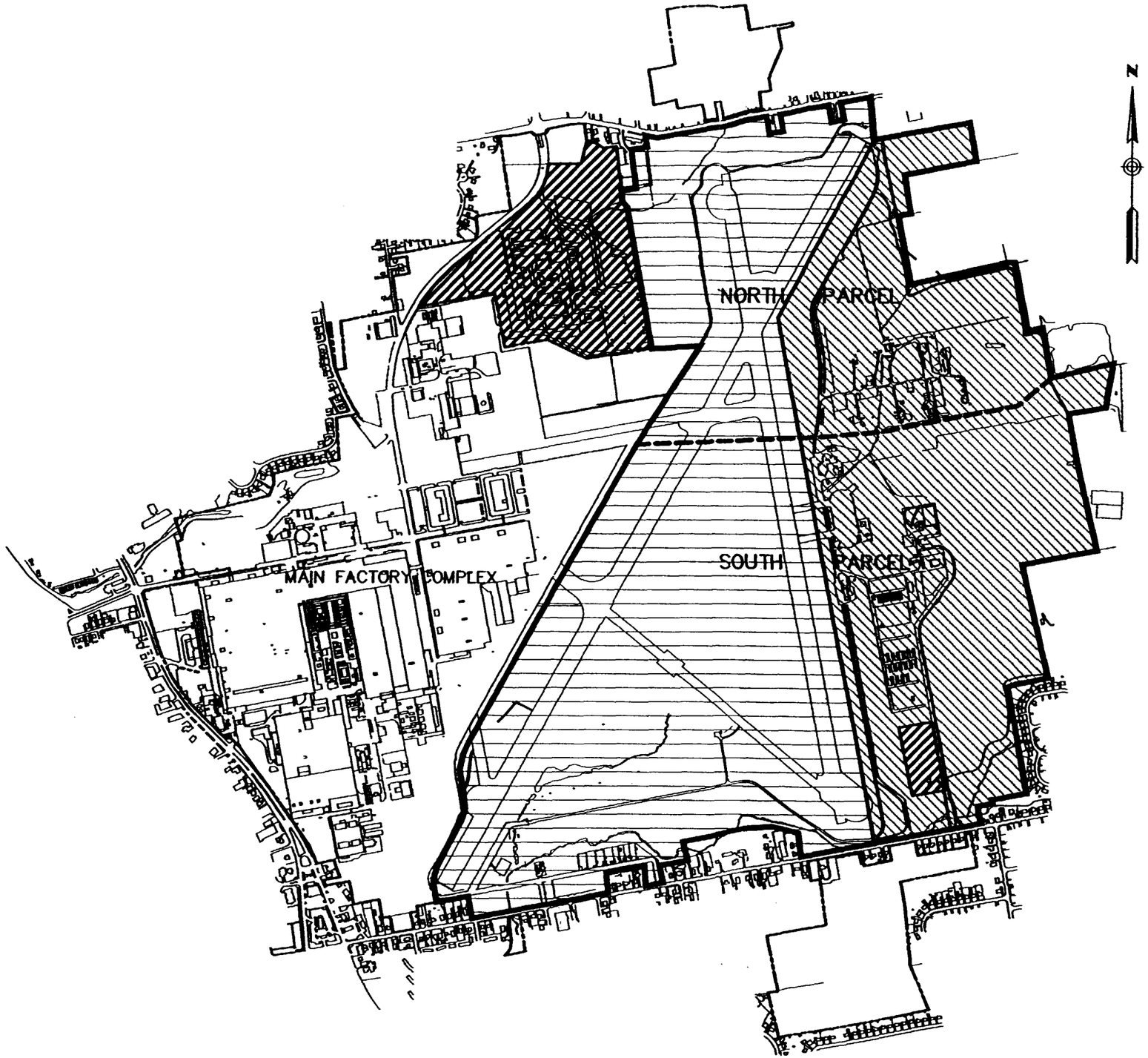

LEGEND

- Property line (Approximate location)
- Area boundary (Approximate location)
- Airport area (Rentschler Field)
- Klondike area
- Areas which are not part of the East Hartford Main Street Facility
- North/South Parcel Boundary (Approximate location)

MAP REFERENCE:

SURVEY CONTROL BY FUSS & O'NEILL, INC
PHOTOGRAMMETRY BY GOLDEN AERIAL SURVEYS, INC
DATE OF PHOTOGRAPHY: 3/17/91

500 0 500 1000 1500

SCALE IN FEET

FIG. 4–1

VOLUNTARY CORRECTIVE ACTION WORK PLAN
PRATT & WHITNEY MAIN STREET FACILITY

AIRPORT AND KLONDIKE AREAS

Comm.No. 68VC601

Pratt & Whitney / LEA

VDI-F02 (1/00)

Conceptual Site Model and Screening Levels for the Airport and Klondike Portions of the Pratt & Whitney Main Street Facility, East Hartford, CT

Prepared for
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August 2004

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Figure 1 Site Map

Figure 2 Exposure Areas

Figure 3 Conceptual Site Model for Airport/Klondike Areas of the Main Street Facility

Attachment A Screening Level Tables (from Gradient, 1999)

1 Introduction

A site-specific conceptual site model (CSM) is developed for Airport/Klondike Area of the Pratt & Whitney (P&W) 400 Main Street facility located in East Hartford, Connecticut in this document based on a review of activities undertaken at the facility and the overall CSM framework (Gradient, 1999)[1]. Although the "generic P&W CSM" and screening levels were developed for active facilities and the Airport and Klondike portions of this facility have been inactive since 1993-1994, the generic CSM and the receptors/exposures and screening levels (presented in the CSM report) are generally applicable at this site, as discussed in the subsequent sections.

[1] Gradient Corporation. 1999. Conceptual Site Model and Screening Levels for Pratt & Whitney's VCAP Connecticut Facilities. September 15.

2 Site Setting and Background

The 600-acre Airport/Klondike Area, abutting the Main Facility Area to the east, and is bordered on the north by a football stadium owned and operated by the State of Connecticut, on the south by Perimeter Road and Brewer Street, and on the east by undeveloped parcels (Figure 1 – Site Map). The majority of the Airport/Klondike area contains unpaved, infrequently mowed, grassy fields surrounding the abandoned airport runways and former industrial buildings. The northern portion of the former Airport site was transferred to the state to build a football stadium and associated parking. The majority of the Airport/Klondike property boundary is fenced and patrolled by P&W – greatly limiting access to this area.

In order to prepare the CSM for the Airport/Klondike area, Gradient interviewed P&W employees familiar with current activities at the site and reviewed recent aerial photographs of the area. Gradient had previously visited the site during the development of the overall CSM framework for the P&W facilities (Gradient, 1999). Although the current uses in the Airport/Klondike area are significantly limited compared to Main Street or other P&W facilities, they are nonetheless addressed by the generic CSM (Gradient, 1999).

This report describes the application of the generic CSM to the Airport and Klondike portions of the Main Street facility. As previously mentioned, the Airport/Klondike area is essentially inactive. Only one portion, the contractor's lot, is still used on a somewhat regular basis. Although contractors visit the site extremely infrequently, the contractor's lot holds maintenance and repair items for short-term storage and is fenced and locked when not in use. Other receptors for the site include maintenance workers, groundskeepers, samplers, and trespassers (Figure 2). The activities and potential exposures of these receptors are discussed in detail in the next section.

3 Site-Specific CSM and Screening Levels

In this chapter, the generic P&W CSM (Gradient, 1999) is modified, as appropriate, to: 1) delete any exposure scenarios or exposure pathways considered not to be "complete" at the Airport/Klondike site, and 2) add exposure scenarios (*i.e.*, receptors, pathways, and media) not included in the generic P&W CSM, if needed. Exposure conditions in the inactive Airport and Klondike portions of the Main Street facility are also evaluated against exposure conditions used in the development of generic P&W screening levels for active facilities (Gradient, 1999) to determine if any modifications to these screening levels are required to reflect unique site-specific conditions.

Overall, potential exposure scenarios and exposure conditions in the Airport and Klondike portions of the East Hartford Main Street facility are similar to exposure scenarios and conditions presented in the generic P&W CSM and the generic P&W screening levels, with a few exceptions, as described below: Refer to Figure 2 for the receptors and exposure pathways for which risks need to be evaluated at the site.

Excavating Laborers

The Airport and Klondike portions of the East Hartford Main Street facility are inactive; thus, excavation activities do not occur and excavation-related exposures do not need to be evaluated. Furthermore, even if there was a need to undertake sub-surface activities, the Design Process Review (DPR), which controls environmental exposures (Gradient, 1999), is followed at the site.

Maintenance Workers

The primary maintenance activities performed at this site consists of removing beaver dams in surface water (*i.e.* streams or ditches) located at the site. Consequently, maintenance workers could potentially be exposed to surface water and sediment while removing beaver dams. Communications from site personnel have indicated that these removal activities occur on an "as-needed basis", a few times per year.

The generic P&W CSM did not consider surface water and sediment exposures to maintenance workers. However, surface water and sediment exposures evaluated for samplers in the generic P&W

CSM (an exposure frequency of 50 times per year) are an appropriate, conservative (*i.e.*, health protective) surrogate for evaluating maintenance worker exposures at the Airport/Klondike area. Maintenance workers repair beaver dams at the Airport/Klondike area a few times a year, whereas the sampler sediment screening levels are based on a much higher exposure frequency (50 days per year). The surface water screening levels used in the generic P&W CSM are based on use of surface water as potable water – clearly a very conservative assumption for evaluating maintenance worker exposure. Overall, no additional screening levels need to be developed for addressing maintenance worker exposure.

Groundskeepers

Groundskeeping activities at the site occur with varying, but in general low frequency in the Airport and Klondike areas. The eastern edge of the Airport area has a 5-foot buffer zone along the fence that separates this area from the Main Street facility. This buffer zone is mowed approximately every 10 days, from March through October (about 20 days per year). By contrast, the rest of the Airport area (*i.e.* the vast majority of the area) is mowed only 1 to 2 times per year. Groundskeepers also occasionally mow the utility right-of-way and stadium overflow parking areas along the abandoned runways a few times per year. Most of the Klondike area is not mowed at all. Although the frequency of potential exposures, even in the most frequently mowed areas is significantly less at this site than that described by the generic CSM (which assumes 160 days per year exposure), the generic P&W screening levels will be used as a conservative measure. If necessary, site-specific exposure considerations may be incorporated at a later point.

Indoor Workers

The Airport and Klondike portions of the East Hartford Main Street facility do not have any active office or industrial buildings; thus, indoor air exposures do not need to be evaluated.

Samplers

Environmental compliance sampling is conducted weekly and monthly at Discharge 05 (DSN005), the only active on-site NPDES outfall. This outfall conveys cooling water and storm water from the adjacent Main Street facility. Sampling at DSN005 is performed by two different groups of

samplers: weekly sampling by contractors and monthly sampling by P&W staff. However, the likelihood of exposure during any sampling effort is limited because all sampling is conducted by 24-hour OSHA trained environmental contractors or professional environmental health and safety staff. Both groups of samplers take all necessary precautions to eliminate the likelihood of exposure. Nonetheless, sampling-related exposures at the site will be evaluated as a proxy for the maintenance worker exposures to sediment and surface water during beaver dam removal.

In addition, the sampler soil screening levels will also be used as a surrogate to evaluate exposures to worker exposures in the contractor lot. Contractors use this area for storing equipment in sheds and infrequently, pick up and drop off supplies. The sampler soil exposure frequency (50 days per year) is protective for such contractors given the limited use of the area.

Trespassers

The Airport and Klondike areas are inactive and largely unoccupied. Trespassers have occasionally been observed by security driving all-terrain vehicles on the abandoned Airport runways. In addition, adult walkers have also occasionally been observed in the area. However, P&W security from the Main Facility patrol the Perimeter Road that runs between the Airport and Klondike areas daily to look for signs of trespassing and vandalism. In addition, 24-hour surveillance video is also used in parts of the Airport and Klondike facility to monitor and address any unwarranted activities. The frequency of trespassing is also expected to be low because most of the area, particularly the Klondike portion, is overgrown and covered by grass up to a few feet in height – a significant natural deterrent to trespassing. Therefore, the generic P&W screening levels, which assume an exposure frequency of 26 days per year for an adolescent, will be used as conservative criteria to evaluate both adult and adolescent trespasser exposures.

Off-Site Utility Repair Workers

No exposure to environmental media from the Airport/Klondike areas of the Main Street facility are expected to occur among off-site utility repair workers. However, the potential for exposure to groundwater vapor *via* trench air inhalation will be evaluated for these receptors as a conservative measure. No modifications to generic P&W screening levels are proposed.

Off-Site Recreators

No recreational activities occur near this site.

Off-Site Residents

A water service survey[2] for the Main Street facility was conducted in January 1998 and determined that all residences in the immediate vicinity had available water service. None of the 64 parcels surveyed had private drinking water supply wells. Therefore, potential exposures *via* groundwater ingestion at off-site private wells is not of concern and does not need to be evaluated. However, vapor intrusion and potential indoor air exposures may be evaluated for these receptors as a conservative measure (if it appears that a VOC plume may be traveling towards the residences). No modifications to generic P&W screening levels are proposed.

Screening Levels

Table 1 summarizes the facility-specific CSM and compares the potential facility-specific receptors to the generic CSM receptors. Primary consideration is given to whether the exposure conditions described by the generic CSM are significantly different from facility-specific exposure conditions. Exposure Areas (EAs) for each of the facility receptors are also identified (Figure 2 - Exposure Areas Map).

Table 2 presents a summary of the exposure media and pathways for each receptor. Attachment A contains a copy of the entire set screening level tables (*e.g.*, Tables 3-1 through 3-10) from the prior CSM report (Gradient, 1999) that are partially referenced in Table 2.

[2] Loureiro Engineering Associates, Inc. 1998. Water Service Survey for the Pratt & Whitney East Hartford, North Haven, Rocky Hill and Southington, Connecticut Facilities. January 26.

4 Data Needs

A significant environmental database exists for the Airport/Klondike area from prior investigations. These data were reviewed to identify data gaps and develop additional sampling plans, if needed. However, the data review for the Airport/Klondike area found that the existing database was sufficient to evaluate the facility using the generic P&W CSM and the generic P&W screening levels. Therefore, no additional data are needed.

Table 1
Summary of Facility-Specific Receptors and Comparison to Generic P&W Receptors
Pratt & Whitney, Airport/Klondike Portions of the Main Street Facility, East Hartford, CT

Potential Receptors	Exposure assumptions significantly different from generic CSM?	Facility-Specific Receptor Characteristics	Exposure Area
Excavating Laborers	Yes, no exposures because no excavation activities at inactive facility.	Not applicable	Not applicable
Maintenance Workers	No, except that maintenance workers removing beaver dams may also contact surface water/sediment.	Yes	Figure 3
Groundskeepers	No, except that mowing frequency significantly less than stated in the generic CSM.	Yes	Figure 3
Indoor Workers	Yes, no active office or industrial buildings.	Not applicable	Not applicable
Samplers	No	No	Figure 3
Trespassers	No	No	Figure 3
On-Site Recreators	Yes, no frequent, organized on-site recreation activities occur.	Not applicable	Not applicable
Off-Site Utility Repair Workers	No.	None	Not defined*
Off-Site Recreators	Yes, no recreation activities occur near the site.	Not applicable	Not applicable
Off-Site Residents	No	None	Not defined*

*Undefined exposure areas may be defined in the future based on a review of available data.

Table 2
Summary of Screening Levels and Proposed Screening Approach
Pratt & Whitney, Airport/Klondike Portions of the Main Street Facility, East Hartford, CT

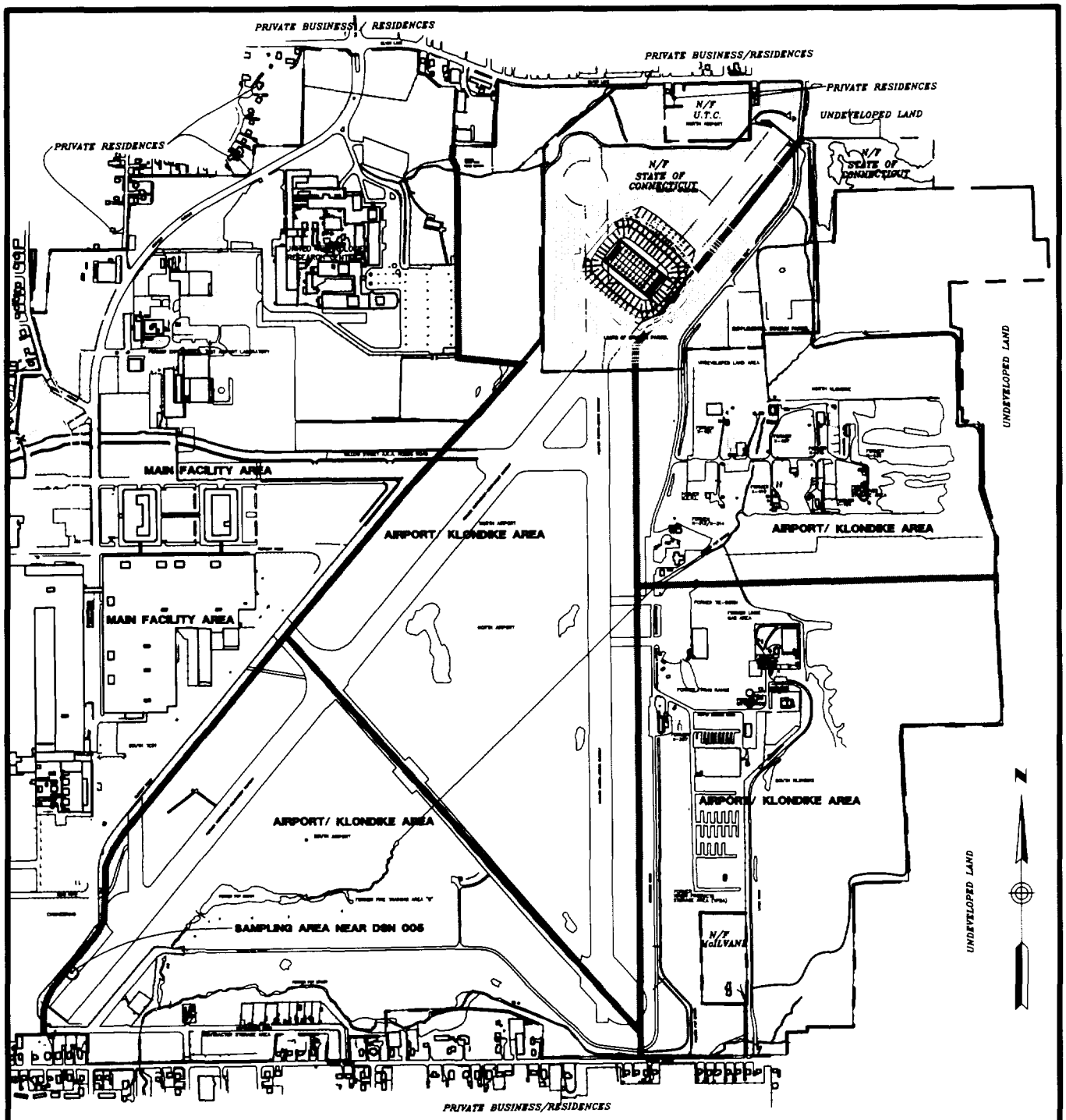
Exposure Media	**Soil**	**Trench Air**	**Indoor Air**	**Surface Water**	**Sediment**	**Groundwater**
Exposure Pathways	**Ingestion and Dermal**	**Inhalation**	**Inhalation**	**Ingestion and Dermal**	**Ingestion and Dermal**	**Dermal**
Excavating Laborers	N/A	N/A	N/A	N/A	N/A	N/A
Maintenance Workers	N/A	N/A	N/A	Table 3-6, 3-7	Table 3-10	N/A
Groundskeepers	Table 3-10	N/A	N/A	N/A	N/A	N/A
Indoor Workers	N/A	N/A	N/A	N/A	N/A	N/A
Samplers	Table 3-10	NA	N/A	Table 3-6, 3-7	Table 3-10	N/A
Trespassers	Table 3-10	NA	N/A	Table 3-6, 3-7	Table 3-10	N/A
On-Site Recreators	N/A	NA	N/A	N/A	N/A	N/A
Off-Site Utility Repair Workers	N/A	Table 3-3	N/A	N/A	N/A	N/A
Off-Site Recreators	N/A	N/A	N/A	N/A	N/A	N/A
Off-Site Residents	N/A	N/A	Table 3-5	N/A	N/A	N/A
Proposed Screening Approach	Compare max (by EA) to P&W soil screening levels	Compare spatial-arithmetic mean groundwater concentration calculated using wells along facility boundary to P&W groundwater screening level	Compare measured groundwater concentrations at wells along P&W property boundary near residences to CT volatilization criteria.	Compare surface water and groundwater concentrations to CT criteria	Compare max (by EA) to generic P&W sediment screening levels	N/A

Notes:

N/A Indicates that receptor is not exposed to medium/pathway or no screening required.

A full set of media screening Tables 3-1 though 3-10 from Gradient (1999) is found in Appendix A.

FIGURES



MAP REFERENCE:
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LEGEND

— — — — UNITED TECHNOLOGIES CORPORATION APPROX. PROPERTY BOUNDARY LINE

— — — — STATE OF CONNECTICUT APPROX. PROPERTY BOUNDARY LINE

AREA NOT SUBJECT TO ENVIRONMENTAL INDICATOR DETERMINATON

500 0 500 1000 1500

SCALE IN FEET

CONCEPTUAL SITE MODEL
United Technologies, Pratt & Whitney, 400 Main St., East Hartford, CT

AIRPORT/KLONDIKE AREA SITE MAP

Comm.No.	FIGURE 1	LEA
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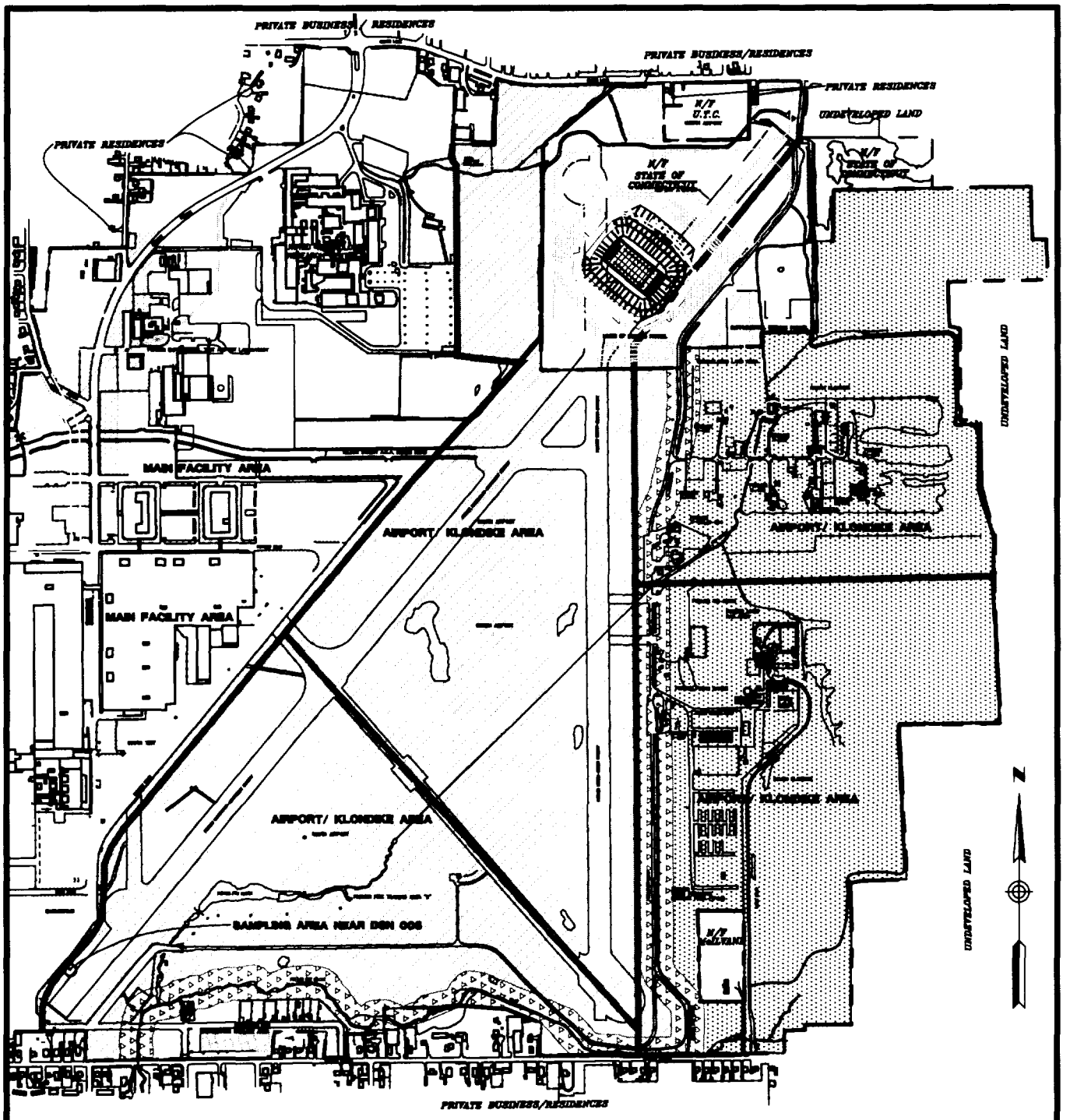

MAP REFERENCE:
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LEGEND

- UNITED TECHNOLOGIES CORPORATION APPROX. PROPERTY BOUNDARY LINE
- STATE OF CONNECTICUT APPROX. PROPERTY BOUNDARY LINE
- AREA NOT SUBJECT TO ENVIRONMENTAL INDICATOR DETERMINATON
- TRESPASSER EXPOSURE AREA
- GROUNDSKEEPER EXPOSURE AREA
- MAINTENANCE WORKER EXPOSURE AREA
- MAINTENANCE/CONTRACTOR LOT AREA

500 0 500 1000 1500

SCALE IN FEET

CONCEPTUAL SITE MODEL
United Technologies, Pratt & Whitney, 400 Main St., East Hartford, CT

AIRPORT/KLONDIKE AREA EXPOSURE MAP

Comm.No.	FIGURE 2	IEA
88UT406		

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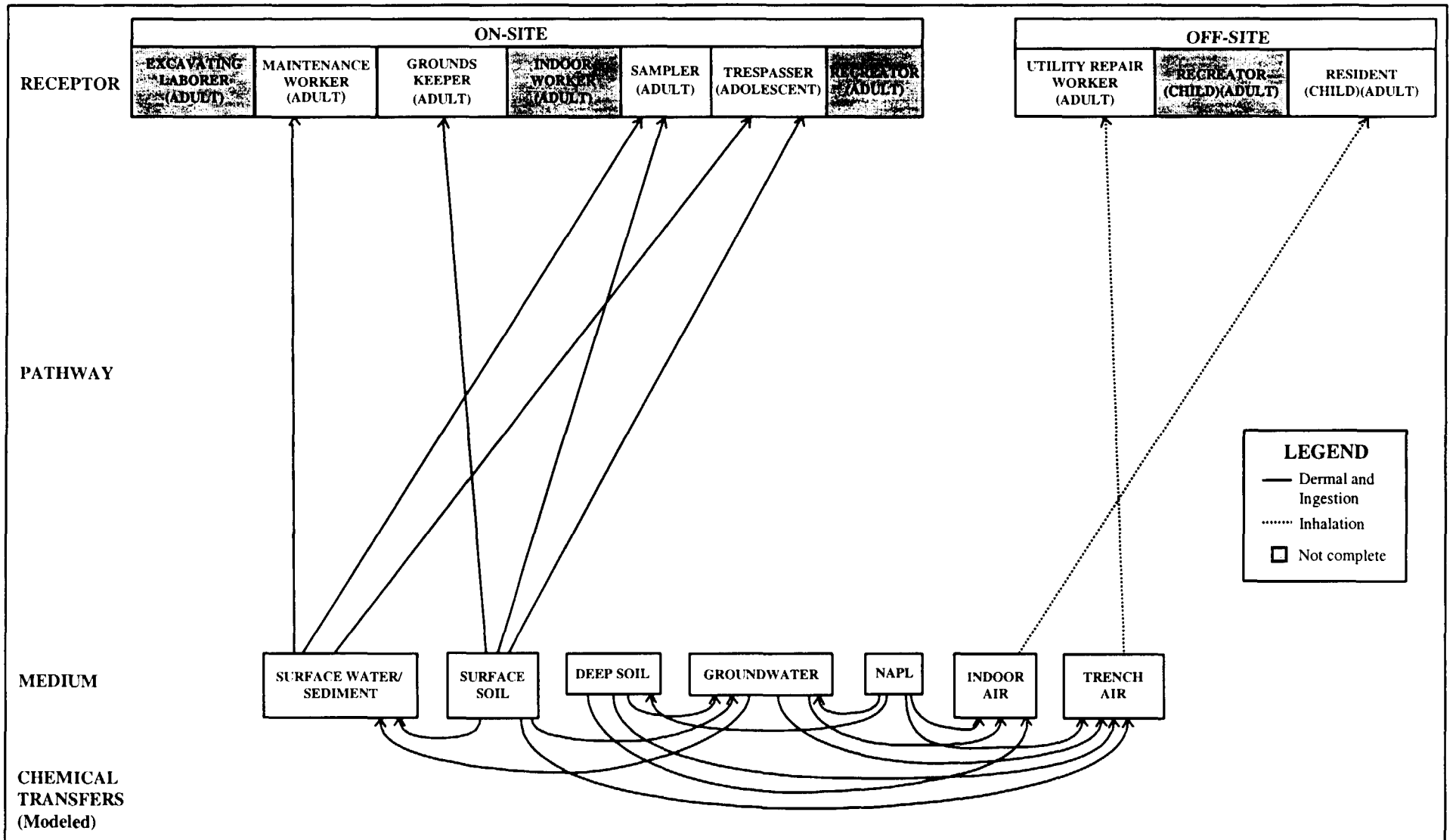

Gradient CORPORATION

CONCEPTUAL SITE MODEL FOR AIRPORT/KLONDIKE AREAS OF THE MAIN STREET FACILITY

Figure 3

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Attachment A

Screening Level Tables (from Gradient, 1999)

Table 3-1
Basis for Receptor-Specific P&W Screening Levels by Exposure Medium
P&W VCAP, Connecticut Facilities

	Exposure Media/Pathways					
Exposure Media:	**Soil**	**Trench Air**	**Indoor Air**	**Surface Water**	**Sediment**	**Groundwater**
Exposure Pathways:	**Ingestion and Dermal**	**Inhalation**	**Inhalation**	**Ingestion and Dermal**	**Ingestion and Dermal**	**Dermal**
Basis for P&W Screening Level Approach:	USEPA SSLs for Ingestion[1]	USEPA SSLs for Inhalation	Direct Measurement and CT Groundwater Volatilization RSRs[2]	CT Criteria	USEPA SSLs for Ingestion[1]	USEPA (1989)
Target Risk/ Concentration	TCR[3] = 10^{-6}; THQ[4] = 1.0	OSHA PELs/Other Occupational Exposure Levels	1% of the lowest Occupational Exposure Levels; TCR[3] = 10^{-6} and THQ[4] = 1.0	N/A[5]	TCR[3] = 10^{-6}; THQ[4] = 1.0	TCR[3] = 10^{-6}; THQ[4] = 1.0
Receptors						
Excavating Laborers	✓	✓				✓
Groundskeepers	✓					
Indoor Workers			✓			
Maintenance Workers	✓	✓	✓			✓
Samplers	✓		✓	✓	✓	
Trespassers	✓			✓	✓	
On-Site Recreators	✓		✓			
Off-Site Recreators				✓	✓	
Off-Site Residents			✓			

Notes:

1. *Only ingestion effects were considered for VOCs. Both ingestion and dermal effects were considered for all other chemicals.*
2. *Direct indoor air measurements will be conducted on-site and compared to 1% of the lowest occupational exposure levels to evaluate potential indoor air exposure. Off-site exposure will be evaluated using CT RSRs.*
3. *TCR=Target Cancer Risk*
4. *THQ=Target Hazard Quotient*
5. *N/A=Not applicable*

Table 3-2
Generic P&W Soil Screening Levels (SSLs) Based on Trench Air Inhalation
P&W VCAP, Connecticut Facilities

Parameter[1]	Generic P&W SSL Based on Trench Air Inhalation - Excavating Laborers and Maintenance Workers (mg/kg)
VOCs	
1,1,1,2-Tetrachloroethane	NC [4]
1,1,1-Trichloroethane	1,200 [2]
1,1,2,2-Tetrachloroethane	2,000 [2]
1,1,2-Trichloroethane	1,800 [2]
1,1-Dichloroethane	1,700 [2]
1,1-Dichloroethene	1,500 [2]
1,2,3-Trichloropropane	1,700 [2]
1,2-Dichloroethane	1,800 [2]
1,2-Dichloroethene (cis)	1,200 [2]
1,2-Dichloroethene (trans)	3,100 [2]
1,2-Dichloropropane	1,100 [2]
1,3-Dichloropropene	690
1,4-Dioxane	27,270 [6]
2-Butanone (MEK)	34,000 [2]
Acetone	100,000 [2]
Acetonitrile	162,610
Acrylonitrile	4,000
Benzene	827
Bromodichloromethane (Dichlorobromomethane)	NC [4]
Bromoform	1,900 [2]
Carbon Disulfide	1,520 [2]
Carbon Tetrachloride	1,100 [2]
Chlorobenzene	680 [2]
Chloroethane	1,600 [2]
Chloroform	2,800 [2]
Chloroprene (beta-Chloroprene)	6,820 [6]
Dichlorodifluoromethane	340 [2]
Ethylbenzene	400 [2]
Ethylene Dibromide (EDB)	11,700
Isobutyl Alcohol (Isobutanol)	40,000 [2]
Methacrylonitrile	2,700
Methyl bromide (Bromomethane)	1,300
Methyl isobutyl ketone (4-Methyl-2-pentanone)	17,000
Methyl-tert-butyl-ether (MTBE)	1,800 [2,5]
Methylene Chloride	2,400 [2]
Propionitrile	1,060 [6]
Styrene	1,500 [2]
Tetrachloroethene	230 [2]
Toluene	650 [2]
Trichloroethene	1,300 [2,3]
Trichlorofluoromethane	1,980 [2]

Table 3-2
Generic P&W Soil Screening Levels (SSLs) Based on Trench Air Inhalation
P&W VCAP, Connecticut Facilities

Parameter[1]	Generic P&W SSL Based on Trench Air Inhalation - Excavating Laborers and Maintenance Workers (mg/kg)
Vinyl Acetate	9,200 [2]
Vinyl Chloride	272
Xylenes	410 [2]

Notes:

1. *List includes VOCs for which USEPA has developed Soil Screening Levels; and VOCs detected in any medium in prior sampling conducted at the VCAP facilities that are also on the VCAP analytical list (included as Appendix B of Oct./Nov. Progress Report).*
2. *SSL based on Soil Saturation Concentration (C-sat) when EPA or calculated health-based SSL was greater than C-sat.*
3. *Note that Unit Risk Factor used to derive SSL was a 1994 Interim toxicity criteria provided by the Superfund Health Risk Technical Support Center, ECAO. However, final SSL based on C-sat since calculated health-based value was greater than C-sat.*
4. *NC - No occupational air exposure levels were available, hence a SSL could not be calculated. If this chemical is detected at the VCAP facilities, an occupational air exposure level and a SSL may later be developed.*
5. *The calculated health-based SSL was compared to C-sat for ethylether, since a C-sat value for MTBE was not available.*
6. *Published values for volatilization factor (VF) and C-sat were not available. Used VF and C-sat for vinyl chloride, since the VF for vinyl chloride is the most health-protective.*

Table 3-3
Generic P&W Groundwater Screening Levels (SLs) Based on Trench Air Inhalation
P&W VCAP, Connecticut Facilities

Parameter[1]	Generic P&W SL for Excavating Laborers and Maintenance Workers (µg/l)
VOCs	
1,1,1,2-Tetrachloroethane	NC [3]
1,1,1-Trichloroethane	1,330,000 [2]
1,1,2,2-Tetrachloroethane	943,941
1,1,2-Trichloroethane	1,193,174
1,1-Dichloroethane	5,060,000 [2]
1,1-Dichloroethene	523,564
1,2,3-Trichloropropane	7,852,721 [4]
1,2-Dichloroethane	5,454,546
1,2-Dichloroethene (cis)	3,500,000 [2]
1,2-Dichloroethene (trans)	3,500,000 [2]
1,2-Dichloropropane	2,800,000 [2]
1,3-Dichloropropene	119,165
1,4-Dioxane	22,782,641
2-Butanone (MEK)	23,993,691
Acetone	109,082,235
Acetonitrile	8,781,048
Acrylonitrile	134,936
Benzene	78,743
Bromodichloromethane (Dichlorobromomethane)	NC [3]
Bromoform	134,589
Carbon Disulfide	1,649,889
Carbon Tetrachloride	793,000 [2]
Chlorobenzene	472,000 [2]
Chloroethane	5,740,000 [2]
Chloroform	1,289,326
Chloroprene (beta-Chloroprene)	2,355,816 [4]
Dichlorodifluoromethane	280,000 [2]
Ethylbenzene	169,000 [2]
Ethylene dibromide (EDB)	3,400,000 [2]
Isobutyl Alcohol (Isobutanol)	7,852,721
Methacrylonitrile	78,449 [4]
Methyl Bromide (Bromomethane)	102,204
Methyl isobutyl ketone (4-Methyl-2-pentanone)	11,894,850
Methyl-t-butyl ether (MTBE)	51,600 [2]
Methylene Chloride	13,000,000 [2]
Propionitrile	366,460 [4]
Styrene	310,000 [2]
Tetrachloroethene	200,000 [2]
Toluene	526,000 [2]
Trichloroethene	1,100,000 [2]
Trichlorofluoromethane	1,100,000 [2]

Table 3-3
Generic P&W Groundwater Screening Levels (SLs) Based on Trench Air Inhalation
P&W VCAP, Connecticut Facilities

Parameter[1]	Generic P&W SL for Excavating Laborers and Maintenance Workers (µg/l)
Vinyl Acetate	916,151 [4]
Vinyl Chloride	68,058
Xylenes	200,000 [2]

Notes:

1. *List includes VOCs for which USEPA has developed Soil Screening Levels; and VOCs detected in any medium in prior sampling conducted at the VCAP facilities that are also on the VCAP analytical list (included as Appendix B of Oct./Nov. Progress Report).*
2. *Indicates that the calculated health-based SL was greater than the aqueous Solubility Limit for the chemical. Therefore, the proposed SL is the chemical's Solubility Limit.*
3. *NC - No occupational air exposure levels were available, hence a SL could not be calculated. If this chemical is detected at the VCAP facilities, an occupational air exposure and a SL may be developed later.*
4. *Screening level computed using the most conservative/highest Henry's Law constant (specifically, constant for Dichlorodifluoromethane), since the Henry's Law constant was not available for this chemical.*

Table 3-4
Generic P&W Indoor Air Screening Levels (SLs)
P&W VCAP, Connecticut Facilities

Parameter[1]	Most Stringent Occupational Indoor Air Level[2] (mg/m³)	Generic P&W Indoor Air SLs[4] (mg/m³)
VOCs		
1,1,1,2-Tetrachloroethane	NA [3]	NA [3]
1,1,1-Trichloroethane	1900	19
1,1,2,2-Tetrachloroethane	6.9	0.069
1,1,2-Trichloroethane	45	0.45
1,1-Dichloroethane	400	4
1,1-Dichloroethene	20	0.2
1,2,3-Trichloropropane	60	0.6
1,2-Dichloroethane	4	0.04
1,2-Dichloroethene (cis)	790	7.9
1,2-Dichloroethene (trans)	790	7.9
1,2-Dichloropropane	347	3.47
1,3-Dichloropropene	4.5	0.045
1,4-Dioxane	90	0.9
2-Butanone (MEK)	590	5.9
Acetone	590	5.9
Acetonitrile	34	0.34
Acrylonitrile	4.3	0.043
Benzene	0.32	0.0032
Bromodichloromethane (Dichlorobromomethane)	NA [3]	NA [3]
Bromoform	5	0.05
Carbon Disulfide	3	0.03
Carbon Tetrachloride	31	0.31
Chlorobenzene	46	0.46
Chloroethane	264	2.64
Chloroform	49	0.49
Chloroprene (beta-Chloroprene)	36	0.36
Dichlorodifluoromethane	4950	49.5
Ethylbenzene	434	4.34
Ethylene Dibromide (EDB)	156	1.56
Isobutyl Alcohol (Isobutanol)	150	1.5
Methacrylonitrile	2.7	0.027
Methyl Bromide (Bromomethane)	3.9	0.039
Methyl isobutyl ketone (4-Methyl-2-pentanone)	205	2.05
Methyl-tert-butyl-ether (MTBE)	144	1.44
Methylene Chloride	174	1.74
Propionitrile	14	0.14
Styrene	85	0.85
Tetrachloroethene	170	1.7
Toluene	188	1.88
Trichloroethene	269	2.69
Trichlorofluoromethane	5600	56

Table 3-4
Generic P&W Indoor Air Screening Levels (SLs)
P&W VCAP, Connecticut Facilities

Parameter[1]	Most Stringent Occupational Indoor Air Level[2] (mg/m³)	Generic P&W Indoor Air SLs[4] (mg/m³)
Vinyl Acetate	35	0.35
Vinyl chloride	2.6	0.026
Xylenes	434	4.34

Notes:

1. *List includes VOCs for which USEPA has developed Soil Screening Levels; and VOCs detected in any medium in prior sampling conducted at the VCAP facilities that are also on the VCAP analytical list (included as Appendix B of Oct./Nov. Progress Report).*
2. *Lowest of OSHA PELs, NIOSH RELs, and ACGIH TLVs were used (ACGIH Guide to Occupational Exposure Values, 1998).*
3. *NA - Indicates value not available. If this compound is detected at the VCAP facilities, an occupational air exposure level may be later developed.*
4. *Proposed screening level is 1% of a chemical's most stringent occupational indoor air level.*

Table 3-5
Generic P&W Off-Site Groundwater Screening Levels (SLs)
Based on Residential Indoor Air Inhalation
P&W VCAP, Connecticut Facilities

Parameter[1]	Generic P&W Off-Site Groundwater SLs[2] (µg/L)
VOCs	
1,1,1,2-Tetrachloroethane	12
1,1,1-Trichloroethane	20,400
1,1,2,2-Tetrachloroethane	23
1,1,2-Trichloroethane	8,000
1,1-Dichloroethane	34,600
1,1-Dichloroethene	1
1,2,3-Trichloropropane	NT [3]
1,2-Dichloroethane	21
1,2-Dichloroethene (cis)	2,732 [2]
1,2-Dichloroethene (trans)	5,465 [2]
1,2-Dichloropropane	14
1,3-Dichloropropene	6
1,4-Dioxane	17,754 [2]
2-Butanone (MEK)	50,000
Acetone	50,000
Acetonitrile	3,088,611 [2]
Acrylonitrile	104 [2]
Benzene	215
Bromodichloromethane (Dichlorobromomethane)	23 [2]
Bromoform	920
Carbon Disulfide	212 [2]
Carbon Tetrachloride	16
Chlorobenzene	1,800
Chloroethane	NT [3]
Chloroform	287
Chloroprene (beta-Chloroprene)	NT [3]
Dichlorodifluoromethane	47 [2,4]
Ethylbenzene	50,000
Ethylene Dibromide (EDB)	4
Isobutyl Alcohol (Isobutanol)	246 [2,4]
Methacrylonitrile	5 [5]
Methyl Bromide (Bromomethane)	226 [2]
Methyl isobutyl ketone (4-Methyl-2-pentanone)	50,000
Methyl-tert-butyl-ether (MTBE)	50,000
Methylene Chloride	50,000
Propionitrile	NT [3]
Styrene	580
Tetrachloroethene	1,500
Toluene	23,500
Trichloroethene	219
Trichlorofluoromethane	4,334 [2]

Table 3-5
Generic P&W Off-Site Groundwater Screening Levels (SLs)
Based on Residential Indoor Air Inhalation
P&W VCAP, Connecticut Facilities

Parameter[1]	Generic P&W Off-Site Groundwater SLs[2] (µg/L)
Vinyl Acetate	47 [2,4]
Vinyl Chloride	2
Xylenes	21,300

Notes:

1. *List includes VOCs for which USEPA has developed Soil Screening Levels; and VOCs detected in any medium in prior sampling conducted at the VCAP facilities that are also on the VCAP analytical list (included as Appendix B of Oct./Nov. Progress Report).*
2. *Same as CT groundwater volatilization RSR; for chemicals with no published numeric RSR values, a value was calculated using CT RSR methodology and default input data.*
3. *NT - Toxicity factor not available to calculate SL.*
4. *Screening level computed using the most conservative/highest Henry's Law constant (specifically, constant for Dichlorodifluoromethane), since the Henry's Law constant was not available for this chemical.*
5. *The VCAP PQL is used as the screening level since the health-based SL was lower than the PQL.*

Table 3-6
Generic P&W Surface Water Screening Levels (SLs)
P&W VCAP, Connecticut Facilities

Parameter[4]	Aquatic Life/Human Health-Based Surface Water SLs[5] (µg/l)	VCAP Practical Quantitation Limit (PQL) (µg/l)	Generic P&W Surface Water SLs[6] (µg/l)
VOCs			
1,1,1,2-Tetrachloroethane	NP[7]	1	1 [8]
1,1,1-Trichloroethane	NP[7]	5	5 [8]
1,1,2,2-Tetrachloroethane	0.17 [1]	0.5	0.5
1,1,2-Trichloroethane	0.6 [1]	5	5
1,1-Dichloroethane	NP[7]	5	5 [8]
1,1-Dichloroethene	0.057 [1]	1	1
1,2,3-Trichloropropane	NP[7]	5	5 [8]
1,2-Dichloroethane	0.38 [1]	1	1
1,2-Dichloroethene (cis)	NP[7]	5	5 [8]
1,2-Dichloroethene (trans)	NP[7]	5	5 [8]
1,2-Dichloropropane	NP[7]	5	5 [8]
1,3-Dichloropropene	10 [1]	0.5	10
1,4-Dioxane	NP[7]	150	150 [8]
2-Butanone (MEK)	NP[7]	100	100 [8]
Acetone	NP[7]	100	100 [8]
Acetonitrile	NP[7]	100	100 [8]
Acrylonitrile	0.059 [1]	0.5	0.5
Benzene	1.2 [1]	1	1.2
Bromodichloromethane (Dichlorobromomethane)	0.27 [1]	5	5
Bromoform	4.3 [1]	4	4.3
Carbon Disulfide	NP[7]	5	5 [8]
Carbon Tetrachloride	0.25 [1]	5	5
Chlorobenzene	680 [1]	5	680
Chloroethane	NP[7]	10	10 [8]
Chloroform	5.7 [1]	5	5.7
Chloroprene (beta-Chloroprene)	NP[7]	5	5 [8]
Dichlorodifluoromethane	NP[7]	5	5 [8]
Ethylbenzene	3100 [1]	5	3100
Ethylene Dibromide (EDB)	NP[7]	0.05	0.05 [8]
Isobutyl Alcohol (Isobutanol)	NP[7]	50	50 [8]
Methacrylonitrile	NP[7]	5	5 [8]
Methyl Bromide (Bromomethane)	48 [1]	10	48
Methyl isobutyl ketone (4-Methyl-2-pentanone)	NP[7]	5	5 [8]
Methyl-tert-butyl-ether (MTBE)	NP[7]	5	5 [8]
Methylene Chloride	4.7 [1]	5	5
Propionitrile	NP[7]	5	5 [8]
Styrene	NP[7]	5	5 [8]
Tetrachloroethene	0.8 [1]	5	5
Toluene	6800 [1]	5	6800
Trichloroethene	2.7 [1]	5	5
Trichlorofluoromethane	NP[7]	5	5 [8]
Vinyl Acetate	NP[7]	5	5 [8]
Vinyl Chloride	2 [1]	2	2
Xylenes	NP[7]	5	5 [8]

Table 3-6
Generic P&W Surface Water Screening Levels (SLs)
P&W VCAP, Connecticut Facilities

Parameter[4]	Aquatic Life/Human Health-Based Surface Water SLs[5] (µg/l)	VCAP Practical Quantitation Limit (PQL) (µg/l)	Generic P&W Surface Water SLs[6] (µg/l)
SVOCs			
1,2,4-Trichlorobenzene	NP[7]	10	10 [8]
1,2-Dichlorobenzene	2700 [1]	10	2700
1,3-Dichlorobenzene	400 [1]	10	400
1,4-Dichlorobenzene	400 [1]	10	400
2,4,5-Trichlorophenol	NP[7]	10	10 [8]
2,4,6-Trichlorophenol	2.1 [1]	10	10
2,4-Dichlorophenol	93 [1]	10	93
2,4-Dimethylphenol	NP[7]	10	10 [8]
2,4-Dinitrophenol	70 [1]	50	70
2,4-Dinitrotoluene	0.11 [1]	10	10
2,6-Dinitrotoluene	NP[7]	10	10 [8]
2-Chlorophenol	NP[7]	10	10 [8]
2-Methylnaphthalene	NP[7]	10	10 [8]
2-Methylphenol	NP[7]	10	10 [8]
3,3-Dichlorobenzidines	0.04 [1]	20	20
4-Nitrophenol	NP[7]	50	50 [8]
7,12-Dimethylbenzo(a)anthracene	NP[7]	10	10 [8]
Acenapthene	NP[7]	10	10 [8]
Acetophenone	NP[7]	10	10 [8]
Anthracene	9600 [1]	10	9600
Benzo(a)anthracene	0.0028 [1]	0.06	0.06
Benzo(a)pyrene	0.0028 [1]	0.2	0.2
Benzo(b)flouranthene	0.0028 [1]	0.08	0.08
Benzo(g,h,i)perylene	0.0028 [1]	10	10
Benzo(k)flouranthene	0.0028 [1]	0.3	0.3
Benzyl alcohol	NP[7]	20	20 [8]
Bis(2-chloroethoxy)methane	NP[7]	10	10 [8]
Bis(2-chloroethyl)ether	0.031 [1]	10	10
Bis(2-ethylhexyl)phthalate	1.8 [1]	2	2
Butyl benzyl phthalate	NP[7]	10	10 [8]
Carbazole	NP[7]	10	10 [8]
Chrysene	0.0028 [1]	10	10
Di-n-butyl phthalate	2700 [1]	10	2700
Di-n-octyl phthalate	NP[7]	10	10 [8]
Dibenzo(a,h)anthracene	0.0028 [1]	10	10
Dibenzofuran	NP[7]	10	10 [8]
Diethylphthalate	23000 [1]	10	23000
Dimethoate	NP[7]	10	10 [8]
Dimethylphthalate	313000 [1]	10	313000
Diphenylamine	NP[7]	10	10 [8]
Disulfoton	NP[7]	10	10 [8]
Flouranthene	300 [1]	10	300
Fluorene	1300 [1]	10	1300
Hexachlorobenzene	0.00075 [1]	0.077	0.077

Table 3-6
Generic P&W Surface Water Screening Levels (SLs)
P&W VCAP, Connecticut Facilities

Parameter[4]	Aquatic Life/Human Health-Based Surface Water SLs[5] (µg/l)	VCAP Practical Quantitation Limit (PQL) (µg/l)	Generic P&W Surface Water SLs[6] (µg/l)
Hexachlorocyclopentadiene	240 [1]	10	240
Hexachloroethane	1.9 [1]	3	3
Indeno(1,2,3-cd)pyrene	0.0028 [1]	10	10
Isophorone	8.4 [1]	10	10
N-Nitrosodi-n-propylamine	NP[7]	10	10 [8]
N-Nitroso-dimethylamine	0.00069 [1]	10	10
N-Nitroso-diphenylamine	5 [1]	10	10
Naphthalene	NP[7]	10	10 [8]
Nitrobenzene	17 [1]	10	17
o,o,o-triethyl phosphorothioate	NP[7]	10	10 [8]
Pentachloroethane	NP[7]	10	10 [8]
Pentachlorophenol	0.28 [1]	1	1
Phenacetine	NP[7]	10	10 [8]
Phenol	NP[7]	10	10 [8]
Phorate	NP[7]	10	10 [8]
Pyrene	960 [1]	10	960
Pyridine	NP[7]	10	10 [8]
Pesticides/PCBs			
2,4-D. (2,4-Dichlorophenoxyacetic acid)	NP[7]	70	70 [8]
Alachlor	NP[7]	2	2 [8]
Aldrin	0.00013 [1]	0.05	0.05
alpha-HCH (alpha-BHC)	NP[7]	0.05	0.05 [8]
beta-HCH (beta-BHC)	NP[7]	0.05	0.05 [8]
Chlordane	0.00057 [1]	0.05	0.05
DDD	0.00083 [1]	0.1	0.1
DDE	0.00059 [1]	0.1	0.1
DDT	0.00059 [1]	0.1	0.1
Dieldrin	0.00014 [1]	0.002	0.002
Endosulfan	0.056 [2]	0.05	0.056
Endosulfan Sulfate	0.93 [1]	0.1	0.93
Endrin	0.0023 [2]	0.1	0.1
Endrin Aldehyde	0.76 [1]	0.1	0.76
Endrin Ketone	NP[7]	0.1	0.1 [8]
Famphur	NP[7]	10	10 [8]
gamma-BHC (Lindane)	0.019 [1]	0.05	0.05
Heptachlor	0.00021 [1]	0.05	0.05
Heptachlor Epoxide	0.0001 [1]	0.05	0.05
Methoxychlor	NP[7]	0.5	0.5 [8]
PCBs	4.40E-05 [1]	0.5	0.5
Toxaphene	0.0002 [2]	1	1
Inorganics			
Aluminum	NP[7]	200	200 [8]
Antimony	14 [1]	6	14
Arsenic	NP[7]	4	4 [8]
Barium	NP[7]	200	200 [8]

Table 3-6
Generic P&W Surface Water Screening Levels (SLs)
P&W VCAP, Connecticut Facilities

Parameter[4]	Aquatic Life/Human Health-Based Surface Water SLs[5] (µg/l)	VCAP Practical Quantitation Limit (PQL) (µg/l)	Generic P&W Surface Water SLs[6] (µg/l)
Beryllium	0.0077 [1]	4	4
Cadmium	0.66 [2]	5	5
Chromium (total)	NP[7]	10	10 [8]
Chromium (VI)	11 [2]	10	11
Cobalt	NP[7]	50	50 [8]
Copper	14.3 [3]	25	25
Cyanide	5.2 [2]	5	5.2
Iron	NP[7]	100	100 [8]
Lead	1.3 [2]	3	3
Magnesium	NP[7]	5,000	5,000 [8]
Manganese	NP[7]	15	15 [8]
Mercury	0.012 [2]	0.2	0.2
Nickel	88 [2]	40	88
Selenium	5 [2]	5	5
Silver	1.2 [3]	10	10
Thallium	1.7 [1]	5	5
Tin	NP[7]	250	250 [8]
Titanium	NP[7]	10	10 [8]
Vanadium	NP[7]	50	50 [8]
Zinc	12.3 [2]	20	20

Notes:

1. *State of Connecticut's human health-based criteria that is protective of consumption of water and organisms.*
2. *State of Connecticut's aquatic life criteria for freshwater that is protective of chronic health effects.*
3. *State of Connecticut's aquatic life criteria for freshwater that is protective of acute health effects.*
4. *List includes chemicals/analytes for which USEPA has developed Soil Screening Levels; and chemicals/analytes detected in any medium in prior sampling conducted at the VCAP facilities that are also on the VCAP analytical list (included as Appendix B of Oct./Nov. Progress Report).*
5. *Lower of the aquatic life (freshwater) and the protection of human health (consumption of both water and organisms) criteria promulgated by the State of Connecticut.*
6. *The PQL is used as the screening level, if the aquatic life/human health-based screening level was lower than the PQL.*
7. *NP - No surface water criteria has been promulgated by the State of Connecticut for this chemical.*
8. *Aquatic life/human health-based screening level not available, hence the PQL will be used as a conservative screening level.*

Table 3-7
Generic P&W Groundwater Screening Levels (SLs) Based on Surface Water Protection
P&W VCAP, Connecticut Facilities

Parameter[1]	Connecticut's Groundwater Criteria Based on Surface Water Protection[2] (µg/l)	VCAP Practical Quantitation Limit (PQL) (µg/l)	Generic P&W Groundwater SLs Based on Surface Water Protection (µg/l)
VOCs			
1,1,1,2-Tetrachloroethane	NP [3]	1	10 [4]
1,1,1-Trichloroethane	62,000	5	62,000
1,1,2,2-Tetrachloroethane	110	0.5	110
1,1,2-Trichloroethane	1,260	5	1,260
1,1-Dichloroethane	NP [3]	5	50 [4]
1,1-Dichloroethene	96	1	96
1,2,3-Trichloropropane	NP [3]	5	50 [4]
1,2-Dichloroethane	2,970	1	2,970
1,2-Dichloroethene (cis)	NP [3]	5	50 [4]
1,2-Dichloroethene (trans)	NP [3]	5	50 [4]
1,2-Dichloropropane	NP [3]	5	50 [4]
1,3-Dichloropropene	34,000	0.5	34,000
1,4-Dioxane	NP [3]	150	1,500 [4]
2-Butanone (MEK)	NP [3]	100	1,000 [4]
Acetone	NP [3]	100	1,000 [4]
Acetonitrile	NP [3]	100	1,000 [4]
Acrylonitrile	20	0.5	20
Benzene	710	1	710
Bromodichloromethane (Dichlorobromomethane)	NP [3]	5	50 [4]
Bromoform	10,800	4	10,800
Carbon Disulfide	NP [3]	5	50 [4]
Carbon Tetrachloride	132	5	132
Chlorobenzene	420,000	5	420,000
Chloroethane	NP [3]	10	100 [4]
Chloroform	14,100	5	14,100
Chloroprene (beta-Chloroprene)	NP [3]	5	50 [4]
Dichlorodifluoromethane	NP [3]	5	50 [4]
Ethylbenzene	580,000	5	580,000
Ethylene dibromide (EDB)	NP [3]	0.05	0.5 [4]
Isobutyl alcohol (Isobutanol)	NP [3]	50	500 [4]
Methacrylonitrile	NP [3]	5	50 [4]
Methyl Bromide (Bromomethane)	NP [3]	10	100 [4]
Methyl isobutyl ketone (4-Methyl-2-pentanone)	NP [3]	5	50 [4]
Methyl-tert-butyl-ether (MTBE)	NP [3]	5	50 [4]
Methylene Chloride	48,000	5	48,000
Propionitrile	NP [3]	5	50 [4]
Styrene	NP [3]	5	50 [4]
Tetrachloroethene	88	5	88
Toluene	4,000,000	5	4,000,000
Trichloroethene	2,340	5	2,340
Trichlorofluoromethane	NP [3]	5	50 [4]
Vinyl Acetate	NP [3]	5	50 [4]
Vinyl Chloride	15,750	2	15,750
Xylenes	NP [3]	5	50 [4]

Table 3-7
Generic P&W Groundwater Screening Levels (SLs) Based on Surface Water Protection
P&W VCAP, Connecticut Facilities

Parameter[1]	Connecticut's Groundwater Criteria Based on Surface Water Protection[2] (µg/l)	VCAP Practical Quantitation Limit (PQL) (µg/l)	Generic P&W Groundwater SLs Based on Surface Water Protection (µg/l)
SVOCs			
1,2,4-Trichlorobenzene	NP [3]	10	100 [4]
1,2-Dichlorobenzene	1,710,000	10	1,710,000
1,3-Dichlorobenzene	26,000	10	26,000
1,4-Dichlorobenzene	26,000	10	26,000
2,4,5-Trichlorophenol	NP [3]	10	100 [4]
2,4,6-Trichlorophenol	NP [3]	10	100 [4]
2,4-Dichlorophenol	15,800	10	15,800
2,4-Dimethylphenol	NP [3]	10	100 [4]
2,4-Dinitrophenol	NP [3]	50	500 [4]
2,4-Dinitrotoluene	NP [3]	10	100 [4]
2-6-Dinitrotoluene	NP [3]	10	100 [4]
2-Chlorophenol	NP [3]	10	100 [4]
2-Methylnaphthalene	NP [3]	10	100 [4]
2-Methylphenol	NP [3]	10	100 [4]
3,3-Dichlorobenzidine	NP [3]	20	200 [4]
4-Nitrophenol	NP [3]	50	500 [4]
7,12-Dimethylbenzo(a)anthracene	NP [3]	10	100 [4]
Acenaphthene	0.3	10	10 [5]
Acetophenone	NP [3]	10	100 [4]
Anthracene	1,100,000	10	1,100,000
Benzo(a)anthracene	0.3	0.2	0.3
Benzo(a)pyrene	0.3	0.08	0.3
Benzo(b)fluoranthene	0.3	0.08	0.3
Benzo(g,h,i)perylene	NP [3]	0.06	0.6 [4]
Benzo(k)fluoranthene	0.3	0.3	0.3
Benzyl alcohol	NP [3]	20	200 [4]
Bis(2-chloroethoxy)methane	NP [3]	10	100 [4]
Bis(2-chloroethyl)ether	42	10	42
Bis(2-ethyl hexyl)phthalate	59	2	59
Butyl benzyl phthalate	NP [3]	10	100 [4]
Carbazole	NP [3]	10	100 [4]
Chrysene	NP [3]	10	100 [4]
Di-n-butyl phthalate	120,000	10	120,000
Di-n-octyl phthalate	NP [3]	10	100 [4]
Dibenz(a,h)anthracene	NP [3]	10	100 [4]
Dibenzofuran	NP [3]	10	100 [4]
Diethylphthalate	NP [3]	10	100 [4]
Dimethoate	NP [3]	10	100 [4]
Dimethylphthalate	NP [3]	10	100 [4]
Diphenylamine	NP [3]	10	100 [4]
Disulfoton	NP [3]	10	100 [4]
Fluoranthene	3,700	10	3,700
Fluorene	140,000	10	140,000
Hexachlorobenzene	0.077	0.077	0.077

Table 3-7
Generic P&W Groundwater Screening Levels (SLs) Based on Surface Water Protection
P&W VCAP, Connecticut Facilities

Parameter[1]	Connecticut's Groundwater Criteria Based on Surface Water Protection[2] (µg/l)	VCAP Practical Quantitation Limit (PQL) (µg/l)	Generic P&W Groundwater SLs Based on Surface Water Protection (µg/l)
Hexachlorocyclopentadiene	NP [3]	10	100 [4]
Hexachloroethane	89	3	89
Ideno(1,2,3-cd)pyrene	NP [3]	10	100 [4]
Isophorone	NP [3]	10	100 [4]
N-Nitroso-di-n-propylamine	NP [3]	10	100 [4]
N-Nitroso-dimethylamine	NP [3]	10	100 [4]
N-Nitroso-diphenylamine	NP [3]	10	100 [4]
Naphthalene	NP [3]	10	100 [4]
Nitrobenzene	NP [3]	10	100 [4]
o,o,o-triethyl phosphorothioate	NP [3]	10	100 [4]
Pentachloroethane	NP [3]	10	100 [4]
Pentachlorophenol	NP [3]	1	10 [4]
Phenacetine	NP [3]	10	100 [4]
Phenol	92,000,000	10	92,000,000
Phorate	NP [3]	10	100 [4]
Pyrene	110,000	10	110,000
Pyridine	NP [3]	10	100 [4]
Pesticides/PCBs			
2,4-D. (2,4-Dichlorophenoxyacetic acid)	NP [3]	70	700 [4]
Alachlor	NP [3]	2	20 [4]
Aldrin	NP [3]	0.05	0.5 [4]
alpha-HCH (alpha-BHC)	NP [3]	0.05	0.5 [4]
beta-HCH (beta-BHC)	NP [3]	0.05	0.5 [4]
Chlordane	0.3	0.05	0.3
DDD	NP [3]	0.1	1 [4]
DDE	NP [3]	0.1	1 [4]
DDT	NP [3]	0.1	1 [4]
Dieldrin	0.1	0.002	0.1
Endosulfan	NP [3]	0.05	0.5 [4]
Endosulfan Sulfate	NP [3]	0.1	1 [4]
Endrin	0.1	0.1	0.1
Endrin Aldehyde	NP [3]	0.1	1 [4]
Endrin Ketone	NP [3]	0.1	1 [4]
Famphur	NP [3]	10	100 [4]
gamma-BHC (Lindane)	NP [3]	0.05	0.5 [4]
Heptachlor	0.05	0.05	0.05
Heptachlor Epoxide	0.05	0.05	0.05
Methoxychlor	NP [3]	0.5	5 [4]
PCBs	0.5	0.5	0.5
Toxaphene	1	1	1
Inorganics			
Aluminum	NP [3]	200	2,000 [4]
Antimony	86,000	6	86,000
Arsenic	4	4	4
Barium	NP [3]	200	2,000 [4]

Table 3-7
Generic P&W Groundwater Screening Levels (SLs) Based on Surface Water Protection
P&W VCAP, Connecticut Facilities

Parameter[1]	Connecticut's Groundwater Criteria Based on Surface Water Protection[2] (µg/l)	VCAP Practical Quantitation Limit (PQL) (µg/l)	Generic P&W Groundwater SLs Based on Surface Water Protection (µg/l)
Beryllium	4	4	4
Cadmium	6	5	6
Chromium (total)	NP [3]	10	100 [4]
Chromium (VI)	110	10	110
Cobalt	NP [3]	50	500 [4]
Copper	48	25	48
Cyanide	52	5	52
Iron	NP [3]	100	1,000 [4]
Lead	13	3	13
Magnesium	NP [3]	5,000	50,000 [4]
Manganese	NP [3]	15	150 [4]
Mercury	0.4	0.2	0.4
Nickel	880	40	880
Selenium	50	5	50
Silver	12	10	12
Thallium	63	5	63
Tin	NP [3]	250	2,500 [4]
Titanium	NP [3]	10	100 [4]
Vanadium	NP [3]	50	500 [4]
Zinc	123	20	123

Note:

1. *List includes chemicals/analytes for which USEPA has developed Soil Screening Levels; and chemicals/analytes detected in any medium in prior sampling conducted at the VCAP facilities that are also on the VCAP analytical list (included as Appendix B of Oct./Nov. Progress Report).*
2. *Same as the State of Connecticut's Groundwater Criteria for the Protection of Surface Water.*
3. *NP - No surface water criteria has been promulgated by the State of Connecticut for this chemical.*
4. *Groundwater criteria for the Protection of Surface Water not available; hence, the PQL times a dilution attenuation factor of 10 (low end of range used by Connecticut) was used to calculate a conservative screening level.*
5. *The VCAP PQL will be used as the screening level since the Connecticut Groundwater criteria is less than the PQL.*

Table 3-8
Generic P&W Groundwater Screening Levels (SLs) Based on Dermal Contact
P&W VCAP, Connecticut Facilities

Parameter[4]	Health-Based Groundwater SL for Excavating Laborers and Maintenance Workers[1] (µg/l)		VCAP Practical Quantitation Limit (PQL) (µg/l)	Generic P&W Groundwater SL for Excavating Laborers and Maintenance Workers[5] (µg/l)
VOCs				
1,1,1,2-Tetrachloroethane	5,000	C	1	5,000
1,1,1-Trichloroethane	1,330,000 [3]	N	5	1,330,000
1,1,2,2-Tetrachloroethane	1,887	C	0.5	1,887
1,1,2-Trichloroethane	7,143	C	5	7,143
1,1-Dichloroethane	5,060,000 [3]	N	5	5,060,000
1,1-Dichloroethene	357	C	1	357
1,2,3-Trichloropropane	77	C	5	77
1,2-Dichloroethane	7,143	C	1	7,143
1,2-Dichloroethene (cis)	1,098,901	N	5	1,098,901
1,2-Dichloroethene (trans)	1,098,901	N	5	1,098,901
1,2-Dichloropropane	5,000	C	5	5,000
1,3-Dichloropropene	3,448	C	0.5	3,448
1,4-Dioxane	769,231	C	150	769,231
2-Butanone (MEK)	147,058,824	N	100	147,058,824
Acetone	212,765,957	N	100	212,765,957
Acetonitrile	11,904,762	N	100	11,904,762
Acrylonitrile	4,545	C	0.5	4,545
Benzene	1,064	C	1	1,064
Bromodichloromethane (Dichlorobromomethane)	9,091	C	5	9,091
Bromoform	163,934	C	4	163,934
Carbon Disulfide	243,902	N	5	243,902
Carbon Tetrachloride	1,190	C	5	1,190
Chlorobenzene	472,000 [3]	N	5	472,000
Chloroethane	5,740,000 [3]	N	10	5,740,000
Chloroform	4,348	C	5	4,348
Chloroprene (beta-chloroprene)	2,439,024	N	5	2,439,024
Dichlorodifluoromethane	280,000 [3]	N	5	280,000
Ethylbenzene	121,951	N	5	121,951
Ethylene dibromide (EDB)	12	C	0.05	12
Isobutyl Alcohol (Isobutanol)	156,250,000	N	50	156,250,000
Methacrylonitrile	NT [2]		5	5
Methyl Bromide (Bromomethane)	476,190	N	10	476,190
Methyl isobutyl ketone (4-Methyl-2-pentanone)	NT [2]		5	5
Methyl-tert-butyl-ether (MTBE)	51,600 [3]	N	5	51,600
Methylene Chloride	100,000	C	5	100,000
Propionitrile	NT [2]		5	5
Styrene	310,000 [3]	N	5	310,000
Tetrachloroethene	179	C	5	179
Toluene	243,902	N	5	243,902
Trichloroethene	31,250	N	5	31,250
Trichlorofluoromethane	1,100,000 [3]	N	5	1,100,000
Vinyl Acetate	20,000,000 [3]	N	5	20,000,000
Vinyl Chloride	244	C	2	244
Xylenes	200,000 [3]	N	5	200,000

Table 3-8
Generic P&W Groundwater Screening Levels (SLs) Based on Dermal Contact
P&W VCAP, Connecticut Facilities

Parameter[4]	Health-Based Groundwater SL for Excavating Laborers and Maintenance Workers[1] (µg/l)		VCAP Practical Quantitation Limit (PQL) (µg/l)	Generic P&W Groundwater SL for Excavating Laborers and Maintenance Workers[5] (µg/l)
SVOCs				
1,2,4-Trichlorobenzene	30,000 [3]	N	10	30,000
1,2-Dichlorobenzene	156,000 [3]	N	10	156,000
1,3-Dichlorobenzene	123,000 [3]	N	10	123,000
1,4-Dichlorobenzene	1,149	C	10	1,149
2,4,5-Trichlorophenol	555,556	N	10	555,556
2,4,6-Trichlorophenol	2,632	C	10	2,632
2,4-Dichlorophenol	30,303	N	10	30,303
2,4-Dimethylphenol	111,111	N	10	111,111
2,4-Dinitrophenol	384,615	N	50	384,615
2,4-Dinitrotoluene	667	C	10	667
2,6-Dinitrotoluene	1,000	C	10	1,000
2-Chlorophenol	90,909	N	10	90,909
2-Methylnaphthalene	NT [2]		10	10
2-Methylphenol	1,886,792	N	10	1,886,792
3,3-Dichlorobenzidine	222	C	20	222
4-Nitrophenol	6,250,000	N	50	6,250,000
7,12-Dimethylbenz(a)anthracene	NT [2]		10	10
Acenaphthene	3,420 [3]	N	10	3,420
Acetophenone	22,222,222	N	10	22,222,222
Anthracene	45 [3]	N	10	45
Benzo(a)anthracene	2.9	C	0.06	2.9
Benzo(a)pyrene	0.2	C	0.2	0.2
Benzo(b)fluoranthene	2	C	0.08	2
Benzo(g,h,i)perylene	NT [2]		10	10
Benzo(k)fluoranthene	4.3 [3]	C	0.3	4.3
Benzyl alcohol	800,000 [3]	N	20	800,000
Bis(2-chloroethoxy)methane	NT [2]		10	10
Bis(2-chloroethyl)ether	714	C	10	714
Bis(2-ethylhexyl)phthalate	285 [3]	C	2	285
Butyl benzyl phthalate	42,200 [3]	N	10	42,200
Carbazole	83	C	10	83
Chrysene	1.8 [3]	C	10	10
Di-n-butyl phthalate	3,333,333	N	10	3,333,333
Di-n-octyl phthalate	3,000 [3]	N	10	3,000
Dibenzo(a,h)anthracene	0.083	C	10	10
Dibenzofuran	29,412	N	10	29,412
Diethylphthalate	896,000 [3]	N	10	896,000
Dimethoate	1,162,791	N	10	1,162,791
Dimethylphthalate	4,320,000 [3]	N	10	4,320,000
Diphenylamine	370,370	N	10	370,370
Disulfoton	1,667	N	10	1,667
Fluoranthene	206 [3]	N	10	206
Fluorene	1,690 [3]	N	10	1,690
Hexachlorobenzene	6 [3]	C	0.077	6

Table 3-8
Generic P&W Groundwater Screening Levels (SLs) Based on Dermal Contact
P&W VCAP, Connecticut Facilities

Parameter[4]	Health-Based Groundwater SL for Excavating Laborers and Maintenance Workers[1] (µg/l)		VCAP Practical Quantitation Limit (PQL) (µg/l)	Generic P&W Groundwater SL for Excavating Laborers and Maintenance Workers[5] (µg/l)
Hexachlorocyclopentadiene	2,100 [3]	N	10	2,100
Hexachloroethane	5,882	C	3	5,882
Indeno(1,2,3-c,d)pyrene	0.53 [3]	C	10	10
Isophorone	434,783	C	10	434,783
N-Nitroso-di-n-propylamine	83	C	10	83
N-Nitroso-dimethylamine	128	C	10	128
N-Nitroso-diphenylamine	17,241	C	10	17,241
Naphthalene	NT [2]		10	10
Nitrobenzene	45,455	N	10	45,455
o,o,o-triethyl phosphorothioate	NT [2]		10	10
Pentachloroethane	NT [2]		10	10
Pentachlorophenol	22	C	1	22
Phenacetine	NT [2]		10	10
Phenol	45,454,545	N	10	45,454,545
Phorate	NT [2]		10	10
Pyrene	132 [3]	N	10	132
Pyridine	625,000	N	10	625,000
Pest/PCB				
2,4-D. (2,4-Dichlorophenoxyacetic acid)	620,000 [3]	N	70	620,000
Alachlor	43	C	2	43
Aldrin	63	C	0.05	63
alpha-HCH (alpha-BHC)	29	C	0.05	29
beta-HCH (beta-BHC)	50	C	0.05	50
Chlordane	50	C	0.05	50
DDD	50	C	0.1	50
DDE	40 [3]	C	0.1	40
DDT	5 [3]	C	0.1	5
Dieldrin	6.7	C	0.002	6.7
Endosulfan	7,143	N	0.05	7,143
Endosulfan Sulfate	NT [2]		0.1	0.1
Endrin	24 [3]	N	0.1	24
Endrin Aldehyde	NT [2]		0.1	0.1
Endrin Ketone	NT [2]		0.1	0.1
Famphur	NT [2]		10	10
gamma-BHC (Lindane)	91	C	0.05	91
Heptachlor	67	C	0.05	67
Heptachlor Epoxide	350 [3]	C	0.05	350
Methoxychlor	NT [2]		0.5	0.5
PCBs	1.5	C	0.5	1.5
Toxaphene	NT [2]		1	1
Inorganics				
Aluminum	1,219,512,195	N	200	1,219,512,195
Antimony	47,619	N	6	47,619
Arsenic	2,174	C	4	2,174
Barium	4,347,826	N	200	4,347,826

Table 3-8
Generic P&W Groundwater Screening Levels (SLs) Based on Dermal Contact
P&W VCAP, Connecticut Facilities

Parameter[4]	Health-Based Groundwater SL for Excavating Laborers and Maintenance Workers[1] (µg/l)		VCAP Practical Quantitation Limit (PQL) (µg/l)	Generic P&W Groundwater SL for Excavating Laborers and Maintenance Workers[5] (µg/l)
Beryllium	7.7	C	4	7.7
Cadmium	30,303	N	5	30,303
Chromium (total)	625,000	N	10	625,000
Chromium (VI)	625,000	N	10	625,000
Cobalt	71,428,571	N	50	71,428,571
Copper	29,400,000	N	25	29,400,000
Cyanide	17,543,860	N	5	17,543,860
Iron	370,370,370	N	100	370,370,370
Lead	NT [2]		3	NR [6]
Magnesium	NT [2]		5000	5,000
Manganese	833,000	N	15	833,000
Mercury	12,821	N	0.2	12,821
Nickel	1,333,333	N	40	1,333,333
Selenium	5,882,353	N	5	5,882,353
Silver	1,818,182	N	10	1,818,182
Thallium	NT [2]		5	5
Tin	714,285,714	N	250	714,285,714
Titanium	NT [2]		10	10
Vanadium	2,564,103	N	50	2,564,103
Zinc	90,909,091	N	20	90,909,091

Notes:

1. *N: SL based on noncarcinogenic effects (with a Target Hazard Quotient of 1).*
   C: SL based on carcinogenic effects (with a Target Risk of 1×10^{-6}).
2. *NT - Indicates no toxicity factors available*
3. *Indicates that the calculated health-based SL was greater than the Solubility Limit - therefore Solubility Limit used as default.*
4. *List includes chemicals/analytes for which USEPA has developed Soil Screening Levels; and chemicals/analytes detected in any medium in prior sampling conducted at the VCAP facilities that are also on the VCAP analytical list (included as Appendix B of Oct./Nov. Progress Report).*

Table 3-9
Summary of Exposure Parameter Values by Receptor for Pratt and Whitney Generic Soil Screening Levels P&W VCAP, Connecticut Facilities

Non-Carcinogens			Soil Ingestion and Dermal Contact						
Parameter	Description	Units	Excavating Laborer	Grounds-keeper	Maintenance Worker	Sampler	Trespasser	OnSite Recreator	Off-Site Recreator
THQ	Target Hazard Quotient	unitless	1	1	1	1	1	1	1
AT	Averaging Time	yr	25	8	25	25	0.25*	25	0.25*
BW	Body Weight	kg	70	70	70	70	59	70	59
ED	Exposure Duration	yr	25	8	25	25	1	25	1
EF	Exposure Frequency	d/yr	50	160	12	50	26	78	26
IR	Ingestion Rate	mg/d	200	100	50	50	50	50	50
FS	Fraction from Source	unitless	1	1	1	1	1	1	1
AF	Dermal Adherence Factor	mg/cm^2	0.041	0.016	0.016	0.016	0.06	0.01	0.06
SA	Skin Contact Area	cm^2/event	4,443	4,443	4,443	4,443	5,800	4,443	5,800
CF1	Conversion Factor	d/yr	365	365	365	365	365	365	365
CF2	Conversion Factor	kg/mg	1.0E-06	1.0E-06	1.0E-06	1.0E-06	1.0E-06	1.0E-06	1.0E-06

Carcinogens			Soil Ingestion and Dermal Contact						
Parameter	Parameter	Units	Excavating Laborer	Grounds-keeper	Maintenance Worker	Sampler	Trespasser	OnSite Recreator	Off-Site Recreator
TR	Target Risk	unitless	1.0E-06	1.0E-06	1.0E-06	1.0E-06	1.0E-06	1.0E-06	1.0E-06
AT	Averaging Time	yr	70	70	70	70	70	70	70
BW	Body Weight	kg	70	70	70	70	59	70	59
ED	Exposure Duration	yr	25	8	25	25	5	25	5
EF	Exposure Frequency	d/yr	50	160	12	50	26	78	26
IR	Ingestion Rate	mg/d	200	100	50	50	50	50	50
FS	Fraction from Source	unitless	1	1	1	1	1	1	1
AF	Dermal Adherence Factor	mg/cm^2	0.041	0.016	0.016	0.016	0.06	0.01	0.06
SA	Skin Contact Area	cm^2/event	4,443	4,443	4,443	4,443	5,800	4,443	5,800
CF1	Conversion Factor	d/yr	365	365	365	365	365	365	365
CF2	Conversion Factor	kg/mg	1.0E-06	1.0E-06	1.0E-06	1.0E-06	1.0E-06	1.0E-06	1.0E-06

*Notes: * - Since this represents a short-term exposure, sub-chronic, non-carcinogenic risks due to exposure over one summer were evaluated.*

Table 3-10

Generic P & W Soil Screening Levels (SSLs) Based on Soil Ingestion and Dermal Contact[5] (mg/kg)
P&W VCAP, Connecticut Facilities

Compound[4]	Basis for Screening Level[1]	Excavating Laborer	Grounds keeper	Maintenance Worker	Sampler	Trespasser	On-Site Recreator	Off-Site Recreator
VOCs								
1,1,1,2-Tetrachloroethane	C	274	491	4,662	982	8,834	736	8,834
1,1,1-Trichloroethane	N	91,467	56,000	NR [2]	364,000	144,947	224,000	144,947
1,1,2,2-Tetrachloroethane	C	34	60	570	120	1,080	90	1,080
1,1,2-Trichloroethane	C	123	220	2,090	440	3,960	330	3,960
1,1-Dichloroethane	N	254,800	156,000	NR [2]	NR [2]	NR [2]	624,000	NR [2]
1,1-Dichloroethene	C	11	20	190	40	360	30	360
1,2,3-Trichloropropane	C	1.0	1.8	17	4	33	3	33
1,2-Dichloroethane	C	78	140	1,330	280	2,520	210	2,520
1,2-Dichloroethene (cis)	N	25,480	15,600	421,200	101,400	414,135	62,400	414,135
1,2-Dichloroethene (trans)	N	52,267	32,000	864,000	208,000	828,269	128,000	828,269
1,2-Dichloropropane	C	101	180	1,710	360	3,240	270	3,240
1,3-Dichloropropene	C	45	80	760	160	1,440	120	1,440
1,4-Dioxane	C	648	1,160	11,020	2,320	20,880	1,740	20,880
2-Butanone (MEK)	N	NR [2]	960,000	NR [2]	NR [2]	NR [2]	NR [2]	NR [2]
Acetone	N	254,800	156,000	NR [2]	NR [2]	NR [2]	624,000	NR [2]
Acetonitrile	N	15,680	9,600	259,200	62,400	248,481	38,400	248,481
Acrylonitrile	C	13	24	224	47	425	35	425
Benzene	C	246	440	4,180	880	7,920	660	7,920
Bromodichloromethane (Dichlorobromomethane)	C	112	200	1,900	400	3,600	300	3,600
Bromoform	C	905	1,620	15,390	3,240	29,160	2,430	29,160
Carbon disulfide	N	254,800	156,000	NR [2]	NR [2]	414,135	624,000	414,135
Carbon tetrachloride	C	56	100	950	200	1,800	150	1,800
Chlorobenzene	N	52,267	32,000	864,000	208,000	82,827	128,000	82,827
Chloroethane	N	NR [2]	640,000	NR [2]	NR [2]	NR [2]	NR [2]	NR [2]
Chloroform	C	1,117	2,000	19,000	4,000	36,000	3,000	36,000
Chloroprene	N	52,267	32,000	864,000	208,000	82,827	128,000	82,827
Dichlorodifluoromethane	N	522,667	320,000	NR [2]	NR [2]	NR [2]	NR [2]	NR [2]
Ethyl ether (Diethyl Ether)	N	522,667	320,000	NR [2]	NR [2]	NR [2]	NR [2]	NR [2]
Ethylbenzene	N	254,800	156,000	NR [2]	NR [2]	414,135	624,000	414,135
Ethylene dibromide (EDB)	C	0.08	0.15	1.4	0.3	2.7	0.2	2.7

Table 3-10

Generic P & W Soil Screening Levels (SSLs) Based on Soil Ingestion and Dermal Contact[5] (mg/kg)

P&W VCAP, Connecticut Facilities

Compound[4]	Basis for Screening Level[1]	Excavating Laborer	Grounds keeper	Maintenance Worker	Sampler	Trespasser	On-Site Recreator	Off-Site Recreator
Isobutyl alcohol (Isobutanol)	N	784,000	480,000	NR [2]	NR [2]	NR [2]	NR [2]	NR [2]
Methacrylonitrile	N	261	160	4,320	1,040	4,141	640	4,141
Methyl bromide (Bromomethane)	N	3,593	2,200	59,400	14,300	5,798	8,800	5,798
Methyl isobutyl ketone (4-Methyl-2-pentanone)	C	71,501	128,000	NR [2]	256,000	NR [2]	192,000	NR [2]
Methyl tert-butyl Ether (MTBE)	N	13,067	8,000	216,000	52,000	20,707	32,000	20,707
Methylene chloride	C	950	1,700	16,150	3,400	30,600	2,550	30,600
Propionitrile		NT [6]	NT [6]	NT [6]	NT [6]	NT [6]	NT [6]	NT [6]
Styrene	N	522,667	320,000	NR [2]	NR [2]	828,269	NR [2]	828,269
Tetrachloroethene	C	134	240	2,280	480	4,320	360	4,320
Toluene	N	522,667	320,000	NR [2]	NR [2]	NR [2]	NR [2]	NR [2]
Trichloroethene	C	648	1,160	11,020	2,320	20,880	1,740	20,880
Trichlorofluoromethane	N	784,000	480,000	NR [2]	NR [2]	NR [2]	NR [2]	NR [2]
Vinyl acetate	N	NR [2]	NR [2]	NR [2]	NR [2]	NR [2]	NR [2]	NR [2]
Vinyl chloride	C	3.4	6	57	12	108	9	108
Xylenes	N	NR [2]	NR [2]	NR [2]	NR [2]	NR [2]	NR [2]	NR [2]
SVOCs								
1,2,4-Trichlorobenzene	N	23,365	14,570	368,971	88,826	24,418	57,283	24,418
1,2-Dichlorobenzene	N	209,687	130,760	NR [2]	797,160	219,765	514,080	219,765
1,3-Dichlorobenzene	N	213,282	133,002	NR [2]	810,826	217,323	522,893	217,323
1,4-Dichlorobenzene	C	277	504	4,494	946	5,698	744	5,698
2,4,5-Trichlorophenol	N	233,652	145,704	NR [2]	888,264	NR [2]	572,832	NR [2]
2,4,6-Trichlorophenol	C	594	1,083	9,654	2,032	12,431	1,597	12,431
2,4-Dichlorophenol	N	6,890	4,296	108,799	26,192	7,325	16,891	7,325
2,4-Dimethylphenol	N	47,929	29,888	756,864	182,208	488,366	117,504	488,366
2,4-Dinitrophenol	N	4,793	2,989	75,686	18,221	4,884	11,750	4,884
2,4-Dinitrotoluene	C	9.2	17	150	32	211	25	211
2,6-Dinitrotoluene	C	9.2	17	150	32	211	25	211
2-Chlorophenol	N	11,683	7,285	184,486	44,413	122,092	28,642	122,092
2-Methylnaphthalene		NT [6]	NT [6]	NT [6]	NT [6]	NT [6]	NT [6]	NT [6]
2-Methylphenol	N	116,826	72,852	NR [2]	444,132	NR [2]	286,416	NR [2]
3,3-Dichlorobenzidine	C	10.2	19	166	35	235	28	235

Table 3-10

Generic P & W Soil Screening Levels (SSLs) Based on Soil Ingestion and Dermal Contact[5] (mg/kg)
P&W VCAP, Connecticut Facilities

Compound[4]	Basis for Screening Level[1]	Excavating Laborer	Grounds keeper	Maintenance Worker	Sampler	Trespasser	On-Site Recreator	Off-Site Recreator
4-Nitrophenol	N	148,578	92,653	NR [2]	564,845	151,394	364,262	151,394
7,12-Dimethylbenz(a)anthracene		NT [6]	NT [6]	NT [6]	NT [6]	NA	NT [6]	NT [6]
Acenaphthene	N	140,790	87,796	NR [2]	535,236	NR [2]	345,168	NR [2]
Acetophenone	N	239,643	149,440	NR [2]	911,040	NR [2]	587,520	NR [2]
Anthracene	N	688,973	429,640	NR [2]	NR [2]	NR [2]	NR [2]	NR [2]
Benzo(a)anthracene	C	9.2	17	150	32	187	25	187
Benzo(a)pyrene	C	0.90	1.6	14	3	17	2	17
Benzo(b)fluoranthene	C	9.2	17	150	32	187	25	187
Benzo(g,h,i)perylene		NT [6]	NT [6]	NT [6]	NT [6]	NA	NT [6]	NT [6]
Benzo(k)fluoranthene	C	92	168	1,498	315	1,873	248	1,873
Benzyl alcohol	N	718,928	448,320	NR [2]	NR [2]	NR [2]	NR [2]	NR [2]
bis(2-Chloroethoxy)methane		NT [6]	NT [6]	NT [6]	NT [6]	NT [6]	NT [6]	NT [6]
Bis(2-chloroethyl)ether	C	6.1	11	100	21	124	17	124
Bis(2-ethylhexyl)phthalate	C	471	859	7,656	1,612	9,767	1,267	9,767
Butyl benzyl phthalate	N	479,285	298,880	NR [2]	NR [2]	NR [2]	NR [2]	NR [2]
Carbazole	C	328	598	5,326	1,121	6,837	881	6,837
Chrysene	C	902	1,644	14,647	3,084	18,732	2,424	18,732
Di-n-butyl phthalate	N	233,652	145,704	NR [2]	888,264	244,183	572,832	244,183
Di-n-octyl phthalate	N	47,929	29,888	756,864	182,208	49,952	117,504	49,952
Dibenz(a,h)anthracene	C	0.92	1.7	15	3	19	2	19
Dibenzofuran	N	9,586	5,978	151,373	36,442	9,767	23,501	9,767
Diethylphthalate	N	NR [2]	NR [2]	NR [2]	NR [2]	NR [2]	NR [2]	NR [2]
Dimethoate	N	479	299	7,569	1,822	488	1,175	488
Dimethylphthalate	N	NR [2]	NR [2]	NR [2]	NR [2]	NR [2]	NR [2]	NR [2]
Diphenylamine	N	59,911	37,360	946,080	227,760	61,046	146,880	61,046
Disulfoton	N	96	60	1,514	364	98	235	98
Fluoranthene	N	92,862	57,908	NR [2]	353,028	976,733	227,664	976,733
Fluorene	N	92,862	57,908	NR [2]	353,028	976,733	227,664	976,733
Hexachlorobenzene	C	4.1	7	67	14	85	11	85
Hexachlorocyclopentadiene	N	16,475	10,274	260,172	62,634	170,928	40,392	170,928
Hexachloroethane	C	471	859	7,656	1,612	9,767	1,267	9,767

Table 3-10

Generic P & W Soil Screening Levels (SSLs) Based on Soil Ingestion and Dermal Contact[5] (mg/kg)
P&W VCAP, Connecticut Facilities

Compound[4]	Basis for Screening Level[1]	Excavating Laborer	Grounds keeper	Maintenance Worker	Sampler	Trespasser	On-Site Recreator	Off-Site Recreator
Ideno(1,2,3-cd)pyrene	C	9.2	17	150	32	187	25	187
Isophorone	C	6,864	12,516	111,515	23,477	143,940	18,452	143,940
N-Nitrosodi-n-propylamine	C	0.92	1.7	15	3	20	2	20
N-Nitrosodimethylamine	C	0.13	0.23	2.1	0.4	2.7	0.3	2.7
N-Nitrosodiphenylamine	C	1,332	2,428	21,637	4,555	27,907	3,580	27,907
Naphthalene	N	92,862	57,908	NR [2]	353,028	97,673	227,664	97,673
Nitrobenzene	N	1,168	729	18,449	4,441	12,209	2,864	12,209
o,o,o-triethyl phosphorothioate		NT [6]	NT [6]	NT [6]	NT [6]	NT [6]	NT [6]	NT [6]
Pentachloroethane		NT [6]	NT [6]	NT [6]	NT [6]	NT [6]	NT [6]	NT [6]
Pentachlorophenol	C	27	51	421	89	997	74	997
Phenacetine		NT [6]	NT [6]	NT [6]	NT [6]	NT [6]	NT [6]	NT [6]
Phenol	N	NR [2]	877,960	NR [2]	NR [2]	NR [2]	NR [2]	NR [2]
Phorate	N	479	299	7,569	1,822	488	1,175	488
Pyrene	N	68,897	42,964	NR [2]	261,924	732,549	168,912	732,549
Pyridine	N	2,396	1,494	37,843	9,110	24,418	5,875	24,418
Pest/PCBs								
2,4-D. (2,4-Dichlorophenoxyacetic acid)	N	23,964	14,944	378,432	91,104	24,418	58,752	24,418
Alachlor	C	82	149	1,327	279	1,709	220	1,709
Aldrin	C	0.41	0.7	7	1.4	8.0	1.1	8.0
alpha-HCH (alpha-BHC)	C	1.02	1.9	17	4	22	3	22
beta-HCH (beta-BHC)	C	4.1	7	67	14	76	11	76
Chlordane	C	5.4	10	90	19	140	14	140
DDD	C	31	56	499	105	570	83	570
DDE	C	20	37	333	70	402	55	402
DDT	C	22	39	364	77	564	58	564
Dieldrin	C	0.41	0.7	7	1.4	8.5	1.1	8.5
Endosulfan	N	14,079	8,780	222,329	53,524	14,651	34,517	14,651
Endosulfan Sulfate		NT [6]	NT [6]	NT [6]	NT [6]	NT [6]	NT [6]	NT [6]
Endrin	N	689	430	10,880	2,619	733	1,689	733
Endrin Aldehyde		NT [6]	NT [6]	NT [6]	NT [6]	NT [6]	NT [6]	NT [6]
Endrin Ketone		NT [6]	NT [6]	NT [6]	NT [6]	NT [6]	NT [6]	NT [6]

Table 3-10

Generic P & W Soil Screening Levels (SSLs) Based on Soil Ingestion and Dermal Contact[5] (mg/kg)
P&W VCAP, Connecticut Facilities

Compound[4]	Basis for Screening Level[1]	Excavating Laborer	Grounds keeper	Maintenance Worker	Sampler	Trespasser	On-Site Recreator	Off-Site Recreator
Famphur		NT [6]	NT [6]	NT [6]	NT [6]	NT [6]	NT [6]	NT [6]
gamma-HCH (Lindane)	C	5.1	9	83	18	105	14	105
Heptachlor	C	1.02	1.9	17	4	23	3	23
Heptachlor epoxide	C	0.72	1.3	12	2	15	1.9	15
Methoxychlor	N	11,683	7,285	184,486	44,413	12,209	28,642	12,209
PCBs	C[7]	3.2	6	51	11	42	9	42
Toxaphene	C	6.1	11	100	21	124	17	124
Inorganics								
Aluminum	N	NR [2]	NR [2]	NR [2]	NR [2]	NR [2]	NR [2]	NR [2]
Antimony	N	1,004	616	16,506	3,974	1,549	2,458	1,549
Arsenic	C	4.3	8	73	15	128	12	128
Barium	N	178,050	109,230	NR [2]	704,990	271,031	436,040	271,031
Berylium	C	1.1	2.0	19	4	34	3	34
Cadmium	N	2,546	1,559	42,060	10,126	4,113	6,234	4,113
Chromium (total)	N	12,625	7,745	207,652	49,990	77,437	30,919	77,437
Chromium (VI)	N	12,625	7,745	207,652	49,990	77,437	30,919	77,437
Cobalt	N	155,389	95,328	NR [2]	615,264	232,312	380,544	232,312
Copper	N	95,823	58,786	NR [2]	379,413	143,259	234,669	143,259
Cyanide	N	51,796	31,776	851,904	205,088	77,437	126,848	77,437
Iron	N	776,944	476,640	NR [2]	NR [2]	NR [2]	NR [2]	NR [2]
Lead3	N	1,750	1,750	1,750	1,750	1,750	1,750	1,750
Magnesium		NT [6]	NT [6]	NT [6]	NT [6]	NT [6]	NT [6]	NT [6]
Manganese	N	129,491	79,440	NR [2]	512,720	193,593	317,120	193,593
Mercury	N	745	457	12,246	2,948	1,162	1,823	1,162
Nickel	N	51,796	31,776	851,904	205,088	77,437	126,848	77,437
Selenium	N	12,625	7,745	207,652	49,990	19,359	30,919	19,359
Silver	N	12,625	7,745	207,652	49,990	19,359	30,919	19,359
Thallium		NT [6]	NT [6]	NT [6]	NT [6]	NT [6]	NT [6]	NT [6]
Tin	N	NR [2]	953,280	NR [2]	NR [2]	NR [2]	NR [2]	NR [2]
Titanium		NT [6]	NT [6]	NT [6]	NT [6]	NT [6]	NT [6]	NT [6]
Vanadium	N	17,805	10,923	292,842	70,499	27,103	43,604	27,103

Table 3-10

Generic P & W Soil Screening Levels (SSLs) Based on Soil Ingestion and Dermal Contact[5] (mg/kg)
P&W VCAP, Connecticut Facilities

Compound[4]	Basis for Screening Level[1]	Excavating Laborer	Grounds keeper	Maintenance Worker	Sampler	Trespasser	On-Site Recreator	Off-Site Recreator
Zinc	N	744,571	456,780	NR [2]	NR [2]	NR [2]	NR [2]	NR [2]

Notes:

1. *N : SSL based on non-carcinogenic effects (with a Target Hazard Quotient of 1).*
   C : SSL based on carcinogenic effects (with a Target Risk of 1×10^{-6}*).*
2. *NR - No Risk. Calculated Screening Level exceeds* 1×10^{6} *mg/kg,*
   indicating that this compound does not pose a risk to this receptor at any concentration.
3. *Industrial screening levels for Lead were derived from the following reference:*
   USEPA, 1996. Recommendations of the Technical Review Workgroup for Lead for an Interim Approach to Assessing Risks Associated with Adult Exposures to Lead in Soil. December, 1996.
4. *The compounds in this list are those for which USEPA has published Soil Screening Levels in the USEPA Soil Screening Guidance.*
5. *Generic Dermal Absorption factors were used for SVOCs (10%) and Inorganics (1%), as discussed in Appendix C.*
   Note that dermal contact was not considered for VOCs.
6. *NT - No toxicity factors available to calculate screening levels.*
7. *Screening level basis for Trespasser and Off-Site Recreator is non-carcinogenic effects.*

Attachment 4

Pratt and Whitney East Hartford Main Facility and Airport/Klondike
400 Main Street, East Hartford, Connecticut
Facility EPA ID #CTD990672081

July 2004 Indoor Air Analytical Laboratory Data Reports

New Jersey
ACCUTEST.
Laboratories

08/13/04

Technical Report for

AUG 16 2004

United Technology Corporation

LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT

UARP# LEA-07/19/04-BAC-01

Accutest Job Number: N73853

Sampling Date: 07/30/04

Report to:

Loureiro Engineering
100 Northwest Drive
Plainville, CT 06062

ATTN: Barbara Heemink

Total number of pages in report: 89

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Vincent J. Pugliese
President

Certifications: NJ(12129), NY(10983), CA, CT, DE, FL, MA, MD, NC, PA, RI, SC, VA

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Sample Summary

United Technology Corporation

Job No: N73853

LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT
Project No: UARP# LEA-07/19/04-BAC-01

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
N73853-1	07/30/04	17:05		07/31/04	AIR	Air	1051104
N73853-2	07/30/04	12:05		07/31/04	AIR	Air	1051113
N73853-3	07/30/04	11:30		07/31/04	AIR	Air	1051111
N73853-4	07/30/04	14:03		07/31/04	AIR	Air	1051122
N73853-5	07/30/04	17:13		07/31/04	AIR	Air	1051105
N73853-6	07/30/04	16:52		07/31/04	AIR	Air	1051103
N73853-7	07/30/04	16:44		07/31/04	AIR	Air	1051101
N73853-8	07/30/04	11:09		07/31/04	AIR	Air	1051109
N73853-9	07/30/04	17:16		07/31/04	AIR	Air	1051106
N73853-10	07/30/04	10:51		07/31/04	AIR	Air	1051107
N73853-11	07/30/04	13:27		07/31/04	AIR	Air	1051119
N73853-12	07/30/04	13:00		07/31/04	AIR	Air	1051118
N73853-13	07/30/04	16:40		07/31/04	AIR	Air	1051100

Sample Summary
(continued)

United Technology Corporation

Job No: N73853

LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT
Project No: UARP# LEA-07/19/04-BAC-01

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
N73853-14	07/30/04	12:30	07/31/04	AIR	Air	1051117
N73853-15	07/30/04	16:35	07/31/04	AIR	Air	1051099
N73853-16	07/30/04	16:26	07/31/04	AIR	Air	1051098
N73853-17	07/30/04	16:44	07/31/04	AIR	Air	1051102
N73853-18	07/30/04	16:44	07/31/04	AIR	Air	A223, UNUSED SUMMA

Accutest Laboratories

Report of Analysis

Client Sample ID:	1051104		
Lab Sample ID:	N73853-1	Date Sampled:	07/30/04
Matrix:	AIR - Air Summa ID: A356	Date Received:	07/31/04
Method:	TO-15	Percent Solids:	n/a
Project:	LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	W03171.D	1	08/05/04	WG	n/a	n/a	VW133
Run #2							

	Initial Volume
Run #1	400 ml
Run #2	

CAS No.	MW	Compound	Result	RL	Units	Q	Result	RL	Units
67-64-1	58.08	Acetone	4.3	0.20	ppbv		10	0.48	ug/m3
106-99-0	54.09	1,3-Butadiene	ND	0.20	ppbv		ND	0.44	ug/m3
71-43-2	78.11	Benzene	0.71	0.20	ppbv		2.3	0.64	ug/m3
75-27-4	163.8	Bromodichloromethane	ND	0.20	ppbv		ND	1.3	ug/m3
75-25-2	252.8	Bromoform	ND	0.20	ppbv		ND	2.1	ug/m3
74-83-9	94.94	Bromomethane	ND	0.20	ppbv		ND	0.78	ug/m3
593-60-2	106.9	Bromoethene	ND	0.20	ppbv		ND	0.87	ug/m3
100-44-7	126	Benzyl Chloride	ND	0.20	ppbv		ND	1.0	ug/m3
75-15-0	76.14	Carbon disulfide	ND	0.20	ppbv		ND	0.62	ug/m3
108-90-7	112.6	Chlorobenzene	ND	0.20	ppbv		ND	0.92	ug/m3
75-00-3	64.52	Chloroethane	ND	0.20	ppbv		ND	0.53	ug/m3
67-66-3	119.4	Chloroform	ND	0.20	ppbv		ND	0.98	ug/m3
74-87-3	50.49	Chloromethane	0.42	0.20	ppbv		0.87	0.41	ug/m3
107-05-1	76.53	3-Chloropropene	ND	0.20	ppbv		ND	0.63	ug/m3
95-49-8	126.6	2-Chlorotoluene	ND	0.20	ppbv		ND	1.0	ug/m3
56-23-5	153.8	Carbon tetrachloride	ND	0.20	ppbv		ND	1.3	ug/m3
110-82-7	84.16	Cyclohexane	ND	0.20	ppbv		ND	0.69	ug/m3
75-34-3	98.96	1,1-Dichloroethane	ND	0.20	ppbv		ND	0.81	ug/m3
75-35-4	96.94	1,1-Dichloroethylene	ND	0.20	ppbv		ND	0.79	ug/m3
106-93-4	187.9	1,2-Dibromoethane	ND	0.20	ppbv		ND	1.5	ug/m3
107-06-2	98.96	1,2-Dichloroethane	ND	0.20	ppbv		ND	0.81	ug/m3
78-87-5	113	1,2-Dichloropropane	ND	0.20	ppbv		ND	0.92	ug/m3
123-91-1	88	1,4-Dioxane	ND	0.20	ppbv		ND	0.72	ug/m3
75-71-8	120.9	Dichlorodifluoromethane	0.38	0.20	ppbv		1.9	0.99	ug/m3
124-48-1	208.3	Dibromochloromethane	ND	0.20	ppbv		ND	1.7	ug/m3
156-60-5	96.94	trans-1,2-Dichloroethylene	ND	0.20	ppbv		ND	0.79	ug/m3
156-59-2	96.94	cis-1,2-Dichloroethylene	ND	0.20	ppbv		ND	0.79	ug/m3
10061-01-5	111	cis-1,3-Dichloropropene	ND	0.20	ppbv		ND	0.91	ug/m3
541-73-1	147	m-Dichlorobenzene	ND	0.20	ppbv		ND	1.2	ug/m3
95-50-1	147	o-Dichlorobenzene	ND	0.20	ppbv		ND	1.2	ug/m3
106-46-7	147	p-Dichlorobenzene	ND	0.20	ppbv		ND	1.2	ug/m3
10061-02-6	111	trans-1,3-Dichloropropene	ND	0.20	ppbv		ND	0.91	ug/m3

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	1051104		
Lab Sample ID:	N73853-1	Date Sampled:	07/30/04
Matrix:	AIR - Air Summa ID: A356	Date Received:	07/31/04
Method:	TO-15	Percent Solids:	n/a
Project:	LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT		

CAS No.	MW	Compound	Result	RL	Units	Q	Result	RL	Units
64-17-5	46	Ethanol	5.0	0.50	ppbv		9.4	0.94	ug/m3
100-41-4	106.2	Ethylbenzene	0.37	0.20	ppbv		1.6	0.87	ug/m3
141-78-6	88	Ethyl Acetate	ND	0.20	ppbv		ND	0.72	ug/m3
622-96-8	120.2	4-Ethyltoluene	0.19	0.20	ppbv	J	0.93	0.98	ug/m3
76-13-1	187.4	Freon 113	0.13	0.20	ppbv	J	1.0	1.5	ug/m3
76-14-2	170.9	Freon 114	ND	0.20	ppbv		ND	1.4	ug/m3
142-82-5	100.2	Heptane	0.33	0.20	ppbv		1.4	0.82	ug/m3
87-68-3	260.8	Hexachlorobutadiene	ND	0.20	ppbv		ND	2.1	ug/m3
110-54-3	86.17	Hexane	1.0	0.20	ppbv		3.5	0.70	ug/m3
591-78-6	100	2-Hexanone	ND	0.20	ppbv		ND	0.82	ug/m3
67-63-0	60	Isopropyl Alcohol	0.58	0.20	ppbv		1.4	0.49	ug/m3
75-09-2	84.94	Methylene chloride	0.16	0.20	ppbv	J	0.56	0.69	ug/m3
78-93-3	72.11	Methyl ethyl ketone	0.50	0.20	ppbv		1.5	0.59	ug/m3
108-10-1	100.2	Methyl Isobutyl Ketone	ND	0.20	ppbv		ND	0.82	ug/m3
1634-04-4	88.15	Methyl Tert Butyl Ether	ND	0.20	ppbv		ND	0.72	ug/m3
115-07-1	42	Propylene	0.62	0.50	ppbv		1.1	0.86	ug/m3
100-42-5	104.1	Styrene	ND	0.20	ppbv		ND	0.85	ug/m3
71-55-6	133.4	1,1,1-Trichloroethane	ND	0.20	ppbv		ND	1.1	ug/m3
79-34-5	167.9	1,1,2,2-Tetrachloroethane	ND	0.20	ppbv		ND	1.4	ug/m3
79-00-5	133.4	1,1,2-Trichloroethane	ND	0.20	ppbv		ND	1.1	ug/m3
120-82-1	181.5	1,2,4-Trichlorobenzene	ND	0.20	ppbv		ND	1.5	ug/m3
95-63-6	120.2	1,2,4-Trimethylbenzene	0.62	0.20	ppbv		3.0	0.98	ug/m3
108-67-8	120.2	1,3,5-Trimethylbenzene	0.19	0.20	ppbv	J	0.93	0.98	ug/m3
540-84-1	114.2	2,2,4-Trimethylpentane	1.1	0.20	ppbv		5.1	0.93	ug/m3
127-18-4	165.8	Tetrachloroethylene	0.16	0.20	ppbv	J	1.1	1.4	ug/m3
109-99-9	72	Tetrahydrofuran	0.10	0.20	ppbv	J	0.29	0.59	ug/m3
108-88-3	92.14	Toluene	2.2	0.20	ppbv		8.3	0.75	ug/m3
79-01-6	131.4	Trichloroethylene	1.2	0.20	ppbv		6.4	1.1	ug/m3
75-69-4	137.4	Trichlorofluoromethane	0.23	0.20	ppbv		1.3	1.1	ug/m3
75-01-4	62.5	Vinyl chloride	ND	0.20	ppbv		ND	0.51	ug/m3
108-05-4	86	Vinyl Acetate	ND	0.20	ppbv		ND	0.70	ug/m3
	106.2	m,p-Xylene	1.4	0.20	ppbv		6.1	0.87	ug/m3
95-47-6	106.2	o-Xylene	0.57	0.20	ppbv		2.5	0.87	ug/m3
1330-20-7	106.2	Xylenes (total)	2.0	0.20	ppbv		8.7	0.87	ug/m3

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	116%		78-124%

(a) Matrix spikes are not analyzed by this procedure.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	1051113		
Lab Sample ID:	N73853-2	Date Sampled:	07/30/04
Matrix:	AIR - Air Summa ID: A106,M115	Date Received:	07/31/04
Method:	TO-15	Percent Solids:	n/a
Project:	LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	W03173.D	16	08/05/04	WG	n/a	n/a	VW133
Run #2 [a]	W03182.D	200	08/06/04	WG	n/a	n/a	VW133
Run #3 [a]	Q22260.D	800	08/07/04	WG	n/a	n/a	VQ886

	Initial Volume
Run #1	400 ml
Run #2	400 ml
Run #3	400 ml

CAS No.	MW	Compound	Result	RL	Units	Q	Result	RL	Units
67-64-1	58.08	Acetone	6.3	3.2	ppbv		15	7.6	ug/m3
106-99-0	54.09	1,3-Butadiene	ND	3.2	ppbv		ND	7.1	ug/m3
71-43-2	78.11	Benzene	3.5	3.2	ppbv		11	10	ug/m3
75-27-4	163.8	Bromodichloromethane	ND	3.2	ppbv		ND	21	ug/m3
75-25-2	252.8	Bromoform	ND	3.2	ppbv		ND	33	ug/m3
74-83-9	94.94	Bromomethane	ND	3.2	ppbv		ND	12	ug/m3
593-60-2	106.9	Bromoethene	ND	3.2	ppbv		ND	14	ug/m3
100-44-7	126	Benzyl Chloride	ND	3.2	ppbv		ND	16	ug/m3
75-15-0	76.14	Carbon disulfide	ND	3.2	ppbv		ND	10	ug/m3
108-90-7	112.6	Chlorobenzene	ND	3.2	ppbv		ND	15	ug/m3
75-00-3	64.52	Chloroethane	ND	3.2	ppbv		ND	8.4	ug/m3
67-66-3	119.4	Chloroform	208	3.2	ppbv		1020	16	ug/m3
74-87-3	50.49	Chloromethane	ND	3.2	ppbv		ND	6.6	ug/m3
107-05-1	76.53	3-Chloropropene	ND	3.2	ppbv		ND	10	ug/m3
95-49-8	126.6	2-Chlorotoluene	ND	3.2	ppbv		ND	17	ug/m3
56-23-5	153.8	Carbon tetrachloride	1.8	3.2	ppbv	J	11	20	ug/m3
110-82-7	84.16	Cyclohexane	ND	3.2	ppbv		ND	11	ug/m3
75-34-3	98.96	1,1-Dichloroethane	218	3.2	ppbv		882	13	ug/m3
75-35-4	96.94	1,1-Dichloroethylene	2780 [b]	40	ppbv		11000 [b]	160	ug/m3
106-93-4	187.9	1,2-Dibromoethane	ND	3.2	ppbv		ND	25	ug/m3
107-06-2	98.96	1,2-Dichloroethane	1.6	3.2	ppbv	J	6.5	13	ug/m3
78-87-5	113	1,2-Dichloropropane	ND	3.2	ppbv		ND	15	ug/m3
123-91-1	88	1,4-Dioxane	ND	3.2	ppbv		ND	12	ug/m3
75-71-8	120.9	Dichlorodifluoromethane	1.6	3.2	ppbv	J	7.9	16	ug/m3
124-48-1	208.3	Dibromochloromethane	ND	3.2	ppbv		ND	27	ug/m3
156-60-5	96.94	trans-1,2-Dichloroethylene	10.1	3.2	ppbv		40.0	13	ug/m3
156-59-2	96.94	cis-1,2-Dichloroethylene	499	3.2	ppbv		1980	13	ug/m3
10061-01-5	111	cis-1,3-Dichloropropene	ND	3.2	ppbv		ND	15	ug/m3
541-73-1	147	m-Dichlorobenzene	ND	3.2	ppbv		ND	19	ug/m3
95-50-1	147	o-Dichlorobenzene	ND	3.2	ppbv		ND	19	ug/m3

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	1051113		
Lab Sample ID:	N73853-2	Date Sampled:	07/30/04
Matrix:	AIR - Air Summa ID: A106,M115	Date Received:	07/31/04
Method:	TO-15	Percent Solids:	n/a
Project:	LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT		

CAS No.	MW	Compound	Result	RL	Units	Q	Result	RL	Units
106-46-7	147	p-Dichlorobenzene	ND	3.2	ppbv		ND	19	ug/m3
10061-02-6	111	trans-1,3-Dichloropropene	ND	3.2	ppbv		ND	15	ug/m3
64-17-5	46	Ethanol	91.9	8.0	ppbv		173	15	ug/m3
100-41-4	106.2	Ethylbenzene	1.7	3.2	ppbv	J	7.4	14	ug/m3
141-78-6	88	Ethyl Acetate	ND	3.2	ppbv		ND	12	ug/m3
622-96-8	120.2	4-Ethyltoluene	ND	3.2	ppbv		ND	16	ug/m3
76-13-1	187.4	Freon 113	ND	3.2	ppbv		ND	25	ug/m3
76-14-2	170.9	Freon 114	ND	3.2	ppbv		ND	22	ug/m3
142-82-5	100.2	Heptane	ND	3.2	ppbv		ND	13	ug/m3
87-68-3	260.8	Hexachlorobutadiene	ND	3.2	ppbv		ND	34	ug/m3
110-54-3	86.17	Hexane	3.9	3.2	ppbv		14	11	ug/m3
591-78-6	100	2-Hexanone	ND	3.2	ppbv		ND	13	ug/m3
67-63-0	60	Isopropyl Alcohol	ND	3.2	ppbv		ND	7.9	ug/m3
75-09-2	84.94	Methylene chloride	ND	3.2	ppbv		ND	11	ug/m3
78-93-3	72.11	Methyl ethyl ketone	2.5	3.2	ppbv	J	7.4	9.4	ug/m3
108-10-1	100.2	Methyl Isobutyl Ketone	ND	3.2	ppbv		ND	13	ug/m3
1634-04-4	88.15	Methyl Tert Butyl Ether	ND	3.2	ppbv		ND	12	ug/m3
115-07-1	42	Propylene	16.6	8.0	ppbv		28.5	14	ug/m3
100-42-5	104.1	Styrene	ND	3.2	ppbv		ND	14	ug/m3
71-55-6	133.4	1,1,1-Trichloroethane	332	3.2	ppbv		1810	17	ug/m3
79-34-5	167.9	1,1,2,2-Tetrachloroethane	ND	3.2	ppbv		ND	22	ug/m3
79-00-5	133.4	1,1,2-Trichloroethane	6.2	3.2	ppbv		34	17	ug/m3
120-82-1	181.5	1,2,4-Trichlorobenzene	ND	3.2	ppbv		ND	24	ug/m3
95-63-6	120.2	1,2,4-Trimethylbenzene	4.2	3.2	ppbv		21	16	ug/m3
108-67-8	120.2	1,3,5-Trimethylbenzene	ND	3.2	ppbv		ND	16	ug/m3
540-84-1	114.2	2,2,4-Trimethylpentane	ND	3.2	ppbv		ND	15	ug/m3
127-18-4	165.8	Tetrachloroethylene	21200 [c]	160	ppbv		144000 [c]	1100	ug/m3
109-99-9	72	Tetrahydrofuran	1.6	3.2	ppbv	J	4.7	9.4	ug/m3
108-88-3	92.14	Toluene	4.0	3.2	ppbv		15	12	ug/m3
79-01-6	131.4	Trichloroethylene	30100 [c]	160	ppbv		162000 [c]	860	ug/m3
75-69-4	137.4	Trichlorofluoromethane	ND	3.2	ppbv		ND	18	ug/m3
75-01-4	62.5	Vinyl chloride	ND	3.2	ppbv		ND	8.2	ug/m3
108-05-4	86	Vinyl Acetate	ND	3.2	ppbv		ND	11	ug/m3
	106.2	m,p-Xylene	7.2	3.2	ppbv		31	14	ug/m3
95-47-6	106.2	o-Xylene	2.6	3.2	ppbv	J	11	14	ug/m3
1330-20-7	106.2	Xylenes (total)	9.8	3.2	ppbv		43	14	ug/m3

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Run# 3	Limits
460-00-4	4-Bromofluorobenzene	126% [d]	109%	101%	78-124%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	1051113			
Lab Sample ID:	N73853-2		Date Sampled:	07/30/04
Matrix:	AIR - Air	Summa ID: A106,M115	Date Received:	07/31/04
Method:	TO-15		Percent Solids:	n/a
Project:	LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT			

CAS No.	MW	Compound	Result	RL	Units	Q	Result	RL	Units

(a) Matrix spikes are not analyzed by this procedure.
(b) Result is from Run# 2
(c) Result is from Run# 3
(d) Outside control limits due to matrix interference. Confirmed by reanalysis.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	1051111		
Lab Sample ID:	N73853-3	Date Sampled:	07/30/04
Matrix:	AIR - Air Summa ID: A316	Date Received:	07/31/04
Method:	TO-15	Percent Solids:	n/a
Project:	LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	W03180.D	4	08/05/04	WG	n/a	n/a	VW133
Run #2 [a]	W03174.D	16	08/05/04	WG	n/a	n/a	VW133

	Initial Volume
Run #1	400 ml
Run #2	400 ml

CAS No.	MW	Compound	Result	RL	Units	Q	Result	RL	Units
67-64-1	58.08	Acetone	5.6	0.80	ppbv		13	1.9	ug/m3
106-99-0	54.09	1,3-Butadiene	ND	0.80	ppbv		ND	1.8	ug/m3
71-43-2	78.11	Benzene	0.64	0.80	ppbv	J	2.0	2.6	ug/m3
75-27-4	163.8	Bromodichloromethane	ND	0.80	ppbv		ND	5.4	ug/m3
75-25-2	252.8	Bromoform	ND	0.80	ppbv		ND	8.3	ug/m3
74-83-9	94.94	Bromomethane	ND	0.80	ppbv		ND	3.1	ug/m3
593-60-2	106.9	Bromoethene	ND	0.80	ppbv		ND	3.5	ug/m3
100-44-7	126	Benzyl Chloride	ND	0.80	ppbv		ND	4.1	ug/m3
75-15-0	76.14	Carbon disulfide	ND	0.80	ppbv		ND	2.5	ug/m3
108-90-7	112.6	Chlorobenzene	ND	0.80	ppbv		ND	3.7	ug/m3
75-00-3	64.52	Chloroethane	ND	0.80	ppbv		ND	2.1	ug/m3
67-66-3	119.4	Chloroform	19.4	0.80	ppbv		94.7	3.9	ug/m3
74-87-3	50.49	Chloromethane	ND	0.80	ppbv		ND	1.7	ug/m3
107-05-1	76.53	3-Chloropropene	ND	0.80	ppbv		ND	2.5	ug/m3
95-49-8	126.6	2-Chlorotoluene	ND	0.80	ppbv		ND	4.1	ug/m3
56-23-5	153.8	Carbon tetrachloride	ND	0.80	ppbv		ND	5.0	ug/m3
110-82-7	84.16	Cyclohexane	ND	0.80	ppbv		ND	2.8	ug/m3
75-34-3	98.96	1,1-Dichloroethane	0.97	0.80	ppbv		3.9	3.2	ug/m3
75-35-4	96.94	1,1-Dichloroethylene	2.9	0.80	ppbv		11	3.2	ug/m3
106-93-4	187.9	1,2-Dibromoethane	ND	0.80	ppbv		ND	6.1	ug/m3
107-06-2	98.96	1,2-Dichloroethane	ND	0.80	ppbv		ND	3.2	ug/m3
78-87-5	113	1,2-Dichloropropane	ND	0.80	ppbv		ND	3.7	ug/m3
123-91-1	88	1,4-Dioxane	ND	0.80	ppbv		ND	2.9	ug/m3
75-71-8	120.9	Dichlorodifluoromethane	1.7	0.80	ppbv		8.4	4.0	ug/m3
124-48-1	208.3	Dibromochloromethane	ND	0.80	ppbv		ND	6.8	ug/m3
156-60-5	96.94	trans-1,2-Dichloroethylene	0.81	0.80	ppbv		3.2	3.2	ug/m3
156-59-2	96.94	cis-1,2-Dichloroethylene	8.3	0.80	ppbv		33	3.2	ug/m3
10061-01-5	111	cis-1,3-Dichloropropene	ND	0.80	ppbv		ND	3.6	ug/m3
541-73-1	147	m-Dichlorobenzene	ND	0.80	ppbv		ND	4.8	ug/m3
95-50-1	147	o-Dichlorobenzene	ND	0.80	ppbv		ND	4.8	ug/m3
106-46-7	147	p-Dichlorobenzene	ND	0.80	ppbv		ND	4.8	ug/m3
10061-02-6	111	trans-1,3-Dichloropropene	ND	0.80	ppbv		ND	3.6	ug/m3

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	1051111		
Lab Sample ID:	N73853-3	Date Sampled:	07/30/04
Matrix:	AIR - Air Summa ID: A316	Date Received:	07/31/04
Method:	TO-15	Percent Solids:	n/a
Project:	LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT		

CAS No.	MW	Compound	Result	RL	Units	Q	Result	RL	Units
64-17-5	46	Ethanol	133	2.0	ppbv		250	3.8	ug/m3
100-41-4	106.2	Ethylbenzene	1.6	0.80	ppbv		6.9	3.5	ug/m3
141-78-6	88	Ethyl Acetate	ND	0.80	ppbv		ND	2.9	ug/m3
622-96-8	120.2	4-Ethyltoluene	1.3	0.80	ppbv		6.4	3.9	ug/m3
76-13-1	187.4	Freon 113	ND	0.80	ppbv		ND	6.1	ug/m3
76-14-2	170.9	Freon 114	ND	0.80	ppbv		ND	5.6	ug/m3
142-82-5	100.2	Heptane	ND	0.80	ppbv		ND	3.3	ug/m3
87-68-3	260.8	Hexachlorobutadiene	ND	0.80	ppbv		ND	8.5	ug/m3
110-54-3	86.17	Hexane	1.8	0.80	ppbv		6.3	2.8	ug/m3
591-78-6	100	2-Hexanone	ND	0.80	ppbv		ND	3.3	ug/m3
67-63-0	60	Isopropyl Alcohol	ND	0.80	ppbv		ND	2.0	ug/m3
75-09-2	84.94	Methylene chloride	ND	0.80	ppbv		ND	2.8	ug/m3
78-93-3	72.11	Methyl ethyl ketone	1.1	0.80	ppbv		3.2	2.4	ug/m3
108-10-1	100.2	Methyl Isobutyl Ketone	0.59	0.80	ppbv	J	2.4	3.3	ug/m3
1634-04-4	88.15	Methyl Tert Butyl Ether	ND	0.80	ppbv		ND	2.9	ug/m3
115-07-1	42	Propylene	5.2	2.0	ppbv		8.9	3.4	ug/m3
100-42-5	104.1	Styrene	ND	0.80	ppbv		ND	3.4	ug/m3
71-55-6	133.4	1,1,1-Trichloroethane	28.7	0.80	ppbv		157	4.4	ug/m3
79-34-5	167.9	1,1,2,2-Tetrachloroethane	ND	0.80	ppbv		ND	5.5	ug/m3
79-00-5	133.4	1,1,2-Trichloroethane	ND	0.80	ppbv		ND	4.4	ug/m3
120-82-1	181.5	1,2,4-Trichlorobenzene	ND	0.80	ppbv		ND	5.9	ug/m3
95-63-6	120.2	1,2,4-Trimethylbenzene	4.5	0.80	ppbv		22	3.9	ug/m3
108-67-8	120.2	1,3,5-Trimethylbenzene	1.2	0.80	ppbv		5.9	3.9	ug/m3
540-84-1	114.2	2,2,4-Trimethylpentane	ND	0.80	ppbv		ND	3.7	ug/m3
127-18-4	165.8	Tetrachloroethylene	412 [b]	3.2	ppbv		2790 [b]	22	ug/m3
109-99-9	72	Tetrahydrofuran	0.63	0.80	ppbv	J	1.9	2.4	ug/m3
108-88-3	92.14	Toluene	3.2	0.80	ppbv		12	3.0	ug/m3
79-01-6	131.4	Trichloroethylene	363 [b]	3.2	ppbv		1950 [b]	17	ug/m3
75-69-4	137.4	Trichlorofluoromethane	1.1	0.80	ppbv		6.2	4.5	ug/m3
75-01-4	62.5	Vinyl chloride	ND	0.80	ppbv		ND	2.0	ug/m3
108-05-4	86	Vinyl Acetate	ND	0.80	ppbv		ND	2.8	ug/m3
	106.2	m,p-Xylene	7.1	0.80	ppbv		31	3.5	ug/m3
95-47-6	106.2	o-Xylene	2.5	0.80	ppbv		11	3.5	ug/m3
1330-20-7	106.2	Xylenes (total)	9.6	0.80	ppbv		42	3.5	ug/m3

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	121%	120%	78-124%

(a) Matrix spikes are not analyzed by this procedure.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	1051111			
Lab Sample ID:	N73853-3		Date Sampled:	07/30/04
Matrix:	AIR - Air	Summa ID: A316	Date Received:	07/31/04
Method:	TO-15		Percent Solids:	n/a
Project:	LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT			

CAS No.	MW	Compound	Result	RL	Units	Q	Result	RL	Units

(b) Result is from Run# 2

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	1051122		
Lab Sample ID:	N73853-4	Date Sampled:	07/30/04
Matrix:	AIR - Air Summa ID: A164	Date Received:	07/31/04
Method:	TO-15	Percent Solids:	n/a
Project:	LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	W03181.D	1	08/05/04	WG	n/a	n/a	VW133
Run #2							

	Initial Volume
Run #1	400 ml
Run #2	

CAS No.	MW	Compound	Result	RL	Units	Q	Result	RL	Units
67-64-1	58.08	Acetone	7.3	0.20	ppbv		17	0.48	ug/m3
106-99-0	54.09	1,3-Butadiene	ND	0.20	ppbv		ND	0.44	ug/m3
71-43-2	78.11	Benzene	0.40	0.20	ppbv		1.3	0.64	ug/m3
75-27-4	163.8	Bromodichloromethane	ND	0.20	ppbv		ND	1.3	ug/m3
75-25-2	252.8	Bromoform	ND	0.20	ppbv		ND	2.1	ug/m3
74-83-9	94.94	Bromomethane	ND	0.20	ppbv		ND	0.78	ug/m3
593-60-2	106.9	Bromoethene	ND	0.20	ppbv		ND	0.87	ug/m3
100-44-7	126	Benzyl Chloride	ND	0.20	ppbv		ND	1.0	ug/m3
75-15-0	76.14	Carbon disulfide	0.42	0.20	ppbv		1.3	0.62	ug/m3
108-90-7	112.6	Chlorobenzene	ND	0.20	ppbv		ND	0.92	ug/m3
75-00-3	64.52	Chloroethane	ND	0.20	ppbv		ND	0.53	ug/m3
67-66-3	119.4	Chloroform	0.79	0.20	ppbv		3.9	0.98	ug/m3
74-87-3	50.49	Chloromethane	0.41	0.20	ppbv		0.85	0.41	ug/m3
107-05-1	76.53	3-Chloropropene	ND	0.20	ppbv		ND	0.63	ug/m3
95-49-8	126.6	2-Chlorotoluene	ND	0.20	ppbv		ND	1.0	ug/m3
56-23-5	153.8	Carbon tetrachloride	ND	0.20	ppbv		ND	1.3	ug/m3
110-82-7	84.16	Cyclohexane	ND	0.20	ppbv		ND	0.69	ug/m3
75-34-3	98.96	1,1-Dichloroethane	2.4	0.20	ppbv		9.7	0.81	ug/m3
75-35-4	96.94	1,1-Dichloroethylene	ND	0.20	ppbv		ND	0.79	ug/m3
106-93-4	187.9	1,2-Dibromoethane	ND	0.20	ppbv		ND	1.5	ug/m3
107-06-2	98.96	1,2-Dichloroethane	ND	0.20	ppbv		ND	0.81	ug/m3
78-87-5	113	1,2-Dichloropropane	ND	0.20	ppbv		ND	0.92	ug/m3
123-91-1	88	1,4-Dioxane	ND	0.20	ppbv		ND	0.72	ug/m3
75-71-8	120.9	Dichlorodifluoromethane	0.38	0.20	ppbv		1.9	0.99	ug/m3
124-48-1	208.3	Dibromochloromethane	ND	0.20	ppbv		ND	1.7	ug/m3
156-60-5	96.94	trans-1,2-Dichloroethylene	ND	0.20	ppbv		ND	0.79	ug/m3
156-59-2	96.94	cis-1,2-Dichloroethylene	1.6	0.20	ppbv		6.3	0.79	ug/m3
10061-01-5	111	cis-1,3-Dichloropropene	ND	0.20	ppbv		ND	0.91	ug/m3
541-73-1	147	m-Dichlorobenzene	ND	0.20	ppbv		ND	1.2	ug/m3
95-50-1	147	o-Dichlorobenzene	ND	0.20	ppbv		ND	1.2	ug/m3
106-46-7	147	p-Dichlorobenzene	ND	0.20	ppbv		ND	1.2	ug/m3
10061-02-6	111	trans-1,3-Dichloropropene	ND	0.20	ppbv		ND	0.91	ug/m3

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	1051122		
Lab Sample ID:	N73853-4	Date Sampled:	07/30/04
Matrix:	AIR - Air Summa ID: A164	Date Received:	07/31/04
Method:	TO-15	Percent Solids:	n/a
Project:	LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT		

CAS No.	MW	Compound	Result	RL	Units	Q	Result	RL	Units
64-17-5	46	Ethanol	6.2	0.50	ppbv		12	0.94	ug/m3
100-41-4	106.2	Ethylbenzene	0.41	0.20	ppbv		1.8	0.87	ug/m3
141-78-6	88	Ethyl Acetate	ND	0.20	ppbv		ND	0.72	ug/m3
622-96-8	120.2	4-Ethyltoluene	ND	0.20	ppbv		ND	0.98	ug/m3
76-13-1	187.4	Freon 113	4.8	0.20	ppbv		37	1.5	ug/m3
76-14-2	170.9	Freon 114	ND	0.20	ppbv		ND	1.4	ug/m3
142-82-5	100.2	Heptane	ND	0.20	ppbv		ND	0.82	ug/m3
87-68-3	260.8	Hexachlorobutadiene	ND	0.20	ppbv		ND	2.1	ug/m3
110-54-3	86.17	Hexane	0.49	0.20	ppbv		1.7	0.70	ug/m3
591-78-6	100	2-Hexanone	ND	0.20	ppbv		ND	0.82	ug/m3
67-63-0	60	Isopropyl Alcohol	0.76	0.20	ppbv		1.9	0.49	ug/m3
75-09-2	84.94	Methylene chloride	0.90	0.20	ppbv		3.1	0.69	ug/m3
78-93-3	72.11	Methyl ethyl ketone	0.55	0.20	ppbv		1.6	0.59	ug/m3
108-10-1	100.2	Methyl Isobutyl Ketone	0.10	0.20	ppbv	J	0.41	0.82	ug/m3
1634-04-4	88.15	Methyl Tert Butyl Ether	ND	0.20	ppbv		ND	0.72	ug/m3
115-07-1	42	Propylene	0.46	0.50	ppbv	J	0.79	0.86	ug/m3
100-42-5	104.1	Styrene	ND	0.20	ppbv		ND	0.85	ug/m3
71-55-6	133.4	1,1,1-Trichloroethane	3.3	0.20	ppbv		18	1.1	ug/m3
79-34-5	167.9	1,1,2,2-Tetrachloroethane	ND	0.20	ppbv		ND	1.4	ug/m3
79-00-5	133.4	1,1,2-Trichloroethane	ND	0.20	ppbv		ND	1.1	ug/m3
120-82-1	181.5	1,2,4-Trichlorobenzene	ND	0.20	ppbv		ND	1.5	ug/m3
95-63-6	120.2	1,2,4-Trimethylbenzene	0.10	0.20	ppbv	J	0.49	0.98	ug/m3
108-67-8	120.2	1,3,5-Trimethylbenzene	ND	0.20	ppbv		ND	0.98	ug/m3
540-84-1	114.2	2,2,4-Trimethylpentane	ND	0.20	ppbv		ND	0.93	ug/m3
127-18-4	165.8	Tetrachloroethylene	4.6	0.20	ppbv		31	1.4	ug/m3
109-99-9	72	Tetrahydrofuran	ND	0.20	ppbv		ND	0.59	ug/m3
108-88-3	92.14	Toluene	0.37	0.20	ppbv		1.4	0.75	ug/m3
79-01-6	131.4	Trichloroethylene	1.7	0.20	ppbv		9.1	1.1	ug/m3
75-69-4	137.4	Trichlorofluoromethane	0.25	0.20	ppbv		1.4	1.1	ug/m3
75-01-4	62.5	Vinyl chloride	ND	0.20	ppbv		ND	0.51	ug/m3
108-05-4	86	Vinyl Acetate	ND	0.20	ppbv		ND	0.70	ug/m3
	106.2	m,p-Xylene	1.7	0.20	ppbv		7.4	0.87	ug/m3
95-47-6	106.2	o-Xylene	0.48	0.20	ppbv		2.1	0.87	ug/m3
1330-20-7	106.2	Xylenes (total)	2.2	0.20	ppbv		9.6	0.87	ug/m3

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	121%		78-124%

(a) Matrix spikes are not analyzed by this procedure.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	1051105		
Lab Sample ID:	N73853-5	Date Sampled:	07/30/04
Matrix:	AIR - Air Summa ID: A224	Date Received:	07/31/04
Method:	TO-15	Percent Solids:	n/a
Project:	LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	W03176.D	1	08/05/04	WG	n/a	n/a	VW133
Run #2							

	Initial Volume
Run #1	400 ml
Run #2	

CAS No.	MW	Compound	Result	RL	Units	Q	Result	RL	Units
67-64-1	58.08	Acetone	4.3	0.20	ppbv		10	0.48	ug/m3
106-99-0	54.09	1,3-Butadiene	ND	0.20	ppbv		ND	0.44	ug/m3
71-43-2	78.11	Benzene	0.11	0.20	ppbv	J	0.35	0.64	ug/m3
75-27-4	163.8	Bromodichloromethane	ND	0.20	ppbv		ND	1.3	ug/m3
75-25-2	252.8	Bromoform	ND	0.20	ppbv		ND	2.1	ug/m3
74-83-9	94.94	Bromomethane	ND	0.20	ppbv		ND	0.78	ug/m3
593-60-2	106.9	Bromoethene	ND	0.20	ppbv		ND	0.87	ug/m3
100-44-7	126	Benzyl Chloride	ND	0.20	ppbv		ND	1.0	ug/m3
75-15-0	76.14	Carbon disulfide	ND	0.20	ppbv		ND	0.62	ug/m3
108-90-7	112.6	Chlorobenzene	ND	0.20	ppbv		ND	0.92	ug/m3
75-00-3	64.52	Chloroethane	ND	0.20	ppbv		ND	0.53	ug/m3
67-66-3	119.4	Chloroform	ND	0.20	ppbv		ND	0.98	ug/m3
74-87-3	50.49	Chloromethane	0.43	0.20	ppbv		0.89	0.41	ug/m3
107-05-1	76.53	3-Chloropropene	ND	0.20	ppbv		ND	0.63	ug/m3
95-49-8	126.6	2-Chlorotoluene	ND	0.20	ppbv		ND	1.0	ug/m3
56-23-5	153.8	Carbon tetrachloride	ND	0.20	ppbv		ND	1.3	ug/m3
110-82-7	84.16	Cyclohexane	ND	0.20	ppbv		ND	0.69	ug/m3
75-34-3	98.96	1,1-Dichloroethane	ND	0.20	ppbv		ND	0.81	ug/m3
75-35-4	96.94	1,1-Dichloroethylene	ND	0.20	ppbv		ND	0.79	ug/m3
106-93-4	187.9	1,2-Dibromoethane	ND	0.20	ppbv		ND	1.5	ug/m3
107-06-2	98.96	1,2-Dichloroethane	ND	0.20	ppbv		ND	0.81	ug/m3
78-87-5	113	1,2-Dichloropropane	ND	0.20	ppbv		ND	0.92	ug/m3
123-91-1	88	1,4-Dioxane	ND	0.20	ppbv		ND	0.72	ug/m3
75-71-8	120.9	Dichlorodifluoromethane	0.41	0.20	ppbv		2.0	0.99	ug/m3
124-48-1	208.3	Dibromochloromethane	ND	0.20	ppbv		ND	1.7	ug/m3
156-60-5	96.94	trans-1,2-Dichloroethylene	ND	0.20	ppbv		ND	0.79	ug/m3
156-59-2	96.94	cis-1,2-Dichloroethylene	ND	0.20	ppbv		ND	0.79	ug/m3
10061-01-5	111	cis-1,3-Dichloropropene	ND	0.20	ppbv		ND	0.91	ug/m3
541-73-1	147	m-Dichlorobenzene	ND	0.20	ppbv		ND	1.2	ug/m3
95-50-1	147	o-Dichlorobenzene	ND	0.20	ppbv		ND	1.2	ug/m3
106-46-7	147	p-Dichlorobenzene	ND	0.20	ppbv		ND	1.2	ug/m3
10061-02-6	111	trans-1,3-Dichloropropene	ND	0.20	ppbv		ND	0.91	ug/m3

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	1051105			
Lab Sample ID:	N73853-5		Date Sampled:	07/30/04
Matrix:	AIR - Air	Summa ID: A224	Date Received:	07/31/04
Method:	TO-15		Percent Solids:	n/a
Project:	LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT			

CAS No.	MW	Compound	Result	RL	Units	Q	Result	RL	Units
64-17-5	46	Ethanol	2.4	0.50	ppbv		4.5	0.94	ug/m3
100-41-4	106.2	Ethylbenzene	ND	0.20	ppbv		ND	0.87	ug/m3
141-78-6	88	Ethyl Acetate	ND	0.20	ppbv		ND	0.72	ug/m3
622-96-8	120.2	4-Ethyltoluene	ND	0.20	ppbv		ND	0.98	ug/m3
76-13-1	187.4	Freon 113	0.37	0.20	ppbv		2.8	1.5	ug/m3
76-14-2	170.9	Freon 114	ND	0.20	ppbv		ND	1.4	ug/m3
142-82-5	100.2	Heptane	ND	0.20	ppbv		ND	0.82	ug/m3
87-68-3	260.8	Hexachlorobutadiene	ND	0.20	ppbv		ND	2.1	ug/m3
110-54-3	86.17	Hexane	0.16	0.20	ppbv	J	0.56	0.70	ug/m3
591-78-6	100	2-Hexanone	ND	0.20	ppbv		ND	0.82	ug/m3
67-63-0	60	Isopropyl Alcohol	3.9	0.20	ppbv		9.6	0.49	ug/m3
75-09-2	84.94	Methylene chloride	0.41	0.20	ppbv		1.4	0.69	ug/m3
78-93-3	72.11	Methyl ethyl ketone	0.49	0.20	ppbv		1.4	0.59	ug/m3
108-10-1	100.2	Methyl Isobutyl Ketone	ND	0.20	ppbv		ND	0.82	ug/m3
1634-04-4	88.15	Methyl Tert Butyl Ether	ND	0.20	ppbv		ND	0.72	ug/m3
115-07-1	42	Propylene	0.86	0.50	ppbv		1.5	0.86	ug/m3
100-42-5	104.1	Styrene	ND	0.20	ppbv		ND	0.85	ug/m3
71-55-6	133.4	1,1,1-Trichloroethane	ND	0.20	ppbv		ND	1.1	ug/m3
79-34-5	167.9	1,1,2,2-Tetrachloroethane	ND	0.20	ppbv		ND	1.4	ug/m3
79-00-5	133.4	1,1,2-Trichloroethane	ND	0.20	ppbv		ND	1.1	ug/m3
120-82-1	181.5	1,2,4-Trichlorobenzene	ND	0.20	ppbv		ND	1.5	ug/m3
95-63-6	120.2	1,2,4-Trimethylbenzene	0.17	0.20	ppbv	J	0.84	0.98	ug/m3
108-67-8	120.2	1,3,5-Trimethylbenzene	ND	0.20	ppbv		ND	0.98	ug/m3
540-84-1	114.2	2,2,4-Trimethylpentane	ND	0.20	ppbv		ND	0.93	ug/m3
127-18-4	165.8	Tetrachloroethylene	0.20	0.20	ppbv		1.4	1.4	ug/m3
109-99-9	72	Tetrahydrofuran	0.12	0.20	ppbv	J	0.35	0.59	ug/m3
108-88-3	92.14	Toluene	0.33	0.20	ppbv		1.2	0.75	ug/m3
79-01-6	131.4	Trichloroethylene	0.49	0.20	ppbv		2.6	1.1	ug/m3
75-69-4	137.4	Trichlorofluoromethane	0.25	0.20	ppbv		1.4	1.1	ug/m3
75-01-4	62.5	Vinyl chloride	ND	0.20	ppbv		ND	0.51	ug/m3
108-05-4	86	Vinyl Acetate	ND	0.20	ppbv		ND	0.70	ug/m3
	106.2	m,p-Xylene	0.19	0.20	ppbv	J	0.83	0.87	ug/m3
95-47-6	106.2	o-Xylene	ND	0.20	ppbv		ND	0.87	ug/m3
1330-20-7	106.2	Xylenes (total)	0.19	0.20	ppbv	J	0.83	0.87	ug/m3

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	118%		78-124%

(a) Matrix spikes are not analyzed by this procedure.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	1051103		
Lab Sample ID:	N73853-6	Date Sampled:	07/30/04
Matrix:	AIR - Air Summa ID: A198	Date Received:	07/31/04
Method:	TO-15	Percent Solids:	n/a
Project:	LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	W03177.D	1	08/05/04	WG	n/a	n/a	VW133
Run #2							

	Initial Volume
Run #1	400 ml
Run #2	

CAS No.	MW	Compound	Result	RL	Units	Q	Result	RL	Units
67-64-1	58.08	Acetone	5.9	0.20	ppbv		14	0.48	ug/m3
106-99-0	54.09	1,3-Butadiene	ND	0.20	ppbv		ND	0.44	ug/m3
71-43-2	78.11	Benzene	0.37	0.20	ppbv		1.2	0.64	ug/m3
75-27-4	163.8	Bromodichloromethane	ND	0.20	ppbv		ND	1.3	ug/m3
75-25-2	252.8	Bromoform	ND	0.20	ppbv		ND	2.1	ug/m3
74-83-9	94.94	Bromomethane	ND	0.20	ppbv		ND	0.78	ug/m3
593-60-2	106.9	Bromoethene	ND	0.20	ppbv		ND	0.87	ug/m3
100-44-7	126	Benzyl Chloride	ND	0.20	ppbv		ND	1.0	ug/m3
75-15-0	76.14	Carbon disulfide	ND	0.20	ppbv		ND	0.62	ug/m3
108-90-7	112.6	Chlorobenzene	ND	0.20	ppbv		ND	0.92	ug/m3
75-00-3	64.52	Chloroethane	ND	0.20	ppbv		ND	0.53	ug/m3
67-66-3	119.4	Chloroform	ND	0.20	ppbv		ND	0.98	ug/m3
74-87-3	50.49	Chloromethane	0.51	0.20	ppbv		1.1	0.41	ug/m3
107-05-1	76.53	3-Chloropropene	ND	0.20	ppbv		ND	0.63	ug/m3
95-49-8	126.6	2-Chlorotoluene	ND	0.20	ppbv		ND	1.0	ug/m3
56-23-5	153.8	Carbon tetrachloride	ND	0.20	ppbv		ND	1.3	ug/m3
110-82-7	84.16	Cyclohexane	ND	0.20	ppbv		ND	0.69	ug/m3
75-34-3	98.96	1,1-Dichloroethane	ND	0.20	ppbv		ND	0.81	ug/m3
75-35-4	96.94	1,1-Dichloroethylene	ND	0.20	ppbv		ND	0.79	ug/m3
106-93-4	187.9	1,2-Dibromoethane	ND	0.20	ppbv		ND	1.5	ug/m3
107-06-2	98.96	1,2-Dichloroethane	ND	0.20	ppbv		ND	0.81	ug/m3
78-87-5	113	1,2-Dichloropropane	ND	0.20	ppbv		ND	0.92	ug/m3
123-91-1	88	1,4-Dioxane	ND	0.20	ppbv		ND	0.72	ug/m3
75-71-8	120.9	Dichlorodifluoromethane	0.73	0.20	ppbv		3.6	0.99	ug/m3
124-48-1	208.3	Dibromochloromethane	ND	0.20	ppbv		ND	1.7	ug/m3
156-60-5	96.94	trans-1,2-Dichloroethylene	ND	0.20	ppbv		ND	0.79	ug/m3
156-59-2	96.94	cis-1,2-Dichloroethylene	ND	0.20	ppbv		ND	0.79	ug/m3
10061-01-5	111	cis-1,3-Dichloropropene	ND	0.20	ppbv		ND	0.91	ug/m3
541-73-1	147	m-Dichlorobenzene	ND	0.20	ppbv		ND	1.2	ug/m3
95-50-1	147	o-Dichlorobenzene	ND	0.20	ppbv		ND	1.2	ug/m3
106-46-7	147	p-Dichlorobenzene	ND	0.20	ppbv		ND	1.2	ug/m3
10061-02-6	111	trans-1,3-Dichloropropene	ND	0.20	ppbv		ND	0.91	ug/m3

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	1051103		
Lab Sample ID:	N73853-6	Date Sampled:	07/30/04
Matrix:	AIR - Air Summa ID: A198	Date Received:	07/31/04
Method:	TO-15	Percent Solids:	n/a
Project:	LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT		

CAS No.	MW	Compound	Result	RL	Units	Q	Result	RL	Units
64-17-5	46	Ethanol	13.9	0.50	ppbv		26.2	0.94	ug/m3
100-41-4	106.2	Ethylbenzene	ND	0.20	ppbv		ND	0.87	ug/m3
141-78-6	88	Ethyl Acetate	ND	0.20	ppbv		ND	0.72	ug/m3
622-96-8	120.2	4-Ethyltoluene	0.28	0.20	ppbv		1.4	0.98	ug/m3
76-13-1	187.4	Freon 113	0.11	0.20	ppbv	J	0.84	1.5	ug/m3
76-14-2	170.9	Freon 114	ND	0.20	ppbv		ND	1.4	ug/m3
142-82-5	100.2	Heptane	0.12	0.20	ppbv	J	0.49	0.82	ug/m3
87-68-3	260.8	Hexachlorobutadiene	ND	0.20	ppbv		ND	2.1	ug/m3
110-54-3	86.17	Hexane	0.20	0.20	ppbv		0.70	0.70	ug/m3
591-78-6	100	2-Hexanone	ND	0.20	ppbv		ND	0.82	ug/m3
67-63-0	60	Isopropyl Alcohol	24.5	0.20	ppbv		60.1	0.49	ug/m3
75-09-2	84.94	Methylene chloride	0.14	0.20	ppbv	J	0.49	0.69	ug/m3
78-93-3	72.11	Methyl ethyl ketone	0.45	0.20	ppbv		1.3	0.59	ug/m3
108-10-1	100.2	Methyl Isobutyl Ketone	ND	0.20	ppbv		ND	0.82	ug/m3
1634-04-4	88.15	Methyl Tert Butyl Ether	0.13	0.20	ppbv	J	0.47	0.72	ug/m3
115-07-1	42	Propylene	3.5	0.50	ppbv		6.0	0.86	ug/m3
100-42-5	104.1	Styrene	ND	0.20	ppbv		ND	0.85	ug/m3
71-55-6	133.4	1,1,1-Trichloroethane	0.12	0.20	ppbv	J	0.65	1.1	ug/m3
79-34-5	167.9	1,1,2,2-Tetrachloroethane	ND	0.20	ppbv		ND	1.4	ug/m3
79-00-5	133.4	1,1,2-Trichloroethane	ND	0.20	ppbv		ND	1.1	ug/m3
120-82-1	181.5	1,2,4-Trichlorobenzene	ND	0.20	ppbv		ND	1.5	ug/m3
95-63-6	120.2	1,2,4-Trimethylbenzene	0.92	0.20	ppbv		4.5	0.98	ug/m3
108-67-8	120.2	1,3,5-Trimethylbenzene	0.31	0.20	ppbv		1.5	0.98	ug/m3
540-84-1	114.2	2,2,4-Trimethylpentane	0.14	0.20	ppbv	J	0.65	0.93	ug/m3
127-18-4	165.8	Tetrachloroethylene	0.11	0.20	ppbv	J	0.75	1.4	ug/m3
109-99-9	72	Tetrahydrofuran	ND	0.20	ppbv		ND	0.59	ug/m3
108-88-3	92.14	Toluene	0.63	0.20	ppbv		2.4	0.75	ug/m3
79-01-6	131.4	Trichloroethylene	0.15	0.20	ppbv	J	0.81	1.1	ug/m3
75-69-4	137.4	Trichlorofluoromethane	0.35	0.20	ppbv		2.0	1.1	ug/m3
75-01-4	62.5	Vinyl chloride	ND	0.20	ppbv		ND	0.51	ug/m3
108-05-4	86	Vinyl Acetate	ND	0.20	ppbv		ND	0.70	ug/m3
	106.2	m,p-Xylene	0.27	0.20	ppbv		1.2	0.87	ug/m3
95-47-6	106.2	o-Xylene	0.15	0.20	ppbv	J	0.65	0.87	ug/m3
1330-20-7	106.2	Xylenes (total)	0.42	0.20	ppbv		1.8	0.87	ug/m3

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	120%		78-124%

(a) Matrix spikes are not analyzed by this procedure.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	1051101		
Lab Sample ID:	N73853-7	Date Sampled:	07/30/04
Matrix:	AIR - Air Summa ID: A184	Date Received:	07/31/04
Method:	TO-15	Percent Solids:	n/a
Project:	LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	W03178.D	1	08/05/04	WG	n/a	n/a	VW133
Run #2							

	Initial Volume
Run #1	400 ml
Run #2	

CAS No.	MW	Compound	Result	RL	Units	Q	Result	RL	Units
67-64-1	58.08	Acetone	12.7	0.20	ppbv		30.2	0.48	ug/m3
106-99-0	54.09	1,3-Butadiene	ND	0.20	ppbv		ND	0.44	ug/m3
71-43-2	78.11	Benzene	0.14	0.20	ppbv	J	0.45	0.64	ug/m3
75-27-4	163.8	Bromodichloromethane	ND	0.20	ppbv		ND	1.3	ug/m3
75-25-2	252.8	Bromoform	ND	0.20	ppbv		ND	2.1	ug/m3
74-83-9	94.94	Bromomethane	ND	0.20	ppbv		ND	0.78	ug/m3
593-60-2	106.9	Bromoethene	ND	0.20	ppbv		ND	0.87	ug/m3
100-44-7	126	Benzyl Chloride	ND	0.20	ppbv		ND	1.0	ug/m3
75-15-0	76.14	Carbon disulfide	ND	0.20	ppbv		ND	0.62	ug/m3
108-90-7	112.6	Chlorobenzene	ND	0.20	ppbv		ND	0.92	ug/m3
75-00-3	64.52	Chloroethane	ND	0.20	ppbv		ND	0.53	ug/m3
67-66-3	119.4	Chloroform	ND	0.20	ppbv		ND	0.98	ug/m3
74-87-3	50.49	Chloromethane	0.46	0.20	ppbv		0.95	0.41	ug/m3
107-05-1	76.53	3-Chloropropene	ND	0.20	ppbv		ND	0.63	ug/m3
95-49-8	126.6	2-Chlorotoluene	ND	0.20	ppbv		ND	1.0	ug/m3
56-23-5	153.8	Carbon tetrachloride	ND	0.20	ppbv		ND	1.3	ug/m3
110-82-7	84.16	Cyclohexane	ND	0.20	ppbv		ND	0.69	ug/m3
75-34-3	98.96	1,1-Dichloroethane	ND	0.20	ppbv		ND	0.81	ug/m3
75-35-4	96.94	1,1-Dichloroethylene	ND	0.20	ppbv		ND	0.79	ug/m3
106-93-4	187.9	1,2-Dibromoethane	ND	0.20	ppbv		ND	1.5	ug/m3
107-06-2	98.96	1,2-Dichloroethane	ND	0.20	ppbv		ND	0.81	ug/m3
78-87-5	113	1,2-Dichloropropane	ND	0.20	ppbv		ND	0.92	ug/m3
123-91-1	88	1,4-Dioxane	ND	0.20	ppbv		ND	0.72	ug/m3
75-71-8	120.9	Dichlorodifluoromethane	0.45	0.20	ppbv		2.2	0.99	ug/m3
124-48-1	208.3	Dibromochloromethane	ND	0.20	ppbv		ND	1.7	ug/m3
156-60-5	96.94	trans-1,2-Dichloroethylene	ND	0.20	ppbv		ND	0.79	ug/m3
156-59-2	96.94	cis-1,2-Dichloroethylene	ND	0.20	ppbv		ND	0.79	ug/m3
10061-01-5	111	cis-1,3-Dichloropropene	ND	0.20	ppbv		ND	0.91	ug/m3
541-73-1	147	m-Dichlorobenzene	ND	0.20	ppbv		ND	1.2	ug/m3
95-50-1	147	o-Dichlorobenzene	ND	0.20	ppbv		ND	1.2	ug/m3
106-46-7	147	p-Dichlorobenzene	ND	0.20	ppbv		ND	1.2	ug/m3
10061-02-6	111	trans-1,3-Dichloropropene	ND	0.20	ppbv		ND	0.91	ug/m3

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	1051101		
Lab Sample ID:	N73853-7	Date Sampled:	07/30/04
Matrix:	AIR - Air Summa ID: A184	Date Received:	07/31/04
Method:	TO-15	Percent Solids:	n/a
Project:	LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT		

CAS No.	MW	Compound	Result	RL	Units	Q	Result	RL	Units
64-17-5	46	Ethanol	42.5	0.50	ppbv	E	80.0	0.94	ug/m3
100-41-4	106.2	Ethylbenzene	0.15	0.20	ppbv	J	0.65	0.87	ug/m3
141-78-6	88	Ethyl Acetate	ND	0.20	ppbv		ND	0.72	ug/m3
622-96-8	120.2	4-Ethyltoluene	0.20	0.20	ppbv		0.98	0.98	ug/m3
76-13-1	187.4	Freon 113	0.36	0.20	ppbv		2.8	1.5	ug/m3
76-14-2	170.9	Freon 114	ND	0.20	ppbv		ND	1.4	ug/m3
142-82-5	100.2	Heptane	0.11	0.20	ppbv	J	0.45	0.82	ug/m3
87-68-3	260.8	Hexachlorobutadiene	ND	0.20	ppbv		ND	2.1	ug/m3
110-54-3	86.17	Hexane	0.29	0.20	ppbv		1.0	0.70	ug/m3
591-78-6	100	2-Hexanone	ND	0.20	ppbv		ND	0.82	ug/m3
67-63-0	60	Isopropyl Alcohol	4.1	0.20	ppbv		10	0.49	ug/m3
75-09-2	84.94	Methylene chloride	0.70	0.20	ppbv		2.4	0.69	ug/m3
78-93-3	72.11	Methyl ethyl ketone	0.55	0.20	ppbv		1.6	0.59	ug/m3
108-10-1	100.2	Methyl Isobutyl Ketone	0.36	0.20	ppbv		1.5	0.82	ug/m3
1634-04-4	88.15	Methyl Tert Butyl Ether	0.11	0.20	ppbv	J	0.40	0.72	ug/m3
115-07-1	42	Propylene	5.1	0.50	ppbv		8.8	0.86	ug/m3
100-42-5	104.1	Styrene	ND	0.20	ppbv		ND	0.85	ug/m3
71-55-6	133.4	1,1,1-Trichloroethane	ND	0.20	ppbv		ND	1.1	ug/m3
79-34-5	167.9	1,1,2,2-Tetrachloroethane	ND	0.20	ppbv		ND	1.4	ug/m3
79-00-5	133.4	1,1,2-Trichloroethane	ND	0.20	ppbv		ND	1.1	ug/m3
120-82-1	181.5	1,2,4-Trichlorobenzene	ND	0.20	ppbv		ND	1.5	ug/m3
95-63-6	120.2	1,2,4-Trimethylbenzene	0.67	0.20	ppbv		3.3	0.98	ug/m3
108-67-8	120.2	1,3,5-Trimethylbenzene	0.28	0.20	ppbv		1.4	0.98	ug/m3
540-84-1	114.2	2,2,4-Trimethylpentane	0.11	0.20	ppbv	J	0.51	0.93	ug/m3
127-18-4	165.8	Tetrachloroethylene	0.28	0.20	ppbv		1.9	1.4	ug/m3
109-99-9	72	Tetrahydrofuran	ND	0.20	ppbv		ND	0.59	ug/m3
108-88-3	92.14	Toluene	0.68	0.20	ppbv		2.6	0.75	ug/m3
79-01-6	131.4	Trichloroethylene	0.45	0.20	ppbv		2.4	1.1	ug/m3
75-69-4	137.4	Trichlorofluoromethane	3.1	0.20	ppbv		17	1.1	ug/m3
75-01-4	62.5	Vinyl chloride	ND	0.20	ppbv		ND	0.51	ug/m3
108-05-4	86	Vinyl Acetate	ND	0.20	ppbv		ND	0.70	ug/m3
	106.2	m,p-Xylene	0.51	0.20	ppbv		2.2	0.87	ug/m3
95-47-6	106.2	o-Xylene	0.19	0.20	ppbv	J	0.83	0.87	ug/m3
1330-20-7	106.2	Xylenes (total)	0.70	0.20	ppbv		3.0	0.87	ug/m3

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	117%		78-124%

(a) Matrix spikes are not analyzed by this procedure.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	1051109		
Lab Sample ID:	N73853-8	Date Sampled:	07/30/04
Matrix:	AIR - Air Summa ID: A293	Date Received:	07/31/04
Method:	TO-15	Percent Solids:	n/a
Project:	LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	W03179.D	16	08/05/04	WG	n/a	n/a	VW133
Run #2 [a]	W03183.D	80	08/06/04	WG	n/a	n/a	VW133

	Initial Volume
Run #1	400 ml
Run #2	400 ml

CAS No.	MW	Compound	Result	RL	Units	Q	Result	RL	Units
67-64-1	58.08	Acetone	8.2	3.2	ppbv		19	7.6	ug/m3
106-99-0	54.09	1,3-Butadiene	ND	3.2	ppbv		ND	7.1	ug/m3
71-43-2	78.11	Benzene	ND	3.2	ppbv		ND	10	ug/m3
75-27-4	163.8	Bromodichloromethane	ND	3.2	ppbv		ND	21	ug/m3
75-25-2	252.8	Bromoform	ND	3.2	ppbv		ND	33	ug/m3
74-83-9	94.94	Bromomethane	ND	3.2	ppbv		ND	12	ug/m3
593-60-2	106.9	Bromoethene	ND	3.2	ppbv		ND	14	ug/m3
100-44-7	126	Benzyl Chloride	ND	3.2	ppbv		ND	16	ug/m3
75-15-0	76.14	Carbon disulfide	ND	3.2	ppbv		ND	10	ug/m3
108-90-7	112.6	Chlorobenzene	ND	3.2	ppbv		ND	15	ug/m3
75-00-3	64.52	Chloroethane	ND	3.2	ppbv		ND	8.4	ug/m3
67-66-3	119.4	Chloroform	14.3	3.2	ppbv		69.8	16	ug/m3
74-87-3	50.49	Chloromethane	ND	3.2	ppbv		ND	6.6	ug/m3
107-05-1	76.53	3-Chloropropene	ND	3.2	ppbv		ND	10	ug/m3
95-49-8	126.6	2-Chlorotoluene	ND	3.2	ppbv		ND	17	ug/m3
56-23-5	153.8	Carbon tetrachloride	2.1	3.2	ppbv	J	13	20	ug/m3
110-82-7	84.16	Cyclohexane	ND	3.2	ppbv		ND	11	ug/m3
75-34-3	98.96	1,1-Dichloroethane	6.2	3.2	ppbv		25	13	ug/m3
75-35-4	96.94	1,1-Dichloroethylene	66.3	3.2	ppbv		263	13	ug/m3
106-93-4	187.9	1,2-Dibromoethane	ND	3.2	ppbv		ND	25	ug/m3
107-06-2	98.96	1,2-Dichloroethane	ND	3.2	ppbv		ND	13	ug/m3
78-87-5	113	1,2-Dichloropropane	ND	3.2	ppbv		ND	15	ug/m3
123-91-1	88	1,4-Dioxane	ND	3.2	ppbv		ND	12	ug/m3
75-71-8	120.9	Dichlorodifluoromethane	ND	3.2	ppbv		ND	16	ug/m3
124-48-1	208.3	Dibromochloromethane	ND	3.2	ppbv		ND	27	ug/m3
156-60-5	96.94	trans-1,2-Dichloroethylene	4.4	3.2	ppbv		17	13	ug/m3
156-59-2	96.94	cis-1,2-Dichloroethylene	5.4	3.2	ppbv		21	13	ug/m3
10061-01-5	111	cis-1,3-Dichloropropene	ND	3.2	ppbv		ND	15	ug/m3
541-73-1	147	m-Dichlorobenzene	ND	3.2	ppbv		ND	19	ug/m3
95-50-1	147	o-Dichlorobenzene	ND	3.2	ppbv		ND	19	ug/m3
106-46-7	147	p-Dichlorobenzene	ND	3.2	ppbv		ND	19	ug/m3
10061-02-6	111	trans-1,3-Dichloropropene	ND	3.2	ppbv		ND	15	ug/m3

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	1051109		
Lab Sample ID:	N73853-8	Date Sampled:	07/30/04
Matrix:	AIR - Air Summa ID: A293	Date Received:	07/31/04
Method:	TO-15	Percent Solids:	n/a
Project:	LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT		

CAS No.	MW	Compound	Result	RL	Units	Q	Result	RL	Units
64-17-5	46	Ethanol	8.4	8.0	ppbv		16	15	ug/m3
100-41-4	106.2	Ethylbenzene	ND	3.2	ppbv		ND	14	ug/m3
141-78-6	88	Ethyl Acetate	ND	3.2	ppbv		ND	12	ug/m3
622-96-8	120.2	4-Ethyltoluene	ND	3.2	ppbv		ND	16	ug/m3
76-13-1	187.4	Freon 113	1.5	3.2	ppbv	J	11	25	ug/m3
76-14-2	170.9	Freon 114	ND	3.2	ppbv		ND	22	ug/m3
142-82-5	100.2	Heptane	ND	3.2	ppbv		ND	13	ug/m3
87-68-3	260.8	Hexachlorobutadiene	ND	3.2	ppbv		ND	34	ug/m3
110-54-3	86.17	Hexane	1.7	3.2	ppbv	J	6.0	11	ug/m3
591-78-6	100	2-Hexanone	ND	3.2	ppbv		ND	13	ug/m3
67-63-0	60	Isopropyl Alcohol	10.8	3.2	ppbv		26.5	7.9	ug/m3
75-09-2	84.94	Methylene chloride	ND	3.2	ppbv		ND	11	ug/m3
78-93-3	72.11	Methyl ethyl ketone	ND	3.2	ppbv		ND	9.4	ug/m3
108-10-1	100.2	Methyl Isobutyl Ketone	ND	3.2	ppbv		ND	13	ug/m3
1634-04-4	88.15	Methyl Tert Butyl Ether	ND	3.2	ppbv		ND	12	ug/m3
115-07-1	42	Propylene	10.8	8.0	ppbv		18.6	14	ug/m3
100-42-5	104.1	Styrene	ND	3.2	ppbv		ND	14	ug/m3
71-55-6	133.4	1,1,1-Trichloroethane	1580 [b]	16	ppbv		8620 [b]	87	ug/m3
79-34-5	167.9	1,1,2,2-Tetrachloroethane	ND	3.2	ppbv		ND	22	ug/m3
79-00-5	133.4	1,1,2-Trichloroethane	ND	3.2	ppbv		ND	17	ug/m3
120-82-1	181.5	1,2,4-Trichlorobenzene	ND	3.2	ppbv		ND	24	ug/m3
95-63-6	120.2	1,2,4-Trimethylbenzene	2.8	3.2	ppbv	J	14	16	ug/m3
108-67-8	120.2	1,3,5-Trimethylbenzene	ND	3.2	ppbv		ND	16	ug/m3
540-84-1	114.2	2,2,4-Trimethylpentane	ND	3.2	ppbv		ND	15	ug/m3
127-18-4	165.8	Tetrachloroethylene	163	3.2	ppbv		1110	22	ug/m3
109-99-9	72	Tetrahydrofuran	ND	3.2	ppbv		ND	9.4	ug/m3
108-88-3	92.14	Toluene	2.3	3.2	ppbv	J	8.7	12	ug/m3
79-01-6	131.4	Trichloroethylene	504	3.2	ppbv		2710	17	ug/m3
75-69-4	137.4	Trichlorofluoromethane	ND	3.2	ppbv		ND	18	ug/m3
75-01-4	62.5	Vinyl chloride	ND	3.2	ppbv		ND	8.2	ug/m3
108-05-4	86	Vinyl Acetate	ND	3.2	ppbv		ND	11	ug/m3
	106.2	m,p-Xylene	5.0	3.2	ppbv		22	14	ug/m3
95-47-6	106.2	o-Xylene	1.6	3.2	ppbv	J	6.9	14	ug/m3
1330-20-7	106.2	Xylenes (total)	6.7	3.2	ppbv		29	14	ug/m3

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	125% [c]	120%	78-124%

(a) Matrix spikes are not analyzed by this procedure.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	1051109			
Lab Sample ID:	N73853-8		Date Sampled:	07/30/04
Matrix:	AIR - Air	Summa ID: A293	Date Received:	07/31/04
Method:	TO-15		Percent Solids:	n/a
Project:	LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT			

CAS No.	MW	Compound	Result	RL	Units	Q	Result	RL	Units

(b) Result is from Run# 2
(c) Outside control limits due to matrix interference. Confirmed by reanalysis.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	1051106		
Lab Sample ID:	N73853-9	Date Sampled:	07/30/04
Matrix:	AIR - Air Summa ID: A191	Date Received:	07/31/04
Method:	TO-15	Percent Solids:	n/a
Project:	LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	W03184.D	1	08/06/04	WG	n/a	n/a	VW133
Run #2							

	Initial Volume
Run #1	400 ml
Run #2	

CAS No.	MW	Compound	Result	RL	Units	Q	Result	RL	Units
67-64-1	58.08	Acetone	4.0	0.20	ppbv		9.5	0.48	ug/m3
106-99-0	54.09	1,3-Butadiene	ND	0.20	ppbv		ND	0.44	ug/m3
71-43-2	78.11	Benzene	0.11	0.20	ppbv	J	0.35	0.64	ug/m3
75-27-4	163.8	Bromodichloromethane	ND	0.20	ppbv		ND	1.3	ug/m3
75-25-2	252.8	Bromoform	ND	0.20	ppbv		ND	2.1	ug/m3
74-83-9	94.94	Bromomethane	ND	0.20	ppbv		ND	0.78	ug/m3
593-60-2	106.9	Bromoethene	ND	0.20	ppbv		ND	0.87	ug/m3
100-44-7	126	Benzyl Chloride	ND	0.20	ppbv		ND	1.0	ug/m3
75-15-0	76.14	Carbon disulfide	ND	0.20	ppbv		ND	0.62	ug/m3
108-90-7	112.6	Chlorobenzene	ND	0.20	ppbv		ND	0.92	ug/m3
75-00-3	64.52	Chloroethane	ND	0.20	ppbv		ND	0.53	ug/m3
67-66-3	119.4	Chloroform	ND	0.20	ppbv		ND	0.98	ug/m3
74-87-3	50.49	Chloromethane	0.49	0.20	ppbv		1.0	0.41	ug/m3
107-05-1	76.53	3-Chloropropene	ND	0.20	ppbv		ND	0.63	ug/m3
95-49-8	126.6	2-Chlorotoluene	ND	0.20	ppbv		ND	1.0	ug/m3
56-23-5	153.8	Carbon tetrachloride	ND	0.20	ppbv		ND	1.3	ug/m3
110-82-7	84.16	Cyclohexane	ND	0.20	ppbv		ND	0.69	ug/m3
75-34-3	98.96	1,1-Dichloroethane	ND	0.20	ppbv		ND	0.81	ug/m3
75-35-4	96.94	1,1-Dichloroethylene	0.10	0.20	ppbv	J	0.40	0.79	ug/m3
106-93-4	187.9	1,2-Dibromoethane	ND	0.20	ppbv		ND	1.5	ug/m3
107-06-2	98.96	1,2-Dichloroethane	ND	0.20	ppbv		ND	0.81	ug/m3
78-87-5	113	1,2-Dichloropropane	ND	0.20	ppbv		ND	0.92	ug/m3
123-91-1	88	1,4-Dioxane	ND	0.20	ppbv		ND	0.72	ug/m3
75-71-8	120.9	Dichlorodifluoromethane	0.50	0.20	ppbv		2.5	0.99	ug/m3
124-48-1	208.3	Dibromochloromethane	ND	0.20	ppbv		ND	1.7	ug/m3
156-60-5	96.94	trans-1,2-Dichloroethylene	ND	0.20	ppbv		ND	0.79	ug/m3
156-59-2	96.94	cis-1,2-Dichloroethylene	ND	0.20	ppbv		ND	0.79	ug/m3
10061-01-5	111	cis-1,3-Dichloropropene	ND	0.20	ppbv		ND	0.91	ug/m3
541-73-1	147	m-Dichlorobenzene	ND	0.20	ppbv		ND	1.2	ug/m3
95-50-1	147	o-Dichlorobenzene	ND	0.20	ppbv		ND	1.2	ug/m3
106-46-7	147	p-Dichlorobenzene	ND	0.20	ppbv		ND	1.2	ug/m3
10061-02-6	111	trans-1,3-Dichloropropene	ND	0.20	ppbv		ND	0.91	ug/m3

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	1051106		
Lab Sample ID:	N73853-9	Date Sampled:	07/30/04
Matrix:	AIR - Air Summa ID: A191	Date Received:	07/31/04
Method:	TO-15	Percent Solids:	n/a
Project:	LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT		

CAS No.	MW	Compound	Result	RL	Units	Q	Result	RL	Units
64-17-5	46	Ethanol	3.5	0.50	ppbv		6.6	0.94	ug/m3
100-41-4	106.2	Ethylbenzene	ND	0.20	ppbv		ND	0.87	ug/m3
141-78-6	88	Ethyl Acetate	ND	0.20	ppbv		ND	0.72	ug/m3
622-96-8	120.2	4-Ethyltoluene	ND	0.20	ppbv		ND	0.98	ug/m3
76-13-1	187.4	Freon 113	0.16	0.20	ppbv	J	1.2	1.5	ug/m3
76-14-2	170.9	Freon 114	ND	0.20	ppbv		ND	1.4	ug/m3
142-82-5	100.2	Heptane	ND	0.20	ppbv		ND	0.82	ug/m3
87-68-3	260.8	Hexachlorobutadiene	ND	0.20	ppbv		ND	2.1	ug/m3
110-54-3	86.17	Hexane	0.094	0.20	ppbv	J	0.33	0.70	ug/m3
591-78-6	100	2-Hexanone	ND	0.20	ppbv		ND	0.82	ug/m3
67-63-0	60	Isopropyl Alcohol	1.7	0.20	ppbv		4.2	0.49	ug/m3
75-09-2	84.94	Methylene chloride	0.16	0.20	ppbv	J	0.56	0.69	ug/m3
78-93-3	72.11	Methyl ethyl ketone	0.27	0.20	ppbv		0.80	0.59	ug/m3
108-10-1	100.2	Methyl Isobutyl Ketone	ND	0.20	ppbv		ND	0.82	ug/m3
1634-04-4	88.15	Methyl Tert Butyl Ether	ND	0.20	ppbv		ND	0.72	ug/m3
115-07-1	42	Propylene	0.92	0.50	ppbv		1.6	0.86	ug/m3
100-42-5	104.1	Styrene	ND	0.20	ppbv		ND	0.85	ug/m3
71-55-6	133.4	1,1,1-Trichloroethane	ND	0.20	ppbv		ND	1.1	ug/m3
79-34-5	167.9	1,1,2,2-Tetrachloroethane	ND	0.20	ppbv		ND	1.4	ug/m3
79-00-5	133.4	1,1,2-Trichloroethane	ND	0.20	ppbv		ND	1.1	ug/m3
120-82-1	181.5	1,2,4-Trichlorobenzene	ND	0.20	ppbv		ND	1.5	ug/m3
95-63-6	120.2	1,2,4-Trimethylbenzene	0.10	0.20	ppbv	J	0.49	0.98	ug/m3
108-67-8	120.2	1,3,5-Trimethylbenzene	ND	0.20	ppbv		ND	0.98	ug/m3
540-84-1	114.2	2,2,4-Trimethylpentane	ND	0.20	ppbv		ND	0.93	ug/m3
127-18-4	165.8	Tetrachloroethylene	0.67	0.20	ppbv		4.5	1.4	ug/m3
109-99-9	72	Tetrahydrofuran	ND	0.20	ppbv		ND	0.59	ug/m3
108-88-3	92.14	Toluene	0.33	0.20	ppbv		1.2	0.75	ug/m3
79-01-6	131.4	Trichloroethylene	1.6	0.20	ppbv		8.6	1.1	ug/m3
75-69-4	137.4	Trichlorofluoromethane	0.36	0.20	ppbv		2.0	1.1	ug/m3
75-01-4	62.5	Vinyl chloride	ND	0.20	ppbv		ND	0.51	ug/m3
108-05-4	86	Vinyl Acetate	ND	0.20	ppbv		ND	0.70	ug/m3
	106.2	m,p-Xylene	0.22	0.20	ppbv		0.96	0.87	ug/m3
95-47-6	106.2	o-Xylene	ND	0.20	ppbv		ND	0.87	ug/m3
1330-20-7	106.2	Xylenes (total)	0.22	0.20	ppbv		0.96	0.87	ug/m3

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	122%		78-124%

(a) Matrix spikes are not analyzed by this procedure.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	1051107		
Lab Sample ID:	N73853-10	Date Sampled:	07/30/04
Matrix:	AIR - Air Summa ID: A285,M127	Date Received:	07/31/04
Method:	TO-15	Percent Solids:	n/a
Project:	LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	Q22256.D	80	08/07/04	WG	n/a	n/a	VQ886
Run #2 [a]	Q22255.D	400	08/07/04	WG	n/a	n/a	VQ886
Run #3 [a]	Q22275.D	4000	08/09/04	WG	n/a	n/a	VQ887

	Initial Volume
Run #1	400 ml
Run #2	400 ml
Run #3	400 ml

CAS No.	MW	Compound	Result	RL	Units	Q	Result	RL	Units
67-64-1	58.08	Acetone	ND	16	ppbv		ND	38	ug/m3
106-99-0	54.09	1,3-Butadiene	ND	16	ppbv		ND	35	ug/m3
71-43-2	78.11	Benzene	34.3	16	ppbv		110	51	ug/m3
75-27-4	163.8	Bromodichloromethane	ND	16	ppbv		ND	110	ug/m3
75-25-2	252.8	Bromoform	ND	16	ppbv		ND	170	ug/m3
74-83-9	94.94	Bromomethane	ND	16	ppbv		ND	62	ug/m3
593-60-2	106.9	Bromoethene	ND	16	ppbv		ND	70	ug/m3
100-44-7	126	Benzyl Chloride	ND	16	ppbv		ND	82	ug/m3
75-15-0	76.14	Carbon disulfide	ND	16	ppbv		ND	50	ug/m3
108-90-7	112.6	Chlorobenzene	ND	16	ppbv		ND	74	ug/m3
75-00-3	64.52	Chloroethane	597	16	ppbv		1580	42	ug/m3
67-66-3	119.4	Chloroform	192	16	ppbv		938	78	ug/m3
74-87-3	50.49	Chloromethane	ND	16	ppbv		ND	33	ug/m3
107-05-1	76.53	3-Chloropropene	ND	16	ppbv		ND	50	ug/m3
95-49-8	126.6	2-Chlorotoluene	ND	16	ppbv		ND	83	ug/m3
56-23-5	153.8	Carbon tetrachloride	ND	16	ppbv		ND	100	ug/m3
110-82-7	84.16	Cyclohexane	ND	16	ppbv		ND	55	ug/m3
75-34-3	98.96	1,1-Dichloroethane	38500 [b]	800	ppbv		156000 [b]	3200	ug/m3
75-35-4	96.94	1,1-Dichloroethylene	3840 [c]	80	ppbv		15200 [c]	320	ug/m3
106-93-4	187.9	1,2-Dibromoethane	ND	16	ppbv		ND	120	ug/m3
107-06-2	98.96	1,2-Dichloroethane	ND	16	ppbv		ND	65	ug/m3
78-87-5	113	1,2-Dichloropropane	ND	16	ppbv		ND	74	ug/m3
123-91-1	88	1,4-Dioxane	ND	16	ppbv		ND	58	ug/m3
75-71-8	120.9	Dichlorodifluoromethane	ND	16	ppbv		ND	79	ug/m3
124-48-1	208.3	Dibromochloromethane	ND	16	ppbv		ND	140	ug/m3
156-60-5	96.94	trans-1,2-Dichloroethylene	34.3	16	ppbv		136	63	ug/m3
156-59-2	96.94	cis-1,2-Dichloroethylene	515	16	ppbv		2040	63	ug/m3
10061-01-5	111	cis-1,3-Dichloropropene	ND	16	ppbv		ND	73	ug/m3
541-73-1	147	m-Dichlorobenzene	ND	16	ppbv		ND	96	ug/m3
95-50-1	147	o-Dichlorobenzene	ND	16	ppbv		ND	96	ug/m3

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	1051107		
Lab Sample ID:	N73853-10	Date Sampled:	07/30/04
Matrix:	AIR - Air Summa ID: A285,M127	Date Received:	07/31/04
Method:	TO-15	Percent Solids:	n/a
Project:	LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT		

CAS No.	MW	Compound	Result	RL	Units	Q	Result	RL	Units
106-46-7	147	p-Dichlorobenzene	ND	16	ppbv		ND	96	ug/m3
10061-02-6	111	trans-1,3-Dichloropropene	ND	16	ppbv		ND	73	ug/m3
64-17-5	46	Ethanol	133	40	ppbv		250	75	ug/m3
100-41-4	106.2	Ethylbenzene	15.7	16	ppbv	J	68.2	69	ug/m3
141-78-6	88	Ethyl Acetate	ND	16	ppbv		ND	58	ug/m3
622-96-8	120.2	4-Ethyltoluene	ND	16	ppbv		ND	79	ug/m3
76-13-1	187.4	Freon 113	320	16	ppbv		2450	120	ug/m3
76-14-2	170.9	Freon 114	ND	16	ppbv		ND	110	ug/m3
142-82-5	100.2	Heptane	ND	16	ppbv		ND	66	ug/m3
87-68-3	260.8	Hexachlorobutadiene	ND	16	ppbv		ND	170	ug/m3
110-54-3	86.17	Hexane	25.3	16	ppbv		89.2	56	ug/m3
591-78-6	100	2-Hexanone	ND	16	ppbv		ND	65	ug/m3
67-63-0	60	Isopropyl Alcohol	ND	16	ppbv		ND	39	ug/m3
75-09-2	84.94	Methylene chloride	ND	16	ppbv		ND	56	ug/m3
78-93-3	72.11	Methyl ethyl ketone	ND	16	ppbv		ND	47	ug/m3
108-10-1	100.2	Methyl Isobutyl Ketone	ND	16	ppbv		ND	66	ug/m3
1634-04-4	88.15	Methyl Tert Butyl Ether	ND	16	ppbv		ND	58	ug/m3
115-07-1	42	Propylene	ND	40	ppbv		ND	69	ug/m3
100-42-5	104.1	Styrene	ND	16	ppbv		ND	68	ug/m3
71-55-6	133.4	1,1,1-Trichloroethane	80400 [b]	800	ppbv		439000 [b]	4400	ug/m3
79-34-5	167.9	1,1,2,2-Tetrachloroethane	ND	16	ppbv		ND	110	ug/m3
79-00-5	133.4	1,1,2-Trichloroethane	18.4	16	ppbv		100	87	ug/m3
120-82-1	181.5	1,2,4-Trichlorobenzene	ND	16	ppbv		ND	120	ug/m3
95-63-6	120.2	1,2,4-Trimethylbenzene	ND	16	ppbv		ND	79	ug/m3
108-67-8	120.2	1,3,5-Trimethylbenzene	ND	16	ppbv		ND	79	ug/m3
540-84-1	114.2	2,2,4-Trimethylpentane	ND	16	ppbv		ND	75	ug/m3
127-18-4	165.8	Tetrachloroethylene	14100 [c]	80	ppbv		95600 [c]	540	ug/m3
109-99-9	72	Tetrahydrofuran	ND	16	ppbv		ND	47	ug/m3
108-88-3	92.14	Toluene	28.5	16	ppbv		107	60	ug/m3
79-01-6	131.4	Trichloroethylene	6260 [c]	80	ppbv		33600 [c]	430	ug/m3
75-69-4	137.4	Trichlorofluoromethane	ND	16	ppbv		ND	90	ug/m3
75-01-4	62.5	Vinyl chloride	ND	16	ppbv		ND	41	ug/m3
108-05-4	86	Vinyl Acetate	ND	16	ppbv		ND	56	ug/m3
	106.2	m,p-Xylene	35.9	16	ppbv		156	69	ug/m3
95-47-6	106.2	o-Xylene	14.1	16	ppbv	J	61.2	69	ug/m3
1330-20-7	106.2	Xylenes (total)	50.0	16	ppbv		217	69	ug/m3

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Run# 3	Limits
460-00-4	4-Bromofluorobenzene	100%	104%	105%	78-124%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	1051107			
Lab Sample ID:	N73853-10		Date Sampled:	07/30/04
Matrix:	AIR - Air	Summa ID: A285,M127	Date Received:	07/31/04
Method:	TO-15		Percent Solids:	n/a
Project:	LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT			

CAS No.	MW	Compound	Result	RL	Units	Q	Result	RL	Units

(a) Matrix spikes are not analyzed by this procedure.
(b) Result is from Run# 3
(c) Result is from Run# 2

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	1051119		
Lab Sample ID:	N73853-11	Date Sampled:	07/30/04
Matrix:	AIR - Air Summa ID: A100	Date Received:	07/31/04
Method:	TO-15	Percent Solids:	n/a
Project:	LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	W03187.D	4	08/06/04	WG	n/a	n/a	VW133
Run #2							

	Initial Volume
Run #1	400 ml
Run #2	

CAS No.	MW	Compound	Result	RL	Units	Q	Result	RL	Units
67-64-1	58.08	Acetone	7.7	0.80	ppbv		18	1.9	ug/m3
106-99-0	54.09	1,3-Butadiene	ND	0.80	ppbv		ND	1.8	ug/m3
71-43-2	78.11	Benzene	0.44	0.80	ppbv	J	1.4	2.6	ug/m3
75-27-4	163.8	Bromodichloromethane	ND	0.80	ppbv		ND	5.4	ug/m3
75-25-2	252.8	Bromoform	ND	0.80	ppbv		ND	8.3	ug/m3
74-83-9	94.94	Bromomethane	ND	0.80	ppbv		ND	3.1	ug/m3
593-60-2	106.9	Bromoethene	ND	0.80	ppbv		ND	3.5	ug/m3
100-44-7	126	Benzyl Chloride	ND	0.80	ppbv		ND	4.1	ug/m3
75-15-0	76.14	Carbon disulfide	ND	0.80	ppbv		ND	2.5	ug/m3
108-90-7	112.6	Chlorobenzene	ND	0.80	ppbv		ND	3.7	ug/m3
75-00-3	64.52	Chloroethane	ND	0.80	ppbv		ND	2.1	ug/m3
67-66-3	119.4	Chloroform	1.4	0.80	ppbv		6.8	3.9	ug/m3
74-87-3	50.49	Chloromethane	ND	0.80	ppbv		ND	1.7	ug/m3
107-05-1	76.53	3-Chloropropene	ND	0.80	ppbv		ND	2.5	ug/m3
95-49-8	126.6	2-Chlorotoluene	ND	0.80	ppbv		ND	4.1	ug/m3
56-23-5	153.8	Carbon tetrachloride	ND	0.80	ppbv		ND	5.0	ug/m3
110-82-7	84.16	Cyclohexane	ND	0.80	ppbv		ND	2.8	ug/m3
75-34-3	98.96	1,1-Dichloroethane	0.78	0.80	ppbv	J	3.2	3.2	ug/m3
75-35-4	96.94	1,1-Dichloroethylene	ND	0.80	ppbv		ND	3.2	ug/m3
106-93-4	187.9	1,2-Dibromoethane	ND	0.80	ppbv		ND	6.1	ug/m3
107-06-2	98.96	1,2-Dichloroethane	ND	0.80	ppbv		ND	3.2	ug/m3
78-87-5	113	1,2-Dichloropropane	ND	0.80	ppbv		ND	3.7	ug/m3
123-91-1	88	1,4-Dioxane	ND	0.80	ppbv		ND	2.9	ug/m3
75-71-8	120.9	Dichlorodifluoromethane	0.48	0.80	ppbv	J	2.4	4.0	ug/m3
124-48-1	208.3	Dibromochloromethane	ND	0.80	ppbv		ND	6.8	ug/m3
156-60-5	96.94	trans-1,2-Dichloroethylene	ND	0.80	ppbv		ND	3.2	ug/m3
156-59-2	96.94	cis-1,2-Dichloroethylene	8.7	0.80	ppbv		34	3.2	ug/m3
10061-01-5	111	cis-1,3-Dichloropropene	ND	0.80	ppbv		ND	3.6	ug/m3
541-73-1	147	m-Dichlorobenzene	ND	0.80	ppbv		ND	4.8	ug/m3
95-50-1	147	o-Dichlorobenzene	ND	0.80	ppbv		ND	4.8	ug/m3
106-46-7	147	p-Dichlorobenzene	ND	0.80	ppbv		ND	4.8	ug/m3
10061-02-6	111	trans-1,3-Dichloropropene	ND	0.80	ppbv		ND	3.6	ug/m3

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	1051119		
Lab Sample ID:	N73853-11	Date Sampled:	07/30/04
Matrix:	AIR - Air Summa ID: A100	Date Received:	07/31/04
Method:	TO-15	Percent Solids:	n/a
Project:	LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT		

CAS No.	MW	Compound	Result	RL	Units	Q	Result	RL	Units
64-17-5	46	Ethanol	ND	2.0	ppbv		ND	3.8	ug/m3
100-41-4	106.2	Ethylbenzene	ND	0.80	ppbv		ND	3.5	ug/m3
141-78-6	88	Ethyl Acetate	ND	0.80	ppbv		ND	2.9	ug/m3
622-96-8	120.2	4-Ethyltoluene	ND	0.80	ppbv		ND	3.9	ug/m3
76-13-1	187.4	Freon 113	2.2	0.80	ppbv		17	6.1	ug/m3
76-14-2	170.9	Freon 114	ND	0.80	ppbv		ND	5.6	ug/m3
142-82-5	100.2	Heptane	ND	0.80	ppbv		ND	3.3	ug/m3
87-68-3	260.8	Hexachlorobutadiene	ND	0.80	ppbv		ND	8.5	ug/m3
110-54-3	86.17	Hexane	0.75	0.80	ppbv	J	2.6	2.8	ug/m3
591-78-6	100	2-Hexanone	ND	0.80	ppbv		ND	3.3	ug/m3
67-63-0	60	Isopropyl Alcohol	ND	0.80	ppbv		ND	2.0	ug/m3
75-09-2	84.94	Methylene chloride	2.5	0.80	ppbv		8.7	2.8	ug/m3
78-93-3	72.11	Methyl ethyl ketone	1.0	0.80	ppbv		2.9	2.4	ug/m3
108-10-1	100.2	Methyl Isobutyl Ketone	ND	0.80	ppbv		ND	3.3	ug/m3
1634-04-4	88.15	Methyl Tert Butyl Ether	ND	0.80	ppbv		ND	2.9	ug/m3
115-07-1	42	Propylene	5.6	2.0	ppbv		9.6	3.4	ug/m3
100-42-5	104.1	Styrene	ND	0.80	ppbv		ND	3.4	ug/m3
71-55-6	133.4	1,1,1-Trichloroethane	6.0	0.80	ppbv		33	4.4	ug/m3
79-34-5	167.9	1,1,2,2-Tetrachloroethane	ND	0.80	ppbv		ND	5.5	ug/m3
79-00-5	133.4	1,1,2-Trichloroethane	ND	0.80	ppbv		ND	4.4	ug/m3
120-82-1	181.5	1,2,4-Trichlorobenzene	ND	0.80	ppbv		ND	5.9	ug/m3
95-63-6	120.2	1,2,4-Trimethylbenzene	ND	0.80	ppbv		ND	3.9	ug/m3
108-67-8	120.2	1,3,5-Trimethylbenzene	ND	0.80	ppbv		ND	3.9	ug/m3
540-84-1	114.2	2,2,4-Trimethylpentane	ND	0.80	ppbv		ND	3.7	ug/m3
127-18-4	165.8	Tetrachloroethylene	66.9	0.80	ppbv		454	5.4	ug/m3
109-99-9	72	Tetrahydrofuran	ND	0.80	ppbv		ND	2.4	ug/m3
108-88-3	92.14	Toluene	ND	0.80	ppbv		ND	3.0	ug/m3
79-01-6	131.4	Trichloroethylene	46.7	0.80	ppbv		251	4.3	ug/m3
75-69-4	137.4	Trichlorofluoromethane	ND	0.80	ppbv		ND	4.5	ug/m3
75-01-4	62.5	Vinyl chloride	ND	0.80	ppbv		ND	2.0	ug/m3
108-05-4	86	Vinyl Acetate	ND	0.80	ppbv		ND	2.8	ug/m3
	106.2	m,p-Xylene	ND	0.80	ppbv		ND	3.5	ug/m3
95-47-6	106.2	o-Xylene	ND	0.80	ppbv		ND	3.5	ug/m3
1330-20-7	106.2	Xylenes (total)	ND	0.80	ppbv		ND	3.5	ug/m3

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	120%		78-124%

(a) Matrix spikes are not analyzed by this procedure.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	1051118		
Lab Sample ID:	N73853-12	Date Sampled:	07/30/04
Matrix:	AIR - Air Summa ID: A125,M102	Date Received:	07/31/04
Method:	TO-15	Percent Solids:	n/a
Project:	LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	W03188.D	4	08/06/04	WG	n/a	n/a	VW133
Run #2 [a]	Q22257.D	50	08/07/04	WG	n/a	n/a	VQ886
Run #3 [a]	Q22276.D	200	08/09/04	WG	n/a	n/a	VQ887

	Initial Volume
Run #1	400 ml
Run #2	400 ml
Run #3	400 ml

CAS No.	MW	Compound	Result	RL	Units	Q	Result	RL	Units
67-64-1	58.08	Acetone	61.5	0.80	ppbv		146	1.9	ug/m3
106-99-0	54.09	1,3-Butadiene	ND	0.80	ppbv		ND	1.8	ug/m3
71-43-2	78.11	Benzene	3.8	0.80	ppbv		12	2.6	ug/m3
75-27-4	163.8	Bromodichloromethane	ND	0.80	ppbv		ND	5.4	ug/m3
75-25-2	252.8	Bromoform	ND	0.80	ppbv		ND	8.3	ug/m3
74-83-9	94.94	Bromomethane	ND	0.80	ppbv		ND	3.1	ug/m3
593-60-2	106.9	Bromoethene	ND	0.80	ppbv		ND	3.5	ug/m3
100-44-7	126	Benzyl Chloride	ND	0.80	ppbv		ND	4.1	ug/m3
75-15-0	76.14	Carbon disulfide	1.4	0.80	ppbv		4.4	2.5	ug/m3
108-90-7	112.6	Chlorobenzene	ND	0.80	ppbv		ND	3.7	ug/m3
75-00-3	64.52	Chloroethane	ND	0.80	ppbv		ND	2.1	ug/m3
67-66-3	119.4	Chloroform	16.5	0.80	ppbv		80.6	3.9	ug/m3
74-87-3	50.49	Chloromethane	ND	0.80	ppbv		ND	1.7	ug/m3
107-05-1	76.53	3-Chloropropene	ND	0.80	ppbv		ND	2.5	ug/m3
95-49-8	126.6	2-Chlorotoluene	ND	0.80	ppbv		ND	4.1	ug/m3
56-23-5	153.8	Carbon tetrachloride	ND	0.80	ppbv		ND	5.0	ug/m3
110-82-7	84.16	Cyclohexane	ND	0.80	ppbv		ND	2.8	ug/m3
75-34-3	98.96	1,1-Dichloroethane	65.2	0.80	ppbv		264	3.2	ug/m3
75-35-4	96.94	1,1-Dichloroethylene	20.0	0.80	ppbv		79.3	3.2	ug/m3
106-93-4	187.9	1,2-Dibromoethane	ND	0.80	ppbv		ND	6.1	ug/m3
107-06-2	98.96	1,2-Dichloroethane	ND	0.80	ppbv		ND	3.2	ug/m3
78-87-5	113	1,2-Dichloropropane	ND	0.80	ppbv		ND	3.7	ug/m3
123-91-1	88	1,4-Dioxane	ND	0.80	ppbv		ND	2.9	ug/m3
75-71-8	120.9	Dichlorodifluoromethane	5.7	0.80	ppbv		28	4.0	ug/m3
124-48-1	208.3	Dibromochloromethane	ND	0.80	ppbv		ND	6.8	ug/m3
156-60-5	96.94	trans-1,2-Dichloroethylene	ND	0.80	ppbv		ND	3.2	ug/m3
156-59-2	96.94	cis-1,2-Dichloroethylene	0.76	0.80	ppbv	J	3.0	3.2	ug/m3
10061-01-5	111	cis-1,3-Dichloropropene	ND	0.80	ppbv		ND	3.6	ug/m3
541-73-1	147	m-Dichlorobenzene	ND	0.80	ppbv		ND	4.8	ug/m3
95-50-1	147	o-Dichlorobenzene	ND	0.80	ppbv		ND	4.8	ug/m3

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	1051118		
Lab Sample ID:	N73853-12	Date Sampled:	07/30/04
Matrix:	AIR - Air Summa ID: A125,M102	Date Received:	07/31/04
Method:	TO-15	Percent Solids:	n/a
Project:	LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT		

CAS No.	MW	Compound	Result	RL	Units	Q	Result	RL	Units
106-46-7	147	p-Dichlorobenzene	ND	0.80	ppbv		ND	4.8	ug/m3
10061-02-6	111	trans-1,3-Dichloropropene	ND	0.80	ppbv		ND	3.6	ug/m3
64-17-5	46	Ethanol	8.6	2.0	ppbv		16	3.8	ug/m3
100-41-4	106.2	Ethylbenzene	2.5	0.80	ppbv		11	3.5	ug/m3
141-78-6	88	Ethyl Acetate	ND	0.80	ppbv		ND	2.9	ug/m3
622-96-8	120.2	4-Ethyltoluene	1.9	0.80	ppbv		9.3	3.9	ug/m3
76-13-1	187.4	Freon 113	0.51	0.80	ppbv	J	3.9	6.1	ug/m3
76-14-2	170.9	Freon 114	ND	0.80	ppbv		ND	5.6	ug/m3
142-82-5	100.2	Heptane	1.8	0.80	ppbv		7.4	3.3	ug/m3
87-68-3	260.8	Hexachlorobutadiene	ND	0.80	ppbv		ND	8.5	ug/m3
110-54-3	86.17	Hexane	4.4	0.80	ppbv		16	2.8	ug/m3
591-78-6	100	2-Hexanone	ND	0.80	ppbv		ND	3.3	ug/m3
67-63-0	60	Isopropyl Alcohol	31.5	0.80	ppbv		77.3	2.0	ug/m3
75-09-2	84.94	Methylene chloride	0.51	0.80	ppbv	J	1.8	2.8	ug/m3
78-93-3	72.11	Methyl ethyl ketone	5.2	0.80	ppbv		15	2.4	ug/m3
108-10-1	100.2	Methyl Isobutyl Ketone	0.88	0.80	ppbv		3.6	3.3	ug/m3
1634-04-4	88.15	Methyl Tert Butyl Ether	ND	0.80	ppbv		ND	2.9	ug/m3
115-07-1	42	Propylene	24.0	2.0	ppbv		41.2	3.4	ug/m3
100-42-5	104.1	Styrene	ND	0.80	ppbv		ND	3.4	ug/m3
71-55-6	133.4	1,1,1-Trichloroethane	2560 [b]	40	ppbv		14000 [b]	220	ug/m3
79-34-5	167.9	1,1,2,2-Tetrachloroethane	ND	0.80	ppbv		ND	5.5	ug/m3
79-00-5	133.4	1,1,2-Trichloroethane	ND	0.80	ppbv		ND	4.4	ug/m3
120-82-1	181.5	1,2,4-Trichlorobenzene	ND	0.80	ppbv		ND	5.9	ug/m3
95-63-6	120.2	1,2,4-Trimethylbenzene	8.3	0.80	ppbv		41	3.9	ug/m3
108-67-8	120.2	1,3,5-Trimethylbenzene	3.3	0.80	ppbv		16	3.9	ug/m3
540-84-1	114.2	2,2,4-Trimethylpentane	ND	0.80	ppbv		ND	3.7	ug/m3
127-18-4	165.8	Tetrachloroethylene	1680 [c]	10	ppbv		11400 [c]	68	ug/m3
109-99-9	72	Tetrahydrofuran	0.91	0.80	ppbv		2.7	2.4	ug/m3
108-88-3	92.14	Toluene	7.9	0.80	ppbv		30	3.0	ug/m3
79-01-6	131.4	Trichloroethylene	53.0	0.80	ppbv		285	4.3	ug/m3
75-69-4	137.4	Trichlorofluoromethane	2.3	0.80	ppbv		13	4.5	ug/m3
75-01-4	62.5	Vinyl chloride	ND	0.80	ppbv		ND	2.0	ug/m3
108-05-4	86	Vinyl Acetate	ND	0.80	ppbv		ND	2.8	ug/m3
	106.2	m,p-Xylene	10.9	0.80	ppbv		47.3	3.5	ug/m3
95-47-6	106.2	o-Xylene	3.9	0.80	ppbv		17	3.5	ug/m3
1330-20-7	106.2	Xylenes (total)	14.9	0.80	ppbv		64.7	3.5	ug/m3

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Run# 3	Limits
460-00-4	4-Bromofluorobenzene	121%	101%	104%	78-124%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	1051118			
Lab Sample ID:	N73853-12		Date Sampled:	07/30/04
Matrix:	AIR - Air	Summa ID: A125,M102	Date Received:	07/31/04
Method:	TO-15		Percent Solids:	n/a
Project:	LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT			

CAS No.	MW	Compound	Result	RL	Units	Q	Result	RL	Units

(a) Matrix spikes are not analyzed by this procedure.
(b) Result is from Run# 3
(c) Result is from Run# 2

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	1051100		
Lab Sample ID:	N73853-13	Date Sampled:	07/30/04
Matrix:	AIR - Air Summa ID: A339	Date Received:	07/31/04
Method:	TO-15	Percent Solids:	n/a
Project:	LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	W03185.D	1	08/06/04	WG	n/a	n/a	VW133
Run #2							

	Initial Volume
Run #1	400 ml
Run #2	

CAS No.	MW	Compound	Result	RL	Units	Q	Result	RL	Units
67-64-1	58.08	Acetone	10.7	0.20	ppbv		25.4	0.48	ug/m3
106-99-0	54.09	1,3-Butadiene	ND	0.20	ppbv		ND	0.44	ug/m3
71-43-2	78.11	Benzene	ND	0.20	ppbv		ND	0.64	ug/m3
75-27-4	163.8	Bromodichloromethane	ND	0.20	ppbv		ND	1.3	ug/m3
75-25-2	252.8	Bromoform	ND	0.20	ppbv		ND	2.1	ug/m3
74-83-9	94.94	Bromomethane	ND	0.20	ppbv		ND	0.78	ug/m3
593-60-2	106.9	Bromoethene	ND	0.20	ppbv		ND	0.87	ug/m3
100-44-7	126	Benzyl Chloride	ND	0.20	ppbv		ND	1.0	ug/m3
75-15-0	76.14	Carbon disulfide	ND	0.20	ppbv		ND	0.62	ug/m3
108-90-7	112.6	Chlorobenzene	ND	0.20	ppbv		ND	0.92	ug/m3
75-00-3	64.52	Chloroethane	ND	0.20	ppbv		ND	0.53	ug/m3
67-66-3	119.4	Chloroform	ND	0.20	ppbv		ND	0.98	ug/m3
74-87-3	50.49	Chloromethane	0.36	0.20	ppbv		0.74	0.41	ug/m3
107-05-1	76.53	3-Chloropropene	ND	0.20	ppbv		ND	0.63	ug/m3
95-49-8	126.6	2-Chlorotoluene	ND	0.20	ppbv		ND	1.0	ug/m3
56-23-5	153.8	Carbon tetrachloride	ND	0.20	ppbv		ND	1.3	ug/m3
110-82-7	84.16	Cyclohexane	ND	0.20	ppbv		ND	0.69	ug/m3
75-34-3	98.96	1,1-Dichloroethane	ND	0.20	ppbv		ND	0.81	ug/m3
75-35-4	96.94	1,1-Dichloroethylene	ND	0.20	ppbv		ND	0.79	ug/m3
106-93-4	187.9	1,2-Dibromoethane	ND	0.20	ppbv		ND	1.5	ug/m3
107-06-2	98.96	1,2-Dichloroethane	ND	0.20	ppbv		ND	0.81	ug/m3
78-87-5	113	1,2-Dichloropropane	ND	0.20	ppbv		ND	0.92	ug/m3
123-91-1	88	1,4-Dioxane	ND	0.20	ppbv		ND	0.72	ug/m3
75-71-8	120.9	Dichlorodifluoromethane	0.30	0.20	ppbv		1.5	0.99	ug/m3
124-48-1	208.3	Dibromochloromethane	ND	0.20	ppbv		ND	1.7	ug/m3
156-60-5	96.94	trans-1,2-Dichloroethylene	ND	0.20	ppbv		ND	0.79	ug/m3
156-59-2	96.94	cis-1,2-Dichloroethylene	ND	0.20	ppbv		ND	0.79	ug/m3
10061-01-5	111	cis-1,3-Dichloropropene	ND	0.20	ppbv		ND	0.91	ug/m3
541-73-1	147	m-Dichlorobenzene	ND	0.20	ppbv		ND	1.2	ug/m3
95-50-1	147	o-Dichlorobenzene	ND	0.20	ppbv		ND	1.2	ug/m3
106-46-7	147	p-Dichlorobenzene	ND	0.20	ppbv		ND	1.2	ug/m3
10061-02-6	111	trans-1,3-Dichloropropene	ND	0.20	ppbv		ND	0.91	ug/m3

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	1051100		
Lab Sample ID:	N73853-13	Date Sampled:	07/30/04
Matrix:	AIR - Air Summa ID: A339	Date Received:	07/31/04
Method:	TO-15	Percent Solids:	n/a
Project:	LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT		

CAS No.	MW	Compound	Result	RL	Units	Q	Result	RL	Units
64-17-5	46	Ethanol	2.7	0.50	ppbv		5.1	0.94	ug/m3
100-41-4	106.2	Ethylbenzene	ND	0.20	ppbv		ND	0.87	ug/m3
141-78-6	88	Ethyl Acetate	ND	0.20	ppbv		ND	0.72	ug/m3
622-96-8	120.2	4-Ethyltoluene	ND	0.20	ppbv		ND	0.98	ug/m3
76-13-1	187.4	Freon 113	ND	0.20	ppbv		ND	1.5	ug/m3
76-14-2	170.9	Freon 114	ND	0.20	ppbv		ND	1.4	ug/m3
142-82-5	100.2	Heptane	ND	0.20	ppbv		ND	0.82	ug/m3
87-68-3	260.8	Hexachlorobutadiene	ND	0.20	ppbv		ND	2.1	ug/m3
110-54-3	86.17	Hexane	0.11	0.20	ppbv	J	0.39	0.70	ug/m3
591-78-6	100	2-Hexanone	ND	0.20	ppbv		ND	0.82	ug/m3
67-63-0	60	Isopropyl Alcohol	1.8	0.20	ppbv		4.4	0.49	ug/m3
75-09-2	84.94	Methylene chloride	0.11	0.20	ppbv	J	0.38	0.69	ug/m3
78-93-3	72.11	Methyl ethyl ketone	9.5	0.20	ppbv		28	0.59	ug/m3
108-10-1	100.2	Methyl Isobutyl Ketone	ND	0.20	ppbv		ND	0.82	ug/m3
1634-04-4	88.15	Methyl Tert Butyl Ether	ND	0.20	ppbv		ND	0.72	ug/m3
115-07-1	42	Propylene	5.6	0.50	ppbv		9.6	0.86	ug/m3
100-42-5	104.1	Styrene	ND	0.20	ppbv		ND	0.85	ug/m3
71-55-6	133.4	1,1,1-Trichloroethane	ND	0.20	ppbv		ND	1.1	ug/m3
79-34-5	167.9	1,1,2,2-Tetrachloroethane	ND	0.20	ppbv		ND	1.4	ug/m3
79-00-5	133.4	1,1,2-Trichloroethane	ND	0.20	ppbv		ND	1.1	ug/m3
120-82-1	181.5	1,2,4-Trichlorobenzene	ND	0.20	ppbv		ND	1.5	ug/m3
95-63-6	120.2	1,2,4-Trimethylbenzene	ND	0.20	ppbv		ND	0.98	ug/m3
108-67-8	120.2	1,3,5-Trimethylbenzene	ND	0.20	ppbv		ND	0.98	ug/m3
540-84-1	114.2	2,2,4-Trimethylpentane	ND	0.20	ppbv		ND	0.93	ug/m3
127-18-4	165.8	Tetrachloroethylene	0.25	0.20	ppbv		1.7	1.4	ug/m3
109-99-9	72	Tetrahydrofuran	6.6	0.20	ppbv		19	0.59	ug/m3
108-88-3	92.14	Toluene	0.32	0.20	ppbv		1.2	0.75	ug/m3
79-01-6	131.4	Trichloroethylene	0.17	0.20	ppbv	J	0.91	1.1	ug/m3
75-69-4	137.4	Trichlorofluoromethane	0.20	0.20	ppbv		1.1	1.1	ug/m3
75-01-4	62.5	Vinyl chloride	ND	0.20	ppbv		ND	0.51	ug/m3
108-05-4	86	Vinyl Acetate	ND	0.20	ppbv		ND	0.70	ug/m3
	106.2	m,p-Xylene	0.14	0.20	ppbv	J	0.61	0.87	ug/m3
95-47-6	106.2	o-Xylene	ND	0.20	ppbv		ND	0.87	ug/m3
1330-20-7	106.2	Xylenes (total)	0.14	0.20	ppbv	J	0.61	0.87	ug/m3

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	120%		78-124%

(a) Matrix spikes are not analyzed by this procedure.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	1051117		
Lab Sample ID:	N73853-14	Date Sampled:	07/30/04
Matrix:	AIR - Air Summa ID: A364,M125	Date Received:	07/31/04
Method:	TO-15	Percent Solids:	n/a
Project:	LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	W03189.D	4	08/06/04	WG	n/a	n/a	VW133
Run #2 [a]	Q22258.D	80	08/07/04	WG	n/a	n/a	VQ886
Run #3 [a]	Q22277.D	800	08/09/04	WG	n/a	n/a	VQ887

	Initial Volume
Run #1	400 ml
Run #2	400 ml
Run #3	400 ml

CAS No.	MW	Compound	Result	RL	Units	Q	Result	RL	Units
67-64-1	58.08	Acetone	849 [b]	16	ppbv		2020 [b]	38	ug/m3
106-99-0	54.09	1,3-Butadiene	ND	0.80	ppbv		ND	1.8	ug/m3
71-43-2	78.11	Benzene	9.0	0.80	ppbv		29	2.6	ug/m3
75-27-4	163.8	Bromodichloromethane	ND	0.80	ppbv		ND	5.4	ug/m3
75-25-2	252.8	Bromoform	ND	0.80	ppbv		ND	8.3	ug/m3
74-83-9	94.94	Bromomethane	ND	0.80	ppbv		ND	3.1	ug/m3
593-60-2	106.9	Bromoethene	ND	0.80	ppbv		ND	3.5	ug/m3
100-44-7	126	Benzyl Chloride	ND	0.80	ppbv		ND	4.1	ug/m3
75-15-0	76.14	Carbon disulfide	3.2	0.80	ppbv		10	2.5	ug/m3
108-90-7	112.6	Chlorobenzene	ND	0.80	ppbv		ND	3.7	ug/m3
75-00-3	64.52	Chloroethane	5.4	0.80	ppbv		14	2.1	ug/m3
67-66-3	119.4	Chloroform	126	0.80	ppbv		615	3.9	ug/m3
74-87-3	50.49	Chloromethane	0.56	0.80	ppbv	J	1.2	1.7	ug/m3
107-05-1	76.53	3-Chloropropene	ND	0.80	ppbv		ND	2.5	ug/m3
95-49-8	126.6	2-Chlorotoluene	ND	0.80	ppbv		ND	4.1	ug/m3
56-23-5	153.8	Carbon tetrachloride	28.1	0.80	ppbv		177	5.0	ug/m3
110-82-7	84.16	Cyclohexane	ND	0.80	ppbv		ND	2.8	ug/m3
75-34-3	98.96	1,1-Dichloroethane	349 [b]	16	ppbv		1410 [b]	65	ug/m3
75-35-4	96.94	1,1-Dichloroethylene	6050 [c]	160	ppbv		24000 [c]	630	ug/m3
106-93-4	187.9	1,2-Dibromoethane	ND	0.80	ppbv		ND	6.1	ug/m3
107-06-2	98.96	1,2-Dichloroethane	16.0	0.80	ppbv		64.8	3.2	ug/m3
78-87-5	113	1,2-Dichloropropane	ND	0.80	ppbv		ND	3.7	ug/m3
123-91-1	88	1,4-Dioxane	ND	0.80	ppbv		ND	2.9	ug/m3
75-71-8	120.9	Dichlorodifluoromethane	1.8	0.80	ppbv		8.9	4.0	ug/m3
124-48-1	208.3	Dibromochloromethane	ND	0.80	ppbv		ND	6.8	ug/m3
156-60-5	96.94	trans-1,2-Dichloroethylene	9.8	0.80	ppbv		39	3.2	ug/m3
156-59-2	96.94	cis-1,2-Dichloroethylene	602 [b]	16	ppbv		2390 [b]	63	ug/m3
10061-01-5	111	cis-1,3-Dichloropropene	ND	0.80	ppbv		ND	3.6	ug/m3
541-73-1	147	m-Dichlorobenzene	ND	0.80	ppbv		ND	4.8	ug/m3
95-50-1	147	o-Dichlorobenzene	ND	0.80	ppbv		ND	4.8	ug/m3

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	1051117		
Lab Sample ID:	N73853-14	Date Sampled:	07/30/04
Matrix:	AIR - Air Summa ID: A364,M125	Date Received:	07/31/04
Method:	TO-15	Percent Solids:	n/a
Project:	LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT		

CAS No.	MW	Compound	Result	RL	Units	Q	Result	RL	Units
106-46-7	147	p-Dichlorobenzene	ND	0.80	ppbv		ND	4.8	ug/m3
10061-02-6	111	trans-1,3-Dichloropropene	ND	0.80	ppbv		ND	3.6	ug/m3
64-17-5	46	Ethanol	77.1	2.0	ppbv		145	3.8	ug/m3
100-41-4	106.2	Ethylbenzene	2.8	0.80	ppbv		12	3.5	ug/m3
141-78-6	88	Ethyl Acetate	ND	0.80	ppbv		ND	2.9	ug/m3
622-96-8	120.2	4-Ethyltoluene	1.9	0.80	ppbv		9.3	3.9	ug/m3
76-13-1	187.4	Freon 113	1.6	0.80	ppbv		12	6.1	ug/m3
76-14-2	170.9	Freon 114	ND	0.80	ppbv		ND	5.6	ug/m3
142-82-5	100.2	Heptane	1.6	0.80	ppbv		6.6	3.3	ug/m3
87-68-3	260.8	Hexachlorobutadiene	ND	0.80	ppbv		ND	8.5	ug/m3
110-54-3	86.17	Hexane	5.9	0.80	ppbv		21	2.8	ug/m3
591-78-6	100	2-Hexanone	ND	0.80	ppbv		ND	3.3	ug/m3
67-63-0	60	Isopropyl Alcohol	120	0.80	ppbv		294	2.0	ug/m3
75-09-2	84.94	Methylene chloride	25.1	0.80	ppbv		87.2	2.8	ug/m3
78-93-3	72.11	Methyl ethyl ketone	20.1	0.80	ppbv		59.3	2.4	ug/m3
108-10-1	100.2	Methyl Isobutyl Ketone	2.4	0.80	ppbv		9.8	3.3	ug/m3
1634-04-4	88.15	Methyl Tert Butyl Ether	0.39	0.80	ppbv	J	1.4	2.9	ug/m3
115-07-1	42	Propylene	52.2	2.0	ppbv		89.7	3.4	ug/m3
100-42-5	104.1	Styrene	ND	0.80	ppbv		ND	3.4	ug/m3
71-55-6	133.4	1,1,1-Trichloroethane	9240 [c]	160	ppbv		50400 [c]	870	ug/m3
79-34-5	167.9	1,1,2,2-Tetrachloroethane	ND	0.80	ppbv		ND	5.5	ug/m3
79-00-5	133.4	1,1,2-Trichloroethane	9.4	0.80	ppbv		51	4.4	ug/m3
120-82-1	181.5	1,2,4-Trichlorobenzene	ND	0.80	ppbv		ND	5.9	ug/m3
95-63-6	120.2	1,2,4-Trimethylbenzene	6.8	0.80	ppbv		33	3.9	ug/m3
108-67-8	120.2	1,3,5-Trimethylbenzene	3.2	0.80	ppbv		16	3.9	ug/m3
540-84-1	114.2	2,2,4-Trimethylpentane	ND	0.80	ppbv		ND	3.7	ug/m3
127-18-4	165.8	Tetrachloroethylene	2890 [b]	16	ppbv		19600 [b]	110	ug/m3
109-99-9	72	Tetrahydrofuran	1.1	0.80	ppbv		3.2	2.4	ug/m3
108-88-3	92.14	Toluene	8.5	0.80	ppbv		32	3.0	ug/m3
79-01-6	131.4	Trichloroethylene	22000 [c]	160	ppbv		118000 [c]	860	ug/m3
75-69-4	137.4	Trichlorofluoromethane	0.52	0.80	ppbv	J	2.9	4.5	ug/m3
75-01-4	62.5	Vinyl chloride	3.1	0.80	ppbv		7.9	2.0	ug/m3
108-05-4	86	Vinyl Acetate	ND	0.80	ppbv		ND	2.8	ug/m3
	106.2	m,p-Xylene	12.0	0.80	ppbv		52.1	3.5	ug/m3
95-47-6	106.2	o-Xylene	4.5	0.80	ppbv		20	3.5	ug/m3
1330-20-7	106.2	Xylenes (total)	16.5	0.80	ppbv		71.7	3.5	ug/m3

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Run# 3	Limits
460-00-4	4-Bromofluorobenzene	133% [d]	104%	106%	78-124%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	1051117			
Lab Sample ID:	N73853-14		Date Sampled:	07/30/04
Matrix:	AIR - Air	Summa ID: A364,M125	Date Received:	07/31/04
Method:	TO-15		Percent Solids:	n/a
Project:	LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT			

CAS No.	MW	Compound	Result	RL	Units	Q	Result	RL	Units

(a) Matrix spikes are not analyzed by this procedure.
(b) Result is from Run# 2
(c) Result is from Run# 3
(d) Outside control limits due to interference with non-target compound.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	1051099		
Lab Sample ID:	N73853-15	Date Sampled:	07/30/04
Matrix:	AIR - Air Summa ID: A141	Date Received:	07/31/04
Method:	TO-15	Percent Solids:	n/a
Project:	LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	W03186.D	1	08/06/04	WG	n/a	n/a	VW133
Run #2							

	Initial Volume
Run #1	400 ml
Run #2	

CAS No.	MW	Compound	Result	RL	Units	Q	Result	RL	Units
67-64-1	58.08	Acetone	3.7	0.20	ppbv		8.8	0.48	ug/m3
106-99-0	54.09	1,3-Butadiene	ND	0.20	ppbv		ND	0.44	ug/m3
71-43-2	78.11	Benzene	0.11	0.20	ppbv	J	0.35	0.64	ug/m3
75-27-4	163.8	Bromodichloromethane	ND	0.20	ppbv		ND	1.3	ug/m3
75-25-2	252.8	Bromoform	ND	0.20	ppbv		ND	2.1	ug/m3
74-83-9	94.94	Bromomethane	ND	0.20	ppbv		ND	0.78	ug/m3
593-60-2	106.9	Bromoethene	ND	0.20	ppbv		ND	0.87	ug/m3
100-44-7	126	Benzyl Chloride	ND	0.20	ppbv		ND	1.0	ug/m3
75-15-0	76.14	Carbon disulfide	ND	0.20	ppbv		ND	0.62	ug/m3
108-90-7	112.6	Chlorobenzene	ND	0.20	ppbv		ND	0.92	ug/m3
75-00-3	64.52	Chloroethane	ND	0.20	ppbv		ND	0.53	ug/m3
67-66-3	119.4	Chloroform	ND	0.20	ppbv		ND	0.98	ug/m3
74-87-3	50.49	Chloromethane	0.48	0.20	ppbv		0.99	0.41	ug/m3
107-05-1	76.53	3-Chloropropene	ND	0.20	ppbv		ND	0.63	ug/m3
95-49-8	126.6	2-Chlorotoluene	ND	0.20	ppbv		ND	1.0	ug/m3
56-23-5	153.8	Carbon tetrachloride	ND	0.20	ppbv		ND	1.3	ug/m3
110-82-7	84.16	Cyclohexane	ND	0.20	ppbv		ND	0.69	ug/m3
75-34-3	98.96	1,1-Dichloroethane	ND	0.20	ppbv		ND	0.81	ug/m3
75-35-4	96.94	1,1-Dichloroethylene	ND	0.20	ppbv		ND	0.79	ug/m3
106-93-4	187.9	1,2-Dibromoethane	ND	0.20	ppbv		ND	1.5	ug/m3
107-06-2	98.96	1,2-Dichloroethane	ND	0.20	ppbv		ND	0.81	ug/m3
78-87-5	113	1,2-Dichloropropane	ND	0.20	ppbv		ND	0.92	ug/m3
123-91-1	88	1,4-Dioxane	ND	0.20	ppbv		ND	0.72	ug/m3
75-71-8	120.9	Dichlorodifluoromethane	0.44	0.20	ppbv		2.2	0.99	ug/m3
124-48-1	208.3	Dibromochloromethane	ND	0.20	ppbv		ND	1.7	ug/m3
156-60-5	96.94	trans-1,2-Dichloroethylene	ND	0.20	ppbv		ND	0.79	ug/m3
156-59-2	96.94	cis-1,2-Dichloroethylene	ND	0.20	ppbv		ND	0.79	ug/m3
10061-01-5	111	cis-1,3-Dichloropropene	ND	0.20	ppbv		ND	0.91	ug/m3
541-73-1	147	m-Dichlorobenzene	ND	0.20	ppbv		ND	1.2	ug/m3
95-50-1	147	o-Dichlorobenzene	ND	0.20	ppbv		ND	1.2	ug/m3
106-46-7	147	p-Dichlorobenzene	ND	0.20	ppbv		ND	1.2	ug/m3
10061-02-6	111	trans-1,3-Dichloropropene	ND	0.20	ppbv		ND	0.91	ug/m3

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	1051099		
Lab Sample ID:	N73853-15	Date Sampled:	07/30/04
Matrix:	AIR - Air Summa ID: A141	Date Received:	07/31/04
Method:	TO-15	Percent Solids:	n/a
Project:	LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT		

CAS No.	MW	Compound	Result	RL	Units	Q	Result	RL	Units
64-17-5	46	Ethanol	2.3	0.50	ppbv		4.3	0.94	ug/m3
100-41-4	106.2	Ethylbenzene	ND	0.20	ppbv		ND	0.87	ug/m3
141-78-6	88	Ethyl Acetate	ND	0.20	ppbv		ND	0.72	ug/m3
622-96-8	120.2	4-Ethyltoluene	ND	0.20	ppbv		ND	0.98	ug/m3
76-13-1	187.4	Freon 113	0.14	0.20	ppbv	J	1.1	1.5	ug/m3
76-14-2	170.9	Freon 114	ND	0.20	ppbv		ND	1.4	ug/m3
142-82-5	100.2	Heptane	ND	0.20	ppbv		ND	0.82	ug/m3
87-68-3	260.8	Hexachlorobutadiene	ND	0.20	ppbv		ND	2.1	ug/m3
110-54-3	86.17	Hexane	0.15	0.20	ppbv	J	0.53	0.70	ug/m3
591-78-6	100	2-Hexanone	ND	0.20	ppbv		ND	0.82	ug/m3
67-63-0	60	Isopropyl Alcohol	0.37	0.20	ppbv		0.91	0.49	ug/m3
75-09-2	84.94	Methylene chloride	0.15	0.20	ppbv	J	0.52	0.69	ug/m3
78-93-3	72.11	Methyl ethyl ketone	0.26	0.20	ppbv		0.77	0.59	ug/m3
108-10-1	100.2	Methyl Isobutyl Ketone	ND	0.20	ppbv		ND	0.82	ug/m3
1634-04-4	88.15	Methyl Tert Butyl Ether	ND	0.20	ppbv		ND	0.72	ug/m3
115-07-1	42	Propylene	2.2	0.50	ppbv		3.8	0.86	ug/m3
100-42-5	104.1	Styrene	ND	0.20	ppbv		ND	0.85	ug/m3
71-55-6	133.4	1,1,1-Trichloroethane	ND	0.20	ppbv		ND	1.1	ug/m3
79-34-5	167.9	1,1,2,2-Tetrachloroethane	ND	0.20	ppbv		ND	1.4	ug/m3
79-00-5	133.4	1,1,2-Trichloroethane	ND	0.20	ppbv		ND	1.1	ug/m3
120-82-1	181.5	1,2,4-Trichlorobenzene	ND	0.20	ppbv		ND	1.5	ug/m3
95-63-6	120.2	1,2,4-Trimethylbenzene	ND	0.20	ppbv		ND	0.98	ug/m3
108-67-8	120.2	1,3,5-Trimethylbenzene	ND	0.20	ppbv		ND	0.98	ug/m3
540-84-1	114.2	2,2,4-Trimethylpentane	ND	0.20	ppbv		ND	0.93	ug/m3
127-18-4	165.8	Tetrachloroethylene	0.15	0.20	ppbv	J	1.0	1.4	ug/m3
109-99-9	72	Tetrahydrofuran	ND	0.20	ppbv		ND	0.59	ug/m3
108-88-3	92.14	Toluene	0.27	0.20	ppbv		1.0	0.75	ug/m3
79-01-6	131.4	Trichloroethylene	0.11	0.20	ppbv	J	0.59	1.1	ug/m3
75-69-4	137.4	Trichlorofluoromethane	0.25	0.20	ppbv		1.4	1.1	ug/m3
75-01-4	62.5	Vinyl chloride	ND	0.20	ppbv		ND	0.51	ug/m3
108-05-4	86	Vinyl Acetate	ND	0.20	ppbv		ND	0.70	ug/m3
	106.2	m,p-Xylene	0.090	0.20	ppbv	J	0.39	0.87	ug/m3
95-47-6	106.2	o-Xylene	ND	0.20	ppbv		ND	0.87	ug/m3
1330-20-7	106.2	Xylenes (total)	0.090	0.20	ppbv	J	0.39	0.87	ug/m3

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	119%		78-124%

(a) Matrix spikes are not analyzed by this procedure.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	1051098		
Lab Sample ID:	N73853-16	Date Sampled:	07/30/04
Matrix:	AIR - Air Summa ID: A297	Date Received:	07/31/04
Method:	TO-15	Percent Solids:	n/a
Project:	LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	Q22254.D	1	08/07/04	WG	n/a	n/a	VQ886
Run #2							

	Initial Volume
Run #1	400 ml
Run #2	

CAS No.	MW	Compound	Result	RL	Units	Q	Result	RL	Units
67-64-1	58.08	Acetone	3.1	0.20	ppbv		7.4	0.48	ug/m3
106-99-0	54.09	1,3-Butadiene	ND	0.20	ppbv		ND	0.44	ug/m3
71-43-2	78.11	Benzene	10.5	0.20	ppbv		33.5	0.64	ug/m3
75-27-4	163.8	Bromodichloromethane	ND	0.20	ppbv		ND	1.3	ug/m3
75-25-2	252.8	Bromoform	ND	0.20	ppbv		ND	2.1	ug/m3
74-83-9	94.94	Bromomethane	ND	0.20	ppbv		ND	0.78	ug/m3
593-60-2	106.9	Bromoethene	ND	0.20	ppbv		ND	0.87	ug/m3
100-44-7	126	Benzyl Chloride	ND	0.20	ppbv		ND	1.0	ug/m3
75-15-0	76.14	Carbon disulfide	ND	0.20	ppbv		ND	0.62	ug/m3
108-90-7	112.6	Chlorobenzene	ND	0.20	ppbv		ND	0.92	ug/m3
75-00-3	64.52	Chloroethane	ND	0.20	ppbv		ND	0.53	ug/m3
67-66-3	119.4	Chloroform	ND	0.20	ppbv		ND	0.98	ug/m3
74-87-3	50.49	Chloromethane	0.52	0.20	ppbv		1.1	0.41	ug/m3
107-05-1	76.53	3-Chloropropene	ND	0.20	ppbv		ND	0.63	ug/m3
95-49-8	126.6	2-Chlorotoluene	ND	0.20	ppbv		ND	1.0	ug/m3
56-23-5	153.8	Carbon tetrachloride	ND	0.20	ppbv		ND	1.3	ug/m3
110-82-7	84.16	Cyclohexane	ND	0.20	ppbv		ND	0.69	ug/m3
75-34-3	98.96	1,1-Dichloroethane	ND	0.20	ppbv		ND	0.81	ug/m3
75-35-4	96.94	1,1-Dichloroethylene	ND	0.20	ppbv		ND	0.79	ug/m3
106-93-4	187.9	1,2-Dibromoethane	ND	0.20	ppbv		ND	1.5	ug/m3
107-06-2	98.96	1,2-Dichloroethane	ND	0.20	ppbv		ND	0.81	ug/m3
78-87-5	113	1,2-Dichloropropane	ND	0.20	ppbv		ND	0.92	ug/m3
123-91-1	88	1,4-Dioxane	ND	0.20	ppbv		ND	0.72	ug/m3
75-71-8	120.9	Dichlorodifluoromethane	0.52	0.20	ppbv		2.6	0.99	ug/m3
124-48-1	208.3	Dibromochloromethane	ND	0.20	ppbv		ND	1.7	ug/m3
156-60-5	96.94	trans-1,2-Dichloroethylene	ND	0.20	ppbv		ND	0.79	ug/m3
156-59-2	96.94	cis-1,2-Dichloroethylene	ND	0.20	ppbv		ND	0.79	ug/m3
10061-01-5	111	cis-1,3-Dichloropropene	ND	0.20	ppbv		ND	0.91	ug/m3
541-73-1	147	m-Dichlorobenzene	ND	0.20	ppbv		ND	1.2	ug/m3
95-50-1	147	o-Dichlorobenzene	ND	0.20	ppbv		ND	1.2	ug/m3
106-46-7	147	p-Dichlorobenzene	ND	0.20	ppbv		ND	1.2	ug/m3
10061-02-6	111	trans-1,3-Dichloropropene	ND	0.20	ppbv		ND	0.91	ug/m3

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	1051098		
Lab Sample ID:	N73853-16	Date Sampled:	07/30/04
Matrix:	AIR - Air Summa ID: A297	Date Received:	07/31/04
Method:	TO-15	Percent Solids:	n/a
Project:	LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT		

CAS No.	MW	Compound	Result	RL	Units	Q	Result	RL	Units
64-17-5	46	Ethanol	1.5	0.50	ppbv		2.8	0.94	ug/m3
100-41-4	106.2	Ethylbenzene	8.6	0.20	ppbv		37	0.87	ug/m3
141-78-6	88	Ethyl Acetate	ND	0.20	ppbv		ND	0.72	ug/m3
622-96-8	120.2	4-Ethyltoluene	ND	0.20	ppbv		ND	0.98	ug/m3
76-13-1	187.4	Freon 113	ND	0.20	ppbv		ND	1.5	ug/m3
76-14-2	170.9	Freon 114	ND	0.20	ppbv		ND	1.4	ug/m3
142-82-5	100.2	Heptane	ND	0.20	ppbv		ND	0.82	ug/m3
87-68-3	260.8	Hexachlorobutadiene	ND	0.20	ppbv		ND	2.1	ug/m3
110-54-3	86.17	Hexane	10.7	0.20	ppbv		37.7	0.70	ug/m3
591-78-6	100	2-Hexanone	ND	0.20	ppbv		ND	0.82	ug/m3
67-63-0	60	Isopropyl Alcohol	0.27	0.20	ppbv		0.66	0.49	ug/m3
75-09-2	84.94	Methylene chloride	ND	0.20	ppbv		ND	0.69	ug/m3
78-93-3	72.11	Methyl ethyl ketone	ND	0.20	ppbv		ND	0.59	ug/m3
108-10-1	100.2	Methyl Isobutyl Ketone	ND	0.20	ppbv		ND	0.82	ug/m3
1634-04-4	88.15	Methyl Tert Butyl Ether	11.5	0.20	ppbv		41.5	0.72	ug/m3
115-07-1	42	Propylene	ND	0.50	ppbv		ND	0.86	ug/m3
100-42-5	104.1	Styrene	ND	0.20	ppbv		ND	0.85	ug/m3
71-55-6	133.4	1,1,1-Trichloroethane	0.25	0.20	ppbv		1.4	1.1	ug/m3
79-34-5	167.9	1,1,2,2-Tetrachloroethane	ND	0.20	ppbv		ND	1.4	ug/m3
79-00-5	133.4	1,1,2-Trichloroethane	ND	0.20	ppbv		ND	1.1	ug/m3
120-82-1	181.5	1,2,4-Trichlorobenzene	ND	0.20	ppbv		ND	1.5	ug/m3
95-63-6	120.2	1,2,4-Trimethylbenzene	0.11	0.20	ppbv	J	0.54	0.98	ug/m3
108-67-8	120.2	1,3,5-Trimethylbenzene	ND	0.20	ppbv		ND	0.98	ug/m3
540-84-1	114.2	2,2,4-Trimethylpentane	0.14	0.20	ppbv	J	0.65	0.93	ug/m3
127-18-4	165.8	Tetrachloroethylene	ND	0.20	ppbv		ND	1.4	ug/m3
109-99-9	72	Tetrahydrofuran	ND	0.20	ppbv		ND	0.59	ug/m3
108-88-3	92.14	Toluene	10.3	0.20	ppbv		38.8	0.75	ug/m3
79-01-6	131.4	Trichloroethylene	ND	0.20	ppbv		ND	1.1	ug/m3
75-69-4	137.4	Trichlorofluoromethane	0.28	0.20	ppbv		1.6	1.1	ug/m3
75-01-4	62.5	Vinyl chloride	ND	0.20	ppbv		ND	0.51	ug/m3
108-05-4	86	Vinyl Acetate	ND	0.20	ppbv		ND	0.70	ug/m3
	106.2	m,p-Xylene	16.7	0.20	ppbv		72.5	0.87	ug/m3
95-47-6	106.2	o-Xylene	7.9	0.20	ppbv		34	0.87	ug/m3
1330-20-7	106.2	Xylenes (total)	24.5	0.20	ppbv		106	0.87	ug/m3

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	109%		78-124%

(a) Matrix spikes are not analyzed by this procedure.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	1051102		
Lab Sample ID:	N73853-17	Date Sampled:	07/30/04
Matrix:	AIR - Air Summa ID: A253	Date Received:	07/31/04
Method:	TO-15	Percent Solids:	n/a
Project:	LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	Q22252.D	1	08/06/04	WG	n/a	n/a	VQ886
Run #2							

	Initial Volume
Run #1	400 ml
Run #2	.

CAS No.	MW	Compound	Result	RL	Units	Q	Result	RL	Units
67-64-1	58.08	Acetone	7.5	0.20	ppbv		18	0.48	ug/m3
106-99-0	54.09	1,3-Butadiene	ND	0.20	ppbv		ND	0.44	ug/m3
71-43-2	78.11	Benzene	ND	0.20	ppbv		ND	0.64	ug/m3
75-27-4	163.8	Bromodichloromethane	ND	0.20	ppbv		ND	1.3	ug/m3
75-25-2	252.8	Bromoform	ND	0.20	ppbv		ND	2.1	ug/m3
74-83-9	94.94	Bromomethane	ND	0.20	ppbv		ND	0.78	ug/m3
593-60-2	106.9	Bromoethene	ND	0.20	ppbv		ND	0.87	ug/m3
100-44-7	126	Benzyl Chloride	ND	0.20	ppbv		ND	1.0	ug/m3
75-15-0	76.14	Carbon disulfide	ND	0.20	ppbv		ND	0.62	ug/m3
108-90-7	112.6	Chlorobenzene	ND	0.20	ppbv		ND	0.92	ug/m3
75-00-3	64.52	Chloroethane	ND	0.20	ppbv		ND	0.53	ug/m3
67-66-3	119.4	Chloroform	ND	0.20	ppbv		ND	0.98	ug/m3
74-87-3	50.49	Chloromethane	0.31	0.20	ppbv		0.64	0.41	ug/m3
107-05-1	76.53	3-Chloropropene	ND	0.20	ppbv		ND	0.63	ug/m3
95-49-8	126.6	2-Chlorotoluene	ND	0.20	ppbv		ND	1.0	ug/m3
56-23-5	153.8	Carbon tetrachloride	ND	0.20	ppbv		ND	1.3	ug/m3
110-82-7	84.16	Cyclohexane	ND	0.20	ppbv		ND	0.69	ug/m3
75-34-3	98.96	1,1-Dichloroethane	ND	0.20	ppbv		ND	0.81	ug/m3
75-35-4	96.94	1,1-Dichloroethylene	ND	0.20	ppbv		ND	0.79	ug/m3
106-93-4	187.9	1,2-Dibromoethane	ND	0.20	ppbv		ND	1.5	ug/m3
107-06-2	98.96	1,2-Dichloroethane	ND	0.20	ppbv		ND	0.81	ug/m3
78-87-5	113	1,2-Dichloropropane	ND	0.20	ppbv		ND	0.92	ug/m3
123-91-1	88	1,4-Dioxane	ND	0.20	ppbv		ND	0.72	ug/m3
75-71-8	120.9	Dichlorodifluoromethane	0.33	0.20	ppbv		1.6	0.99	ug/m3
124-48-1	208.3	Dibromochloromethane	ND	0.20	ppbv		ND	1.7	ug/m3
156-60-5	96.94	trans-1,2-Dichloroethylene	ND	0.20	ppbv		ND	0.79	ug/m3
156-59-2	96.94	cis-1,2-Dichloroethylene	ND	0.20	ppbv		ND	0.79	ug/m3
10061-01-5	111	cis-1,3-Dichloropropene	ND	0.20	ppbv		ND	0.91	ug/m3
541-73-1	147	m-Dichlorobenzene	ND	0.20	ppbv		ND	1.2	ug/m3
95-50-1	147	o-Dichlorobenzene	ND	0.20	ppbv		ND	1.2	ug/m3
106-46-7	147	p-Dichlorobenzene	ND	0.20	ppbv		ND	1.2	ug/m3
10061-02-6	111	trans-1,3-Dichloropropene	ND	0.20	ppbv		ND	0.91	ug/m3

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	1051102		
Lab Sample ID:	N73853-17	Date Sampled:	07/30/04
Matrix:	AIR - Air Summa ID: A253	Date Received:	07/31/04
Method:	TO-15	Percent Solids:	n/a
Project:	LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT		

CAS No.	MW	Compound	Result	RL	Units	Q	Result	RL	Units
64-17-5	46	Ethanol	22.3	0.50	ppbv		42.0	0.94	ug/m3
100-41-4	106.2	Ethylbenzene	0.096	0.20	ppbv	J	0.42	0.87	ug/m3
141-78-6	88	Ethyl Acetate	ND	0.20	ppbv		ND	0.72	ug/m3
622-96-8	120.2	4-Ethyltoluene	0.11	0.20	ppbv	J	0.54	0.98	ug/m3
76-13-1	187.4	Freon 113	ND	0.20	ppbv		ND	1.5	ug/m3
76-14-2	170.9	Freon 114	ND	0.20	ppbv		ND	1.4	ug/m3
142-82-5	100.2	Heptane	ND	0.20	ppbv		ND	0.82	ug/m3
87-68-3	260.8	Hexachlorobutadiene	ND	0.20	ppbv		ND	2.1	ug/m3
110-54-3	86.17	Hexane	0.12	0.20	ppbv	J	0.42	0.70	ug/m3
591-78-6	100	2-Hexanone	ND	0.20	ppbv		ND	0.82	ug/m3
67-63-0	60	Isopropyl Alcohol	2.4	0.20	ppbv		5.9	0.49	ug/m3
75-09-2	84.94	Methylene chloride	0.15	0.20	ppbv	J	0.52	0.69	ug/m3
78-93-3	72.11	Methyl ethyl ketone	ND	0.20	ppbv		ND	0.59	ug/m3
108-10-1	100.2	Methyl Isobutyl Ketone	0.18	0.20	ppbv	J	0.74	0.82	ug/m3
1634-04-4	88.15	Methyl Tert Butyl Ether	ND	0.20	ppbv		ND	0.72	ug/m3
115-07-1	42	Propylene	ND	0.50	ppbv		ND	0.86	ug/m3
100-42-5	104.1	Styrene	ND	0.20	ppbv		ND	0.85	ug/m3
71-55-6	133.4	1,1,1-Trichloroethane	ND	0.20	ppbv		ND	1.1	ug/m3
79-34-5	167.9	1,1,2,2-Tetrachloroethane	ND	0.20	ppbv		ND	1.4	ug/m3
79-00-5	133.4	1,1,2-Trichloroethane	ND	0.20	ppbv		ND	1.1	ug/m3
120-82-1	181.5	1,2,4-Trichlorobenzene	ND	0.20	ppbv		ND	1.5	ug/m3
95-63-6	120.2	1,2,4-Trimethylbenzene	0.32	0.20	ppbv		1.6	0.98	ug/m3
108-67-8	120.2	1,3,5-Trimethylbenzene	0.16	0.20	ppbv	J	0.79	0.98	ug/m3
540-84-1	114.2	2,2,4-Trimethylpentane	ND	0.20	ppbv		ND	0.93	ug/m3
127-18-4	165.8	Tetrachloroethylene	0.13	0.20	ppbv	J	0.88	1.4	ug/m3
109-99-9	72	Tetrahydrofuran	ND	0.20	ppbv		ND	0.59	ug/m3
108-88-3	92.14	Toluene	0.43	0.20	ppbv		1.6	0.75	ug/m3
79-01-6	131.4	Trichloroethylene	0.11	0.20	ppbv	J	0.59	1.1	ug/m3
75-69-4	137.4	Trichlorofluoromethane	2.2	0.20	ppbv		12	1.1	ug/m3
75-01-4	62.5	Vinyl chloride	ND	0.20	ppbv		ND	0.51	ug/m3
108-05-4	86	Vinyl Acetate	ND	0.20	ppbv		ND	0.70	ug/m3
	106.2	m,p-Xylene	0.27	0.20	ppbv		1.2	0.87	ug/m3
95-47-6	106.2	o-Xylene	0.11	0.20	ppbv	J	0.48	0.87	ug/m3
1330-20-7	106.2	Xylenes (total)	0.37	0.20	ppbv		1.6	0.87	ug/m3

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	100%		78-124%

(a) Matrix spikes are not analyzed by this procedure.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- **Chain of Custody**

N

AIR

CHAIN OF CUSTODY

ACCUTEST Laboratories

2235 Route 130, Dayton NJ 08810
TEL. 732-329-0200 FAX: 732-329-3499/3480
www.accutest.com

FED-EX Tracking #:
Bottle Order Control #:
Accutest Quote #:
Accutest Job #: N73853

Client / Reporting Information

Company Name: LEA
Address: 100 Northwest Drive
City: Plainville State: CT Zip: 06062
Project Contact: Barbara Heemink E-mail:
Phone #: 860-747-6181
Sampler's Name: Michael Gaughan

Project Information

Project Name: P+W East Hartford Indoor Air
Street: 400 Main St.
City: East Hartford State: CT
Project #: 88UT406.003
Fax #:
Client Purchase Order #:

Requested Analysis: TO-15

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Water; SW - Surface Water; SO - Soil; SL - Sludge; OI - Oil; LIQ - Other Liquid; AIR - Air; SOL - Other Solid; WP - Wipe

Accutest Sample #	Field ID / Point of Collection	SUMMA # / MEOH Vial #	Collection Date	Collection Time	Sampled By	Matrix	# of bottles	Preservatives	TO-15	LAB USE ONLY
-1	1051104	A356	7/16/04	1705	MG	Air	1		X	05
-2	1051113	A106		1205			1		X	
-3	1051111	A316		1130			1		X	
-4	1051122	A164		1403			1		X	
-5	1051105	A224		1713			1		X	
-6	1051103	A198		1652			1		X	
-7	1051101	A184		1644			1		X	
-8	1051109	A293		1109			1		X	
-9	1051106	A191		1716			1		X	
-10	1051107	A285	7/16/04	1051	MG	Air	1		X	

Turnaround Time (Business Days)

- [X] Std. 15 Business Days
- [ ] 10 Day RUSH
- [X] 5 Day RUSH — Approved By / Date: chgt 3 pmk
- [ ] 3 Day EMERGENCY
- [ ] 2 Day EMERGENCY
- [ ] 1 Day EMERGENCY
- [ ] Other

Emergency & Rush TAT data available VIA LabLink

Data Deliverable Information

- [ ] Commercial "A"
- [ ] Commercial "B"
- [ ] NJ Reduced
- [ ] NJ Full
- [ ] Other
- [ ] FULL CLP
- [ ] NYASP Category A
- [ ] NYASP Category B
- [ ] State Forms
- [X] EDD Format

Commercial "A" = Results Only

Comments / Remarks

Sample Custody must be documented below each time samples change possession, including courier delivery

Relinquished by Sampler	Date Time	Received by	Relinquished by	Date Time	Received by
1 Michael Gaughan	7/16/04 1753	1 FedX	2 FedX	7/16/04 1900	2 [illegible]
3		3	4		4
5		5			

Custody Seal #: Rec'd intact — Preserved where applicable: ☐ — On Ice: ☐ — Cooler Temp:

2B

8

3.1 3

N73853: Chain of Custody
Page 1 of 2

CHAIN OF CUSTODY

ACCUTEST Laboratories

2235 Route 130, Dayton NJ 08810
TEL. 732-329-0200 FAX: 732-329-3499/3480
www.accutest.com

FED-EX Tracking #:
Bottle Order Control #:
Accutest Quote #:
Accutest Job #: N73853

Client / Reporting Information

Company Name: LEA
Address: 100 Northwest Drive
City: Plainville State: CT Zip: 06062
Project Contact: Barbara Heemink E-mail:
Phone #: 860-747-6181
Sampler's Name: Michael Gaughan

Project Information

Project Name: P&W East Hartford
Street: 400 Main St.
City: East Hartford State: CT
Project #: 88UT406.003
Fax #:
Client Purchase Order #:

Requested Analysis

TO-15

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL - Sludge
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid
WP - Wipes

Accutest Sample #	Field ID / Point of Collection	MEOH Vial #	Collection Date	Collection Time	Sampled By	Matrix	# of bottles	TO-15	LAB USE ONLY
11	1051119	A100	7/30/04	1327	MG	Air	1	X	65
12	1051118	A125	↓	1300	↓	↓	1	X	
13	1051100	A339		1640			1	X	
14	1051117	A364		1230			1	X	
15	1051099	A141		1635			1	X	
16	1051098	A297	↓	1626	↓	↓	1	X	
17	1051102	A253	7/30/04	1644	MG	Air	1	X	

MG

Turnaround Time (Business Days)

- [x] Std. 15 Business Days
- [ ] 10 Day RUSH
- [ ] 5 Day RUSH
- [ ] 3 Day EMERGENCY
- [ ] 2 Day EMERGENCY
- [ ] 1 Day EMERGENCY
- [ ] Other

Approved By: / Date:

Emergency & Rush TIA data available VIA LabLink

Data Deliverable Information

- [ ] Commercial "A"
- [ ] Commercial "B"
- [ ] NJ Reduced
- [ ] NJ Full
- [ ] Other
- [ ] FULL CLP
- [ ] NYASP Category A
- [ ] NYASP Category B
- [ ] State Forms
- [x] EDD Format

Commercial "A" = Results Only

Comments / Remarks

Also rec'd A203 was used NOT on C-O-C
rec'd 17 FLs

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by:	Date/Time	Received by:	Relinquished by:	Date/Time	Received by:
1 Michael Gaughan	7/30/04 1653	1 Fed X	2 Fed X		2 M Collins
3		3	4		4
5		5			

Custody Seal #: Preserved where applicable: [ ] On Ice: [ ] Cooler Temp:

3.1 3

N73853: Chain of Custody
Page 2 of 2

GC/MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Instrument Performance Checks (BFB)
- Surrogate Recovery Summaries

Method Blank Summary

Job Number: N73853
Account: UTC United Technology Corporation
Project: LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VW133-MB	W03170.D	1	08/05/04	WG	n/a	n/a	VW133

The QC reported here applies to the following samples: Method: TO-15

N73853-1, N73853-2, N73853-3, N73853-4, N73853-5, N73853-6, N73853-7, N73853-8, N73853-9, N73853-11, N73853-12, N73853-13, N73853-14, N73853-15

CAS No.	Compound	Result	RL	Units	Q	Result	RL	Units
67-64-1	Acetone	ND	0.20	ppbv		ND	0.48	ug/m3
106-99-0	1,3-Butadiene	ND	0.20	ppbv		ND	0.44	ug/m3
71-43-2	Benzene	ND	0.20	ppbv		ND	0.64	ug/m3
75-27-4	Bromodichloromethane	ND	0.20	ppbv		ND	1.3	ug/m3
75-25-2	Bromoform	ND	0.20	ppbv		ND	2.1	ug/m3
74-83-9	Bromomethane	ND	0.20	ppbv		ND	0.78	ug/m3
593-60-2	Bromoethene	ND	0.20	ppbv		ND	0.87	ug/m3
100-44-7	Benzyl Chloride	ND	0.20	ppbv		ND	1.0	ug/m3
75-15-0	Carbon disulfide	ND	0.20	ppbv		ND	0.62	ug/m3
108-90-7	Chlorobenzene	ND	0.20	ppbv		ND	0.92	ug/m3
75-00-3	Chloroethane	ND	0.20	ppbv		ND	0.53	ug/m3
67-66-3	Chloroform	ND	0.20	ppbv		ND	0.98	ug/m3
74-87-3	Chloromethane	ND	0.20	ppbv		ND	0.41	ug/m3
107-05-1	3-Chloropropene	ND	0.20	ppbv		ND	0.63	ug/m3
95-49-8	2-Chlorotoluene	ND	0.20	ppbv		ND	1.0	ug/m3
56-23-5	Carbon tetrachloride	ND	0.20	ppbv		ND	1.3	ug/m3
110-82-7	Cyclohexane	ND	0.20	ppbv		ND	0.69	ug/m3
75-34-3	1,1-Dichloroethane	ND	0.20	ppbv		ND	0.81	ug/m3
75-35-4	1,1-Dichloroethylene	ND	0.20	ppbv		ND	0.79	ug/m3
106-93-4	1,2-Dibromoethane	ND	0.20	ppbv		ND	1.5	ug/m3
107-06-2	1,2-Dichloroethane	ND	0.20	ppbv		ND	0.81	ug/m3
78-87-5	1,2-Dichloropropane	ND	0.20	ppbv		ND	0.92	ug/m3
123-91-1	1,4-Dioxane	ND	0.20	ppbv		ND	0.72	ug/m3
75-71-8	Dichlorodifluoromethane	ND	0.20	ppbv		ND	0.99	ug/m3
124-48-1	Dibromochloromethane	ND	0.20	ppbv		ND	1.7	ug/m3
156-60-5	trans-1,2-Dichloroethylene	ND	0.20	ppbv		ND	0.79	ug/m3
156-59-2	cis-1,2-Dichloroethylene	ND	0.20	ppbv		ND	0.79	ug/m3
10061-01-5	cis-1,3-Dichloropropene	ND	0.20	ppbv		ND	0.91	ug/m3
541-73-1	m-Dichlorobenzene	ND	0.20	ppbv		ND	1.2	ug/m3
95-50-1	o-Dichlorobenzene	ND	0.20	ppbv		ND	1.2	ug/m3
106-46-7	p-Dichlorobenzene	ND	0.20	ppbv		ND	1.2	ug/m3
10061-02-6	trans-1,3-Dichloropropene	ND	0.20	ppbv		ND	0.91	ug/m3
64-17-5	Ethanol	ND	0.50	ppbv		ND	0.94	ug/m3
100-41-4	Ethylbenzene	ND	0.20	ppbv		ND	0.87	ug/m3
141-78-6	Ethyl Acetate	ND	0.20	ppbv		ND	0.72	ug/m3
622-96-8	4-Ethyltoluene	ND	0.20	ppbv		ND	0.98	ug/m3

Method Blank Summary

Job Number: N73853
Account: UTC United Technology Corporation
Project: LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VW133-MB	W03170.D	1	08/05/04	WG	n/a	n/a	VW133

The QC reported here applies to the following samples: Method: TO-15

N73853-1, N73853-2, N73853-3, N73853-4, N73853-5, N73853-6, N73853-7, N73853-8, N73853-9, N73853-11, N73853-12, N73853-13, N73853-14, N73853-15

CAS No.	Compound	Result	RL	Units	Q	Result	RL	Units
76-13-1	Freon 113	ND	0.20	ppbv		ND	1.5	ug/m3
76-14-2	Freon 114	ND	0.20	ppbv		ND	1.4	ug/m3
142-82-5	Heptane	ND	0.20	ppbv		ND	0.82	ug/m3
87-68-3	Hexachlorobutadiene	ND	0.20	ppbv		ND	2.1	ug/m3
110-54-3	Hexane	ND	0.20	ppbv		ND	0.70	ug/m3
591-78-6	2-Hexanone	ND	0.20	ppbv		ND	0.82	ug/m3
67-63-0	Isopropyl Alcohol	ND	0.20	ppbv		ND	0.49	ug/m3
75-09-2	Methylene chloride	ND	0.20	ppbv		ND	0.69	ug/m3
78-93-3	Methyl ethyl ketone	ND	0.20	ppbv		ND	0.59	ug/m3
108-10-1	Methyl Isobutyl Ketone	ND	0.20	ppbv		ND	0.82	ug/m3
1634-04-4	Methyl Tert Butyl Ether	ND	0.20	ppbv		ND	0.72	ug/m3
115-07-1	Propylene	ND	0.50	ppbv		ND	0.86	ug/m3
100-42-5	Styrene	ND	0.20	ppbv		ND	0.85	ug/m3
71-55-6	1,1,1-Trichloroethane	ND	0.20	ppbv		ND	1.1	ug/m3
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.20	ppbv		ND	1.4	ug/m3
79-00-5	1,1,2-Trichloroethane	ND	0.20	ppbv		ND	1.1	ug/m3
120-82-1	1,2,4-Trichlorobenzene	ND	0.20	ppbv		ND	1.5	ug/m3
95-63-6	1,2,4-Trimethylbenzene	ND	0.20	ppbv		ND	0.98	ug/m3
108-67-8	1,3,5-Trimethylbenzene	ND	0.20	ppbv		ND	0.98	ug/m3
540-84-1	2,2,4-Trimethylpentane	ND	0.20	ppbv		ND	0.93	ug/m3
127-18-4	Tetrachloroethylene	ND	0.20	ppbv		ND	1.4	ug/m3
109-99-9	Tetrahydrofuran	ND	0.20	ppbv		ND	0.59	ug/m3
108-88-3	Toluene	ND	0.20	ppbv		ND	0.75	ug/m3
79-01-6	Trichloroethylene	ND	0.20	ppbv		ND	1.1	ug/m3
75-69-4	Trichlorofluoromethane	ND	0.20	ppbv		ND	1.1	ug/m3
75-01-4	Vinyl chloride	ND	0.20	ppbv		ND	0.51	ug/m3
108-05-4	Vinyl Acetate	ND	0.20	ppbv		ND	0.70	ug/m3
	m,p-Xylene	ND	0.20	ppbv		ND	0.87	ug/m3
95-47-6	o-Xylene	ND	0.20	ppbv		ND	0.87	ug/m3
1330-20-7	Xylenes (total)	ND	0.20	ppbv		ND	0.87	ug/m3

CAS No.	Surrogate Recoveries		Limits
460-00-4	4-Bromofluorobenzene	116%	78-124%

Method Blank Summary

Job Number: N73853
Account: UTC United Technology Corporation
Project: LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VQ886-MB	Q22243.D	1	08/06/04	WG	n/a	n/a	VQ886

The QC reported here applies to the following samples: Method: TO-15

N73853-2, N73853-10, N73853-12, N73853-14, N73853-16, N73853-17

CAS No.	Compound	Result	RL	Units	Q	Result	RL	Units
67-64-1	Acetone	ND	0.20	ppbv		ND	0.48	ug/m3
106-99-0	1,3-Butadiene	ND	0.20	ppbv		ND	0.44	ug/m3
71-43-2	Benzene	ND	0.20	ppbv		ND	0.64	ug/m3
75-27-4	Bromodichloromethane	ND	0.20	ppbv		ND	1.3	ug/m3
75-25-2	Bromoform	ND	0.20	ppbv		ND	2.1	ug/m3
74-83-9	Bromomethane	ND	0.20	ppbv		ND	0.78	ug/m3
593-60-2	Bromoethene	ND	0.20	ppbv		ND	0.87	ug/m3
100-44-7	Benzyl Chloride	ND	0.20	ppbv		ND	1.0	ug/m3
75-15-0	Carbon disulfide	ND	0.20	ppbv		ND	0.62	ug/m3
108-90-7	Chlorobenzene	ND	0.20	ppbv		ND	0.92	ug/m3
75-00-3	Chloroethane	ND	0.20	ppbv		ND	0.53	ug/m3
67-66-3	Chloroform	ND	0.20	ppbv		ND	0.98	ug/m3
74-87-3	Chloromethane	ND	0.20	ppbv		ND	0.41	ug/m3
107-05-1	3-Chloropropene	ND	0.20	ppbv		ND	0.63	ug/m3
95-49-8	2-Chlorotoluene	ND	0.20	ppbv		ND	1.0	ug/m3
56-23-5	Carbon tetrachloride	ND	0.20	ppbv		ND	1.3	ug/m3
110-82-7	Cyclohexane	ND	0.20	ppbv		ND	0.69	ug/m3
75-34-3	1,1-Dichloroethane	ND	0.20	ppbv		ND	0.81	ug/m3
75-35-4	1,1-Dichloroethylene	ND	0.20	ppbv		ND	0.79	ug/m3
106-93-4	1,2-Dibromoethane	ND	0.20	ppbv		ND	1.5	ug/m3
107-06-2	1,2-Dichloroethane	ND	0.20	ppbv		ND	0.81	ug/m3
78-87-5	1,2-Dichloropropane	ND	0.20	ppbv		ND	0.92	ug/m3
123-91-1	1,4-Dioxane	ND	0.20	ppbv		ND	0.72	ug/m3
75-71-8	Dichlorodifluoromethane	ND	0.20	ppbv		ND	0.99	ug/m3
124-48-1	Dibromochloromethane	ND	0.20	ppbv		ND	1.7	ug/m3
156-60-5	trans-1,2-Dichloroethylene	ND	0.20	ppbv		ND	0.79	ug/m3
156-59-2	cis-1,2-Dichloroethylene	ND	0.20	ppbv		ND	0.79	ug/m3
10061-01-5	cis-1,3-Dichloropropene	ND	0.20	ppbv		ND	0.91	ug/m3
541-73-1	m-Dichlorobenzene	ND	0.20	ppbv		ND	1.2	ug/m3
95-50-1	o-Dichlorobenzene	ND	0.20	ppbv		ND	1.2	ug/m3
106-46-7	p-Dichlorobenzene	ND	0.20	ppbv		ND	1.2	ug/m3
10061-02-6	trans-1,3-Dichloropropene	ND	0.20	ppbv		ND	0.91	ug/m3
64-17-5	Ethanol	ND	0.50	ppbv		ND	0.94	ug/m3
100-41-4	Ethylbenzene	ND	0.20	ppbv		ND	0.87	ug/m3
141-78-6	Ethyl Acetate	ND	0.20	ppbv		ND	0.72	ug/m3
622-96-8	4-Ethyltoluene	ND	0.20	ppbv		ND	0.98	ug/m3

Method Blank Summary

Job Number: N73853
Account: UTC United Technology Corporation
Project: LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VQ886-MB	Q22243.D	1	08/06/04	WG	n/a	n/a	VQ886

The QC reported here applies to the following samples: Method: TO-15

N73853-2, N73853-10, N73853-12, N73853-14, N73853-16, N73853-17

CAS No.	Compound	Result	RL	Units	Q	Result	RL	Units
76-13-1	Freon 113	ND	0.20	ppbv		ND	1.5	ug/m3
76-14-2	Freon 114	ND	0.20	ppbv		ND	1.4	ug/m3
142-82-5	Heptane	ND	0.20	ppbv		ND	0.82	ug/m3
87-68-3	Hexachlorobutadiene	ND	0.20	ppbv		ND	2.1	ug/m3
110-54-3	Hexane	ND	0.20	ppbv		ND	0.70	ug/m3
591-78-6	2-Hexanone	ND	0.20	ppbv		ND	0.82	ug/m3
67-63-0	Isopropyl Alcohol	ND	0.20	ppbv		ND	0.49	ug/m3
75-09-2	Methylene chloride	ND	0.20	ppbv		ND	0.69	ug/m3
78-93-3	Methyl ethyl ketone	ND	0.20	ppbv		ND	0.59	ug/m3
108-10-1	Methyl Isobutyl Ketone	ND	0.20	ppbv		ND	0.82	ug/m3
1634-04-4	Methyl Tert Butyl Ether	ND	0.20	ppbv		ND	0.72	ug/m3
115-07-1	Propylene	ND	0.50	ppbv		ND	0.86	ug/m3
100-42-5	Styrene	ND	0.20	ppbv		ND	0.85	ug/m3
71-55-6	1,1,1-Trichloroethane	ND	0.20	ppbv		ND	1.1	ug/m3
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.20	ppbv		ND	1.4	ug/m3
79-00-5	1,1,2-Trichloroethane	ND	0.20	ppbv		ND	1.1	ug/m3
120-82-1	1,2,4-Trichlorobenzene	ND	0.20	ppbv		ND	1.5	ug/m3
95-63-6	1,2,4-Trimethylbenzene	ND	0.20	ppbv		ND	0.98	ug/m3
108-67-8	1,3,5-Trimethylbenzene	ND	0.20	ppbv		ND	0.98	ug/m3
540-84-1	2,2,4-Trimethylpentane	ND	0.20	ppbv		ND	0.93	ug/m3
127-18-4	Tetrachloroethylene	ND	0.20	ppbv		ND	1.4	ug/m3
109-99-9	Tetrahydrofuran	ND	0.20	ppbv		ND	0.59	ug/m3
108-88-3	Toluene	ND	0.20	ppbv		ND	0.75	ug/m3
79-01-6	Trichloroethylene	ND	0.20	ppbv		ND	1.1	ug/m3
75-69-4	Trichlorofluoromethane	ND	0.20	ppbv		ND	1.1	ug/m3
75-01-4	Vinyl chloride	ND	0.20	ppbv		ND	0.51	ug/m3
108-05-4	Vinyl Acetate	ND	0.20	ppbv		ND	0.70	ug/m3
	m,p-Xylene	ND	0.20	ppbv		ND	0.87	ug/m3
95-47-6	o-Xylene	ND	0.20	ppbv		ND	0.87	ug/m3
1330-20-7	Xylenes (total)	ND	0.20	ppbv		ND	0.87	ug/m3

CAS No.	Surrogate Recoveries		Limits
460-00-4	4-Bromofluorobenzene	97%	78-124%

Method Blank Summary

Job Number: N73853
Account: UTC United Technology Corporation
Project: LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VQ886-MB	Q22243.D	1	08/06/04	WG	n/a	n/a	VQ886

The QC reported here applies to the following samples: Method:

N73853-2, N73853-10, N73853-12, N73853-14, N73853-16, N73853-17

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ppbv	

Method Blank Summary

Job Number: N73853
Account: UTC United Technology Corporation
Project: LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VQ887-MB	Q22270.D	1	08/09/04	WG	n/a	n/a	VQ887

The QC reported here applies to the following samples: Method: TO-15

N73853-10, N73853-12, N73853-14

CAS No.	Compound	Result	RL	Units	Q	Result	RL	Units
75-34-3	1,1-Dichloroethane	ND	0.20	ppbv		ND	0.81	ug/m3
75-35-4	1,1-Dichloroethylene	ND	0.20	ppbv		ND	0.79	ug/m3
71-55-6	1,1,1-Trichloroethane	ND	0.20	ppbv		ND	1.1	ug/m3
79-01-6	Trichloroethylene	ND	0.20	ppbv		ND	1.1	ug/m3

CAS No.	Surrogate Recoveries		Limits
460-00-4	4-Bromofluorobenzene	98%	78-124%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ppbv	

Method Blank Summary

Job Number: N73853
Account: UTC United Technology Corporation
Project: LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VQ877-MB	Q22017.D	1	07/21/04	WG	n/a	n/a	VQ877

The QC reported here applies to the following samples: Method: TO-15

VQ877-SCC

CAS No.	Compound	Result	RL	Units	Q	Result	RL	Units
67-64-1	Acetone	ND	0.20	ppbv		ND	0.48	ug/m3
106-99-0	1,3-Butadiene	ND	0.20	ppbv		ND	0.44	ug/m3
71-43-2	Benzene	ND	0.20	ppbv		ND	0.64	ug/m3
75-27-4	Bromodichloromethane	ND	0.20	ppbv		ND	1.3	ug/m3
75-25-2	Bromoform	ND	0.20	ppbv		ND	2.1	ug/m3
74-83-9	Bromomethane	ND	0.20	ppbv		ND	0.78	ug/m3
593-60-2	Bromoethene	ND	0.20	ppbv		ND	0.87	ug/m3
100-44-7	Benzyl Chloride	ND	0.20	ppbv		ND	1.0	ug/m3
75-15-0	Carbon disulfide	ND	0.20	ppbv		ND	0.62	ug/m3
108-90-7	Chlorobenzene	ND	0.20	ppbv		ND	0.92	ug/m3
75-00-3	Chloroethane	ND	0.20	ppbv		ND	0.53	ug/m3
67-66-3	Chloroform	ND	0.20	ppbv		ND	0.98	ug/m3
74-87-3	Chloromethane	ND	0.20	ppbv		ND	0.41	ug/m3
107-05-1	3-Chloropropene	ND	0.20	ppbv		ND	0.63	ug/m3
95-49-8	2-Chlorotoluene	ND	0.20	ppbv		ND	1.0	ug/m3
56-23-5	Carbon tetrachloride	ND	0.20	ppbv		ND	1.3	ug/m3
110-82-7	Cyclohexane	ND	0.20	ppbv		ND	0.69	ug/m3
75-34-3	1,1-Dichloroethane	ND	0.20	ppbv		ND	0.81	ug/m3
75-35-4	1,1-Dichloroethylene	ND	0.20	ppbv		ND	0.79	ug/m3
106-93-4	1,2-Dibromoethane	ND	0.20	ppbv		ND	1.5	ug/m3
107-06-2	1,2-Dichloroethane	ND	0.20	ppbv		ND	0.81	ug/m3
78-87-5	1,2-Dichloropropane	ND	0.20	ppbv		ND	0.92	ug/m3
123-91-1	1,4-Dioxane	ND	0.20	ppbv		ND	0.72	ug/m3
75-71-8	Dichlorodifluoromethane	ND	0.20	ppbv		ND	0.99	ug/m3
124-48-1	Dibromochloromethane	ND	0.20	ppbv		ND	1.7	ug/m3
156-60-5	trans-1,2-Dichloroethylene	ND	0.20	ppbv		ND	0.79	ug/m3
156-59-2	cis-1,2-Dichloroethylene	ND	0.20	ppbv		ND	0.79	ug/m3
10061-01-5	cis-1,3-Dichloropropene	ND	0.20	ppbv		ND	0.91	ug/m3
541-73-1	m-Dichlorobenzene	ND	0.20	ppbv		ND	1.2	ug/m3
95-50-1	o-Dichlorobenzene	ND	0.20	ppbv		ND	1.2	ug/m3
106-46-7	p-Dichlorobenzene	ND	0.20	ppbv		ND	1.2	ug/m3
10061-02-6	trans-1,3-Dichloropropene	ND	0.20	ppbv		ND	0.91	ug/m3
64-17-5	Ethanol	ND	0.50	ppbv		ND	0.94	ug/m3
100-41-4	Ethylbenzene	ND	0.20	ppbv		ND	0.87	ug/m3
141-78-6	Ethyl Acetate	ND	0.20	ppbv		ND	0.72	ug/m3
622-96-8	4-Ethyltoluene	ND	0.20	ppbv		ND	0.98	ug/m3

Method Blank Summary

Job Number: N73853
Account: UTC United Technology Corporation
Project: LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VQ877-MB	Q22017.D	1	07/21/04	WG	n/a	n/a	VQ877

The QC reported here applies to the following samples: Method: TO-15

VQ877-SCC

CAS No.	Compound	Result	RL	Units	Q	Result	RL	Units
76-13-1	Freon 113	ND	0.20	ppbv		ND	1.5	ug/m3
76-14-2	Freon 114	ND	0.20	ppbv		ND	1.4	ug/m3
142-82-5	Heptane	ND	0.20	ppbv		ND	0.82	ug/m3
87-68-3	Hexachlorobutadiene	ND	0.20	ppbv		ND	2.1	ug/m3
110-54-3	Hexane	ND	0.20	ppbv		ND	0.70	ug/m3
591-78-6	2-Hexanone	ND	0.20	ppbv		ND	0.82	ug/m3
67-63-0	Isopropyl Alcohol	ND	0.20	ppbv		ND	0.49	ug/m3
75-09-2	Methylene chloride	ND	0.20	ppbv		ND	0.69	ug/m3
78-93-3	Methyl ethyl ketone	ND	0.20	ppbv		ND	0.59	ug/m3
108-10-1	Methyl Isobutyl Ketone	ND	0.20	ppbv		ND	0.82	ug/m3
1634-04-4	Methyl Tert Butyl Ether	ND	0.20	ppbv		ND	0.72	ug/m3
115-07-1	Propylene	ND	0.50	ppbv		ND	0.86	ug/m3
100-42-5	Styrene	ND	0.20	ppbv		ND	0.85	ug/m3
71-55-6	1,1,1-Trichloroethane	ND	0.20	ppbv		ND	1.1	ug/m3
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.20	ppbv		ND	1.4	ug/m3
79-00-5	1,1,2-Trichloroethane	ND	0.20	ppbv		ND	1.1	ug/m3
120-82-1	1,2,4-Trichlorobenzene	ND	0.20	ppbv		ND	1.5	ug/m3
95-63-6	1,2,4-Trimethylbenzene	ND	0.20	ppbv		ND	0.98	ug/m3
108-67-8	1,3,5-Trimethylbenzene	ND	0.20	ppbv		ND	0.98	ug/m3
540-84-1	2,2,4-Trimethylpentane	ND	0.20	ppbv		ND	0.93	ug/m3
127-18-4	Tetrachloroethylene	ND	0.20	ppbv		ND	1.4	ug/m3
109-99-9	Tetrahydrofuran	ND	0.20	ppbv		ND	0.59	ug/m3
108-88-3	Toluene	ND	0.20	ppbv		ND	0.75	ug/m3
79-01-6	Trichloroethylene	ND	0.20	ppbv		ND	1.1	ug/m3
75-69-4	Trichlorofluoromethane	ND	0.20	ppbv		ND	1.1	ug/m3
75-01-4	Vinyl chloride	ND	0.20	ppbv		ND	0.51	ug/m3
108-05-4	Vinyl Acetate	ND	0.20	ppbv		ND	0.70	ug/m3
	m,p-Xylene	ND	0.20	ppbv		ND	0.87	ug/m3
95-47-6	o-Xylene	ND	0.20	ppbv		ND	0.87	ug/m3
1330-20-7	Xylenes (total)	ND	0.20	ppbv		ND	0.87	ug/m3

CAS No.	Surrogate Recoveries		Limits
460-00-4	4-Bromofluorobenzene	86%	78-124%

Method Blank Summary

Job Number: N73853
Account: UTC United Technology Corporation
Project: LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VQ877-MB	Q22017.D	1	07/21/04	WG	n/a	n/a	VQ877

The QC reported here applies to the following samples: Method:

VQ877-SCC

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ppbv	

Method Blank Summary

Job Number: N73853
Account: UTC United Technology Corporation
Project: LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VW130-MB	W03036.D	1	07/27/04	WG	n/a	n/a	VW130

The QC reported here applies to the following samples: Method: TO-15

VW130-SCC

CAS No.	Compound	Result	RL	Units	Q	Result	RL	Units
67-64-1	Acetone	ND	0.20	ppbv		ND	0.48	ug/m3
106-99-0	1,3-Butadiene	ND	0.20	ppbv		ND	0.44	ug/m3
71-43-2	Benzene	ND	0.20	ppbv		ND	0.64	ug/m3
75-27-4	Bromodichloromethane	ND	0.20	ppbv		ND	1.3	ug/m3
75-25-2	Bromoform	ND	0.20	ppbv		ND	2.1	ug/m3
74-83-9	Bromomethane	ND	0.20	ppbv		ND	0.78	ug/m3
593-60-2	Bromoethene	ND	0.20	ppbv		ND	0.87	ug/m3
100-44-7	Benzyl Chloride	ND	0.20	ppbv		ND	1.0	ug/m3
75-15-0	Carbon disulfide	ND	0.20	ppbv		ND	0.62	ug/m3
108-90-7	Chlorobenzene	ND	0.20	ppbv		ND	0.92	ug/m3
75-00-3	Chloroethane	ND	0.20	ppbv		ND	0.53	ug/m3
67-66-3	Chloroform	ND	0.20	ppbv		ND	0.98	ug/m3
74-87-3	Chloromethane	ND	0.20	ppbv		ND	0.41	ug/m3
107-05-1	3-Chloropropene	ND	0.20	ppbv		ND	0.63	ug/m3
95-49-8	2-Chlorotoluene	ND	0.20	ppbv		ND	1.0	ug/m3
56-23-5	Carbon tetrachloride	ND	0.20	ppbv		ND	1.3	ug/m3
110-82-7	Cyclohexane	ND	0.20	ppbv		ND	0.69	ug/m3
75-34-3	1,1-Dichloroethane	ND	0.20	ppbv		ND	0.81	ug/m3
75-35-4	1,1-Dichloroethylene	ND	0.20	ppbv		ND	0.79	ug/m3
106-93-4	1,2-Dibromoethane	ND	0.20	ppbv		ND	1.5	ug/m3
107-06-2	1,2-Dichloroethane	ND	0.20	ppbv		ND	0.81	ug/m3
78-87-5	1,2-Dichloropropane	ND	0.20	ppbv		ND	0.92	ug/m3
123-91-1	1,4-Dioxane	ND	0.20	ppbv		ND	0.72	ug/m3
75-71-8	Dichlorodifluoromethane	ND	0.20	ppbv		ND	0.99	ug/m3
124-48-1	Dibromochloromethane	ND	0.20	ppbv		ND	1.7	ug/m3
156-60-5	trans-1,2-Dichloroethylene	ND	0.20	ppbv		ND	0.79	ug/m3
156-59-2	cis-1,2-Dichloroethylene	ND	0.20	ppbv		ND	0.79	ug/m3
10061-01-5	cis-1,3-Dichloropropene	ND	0.20	ppbv		ND	0.91	ug/m3
541-73-1	m-Dichlorobenzene	ND	0.20	ppbv		ND	1.2	ug/m3
95-50-1	o-Dichlorobenzene	ND	0.20	ppbv		ND	1.2	ug/m3
106-46-7	p-Dichlorobenzene	ND	0.20	ppbv		ND	1.2	ug/m3
10061-02-6	trans-1,3-Dichloropropene	ND	0.20	ppbv		ND	0.91	ug/m3
64-17-5	Ethanol	ND	0.50	ppbv		ND	0.94	ug/m3
100-41-4	Ethylbenzene	ND	0.20	ppbv		ND	0.87	ug/m3
141-78-6	Ethyl Acetate	ND	0.20	ppbv		ND	0.72	ug/m3
622-96-8	4-Ethyltoluene	ND	0.20	ppbv		ND	0.98	ug/m3

Method Blank Summary

Job Number: N73853
Account: UTC United Technology Corporation
Project: LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VW130-MB	W03036.D	1	07/27/04	WG	n/a	n/a	VW130

The QC reported here applies to the following samples: Method: TO-15

VW130-SCC

CAS No.	Compound	Result	RL	Units	Q	Result	RL	Units
76-13-1	Freon 113	ND	0.20	ppbv		ND	1.5	ug/m3
76-14-2	Freon 114	ND	0.20	ppbv		ND	1.4	ug/m3
142-82-5	Heptane	ND	0.20	ppbv		ND	0.82	ug/m3
87-68-3	Hexachlorobutadiene	ND	0.20	ppbv		ND	2.1	ug/m3
110-54-3	Hexane	ND	0.20	ppbv		ND	0.70	ug/m3
591-78-6	2-Hexanone	ND	0.20	ppbv		ND	0.82	ug/m3
67-63-0	Isopropyl Alcohol	ND	0.20	ppbv		ND	0.49	ug/m3
75-09-2	Methylene chloride	ND	0.20	ppbv		ND	0.69	ug/m3
78-93-3	Methyl ethyl ketone	ND	0.20	ppbv		ND	0.59	ug/m3
108-10-1	Methyl Isobutyl Ketone	ND	0.20	ppbv		ND	0.82	ug/m3
1634-04-4	Methyl Tert Butyl Ether	ND	0.20	ppbv		ND	0.72	ug/m3
115-07-1	Propylene	ND	0.50	ppbv		ND	0.86	ug/m3
100-42-5	Styrene	ND	0.20	ppbv		ND	0.85	ug/m3
71-55-6	1,1,1-Trichloroethane	ND	0.20	ppbv		ND	1.1	ug/m3
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.20	ppbv		ND	1.4	ug/m3
79-00-5	1,1,2-Trichloroethane	ND	0.20	ppbv		ND	1.1	ug/m3
120-82-1	1,2,4-Trichlorobenzene	ND	0.20	ppbv		ND	1.5	ug/m3
95-63-6	1,2,4-Trimethylbenzene	ND	0.20	ppbv		ND	0.98	ug/m3
108-67-8	1,3,5-Trimethylbenzene	ND	0.20	ppbv		ND	0.98	ug/m3
540-84-1	2,2,4-Trimethylpentane	ND	0.20	ppbv		ND	0.93	ug/m3
127-18-4	Tetrachloroethylene	ND	0.20	ppbv		ND	1.4	ug/m3
109-99-9	Tetrahydrofuran	ND	0.20	ppbv		ND	0.59	ug/m3
108-88-3	Toluene	ND	0.20	ppbv		ND	0.75	ug/m3
79-01-6	Trichloroethylene	ND	0.20	ppbv		ND	1.1	ug/m3
75-69-4	Trichlorofluoromethane	ND	0.20	ppbv		ND	1.1	ug/m3
75-01-4	Vinyl chloride	ND	0.20	ppbv		ND	0.51	ug/m3
108-05-4	Vinyl Acetate	ND	0.20	ppbv		ND	0.70	ug/m3
	m,p-Xylene	ND	0.20	ppbv		ND	0.87	ug/m3
95-47-6	o-Xylene	ND	0.20	ppbv		ND	0.87	ug/m3
1330-20-7	Xylenes (total)	ND	0.20	ppbv		ND	0.87	ug/m3

CAS No.	Surrogate Recoveries		Limits
460-00-4	4-Bromofluorobenzene	94%	78-124%

Blank Spike/Blank Spike Duplicate Summary

Job Number: N73853
Account: UTC United Technology Corporation
Project: LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VW133-BS	W03158.D	1	08/04/04	WG	n/a	n/a	VW133
VW133-BSD	W03159.D	1	08/04/04	WG	n/a	n/a	VW133

The QC reported here applies to the following samples: Method: TO-15

N73853-1, N73853-2, N73853-3, N73853-4, N73853-5, N73853-6, N73853-7, N73853-8, N73853-9, N73853-11, N73853-12, N73853-13, N73853-14, N73853-15

CAS No.	Compound	Spike ppbv	BSP ppbv	BSP %	BSD ppbv	BSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	10	9.6	96	10.2	102	6	61-122/30
106-99-0	1,3-Butadiene	10	10.5	105	11.1	111	6	72-128/30
71-43-2	Benzene	10	10.5	105	10.8	108	3	82-114/30
75-27-4	Bromodichloromethane	10	12.4	124	12.6	126	2	84-130/30
75-25-2	Bromoform	10	9.9	99	10.7	107	8	71-138/30
74-83-9	Bromomethane	10	9.7	97	10.5	105	8	79-122/30
593-60-2	Bromoethene	10	9.9	99	10.7	107	8	84-119/30
100-44-7	Benzyl Chloride	10	9.9	99	10.6	106	7	92-135/30
75-15-0	Carbon disulfide	10	9.1	91	9.4	94	3	76-126/30
108-90-7	Chlorobenzene	10	9.1	91	9.9	99	8	86-115/30
75-00-3	Chloroethane	10	9.9	99	10.7	107	8	80-119/30
67-66-3	Chloroform	10	10.3	103	10.6	106	3	82-122/30
74-87-3	Chloromethane	10	10	100	10.5	105	5	61-125/30
107-05-1	3-Chloropropene	10	9.4	94	10.1	101	7	72-125/30
95-49-8	2-Chlorotoluene	10	9.7	97	10.3	103	6	88-124/30
56-23-5	Carbon tetrachloride	10	11.6	116	11.9	119	3	78-130/30
110-82-7	Cyclohexane	10	9.1	91	9.4	94	3	80-109/30
75-34-3	1,1-Dichloroethane	10	10.0	100	10.4	104	4	79-120/30
75-35-4	1,1-Dichloroethylene	10	9.7	97	10.3	103	6	77-122/30
106-93-4	1,2-Dibromoethane	10	9.3	93	10.1	101	8	87-121/30
107-06-2	1,2-Dichloroethane	10	10.3	103	10.7	107	4	78-139/30
78-87-5	1,2-Dichloropropane	10	11.1	111	11.5	115	4	80-116/30
123-91-1	1,4-Dioxane	10	11.1	111	11.7	117	5	65-127/30
75-71-8	Dichlorodifluoromethane	10	10.9	109	11.1	111	2	78-137/30
124-48-1	Dibromochloromethane	10	10.1	101	10.8	108	7	86-124/30
156-60-5	trans-1,2-Dichloroethylene	10	9.8	98	10.3	103	5	81-120/30
156-59-2	cis-1,2-Dichloroethylene	10	9.9	99	10.3	103	4	83-115/30
10061-01-5	cis-1,3-Dichloropropene	10	10.3	103	10.6	106	3	87-122/30
541-73-1	m-Dichlorobenzene	10	9.2	92	9.8	98	6	86-130/30
95-50-1	o-Dichlorobenzene	10	9.2	92	9.8	98	6	86-130/30
106-46-7	p-Dichlorobenzene	10	9.0	90	9.6	96	6	84-130/30
10061-02-6	trans-1,3-Dichloropropene	10	10.6	106	10.8	108	2	83-133/30
64-17-5	Ethanol	10	13.1	131	14.3	143	9	59-150/30
100-41-4	Ethylbenzene	10	9.4	94	10.0	100	6	83-121/30
141-78-6	Ethyl Acetate	10	9.3	93	9.8	98	5	65-135/30
622-96-8	4-Ethyltoluene	10	9.9	99	10.5	105	6	85-127/30

Blank Spike/Blank Spike Duplicate Summary

Job Number: N73853
Account: UTC United Technology Corporation
Project: LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VW133-BS	W03158.D	1	08/04/04	WG	n/a	n/a	VW133
VW133-BSD	W03159.D	1	08/04/04	WG	n/a	n/a	VW133

The QC reported here applies to the following samples: Method: TO-15

N73853-1, N73853-2, N73853-3, N73853-4, N73853-5, N73853-6, N73853-7, N73853-8, N73853-9, N73853-11, N73853-12, N73853-13, N73853-14, N73853-15

CAS No.	Compound	Spike ppbv	BSP ppbv	BSP %	BSD ppbv	BSD %	RPD	Limits Rec/RPD
76-13-1	Freon 113	10	9.9	99	10.2	102	3	77-123/30
76-14-2	Freon 114	10	10.2	102	10.8	108	6	81-126/30
142-82-5	Heptane	10	10	100	10.3	103	3	72-125/30
87-68-3	Hexachlorobutadiene	10	9.0	90	9.5	95	5	56-162/30
110-54-3	Hexane	10	9.2	92	9.6	96	4	74-115/30
591-78-6	2-Hexanone	10	9.0	90	9.7	97	7	59-129/30
67-63-0	Isopropyl Alcohol	10	11.4	114	12.2	122	7	55-138/30
75-09-2	Methylene chloride	10	9.3	93	9.7	97	4	74-116/30
78-93-3	Methyl ethyl ketone	10	9.5	95	10.0	100	5	77-118/30
108-10-1	Methyl Isobutyl Ketone	10	11.4	114	11.7	117	3	63-126/30
1634-04-4	Methyl Tert Butyl Ether	10	10.1	101	10.5	105	4	79-120/30
115-07-1	Propylene	10	10.9	109	10.9	109	0	58-136/30
100-42-5	Styrene	10	9.7	97	10.5	105	8	86-123/30
71-55-6	1,1,1-Trichloroethane	10	11.2	112	11.5	115	3	78-129/30
79-34-5	1,1,2,2-Tetrachloroethane	10	9.2	92	9.8	98	6	82-126/30
79-00-5	1,1,2-Trichloroethane	10	10.8	108	11.1	111	3	86-118/30
120-82-1	1,2,4-Trichlorobenzene	10	10.3	103	10.9	109	6	66-159/30
95-63-6	1,2,4-Trimethylbenzene	10	9.9	99	10.5	105	6	87-127/30
108-67-8	1,3,5-Trimethylbenzene	10	9.9	99	10.4	104	5	86-127/30
540-84-1	2,2,4-Trimethylpentane	10	9.6	96	9.9	99	3	73-124/30
127-18-4	Tetrachloroethylene	10	9.1	91	9.8	98	7	80-122/30
109-99-9	Tetrahydrofuran	10	8.9	89	9.4	94	5	70-122/30
108-88-3	Toluene	10	9.9	99	10.2	102	3	79-120/30
79-01-6	Trichloroethylene	10	10.7	107	10.9	109	2	86-122/30
75-69-4	Trichlorofluoromethane	10	10.8	108	11.0	110	2	77-136/30
75-01-4	Vinyl chloride	10	9.8	98	10.7	107	9	75-122/30
108-05-4	Vinyl Acetate	10	9.8	98	10.3	103	5	75-129/30
	m,p-Xylene	20	19.0	95	20.5	103	8	84-122/30
95-47-6	o-Xylene	10	9.7	97	10.5	105	8	79-124/30
1330-20-7	Xylenes (total)	30	28.7	96	30.9	103	7	83-122/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
460-00-4	4-Bromofluorobenzene	108%	104%	78-124%

Blank Spike/Blank Spike Duplicate Summary

Job Number: N73853
Account: UTC United Technology Corporation
Project: LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VQ886-BS	Q22241.D	1	08/06/04	WG	n/a	n/a	VQ886
VQ886-BSD	Q22242.D	1	08/06/04	WG	n/a	n/a	VQ886

The QC reported here applies to the following samples: Method: TO-15

N73853-2, N73853-10, N73853-12, N73853-14, N73853-16, N73853-17

CAS No.	Compound	Spike ppbv	BSP ppbv	BSP %	BSD ppbv	BSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	10	10	100	9.9	99	1	61-122/30
106-99-0	1,3-Butadiene	10	11.4	114	11.3	113	1	72-128/30
71-43-2	Benzene	10	10.5	105	10.8	108	3	82-114/30
75-27-4	Bromodichloromethane	10	10.9	109	11.0	110	1	84-130/30
75-25-2	Bromoform	10	10.7	107	10.6	106	1	71-138/30
74-83-9	Bromomethane	10	10.5	105	10.5	105	0	79-122/30
593-60-2	Bromoethene	10	10.5	105	10.7	107	2	84-119/30
100-44-7	Benzyl Chloride	10	10.3	103	10	100	3	92-135/30
75-15-0	Carbon disulfide	10	10.0	100	10.3	103	3	76-126/30
108-90-7	Chlorobenzene	10	10.2	102	10.2	102	0	86-115/30
75-00-3	Chloroethane	10	10.9	109	10.8	108	1	80-119/30
67-66-3	Chloroform	10	10.3	103	10.4	104	1	82-122/30
74-87-3	Chloromethane	10	9.3	93	9.3	93	0	61-125/30
107-05-1	3-Chloropropene	10	9.5	95	9.5	95	0	72-125/30
95-49-8	2-Chlorotoluene	10	11.3	113	11.1	111	2	88-124/30
56-23-5	Carbon tetrachloride	10	10.7	107	10.6	106	1	78-130/30
110-82-7	Cyclohexane	10	10.3	103	10.4	104	1	80-109/30
75-34-3	1,1-Dichloroethane	10	10.4	104	10.6	106	2	79-120/30
75-35-4	1,1-Dichloroethylene	10	10.3	103	10.4	104	1	77-122/30
106-93-4	1,2-Dibromoethane	10	10.8	108	10.7	107	1	87-121/30
107-06-2	1,2-Dichloroethane	10	10.5	105	10.9	109	4	78-139/30
78-87-5	1,2-Dichloropropane	10	10.3	103	10.5	105	2	80-116/30
123-91-1	1,4-Dioxane	10	12.2	122	12.3	123	1	65-127/30
75-71-8	Dichlorodifluoromethane	10	10.4	104	10.4	104	0	78-137/30
124-48-1	Dibromochloromethane	10	11.2	112	11.2	112	0	86-124/30
156-60-5	trans-1,2-Dichloroethylene	10	9.9	99	10.1	101	2	81-120/30
156-59-2	cis-1,2-Dichloroethylene	10	9.9	99	10.1	101	2	83-115/30
10061-01-5	cis-1,3-Dichloropropene	10	10.8	108	10.9	109	1	87-122/30
541-73-1	m-Dichlorobenzene	10	11.0	110	10.8	108	2	86-130/30
95-50-1	o-Dichlorobenzene	10	10.9	109	10.6	106	3	86-130/30
106-46-7	p-Dichlorobenzene	10	10.8	108	10.5	105	3	84-130/30
10061-02-6	trans-1,3-Dichloropropene	10	10.6	106	10.9	109	3	83-133/30
64-17-5	Ethanol	10	10.4	104	10.4	104	0	59-150/30
100-41-4	Ethylbenzene	10	11.0	110	11.0	110	0	83-121/30
141-78-6	Ethyl Acetate	10	10.7	107	11.2	112	5	65-135/30
622-96-8	4-Ethyltoluene	10	11.4	114	11.2	112	2	85-127/30

Blank Spike/Blank Spike Duplicate Summary

Job Number: N73853
Account: UTC United Technology Corporation
Project: LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VQ886-BS	Q22241.D	1	08/06/04	WG	n/a	n/a	VQ886
VQ886-BSD	Q22242.D	1	08/06/04	WG	n/a	n/a	VQ886

The QC reported here applies to the following samples: Method: TO-15

N73853-2, N73853-10, N73853-12, N73853-14, N73853-16, N73853-17

CAS No.	Compound	Spike ppbv	BSP ppbv	BSP %	BSD ppbv	BSD %	RPD	Limits Rec/RPD
76-13-1	Freon 113	10	10.4	104	10.5	105	1	77-123/30
76-14-2	Freon 114	10	10.6	106	10.6	106	0	81-126/30
142-82-5	Heptane	10	10.9	109	11.0	110	1	72-125/30
87-68-3	Hexachlorobutadiene	10	10.2	102	10.5	105	3	56-162/30
110-54-3	Hexane	10	10.3	103	10.6	106	3	74-115/30
591-78-6	2-Hexanone	10	9.5	95	9.5	95	0	59-129/30
67-63-0	Isopropyl Alcohol	10	11.5	115	11.3	113	2	55-138/30
75-09-2	Methylene chloride	10	9.7	97	9.5	95	2	74-116/30
78-93-3	Methyl ethyl ketone	10	9.7	97	9.5	95	2	77-118/30
108-10-1	Methyl Isobutyl Ketone	10	10.1	101	10.4	104	3	63-126/30
1634-04-4	Methyl Tert Butyl Ether	10	10.4	104	10.6	106	2	79-120/30
115-07-1	Propylene	10	9.3	93	9.2	92	1	58-136/30
100-42-5	Styrene	10	11.2	112	11.2	112	0	86-123/30
71-55-6	1,1,1-Trichloroethane	10	10.6	106	10.7	107	1	78-129/30
79-34-5	1,1,2,2-Tetrachloroethane	10	11.2	112	11.1	111	1	82-126/30
79-00-5	1,1,2-Trichloroethane	10	10.6	106	10.9	109	3	86-118/30
120-82-1	1,2,4-Trichlorobenzene	10	9.5	95	9.6	96	1	66-159/30
95-63-6	1,2,4-Trimethylbenzene	10	11.6	116	11.2	112	4	87-127/30
108-67-8	1,3,5-Trimethylbenzene	10	11.7	117	11.3	113	3	86-127/30
540-84-1	2,2,4-Trimethylpentane	10	10.9	109	11.1	111	2	73-124/30
127-18-4	Tetrachloroethylene	10	10.5	105	10.8	108	3	80-122/30
109-99-9	Tetrahydrofuran	10	9.3	93	9.9	99	6	70-122/30
108-88-3	Toluene	10	10.9	109	11.2	112	3	79-120/30
79-01-6	Trichloroethylene	10	10.6	106	10.6	106	0	86-122/30
75-69-4	Trichlorofluoromethane	10	10.6	106	10.6	106	0	77-136/30
75-01-4	Vinyl chloride	10	10.6	106	10.7	107	1	75-122/30
108-05-4	Vinyl Acetate	10	8.7	87	8.6	86	1	75-129/30
	m,p-Xylene	20	21.8	109	21.7	109	0	84-122/30
95-47-6	o-Xylene	10	10.8	108	11.0	110	2	79-124/30
1330-20-7	Xylenes (total)	30	32.6	109	32.7	109	0	83-122/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
460-00-4	4-Bromofluorobenzene	106%	102%	78-124%

Blank Spike/Blank Spike Duplicate Summary

Job Number: N73853
Account: UTC United Technology Corporation
Project: LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VQ887-BS	Q22267.D	1	08/09/04	WG	n/a	n/a	VQ887
VQ887-BSD	Q22268.D	1	08/09/04	WG	n/a	n/a	VQ887

The QC reported here applies to the following samples: Method: TO-15

N73853-10, N73853-12, N73853-14

CAS No.	Compound	Spike ppbv	BSP ppbv	BSP %	BSD ppbv	BSD %	RPD	Limits Rec/RPD
75-34-3	1,1-Dichloroethane	10	9.8	98	10.3	103	5	79-120/30
75-35-4	1,1-Dichloroethylene	10	10.5	105	10.4	104	1	77-122/30
71-55-6	1,1,1-Trichloroethane	10	10.7	107	11.1	111	4	78-129/30
79-01-6	Trichloroethylene	10	9.7	97	9.8	98	1	86-122/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
460-00-4	4-Bromofluorobenzene	105%	106%	78-124%

Blank Spike/Blank Spike Duplicate Summary

Job Number: N73853
Account: UTC United Technology Corporation
Project: LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VQ877-BS	Q22015.D	1	07/21/04	WG	n/a	n/a	VQ877
VQ877-BSD	Q22016.D	1	07/21/04	WG	n/a	n/a	VQ877

The QC reported here applies to the following samples: Method: TO-15

VQ877-SCC

CAS No.	Compound	Spike ppbv	BSP ppbv	BSP %	BSD ppbv	BSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	10	9.1	91	9.0	90	1	61-122/30
106-99-0	1,3-Butadiene	10	9.9	99	9.5	95	4	72-128/30
71-43-2	Benzene	10	9.3	93	10.1	101	8	82-114/30
75-27-4	Bromodichloromethane	10	10.4	104	10.8	108	4	84-130/30
75-25-2	Bromoform	10	10.9	109	10.6	106	3	71-138/30
74-83-9	Bromomethane	10	10.0	100	10.0	100	0	79-122/30
593-60-2	Bromoethene	10	9.9	99	10.3	103	4	84-119/30
100-44-7	Benzyl Chloride	10	10.8	108	10.8	108	0	92-135/30
75-15-0	Carbon disulfide	10	9.6	96	10	100	4	76-126/30
108-90-7	Chlorobenzene	10	11.0	110	10.8	108	2	86-115/30
75-00-3	Chloroethane	10	9.9	99	9.9	99	0	80-119/30
67-66-3	Chloroform	10	9.8	98	10.3	103	5	82-122/30
74-87-3	Chloromethane	10	8.7	87	8.7	87	0	61-125/30
107-05-1	3-Chloropropene	10	9.4	94	9.5	95	1	72-125/30
95-49-8	2-Chlorotoluene	10	11.6	116	11.6	116	0	88-124/30
56-23-5	Carbon tetrachloride	10	10.5	105	10.8	108	3	78-130/30
110-82-7	Cyclohexane	10	10.1	101	9.9	99	2	80-109/30
75-34-3	1,1-Dichloroethane	10	9.6	96	10.2	102	6	79-120/30
75-35-4	1,1-Dichloroethylene	10	10.1	101	10.3	103	2	77-122/30
106-93-4	1,2-Dibromoethane	10	10.7	107	10.5	105	2	87-121/30
107-06-2	1,2-Dichloroethane	10	10.0	100	10.2	102	2	78-139/30
78-87-5	1,2-Dichloropropane	10	9.8	98	10.3	103	5	80-116/30
123-91-1	1,4-Dioxane	10	11.1	111	11.4	114	3	65-127/30
75-71-8	Dichlorodifluoromethane	10	9.9	99	10.0	100	1	78-137/30
124-48-1	Dibromochloromethane	10	10.9	109	10.7	107	2	86-124/30
156-60-5	trans-1,2-Dichloroethylene	10	9.7	97	10.4	104	7	81-120/30
156-59-2	cis-1,2-Dichloroethylene	10	9.3	93	10.1	101	8	83-115/30
10061-01-5	cis-1,3-Dichloropropene	10	9.9	99	10.5	105	6	87-122/30
541-73-1	m-Dichlorobenzene	10	11.5	115	11.5	115	0	86-130/30
95-50-1	o-Dichlorobenzene	10	11.5	115	11.6	116	1	86-130/30
106-46-7	p-Dichlorobenzene	10	11.2	112	11.1	111	1	84-130/30
10061-02-6	trans-1,3-Dichloropropene	10	10.3	103	10.6	106	3	83-133/30
64-17-5	Ethanol	10	9.9	99	9.6	96	3	59-150/30
100-41-4	Ethylbenzene	10	11.7	117	11.4	114	3	83-121/30
141-78-6	Ethyl Acetate	10	12.7	127	12.5	125	2	65-135/30
622-96-8	4-Ethyltoluene	10	12.2	122	12.2	122	0	85-127/30

Blank Spike/Blank Spike Duplicate Summary

Job Number: N73853
Account: UTC United Technology Corporation
Project: LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VQ877-BS	Q22015.D	1	07/21/04	WG	n/a	n/a	VQ877
VQ877-BSD	Q22016.D	1	07/21/04	WG	n/a	n/a	VQ877

The QC reported here applies to the following samples: Method: TO-15

VQ877-SCC

CAS No.	Compound	Spike ppbv	BSP ppbv	BSP %	BSD ppbv	BSD %	RPD	Limits Rec/RPD
76-13-1	Freon 113	10	10.3	103	10.6	106	3	77-123/30
76-14-2	Freon 114	10	10.1	101	10.4	104	3	81-126/30
142-82-5	Heptane	10	10.3	103	10.7	107	4	72-125/30
87-68-3	Hexachlorobutadiene	10	11.1	111	11.2	112	1	56-162/30
110-54-3	Hexane	10	10.7	107	10.8	108	1	74-115/30
591-78-6	2-Hexanone	10	11.1	111	10.9	109	2	59-129/30
67-63-0	Isopropyl Alcohol	10	9.5	95	9.9	99	4	55-138/30
75-09-2	Methylene chloride	10	9.7	97	10.0	100	3	74-116/30
78-93-3	Methyl ethyl ketone	10	9.7	97	10.6	106	9	77-118/30
108-10-1	Methyl Isobutyl Ketone	10	10.7	107	10.8	108	1	63-126/30
1634-04-4	Methyl Tert Butyl Ether	10	9.6	96	10.3	103	7	79-120/30
115-07-1	Propylene	10	9.1	91	9.1	91	0	58-136/30
100-42-5	Styrene	10	12.0	120	11.7	117	3	86-123/30
71-55-6	1,1,1-Trichloroethane	10	10.7	107	11.1	111	4	78-129/30
79-34-5	1,1,2,2-Tetrachloroethane	10	11.4	114	11.2	112	2	82-126/30
79-00-5	1,1,2-Trichloroethane	10	10.2	102	10.8	108	6	86-118/30
120-82-1	1,2,4-Trichlorobenzene	10	10.1	101	10.2	102	1	66-159/30
95-63-6	1,2,4-Trimethylbenzene	10	12.2	122	12.0	120	2	87-127/30
108-67-8	1,3,5-Trimethylbenzene	10	11.9	119	11.9	119	0	86-127/30
540-84-1	2,2,4-Trimethylpentane	10	11.0	110	11.0	110	0	73-124/30
127-18-4	Tetrachloroethylene	10	11.2	112	10.9	109	3	80-122/30
109-99-9	Tetrahydrofuran	10	9.6	96	9.8	98	2	70-122/30
108-88-3	Toluene	10	10.2	102	10.7	107	5	79-120/30
79-01-6	Trichloroethylene	10	10.2	102	10.5	105	3	86-122/30
75-69-4	Trichlorofluoromethane	10	9.7	97	9.8	98	1	77-136/30
75-01-4	Vinyl chloride	10	9.9	99	10.2	102	3	75-122/30
108-05-4	Vinyl Acetate	10	8.4	84	9.3	93	10	75-129/30
	m,p-Xylene	20	23.3	117	23.2	116	0	84-122/30
95-47-6	o-Xylene	10	11.8	118	11.6	116	2	79-124/30
1330-20-7	Xylenes (total)	30	35.1	117	34.8	116	1	83-122/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
460-00-4	4-Bromofluorobenzene	101%	99%	78-124%

Blank Spike/Blank Spike Duplicate Summary

Job Number: N73853
Account: UTC United Technology Corporation
Project: LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VW130-BS	W03034.D	1	07/27/04	WG	n/a	n/a	VW130
VW130-BSD	W03035.D	1	07/27/04	WG	n/a	n/a	VW130

The QC reported here applies to the following samples: Method: TO-15

VW130-SCC

CAS No.	Compound	Spike ppbv	BSP ppbv	BSP %	BSD ppbv	BSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	10	10.3	103	9.6	96	7	61-122/30
106-99-0	1,3-Butadiene	10	10.4	104	9.6	96	8	72-128/30
71-43-2	Benzene	10	10.7	107	10.3	103	4	82-114/30
75-27-4	Bromodichloromethane	10	11.1	111	10.6	106	5	84-130/30
75-25-2	Bromoform	10	11.0	110	10.4	104	6	71-138/30
74-83-9	Bromomethane	10	10.2	102	9.5	95	7	79-122/30
593-60-2	Bromoethene	10	10.1	101	9.5	95	6	84-119/30
100-44-7	Benzyl Chloride	10	11.2	112	10.6	106	6	92-135/30
75-15-0	Carbon disulfide	10	10.1	101	9.5	95	6	76-126/30
108-90-7	Chlorobenzene	10	10.7	107	10.2	102	5	86-115/30
75-00-3	Chloroethane	10	10.1	101	9.5	95	6	80-119/30
67-66-3	Chloroform	10	10.5	105	10.0	100	5	82-122/30
74-87-3	Chloromethane	10	10	100	9.3	93	7	61-125/30
107-05-1	3-Chloropropene	10	9.1	91	8.8	88	3	72-125/30
95-49-8	2-Chlorotoluene	10	10.8	108	10.3	103	5	88-124/30
56-23-5	Carbon tetrachloride	10	10.5	105	9.9	99	6	78-130/30
110-82-7	Cyclohexane	10	10.4	104	9.9	99	5	80-109/30
75-34-3	1,1-Dichloroethane	10	10.3	103	9.7	97	6	79-120/30
75-35-4	1,1-Dichloroethylene	10	10.0	100	9.6	96	4	77-122/30
106-93-4	1,2-Dibromoethane	10	10.4	104	9.8	98	6	87-121/30
107-06-2	1,2-Dichloroethane	10	10.5	105	9.8	98	7	78-139/30
78-87-5	1,2-Dichloropropane	10	11.0	110	10.5	105	5	80-116/30
123-91-1	1,4-Dioxane	10	9.5	95	8.8	88	8	65-127/30
75-71-8	Dichlorodifluoromethane	10	10.6	106	9.8	98	8	78-137/30
124-48-1	Dibromochloromethane	10	10.8	108	10.2	102	6	86-124/30
156-60-5	trans-1,2-Dichloroethylene	10	10.2	102	9.7	97	5	81-120/30
156-59-2	cis-1,2-Dichloroethylene	10	10.2	102	9.7	97	5	83-115/30
10061-01-5	cis-1,3-Dichloropropene	10	10.9	109	10.5	105	4	87-122/30
541-73-1	m-Dichlorobenzene	10	10.3	103	9.9	99	4	86-130/30
95-50-1	o-Dichlorobenzene	10	10.5	105	10	100	5	86-130/30
106-46-7	p-Dichlorobenzene	10	10.2	102	9.7	97	5	84-130/30
10061-02-6	trans-1,3-Dichloropropene	10	10.5	105	10.3	103	2	83-133/30
64-17-5	Ethanol	10	11.9	119	10.6	106	12	59-150/30
100-41-4	Ethylbenzene	10	10.7	107	10.2	102	5	83-121/30
141-78-6	Ethyl Acetate	10	9.7	97	9.4	94	3	65-135/30
622-96-8	4-Ethyltoluene	10	10.7	107	10.1	101	6	85-127/30

Blank Spike/Blank Spike Duplicate Summary

Job Number: N73853
Account: UTC United Technology Corporation
Project: LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VW130-BS	W03034.D	1	07/27/04	WG	n/a	n/a	VW130
VW130-BSD	W03035.D	1	07/27/04	WG	n/a	n/a	VW130

The QC reported here applies to the following samples: Method: TO-15

VW130-SCC

CAS No.	Compound	Spike ppbv	BSP ppbv	BSP %	BSD ppbv	BSD %	RPD	Limits Rec/RPD
76-13-1	Freon 113	10	10.2	102	9.8	98	4	77-123/30
76-14-2	Freon 114	10	10.2	102	9.5	95	7	81-126/30
142-82-5	Heptane	10	10.9	109	10.4	104	5	72-125/30
87-68-3	Hexachlorobutadiene	10	10.1	101	9.5	95	6	56-162/30
110-54-3	Hexane	10	10.2	102	9.7	97	5	74-115/30
591-78-6	2-Hexanone	10	10.8	108	10.3	103	5	59-129/30
67-63-0	Isopropyl Alcohol	10	10.8	108	10.2	102	6	55-138/30
75-09-2	Methylene chloride	10	9.5	95	9.0	90	5	74-116/30
78-93-3	Methyl ethyl ketone	10	10.2	102	9.7	97	5	77-118/30
108-10-1	Methyl Isobutyl Ketone	10	10.9	109	10.4	104	5	63-126/30
1634-04-4	Methyl Tert Butyl Ether	10	10.2	102	9.7	97	5	79-120/30
115-07-1	Propylene	10	9.5	95	8.7	87	9	58-136/30
100-42-5	Styrene	10	10.7	107	10.2	102	5	86-123/30
71-55-6	1,1,1-Trichloroethane	10	10.4	104	9.8	98	6	78-129/30
79-34-5	1,1,2,2-Tetrachloroethane	10	10.6	106	10.0	100	6	82-126/30
79-00-5	1,1,2-Trichloroethane	10	10.6	106	10.2	102	4	86-118/30
120-82-1	1,2,4-Trichlorobenzene	10	11.8	118	10.9	109	8	66-159/30
95-63-6	1,2,4-Trimethylbenzene	10	10.7	107	10.2	102	5	87-127/30
108-67-8	1,3,5-Trimethylbenzene	10	10.8	108	10.3	103	5	86-127/30
540-84-1	2,2,4-Trimethylpentane	10	10.7	107	10.2	102	5	73-124/30
127-18-4	Tetrachloroethylene	10	10.7	107	10.2	102	5	80-122/30
109-99-9	Tetrahydrofuran	10	10.1	101	9.7	97	4	70-122/30
108-88-3	Toluene	10	10.7	107	10.4	104	3	79-120/30
79-01-6	Trichloroethylene	10	10.4	104	10	100	4	86-122/30
75-69-4	Trichlorofluoromethane	10	10.5	105	9.7	97	8	77-136/30
75-01-4	Vinyl chloride	10	10.2	102	9.5	95	7	75-122/30
108-05-4	Vinyl Acetate	10	10.1	101	9.7	97	4	75-129/30
	m,p-Xylene	20	21.7	109	20.7	104	5	84-122/30
95-47-6	o-Xylene	10	10.8	108	10.3	103	5	79-124/30
1330-20-7	Xylenes (total)	30	32.5	108	31.0	103	5	83-122/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
460-00-4	4-Bromofluorobenzene	104%	103%	78-124%

Duplicate Summary

Job Number: N73853
Account: UTC United Technology Corporation
Project: LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
N73853-1DUP	W03172.D	1	08/05/04	WG	n/a	n/a	VW133
N73853-1 [a]	W03171.D	1	08/05/04	WG	n/a	n/a	VW133

The QC reported here applies to the following samples: Method: TO-15

N73853-1, N73853-2, N73853-3, N73853-4, N73853-5, N73853-6, N73853-7, N73853-8, N73853-9, N73853-11, N73853-12, N73853-13, N73853-14, N73853-15

CAS No.	Compound	N73853-1 ppbv	Q	DUP ppbv	Q	RPD	Limits
67-64-1	Acetone	4.3		4.8		11	24
106-99-0	1,3-Butadiene	ND		ND		nc	10
71-43-2	Benzene	0.71		0.79		11	14
75-27-4	Bromodichloromethane	ND		ND		nc	10
75-25-2	Bromoform	ND		ND		nc	10
74-83-9	Bromomethane	ND		ND		nc	10
593-60-2	Bromoethene	ND		ND		nc	10
100-44-7	Benzyl Chloride	ND		ND		nc	10
75-15-0	Carbon disulfide	ND		ND		nc	11
108-90-7	Chlorobenzene	ND		ND		nc	10
75-00-3	Chloroethane	ND		ND		nc	10
67-66-3	Chloroform	ND		ND		nc	12
74-87-3	Chloromethane	0.42		0.44		5	20
107-05-1	3-Chloropropene	ND		ND		nc	10
95-49-8	2-Chlorotoluene	ND		ND		nc	10
56-23-5	Carbon tetrachloride	ND		ND		nc	10
110-82-7	Cyclohexane	ND		ND		nc	30
75-34-3	1,1-Dichloroethane	ND		ND		nc	10
75-35-4	1,1-Dichloroethylene	ND		ND		nc	10
106-93-4	1,2-Dibromoethane	ND		ND		nc	10
107-06-2	1,2-Dichloroethane	ND		ND		nc	10
78-87-5	1,2-Dichloropropane	ND		ND		nc	10
123-91-1	1,4-Dioxane	ND		ND		nc	10
75-71-8	Dichlorodifluoromethane	0.38		0.40		5	28
124-48-1	Dibromochloromethane	ND		ND		nc	10
156-60-5	trans-1,2-Dichloroethylene	ND		ND		nc	10
156-59-2	cis-1,2-Dichloroethylene	ND		ND		nc	10
10061-01-5	cis-1,3-Dichloropropene	ND		ND		nc	10
541-73-1	m-Dichlorobenzene	ND		ND		nc	10
95-50-1	o-Dichlorobenzene	ND		ND		nc	10
106-46-7	p-Dichlorobenzene	ND		ND		nc	10
10061-02-6	trans-1,3-Dichloropropene	ND		ND		nc	10
64-17-5	Ethanol	5.0		5.5		10	22
100-41-4	Ethylbenzene	0.37		0.42		13	17
141-78-6	Ethyl Acetate	ND		ND		nc	10
622-96-8	4-Ethyltoluene	0.19	J	0.21		10	14

Duplicate Summary

Job Number: N73853
Account: UTC United Technology Corporation
Project: LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
N73853-1DUP	W03172.D	1	08/05/04	WG	n/a	n/a	VW133
N73853-1 [a]	W03171.D	1	08/05/04	WG	n/a	n/a	VW133

The QC reported here applies to the following samples: Method: TO-15

N73853-1, N73853-2, N73853-3, N73853-4, N73853-5, N73853-6, N73853-7, N73853-8, N73853-9, N73853-11, N73853-12, N73853-13, N73853-14, N73853-15

CAS No.	Compound	N73853-1 ppbv	Q	DUP ppbv	Q	RPD	Limits
76-13-1	Freon 113	0.13	J	0.26		67* [b]	15
76-14-2	Freon 114	ND		ND		nc	10
142-82-5	Heptane	0.33		0.40		19	20
87-68-3	Hexachlorobutadiene	ND		ND		nc	10
110-54-3	Hexane	1.0		1.1		10	16
591-78-6	2-Hexanone	ND		ND		nc	10
67-63-0	Isopropyl Alcohol	0.58		0.66		13	14
75-09-2	Methylene chloride	0.16	J	0.17	J	6	30
78-93-3	Methyl ethyl ketone	0.50		0.60		18	21
108-10-1	Methyl Isobutyl Ketone	ND		ND		nc	10
1634-04-4	Methyl Tert Butyl Ether	ND		ND		nc	16
115-07-1	Propylene	0.62		0.68		9	10
100-42-5	Styrene	ND		ND		nc	10
71-55-6	1,1,1-Trichloroethane	ND		ND		nc	10
79-34-5	1,1,2,2-Tetrachloroethane	ND		ND		nc	10
79-00-5	1,1,2-Trichloroethane	ND		ND		nc	10
120-82-1	1,2,4-Trichlorobenzene	ND		ND		nc	10
95-63-6	1,2,4-Trimethylbenzene	0.62		0.69		11	15
108-67-8	1,3,5-Trimethylbenzene	0.19	J	0.22		15* [b]	12
540-84-1	2,2,4-Trimethylpentane	1.1		1.2		9	10
127-18-4	Tetrachloroethylene	0.16	J	0.16	J	0	12
109-99-9	Tetrahydrofuran	0.10	J	0.12	J	18* [b]	14
108-88-3	Toluene	2.2		2.4		9	13
79-01-6	Trichloroethylene	1.2		1.3		8	10
75-69-4	Trichlorofluoromethane	0.23		0.26		12	21
75-01-4	Vinyl chloride	ND		ND		nc	10
108-05-4	Vinyl Acetate	ND		ND		nc	10
	m,p-Xylene	1.4		1.6		13	18
95-47-6	o-Xylene	0.57		0.62		8	16
1330-20-7	Xylenes (total)	2.0		2.2		10	16

CAS No.	Surrogate Recoveries	DUP	N73853-1	Limits
460-00-4	4-Bromofluorobenzene	118%	116%	78-124%

Duplicate Summary

Job Number: N73853
Account: UTC United Technology Corporation
Project: LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
N73853-1DUP	W03172.D	1	08/05/04	WG	n/a	n/a	VW133
N73853-1 [a]	W03171.D	1	08/05/04	WG	n/a	n/a	VW133

The QC reported here applies to the following samples: Method: TO-15

N73853-1, N73853-2, N73853-3, N73853-4, N73853-5, N73853-6, N73853-7, N73853-8, N73853-9, N73853-11, N73853-12, N73853-13, N73853-14, N73853-15

(a) Matrix spikes are not analyzed by this procedure.
(b) High RPD due to low concentration of hit

Duplicate Summary

Job Number: N73853
Account: UTC United Technology Corporation
Project: LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
N74204-5DUP	Q22245.D	1	08/06/04	WG	n/a	n/a	VQ886
N74204-5 [a]	Q22244.D	1	08/06/04	WG	n/a	n/a	VQ886

The QC reported here applies to the following samples: Method: TO-15

N73853-2, N73853-10, N73853-12, N73853-14, N73853-16, N73853-17

CAS No.	Compound	N74204-5 ppbv	Q	DUP ppbv	Q	RPD	Limits
67-64-1	Acetone	5.2		5.5		6	24
106-99-0	1,3-Butadiene	ND		ND		nc	10
71-43-2	Benzene	0.62		0.56		10	14
75-27-4	Bromodichloromethane	ND		ND		nc	10
75-25-2	Bromoform	ND		ND		nc	10
74-83-9	Bromomethane	ND		ND		nc	10
593-60-2	Bromoethene	ND		ND		nc	10
100-44-7	Benzyl Chloride	ND		ND		nc	10
75-15-0	Carbon disulfide	ND		ND		nc	11
108-90-7	Chlorobenzene	ND		ND		nc	10
75-00-3	Chloroethane	ND		ND		nc	10
67-66-3	Chloroform	0.11	J	0.096	J	14* [b]	12
74-87-3	Chloromethane	ND		ND		nc	20
107-05-1	3-Chloropropene	ND		ND		nc	10
95-49-8	2-Chlorotoluene	ND		ND		nc	10
56-23-5	Carbon tetrachloride	ND		ND		nc	10
110-82-7	Cyclohexane	ND		ND		nc	30
75-34-3	1,1-Dichloroethane	ND		ND		nc	10
75-35-4	1,1-Dichloroethylene	ND		ND		nc	10
106-93-4	1,2-Dibromoethane	ND		ND		nc	10
107-06-2	1,2-Dichloroethane	ND		ND		nc	10
78-87-5	1,2-Dichloropropane	ND		ND		nc	10
123-91-1	1,4-Dioxane	ND		ND		nc	10
75-71-8	Dichlorodifluoromethane	3.7		3.5		6	28
124-48-1	Dibromochloromethane	ND		ND		nc	10
156-60-5	trans-1,2-Dichloroethylene	ND		ND		nc	10
156-59-2	cis-1,2-Dichloroethylene	ND		ND		nc	10
10061-01-5	cis-1,3-Dichloropropene	ND		ND		nc	10
541-73-1	m-Dichlorobenzene	0.13	J	0.096	J	30* [b]	10
95-50-1	o-Dichlorobenzene	ND		ND		nc	10
106-46-7	p-Dichlorobenzene	0.13	J	0.098	J	28* [b]	10
10061-02-6	trans-1,3-Dichloropropene	ND		ND		nc	10
64-17-5	Ethanol	ND		ND		nc	22
100-41-4	Ethylbenzene	0.20		0.18	J	11	17
141-78-6	Ethyl Acetate	ND		ND		nc	10
622-96-8	4-Ethyltoluene	ND		ND		nc	14

Duplicate Summary

Job Number: N73853
Account: UTC United Technology Corporation
Project: LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
N74204-5DUP	Q22245.D	1	08/06/04	WG	n/a	n/a	VQ886
N74204-5 [a]	Q22244.D	1	08/06/04	WG	n/a	n/a	VQ886

The QC reported here applies to the following samples: Method: TO-15

N73853-2, N73853-10, N73853-12, N73853-14, N73853-16, N73853-17

CAS No.	Compound	N74204-5 ppbv	Q	DUP ppbv	Q	RPD	Limits
76-13-1	Freon 113	ND		ND		nc	15
76-14-2	Freon 114	ND		ND		nc	10
142-82-5	Heptane	0.56		0.52		7	20
87-68-3	Hexachlorobutadiene	ND		ND		nc	10
110-54-3	Hexane	0.92		0.87		6	16
591-78-6	2-Hexanone	ND		ND		nc	10
67-63-0	Isopropyl Alcohol	0.46		0.27		52* [b]	14
75-09-2	Methylene chloride	0.26		0.25		4	30
78-93-3	Methyl ethyl ketone	ND		ND		nc	21
108-10-1	Methyl Isobutyl Ketone	ND		ND		nc	10
1634-04-4	Methyl Tert Butyl Ether	1.9		1.7		11	16
115-07-1	Propylene	28.2		27.3		3	10
100-42-5	Styrene	ND		ND		nc	10
71-55-6	1,1,1-Trichloroethane	ND		ND		nc	10
79-34-5	1,1,2,2-Tetrachloroethane	ND		ND		nc	10
79-00-5	1,1,2-Trichloroethane	ND		ND		nc	10
120-82-1	1,2,4-Trichlorobenzene	ND		ND		nc	10
95-63-6	1,2,4-Trimethylbenzene	0.30		0.25		18* [b]	15
108-67-8	1,3,5-Trimethylbenzene	ND		ND		nc	12
540-84-1	2,2,4-Trimethylpentane	0.36		0.30		18* [b]	10
127-18-4	Tetrachloroethylene	ND		ND		nc	12
109-99-9	Tetrahydrofuran	ND		ND		nc	14
108-88-3	Toluene	1.5		1.4		7	13
79-01-6	Trichloroethylene	ND		ND		nc	10
75-69-4	Trichlorofluoromethane	0.23		0.24		4	21
75-01-4	Vinyl chloride	ND		ND		nc	10
108-05-4	Vinyl Acetate	ND		ND		nc	10
	m,p-Xylene	0.61		0.54		12	18
95-47-6	o-Xylene	0.22		0.20		10	16
1330-20-7	Xylenes (total)	0.83		0.74		11	16

CAS No.	Surrogate Recoveries	DUP	N74204-5	Limits
460-00-4	4-Bromofluorobenzene	104%	104%	78-124%

Duplicate Summary

Job Number: N73853
Account: UTC United Technology Corporation
Project: LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
N74204-5DUP	Q22245.D	1	08/06/04	WG	n/a	n/a	VQ886
N74204-5 [a]	Q22244.D	1	08/06/04	WG	n/a	n/a	VQ886

The QC reported here applies to the following samples: Method: TO-15

N73853-2, N73853-10, N73853-12, N73853-14, N73853-16, N73853-17

(a) Matrix spikes are not analyzed by this procedure.
(b) High RPD due to low concentration of hit

Duplicate Summary

Job Number: N73853
Account: UTC United Technology Corporation
Project: LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
N74419-2DUP	Q22273.D	2	08/09/04	WG	n/a	n/a	VQ887
N74419-2 [a]	Q22272.D	2	08/09/04	WG	n/a	n/a	VQ887

The QC reported here applies to the following samples: Method: TO-15

N73853-10, N73853-12, N73853-14

CAS No.	Compound	N74419-2 ppbv	Q	DUP ppbv	Q	RPD	Limits
75-34-3	1,1-Dichloroethane	ND		ND		nc	10
75-35-4	1,1-Dichloroethylene	ND		ND		nc	10
71-55-6	1,1,1-Trichloroethane	ND		ND		nc	10
79-01-6	Trichloroethylene	ND		ND		nc	10

CAS No.	Surrogate Recoveries	DUP	N74419-2	Limits
460-00-4	4-Bromofluorobenzene	103%	109%	78-124%

(a) Matrix spikes are not analyzed by this procedure.

Summa Cleaning Certification

Job Number: N73853
Account: UTC United Technology Corporation
Project: LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VQ877-SCC	Q22032.D	1	07/22/04	WG	n/a	n/a	VQ877

The QC reported here (Summa A191) applies to the following samples: Method: TO-15

Batch CP1250 cleaned 07/20/04: N73853-1(A356), N73853-2(A106), N73853-5(A224), N73853-7(A184), N73853-9(A191), N73853-10(A285), N73853-13(A339)

CAS No.	Compound	Result	RL	Units	Q	Result	RL	Units
67-64-1	Acetone	ND	0.20	ppbv		ND	0.48	ug/m3
106-99-0	1,3-Butadiene	ND	0.20	ppbv		ND	0.44	ug/m3
71-43-2	Benzene	ND	0.20	ppbv		ND	0.64	ug/m3
75-27-4	Bromodichloromethane	ND	0.20	ppbv		ND	1.3	ug/m3
75-25-2	Bromoform	ND	0.20	ppbv		ND	2.1	ug/m3
74-83-9	Bromomethane	ND	0.20	ppbv		ND	0.78	ug/m3
593-60-2	Bromoethene	ND	0.20	ppbv		ND	0.87	ug/m3
100-44-7	Benzyl Chloride	ND	0.20	ppbv		ND	1.0	ug/m3
75-15-0	Carbon disulfide	ND	0.20	ppbv		ND	0.62	ug/m3
108-90-7	Chlorobenzene	ND	0.20	ppbv		ND	0.92	ug/m3
75-00-3	Chloroethane	ND	0.20	ppbv		ND	0.53	ug/m3
67-66-3	Chloroform	ND	0.20	ppbv		ND	0.98	ug/m3
74-87-3	Chloromethane	ND	0.20	ppbv		ND	0.41	ug/m3
107-05-1	3-Chloropropene	ND	0.20	ppbv		ND	0.63	ug/m3
95-49-8	2-Chlorotoluene	ND	0.20	ppbv		ND	1.0	ug/m3
56-23-5	Carbon tetrachloride	ND	0.20	ppbv		ND	1.3	ug/m3
110-82-7	Cyclohexane	ND	0.20	ppbv		ND	0.69	ug/m3
75-34-3	1,1-Dichloroethane	ND	0.20	ppbv		ND	0.81	ug/m3
75-35-4	1,1-Dichloroethylene	ND	0.20	ppbv		ND	0.79	ug/m3
106-93-4	1,2-Dibromoethane	ND	0.20	ppbv		ND	1.5	ug/m3
107-06-2	1,2-Dichloroethane	ND	0.20	ppbv		ND	0.81	ug/m3
78-87-5	1,2-Dichloropropane	ND	0.20	ppbv		ND	0.92	ug/m3
123-91-1	1,4-Dioxane	ND	0.20	ppbv		ND	0.72	ug/m3
75-71-8	Dichlorodifluoromethane	ND	0.20	ppbv		ND	0.99	ug/m3
124-48-1	Dibromochloromethane	ND	0.20	ppbv		ND	1.7	ug/m3
156-60-5	trans-1,2-Dichloroethylene	ND	0.20	ppbv		ND	0.79	ug/m3
156-59-2	cis-1,2-Dichloroethylene	ND	0.20	ppbv		ND	0.79	ug/m3
10061-01-5	cis-1,3-Dichloropropene	ND	0.20	ppbv		ND	0.91	ug/m3
541-73-1	m-Dichlorobenzene	ND	0.20	ppbv		ND	1.2	ug/m3
95-50-1	o-Dichlorobenzene	ND	0.20	ppbv		ND	1.2	ug/m3
106-46-7	p-Dichlorobenzene	ND	0.20	ppbv		ND	1.2	ug/m3
10061-02-6	trans-1,3-Dichloropropene	ND	0.20	ppbv		ND	0.91	ug/m3
64-17-5	Ethanol	ND	0.50	ppbv		ND	0.94	ug/m3
100-41-4	Ethylbenzene	ND	0.20	ppbv		ND	0.87	ug/m3
141-78-6	Ethyl Acetate	ND	0.20	ppbv		ND	0.72	ug/m3
622-96-8	4-Ethyltoluene	ND	0.20	ppbv		ND	0.98	ug/m3

Summa Cleaning Certification

Job Number: N73853
Account: UTC United Technology Corporation
Project: LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VQ877-SCC	Q22032.D	1	07/22/04	WG	n/a	n/a	VQ877

The QC reported here (Summa A191) applies to the following samples: Method: TO-15

Batch CP1250 cleaned 07/20/04: N73853-1(A356), N73853-2(A106), N73853-5(A224), N73853-7(A184), N73853-9(A191), N73853-10(A285), N73853-13(A339)

CAS No.	Compound	Result	RL	Units	Q	Result	RL	Units
76-13-1	Freon 113	ND	0.20	ppbv		ND	1.5	ug/m3
76-14-2	Freon 114	ND	0.20	ppbv		ND	1.4	ug/m3
142-82-5	Heptane	ND	0.20	ppbv		ND	0.82	ug/m3
87-68-3	Hexachlorobutadiene	ND	0.20	ppbv		ND	2.1	ug/m3
110-54-3	Hexane	ND	0.20	ppbv		ND	0.70	ug/m3
591-78-6	2-Hexanone	ND	0.20	ppbv		ND	0.82	ug/m3
67-63-0	Isopropyl Alcohol	ND	0.20	ppbv		ND	0.49	ug/m3
75-09-2	Methylene chloride	ND	0.20	ppbv		ND	0.69	ug/m3
78-93-3	Methyl ethyl ketone	ND	0.20	ppbv		ND	0.59	ug/m3
108-10-1	Methyl Isobutyl Ketone	ND	0.20	ppbv		ND	0.82	ug/m3
1634-04-4	Methyl Tert Butyl Ether	ND	0.20	ppbv		ND	0.72	ug/m3
115-07-1	Propylene	ND	0.50	ppbv		ND	0.86	ug/m3
100-42-5	Styrene	ND	0.20	ppbv		ND	0.85	ug/m3
71-55-6	1,1,1-Trichloroethane	ND	0.20	ppbv		ND	1.1	ug/m3
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.20	ppbv		ND	1.4	ug/m3
79-00-5	1,1,2-Trichloroethane	ND	0.20	ppbv		ND	1.1	ug/m3
120-82-1	1,2,4-Trichlorobenzene	ND	0.20	ppbv		ND	1.5	ug/m3
95-63-6	1,2,4-Trimethylbenzene	ND	0.20	ppbv		ND	0.98	ug/m3
108-67-8	1,3,5-Trimethylbenzene	ND	0.20	ppbv		ND	0.98	ug/m3
540-84-1	2,2,4-Trimethylpentane	ND	0.20	ppbv		ND	0.93	ug/m3
127-18-4	Tetrachloroethylene	ND	0.20	ppbv		ND	1.4	ug/m3
109-99-9	Tetrahydrofuran	ND	0.20	ppbv		ND	0.59	ug/m3
108-88-3	Toluene	ND	0.20	ppbv		ND	0.75	ug/m3
79-01-6	Trichloroethylene	ND	0.20	ppbv		ND	1.1	ug/m3
75-69-4	Trichlorofluoromethane	ND	0.20	ppbv		ND	1.1	ug/m3
75-01-4	Vinyl chloride	ND	0.20	ppbv		ND	0.51	ug/m3
108-05-4	Vinyl Acetate	ND	0.20	ppbv		ND	0.70	ug/m3
	m,p-Xylene	ND	0.20	ppbv		ND	0.87	ug/m3
95-47-6	o-Xylene	ND	0.20	ppbv		ND	0.87	ug/m3
1330-20-7	Xylenes (total)	ND	0.20	ppbv		ND	0.87	ug/m3

CAS No.	Surrogate Recoveries		Limits
460-00-4	4-Bromofluorobenzene	89%	78-124%

Summa Cleaning Certification

Job Number: N73853
Account: UTC United Technology Corporation
Project: LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VW130-SCC	W03038.D	1	07/27/04	WG	n/a	n/a	VW130

The QC reported here (Summa A125) applies to the following samples: Method: TO-15

Batch CP1253 cleaned 07/23/04: N73853-3(A316), N73853-4(A164), N73853-6(A198), N73853-8(A293), N73853-11(A100), N73853-12(A125), N73853-14(A364), N73853-15(A141), N73853-16(A297), N73853-17(A253)

CAS No.	Compound	Result	RL	Units	Q	Result	RL	Units
67-64-1	Acetone	ND	0.20	ppbv		ND	0.48	ug/m3
106-99-0	1,3-Butadiene	ND	0.20	ppbv		ND	0.44	ug/m3
71-43-2	Benzene	ND	0.20	ppbv		ND	0.64	ug/m3
75-27-4	Bromodichloromethane	ND	0.20	ppbv		ND	1.3	ug/m3
75-25-2	Bromoform	ND	0.20	ppbv		ND	2.1	ug/m3
74-83-9	Bromomethane	ND	0.20	ppbv		ND	0.78	ug/m3
593-60-2	Bromoethene	ND	0.20	ppbv		ND	0.87	ug/m3
100-44-7	Benzyl Chloride	ND	0.20	ppbv		ND	1.0	ug/m3
75-15-0	Carbon disulfide	ND	0.20	ppbv		ND	0.62	ug/m3
108-90-7	Chlorobenzene	ND	0.20	ppbv		ND	0.92	ug/m3
75-00-3	Chloroethane	ND	0.20	ppbv		ND	0.53	ug/m3
67-66-3	Chloroform	ND	0.20	ppbv		ND	0.98	ug/m3
74-87-3	Chloromethane	ND	0.20	ppbv		ND	0.41	ug/m3
107-05-1	3-Chloropropene	ND	0.20	ppbv		ND	0.63	ug/m3
95-49-8	2-Chlorotoluene	ND	0.20	ppbv		ND	1.0	ug/m3
56-23-5	Carbon tetrachloride	ND	0.20	ppbv		ND	1.3	ug/m3
110-82-7	Cyclohexane	ND	0.20	ppbv		ND	0.69	ug/m3
75-34-3	1,1-Dichloroethane	ND	0.20	ppbv		ND	0.81	ug/m3
75-35-4	1,1-Dichloroethylene	ND	0.20	ppbv		ND	0.79	ug/m3
106-93-4	1,2-Dibromoethane	ND	0.20	ppbv		ND	1.5	ug/m3
107-06-2	1,2-Dichloroethane	ND	0.20	ppbv		ND	0.81	ug/m3
78-87-5	1,2-Dichloropropane	ND	0.20	ppbv		ND	0.92	ug/m3
123-91-1	1,4-Dioxane	ND	0.20	ppbv		ND	0.72	ug/m3
75-71-8	Dichlorodifluoromethane	ND	0.20	ppbv		ND	0.99	ug/m3
124-48-1	Dibromochloromethane	ND	0.20	ppbv		ND	1.7	ug/m3
156-60-5	trans-1,2-Dichloroethylene	ND	0.20	ppbv		ND	0.79	ug/m3
156-59-2	cis-1,2-Dichloroethylene	ND	0.20	ppbv		ND	0.79	ug/m3
10061-01-5	cis-1,3-Dichloropropene	ND	0.20	ppbv		ND	0.91	ug/m3
541-73-1	m-Dichlorobenzene	ND	0.20	ppbv		ND	1.2	ug/m3
95-50-1	o-Dichlorobenzene	ND	0.20	ppbv		ND	1.2	ug/m3
106-46-7	p-Dichlorobenzene	ND	0.20	ppbv		ND	1.2	ug/m3
10061-02-6	trans-1,3-Dichloropropene	ND	0.20	ppbv		ND	0.91	ug/m3
64-17-5	Ethanol	ND	0.50	ppbv		ND	0.94	ug/m3
100-41-4	Ethylbenzene	ND	0.20	ppbv		ND	0.87	ug/m3
141-78-6	Ethyl Acetate	ND	0.20	ppbv		ND	0.72	ug/m3
622-96-8	4-Ethyltoluene	ND	0.20	ppbv		ND	0.98	ug/m3

Summa Cleaning Certification

Job Number: N73853
Account: UTC United Technology Corporation
Project: LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VW130-SCC	W03038.D	1	07/27/04	WG	n/a	n/a	VW130

The QC reported here (Summa A125) applies to the following samples: Method: TO-15

Batch CP1253 cleaned 07/23/04: N73853-3(A316), N73853-4(A164), N73853-6(A198), N73853-8(A293), N73853-11(A100), N73853-12(A125), N73853-14(A364), N73853-15(A141), N73853-16(A297), N73853-17(A253)

CAS No.	Compound	Result	RL	Units	Q	Result	RL	Units
76-13-1	Freon 113	ND	0.20	ppbv		ND	1.5	ug/m3
76-14-2	Freon 114	ND	0.20	ppbv		ND	1.4	ug/m3
142-82-5	Heptane	ND	0.20	ppbv		ND	0.82	ug/m3
87-68-3	Hexachlorobutadiene	ND	0.20	ppbv		ND	2.1	ug/m3
110-54-3	Hexane	ND	0.20	ppbv		ND	0.70	ug/m3
591-78-6	2-Hexanone	ND	0.20	ppbv		ND	0.82	ug/m3
67-63-0	Isopropyl Alcohol	ND	0.20	ppbv		ND	0.49	ug/m3
75-09-2	Methylene chloride	ND	0.20	ppbv		ND	0.69	ug/m3
78-93-3	Methyl ethyl ketone	ND	0.20	ppbv		ND	0.59	ug/m3
108-10-1	Methyl Isobutyl Ketone	ND	0.20	ppbv		ND	0.82	ug/m3
1634-04-4	Methyl Tert Butyl Ether	ND	0.20	ppbv		ND	0.72	ug/m3
115-07-1	Propylene	ND	0.50	ppbv		ND	0.86	ug/m3
100-42-5	Styrene	ND	0.20	ppbv		ND	0.85	ug/m3
71-55-6	1,1,1-Trichloroethane	ND	0.20	ppbv		ND	1.1	ug/m3
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.20	ppbv		ND	1.4	ug/m3
79-00-5	1,1,2-Trichloroethane	ND	0.20	ppbv		ND	1.1	ug/m3
120-82-1	1,2,4-Trichlorobenzene	ND	0.20	ppbv		ND	1.5	ug/m3
95-63-6	1,2,4-Trimethylbenzene	ND	0.20	ppbv		ND	0.98	ug/m3
108-67-8	1,3,5-Trimethylbenzene	ND	0.20	ppbv		ND	0.98	ug/m3
540-84-1	2,2,4-Trimethylpentane	ND	0.20	ppbv		ND	0.93	ug/m3
127-18-4	Tetrachloroethylene	ND	0.20	ppbv		ND	1.4	ug/m3
109-99-9	Tetrahydrofuran	ND	0.20	ppbv		ND	0.59	ug/m3
108-88-3	Toluene	ND	0.20	ppbv		ND	0.75	ug/m3
79-01-6	Trichloroethylene	ND	0.20	ppbv		ND	1.1	ug/m3
75-69-4	Trichlorofluoromethane	ND	0.20	ppbv		ND	1.1	ug/m3
75-01-4	Vinyl chloride	ND	0.20	ppbv		ND	0.51	ug/m3
108-05-4	Vinyl Acetate	ND	0.20	ppbv		ND	0.70	ug/m3
	m,p-Xylene	ND	0.20	ppbv		ND	0.87	ug/m3
95-47-6	o-Xylene	ND	0.20	ppbv		ND	0.87	ug/m3
1330-20-7	Xylenes (total)	ND	0.20	ppbv		ND	0.87	ug/m3

CAS No.	Surrogate Recoveries		Limits
460-00-4	4-Bromofluorobenzene	115%	78-124%

Instrument Performance Check (BFB)

Job Number: N73853
Account: UTC United Technology Corporation
Project: LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT

Sample:	VQ876-BFB	Injection Date:	07/20/04
Lab File ID:	Q21988.D	Injection Time:	10:15
Instrument ID:	GCMSQ		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	8.0 - 40.0% of mass 95	23896	16.1	Pass
75	30.0 - 66.0% of mass 95	59344	39.9	Pass
95	Base peak, 100% relative abundance	148779	100.0	Pass
96	5.0 - 9.0% of mass 95	10178	6.8	Pass
173	Less than 2.0% of mass 174	388	0.26 (0.22)	Pass
174	50.0 - 120.0% of mass 95	174123	117.0	Pass
175	4.0 - 9.01% of mass 174	11264	7.6 (6.5)	Pass
176	93.0 - 101.0% of mass 174	164608	110.6 (94.5)	Pass
177	5.0 - 9.0% of mass 176	11173	7.5 (6.8)	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VQ876-IC876	Q21989.D	07/20/04	11:12	00:57	Initial cal 40
VQ876-ICC876	Q21991.D	07/20/04	13:04	02:49	Initial cal 10
VQ876-IC876	Q21992.D	07/20/04	14:01	03:46	Initial cal 5
VQ876-IC876	Q21993.D	07/20/04	14:59	04:44	Initial cal 20
VQ876-IC876	Q21994.D	07/20/04	15:55	05:40	Initial cal 2
VQ876-IC876	Q21995.D	07/20/04	16:53	06:38	Initial cal 0.5
VQ876-IC876	Q21997.D	07/20/04	18:49	08:34	Initial cal 0.2
VQ876-BS	Q22001.D	07/20/04	22:39	12:24	Blank Spike
VQ876-BSD	Q22002.D	07/20/04	23:36	13:21	Blank Spike Duplicate
VQ876-MB	Q22003.D	07/21/04	00:34	14:19	Method Blank
N70966-8	Q22004.D	07/21/04	01:27	15:12	(used for QC only; not part of job N73853)
N70966-8DUP	Q22005.D	07/21/04	02:24	16:09	Duplicate
ZZZZZZ	Q22006.D	07/21/04	03:21	17:06	(unrelated sample)
ZZZZZZ	Q22008.D	07/21/04	05:16	19:01	(unrelated sample)
ZZZZZZ	Q22009.D	07/21/04	06:13	19:58	(unrelated sample)

Instrument Performance Check (BFB)

Job Number: N73853
Account: UTC United Technology Corporation
Project: LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT

Sample:	VQ877-BFB	Injection Date:	07/21/04
Lab File ID:	Q22013.D	Injection Time:	10:58
Instrument ID:	GCMSQ		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	8.0 - 40.0% of mass 95	25069	17.7	Pass
75	30.0 - 66.0% of mass 95	57240	40.3	Pass
95	Base peak, 100% relative abundance	141912	100.0	Pass
96	5.0 - 9.0% of mass 95	10666	7.5	Pass
173	Less than 2.0% of mass 174	835	0.59 (0.51)	Pass
174	50.0 - 120.0% of mass 95	164459	115.9	Pass
175	4.0 - 9.01% of mass 174	12084	8.5 (7.3)	Pass
176	93.0 - 101.0% of mass 174	155413	109.5 (94.5)	Pass
177	5.0 - 9.0% of mass 176	10529	7.4 (6.8)	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VQ877-CC876	Q22014.D	07/21/04	11:53	00:55	Continuing cal 10
VQ877-BS	Q22015.D	07/21/04	12:49	01:51	Blank Spike
VQ877-BSD	Q22016.D	07/21/04	13:44	02:46	Blank Spike Duplicate
VQ877-MB	Q22017.D	07/21/04	14:37	03:39	Method Blank
ZZZZZZ	Q22018.D	07/21/04	15:33	04:35	(unrelated sample)
ZZZZZZ	Q22019.D	07/21/04	16:30	05:32	(unrelated sample)
N70966-4	Q22021.D	07/21/04	22:49	11:51	(used for QC only; not part of job N73853)
N70966-4DUP	Q22022.D	07/21/04	23:46	12:48	Duplicate
ZZZZZZ	Q22023.D	07/22/04	00:44	13:46	(unrelated sample)
ZZZZZZ	Q22024.D	07/22/04	01:40	14:42	(unrelated sample)
ZZZZZZ	Q22026.D	07/22/04	03:34	16:36	(unrelated sample)
ZZZZZZ	Q22027.D	07/22/04	04:32	17:34	(unrelated sample)
ZZZZZZ	Q22028.D	07/22/04	05:29	18:31	(unrelated sample)
ZZZZZZ	Q22030.D	07/22/04	07:23	20:25	(unrelated sample)
ZZZZZZ	Q22031.D	07/22/04	08:20	21:22	(unrelated sample)
VQ877-SCC	Q22032.D	07/22/04	09:12	22:14	Summa Cleaning Certification

Instrument Performance Check (BFB)

Job Number: N73853
Account: UTC United Technology Corporation
Project: LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT

Sample:	VQ885-BFB	Injection Date:	08/05/04
Lab File ID:	Q22214.D	Injection Time:	10:00
Instrument ID:	GCMSQ		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	8.0 - 40.0% of mass 95	49245	25.4	Pass
75	30.0 - 66.0% of mass 95	104349	53.9	Pass
95	Base peak, 100% relative abundance	193557	100.0	Pass
96	5.0 - 9.0% of mass 95	14215	7.3	Pass
173	Less than 2.0% of mass 174	0	0.0 (a)	Pass
174	50.0 - 120.0% of mass 95	159872	82.6	Pass
175	4.0 - 9.01% of mass 174	14382	7.1 (9.0)	Pass
176	93.0 - 101.0% of mass 174	152464	78.8 (95.3)	Pass
177	5.0 - 9.0% of mass 176	10159	5.2 (6.7)	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VQ885-IC885	Q22215.D	08/05/04	10:57	00:57	Initial cal 40
VQ885-IC885	Q22216.D	08/05/04	12:00	02:00	Initial cal 20
VQ885-ICC885	Q22217.D	08/05/04	12:56	02:56	Initial cal 10
VQ885-IC885	Q22218.D	08/05/04	13:54	03:54	Initial cal 5
VQ885-IC885	Q22219.D	08/05/04	14:52	04:52	Initial cal 2
VQ885-IC885	Q22220.D	08/05/04	15:47	05:47	Initial cal 0.5
VQ885-IC885	Q22221.D	08/05/04	16:46	06:46	Initial cal 0.2
VQ885-BS	Q22224.D	08/05/04	19:36	09:36	Blank Spike
VQ885-BSD	Q22225.D	08/05/04	20:33	10:33	Blank Spike Duplicate
VQ885-MB	Q22226.D	08/05/04	21:30	11:30	Method Blank
VQ885-SCC	Q22227.D	08/05/04	22:28	12:28	Summa Cleaning Certification
N72309-3	Q22228.D	08/05/04	23:25	13:25	(used for QC only; not part of job N73853)
N72309-3DUP	Q22229.D	08/06/04	00:23	14:23	Duplicate
ZZZZZZ	Q22230.D	08/06/04	01:20	15:20	(unrelated sample)
ZZZZZZ	Q22232.D	08/06/04	03:15	17:15	(unrelated sample)
ZZZZZZ	Q22233.D	08/06/04	04:12	18:12	(unrelated sample)
ZZZZZZ	Q22234.D	08/06/04	05:08	19:08	(unrelated sample)
ZZZZZZ	Q22235.D	08/06/04	06:05	20:05	(unrelated sample)
ZZZZZZ	Q22236.D	08/06/04	07:01	21:01	(unrelated sample)
ZZZZZZ	Q22238.D	08/06/04	08:55	22:55	(unrelated sample)

Instrument Performance Check (BFB)

Job Number: N73853
Account: UTC United Technology Corporation
Project: LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT

Sample:	VQ886-BFB	Injection Date:	08/06/04
Lab File ID:	Q22239.D	Injection Time:	10:04
Instrument ID:	GCMSQ		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	8.0 - 40.0% of mass 95	69480	27.2	Pass
75	30.0 - 66.0% of mass 95	147477	57.7	Pass
95	Base peak, 100% relative abundance	255744	100.0	Pass
96	5.0 - 9.0% of mass 95	17512	6.8	Pass
173	Less than 2.0% of mass 174	0	0.0 (0.0)	Pass
174	50.0 - 120.0% of mass 95	206059	80.6	Pass
175	4.0 - 9.01% of mass 174	12627	4.9 (6.1)	Pass
176	93.0 - 101.0% of mass 174	199317	77.9 (96.7)	Pass
177	5.0 - 9.0% of mass 176	12496	4.9 (6.3)	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VQ886-CC885	Q22240.D	08/06/04	10:57	00:53	Continuing cal 10
VQ886-BS	Q22241.D	08/06/04	11:54	01:50	Blank Spike
VQ886-BSD	Q22242.D	08/06/04	12:47	02:43	Blank Spike Duplicate
VQ886-MB	Q22243.D	08/06/04	13:39	03:35	Method Blank
N74204-5	Q22244.D	08/06/04	14:34	04:30	(used for QC only; not part of job N73853)
N74204-5DUP	Q22245.D	08/06/04	15:31	05:27	Duplicate
ZZZZZZ	Q22246.D	08/06/04	16:28	06:24	(unrelated sample)
ZZZZZZ	Q22247.D	08/06/04	17:31	07:27	(unrelated sample)
ZZZZZZ	Q22248.D	08/06/04	18:28	08:24	(unrelated sample)
ZZZZZZ	Q22249.D	08/06/04	19:25	09:21	(unrelated sample)
N73853-17	Q22252.D	08/06/04	23:27	13:23	1051102
ZZZZZZ	Q22253.D	08/07/04	00:25	14:21	(unrelated sample)
N73853-16	Q22254.D	08/07/04	01:22	15:18	1051098
N73853-10	Q22255.D	08/07/04	02:20	16:16	1051107
N73853-10	Q22256.D	08/07/04	03:18	17:14	1051107
N73853-12	Q22257.D	08/07/04	04:16	18:12	1051118
N73853-14	Q22258.D	08/07/04	05:14	19:10	1051117
N73853-2	Q22260.D	08/07/04	07:10	21:06	1051113
ZZZZZZ	Q22261.D	08/07/04	08:08	22:04	(unrelated sample)

Instrument Performance Check (BFB)

Job Number: N73853
Account: UTC United Technology Corporation
Project: LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT

Sample:	VQ887-BFB	Injection Date:	08/09/04
Lab File ID:	Q22264.D	Injection Time:	10:35
Instrument ID:	GCMSQ		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	8.0 - 40.0% of mass 95	41704	25.3	Pass
75	30.0 - 66.0% of mass 95	97915	59.3	Pass
95	Base peak, 100% relative abundance	165035	100.0	Pass
96	5.0 - 9.0% of mass 95	11246	6.8	Pass
173	Less than 2.0% of mass 174	0	0.0	(0.0) Pass
174	50.0 - 120.0% of mass 95	139111	84.3	Pass
175	4.0 - 9.01% of mass 174	8098	4.9	(5.8) Pass
176	93.0 - 101.0% of mass 174	134003	81.2	(96.3) Pass
177	5.0 - 9.0% of mass 176	8341	5.1	(6.2) Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VQ887-CC885	Q22266.D	08/09/04	12:29	01:54	Continuing cal 10
VQ887-BS	Q22267.D	08/09/04	13:26	02:51	Blank Spike
VQ887-BSD	Q22268.D	08/09/04	14:24	03:49	Blank Spike Duplicate
VQ887-MB	Q22270.D	08/09/04	16:11	05:36	Method Blank
VQ887-SCC	Q22271.D	08/09/04	17:07	06:32	Summa Cleaning Certification
N74419-2	Q22272.D	08/09/04	18:17	07:42	(used for QC only; not part of job N73853)
N74419-2DUP	Q22273.D	08/09/04	19:15	08:40	Duplicate
N73853-10	Q22275.D	08/09/04	21:11	10:36	1051107
N73853-12	Q22276.D	08/09/04	22:09	11:34	1051118
N73853-14	Q22277.D	08/09/04	23:06	12:31	1051117
ZZZZZZ	Q22278.D	08/10/04	00:07	13:32	(unrelated sample)
ZZZZZZ	Q22279.D	08/10/04	01:08	14:33	(unrelated sample)
ZZZZZZ	Q22280.D	08/10/04	02:06	15:31	(unrelated sample)
ZZZZZZ	Q22281.D	08/10/04	03:04	16:29	(unrelated sample)
ZZZZZZ	Q22287.D	08/10/04	09:27	22:52	(unrelated sample)

Instrument Performance Check (BFB)

Job Number: N73853
Account: UTC United Technology Corporation
Project: LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT

Sample:	VW130-BFB	Injection Date:	07/26/04
Lab File ID:	W03022.D	Injection Time:	18:42
Instrument ID:	GCMSW		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	31717	15.4	Pass
75	30.0 - 66.0% of mass 95	91917	44.7	Pass
95	Base peak, 100% relative abundance	205546	100.0	Pass
96	5.0 - 9.0% of mass 95	13592	6.6	Pass
173	Less than 2.0% of mass 174	0	0.0 (0.0) a	Pass
174	50.0 - 100.0% of mass 95	166314	80.9	Pass
175	5.0 - 9.0% of mass 174	11848	5.8 (7.1) a	Pass
176	95.0 - 101.0% of mass 174	159872	77.8 (96.1) a	Pass
177	5.0 - 9.0% of mass 176	10362	5.0 (6.5) b	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VW130-IC130	W03023.D	07/26/04	19:59	01:17	Initial cal 40
VW130-IC130	W03024.D	07/26/04	20:51	02:09	Initial cal 20
VW130-ICC130	W03025.D	07/26/04	21:43	03:01	Initial cal 10
VW130-IC130	W03026.D	07/26/04	22:35	03:53	Initial cal 5
VW130-IC130	W03027.D	07/27/04	01:34	06:52	Initial cal 2
VW130-IC130	W03030.D	07/27/04	04:11	09:29	Initial cal 0.2
VW130-IC130	W03033.D	07/27/04	06:48	12:06	Initial cal 0.5
VW130-BS	W03034.D	07/27/04	07:40	12:58	Blank Spike
VW130-BSD	W03035.D	07/27/04	08:32	13:50	Blank Spike Duplicate
VW130-MB	W03036.D	07/27/04	09:24	14:42	Method Blank
VW130-SCC	W03038.D	07/27/04	12:00	17:18	Summa Cleaning Certification
N71188-1	W03039.D	07/27/04	12:52	18:10	(used for QC only; not part of job N73853)
N71188-1DUP	W03040.D	07/27/04	13:44	19:02	Duplicate

Instrument Performance Check (BFB)

Job Number: N73853
Account: UTC United Technology Corporation
Project: LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT

Sample:	VW133-BFB	Injection Date:	08/04/04
Lab File ID:	W03147.D	Injection Time:	10:10
Instrument ID:	GCMSW		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	22499	18.2	Pass
75	30.0 - 60.0% of mass 95	57322	46.4	Pass
95	Base peak, 100% relative abundance	123659	100.0	Pass
96	5.0 - 9.0% of mass 95	8224	6.7	Pass
173	Less than 2.0% of mass 174	0	0.0 (a)	Pass
174	50.0 - 100.0% of mass 95	100443	81.2	Pass
175	5.0 - 9.0% of mass 174	7393	6.0 (a)	Pass
176	95.0 - 101.0% of mass 174	98485	79.6 (98.0)	Pass
177	5.0 - 9.0% of mass 176	6567	5.3 (6.7)	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VW133-IC133	W03148.D	08/04/04	11:02	00:52	Initial cal 40
VW133-IC133	W03149.D	08/04/04	11:55	01:45	Initial cal 20
VW133-IC133	W03151.D	08/04/04	13:39	03:29	Initial cal 5
VW133-ICC133	W03152.D	08/04/04	14:32	04:22	Initial cal 10
VW133-IC133	W03153.D	08/04/04	15:24	05:14	Initial cal 2
VW133-IC133	W03154.D	08/04/04	16:16	06:06	Initial cal 0.5
VW133-IC133	W03155.D	08/04/04	17:09	06:59	Initial cal 0.2
VW133-BS	W03158.D	08/04/04	19:59	09:49	Blank Spike
VW133-BSD	W03159.D	08/04/04	20:52	10:42	Blank Spike Duplicate

Instrument Performance Check (BFB)

Job Number: N73853
Account: UTC United Technology Corporation
Project: LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT

Sample:	VW133-BFB	Injection Date:	08/05/04
Lab File ID:	W03166.D	Injection Time:	09:35
Instrument ID:	GCMSW		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	37691	17.9	Pass
75	30.0 - 60.0% of mass 95	97728	46.5	Pass
95	Base peak, 100% relative abundance	210283	100.0	Pass
96	5.0 - 9.0% of mass 95	14107	6.7	Pass
173	Less than 2.0% of mass 174	0	0.0 (0.0) a	Pass
174	50.0 - 100.0% of mass 95	174037	82.8	Pass
175	5.0 - 9.0% of mass 174	12564	6.0 (7.2) a	Pass
176	95.0 - 101.0% of mass 174	168576	80.2 (96.9) a	Pass
177	5.0 - 9.0% of mass 176	11202	5.3 (6.6) b	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VW133-CC133	W03168.D	08/05/04	11:19	01:44	Continuing cal 10
VW133-MB	W03170.D	08/05/04	14:23	04:48	Method Blank
N73853-1	W03171.D	08/05/04	15:15	05:40	1051104
N73853-1DUP	W03172.D	08/05/04	16:07	06:32	Duplicate
N73853-2	W03173.D	08/05/04	17:00	07:25	1051113
N73853-3	W03174.D	08/05/04	17:52	08:17	1051111
N73853-5	W03176.D	08/05/04	19:38	10:03	1051105
N73853-6	W03177.D	08/05/04	20:30	10:55	1051103
N73853-7	W03178.D	08/05/04	21:23	11:48	1051101
N73853-8	W03179.D	08/05/04	22:16	12:41	1051109
N73853-3	W03180.D	08/05/04	23:06	13:31	1051111
N73853-4	W03181.D	08/05/04	23:59	14:24	1051122
N73853-2	W03182.D	08/06/04	00:52	15:17	1051113
N73853-8	W03183.D	08/06/04	01:45	16:10	1051109
N73853-9	W03184.D	08/06/04	02:37	17:02	1051106
N73853-13	W03185.D	08/06/04	03:30	17:55	1051100
N73853-15	W03186.D	08/06/04	04:23	18:48	1051099
N73853-11	W03187.D	08/06/04	05:16	19:41	1051119
N73853-12	W03188.D	08/06/04	06:08	20:33	1051118
N73853-14	W03189.D	08/06/04	07:01	21:26	1051117

Volatile Surrogate Recovery Summary

Job Number: N73853
Account: UTC United Technology Corporation
Project: LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT

Method: TO-15 Matrix: AIR

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1
N73853-1	W03171.D	116.0
N73853-2	W03182.D	109.0
N73853-2	Q22260.D	101.0
N73853-2	W03173.D	126.0
N73853-3	W03180.D	121.0
N73853-3	W03174.D	120.0
N73853-4	W03181.D	121.0
N73853-5	W03176.D	118.0
N73853-6	W03177.D	120.0
N73853-7	W03178.D	117.0
N73853-8	W03183.D	120.0
N73853-8	W03179.D	125.0
N73853-9	W03184.D	122.0
N73853-10	Q22256.D	100.0
N73853-10	Q22275.D	105.0
N73853-10	Q22255.D	104.0
N73853-11	W03187.D	120.0
N73853-12	Q22257.D	101.0
N73853-12	Q22276.D	104.0
N73853-12	W03188.D	121.0
N73853-13	W03185.D	120.0
N73853-14	Q22258.D	104.0
N73853-14	Q22277.D	106.0
N73853-14	W03189.D	133.0
N73853-15	W03186.D	119.0
N73853-16	Q22254.D	109.0
N73853-17	Q22252.D	100.0
N73853-1DUP	W03172.D	118.0
N74204-5DUP	Q22245.D	104.0
N74419-2DUP	Q22273.D	103.0
VQ877-SCC	Q22032.D	89.0
VQ886-BS	Q22241.D	106.0
VQ886-BSD	Q22242.D	102.0
VQ886-MB	Q22243.D	97.0
VQ887-BS	Q22267.D	105.0
VQ887-BSD	Q22268.D	106.0
VQ887-MB	Q22270.D	98.0
VW130-SCC	W03038.D	115.0
VW133-BS	W03158.D	108.0
VW133-BSD	W03159.D	104.0

Volatile Surrogate Recovery Summary

Job Number: N73853
Account: UTC United Technology Corporation
Project: LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT

Method: TO-15 Matrix: AIR

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1
VW133-MB	W03170.D	116.0
VQ877-MB	Q22017.D	86.0
VW130-MB	W03036.D	94.0

Surrogate Compounds	Recovery Limits
S1 = 4-Bromofluorobenzene	78-124%

(a) Outside control limits due to matrix interference. Confirmed by reanalysis.
(b) Outside control limits due to interference with non-target compound.

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Laboratories

08/18/04

Technical Report for

United Technology Corporation

LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT

UARP# LEA-07/19/04-BAC-01

Accutest Job Number: N73864

Sampling Date: 07/30/04

Report to:

Loureiro Engineering
100 Northwest Drive
Plainville, CT 06062

ATTN: Barbara Heemink

Total number of pages in report: 42

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Vincent J. Pugliese
President

Certifications: NJ(12129), NY(10983), CA, CT, DE, FL, MA, MD, NC, PA, RI, SC, VA

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Sample Summary

United Technology Corporation

Job No: N73864

LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT
Project No: UARP# LEA-07/19/04-BAC-01

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
N73864-1	07/30/04	13:30	MG	07/31/04	SO	Solid	EH-CC-MS

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Accutest Laboratories

Report of Analysis

Client Sample ID:	EH-CC-MS		
Lab Sample ID:	N73864-1	Date Sampled:	07/30/04
Matrix:	SO - Solid	Date Received:	07/31/04
Method:	SW846 8260B	Percent Solids:	90.8
Project:	LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	G72001.D	1	08/05/04	SJM	n/a	n/a	VG3763
Run #2 [a]	G72036.D	1	08/06/04	SJM	n/a	n/a	VG3765

	Initial Weight
Run #1	1.1 g
Run #2	0.50 g

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	59.3	50	7.2	ug/kg	
71-43-2	Benzene	ND	5.0	1.2	ug/kg	
75-27-4	Bromodichloromethane	ND	25	0.73	ug/kg	
75-25-2	Bromoform	ND	25	3.3	ug/kg	
74-83-9	Bromomethane	ND	25	5.0	ug/kg	
78-93-3	2-Butanone (MEK)	ND	50	22	ug/kg	
75-15-0	Carbon disulfide	ND	25	3.2	ug/kg	
56-23-5	Carbon tetrachloride	ND	25	5.6	ug/kg	
108-90-7	Chlorobenzene	ND	25	1.3	ug/kg	
75-00-3	Chloroethane	ND	25	5.1	ug/kg	
67-66-3	Chloroform	ND	25	2.2	ug/kg	
74-87-3	Chloromethane	ND	25	3.8	ug/kg	
124-48-1	Dibromochloromethane	ND	25	2.6	ug/kg	
75-34-3	1,1-Dichloroethane	ND	25	1.4	ug/kg	
107-06-2	1,2-Dichloroethane	ND	25	1.3	ug/kg	
75-35-4	1,1-Dichloroethene	ND	25	3.3	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	25	1.8	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	25	1.8	ug/kg	
78-87-5	1,2-Dichloropropane	ND	25	4.4	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	25	1.4	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	25	2.1	ug/kg	
100-41-4	Ethylbenzene	81.3	5.0	2.8	ug/kg	
591-78-6	2-Hexanone	ND	25	5.5	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	25	5.8	ug/kg	
75-09-2	Methylene chloride	ND	25	1.9	ug/kg	
100-42-5	Styrene	ND	25	1.6	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	25	1.7	ug/kg	
127-18-4	Tetrachloroethene	ND	25	2.1	ug/kg	
108-88-3	Toluene	3.6	5.0	1.1	ug/kg	J
71-55-6	1,1,1-Trichloroethane	ND	25	2.2	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	25	1.8	ug/kg	
79-01-6	Trichloroethene	ND	25	1.9	ug/kg	

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	EH-CC-MS		
Lab Sample ID:	N73864-1	Date Sampled:	07/30/04
Matrix:	SO - Solid	Date Received:	07/31/04
Method:	SW846 8260B	Percent Solids:	90.8
Project:	LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	ND	25	3.5	ug/kg	
1330-20-7	Xylene (total)	494	10	2.1	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	21%	31%	67-119%
17060-07-0	1,2-Dichloroethane-D4	62%	70%	58-128%
2037-26-5	Toluene-D8	87%	91%	75-121%
460-00-4	4-Bromofluorobenzene	90%	84%	67-132%

(a) Confirmation run.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	EH-CC-MS		
Lab Sample ID:	N73864-1	Date Sampled:	07/30/04
Matrix:	SO - Solid	Date Received:	07/31/04
Method:	SW846 8082 SW846 3545	Percent Solids:	90.8
Project:	LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AB48470.D	1	08/04/04	OYA	08/03/04	OP17598	GAB2297
Run #2							

	Initial Weight	Final Volume
Run #1	15.3 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	36	15	ug/kg	
11104-28-2	Aroclor 1221	ND	36	9.5	ug/kg	
11141-16-5	Aroclor 1232	ND	36	13	ug/kg	
53469-21-9	Aroclor 1242	ND	36	15	ug/kg	
12672-29-6	Aroclor 1248	ND	36	3.0	ug/kg	
11097-69-1	Aroclor 1254	ND	36	6.4	ug/kg	
11096-82-5	Aroclor 1260	350	36	14	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	74%		32-134%
877-09-8	Tetrachloro-m-xylene	35%		32-134%
2051-24-3	Decachlorobiphenyl	86%		22-154%
2051-24-3	Decachlorobiphenyl	57%		22-154%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	EH-CC-MS		
Lab Sample ID:	N73864-1	Date Sampled:	07/30/04
Matrix:	SO - Solid	Date Received:	07/31/04
		Percent Solids:	90.8
Project:	LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT		

Metals Analysis, TCLP Leachate SW846 1311

Analyte	Result	HW#	MCL	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	<0.50	D004	5.0	0.50	mg/l	1	08/10/04	08/13/04	ND	SW846 6010B [2]	SW846 3010A [4]
Barium	<1.0	D005	100	1.0	mg/l	1	08/10/04	08/13/04	ND	SW846 6010B [2]	SW846 3010A [4]
Cadmium	0.016	D006	1.0	0.0050	mg/l	1	08/10/04	08/13/04	ND	SW846 6010B [2]	SW846 3010A [4]
Chromium	<0.010	D007	5.0	0.010	mg/l	1	08/10/04	08/13/04	ND	SW846 6010B [2]	SW846 3010A [4]
Copper	0.025			0.025	mg/l	1	08/10/04	08/13/04	ND	SW846 6010B [2]	SW846 3010A [4]
Lead	<0.50	D008	5.0	0.50	mg/l	5	08/10/04	08/16/04	ND	SW846 6010B [3]	SW846 3010A [4]
Mercury	<0.00020	D009	0.20	0.00020	mg/l	1	08/11/04	08/12/04	WG	SW846 7470A [1]	SW846 7470A [5]
Nickel	0.10			0.040	mg/l	1	08/10/04	08/13/04	ND	SW846 6010B [2]	SW846 3010A [4]
Selenium	<0.50	D010	1.0	0.50	mg/l	1	08/10/04	08/13/04	ND	SW846 6010B [2]	SW846 3010A [4]
Silver	<0.010	D011	5.0	0.010	mg/l	1	08/10/04	08/13/04	ND	SW846 6010B [2]	SW846 3010A [4]
Zinc	0.30			0.020	mg/l	1	08/10/04	08/13/04	ND	SW846 6010B [2]	SW846 3010A [4]

(1) Instrument QC Batch: MA14274
(2) Instrument QC Batch: MA14285
(3) Instrument QC Batch: MA14293
(4) Prep QC Batch: MP26726
(5) Prep QC Batch: MP26766

RL = Reporting Limit
MCL = Maximum Contamination Level (40 CFR 261 6/96)

Accutest Laboratories

Report of Analysis

Client Sample ID:	EH-CC-MS		
Lab Sample ID:	N73864-1	Date Sampled:	07/30/04
Matrix:	SO - Solid	Date Received:	07/31/04
		Percent Solids:	90.8
Project:	LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Cyanide [a]	< 1.1	1.1	mg/kg	1	08/07/04 11:43	JH	SW846 9012 M
Solids, Percent	90.8		%	1	08/04/04	ADP	ASTM 4643-00

(a) Blank spike recovery of 85.4% indicates possible slight low bias. Good recovery on 2nd blank spike (94.6%) and on the matrix spike (93.1%) on this sample.The result was confirmed at reanalysis.

RL = Reporting Limit

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- **Chain of Custody**

CHAIN OF CUSTODY

ACCUTEST Laboratories

2235 Route 130, Dayton NJ 08810
TEL. 732-329-0200 FAX: 732-329-3499/3480
www.accutest.com

FED-EX Tracking #:
Bottle Order Control #:
Accutest Quote #:
Accutest Job #: N73864

Client / Reporting Information

Company Name: LEA
Address: 100 Northwest Drive
City: Plainville State: CT Zip: 06062
Project Contact: Barbara Heemink E-mail:
Phone #: 860-747-6181
Sampler's Name: Michael Gaughan

Project Information

Project Name: PrW East Hartford Indoor Air
Street: 400 Main St
City: East Hartford State: CT
Project #: 88UT406.003
Fax #:
Client Purchase Order #:

Requested Analysis

Accutest Sample #	Field ID / Point of Collection	SUMMA # / MEOH Vial #	Collection Date	Time	Sampled By	Matrix	# of bottles	Number of preserved Bottles	VOCs 8260B TCL	TCLP Metals RCRA 8 + Cu, Ni, Zn	PCBs	Cyanide				Lab Use Only
	1051108		7/30/04	1013	MG	SOL	1		X	X	X	X				
	1051110		7/30/04	1036	MG	SOL	1		X	X	X	X				EX07
	1051112		7/30/04	1057	MG	SOL	1		X	X	X	X				15C2
	1051114		7/30/04	1124	MG	SOL	1		X	X	X	X				
	1051116	SAMPLE ID =	7/30/04	1154	MG	SOL	1		X	X	X	X				
	1051120	EH-CC-MS	7/30/04	1230	MG	SOL	1		X	X	X	X				
	1051121		7/30/04	1250	MG	SOL	1		X	X	X	X				
	1051123		7/30/04	1330	MG	SOL	1		X	X	X	X				

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Water; SW - Surface Water; SO - Soil; SL - Sludge; OL - Oil; LIQ - Other Liquid; AIR - Air; SOL - Other Solid; WIPE - Wipe

Turnaround Time (Business Days)

- [x] Std. 15 Business Days
- [ ] 10 Day RUSH
- [ ] 5 Day RUSH
- [ ] 3 Day EMERGENCY
- [ ] 2 Day EMERGENCY
- [ ] 1 Day EMERGENCY
- [ ] Other

Approved By: / Date:

Emergency & Rush T/A data available VIA LabLink

Data Deliverable Information

- [ ] Commercial "A"
- [x] Commercial "B"
- [ ] NJ Reduced
- [ ] NJ Full
- [ ] Other
- [ ] FULL CLP
- [ ] NYASP Category A
- [ ] NYASP Category B
- [ ] State Forms
- [x] EDD Format

Commercial "A" = Results Only

V8260TCL per B. Heemink - D. Kerr 8/2

Comments / Remarks

~~Sample ID's 1051108 through 1051123 shall be analyzed as a single composite sample.~~ MG

Sample # 1051108, 1051110, 1051112, 1051114, 1051116, 1051120, 1051121 and 1051123 to be analyzed as a single composite sample.

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler	Date Time: 7/30/04 1910	Received by: FedX	Relinquished by: FedX	Date Time: 7/31/04 1030	Received by:
Relinquished by:	Date Time:	Received by:	Relinquished by:	Date Time:	Received by:
Relinquished by:	Date Time:	Received by:	Custody Seal #	Preserved where applicable ☐	On Ice ☐ Cooler Temp 4

1B

TR

3.1 3

N73864: Chain of Custody
Page 1 of 1

GC/MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Instrument Performance Checks (BFB)
- Surrogate Recovery Summaries

Method Blank Summary

Job Number: N73864
Account: UTC United Technology Corporation
Project: LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VG3763-MB1	G71987.D	1	08/05/04	SJM	n/a	n/a	VG3763

The QC reported here applies to the following samples: Method: SW846 8260B

N73864-1

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	1.4	ug/kg	
71-43-2	Benzene	ND	1.0	0.24	ug/kg	
75-27-4	Bromodichloromethane	ND	5.0	0.15	ug/kg	
75-25-2	Bromoform	ND	5.0	0.65	ug/kg	
74-83-9	Bromomethane	ND	5.0	1.0	ug/kg	
78-93-3	2-Butanone (MEK)	ND	10	4.4	ug/kg	
75-15-0	Carbon disulfide	ND	5.0	0.65	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.0	1.1	ug/kg	
108-90-7	Chlorobenzene	ND	5.0	0.25	ug/kg	
75-00-3	Chloroethane	ND	5.0	1.0	ug/kg	
67-66-3	Chloroform	ND	5.0	0.44	ug/kg	
74-87-3	Chloromethane	ND	5.0	0.75	ug/kg	
124-48-1	Dibromochloromethane	ND	5.0	0.52	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.0	0.29	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.0	0.26	ug/kg	
75-35-4	1,1-Dichloroethene	ND	5.0	0.66	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	5.0	0.37	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	5.0	0.36	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.0	0.88	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	0.29	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	0.43	ug/kg	
100-41-4	Ethylbenzene	ND	1.0	0.57	ug/kg	
591-78-6	2-Hexanone	ND	5.0	1.1	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.2	ug/kg	
75-09-2	Methylene chloride	ND	5.0	0.37	ug/kg	
100-42-5	Styrene	ND	5.0	0.32	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	0.34	ug/kg	
127-18-4	Tetrachloroethene	ND	5.0	0.43	ug/kg	
108-88-3	Toluene	ND	1.0	0.23	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.0	0.44	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.0	0.36	ug/kg	
79-01-6	Trichloroethene	ND	5.0	0.38	ug/kg	
75-01-4	Vinyl chloride	ND	5.0	0.69	ug/kg	
1330-20-7	Xylene (total)	ND	2.0	0.42	ug/kg	

Method Blank Summary

Job Number: N73864
Account: UTC United Technology Corporation
Project: LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VG3763-MB1	G71987.D	1	08/05/04	SJM	n/a	n/a	VG3763

The QC reported here applies to the following samples: Method: SW846 8260B

N73864-1

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	78%	67-119%
17060-07-0	1,2-Dichloroethane-D4	59%	58-128%
2037-26-5	Toluene-D8	89%	75-121%
460-00-4	4-Bromofluorobenzene	93%	67-132%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
124-38-9	Carbon dioxide	2.78	47	ug/kg	JN
	Total TIC, Volatile		47	ug/kg	J

Blank Spike Summary

Job Number: N73864
Account: UTC United Technology Corporation
Project: LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VG3763-BS	G71988.D	1	08/05/04	SJM	n/a	n/a	VG3763

The QC reported here applies to the following samples: Method: SW846 8260B

N73864-1

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
67-64-1	Acetone	50	44.4	89	49-151
71-43-2	Benzene	50	54.6	109	80-116
75-27-4	Bromodichloromethane	50	44.4	89	81-123
75-25-2	Bromoform	50	45.0	90	79-129
74-83-9	Bromomethane	50	52.8	106	63-130
78-93-3	2-Butanone (MEK)	50	38.8	78	59-137
75-15-0	Carbon disulfide	50	49.6	99	59-130
56-23-5	Carbon tetrachloride	50	40.7	81	69-134
108-90-7	Chlorobenzene	50	53.9	108	84-116
75-00-3	Chloroethane	50	57.4	115	65-133
67-66-3	Chloroform	50	44.8	90	78-119
74-87-3	Chloromethane	50	59.8	120	60-131
124-48-1	Dibromochloromethane	50	47.5	95	82-124
75-34-3	1,1-Dichloroethane	50	46.7	93	77-121
107-06-2	1,2-Dichloroethane	50	43.0	86	74-131
75-35-4	1,1-Dichloroethene	50	53.4	107	71-123
156-59-2	cis-1,2-Dichloroethene	50	50.0	100	77-119
156-60-5	trans-1,2-Dichloroethene	50	50.7	101	73-119
78-87-5	1,2-Dichloropropane	50	50.8	102	82-119
10061-01-5	cis-1,3-Dichloropropene	50	46.4	93	82-120
10061-02-6	trans-1,3-Dichloropropene	50	45.5	91	80-123
100-41-4	Ethylbenzene	50	48.8	98	81-118
591-78-6	2-Hexanone	50	40.9	82	63-142
108-10-1	4-Methyl-2-pentanone(MIBK)	50	47.9	96	75-133
75-09-2	Methylene chloride	50	51.7	103	77-119
100-42-5	Styrene	50	54.3	109	82-126
79-34-5	1,1,2,2-Tetrachloroethane	50	55.4	111	77-122
127-18-4	Tetrachloroethene	50	51.2	102	71-126
108-88-3	Toluene	50	53.6	107	82-118
71-55-6	1,1,1-Trichloroethane	50	42.2	84	74-127
79-00-5	1,1,2-Trichloroethane	50	49.7	99	84-119
79-01-6	Trichloroethene	50	46.7	93	80-119
75-01-4	Vinyl chloride	50	58.9	118	66-131
1330-20-7	Xylene (total)	150	157	105	83-119

Blank Spike Summary

Job Number: N73864
Account: UTC United Technology Corporation
Project: LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VG3763-BS	G71988.D	1	08/05/04	SJM	n/a	n/a	VG3763

The QC reported here applies to the following samples: Method: SW846 8260B

N73864-1

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	97%	67-119%
17060-07-0	1,2-Dichloroethane-D4	86%	58-128%
2037-26-5	Toluene-D8	102%	75-121%
460-00-4	4-Bromofluorobenzene	97%	67-132%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: N73864
Account: UTC United Technology Corporation
Project: LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
N73236-1MS	G71995.D	1	08/05/04	SJM	n/a	n/a	VG3763
N73236-1MSD	G71996.D	1	08/05/04	SJM	n/a	n/a	VG3763
N73236-1	G71989.D	1	08/05/04	SJM	n/a	n/a	VG3763

The QC reported here applies to the following samples: Method: SW846 8260B

N73864-1

CAS No.	Compound	N73236-1 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		65.3	39.9	61	40.7	62	2	24-179/40
71-43-2	Benzene	ND		65.3	59.0	90	59.3	91	1	52-132/19
75-27-4	Bromodichloromethane	ND		65.3	54.1	83	54.7	84	1	53-137/17
75-25-2	Bromoform	ND		65.3	53.2	81	55.2	84	4	48-139/21
74-83-9	Bromomethane	ND		65.3	61.0	93	62.6	96	3	1-144/40
78-93-3	2-Butanone (MEK)	ND		65.3	43.0	66	43.9	67	2	34-165/31
75-15-0	Carbon disulfide	ND		65.3	45.1	69	47.0	72	4	34-141/21
56-23-5	Carbon tetrachloride	ND		65.3	44.1	68	43.8	67	1	41-146/19
108-90-7	Chlorobenzene	ND		65.3	59.6	91	57.5	88	4	47-138/22
75-00-3	Chloroethane	ND		65.3	62.2	95	65.5	100	5	2-139/38
67-66-3	Chloroform	ND		65.3	54.6	84	54.4	83	0	56-130/16
74-87-3	Chloromethane	ND		65.3	56.8	87	59.9	92	5	45-134/23
124-48-1	Dibromochloromethane	ND		65.3	60.9	93	59.9	92	2	53-138/20
75-34-3	1,1-Dichloroethane	ND		65.3	54.1	83	53.7	82	1	57-131/15
107-06-2	1,2-Dichloroethane	ND		65.3	51.8	79	51.6	79	0	54-135/16
75-35-4	1,1-Dichloroethene	ND		65.3	51.2	78	52.4	80	2	47-138/17
156-59-2	cis-1,2-Dichloroethene	ND		65.3	60.0	92	61.3	94	2	55-132/16
156-60-5	trans-1,2-Dichloroethene	ND		65.3	54.7	84	55.3	85	1	50-133/16
78-87-5	1,2-Dichloropropane	ND		65.3	58.7	90	59.1	90	1	59-131/16
10061-01-5	cis-1,3-Dichloropropene	ND		65.3	56.4	86	57.4	88	2	51-136/18
10061-02-6	trans-1,3-Dichloropropene	ND		65.3	54.2	83	55.6	85	3	49-138/19
100-41-4	Ethylbenzene	ND		65.3	51.4	79	49.5	76	4	39-144/23
591-78-6	2-Hexanone	ND		65.3	41.1	63	40.3	62	2	31-169/28
108-10-1	4-Methyl-2-pentanone(MIBK)	ND		65.3	63.7	98	66.0	101	4	49-144/27
75-09-2	Methylene chloride	ND		65.3	61.6	94	61.9	95	0	57-131/16
100-42-5	Styrene	ND		65.3	57.4	88	59.6	91	4	40-152/24
79-34-5	1,1,2,2-Tetrachloroethane	ND		65.3	66.3	101	66.3	101	0	43-139/31
127-18-4	Tetrachloroethene	ND		65.3	57.4	88	55.9	86	3	37-159/37
108-88-3	Toluene	ND		65.3	56.6	87	59.1	90	4	46-140/20
71-55-6	1,1,1-Trichloroethane	ND		65.3	46.8	72	47.5	73	1	48-139/17
79-00-5	1,1,2-Trichloroethane	ND		65.3	63.4	97	65.3	100	3	56-136/18
79-01-6	Trichloroethene	ND		65.3	51.9	79	51.4	79	1	46-143/19
75-01-4	Vinyl chloride	ND		65.3	57.8	88	59.9	92	4	49-136/20
1330-20-7	Xylene (total)	ND		196	163	83	165	84	1	40-145/24

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: N73864
Account: UTC United Technology Corporation
Project: LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
N73236-1MS	G71995.D	1	08/05/04	SJM	n/a	n/a	VG3763
N73236-1MSD	G71996.D	1	08/05/04	SJM	n/a	n/a	VG3763
N73236-1	G71989.D	1	08/05/04	SJM	n/a	n/a	VG3763

The QC reported here applies to the following samples: Method: SW846 8260B

N73864-1

CAS No.	Surrogate Recoveries	MS	MSD	N73236-1	Limits
1868-53-7	Dibromofluoromethane	84%	86%	79%	67-119%
17060-07-0	1,2-Dichloroethane-D4	74%	75%	64%	58-128%
2037-26-5	Toluene-D8	90%	90%	88%	75-121%
460-00-4	4-Bromofluorobenzene	79%	80%	88%	67-132%

Instrument Performance Check (BFB)

Job Number: N73864
Account: UTC United Technology Corporation
Project: LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT

Sample:	VG3742-BFB1	Injection Date:	07/19/04
Lab File ID:	G71533.D	Injection Time:	10:06
Instrument ID:	GCMSG		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	9599	23.2	Pass
75	30.0 - 60.0% of mass 95	21016	50.9	Pass
95	Base peak, 100% relative abundance	41328	100.0	Pass
96	5.0 - 9.0% of mass 95	2885	7.0	Pass
173	Less than 2.0% of mass 174	0	0.0 (0.0) [a]	Pass
174	50.0 - 150.0% of mass 95	30565	74.0	Pass
175	5.0 - 9.0% of mass 174	2610	6.3 (8.5) [a]	Pass
176	95.0 - 101.0% of mass 174	30133	72.9 (98.6) [a]	Pass
177	5.0 - 9.0% of mass 176	2270	5.5 (7.5) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VG3742-IC3742	G71534.D	07/19/04	10:58	00:52	Initial cal 1
VG3742-IC3742	G71535.D	07/19/04	11:38	01:32	Initial cal 5
VG3742-IC3742	G71536.D	07/19/04	12:14	02:08	Initial cal 10
VG3742-ICC3742	G71537.D	07/19/04	12:51	02:45	Initial cal 50
VG3742-IC3742	G71538.D	07/19/04	13:28	03:22	Initial cal 100
VG3742-IC3742	G71539.D	07/19/04	14:10	04:04	Initial cal 200
VG3742-IC3742	G71540.D	07/19/04	14:50	04:44	Initial cal 400

Instrument Performance Check (BFB)

Job Number: N73864
Account: UTC United Technology Corporation
Project: LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT

Sample:	VG3763-BFB1	Injection Date:	08/05/04
Lab File ID:	G71983.D	Injection Time:	11:36
Instrument ID:	GCMSG		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	11916	22.1	Pass
75	30.0 - 60.0% of mass 95	25435	47.3	Pass
95	Base peak, 100% relative abundance	53811	100.0	Pass
96	5.0 - 9.0% of mass 95	4071	7.6	Pass
173	Less than 2.0% of mass 174	0	0.0 (0.0) [a]	Pass
174	50.0 - 150.0% of mass 95	43211	80.3	Pass
175	5.0 - 9.0% of mass 174	3725	6.9 (8.6) [a]	Pass
176	95.0 - 101.0% of mass 174	42101	78.2 (97.4) [a]	Pass
177	5.0 - 9.0% of mass 176	2942	5.5 (7.0) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VG3763-CC3742	G71985.D	08/05/04	13:18	01:42	Continuing cal 100
VG3763-MB1	G71987.D	08/05/04	14:46	03:10	Method Blank
VG3763-BS	G71988.D	08/05/04	15:24	03:48	Blank Spike
N73236-1	G71989.D	08/05/04	16:00	04:24	(used for QC only; not part of job N73864)
ZZZZZZ	G71990.D	08/05/04	16:37	05:01	(unrelated sample)
ZZZZZZ	G71991.D	08/05/04	17:12	05:36	(unrelated sample)
ZZZZZZ	G71992.D	08/05/04	17:48	06:12	(unrelated sample)
ZZZZZZ	G71993.D	08/05/04	18:24	06:48	(unrelated sample)
ZZZZZZ	G71994.D	08/05/04	18:59	07:23	(unrelated sample)
N73236-1MS	G71995.D	08/05/04	19:35	07:59	Matrix Spike
N73236-1MSD	G71996.D	08/05/04	20:11	08:35	Matrix Spike Duplicate
ZZZZZZ	G71997.D	08/05/04	20:46	09:10	(unrelated sample)
ZZZZZZ	G71998.D	08/05/04	21:22	09:46	(unrelated sample)
ZZZZZZ	G71999.D	08/05/04	21:58	10:22	(unrelated sample)
ZZZZZZ	G72000.D	08/05/04	22:34	10:58	(unrelated sample)
N73864-1	G72001.D	08/05/04	23:10	11:34	EH-CC-MS

Instrument Performance Check (BFB)

Job Number: N73864
Account: UTC United Technology Corporation
Project: LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT

Sample:	VG3765-BFB1	Injection Date:	08/06/04
Lab File ID:	G72023.D	Injection Time:	12:40
Instrument ID:	GCMSG		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	8332	21.8		Pass
75	30.0 - 60.0% of mass 95	18227	47.7		Pass
95	Base peak, 100% relative abundance	38248	100.0		Pass
96	5.0 - 9.0% of mass 95	2794	7.3		Pass
173	Less than 2.0% of mass 174	0	0.0	(0.0) [a]	Pass
174	50.0 - 150.0% of mass 95	28491	74.5		Pass
175	5.0 - 9.0% of mass 174	2502	6.5	(8.8) [a]	Pass
176	95.0 - 101.0% of mass 174	27744	72.5	(97.4) [a]	Pass
177	5.0 - 9.0% of mass 176	2021	5.3	(7.3) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VG3765-CC3742	G72024.D	08/06/04	13:27	00:47	Continuing cal 100
VG3765-MB1	G72026.D	08/06/04	14:53	02:13	Method Blank
VG3765-BS	G72027.D	08/06/04	15:34	02:54	Blank Spike
ZZZZZZ	G72028.D	08/06/04	16:09	03:29	(unrelated sample)
ZZZZZZ	G72029.D	08/06/04	16:46	04:06	(unrelated sample)
ZZZZZZ	G72030.D	08/06/04	17:21	04:41	(unrelated sample)
N73785-3	G72031.D	08/06/04	17:57	05:17	(used for QC only; not part of job N73864)
N73785-3MS	G72032.D	08/06/04	18:33	05:53	Matrix Spike
N73785-3MSD	G72033.D	08/06/04	19:08	06:28	Matrix Spike Duplicate
ZZZZZZ	G72034.D	08/06/04	19:44	07:04	(unrelated sample)
ZZZZZZ	G72035.D	08/06/04	20:19	07:39	(unrelated sample)
N73864-1	G72036.D	08/06/04	20:54	08:14	EH-CC-MS
ZZZZZZ	G72037.D	08/06/04	21:30	08:50	(unrelated sample)
ZZZZZZ	G72038.D	08/06/04	22:05	09:25	(unrelated sample)
ZZZZZZ	G72039.D	08/06/04	22:40	10:00	(unrelated sample)
ZZZZZZ	G72040.D	08/06/04	23:16	10:36	(unrelated sample)
ZZZZZZ	G72041.D	08/06/04	23:52	11:12	(unrelated sample)

Volatile Surrogate Recovery Summary

Job Number: N73864
Account: UTC United Technology Corporation
Project: LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT

Method: SW846 8260B Matrix: SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4
N73864-1	G72036.D	31.0*	70.0	91.0	84.0
N73864-1	G72001.D	21.0*	62.0	87.0	90.0
N73236-1MS	G71995.D	84.0	74.0	90.0	79.0
N73236-1MSD	G71996.D	86.0	75.0	90.0	80.0
VG3763-BS	G71988.D	97.0	86.0	102.0	97.0
VG3763-MB1	G71987.D	78.0	59.0	89.0	93.0

Surrogate Compounds	Recovery Limits
S1 = Dibromofluoromethane	67-119%
S2 = 1,2-Dichloroethane-D4	58-128%
S3 = Toluene-D8	75-121%
S4 = 4-Bromofluorobenzene	67-132%

GC Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries

Method Blank Summary

Job Number: N73864
Account: UTC United Technology Corporation
Project: LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP17598-MB2	AB48468.D	1	08/04/04	OYA	08/03/04	OP17598	GAB2297

The QC reported here applies to the following samples: Method: SW846 8082

N73864-1

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	33	14	ug/kg	
11104-28-2	Aroclor 1221	ND	33	8.8	ug/kg	
11141-16-5	Aroclor 1232	ND	33	12	ug/kg	
53469-21-9	Aroclor 1242	ND	33	14	ug/kg	
12672-29-6	Aroclor 1248	ND	33	2.8	ug/kg	
11097-69-1	Aroclor 1254	ND	33	5.9	ug/kg	
11096-82-5	Aroclor 1260	ND	33	13	ug/kg	

CAS No.	Surrogate Recoveries		Limits
877-09-8	Tetrachloro-m-xylene	85%	32-134%
877-09-8	Tetrachloro-m-xylene	91%	32-134%
2051-24-3	Decachlorobiphenyl	100%	22-154%
2051-24-3	Decachlorobiphenyl	102%	22-154%

Method Blank Summary

Job Number: N73864
Account: UTC United Technology Corporation
Project: LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP17598-MB2	EF53196.D	1	08/04/04	OYA	08/03/04	OP17598	GEF2569

The QC reported here applies to the following samples: Method: SW846 8082

N73864-1

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	33	14	ug/kg	
11104-28-2	Aroclor 1221	ND	33	8.8	ug/kg	
11141-16-5	Aroclor 1232	ND	33	12	ug/kg	
53469-21-9	Aroclor 1242	ND	33	14	ug/kg	
12672-29-6	Aroclor 1248	ND	33	2.8	ug/kg	
11097-69-1	Aroclor 1254	ND	33	5.9	ug/kg	
11096-82-5	Aroclor 1260	ND	33	13	ug/kg	

CAS No.	Surrogate Recoveries		Limits
877-09-8	Tetrachloro-m-xylene	85%	32-134%
877-09-8	Tetrachloro-m-xylene	94%	32-134%
2051-24-3	Decachlorobiphenyl	100%	22-154%
2051-24-3	Decachlorobiphenyl	103%	22-154%

Method Blank Summary

Job Number: N73864
Account: UTC United Technology Corporation
Project: LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP17598-MB1	EF53136.D	1	08/02/04	OYA	07/31/04	OP17598	GEF2567

The QC reported here applies to the following samples: Method: SW846 8082

OP17598-MS, OP17598-MSD

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	33	14	ug/kg	
11104-28-2	Aroclor 1221	ND	33	8.8	ug/kg	
11141-16-5	Aroclor 1232	ND	33	12	ug/kg	
53469-21-9	Aroclor 1242	ND	33	14	ug/kg	
12672-29-6	Aroclor 1248	ND	33	2.8	ug/kg	
11097-69-1	Aroclor 1254	ND	33	5.9	ug/kg	
11096-82-5	Aroclor 1260	ND	33	13	ug/kg	

CAS No.	Surrogate Recoveries		Limits
877-09-8	Tetrachloro-m-xylene	94%	32-134%
877-09-8	Tetrachloro-m-xylene	103%	32-134%
2051-24-3	Decachlorobiphenyl	86%	22-154%
2051-24-3	Decachlorobiphenyl	89%	22-154%

Blank Spike Summary

Job Number: N73864
Account: UTC United Technology Corporation
Project: LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP17598-BS2	AB48469.D	1	08/04/04	OYA	08/03/04	OP17598	GAB2297

The QC reported here applies to the following samples: Method: SW846 8082

N73864-1

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
12674-11-2	Aroclor 1016	133	152	114	78-133
11104-28-2	Aroclor 1221		ND		70-130
11141-16-5	Aroclor 1232		ND		70-130
53469-21-9	Aroclor 1242		ND		70-130
12672-29-6	Aroclor 1248		ND		70-130
11097-69-1	Aroclor 1254		ND		70-130
11096-82-5	Aroclor 1260	133	155	116	74-135

CAS No.	Surrogate Recoveries	BSP	Limits
877-09-8	Tetrachloro-m-xylene	91%	32-134%
877-09-8	Tetrachloro-m-xylene	92%	32-134%
2051-24-3	Decachlorobiphenyl	105%	22-154%
2051-24-3	Decachlorobiphenyl	107%	22-154%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: N73864
Account: UTC United Technology Corporation
Project: LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP17598-MS	EF53148.D	1	08/02/04	OYA	07/31/04	OP17598	GEF2567
OP17598-MSD	EF53149.D	1	08/02/04	OYA	07/31/04	OP17598	GEF2567
N73743-1	EF53150.D	1	08/02/04	OYA	07/31/04	OP17598	GEF2567

The QC reported here applies to the following samples: Method: SW846 8082

N73864-1

CAS No.	Compound	N73743-1 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
12674-11-2	Aroclor 1016	ND		138	99.0	72	99.8	73	1	49-150/33
11104-28-2	Aroclor 1221	ND			ND		ND		nc	70-130/10
11141-16-5	Aroclor 1232	ND			ND		ND		nc	70-130/10
53469-21-9	Aroclor 1242	ND			ND		ND		nc	70-130/11
12672-29-6	Aroclor 1248	ND			ND		ND		nc	70-130/12
11097-69-1	Aroclor 1254	ND			ND		ND		nc	70-130/19
11096-82-5	Aroclor 1260	ND		138	117	85	121	88	3	37-149/37

CAS No.	Surrogate Recoveries	MS	MSD	N73743-1	Limits
877-09-8	Tetrachloro-m-xylene	60%	60%	60%	32-134%
877-09-8	Tetrachloro-m-xylene	56%	57%	58%	32-134%
2051-24-3	Decachlorobiphenyl	101%	106%	109%	22-154%
2051-24-3	Decachlorobiphenyl	96%	99%	106%	22-154%

Semivolatile Surrogate Recovery Summary

Job Number: N73864
Account: UTC United Technology Corporation
Project: LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT

Method: SW846 8082 Matrix: SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]	S1 [b]	S2 [a]	S2 [b]
N73864-1	AB48470.D	74.0	35.0	86.0	57.0
OP17598-BS2	AB48469.D	91.0	92.0	105.0	107.0
OP17598-MB2	AB48468.D	85.0	91.0	100.0	102.0
OP17598-MB2	EF53196.D	85.0	94.0	100.0	103.0
OP17598-MS	EF53148.D	60.0	56.0	101.0	96.0
OP17598-MSD	EF53149.D	60.0	57.0	106.0	99.0
OP17598-MB1	EF53136.D	94.0	103.0	86.0	89.0

Surrogate Compounds	Recovery Limits
S1 = Tetrachloro-m-xylene	32-134%
S2 = Decachlorobiphenyl	22-154%

(a) Recovery from GC signal #1
(b) Recovery from GC signal #2

Metals Analysis

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: N73864
Account: UTC - United Technology Corporation
Project: LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT

QC Batch ID: MP26726
Matrix Type: LEACHATE

Methods: SW846 6010B
Units: mg/l

Prep Date: 08/10/04

Metal	RL	IDL	MB raw	final
Aluminum	0.20	.0099		
Antimony	0.20	.0032		
Arsenic	0.50	.0026	0.0062	<0.50
Barium	1.0	.0004	0.0072	<1.0
Beryllium	0.0050	.0001		
Boron	0.10	.0013		
Cadmium	0.0050	.0003	0.00016	<0.0050
Calcium	5.0	.0091		
Chromium	0.010	.0008	0.00059	<0.010
Cobalt	0.050	.0007		
Copper	0.025	.0009	0.0051	<0.025
Iron	0.10	.018		
Lead	0.50	.0014	0.0041	<0.50
Magnesium	5.0	.0087		
Manganese	0.015	.0002		
Molybdenum	0.010	.0011		
Nickel	0.040	.0011	-0.00017	<0.040
Palladium	0.010	.0023		
Potassium	5.0	.011		
Selenium	0.50	.0018	0.0075	<0.50
Silicon	0.20	.0077		
Silver	0.010	.0006	-0.00057	<0.010
Sodium	5.0	.11		
Strontium	0.010	.0004		
Thallium	0.20	.0045		
Tin	0.010	.0016		
Titanium	0.010	.0003		
Vanadium	0.050	.0005		
Zinc	0.020	.0009	0.0083	<0.020

Associated samples MP26726: N73864-1

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: N73864
Account: UTC - United Technology Corporation
Project: LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT

QC Batch ID: MP26726
Matrix Type: LEACHATE

Methods: SW846 6010B
Units: mg/l

Prep Date: 08/10/04

Metal	N73864-1 Original	MS	Spikelot MPITCLP1	% Rec	QC Limits
Aluminum					
Antimony					
Arsenic	0.010	1.9	2.0	94.5	75-125
Barium	0.67	10.7	10.0	100.3	75-125
Beryllium					
Cadmium	0.016	0.063	0.050	94.0	75-125
Calcium					
Chromium	0.0015	0.18	0.20	89.3	75-125
Cobalt					
Copper	0.025	0.29	0.25	103.2	75-125
Iron					
Lead	0.057	2.0	2.0	97.2	75-125
Magnesium					
Manganese					
Molybdenum					
Nickel	0.10	0.57	0.50	92.0	75-125
Palladium					
Potassium					
Selenium	0.0082	2.0	2.0	99.5	75-125
Silicon					
Silver	0.0	0.050	0.050	100.0	75-125
Sodium					
Thallium					
Tin					
Vanadium					
Zinc	0.30	0.77	0.50	86.0	75-125

Associated samples MP26726: N73864-1

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: N73864
Account: UTC - United Technology Corporation
Project: LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT

QC Batch ID: MP26726
Matrix Type: LEACHATE

Methods: SW846 6010B
Units: mg/l

Prep Date: 08/10/04

Metal	N73864-1 Original	MSD	Spikelot MPITCLP1	% Rec	MSD RPD	QC Limit
Aluminum						
Antimony						
Arsenic	0.010	1.9	2.0	94.5	0.0	20
Barium	0.67	10.6	10.0	99.3	0.9	20
Beryllium						
Cadmium	0.016	0.062	0.050	92.0	1.6	20
Calcium						
Chromium	0.0015	0.18	0.20	89.3	0.0	20
Cobalt						
Copper	0.025	0.29	0.25	103.2	0.0	20
Iron						
Lead	0.057	2.0	2.0	97.2	0.0	20
Magnesium						
Manganese						
Molybdenum						
Nickel	0.10	0.56	0.50	90.0	1.8	20
Palladium						
Potassium						
Selenium	0.0082	1.9	2.0	94.5	5.1	20
Silicon						
Silver	0.0	0.049	0.050	98.0	4.0	20
Sodium						
Thallium						
Tin						
Vanadium						
Zinc	0.30	0.75	0.50	82.0	2.6	20

Associated samples MP26726: N73864-1

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: N73864
Account: UTC - United Technology Corporation
Project: LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT

QC Batch ID: MP26726
Matrix Type: LEACHATE

Methods: SW846 6010B
Units: mg/l

Prep Date:			08/11/04				08/10/04	
Metal	LCS Result	Spikelot MPLCW2	% Rec	QC Limits	BSP Result	Spikelot MPITCLP1	% Rec	QC Limits
Aluminum								
Antimony								
Arsenic	0.49	0.50	98.0	80-120	2.0	2.0	100.0	80-120
Barium	0.50	0.50	100.0	80-120	9.9	10.	99.0	80-120
Beryllium								
Boron								
Cadmium	0.50	0.50	100.0	80-120	0.051	0.050	102.0	80-120
Calcium								
Chromium	0.50	0.50	100.0	80-120	0.20	0.20	100.0	80-120
Cobalt								
Copper					0.25	0.25	100.0	80-120
Iron								
Lead	0.50	0.50	100.0	80-120	2.0	2.0	100.0	80-120
Magnesium								
Manganese								
Molybdenum								
Nickel					0.50	0.50	100.0	80-120
Palladium								
Potassium								
Selenium	0.46	0.50	92.0	80-120	2.0	2.0	100.0	80-120
Silicon								
Silver	0.19	0.20	95.0	80-120	0.048	0.050	96.0	80-120
Sodium								
Strontium								
Thallium								
Tin								
Titanium								
Vanadium								
Zinc					0.51	0.50	102.0	80-120

Associated samples MP26726: N73864-1

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: N73864
Account: UTC - United Technology Corporation
Project: LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT

QC Batch ID: MP26726
Matrix Type: LEACHATE

Methods: SW846 6010B
Units: ug/l

Prep Date: 08/10/04

Metal	N73864-1 Original	SDL 1:5	RPD	QC Limits
Aluminum				
Antimony				
Arsenic	9.97	0.00	100.0(a)	0-10
Barium	672	693	3.1	0-10
Beryllium				
Cadmium	16.1	19.4	20.4*(b)	0-10
Calcium				
Chromium	1.45	6.21	328.3(a)	0-10
Cobalt				
Copper	25.3	31.3	2.2	0-10
Iron				
Lead	56.6	0.00	100.0(a)	0-10
Magnesium				
Manganese				
Molybdenum				
Nickel	103	113	0.8	0-10
Palladium				
Potassium				
Selenium	8.23	12.1	10.4 (a)	0-10
Silicon				
Silver	0.00	0.00	NC	0-10
Sodium				
Thallium				
Tin				
Vanadium				
Zinc	305	344	1.7	0-10

Associated samples MP26726: N73864-1

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested
(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).
(b) Serial dilution indicates possible matrix interference.

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: N73864
Account: UTC - United Technology Corporation
Project: LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT

QC Batch ID: MP26766
Matrix Type: LEACHATE

Methods: SW846 7470A
Units: mg/l

Prep Date: 08/11/04

Metal	RL	IDL	MB raw	final
Mercury	0.00020	.000045	0.000056	<0.00020

Associated samples MP26766: N73864-1

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

6.2.1

6

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: N73864
Account: UTC - United Technology Corporation
Project: LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT

QC Batch ID: MP26766
Matrix Type: LEACHATE

Methods: SW846 7470A
Units: mg/l

Prep Date: 08/11/04

Metal	N73864-1 Original	MS	Spikelot HGPW2	% Rec	QC Limits
Mercury	0.0	0.0019	0.0020	95.0	75-125

Associated samples MP26766: N73864-1

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

6.2.2

6

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: N73864
Account: UTC - United Technology Corporation
Project: LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT

QC Batch ID: MP26766
Matrix Type: LEACHATE

Methods: SW846 7470A
Units: mg/l

Prep Date: 08/11/04

Metal	N73864-1 Original	MSD	Spikelot HGPW2	% Rec	MSD RPD	QC Limit
Mercury	0.0	0.0018	0.0020	90.0	5.4	20

Associated samples MP26766: N73864-1

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

6.2.2

6

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: N73864
Account: UTC - United Technology Corporation
Project: LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT

QC Batch ID: MP26766
Matrix Type: LEACHATE

Methods: SW846 7470A
Units: mg/l

Prep Date:	08/11/04				08/11/04			
Metal	LCS Result	Spikelot HGPW2	% Rec	QC Limits	BSP Result	Spikelot HGPW2	% Rec	QC Limits
Mercury	0.0019	0.0020	95.0	80-120	0.0018	0.0020	90.0	80-120

Associated samples MP26766: N73864-1

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

6.2.3

6

General Chemistry

QC Data Summaries

7

Includes the following where applicable:

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: N73864
Account: UTC - United Technology Corporation
Project: LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT

Analyte	Batch ID	RL	MB Result	Units	BSP %Recov	QC Limits
Cyanide	GP24512/GN70341	1.0	<1.0	mg/kg	85.4*(a)	90-110%
Cyanide	GP24512/GN70341				94.6	90-110%

Associated Samples:
Batch GP24512: N73864-1
(a) Blank spike recovery indicates possible slight low bias. Reported sample flagged.

7.1

7

DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: N73864
Account: UTC - United Technology Corporation
Project: LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
Cyanide	GP24512/GN70341	N73864-1	mg/kg	<0.056	<0.055	0.0	0-30%
Cyanide	GP24512/GN70439	N73864-1	mg/kg	<0.056	0.10	200.0(a)	0-30%

Associated Samples:
Batch GP24512: N73864-1
(a) RPD acceptable due to low duplicate and sample concentrations.

7.2

7

MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: N73864
Account: UTC - United Technology Corporation
Project: LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Cyanide	GP24512/GN70341	N73864-1	mg/kg	<0.056	5.26	4.9	93.1	56-135%
Cyanide	GP24512/GN70439	N73864-1	mg/kg	<0.056	5.26	5.2	98.8	56-135%

Associated Samples:
Batch GP24512: N73864-1

7.3

7

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Technical Report for

United Technology Corporation

LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT

UARP# LEA-07/19/04-BAC-01 ; 88UT406.003

Accutest Job Number: N73884

Sampling Date: 07/20/04

Report to:

Loureiro Engineering
100 Northwest Drive
Plainville, CT 06062

ATTN: Barbara Heemink

Total number of pages in report: 26

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Vincent J. Pugliese
President

Certifications: NJ(12129), NY(10983), CA, CT, DE, FL, MA, MD, NC, PA, RI, SC, VA

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Sample Summary

United Technology Corporation

Job No: N73884

LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT
Project No: UARP# LEA-07/19/04-BAC-01 ; 88UT406.003

Sample Number	Collected Date	Time By	Received	Matrix Code	Matrix Type	Client Sample ID
N73884-1	07/20/04	19:48	08/02/04	AIR	Air	1051115

Accutest Laboratories

Report of Analysis

Client Sample ID:	1051115		
Lab Sample ID:	N73884-1	Date Sampled:	07/20/04
Matrix:	AIR - Air Summa ID: A320	Date Received:	08/02/04
Method:	TO-15	Percent Solids:	n/a
Project:	LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	Q22355.D	1	08/14/04	WG	n/a	n/a	VQ890
Run #2							

	Initial Volume
Run #1	400 ml
Run #2	

CAS No.	MW	Compound	Result	RL	Units	Q	Result	RL	Units
67-64-1	58.08	Acetone	14.8	0.20	ppbv		35.2	0.48	ug/m3
106-99-0	54.09	1,3-Butadiene	ND	0.20	ppbv		ND	0.44	ug/m3
71-43-2	78.11	Benzene	0.17	0.20	ppbv	J	0.54	0.64	ug/m3
75-27-4	163.8	Bromodichloromethane	ND	0.20	ppbv		ND	1.3	ug/m3
75-25-2	252.8	Bromoform	ND	0.20	ppbv		ND	2.1	ug/m3
74-83-9	94.94	Bromomethane	ND	0.20	ppbv		ND	0.78	ug/m3
593-60-2	106.9	Bromoethene	ND	0.20	ppbv		ND	0.87	ug/m3
100-44-7	126	Benzyl Chloride	ND	0.20	ppbv		ND	1.0	ug/m3
75-15-0	76.14	Carbon disulfide	ND	0.20	ppbv		ND	0.62	ug/m3
108-90-7	112.6	Chlorobenzene	ND	0.20	ppbv		ND	0.92	ug/m3
75-00-3	64.52	Chloroethane	ND	0.20	ppbv		ND	0.53	ug/m3
67-66-3	119.4	Chloroform	ND	0.20	ppbv		ND	0.98	ug/m3
74-87-3	50.49	Chloromethane	ND	0.20	ppbv		ND	0.41	ug/m3
107-05-1	76.53	3-Chloropropene	ND	0.20	ppbv		ND	0.63	ug/m3
95-49-8	126.6	2-Chlorotoluene	ND	0.20	ppbv		ND	1.0	ug/m3
56-23-5	153.8	Carbon tetrachloride	ND	0.20	ppbv		ND	1.3	ug/m3
110-82-7	84.16	Cyclohexane	ND	0.20	ppbv		ND	0.69	ug/m3
75-34-3	98.96	1,1-Dichloroethane	ND	0.20	ppbv		ND	0.81	ug/m3
75-35-4	96.94	1,1-Dichloroethylene	ND	0.20	ppbv		ND	0.79	ug/m3
106-93-4	187.9	1,2-Dibromoethane	ND	0.20	ppbv		ND	1.5	ug/m3
107-06-2	98.96	1,2-Dichloroethane	ND	0.20	ppbv		ND	0.81	ug/m3
78-87-5	113	1,2-Dichloropropane	ND	0.20	ppbv		ND	0.92	ug/m3
123-91-1	88	1,4-Dioxane	ND	0.20	ppbv		ND	0.72	ug/m3
75-71-8	120.9	Dichlorodifluoromethane	0.54	0.20	ppbv		2.7	0.99	ug/m3
124-48-1	208.3	Dibromochloromethane	ND	0.20	ppbv		ND	1.7	ug/m3
156-60-5	96.94	trans-1,2-Dichloroethylene	ND	0.20	ppbv		ND	0.79	ug/m3
156-59-2	96.94	cis-1,2-Dichloroethylene	ND	0.20	ppbv		ND	0.79	ug/m3
10061-01-5	111	cis-1,3-Dichloropropene	ND	0.20	ppbv		ND	0.91	ug/m3
541-73-1	147	m-Dichlorobenzene	ND	0.20	ppbv		ND	1.2	ug/m3
95-50-1	147	o-Dichlorobenzene	ND	0.20	ppbv		ND	1.2	ug/m3
106-46-7	147	p-Dichlorobenzene	ND	0.20	ppbv		ND	1.2	ug/m3
10061-02-6	111	trans-1,3-Dichloropropene	ND	0.20	ppbv		ND	0.91	ug/m3

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	1051115		
Lab Sample ID:	N73884-1	Date Sampled:	07/20/04
Matrix:	AIR - Air Summa ID: A320	Date Received:	08/02/04
Method:	TO-15	Percent Solids:	n/a
Project:	LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT		

CAS No.	MW	Compound	Result	RL	Units	Q	Result	RL	Units
64-17-5	46	Ethanol	1.5	0.50	ppbv		2.8	0.94	ug/m3
100-41-4	106.2	Ethylbenzene	0.10	0.20	ppbv	J	0.43	0.87	ug/m3
141-78-6	88	Ethyl Acetate	ND	0.20	ppbv		ND	0.72	ug/m3
622-96-8	120.2	4-Ethyltoluene	ND	0.20	ppbv		ND	0.98	ug/m3
76-13-1	187.4	Freon 113	ND	0.20	ppbv		ND	1.5	ug/m3
76-14-2	170.9	Freon 114	ND	0.20	ppbv		ND	1.4	ug/m3
142-82-5	100.2	Heptane	ND	0.20	ppbv		ND	0.82	ug/m3
87-68-3	260.8	Hexachlorobutadiene	ND	0.20	ppbv		ND	2.1	ug/m3
110-54-3	86.17	Hexane	3.3	0.20	ppbv		12	0.70	ug/m3
591-78-6	100	2-Hexanone	0.13	0.20	ppbv	J	0.53	0.82	ug/m3
67-63-0	60	Isopropyl Alcohol	ND	0.20	ppbv		ND	0.49	ug/m3
75-09-2	84.94	Methylene chloride	ND	0.20	ppbv		ND	0.69	ug/m3
78-93-3	72.11	Methyl ethyl ketone	0.62	0.20	ppbv		1.8	0.59	ug/m3
108-10-1	100.2	Methyl Isobutyl Ketone	ND	0.20	ppbv		ND	0.82	ug/m3
1634-04-4	88.15	Methyl Tert Butyl Ether	ND	0.20	ppbv		ND	0.72	ug/m3
115-07-1	42	Propylene	ND	0.50	ppbv		ND	0.86	ug/m3
100-42-5	104.1	Styrene	ND	0.20	ppbv		ND	0.85	ug/m3
71-55-6	133.4	1,1,1-Trichloroethane	0.30	0.20	ppbv		1.6	1.1	ug/m3
79-34-5	167.9	1,1,2,2-Tetrachloroethane	ND	0.20	ppbv		ND	1.4	ug/m3
79-00-5	133.4	1,1,2-Trichloroethane	ND	0.20	ppbv		ND	1.1	ug/m3
120-82-1	181.5	1,2,4-Trichlorobenzene	ND	0.20	ppbv		ND	1.5	ug/m3
95-63-6	120.2	1,2,4-Trimethylbenzene	0.099	0.20	ppbv	J	0.49	0.98	ug/m3
108-67-8	120.2	1,3,5-Trimethylbenzene	ND	0.20	ppbv		ND	0.98	ug/m3
540-84-1	114.2	2,2,4-Trimethylpentane	ND	0.20	ppbv		ND	0.93	ug/m3
127-18-4	165.8	Tetrachloroethylene	0.19	0.20	ppbv	J	1.3	1.4	ug/m3
109-99-9	72	Tetrahydrofuran	ND	0.20	ppbv		ND	0.59	ug/m3
108-88-3	92.14	Toluene	0.34	0.20	ppbv		1.3	0.75	ug/m3
79-01-6	131.4	Trichloroethylene	ND	0.20	ppbv		ND	1.1	ug/m3
75-69-4	137.4	Trichlorofluoromethane	0.43	0.20	ppbv		2.4	1.1	ug/m3
75-01-4	62.5	Vinyl chloride	ND	0.20	ppbv		ND	0.51	ug/m3
108-05-4	86	Vinyl Acetate	ND	0.20	ppbv		ND	0.70	ug/m3
	106.2	m,p-Xylene	0.21	0.20	ppbv		0.91	0.87	ug/m3
95-47-6	106.2	o-Xylene	ND	0.20	ppbv		ND	0.87	ug/m3
1330-20-7	106.2	Xylenes (total)	0.21	0.20	ppbv		0.91	0.87	ug/m3

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	110%		78-124%

(a) Matrix spikes are not analyzed by this procedure.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

AIR

ACCUTEST. Laboratories

CHAIN OF CUSTODY

2235 Route 130, Dayton NJ 08810
TEL. 732-329-0200 FAX: 732-329-3499/3480
www.accutest.com

FED-EX Tracking #	Bottle Order Control #
Accutest Quote #	Accutest Job # N73884

Client / Reporting Information

Company Name: LEA
Address: 100 Northwest Drive
City: Plainville State: CT Zip: 06062
Project Contact: Barbara Heemink E-mail:
Phone #: 860-747-6181
Sampler's Name: Michael Gaughen

Project Information

Project Name: DrW East Hartford Indoor Air
Street: 400 Main St.
City: East Hartford State: CT
Project #: 88UT406.003
Fax #:
Client Purchase Order #:

Requested Analysis

TO-15

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Water; SW - Surface Water; SO - Soil; SL - Sludge; OI - Oil; LIQ - Other Liquid; AIR - Air; SOL - Other Solid; WP - Wipe

Accutest Sample #	Field ID / Point of Collection	SUMMA # / MEOH Vial #	Collection Date	Collection Time	Sampled By	Matrix	# of bottles	Preservative	Requested Analysis	LAB USE ONLY
-1	1051115	A320 FC TRS 08/04	7/28/04	1948	MG	Air	1		X	B.S.

MG

Turnaround Time (Business Days)

- [x] Std. 15 Business Days
- [ ] 10 Day RUSH
- [ ] 5 Day RUSH
- [ ] 3 Day EMERGENCY
- [ ] 2 Day EMERGENCY
- [ ] 1 Day EMERGENCY
- [ ] Other

Approved By: / Date

Emergency & Rush T/A data available VIA LabLink

Data Deliverable Information

- [ ] Commercial "A"
- [ ] Commercial "B"
- [ ] NJ Reduced
- [ ] NJ Full
- [ ] Other
- [ ] FULL CLP
- [ ] NYASP Category A
- [ ] NYASP Category B
- [ ] State Forms
- [x] EDD Format

Commercial "A" = Results Only

Comments / Remarks

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler	Date Time	Received by:	Relinquished by:	Date Time	Received by:
1 Michael Gaughen	7/28/04	1 Barbara Heemink	2 Barbara Heemink	7/28/04 1045AM	3 FEDEX
Relinquished by: 3 Fed Ex	Date Time 07/29/04	Received by: 3 Cargill 08/04 0940	Relinquished by: 4	Date Time	Received by: 4
Relinquished by: 5	Date Time:	Received by: 5	Custody Seal #	Preserved where applicable ☐	On Ice ☐ Cooler Temp

TRS

3.1 3

N73884: Chain of Custody
Page 1 of 1

GC/MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Instrument Performance Checks (BFB)
- Surrogate Recovery Summaries

Method Blank Summary

Job Number: N73884
Account: UTC United Technology Corporation
Project: LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VQ890-MB	Q22343.D	1	08/13/04	WG	n/a	n/a	VQ890

The QC reported here applies to the following samples: Method: TO-15

N73884-1

CAS No.	Compound	Result	RL	Units	Q	Result	RL	Units
67-64-1	Acetone	ND	0.20	ppbv		ND	0.48	ug/m3
106-99-0	1,3-Butadiene	ND	0.20	ppbv		ND	0.44	ug/m3
71-43-2	Benzene	ND	0.20	ppbv		ND	0.64	ug/m3
75-27-4	Bromodichloromethane	ND	0.20	ppbv		ND	1.3	ug/m3
75-25-2	Bromoform	ND	0.20	ppbv		ND	2.1	ug/m3
74-83-9	Bromomethane	ND	0.20	ppbv		ND	0.78	ug/m3
593-60-2	Bromoethene	ND	0.20	ppbv		ND	0.87	ug/m3
100-44-7	Benzyl Chloride	ND	0.20	ppbv		ND	1.0	ug/m3
75-15-0	Carbon disulfide	ND	0.20	ppbv		ND	0.62	ug/m3
108-90-7	Chlorobenzene	ND	0.20	ppbv		ND	0.92	ug/m3
75-00-3	Chloroethane	ND	0.20	ppbv		ND	0.53	ug/m3
67-66-3	Chloroform	ND	0.20	ppbv		ND	0.98	ug/m3
74-87-3	Chloromethane	ND	0.20	ppbv		ND	0.41	ug/m3
107-05-1	3-Chloropropene	ND	0.20	ppbv		ND	0.63	ug/m3
95-49-8	2-Chlorotoluene	ND	0.20	ppbv		ND	1.0	ug/m3
56-23-5	Carbon tetrachloride	ND	0.20	ppbv		ND	1.3	ug/m3
110-82-7	Cyclohexane	ND	0.20	ppbv		ND	0.69	ug/m3
75-34-3	1,1-Dichloroethane	ND	0.20	ppbv		ND	0.81	ug/m3
75-35-4	1,1-Dichloroethylene	ND	0.20	ppbv		ND	0.79	ug/m3
106-93-4	1,2-Dibromoethane	ND	0.20	ppbv		ND	1.5	ug/m3
107-06-2	1,2-Dichloroethane	ND	0.20	ppbv		ND	0.81	ug/m3
78-87-5	1,2-Dichloropropane	ND	0.20	ppbv		ND	0.92	ug/m3
123-91-1	1,4-Dioxane	ND	0.20	ppbv		ND	0.72	ug/m3
75-71-8	Dichlorodifluoromethane	ND	0.20	ppbv		ND	0.99	ug/m3
124-48-1	Dibromochloromethane	ND	0.20	ppbv		ND	1.7	ug/m3
156-60-5	trans-1,2-Dichloroethylene	ND	0.20	ppbv		ND	0.79	ug/m3
156-59-2	cis-1,2-Dichloroethylene	ND	0.20	ppbv		ND	0.79	ug/m3
10061-01-5	cis-1,3-Dichloropropene	ND	0.20	ppbv		ND	0.91	ug/m3
541-73-1	m-Dichlorobenzene	ND	0.20	ppbv		ND	1.2	ug/m3
95-50-1	o-Dichlorobenzene	ND	0.20	ppbv		ND	1.2	ug/m3
106-46-7	p-Dichlorobenzene	ND	0.20	ppbv		ND	1.2	ug/m3
10061-02-6	trans-1,3-Dichloropropene	ND	0.20	ppbv		ND	0.91	ug/m3
64-17-5	Ethanol	ND	0.50	ppbv		ND	0.94	ug/m3
100-41-4	Ethylbenzene	ND	0.20	ppbv		ND	0.87	ug/m3
141-78-6	Ethyl Acetate	ND	0.20	ppbv		ND	0.72	ug/m3
622-96-8	4-Ethyltoluene	ND	0.20	ppbv		ND	0.98	ug/m3

Method Blank Summary

Job Number: N73884
Account: UTC United Technology Corporation
Project: LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VQ890-MB	Q22343.D	1	08/13/04	WG	n/a	n/a	VQ890

The QC reported here applies to the following samples: Method: TO-15

N73884-1

CAS No.	Compound	Result	RL	Units	Q	Result	RL	Units
76-13-1	Freon 113	ND	0.20	ppbv		ND	1.5	ug/m3
76-14-2	Freon 114	ND	0.20	ppbv		ND	1.4	ug/m3
142-82-5	Heptane	ND	0.20	ppbv		ND	0.82	ug/m3
87-68-3	Hexachlorobutadiene	ND	0.20	ppbv		ND	2.1	ug/m3
110-54-3	Hexane	ND	0.20	ppbv		ND	0.70	ug/m3
591-78-6	2-Hexanone	ND	0.20	ppbv		ND	0.82	ug/m3
67-63-0	Isopropyl Alcohol	ND	0.20	ppbv		ND	0.49	ug/m3
75-09-2	Methylene chloride	ND	0.20	ppbv		ND	0.69	ug/m3
78-93-3	Methyl ethyl ketone	ND	0.20	ppbv		ND	0.59	ug/m3
108-10-1	Methyl Isobutyl Ketone	ND	0.20	ppbv		ND	0.82	ug/m3
1634-04-4	Methyl Tert Butyl Ether	ND	0.20	ppbv		ND	0.72	ug/m3
115-07-1	Propylene	ND	0.50	ppbv		ND	0.86	ug/m3
100-42-5	Styrene	ND	0.20	ppbv		ND	0.85	ug/m3
71-55-6	1,1,1-Trichloroethane	ND	0.20	ppbv		ND	1.1	ug/m3
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.20	ppbv		ND	1.4	ug/m3
79-00-5	1,1,2-Trichloroethane	ND	0.20	ppbv		ND	1.1	ug/m3
120-82-1	1,2,4-Trichlorobenzene	ND	0.20	ppbv		ND	1.5	ug/m3
95-63-6	1,2,4-Trimethylbenzene	ND	0.20	ppbv		ND	0.98	ug/m3
108-67-8	1,3,5-Trimethylbenzene	ND	0.20	ppbv		ND	0.98	ug/m3
540-84-1	2,2,4-Trimethylpentane	ND	0.20	ppbv		ND	0.93	ug/m3
127-18-4	Tetrachloroethylene	ND	0.20	ppbv		ND	1.4	ug/m3
109-99-9	Tetrahydrofuran	ND	0.20	ppbv		ND	0.59	ug/m3
108-88-3	Toluene	ND	0.20	ppbv		ND	0.75	ug/m3
79-01-6	Trichloroethylene	ND	0.20	ppbv		ND	1.1	ug/m3
75-69-4	Trichlorofluoromethane	ND	0.20	ppbv		ND	1.1	ug/m3
75-01-4	Vinyl chloride	ND	0.20	ppbv		ND	0.51	ug/m3
108-05-4	Vinyl Acetate	ND	0.20	ppbv		ND	0.70	ug/m3
	m,p-Xylene	ND	0.20	ppbv		ND	0.87	ug/m3
95-47-6	o-Xylene	ND	0.20	ppbv		ND	0.87	ug/m3
1330-20-7	Xylenes (total)	ND	0.20	ppbv		ND	0.87	ug/m3

CAS No.	Surrogate Recoveries		Limits
460-00-4	4-Bromofluorobenzene	99%	78-124%

Method Blank Summary

Job Number: N73884
Account: UTC United Technology Corporation
Project: LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VW130-MB	W03036.D	1	07/27/04	WG	n/a	n/a	VW130

The QC reported here applies to the following samples: Method: TO-15

VW130-SCC

CAS No.	Compound	Result	RL	Units	Q	Result	RL	Units
67-64-1	Acetone	ND	0.20	ppbv		ND	0.48	ug/m3
106-99-0	1,3-Butadiene	ND	0.20	ppbv		ND	0.44	ug/m3
71-43-2	Benzene	ND	0.20	ppbv		ND	0.64	ug/m3
75-27-4	Bromodichloromethane	ND	0.20	ppbv		ND	1.3	ug/m3
75-25-2	Bromoform	ND	0.20	ppbv		ND	2.1	ug/m3
74-83-9	Bromomethane	ND	0.20	ppbv		ND	0.78	ug/m3
593-60-2	Bromoethene	ND	0.20	ppbv		ND	0.87	ug/m3
100-44-7	Benzyl Chloride	ND	0.20	ppbv		ND	1.0	ug/m3
75-15-0	Carbon disulfide	ND	0.20	ppbv		ND	0.62	ug/m3
108-90-7	Chlorobenzene	ND	0.20	ppbv		ND	0.92	ug/m3
75-00-3	Chloroethane	ND	0.20	ppbv		ND	0.53	ug/m3
67-66-3	Chloroform	ND	0.20	ppbv		ND	0.98	ug/m3
74-87-3	Chloromethane	ND	0.20	ppbv		ND	0.41	ug/m3
107-05-1	3-Chloropropene	ND	0.20	ppbv		ND	0.63	ug/m3
95-49-8	2-Chlorotoluene	ND	0.20	ppbv		ND	1.0	ug/m3
56-23-5	Carbon tetrachloride	ND	0.20	ppbv		ND	1.3	ug/m3
110-82-7	Cyclohexane	ND	0.20	ppbv		ND	0.69	ug/m3
75-34-3	1,1-Dichloroethane	ND	0.20	ppbv		ND	0.81	ug/m3
75-35-4	1,1-Dichloroethylene	ND	0.20	ppbv		ND	0.79	ug/m3
106-93-4	1,2-Dibromoethane	ND	0.20	ppbv		ND	1.5	ug/m3
107-06-2	1,2-Dichloroethane	ND	0.20	ppbv		ND	0.81	ug/m3
78-87-5	1,2-Dichloropropane	ND	0.20	ppbv		ND	0.92	ug/m3
123-91-1	1,4-Dioxane	ND	0.20	ppbv		ND	0.72	ug/m3
75-71-8	Dichlorodifluoromethane	ND	0.20	ppbv		ND	0.99	ug/m3
124-48-1	Dibromochloromethane	ND	0.20	ppbv		ND	1.7	ug/m3
156-60-5	trans-1,2-Dichloroethylene	ND	0.20	ppbv		ND	0.79	ug/m3
156-59-2	cis-1,2-Dichloroethylene	ND	0.20	ppbv		ND	0.79	ug/m3
10061-01-5	cis-1,3-Dichloropropene	ND	0.20	ppbv		ND	0.91	ug/m3
541-73-1	m-Dichlorobenzene	ND	0.20	ppbv		ND	1.2	ug/m3
95-50-1	o-Dichlorobenzene	ND	0.20	ppbv		ND	1.2	ug/m3
106-46-7	p-Dichlorobenzene	ND	0.20	ppbv		ND	1.2	ug/m3
10061-02-6	trans-1,3-Dichloropropene	ND	0.20	ppbv		ND	0.91	ug/m3
64-17-5	Ethanol	ND	0.50	ppbv		ND	0.94	ug/m3
100-41-4	Ethylbenzene	ND	0.20	ppbv		ND	0.87	ug/m3
141-78-6	Ethyl Acetate	ND	0.20	ppbv		ND	0.72	ug/m3
622-96-8	4-Ethyltoluene	ND	0.20	ppbv		ND	0.98	ug/m3

Method Blank Summary

Job Number: N73884
Account: UTC United Technology Corporation
Project: LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VW130-MB	W03036.D	1	07/27/04	WG	n/a	n/a	VW130

The QC reported here applies to the following samples: Method: TO-15

VW130-SCC

CAS No.	Compound	Result	RL	Units	Q	Result	RL	Units
76-13-1	Freon 113	ND	0.20	ppbv		ND	1.5	ug/m3
76-14-2	Freon 114	ND	0.20	ppbv		ND	1.4	ug/m3
142-82-5	Heptane	ND	0.20	ppbv		ND	0.82	ug/m3
87-68-3	Hexachlorobutadiene	ND	0.20	ppbv		ND	2.1	ug/m3
110-54-3	Hexane	ND	0.20	ppbv		ND	0.70	ug/m3
591-78-6	2-Hexanone	ND	0.20	ppbv		ND	0.82	ug/m3
67-63-0	Isopropyl Alcohol	ND	0.20	ppbv		ND	0.49	ug/m3
75-09-2	Methylene chloride	ND	0.20	ppbv		ND	0.69	ug/m3
78-93-3	Methyl ethyl ketone	ND	0.20	ppbv		ND	0.59	ug/m3
108-10-1	Methyl Isobutyl Ketone	ND	0.20	ppbv		ND	0.82	ug/m3
1634-04-4	Methyl Tert Butyl Ether	ND	0.20	ppbv		ND	0.72	ug/m3
115-07-1	Propylene	ND	0.50	ppbv		ND	0.86	ug/m3
100-42-5	Styrene	ND	0.20	ppbv		ND	0.85	ug/m3
71-55-6	1,1,1-Trichloroethane	ND	0.20	ppbv		ND	1.1	ug/m3
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.20	ppbv		ND	1.4	ug/m3
79-00-5	1,1,2-Trichloroethane	ND	0.20	ppbv		ND	1.1	ug/m3
120-82-1	1,2,4-Trichlorobenzene	ND	0.20	ppbv		ND	1.5	ug/m3
95-63-6	1,2,4-Trimethylbenzene	ND	0.20	ppbv		ND	0.98	ug/m3
108-67-8	1,3,5-Trimethylbenzene	ND	0.20	ppbv		ND	0.98	ug/m3
540-84-1	2,2,4-Trimethylpentane	ND	0.20	ppbv		ND	0.93	ug/m3
127-18-4	Tetrachloroethylene	ND	0.20	ppbv		ND	1.4	ug/m3
109-99-9	Tetrahydrofuran	ND	0.20	ppbv		ND	0.59	ug/m3
108-88-3	Toluene	ND	0.20	ppbv		ND	0.75	ug/m3
79-01-6	Trichloroethylene	ND	0.20	ppbv		ND	1.1	ug/m3
75-69-4	Trichlorofluoromethane	ND	0.20	ppbv		ND	1.1	ug/m3
75-01-4	Vinyl chloride	ND	0.20	ppbv		ND	0.51	ug/m3
108-05-4	Vinyl Acetate	ND	0.20	ppbv		ND	0.70	ug/m3
	m,p-Xylene	ND	0.20	ppbv		ND	0.87	ug/m3
95-47-6	o-Xylene	ND	0.20	ppbv		ND	0.87	ug/m3
1330-20-7	Xylenes (total)	ND	0.20	ppbv		ND	0.87	ug/m3

CAS No.	Surrogate Recoveries		Limits
460-00-4	4-Bromofluorobenzene	94%	78-124%

Blank Spike/Blank Spike Duplicate Summary

Job Number: N73884
Account: UTC United Technology Corporation
Project: LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VQ890-BS	Q22341.D	1	08/13/04	WG	n/a	n/a	VQ890
VQ890-BSD	Q22342.D	1	08/13/04	WG	n/a	n/a	VQ890

The QC reported here applies to the following samples: Method: TO-15

N73884-1

CAS No.	Compound	Spike ppbv	BSP ppbv	BSP %	BSD ppbv	BSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	10	8.9	89	8.4	84	6	61-122/30
106-99-0	1,3-Butadiene	10	10	100	9.8	98	2	72-128/30
71-43-2	Benzene	10	8.9	89	8.6	86	3	82-114/30
75-27-4	Bromodichloromethane	10	9.7	97	9.2	92	5	84-130/30
75-25-2	Bromoform	10	9.5	95	9.2	92	3	71-138/30
74-83-9	Bromomethane	10	9.4	94	9.1	91	3	79-122/30
593-60-2	Bromoethene	10	9.5	95	9.2	92	3	84-119/30
100-44-7	Benzyl Chloride	10	8.6	86* [a]	8.3	83* [a]	4	92-135/30
75-15-0	Carbon disulfide	10	8.8	88	8.7	87	1	76-126/30
108-90-7	Chlorobenzene	10	8.7	87 [b]	8.4	84* [a]	4	86-115/30
75-00-3	Chloroethane	10	9.6	96	9.2	92	4	80-119/30
67-66-3	Chloroform	10	9.7	97	9.2	92	5	82-122/30
74-87-3	Chloromethane	10	8.2	82	7.6	76	8	61-125/30
107-05-1	3-Chloropropene	10	8.7	87	8.5	85	2	72-125/30
95-49-8	2-Chlorotoluene	10	9.7	97	9.3	93	4	88-124/30
56-23-5	Carbon tetrachloride	10	10.2	102	9.8	98	4	78-130/30
110-82-7	Cyclohexane	10	8.5	85	8.6	86	1	80-109/30
75-34-3	1,1-Dichloroethane	10	9.6	96	9.2	92	4	79-120/30
75-35-4	1,1-Dichloroethylene	10	9.5	95	9.2	92	3	77-122/30
106-93-4	1,2-Dibromoethane	10	9.3	93	8.9	89	4	87-121/30
107-06-2	1,2-Dichloroethane	10	8.9	89	9.3	93	4	78-139/30
78-87-5	1,2-Dichloropropane	10	8.8	88	8.6	86	2	80-116/30
123-91-1	1,4-Dioxane	10	9.8	98	9.6	96	2	65-127/30
75-71-8	Dichlorodifluoromethane	10	10	100	9.4	94	6	78-137/30
124-48-1	Dibromochloromethane	10	9.8	98	9.5	95	3	86-124/30
156-60-5	trans-1,2-Dichloroethylene	10	8.8	88	8.5	85	3	81-120/30
156-59-2	cis-1,2-Dichloroethylene	10	9.0	90	8.7	87	3	83-115/30
10061-01-5	cis-1,3-Dichloropropene	10	9.2	92	8.8	88	4	87-122/30
541-73-1	m-Dichlorobenzene	10	9.6	96	9.2	92	4	86-130/30
95-50-1	o-Dichlorobenzene	10	9.5	95	9.2	92	3	86-130/30
106-46-7	p-Dichlorobenzene	10	9.3	93	8.9	89	4	84-130/30
10061-02-6	trans-1,3-Dichloropropene	10	9.3	93	9.1	91	2	83-133/30
64-17-5	Ethanol	10	9.2	92	9.2	92	0	59-150/30
100-41-4	Ethylbenzene	10	9.4	94	9.0	90	4	83-121/30
141-78-6	Ethyl Acetate	10	9.5	95	9.7	97	2	65-135/30
622-96-8	4-Ethyltoluene	10	9.6	96	9.4	94	2	85-127/30

Blank Spike/Blank Spike Duplicate Summary

Job Number: N73884
Account: UTC United Technology Corporation
Project: LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VQ890-BS	Q22341.D	1	08/13/04	WG	n/a	n/a	VQ890
VQ890-BSD	Q22342.D	1	08/13/04	WG	n/a	n/a	VQ890

The QC reported here applies to the following samples: Method: TO-15

N73884-1

CAS No.	Compound	Spike ppbv	BSP ppbv	BSP %	BSD ppbv	BSD %	RPD	Limits Rec/RPD
76-13-1	Freon 113	10	9.7	97	9.4	94	3	77-123/30
76-14-2	Freon 114	10	9.8	98	9.3	93	5	81-126/30
142-82-5	Heptane	10	9.2	92	8.9	89	3	72-125/30
87-68-3	Hexachlorobutadiene	10	9.8	98	9.1	91	7	56-162/30
110-54-3	Hexane	10	9.2	92	9.1	91	1	74-115/30
591-78-6	2-Hexanone	10	7.9	79	7.8	78	1	59-129/30
67-63-0	Isopropyl Alcohol	10	10.4	104	10	100	4	55-138/30
75-09-2	Methylene chloride	10	8.9	89	8.6	86	3	74-116/30
78-93-3	Methyl ethyl ketone	10	8.7	87 [b]	7.5	75* [a]	15	77-118/30
108-10-1	Methyl Isobutyl Ketone	10	8.7	87	8.5	85	2	63-126/30
1634-04-4	Methyl Tert Butyl Ether	10	9.5	95	9.1	91	4	79-120/30
115-07-1	Propylene	10	8.7	87	8.1	81	7	58-136/30
100-42-5	Styrene	10	9.5	95	9.2	92	3	86-123/30
71-55-6	1,1,1-Trichloroethane	10	10.6	106	10.0	100	6	78-129/30
79-34-5	1,1,2,2-Tetrachloroethane	10	9.6	96	9.2	92	4	82-126/30
79-00-5	1,1,2-Trichloroethane	10	9.5	95	9.0	90	5	86-118/30
120-82-1	1,2,4-Trichlorobenzene	10	8.4	84	7.7	77	9	66-159/30
95-63-6	1,2,4-Trimethylbenzene	10	9.8	98	9.5	95	3	87-127/30
108-67-8	1,3,5-Trimethylbenzene	10	10.1	101	9.6	96	5	86-127/30
540-84-1	2,2,4-Trimethylpentane	10	9.2	92	8.9	89	3	73-124/30
127-18-4	Tetrachloroethylene	10	9.6	96	9.2	92	4	80-122/30
109-99-9	Tetrahydrofuran	10	8.6	86	8.2	82	5	70-122/30
108-88-3	Toluene	10	9.4	94	9.0	90	4	79-120/30
79-01-6	Trichloroethylene	10	9.1	91	8.7	87	4	86-122/30
75-69-4	Trichlorofluoromethane	10	10.2	102	9.7	97	5	77-136/30
75-01-4	Vinyl chloride	10	9.1	91	9.0	90	1	75-122/30
108-05-4	Vinyl Acetate	10	7.6	76 [b]	7.2	72* [a]	5	75-129/30
	m,p-Xylene	20	18.6	93	17.7	89	5	84-122/30
95-47-6	o-Xylene	10	9.3	93	8.9	89	4	79-124/30
1330-20-7	Xylenes (total)	30	27.8	93	26.6	89	4	83-122/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
460-00-4	4-Bromofluorobenzene	103%	102%	78-124%

Blank Spike/Blank Spike Duplicate Summary

Job Number: N73884
Account: UTC United Technology Corporation
Project: LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VQ890-BS	Q22341.D	1	08/13/04	WG	n/a	n/a	VQ890
VQ890-BSD	Q22342.D	1	08/13/04	WG	n/a	n/a	VQ890

The QC reported here applies to the following samples: Method: TO-15

N73884-1

(a) Outside control limits.
(b) Outside of in house control limits, but within reasonable method recovery limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: N73884
Account: UTC United Technology Corporation
Project: LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VW130-BS	W03034.D	1	07/27/04	WG	n/a	n/a	VW130
VW130-BSD	W03035.D	1	07/27/04	WG	n/a	n/a	VW130

The QC reported here applies to the following samples: Method: TO-15

VW130-SCC

CAS No.	Compound	Spike ppbv	BSP ppbv	BSP %	BSD ppbv	BSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	10	10.3	103	9.6	96	7	61-122/30
106-99-0	1,3-Butadiene	10	10.4	104	9.6	96	8	72-128/30
71-43-2	Benzene	10	10.7	107	10.3	103	4	82-114/30
75-27-4	Bromodichloromethane	10	11.1	111	10.6	106	5	84-130/30
75-25-2	Bromoform	10	11.0	110	10.4	104	6	71-138/30
74-83-9	Bromomethane	10	10.2	102	9.5	95	7	79-122/30
593-60-2	Bromoethene	10	10.1	101	9.5	95	6	84-119/30
100-44-7	Benzyl Chloride	10	11.2	112	10.6	106	6	92-135/30
75-15-0	Carbon disulfide	10	10.1	101	9.5	95	6	76-126/30
108-90-7	Chlorobenzene	10	10.7	107	10.2	102	5	86-115/30
75-00-3	Chloroethane	10	10.1	101	9.5	95	6	80-119/30
67-66-3	Chloroform	10	10.5	105	10.0	100	5	82-122/30
74-87-3	Chloromethane	10	10	100	9.3	93	7	61-125/30
107-05-1	3-Chloropropene	10	9.1	91	8.8	88	3	72-125/30
95-49-8	2-Chlorotoluene	10	10.8	108	10.3	103	5	88-124/30
56-23-5	Carbon tetrachloride	10	10.5	105	9.9	99	6	78-130/30
110-82-7	Cyclohexane	10	10.4	104	9.9	99	5	80-109/30
75-34-3	1,1-Dichloroethane	10	10.3	103	9.7	97	6	79-120/30
75-35-4	1,1-Dichloroethylene	10	10.0	100	9.6	96	4	77-122/30
106-93-4	1,2-Dibromoethane	10	10.4	104	9.8	98	6	87-121/30
107-06-2	1,2-Dichloroethane	10	10.5	105	9.8	98	7	78-139/30
78-87-5	1,2-Dichloropropane	10	11.0	110	10.5	105	5	80-116/30
123-91-1	1,4-Dioxane	10	9.5	95	8.8	88	8	65-127/30
75-71-8	Dichlorodifluoromethane	10	10.6	106	9.8	98	8	78-137/30
124-48-1	Dibromochloromethane	10	10.8	108	10.2	102	6	86-124/30
156-60-5	trans-1,2-Dichloroethylene	10	10.2	102	9.7	97	5	81-120/30
156-59-2	cis-1,2-Dichloroethylene	10	10.2	102	9.7	97	5	83-115/30
10061-01-5	cis-1,3-Dichloropropene	10	10.9	109	10.5	105	4	87-122/30
541-73-1	m-Dichlorobenzene	10	10.3	103	9.9	99	4	86-130/30
95-50-1	o-Dichlorobenzene	10	10.5	105	10	100	5	86-130/30
106-46-7	p-Dichlorobenzene	10	10.2	102	9.7	97	5	84-130/30
10061-02-6	trans-1,3-Dichloropropene	10	10.5	105	10.3	103	2	83-133/30
64-17-5	Ethanol	10	11.9	119	10.6	106	12	59-150/30
100-41-4	Ethylbenzene	10	10.7	107	10.2	102	5	83-121/30
141-78-6	Ethyl Acetate	10	9.7	97	9.4	94	3	65-135/30
622-96-8	4-Ethyltoluene	10	10.7	107	10.1	101	6	85-127/30

Blank Spike/Blank Spike Duplicate Summary

Job Number: N73884
Account: UTC United Technology Corporation
Project: LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VW130-BS	W03034.D	1	07/27/04	WG	n/a	n/a	VW130
VW130-BSD	W03035.D	1	07/27/04	WG	n/a	n/a	VW130

The QC reported here applies to the following samples: Method: TO-15

VW130-SCC

CAS No.	Compound	Spike ppbv	BSP ppbv	BSP %	BSD ppbv	BSD %	RPD	Limits Rec/RPD
76-13-1	Freon 113	10	10.2	102	9.8	98	4	77-123/30
76-14-2	Freon 114	10	10.2	102	9.5	95	7	81-126/30
142-82-5	Heptane	10	10.9	109	10.4	104	5	72-125/30
87-68-3	Hexachlorobutadiene	10	10.1	101	9.5	95	6	56-162/30
110-54-3	Hexane	10	10.2	102	9.7	97	5	74-115/30
591-78-6	2-Hexanone	10	10.8	108	10.3	103	5	59-129/30
67-63-0	Isopropyl Alcohol	10	10.8	108	10.2	102	6	55-138/30
75-09-2	Methylene chloride	10	9.5	95	9.0	90	5	74-116/30
78-93-3	Methyl ethyl ketone	10	10.2	102	9.7	97	5	77-118/30
108-10-1	Methyl Isobutyl Ketone	10	10.9	109	10.4	104	5	63-126/30
1634-04-4	Methyl Tert Butyl Ether	10	10.2	102	9.7	97	5	79-120/30
115-07-1	Propylene	10	9.5	95	8.7	87	9	58-136/30
100-42-5	Styrene	10	10.7	107	10.2	102	5	86-123/30
71-55-6	1,1,1-Trichloroethane	10	10.4	104	9.8	98	6	78-129/30
79-34-5	1,1,2,2-Tetrachloroethane	10	10.6	106	10.0	100	6	82-126/30
79-00-5	1,1,2-Trichloroethane	10	10.6	106	10.2	102	4	86-118/30
120-82-1	1,2,4-Trichlorobenzene	10	11.8	118	10.9	109	8	66-159/30
95-63-6	1,2,4-Trimethylbenzene	10	10.7	107	10.2	102	5	87-127/30
108-67-8	1,3,5-Trimethylbenzene	10	10.8	108	10.3	103	5	86-127/30
540-84-1	2,2,4-Trimethylpentane	10	10.7	107	10.2	102	5	73-124/30
127-18-4	Tetrachloroethylene	10	10.7	107	10.2	102	5	80-122/30
109-99-9	Tetrahydrofuran	10	10.1	101	9.7	97	4	70-122/30
108-88-3	Toluene	10	10.7	107	10.4	104	3	79-120/30
79-01-6	Trichloroethylene	10	10.4	104	10	100	4	86-122/30
75-69-4	Trichlorofluoromethane	10	10.5	105	9.7	97	8	77-136/30
75-01-4	Vinyl chloride	10	10.2	102	9.5	95	7	75-122/30
108-05-4	Vinyl Acetate	10	10.1	101	9.7	97	4	75-129/30
	m,p-Xylene	20	21.7	109	20.7	104	5	84-122/30
95-47-6	o-Xylene	10	10.8	108	10.3	103	5	79-124/30
1330-20-7	Xylenes (total)	30	32.5	108	31.0	103	5	83-122/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
460-00-4	4-Bromofluorobenzene	104%	103%	78-124%

Duplicate Summary

Job Number: N73884
Account: UTC United Technology Corporation
Project: LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
N73150-12DUP	Q22347.D	1	08/14/04	WG	n/a	n/a	VQ890
N73150-12 [a]	Q22346.D	1	08/13/04	WG	n/a	n/a	VQ890

The QC reported here applies to the following samples: Method: TO-15

N73884-1

CAS No.	Compound	N73150-12 ppbv	Q	DUP ppbv	Q	RPD	Limits
67-64-1	Acetone	10.1		10.7		6	24
106-99-0	1,3-Butadiene	ND		ND		nc	10
71-43-2	Benzene	0.44		0.52		17* [b]	14
75-27-4	Bromodichloromethane	ND		ND		nc	10
75-25-2	Bromoform	ND		ND		nc	10
74-83-9	Bromomethane	ND		ND		nc	10
593-60-2	Bromoethene	ND		ND		nc	10
100-44-7	Benzyl Chloride	ND		ND		nc	10
75-15-0	Carbon disulfide	ND		ND		nc	11
108-90-7	Chlorobenzene	ND		ND		nc	10
75-00-3	Chloroethane	ND		ND		nc	10
67-66-3	Chloroform	ND		ND		nc	12
74-87-3	Chloromethane	ND		ND		nc	20
107-05-1	3-Chloropropene	ND		ND		nc	10
95-49-8	2-Chlorotoluene	ND		ND		nc	10
56-23-5	Carbon tetrachloride	ND		ND		nc	10
110-82-7	Cyclohexane	ND		ND		nc	30
75-34-3	1,1-Dichloroethane	ND		ND		nc	10
75-35-4	1,1-Dichloroethylene	ND		ND		nc	10
106-93-4	1,2-Dibromoethane	ND		ND		nc	10
107-06-2	1,2-Dichloroethane	ND		ND		nc	10
78-87-5	1,2-Dichloropropane	ND		ND		nc	10
123-91-1	1,4-Dioxane	ND		ND		nc	10
75-71-8	Dichlorodifluoromethane	ND		ND		nc	28
124-48-1	Dibromochloromethane	ND		ND		nc	10
156-60-5	trans-1,2-Dichloroethylene	ND		ND		nc	10
156-59-2	cis-1,2-Dichloroethylene	ND		ND		nc	10
10061-01-5	cis-1,3-Dichloropropene	ND		ND		nc	10
541-73-1	m-Dichlorobenzene	ND		ND		nc	10
95-50-1	o-Dichlorobenzene	ND		ND		nc	10
106-46-7	p-Dichlorobenzene	ND		ND		nc	10
10061-02-6	trans-1,3-Dichloropropene	ND		ND		nc	10
64-17-5	Ethanol	42.4	E	43.5	E	3	22
100-41-4	Ethylbenzene	ND		0.10	J	200* [c]	17
141-78-6	Ethyl Acetate	ND		ND		nc	10
622-96-8	4-Ethyltoluene	ND		ND		nc	14

Duplicate Summary

Job Number: N73884
Account: UTC United Technology Corporation
Project: LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
N73150-12DUP	Q22347.D	1	08/14/04	WG	n/a	n/a	VQ890
N73150-12 [a]	Q22346.D	1	08/13/04	WG	n/a	n/a	VQ890

The QC reported here applies to the following samples: Method: TO-15

N73884-1

CAS No.	Compound	N73150-12 ppbv	Q	DUP ppbv	Q	RPD	Limits
76-13-1	Freon 113	ND		ND		nc	15
76-14-2	Freon 114	ND		ND		nc	10
142-82-5	Heptane	0.38		0.43		12	20
87-68-3	Hexachlorobutadiene	ND		ND		nc	10
110-54-3	Hexane	0.66		0.69		4	16
591-78-6	2-Hexanone	ND		ND		nc	10
67-63-0	Isopropyl Alcohol	0.40		0.35		13	14
75-09-2	Methylene chloride	ND		ND		nc	30
78-93-3	Methyl ethyl ketone	1.3		1.3		0	21
108-10-1	Methyl Isobutyl Ketone	ND		ND		nc	10
1634-04-4	Methyl Tert Butyl Ether	0.41		0.51		22* [b]	16
115-07-1	Propylene	ND		ND		nc	10
100-42-5	Styrene	ND		ND		nc	10
71-55-6	1,1,1-Trichloroethane	ND		ND		nc	10
79-34-5	1,1,2,2-Tetrachloroethane	ND		ND		nc	10
79-00-5	1,1,2-Trichloroethane	ND		ND		nc	10
120-82-1	1,2,4-Trichlorobenzene	ND		ND		nc	10
95-63-6	1,2,4-Trimethylbenzene	0.12	J	0.12	J	0	15
108-67-8	1,3,5-Trimethylbenzene	ND		ND		nc	12
540-84-1	2,2,4-Trimethylpentane	ND		ND		nc	10
127-18-4	Tetrachloroethylene	1.0		1.1		10	12
109-99-9	Tetrahydrofuran	ND		ND		nc	14
108-88-3	Toluene	1.7		1.9		11	13
79-01-6	Trichloroethylene	ND		ND		nc	10
75-69-4	Trichlorofluoromethane	1.4		1.6		13	21
75-01-4	Vinyl chloride	ND		ND		nc	10
108-05-4	Vinyl Acetate	ND		ND		nc	10
	m,p-Xylene	0.23		0.27		16	18
95-47-6	o-Xylene	ND		0.11	J	200* [c]	16
1330-20-7	Xylenes (total)	0.23		0.38		49*	16

CAS No.	Surrogate Recoveries	DUP	N73150-12	Limits
460-00-4	4-Bromofluorobenzene	103%	105%	78-124%

Duplicate Summary

Job Number: N73884
Account: UTC United Technology Corporation
Project: LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
N73150-12DUP	Q22347.D	1	08/14/04	WG	n/a	n/a	VQ890
N73150-12 [a]	Q22346.D	1	08/13/04	WG	n/a	n/a	VQ890

The QC reported here applies to the following samples: Method: TO-15

N73884-1

(a) Matrix spikes are not analyzed by this procedure.
(b) Outside control limits.
(c) High RPD due to low concentration of hit

Summa Cleaning Certification

Job Number: N73884
Account: UTC United Technology Corporation
Project: LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VW130-SCC	W03038.D	1	07/27/04	WG	n/a	n/a	VW130

The QC reported here (Summa A125) applies to the following samples: Method: TO-15

Batch CP1253 cleaned 07/23/04: N73884-1(A320)

CAS No.	Compound	Result	RL	Units	Q	Result	RL	Units
67-64-1	Acetone	ND	0.20	ppbv		ND	0.48	ug/m3
106-99-0	1,3-Butadiene	ND	0.20	ppbv		ND	0.44	ug/m3
71-43-2	Benzene	ND	0.20	ppbv		ND	0.64	ug/m3
75-27-4	Bromodichloromethane	ND	0.20	ppbv		ND	1.3	ug/m3
75-25-2	Bromoform	ND	0.20	ppbv		ND	2.1	ug/m3
74-83-9	Bromomethane	ND	0.20	ppbv		ND	0.78	ug/m3
593-60-2	Bromoethene	ND	0.20	ppbv		ND	0.87	ug/m3
100-44-7	Benzyl Chloride	ND	0.20	ppbv		ND	1.0	ug/m3
75-15-0	Carbon disulfide	ND	0.20	ppbv		ND	0.62	ug/m3
108-90-7	Chlorobenzene	ND	0.20	ppbv		ND	0.92	ug/m3
75-00-3	Chloroethane	ND	0.20	ppbv		ND	0.53	ug/m3
67-66-3	Chloroform	ND	0.20	ppbv		ND	0.98	ug/m3
74-87-3	Chloromethane	ND	0.20	ppbv		ND	0.41	ug/m3
107-05-1	3-Chloropropene	ND	0.20	ppbv		ND	0.63	ug/m3
95-49-8	2-Chlorotoluene	ND	0.20	ppbv		ND	1.0	ug/m3
56-23-5	Carbon tetrachloride	ND	0.20	ppbv		ND	1.3	ug/m3
110-82-7	Cyclohexane	ND	0.20	ppbv		ND	0.69	ug/m3
75-34-3	1,1-Dichloroethane	ND	0.20	ppbv		ND	0.81	ug/m3
75-35-4	1,1-Dichloroethylene	ND	0.20	ppbv		ND	0.79	ug/m3
106-93-4	1,2-Dibromoethane	ND	0.20	ppbv		ND	1.5	ug/m3
107-06-2	1,2-Dichloroethane	ND	0.20	ppbv		ND	0.81	ug/m3
78-87-5	1,2-Dichloropropane	ND	0.20	ppbv		ND	0.92	ug/m3
123-91-1	1,4-Dioxane	ND	0.20	ppbv		ND	0.72	ug/m3
75-71-8	Dichlorodifluoromethane	ND	0.20	ppbv		ND	0.99	ug/m3
124-48-1	Dibromochloromethane	ND	0.20	ppbv		ND	1.7	ug/m3
156-60-5	trans-1,2-Dichloroethylene	ND	0.20	ppbv		ND	0.79	ug/m3
156-59-2	cis-1,2-Dichloroethylene	ND	0.20	ppbv		ND	0.79	ug/m3
10061-01-5	cis-1,3-Dichloropropene	ND	0.20	ppbv		ND	0.91	ug/m3
541-73-1	m-Dichlorobenzene	ND	0.20	ppbv		ND	1.2	ug/m3
95-50-1	o-Dichlorobenzene	ND	0.20	ppbv		ND	1.2	ug/m3
106-46-7	p-Dichlorobenzene	ND	0.20	ppbv		ND	1.2	ug/m3
10061-02-6	trans-1,3-Dichloropropene	ND	0.20	ppbv		ND	0.91	ug/m3
64-17-5	Ethanol	ND	0.50	ppbv		ND	0.94	ug/m3
100-41-4	Ethylbenzene	ND	0.20	ppbv		ND	0.87	ug/m3
141-78-6	Ethyl Acetate	ND	0.20	ppbv		ND	0.72	ug/m3
622-96-8	4-Ethyltoluene	ND	0.20	ppbv		ND	0.98	ug/m3

Summa Cleaning Certification

Job Number: N73884
Account: UTC United Technology Corporation
Project: LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VW130-SCC	W03038.D	1	07/27/04	WG	n/a	n/a	VW130

The QC reported here (Summa A125) applies to the following samples: Method: TO-15

Batch CP1253 cleaned 07/23/04: N73884-1(A320)

CAS No.	Compound	Result	RL	Units	Q	Result	RL	Units
76-13-1	Freon 113	ND	0.20	ppbv		ND	1.5	ug/m3
76-14-2	Freon 114	ND	0.20	ppbv		ND	1.4	ug/m3
142-82-5	Heptane	ND	0.20	ppbv		ND	0.82	ug/m3
87-68-3	Hexachlorobutadiene	ND	0.20	ppbv		ND	2.1	ug/m3
110-54-3	Hexane	ND	0.20	ppbv		ND	0.70	ug/m3
591-78-6	2-Hexanone	ND	0.20	ppbv		ND	0.82	ug/m3
67-63-0	Isopropyl Alcohol	ND	0.20	ppbv		ND	0.49	ug/m3
75-09-2	Methylene chloride	ND	0.20	ppbv		ND	0.69	ug/m3
78-93-3	Methyl ethyl ketone	ND	0.20	ppbv		ND	0.59	ug/m3
108-10-1	Methyl Isobutyl Ketone	ND	0.20	ppbv		ND	0.82	ug/m3
1634-04-4	Methyl Tert Butyl Ether	ND	0.20	ppbv		ND	0.72	ug/m3
115-07-1	Propylene	ND	0.50	ppbv		ND	0.86	ug/m3
100-42-5	Styrene	ND	0.20	ppbv		ND	0.85	ug/m3
71-55-6	1,1,1-Trichloroethane	ND	0.20	ppbv		ND	1.1	ug/m3
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.20	ppbv		ND	1.4	ug/m3
79-00-5	1,1,2-Trichloroethane	ND	0.20	ppbv		ND	1.1	ug/m3
120-82-1	1,2,4-Trichlorobenzene	ND	0.20	ppbv		ND	1.5	ug/m3
95-63-6	1,2,4-Trimethylbenzene	ND	0.20	ppbv		ND	0.98	ug/m3
108-67-8	1,3,5-Trimethylbenzene	ND	0.20	ppbv		ND	0.98	ug/m3
540-84-1	2,2,4-Trimethylpentane	ND	0.20	ppbv		ND	0.93	ug/m3
127-18-4	Tetrachloroethylene	ND	0.20	ppbv		ND	1.4	ug/m3
109-99-9	Tetrahydrofuran	ND	0.20	ppbv		ND	0.59	ug/m3
108-88-3	Toluene	ND	0.20	ppbv		ND	0.75	ug/m3
79-01-6	Trichloroethylene	ND	0.20	ppbv		ND	1.1	ug/m3
75-69-4	Trichlorofluoromethane	ND	0.20	ppbv		ND	1.1	ug/m3
75-01-4	Vinyl chloride	ND	0.20	ppbv		ND	0.51	ug/m3
108-05-4	Vinyl Acetate	ND	0.20	ppbv		ND	0.70	ug/m3
	m,p-Xylene	ND	0.20	ppbv		ND	0.87	ug/m3
95-47-6	o-Xylene	ND	0.20	ppbv		ND	0.87	ug/m3
1330-20-7	Xylenes (total)	ND	0.20	ppbv		ND	0.87	ug/m3

CAS No.	Surrogate Recoveries		Limits
460-00-4	4-Bromofluorobenzene	115%	78-124%

Instrument Performance Check (BFB)

Job Number: N73884
Account: UTC United Technology Corporation
Project: LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT

Sample:	VQ885-BFB	Injection Date:	08/05/04
Lab File ID:	Q22214.D	Injection Time:	10:00
Instrument ID:	GCMSQ		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	8.0 - 40.0% of mass 95	49245	25.4	Pass
75	30.0 - 66.0% of mass 95	104349	53.9	Pass
95	Base peak, 100% relative abundance	193557	100.0	Pass
96	5.0 - 9.0% of mass 95	14215	7.3	Pass
173	Less than 2.0% of mass 174	0	0.0 (0.0) [a]	Pass
174	50.0 - 120.0% of mass 95	159872	82.6	Pass
175	4.0 - 9.01% of mass 174	14382	7.4 (9.0) [a]	Pass
176	93.0 - 101.0% of mass 174	152464	78.8 (95.4) [a]	Pass
177	5.0 - 9.0% of mass 176	10159	5.2 (6.7) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VQ885-IC885	Q22215.D	08/05/04	10:57	00:57	Initial cal 40
VQ885-IC885	Q22216.D	08/05/04	12:00	02:00	Initial cal 20
VQ885-ICC885	Q22217.D	08/05/04	12:56	02:56	Initial cal 10
VQ885-IC885	Q22218.D	08/05/04	13:54	03:54	Initial cal 5
VQ885-IC885	Q22219.D	08/05/04	14:52	04:52	Initial cal 2
VQ885-IC885	Q22220.D	08/05/04	15:47	05:47	Initial cal 0.5
VQ885-IC885	Q22221.D	08/05/04	16:46	06:46	Initial cal 0.2
VQ885-BS	Q22224.D	08/05/04	19:36	09:36	Blank Spike
VQ885-BSD	Q22225.D	08/05/04	20:33	10:33	Blank Spike Duplicate
VQ885-MB	Q22226.D	08/05/04	21:30	11:30	Method Blank
VQ885-SCC	Q22227.D	08/05/04	22:28	12:28	Summa Cleaning Certification
N72309-3	Q22228.D	08/05/04	23:25	13:25	(used for QC only; not part of job N73884)
N72309-3DUP	Q22229.D	08/06/04	00:23	14:23	Duplicate
ZZZZZZ	Q22230.D	08/06/04	01:20	15:20	(unrelated sample)
ZZZZZZ	Q22232.D	08/06/04	03:15	17:15	(unrelated sample)
ZZZZZZ	Q22233.D	08/06/04	04:12	18:12	(unrelated sample)
ZZZZZZ	Q22234.D	08/06/04	05:08	19:08	(unrelated sample)
ZZZZZZ	Q22235.D	08/06/04	06:05	20:05	(unrelated sample)
ZZZZZZ	Q22236.D	08/06/04	07:01	21:01	(unrelated sample)
ZZZZZZ	Q22238.D	08/06/04	08:55	22:55	(unrelated sample)

Instrument Performance Check (BFB)

Job Number: N73884
Account: UTC United Technology Corporation
Project: LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT

Sample:	VQ890-BFB	Injection Date:	08/13/04
Lab File ID:	Q22339.D	Injection Time:	16:24
Instrument ID:	GCMSQ		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	8.0 - 40.0% of mass 95	61448	27.3		Pass
75	30.0 - 66.0% of mass 95	130051	57.8		Pass
95	Base peak, 100% relative abundance	225028	100.0		Pass
96	5.0 - 9.0% of mass 95	16240	7.2		Pass
173	Less than 2.0% of mass 174	0	0.0	(0.0) [a]	Pass
174	50.0 - 120.0% of mass 95	183040	81.3		Pass
175	4.0 - 9.01% of mass 174	10531	4.7	(5.8) [a]	Pass
176	93.0 - 101.0% of mass 174	181355	80.6	(99.1) [a]	Pass
177	5.0 - 9.0% of mass 176	12820	5.7	(7.1) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VQ890-CC885	Q22340.D	08/13/04	17:17	00:53	Continuing cal 10
VQ890-BS	Q22341.D	08/13/04	18:11	01:47	Blank Spike
VQ890-BSD	Q22342.D	08/13/04	19:09	02:45	Blank Spike Duplicate
VQ890-MB	Q22343.D	08/13/04	20:06	03:42	Method Blank
VQ890-SCC	Q22344.D	08/13/04	21:04	04:40	Summa Cleaning Certification
N73150-12	Q22346.D	08/13/04	23:59	07:35	(used for QC only; not part of job N73884)
N73150-12DUP	Q22347.D	08/14/04	00:57	08:33	Duplicate
ZZZZZZ	Q22348.D	08/14/04	01:55	09:31	(unrelated sample)
ZZZZZZ	Q22350.D	08/14/04	03:48	11:24	(unrelated sample)
ZZZZZZ	Q22351.D	08/14/04	04:45	12:21	(unrelated sample)
ZZZZZZ	Q22352.D	08/14/04	05:41	13:17	(unrelated sample)
ZZZZZZ	Q22354.D	08/14/04	07:34	15:10	(unrelated sample)
N73884-1	Q22355.D	08/14/04	08:31	16:07	1051115
ZZZZZZ	Q22356.D	08/14/04	09:28	17:04	(unrelated sample)
ZZZZZZ	Q22357.D	08/14/04	10:24	18:00	(unrelated sample)
ZZZZZZ	Q22358.D	08/14/04	11:21	18:57	(unrelated sample)
ZZZZZZ	Q22359.D	08/14/04	12:17	19:53	(unrelated sample)

Instrument Performance Check (BFB)

Job Number: N73884
Account: UTC United Technology Corporation
Project: LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT

Sample:	VW130-BFB	Injection Date:	07/26/04
Lab File ID:	W03022.D	Injection Time:	18:42
Instrument ID:	GCMSW		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	31717	15.4	Pass
75	30.0 - 66.0% of mass 95	91917	44.7	Pass
95	Base peak, 100% relative abundance	205546	100.0	Pass
96	5.0 - 9.0% of mass 95	13592	6.6	Pass
173	Less than 2.0% of mass 174	0	0.0 (0.0) [a]	Pass
174	50.0 - 100.0% of mass 95	166314	80.9	Pass
175	5.0 - 9.0% of mass 174	11848	5.8 (7.1) [a]	Pass
176	95.0 - 101.0% of mass 174	159872	77.8 (96.1) [a]	Pass
177	5.0 - 9.0% of mass 176	10362	5.0 (6.5) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VW130-IC130	W03023.D	07/26/04	19:59	01:17	Initial cal 40
VW130-IC130	W03024.D	07/26/04	20:51	02:09	Initial cal 20
VW130-ICC130	W03025.D	07/26/04	21:43	03:01	Initial cal 10
VW130-IC130	W03026.D	07/26/04	22:35	03:53	Initial cal 5
VW130-IC130	W03027.D	07/27/04	01:34	06:52	Initial cal 2
VW130-IC130	W03030.D	07/27/04	04:11	09:29	Initial cal 0.2
VW130-IC130	W03033.D	07/27/04	06:48	12:06	Initial cal 0.5
VW130-BS	W03034.D	07/27/04	07:40	12:58	Blank Spike
VW130-BSD	W03035.D	07/27/04	08:32	13:50	Blank Spike Duplicate
VW130-MB	W03036.D	07/27/04	09:24	14:42	Method Blank
VW130-SCC	W03038.D	07/27/04	12:00	17:18	Summa Cleaning Certification
N71188-1	W03039.D	07/27/04	12:52	18:10	(used for QC only; not part of job N73884)
N71188-1DUP	W03040.D	07/27/04	13:44	19:02	Duplicate

Volatile Surrogate Recovery Summary

Job Number: N73884
Account: UTC United Technology Corporation
Project: LEACTP: Pratt & Whitney, East Hartford, Indoor Air, CT

Method: TO-15 Matrix: AIR

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1
N73884-1	Q22355.D	110.0
N73150-12DUP	Q22347.D	103.0
VQ890-BS	Q22341.D	103.0
VQ890-BSD	Q22342.D	102.0
VQ890-MB	Q22343.D	99.0
VW130-SCC	W03038.D	115.0
VW130-MB	W03036.D	94.0

Surrogate Compounds	Recovery Limits
S1 = 4-Bromofluorobenzene	78-124%

Attachment 5

Pratt and Whitney East Hartford Main Facility and Airport/Klondike
400 Main Street, East Hartford, Connecticut
Facility EPA ID #CTD990672081

Calculated Risk-Based Criteria Summary Report

SUMMARY REPORT
FOR THE DEVELOPMENT
OF
CALCULATED RISK-BASED CRITERIA,
MAIN FACILITY AREA AND AIRPORT/KLONDIKE AREA,
PRATT & WHITNEY, MAIN STREET,
EAST HARTFORD, CONNECTICUT

Pratt & Whitney
400 Main Street
East Hartford, Connecticut

Prepared
September 2004

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Table 2 Development of Risk-Based Surface Water Screening Levels for Trespassers – Main Facility Area

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Table 4 Development of Risk-Based Surface Water Screening Levels for Trespassers – Airport/Klondike Area

Table 5 Development of Risk-Based Groundwater Screening Levels Protective of Surface Water Exposures – Main Facility Area

Table 6 Development of Risk-Based Groundwater Screening Levels Protective of Surface Water Exposures- Airport/Klondike Area

1.0 INTRODUCTION

This document presents the development of risk-based criteria for the Main Facility Area and Airport/Klondike Area of the Pratt & Whitney (P&W) Main Street, East Hartford facility being addressed under the Voluntary Corrective Action Program (VCAP).[1] Two conceptual site model reports have been developed for the Site. A report entitled *Conceptual Site Models and Screening Levels for Pratt & Whitney's VCAP Connecticut Facilities* was prepared by Gradient Corporation (Main Facility CSM Report). This report was issued on December 19, 1997 and revised on September 18, 1998, and September 15, 1999. The second conceptual site model report, entitled *Conceptual Site Model for the Airport/Klondike Portions of the Pratt & Whitney Main Street Facility, East Hartford, CT* (Airport/Klondike CSM Report), prepared by Gradient Corporation on August 26, 2004, addresses the Airport/Klondike Area of the Site. Both of the reports provide area-specific (i.e., Main Facility Area and Airport/Klondike Area) conceptual site models, a description of area-specific exposure media and exposure pathways, a description of potential receptors, a rational and approach to screening analytical data generated for exposure media, and screening levels for exposure media. Risk-based criteria were developed for chemicals that exceeded the screening levels developed in the Main Facility CSM Report and the Airport/Klondike CSM Report. Risk-based criteria were developed for two media: surface water and groundwater (protective of discharge to surface water). The following sub-sections present the approach used in developing the risk-based criteria.

2.0 RISK-BASED CRITERIA FOR SURFACE WATER

In the Main Facility CSM Report and the Airport/Klondike CSM Report, surface water quality standards [i.e., Surface Water Protection Criteria (SWPC)] promulgated by the Connecticut Department of Environmental Protection (DEP) per the Remediation Standard Regulations (RSRs) had been defined as surface water screening levels. However, these screening levels were overly conservative for application at the Pratt & Whitney facilities because they were based on surface water being the source of drinking water, a condition not satisfied at any of the VCAP facilities. We were aware of these conservative assumptions, but proposed the DEP SWPC as screening levels since these standards were readily available. Given the conservative nature of the screening levels proposed in the Main Facility CSM Report and the Airport/Klondike CSM Report, some exceedances of the screening levels were expected. Therefore, risk-based criteria, protective of human health, were developed for these chemicals.

Risk-based criteria (protective of human health) were developed assuming incidental ingestion of and dermal contact with surface water for the two receptor groups, Samplers/Maintenance Workers and Trespassers, likely to be

[1] The screening levels developed in this document are being referred to as "generic" levels since they are applicable to all Pratt & Whitney facilities being addressed by the VCAP.

exposed to surface water. The calculated risk-based criteria for Samplers/Maintenance Workers and Trespassers are presented in Tables 1 through 4, respectively.

2.1 Development of Risk-Based Criteria for Surface Water

Risk-based criteria were developed for Samplers/Maintenance Workers and Trespassers considering incidental ingestion of and dermal contact with surface water. The equations used for calculating the screening levels are as follows:

Carcinogens

$$C = \frac{Target\ Cancer\ Risk}{\left[IF_d * K_p * \left(CSF / Oral_{abs}\right) + IF_{ing} * CSF\right]}$$

where:

C	=	Risk-based Criteria (mg/l)
IF_d	=	Dermal Intake Factor = (SA*ET*EF*ED*CF)/(BW*AT)
IF_{ing}	=	Ingestion Intake Factor = (IR*ET*EF*ED)/(BW*AT)
ET	=	Exposure Time (hours/event)
EF	=	Exposure Frequency (events/year)
ED	=	Exposure Duration (year)
BW	=	Body Weight (kgs)
AT	=	Averaging Time (days)
SA	=	Body Surface Area Exposed to Surface Water (cm^2)
CF	=	Conversion Factor
IR	=	Surface Water Ingestion Rate (L/hour)
$Oral_{abs}$	=	Oral Absorption (unitless)
CSF	=	Cancer Slope Factor $(mg\text{-}kg/day)^{-1}$
K_p	=	Dermal Permeability (cm/hr)

Non-carcinogens

$$C = \frac{Target\ Hazard\ Quotient}{\left[\left(IF_d * K_p / \left(RfD * Oral_{abs}\right)\right) + \left(IF_{ing} / RfD\right)\right]}$$

where:

C	=	Risk-based Criteria (mg/l)
IF_d	=	Dermal Intake Factor = (SA*ET*EF*ED*CF)/(BW*AT)
IF_{ing}	=	Ingestion Intake Factor = (IR*ET*EF*ED)/(BW*AT)
ET	=	Exposure Time (hours/event)
EF	=	Exposure Frequency (events/year)
ED	=	Exposure Duration (years)
BW	=	Body Weight (kgs)
AT	=	Averaging Time (days)
SA	=	Body Surface Area Exposed to Surface Water (cm^2)
CF	=	Conversion Factor
IR	=	Surface Water Ingestion Rate (L/hour)
RfD	=	Reference Dose (mg/kg-d)

$Oral_{abs}$ = Oral Absorption (unitless)
K_p = Dermal Permeability (cm/hr)

A target cancer risk of 10^{-6} and a target hazard quotient of 1.0 was used. Exposure factor values for all parameters, except exposure time (ET), body surface area exposed to surface water (SA), and surface water incidental ingestion rate (IR), had been defined in the CSM report. The exposure factor values used for the three surface water exposure-specific variables (ET, SA, and IR) are discussed below.

2.2 Samplers/Maintenance Workers

Exposure factor values used for Samplers/Maintenance Workers, exposure time of 2 hours per event, skin surface area of 2,270 cm^2 (hands and forearms), and an incidental ingestion rate of 0.005 liters per hour, are also health-protective because Samplers/Maintenance Workers are likely to wear gloves while collecting samples and removing beaver dams (as at the East Hartford - Airport/Klondike area). This is likely to eliminate or greatly limit their potential exposure to surface water.

2.3 Trespassers

The exposure factor values used for Trespassers, exposure time of 2 hours per event, skin surface area of 5,242 cm^2 (hands, forearms, lower legs), and an incidental ingestion rate of 0.05 liters per hour are health-protective. On-site surface water bodies at the P&W facilities are small brooks or streams. The small size of these water bodies greatly limits the potential for surface water exposure to Trespassers. However, the exposure parameter values used in the calculations reflect a much greater level of exposure. For example, the incidental surface water ingestion rate value chosen (0.05 liters per hour) corresponds to the EPA-recommended ingestion rate while swimming. Similarly, the skin surface area and exposure time values chosen are also expected to be health-protective for the trespassing exposure scenario.

3.0 RISK-BASED CRITERIA FOR GROUNDWATER DISCHARGE TO SURFACE WATER

Risk-based criteria for groundwater, protective of human exposures to surface water, were also developed. The lower of the risk-based surface water criteria for Samplers/Maintenance Workers and Trespassers (presented in Tables 1 through 4) was multiplied by a default dilution and attenuation factor (DAF) of 10 to develop these criteria (Tables 5 and 6). The DEP had also used a DAF of 10 (the lower-bound of the DAF values used by DEP) in calculating the state's groundwater protection criteria.

3.1 Risk-based Criteria for Lead in Surface Water

Blood lead levels (BLLs) in adolescents and adults are assessed using USEPA's Adult Lead Model (ALM) (USEPA, 2003). USEPA's Adult Blood Lead Model predicts a median BLL estimate for an adult as a function of the baseline BLL plus an increment that is attributable to exposure to site media. This increment is a function of the biokinetic slope factor, the concentration of lead in site media, the ingestion rate, the fraction of lead that is absorbed, and the exposure frequency. EPA has selected a target BLL for an adult female, in order to protect a developing fetus such that no more than 5% of fetuses would be expected to have BLLs exceeding 10 μg/dL. The basic form of the equation for the ALM is as follows:

$$BLL_{adult} = PbB + \frac{(EF \times AF \times PbS \times IR \times BKSF)}{AT}$$

The input values used in the model are summarized in Table 4 and described below. First, an average baseline lead concentration in blood (PbB_{base}) for adults is identified to account for continuing exposure to background levels of lead in food, soil, and dust, and pre-existing body burdens due to prior lead exposures. Baseline BLLs were obtained from the most recent National Health and Nutrition Examination Survey, from 1991-1994 (NHANES III, Phase 2) (U.S. Public Health Service, 1997). For adults we used the geometric mean (GM) and geometric standard deviation (GSD) BLLs for women of childbearing age in the northeastern United States (Age 20-49). For the adolescent trespassers, we used the GM and GSD BLLs for males and females combined, in the age range of interest (Age 13-18). To this baseline, the model adds the incremental increase in blood lead due to the lead source of interest (in this case, exposure to lead *via* exposure to surface water).

The concentration of lead in surface water (PbS) is the mean lead concentration in each exposure area. Lead uptake is calculated by multiplying the concentration of lead in surface water by the ingestion rate (IR) and the absorption fraction (AF) for lead in water. The AF is the amount of lead that is absorbed into the bloodstream from the gastrointestinal tract. The AF value for lead in water of 50% was obtained from USEPA's IEUBK model (USEPA, 2002). The exposure frequency (EF) for Adolescent Trespasser is 26 days per year; the EF for Adult Samplers/Maintenance Workers is 50 days per year, consistent with the CSM report. The averaging time (AT) for chronic exposure to lead in surface water is assumed to be one year (*i.e.*, 365 days). The biokinetic slope factor (BKSF) relates the incremental lead uptake into the body to an incremental increase in blood lead level in adults. USEPA's default value of 0.4 was used for the BKSF.

Total BLLs for adults are predicted by adding the estimated incremental increase in blood lead to the average baseline BLL. A geometric standard deviation (GSD) appropriate for adults is used to estimate the probable range of BLLs around the predicted geometric mean adult BLL from the model. For this evaluation, we used the actual GSDs for the BLLs obtained from the NHANES database.

BLLs estimated using the ALM are evaluated based on a comparison to the USEPA risk management criterion for lead. Specifically, the health protection goal of the USEPA Office of Solid Waste and Emergency Response is to "limit exposure to soil lead levels such that a typical (or hypothetical) child or group of similarly exposed children would have an estimated risk of no more than 5% of exceeding a blood lead of 10 μg/dL" (USEPA, 1998). The Centers for Disease Control (CDC) recommend that "the goal of all lead poisoning prevention activities should be to reduce children's BLLs below 10 μg/dL" (CDC, 1991). Based on a goal of keeping the BLL in children at or below 10 μg/dL, the BLL for women of childbearing age should not exceed 11.1 μg/dL, because the fetal BLL is approximately 90% of the maternal BLL (*i.e.*, 90% of 11.1 μg/dL is 10 μg/dL).

The adult lead modeling results, along with the input values and predicted BLLs, for the adult Sampler/Maintenance Workers and adolescent Trespasser are presented in Tables 1 through 4. Note that the mean surface water lead concentration was back-calculated to determine the maximum mean concentration of lead in surface water that would result in a blood lead level less than the blood lead goal. That is, assuming that all lead exposure is from surface water contact, and background levels of lead from all other sources (*e.g.*, food, soil, dust) are reflected in the baseline blood lead value, the adult Sampler/Maintenance Worker could be exposed to 900 μg/L lead in surface water, and the adolescent Trespasser could be exposed to 1,800 μg/L lead in surface water, and still be below the target goal levels.

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TABLES

Table 1
Development of Risk-based Surface Water Screening Levels for Samplers/Maintenance Workers
MAIN FACILITY AREA

Chemical	K_p[1] (cm/hr)	$Oral_{abs}$[2] (unitless)	CSF[3] $(mg/kg\text{-}d)^{-1}$	RfD[3] (mg/kg-d)	Risk-based Screening Levels[4] Cancer (µg/L)	Risk-based Screening Levels[4] Non-Cancer (µg/L)	Final Screening Level[5] (µg/L)	Risk Driver
Inorganics								
Cadmium	1.0E-03	0.025	N/A	5.0E-04	N/A	1,334	1,334	N
Nickel	2.0E-04	0.27	N/A	2.0E-02	N/A	764,800	764,800	N
Semi-volatile Organics								
Benzo(a)anthracene	4.7E-01	1	7.30E-01 [3]	N/A	0.9	N/A	0.9	C
Benzo(b)fluoranthene	7.0E-01	1	7.30E-01 [3]	N/A	0.6	N/A	0.6	C
Benzo(a)pyrene	7.0E-01	1	7.30E+00	N/A	0.1	N/A	0.1	C
Benzo(k)fluoranthene	6.1E-01	1	7.30E-02 [3]	N/A	7.1	N/A	7.1	C
Chrysene	4.7E-01	1	7.30E-03 [3]	N/A	91	N/A	91	C
Pentachlorphenol	3.9E-01	1	1.20E-01	3.0E-02	6.7	8,609	6.7	C
bis(2-ethylhexylphthalate)	3.9E-03 [9]	1	1.40E-02	2.0E-02	3,689	368,873	3,689	C
Other Compounds								
PCBs	4.3E-01 [10]	1	2.00E+00	2.0E-05	0.4	5	0.4	C
Volatile Organic								
Benzene	1.5E-02	1	5.50E-02	4.0E-03	333.1	26,172	333	
1,1-Dichloroethene	1.2E-02	1	N/A	5.0E-02	N/A	396,247	396,247	N
Chloroform	6.8E-03	1	N/A	1.0E-02	N/A	125,024	125,024	N
cis-1,2-Dichloroethene	7.7E-03 [11]	1	N/A	2.0E-02 [11]	N/A	227,323	227,323	N
TCE	1.2E-02	1	1.1E-02 [13]	N/A	2,017	N/A	2,017	C
Tetrachloroethene	3.3E-02	1	5.2E-02 [13]	1.0E-02	172	31,973	172	C
Vinyl Chloride	5.6E-03	1	7.5E-01	N/A	54	N/A	54	C

Calculation of Risk-based Screening Levels:

C_w - Cancer = $\dfrac{\text{Cancer Risk } (1 \times 10^{-6})}{[IF_d * K_p * (CSF/Oral_{abs}) + IF_{ing} * CSF]}$

Cw-Non-Cancer= $\dfrac{\text{Hazard Quotient } (1.0)}{[(IF_d * K_p/(RfD * Oral_{abs})) + (IF_{ing}/RfD)]}$

Intake Parameters:	Intake Factor Cancer	Intake Factor Non-cancer
IF_d = Dermal Intake Factor = (SA*ET*EF*ED*CF)/(BW*AT)	3.17E-03	8.88E-03
IF_{ing} = Ingestion Intake Factor = (IR*ET*EF*ED)/(BW*AT)	6.99E-06	1.96E-05

ET = Exposure Time =2 hours/event
EF = Exposure Frequency = 50 events/year
ED = Exposure Duration = 25 years for cancer; 25 year for noncancer
BW = Body Weight = 70 kg
AT = Averaging Time = 25,550 days for cancer; 9125 days for noncancer
SA = Body Surface Area Exposed to Surface Water = 2270 cm^2 (includes hands and forearms)
CF = Conversion Factor = 0.001 L/cm3
IR = Surface Water Ingestion Rate = 0.005 L/hour

Notes:
N/A = Not Available/Not Applicable C - Cancer N - Noncancer

1. Kp values from USEPA 2001 Dermal Risk Assessment Interim Guidance.
2. All oral values are from USEPA, 1999 unless otherwise noted. An oral absorption value of 100% was used if the value was greater than 50%, per USEPA, 1999. Risk Assessment Guidance for Superfund, V. 1: Human Health Evaluation Manual Supplemental Guidance, Dermal Risk Assessment, Interim Guidance.
3. Toxicity factors obtained from IRIS except for certain PAH slope factors, which were determined using TEFs adjustments to the benzo(a)pyrene slope factor.
4. Risk-based criteria calculated using the equations and input parameter values listed above.
5. Final criteria is the lower of the cancer and non-cancer values.
9. The value for diethyl phthalate was used since none was available for bis(2-ethylhexylphthalate).
10. The value for PCB-hexachlorbiphenyl was used since none was available for non-specific PCBs.
11. The value for trans-1,2-DCE was used since none was available for cis-1,2-DCE.
13. No toxicity value currently available; used withdrawn value from IRIS.

Table 2
Development of Risk-based Surface Water Screening Levels for Trespassers
MAIN FACILITY AREA

Chemical	K_p[1] (cm/hr)	$Oral_{abs}$[2] (unitless)	CSF[3] $(mg/kg\text{-}d)^{-1}$	RfD[3] (mg/kg-d)	Risk-based Screening Levels[4] Cancer (µg/L)	Risk-based Screening Levels[4] Non-Cancer (µg/L)	Final Screening Level[5] (µg/L)	Risk Driver
Inorganics								
Cadmium	1.0E-03	0.025	N/A	5.0E-04	N/A	199	199	N
Nickel	2.0E-04	0.27	N/A	2.0E-02	N/A	38,324	38,324	N
Semi-volatile Organics								
Benzo(a)anthracene	4.7E-01	1	7.30E-01 [3]	N/A	3.2	N/A	3.2	C
Benzo(b)fluoranthene	7.0E-01	1	7.30E-01 [3]	N/A	2.1	N/A	2.1	C
Benzo(a)pyrene	7.0E-01	1	7.30E+00	N/A	0.2	N/A	0.2	C
Benzo(k)fluoranthene	6.1E-01	1	7.30E-02 [3]	N/A	24.5	N/A	24.5	C
Chrysene	4.7E-01	1	7.30E-03 [3]	N/A	316	N/A	316	C
Pentachlorphenol	3.9E-01	1	1.20E-01	3.0E-02	23.1	1,479	23.1	C
bis(2-ethylhexylphthalate)	3.9E-03 [9]	1	1.40E-02	2.0E-02	5,879	29,314	5,879	C
Other Compounds								
PCBs	4.3E-01 [10]	1	2.00E+00	2.0E-05	1.3	1	0.9	C
Volatile Organic								
Benzene	1.5E-02	1	5.50E-02	4.0E-03	819.5	3,211	820	
1,1-Dichloroethene	1.2E-02	1	N/A	5.0E-02	N/A	45,725	45,725	N
Chloroform	6.8E-03	1	N/A	1.0E-02	N/A	12,055	12,055	N
cis-1,2-Dichloroethene	7.7E-03 [11]	1	N/A	2.0E-02 [11]	N/A	22,852	22,852	N
TCE	1.2E-02	1	1.1E-02 [13]	N/A	4,668	N/A	4,668	C
Tetrachloroethene	3.3E-02	1	5.2E-02 [13]	1.0E-02	500	4,630	500	C
Vinyl Chloride	5.6E-03	1	7.5E-01	N/A	97	N/A	97	C

Calculation of Risk-based Screening Levels:

C_w - Cancer =
$$\frac{\text{Cancer Risk } (1 \times 10^{-6})}{[IF_d * K_p * (CSF/Oral_{abs}) + IF_{ing} * CSF]}$$

Cw-Non-Cancer=
$$\frac{\text{Hazard Quotient } (1.0)}{[(IF_d * K_p/(RfD * Oral_{abs})) + (IF_{ing}/RfD)]}$$

Intake Parameters:	Intake Factor Cancer	Intake Factor Non-cancer
IF_d = Dermal Intake Factor = (SA*ET*EF*ED*CF)/(BW*AT)	9.04E-04	5.08E-02
IF_{ing} = Ingestion Intake Factor = (IR*ET*EF*ED)/(BW*AT)	8.62E-06	4.84E-04

ET = Exposure Time =2 hours/event
EF = Exposure Frequency = 26 events/year
ED = Exposure Duration = 5 years for cancer; 1 year (summer) for noncancer
BW = Body Weight = 59 kg
AT = Averaging Time = 25,550 days for cancer; 91 days for noncancer
SA = Body Surface Area Exposed to Surface Water = 5,242 cm^2 (includes hands, forearms, lower legs, and feet for adolescents, 13-18 years)
CF = Conversion Factor = 0.001 L/cm^3
IR = Surface Water Ingestion Rate = 0.05 L/hour

Notes:
N/A = Not Available/Not Applicable C - Cancer N - Noncancer

1. Kp values from USEPA 2001 Dermal Risk Assessment Interim Guidance.
2. All oral values are from USEPA, 1999 unless otherwise noted. An oral absorption value of 100% was used if the value was greater than 50%, per USEPA, 1999. Risk Assessment Guidance for Superfund, V. 1: Human Health Evaluation Manual Supplemental Guidance, Dermal Risk Assessment, Interim Guidance.
3. Toxicity factors obtained from IRIS except for certain PAH slope factors, which were determined using TEFs adjustments to the benzo(a)pyrene slope factor.
4. Risk-based criteria calculated using the equations and input parameter values listed above.
5. Final criteria is the lower of the cancer and non-cancer values.
9. The value for diethyl phthalate was used since none was available for bis(2-ethylhexylphthalate).
10. The value for PCB-hexachlorbiphenyl was used since none was available for non-specific PCBs.
11. The value for trans-1,2-DCE was used since none was available for cis-1,2-DCE.
13. No toxicity value currently available; used withdrawn value from IRIS.

Table 3
Development of Risk-based Surface Water Screening Levels for Samplers/Maintenance Workers
AIRPORT/KLONDIKE AREA

Chemical	K_p[1] (cm/hr)	$Oral_{abs}$[2] (unitless)	CSF[3] $(mg/kg\text{-}d)^{-1}$	RfD[3] (mg/kg-d)	Risk-based Screening Levels[4] Cancer (µg/L)	Risk-based Screening Levels[4] Non-Cancer (µg/L)	Final Screening Level[5] (µg/L)	Risk Driver
Inorganics								
Arsenic	1.0E-03	1	1.50E+00	3.0E-04	66	10,543	66	C
Barium	1.0E-03	0.07	N/A	7.0E-02	N/A	477,844	477,844	N
Cadmium	1.0E-03	0.025	N/A	5.0E-04	N/A	1,334	1,334	N
Chromium (total)	2.0E-03	0.025	N/A	3.0E-03	N/A	4,108	4,108	N
Copper	1.0E-03	0.05 [10]	N/A	3.7E-02	N/A	187,569	187,569	N
Lead	1.0E-04	0.04	N/A	N/A	N/A	N/A	900 [14]	PbB
Mercury	1.0E-03	0.15	N/A	3.0E-04	N/A	3,807	3,807	N
Selenium	1.0E-03	1	N/A	5.0E-03	N/A	175,722	175,722	N
Zinc	6.0E-04	0.05 [10]	N/A	3.0E-01	N/A	2,377,481	2,377,481	N
Volatile Organic								
1,1,1-Trichloroethane	1.3E-02	1	N/A	3.5E-02 [13]	N/A	259,128	259,128	N
1,1-Dichloroethane	6.7E-03	1	N/A	1.0E-01	N/A	1,264,288	1,264,288	N
1,1-Dichloroethene	1.2E-02	1	N/A	5.0E-02	N/A	396,247	396,247	N
Chloroform	6.8E-03	1	N/A	1.0E-02	N/A	125,024	125,024	N
cis-1,2-Dichloroethene	7.7E-03 [11]	1	N/A	2.0E-02 [11]	N/A	227,323	227,323	N
Methylene Chloride	3.5E-03	1	N/A	6.0E-02	N/A	1,184,241	1,184,241	N
TCE	1.2E-02	1	1.1E-02 [13]	N/A	2,017	N/A	2,017	C
Tetrachloroethene	3.3E-02	1	5.2E-02 [13]	1.0E-02	172	31,973	172	C
Vinyl Chloride	5.6E-03	1	7.5E-01	N/A	54	N/A	54	C
Xylenes	5.3E-02	1	N/A	2.0E+00	N/A	4,077,887	4,077,887	N

Calculation of Risk-based Screening Levels:

C_w - Cancer =
$$\frac{\text{Cancer Risk } (1 \times 10^{-6})}{[IF_d * K_p * (CSF/Oral_{abs}) + IF_{ing} * CSF]}$$

Cw-Non-Cancer=
$$\frac{\text{Hazard Quotient } (1.0)}{[(IF_d * K_p/(RfD * Oral_{abs})) + (IF_{ing}/RfD)]}$$

Intake Parameters:	Intake Factor Cancer	Intake Factor Non-cancer
IF_d = Dermal Intake Factor = (SA*ET*EF*ED*CF)/(BW*AT)	3.17E-03	8.88E-03
IF_{ing} = Ingestion Intake Factor = (IR*ET*EF*ED)/(BW*AT)	6.99E-06	1.96E-05

ET = Exposure Time =2 hours/event
EF = Exposure Frequency = 50 events/year
ED = Exposure Duration = 25 years for cancer; 25 year for noncancer
BW = Body Weight = 70 kg
AT = Averaging Time = 25,550 days for cancer; 9125 days for noncancer
SA = Body Surface Area Exposed to Surface Water = 2270 cm^2 (includes hands and forearms)
CF = Conversion Factor = 0.001 L/cm3
IR = Surface Water Ingestion Rate = 0.005 L/hour

Notes:

N/A = Not Available/Not Applicable — C - Cancer
PbB = Adult Blood Lead Model — N - Noncancer

1. Kp values from USEPA 2001 Dermal Risk Assessment Interim Guidance.
2. All oral values are from USEPA, 1999 unless otherwise noted. An oral absorption value of 100% was used if the value was greater than 50%, per USEPA, 1999. Risk Assessment Guidance for Superfund, V. 1: Human Health Evaluation Manual Supplemental Guidance, Dermal Risk Assessment, Interim Guidance.
3. Toxicity factors obtained from IRIS, and additionally HEAST, ECAO, and NCEA, if IRIS toxicity factors were not available.
4. Risk-based criteria calculated using the equations and input parameter values listed above.
5. Final criteria is the lower of the cancer and non-cancer values.
10. Value not available; assumed 5% oral absorption to be conservative.
11. The value for trans-1,2-DCE was used since none was available for cis-1,2-DCE.
12. Derived from RDA of 10 mg/d (divided RDA by 70kg) (National Research Council, "RDA", 1989).
13. No toxicity value currently available; used withdrawn value from IRIS.
14. The value for lead was calculated using the Adult Blood Lead model by the USEPA Technical Review Workgroup for Lead, 2003. Default parameters except for the receptor-specific exposure frequency were used and the absorption of lead from water (50%) from USEPA's IEUBK model, 2002. The screening level was set so that a fetus of an exposed adult has no more than a 5% probability of having a blood lead above 10 ug/dL.

Table 4
Development of Risk-based Surface Water Screening Levels for Trespassers
AIRPORT/KLONDIKE AREA

Chemical	K_p[1] (cm/hr)	$Oral_{abs}$[2] (unitless)	CSF[3] $(mg/kg\text{-}d)^{-1}$	RfD[3] (mg/kg-d)	Risk-based Screening Levels[4] Cancer (µg/L)	Risk-based Screening Levels[4] Non-Cancer (µg/L)	Final Screening Level[5] (µg/L)	Risk Driver
Inorganics								
Arsenic	1.0E-03	1	1.50E+00	3.0E-04	70	561	70	C
Barium	1.0E-03	0.07	N/A	7.0E-02	N/A	57,873	57,873	N
Cadmium	1.0E-03	0.025	N/A	5.0E-04	N/A	199	199	N
Chromium (total)	2.0E-03	0.025	N/A	3.0E-03	N/A	660	660	N
Copper	1.0E-03	0.05 [10]	N/A	3.7E-02	N/A	24,672	24,672	N
Lead	1.0E-04	0.04	N/A	N/A	N/A	N/A	1,800 [14]	PbB
Mercury	1.0E-03	0.15	N/A	3.0E-04	N/A	365	365	N
Selenium	1.0E-03	1	N/A	5.0E-03	N/A	9,345	9,345	N
Zinc	6.0E-04	0.05 [10]	N/A	3.0E-01	N/A	274,348	274,348	N
Volatile Organic								
1,1,1-Trichloroethane	1.3E-02	1	N/A	3.5E-02 [13]	N/A	30,587	30,587	N
1,1-Dichloroethane	6.7E-03	1	N/A	1.0E-01	N/A	121,297	121,297	N
1,1-Dichloroethene	1.2E-02	1	N/A	5.0E-02	N/A	45,725	45,725	N
Chloroform	6.8E-03	1	N/A	1.0E-02	N/A	12,055	12,055	N
cis-1,2-Dichloroethene	7.7E-03 [11]	1	N/A	2.0E-02 [11]	N/A	22,852	22,852	N
Methylene Chloride	3.5E-03	1	N/A	6.0E-02	N/A	90,640	90,640	N
TCE	1.2E-02	1	1.1E-02 [13]	N/A	4,668	N/A	4,668	C
Tetrachloroethene	3.3E-02	1	5.2E-02 [13]	1.0E-02	500	4,630	500	C
Vinyl Chloride	5.6E-03	1	7.5E-01	N/A	97	N/A	97	C
Xylenes	5.3E-02	1	N/A	2.0E+00	N/A	629,907	629,907	N

Calculation of Risk-based Screening Levels:

C_w - Cancer =
$$\frac{\text{Cancer Risk } (1 \times 10^{-6})}{[IF_d * K_p * (CSF/Oral_{abs}) + IF_{ing} * CSF]}$$

Cw-Non-Cancer=
$$\frac{\text{Hazard Quotient } (1.0)}{[(IF_d * K_p/(RfD * Oral_{abs})) + (IF_{ing}/RfD)]}$$

Intake Parameters:	Intake Factor Cancer	Intake Factor Non-cancer
IF_d = Dermal Intake Factor = (SA*ET*EF*ED*CF)/(BW*AT)	9.04E-04	5.08E-02
IF_{ing} = Ingestion Intake Factor = (IR*ET*EF*ED)/(BW*AT)	8.62E-06	4.84E-04

ET = Exposure Time =2 hours/event
EF = Exposure Frequency = 26 events/year
ED = Exposure Duration = 5 years for cancer; 1 year (summer) for noncancer
BW = Body Weight = 59 kg
AT = Averaging Time = 25,550 days for cancer; 91 days for noncancer
SA = Body Surface Area Exposed to Surface Water = 5,242 cm^2 (includes hands, forearms, lower legs, and feet for adolescents, 13-18 years)
CF = Conversion Factor = 0.001 L/cm^3
IR = Surface Water Ingestion Rate = 0.05 L/hour

Notes:

N/A = Not Available/Not Applicable — C - Cancer
PbB = Adult Blood Lead Model — N - Noncancer

1. Kp values from USEPA 2001 Dermal Risk Assessment Interim Guidance.
2. All oral values are from USEPA, 1999 unless otherwise noted. An oral absorption value of 100% was used if the value was greater than 50%, per USEPA, 1999. Risk Assessment Guidance for Superfund, V. 1: Human Health Evaluation Manual Supplemental Guidance, Dermal Risk Assessment, Interim Guidance.
3. Toxicity factors obtained from IRIS, and additionally HEAST, ECAO, and NCEA, if IRIS toxicity factors were not available.
4. Risk-based criteria calculated using the equations and input parameter values listed above.
5. Final criteria is the lower of the cancer and non-cancer values.
10. Value not available; assumed 5% oral absorption to be conservative.
11. The value for trans-1,2-DCE was used since none was available for cis-1,2-DCE.
12. Derived from RDA of 10 mg/d (divided RDA by 70kg) (National Research Council, "RDA", 1989).
13. No toxicity value currently available; used withdrawn value from IRIS.
14. The value for lead was calculated using the Adult Blood Lead model by the USEPA Technical Review Workgroup for Lead, 2003. Default parameters except for the receptor-specific exposure frequency were used and the absorption of lead from water (50%) from USEPA's IEUBK model, 2002. The screening level was set so that a fetus of an exposed adult has no more than a 5% probability of having a blood lead above 10 ug/dL.

Table 5
Development of Risk-Based Groundwater Screening Levels Protective of Surface Water Exposures
MAIN FACILITY AREA

Chemical	Surface-Water Screening Level (µg/l) Samplers/ Maintenance Workers	Trespassers	DAF	Groundwater Screening Level (µg/l)
Inorganics				
Cadmium	1,334	199	10	1,988
Nickel	764,800	38,324	10	383,238
Semi-volatile Organics				
Benzo(a)anthracene	0.9	3	10	9
Benzo(b)fluoranthene	0.6	2	10	6
Benzo(a)pyrene	0.1	0.2	10	1
Benzo(k)fluoranthene	7.1	24	10	71
Chrysene	91	316	10	914
Pentachlorphenol	6.7	23	10	67
bis(2-ethylhexylphthalate)	3,689	5,879	10	36,887
Other Compounds				
PCBs	0.4	1	10	4
Volatile Organic				
Benzene	333	820	10	3,331
1,1-Dichloroethene	396,247	45,725	10	457,247
Chloroform	125,024	12,055	10	120,555
cis-1,2-Dichloroethene	227,323	22,852	10	228,522
TCE	2,017	4,668	10	20,173
Tetrachloroethene	172	500	10	1,722
Vinyl Chloride	54	97	10	539

Notes:
1. Groundwater screening level = Lower of surface water screening levels × DAF

Table 6
Development of Risk-Based Groundwater Screening Levels Protective of Surface Water Exposures
AIRPORT/KLONDIKE AREA

Chemical	Surface-Water Screening Level (µg/l) Samplers/ Maintenance Workers	Trespassers	DAF	Groundwater Screening Level (µg/l)
Inorganics				
Arsenic	66	70	10	656
Barium	477,844	57,873	10	578,729
Cadmium	1,334	199	10	1,988
Chromium (total)	4,108	660	10	6,599
Copper	187,569	24,672	10	246,722
Lead	900	1,800	10	9,000
Mercury	3,807	365	10	3,646
Selenium	175,722	9,345	10	93,452
Zinc	2,377,481	274,348	10	2,743,481
Volatile Organic				
1,1,1-Trichloroethane	259,128	30,587	10	305,872
1,1-Dichloroethane	1,264,288	121,297	10	1,212,973
1,1-Dichloroethene	396,247	45,725	10	457,247
Chloroform	125,024	12,055	10	120,555
cis-1,2-Dichloroethene	227,323	22,852	10	228,522
Methylene Chloride	1,184,241	90,640	10	906,404
TCE	2,017	4,668	10	20,173
Tetrachloroethene	172	500	10	1,722
Vinyl Chloride	54	97	10	539
Xylenes	4,077,887	629,907	10	6,299,073

lotes:

1. Groundwater screening level = Lower of surface water screening levels × DAF