Table 8a

EXCEEDANCES OF P&W VCAP RISK-BASED GROUNDWATER LIMITS BASED ON CT SURFACE WATER CRITERIA

Pratt & Whitney, East Hartford, CT: Step 4 Investigation - Groundwater Data

Loureiro Engineering Associates, Inc.

	Location ID	ET-MW-18D	ET-MW-18D	ET-MW-18D	ET-MW-18D	ET-MW-18D	ET-MW-18S	ET-MW-18S
	Sample ID	2003527	2003527	2003527	2003531	2003531	2003530	2003530
	Sample Date	08/16/2001	08/16/2001	08/16/2001	08/16/2001	08/16/2001	08/16/2001	08/16/2001
	Sample Time	11:50	11:50	11:50	11:40	11:40	11:30	11:30
	Sample Depth	32.50' - 35.5	32.50' - 35.5	32.50' - 35.5	32.50' - 35.5	32.50' - 35.5	7.00' - 16.00	7.00' - 16.00
	Laboratory	STLC	STLC	STLC	STLC	STLC	STLC	STLC
	Lab. Number	A1H170215009	A1H170215009R	A1H170215010	A1H170215019	A1H170215020	A1H170215017	A1H170215018
Constituent	Units							
Depth of Well	Ft	35.3	35.3	35.3	35.3	35.3	15.46	15.46
Depth to Water	Ft	10.6	10.6	10.6	10.6	10.6	10.46	10.46
Water Elevation	Ft	30.32	30.32	30.32	30.32	30.32	30.40	30.40
Date Metals Analyzed	-	08/24/2001		08/24/2001	08/24/2001	08/24/2001	08/24/2001	08/24/2001
Date Organics Analyzed	-	08/23/2001			08/23/2001			
Date Physical Analyzed	-							
Date Semi-volatile Organics Analyzed	-	08/23/2001	09/04/2001		08/23/2001		08/23/2001	
Arsenic	mg/L							
Arsenic (Unfiltered)	mg/L							
Beryllium	mg/L	<0.0050 U			<0.0050 U		<0.0050 U	
Beryllium (Unfiltered)	mg/L			<0.0050 U		<0.0050 U		<0.0050 U
Cadmium (Unfiltered)	mg/L							
Chromium, Total (Unfiltered)	mg/L							
Copper (Unfiltered)	mg/L							
Lead (Unfiltered)	mg/L							
Mercury (Unfiltered)	mg/L							
Zinc (Unfiltered)	mg/L							
Famphur	ug/l							
Hexachlorobenzene	ug/l	<10 U	<10 UJ		<10 U		<10 U	
Cyanide (Total)	mg/L							
Acenaphthene	ug/l							
Benzo(a)anthracene	ug/l	<10 U	<10 UJ		<10 U		<10 U	
Benzo(a)pyrene	ug/l	<10 U	<10 UJ		<10 U		<10 U	
Benzo(b)fluoranthene	ug/l	<10 U	<10 UJ		<10 U		<10 U	
Benzo(g,h,i)perylene	ug/l	<10 U	<10 UJ		<10 U		<10 U	
Benzo(k)fluoranthene	ug/l	<10 U	<10 UJ		<10 U		<10 U	
Naphthalene	ug/L							
Pentachlorophenol	ug/l							

RCRA RECORDS CENTER
FACILITY Pratt + Whitney - Main St.
I.D. NO. CTD990672081
FILE LOC. B-5
OTHER RDMS# 1490

Table 8a

EXCEEDANCES OF P&W VCAP RISK-BASED GROUNDWATER LIMITS BASED ON CT SURFACE WATER CRITERIA

Pratt & Whitney, East Hartford, CT: Step 4 Investigation - Groundwater Data

Loureiro Engineering Associates, Inc.

	Location ID	ET-MW-18D	ET-MW-18D	ET-MW-18D	ET-MW-18D	ET-MW-18D	ET-MW-18S	ET-MW-18S
	Sample ID	2003527	2003527	2003527	2003531	2003531	2003530	2003530
	Sample Date	08/16/2001	08/16/2001	08/16/2001	08/16/2001	08/16/2001	08/16/2001	08/16/2001
	Sample Time	11:50	11:50	11:50	11:40	11:40	11:30	11:30
	Sample Depth	32.50' - 35.5	32.50' - 35.5	32.50' - 35.5	32.50' - 35.5	32.50' - 35.5	7.00' - 16.00	7.00' - 16.00
	Laboratory	STLC	STLC	STLC	STLC	STLC	STLC	STLC
	Lab. Number	A1H170215009	A1H170215009R	A1H170215010	A1H170215019	A1H170215020	A1H170215017	A1H170215018
Constituent	Units							
1,1,1,2-Tetrachloroethane	ug/l							
1,1-Dichloroethane	ug/l							
1,1-Dichloroethene	ug/l							
1,2,3-Trichloropropane	ug/l							
1,2-Dibromoethane (Ethylene Dibromide)	ug/l	<2.0 U			<2.5 U			
1,2-Dichloropropane	ug/l							
1,4-Dioxane (p-Dioxane)	ug/l							
2-Chloro-1,3-butadiene	ug/l							
Acetone	ug/l							
Acetonitrile	ug/l							
Acrylonitrile	ug/l							
Bromodichloromethane	ug/l							
Bromomethane	ug/l							
Carbon Disulfide	ug/l							
Carbon Tetrachloride	ug/l							
Dichlorodifluoromethane	ug/l							
Isobutanol	ug/l							
Methyl Ethyl Ketone (2-Butanone)	ug/l							
Methyl Isobutyl Ketone (4-methyl-2-penta	ug/l							
Methylacrylonitrile	ug/l							
Propane Nitrile (propionitrile)	ug/l							
Styrene	ug/l							
Tetrachloroethylene (PCE)	ug/l							
Trichlorofluoromethane	ug/l							
Vinyl Acetate	ug/l							
Xylenes	ug/l							
cis-1,2-Dichloroethylene	ug/l							
tert-Butyl Methyl Ether	ug/l							

Table 8a

EXCEEDANCES OF P&W VCAP RISK-BASED GROUNDWATER LIMITS BASED ON CT SURFACE WATER CRITERIA

Pratt & Whitney, East Hartford, CT: Step 4 Investigation - Groundwater Data

Loureiro Engineering Associates, Inc.

	Location ID	ET-MW-19D	ET-MW-19D	ET-MW-19S	ET-MW-19S	ET-MW-20D	ET-MW-20D	ET-MW-20S
	Sample ID	2003535	2003535	2003534	2003534	2003529	2003529	2003528
	Sample Date	08/16/2001	08/16/2001	08/16/2001	08/16/2001	08/16/2001	08/16/2001	08/16/2001
	Sample Time	10:55	10:55	10:40	10:40	12:20	12:20	12:15
	Sample Depth	32.50' - 35.5	32.50' - 35.5	7.00' - 16.00	7.00' - 16.00	33.00' - 36.0	33.00' - 36.0	9.00' - 17.00
	Laboratory	STLC	STLC	STLC	STLC	STLC	STLC	STLC
	Lab. Number	A1H170215014	A1H170215015	A1H170215012	A1H170215013	A1H170228004	A1H170228005	A1H170228002
Constituent	Units							
Depth of Well	Ft	35.00	35.00	15.40	15.40	35.13	35.13	16.72
Depth to Water	Ft	9.88	9.88	9.83	9.83	10.14	10.14	9.98
Water Elevation	Ft	30.15	30.15	30.22	30.22	30.31	30.31	30.29
Date Metals Analyzed	-	08/24/2001	08/24/2001	08/24/2001	08/24/2001	08/26/2001	08/26/2001	08/26/2001
Date Organics Analyzed	-							
Date Physical Analyzed	-							
Date Semi-volatile Organics Analyzed	-	08/23/2001		08/23/2001		08/23/2001		08/23/2001
Arsenic	mg/L							
Arsenic (Unfiltered)	mg/L						0.0079	
Beryllium	mg/L	<0.0050 U		<0.0050 U		<0.0050 U		<0.0050 U
Beryllium (Unfiltered)	mg/L		<0.0050 U		<0.0050 U		<0.0050 U	
Cadmium (Unfiltered)	mg/L							
Chromium, Total (Unfiltered)	mg/L							
Copper (Unfiltered)	mg/L						0.0615	
Lead (Unfiltered)	mg/L						0.0138	
Mercury (Unfiltered)	mg/L							
Zinc (Unfiltered)	mg/L							
Famphur	ug/l							
Hexachlorobenzene	ug/l	<10 U		<10 U		<10 U		<10 U
Cyanide (Total)	mg/L							
Acenaphthene	ug/l							
Benzo(a)anthracene	ug/l	<10 U		<10 U		<10 U		<10 U
Benzo(a)pyrene	ug/l	<10 U		<10 U		<10 U		<10 U
Benzo(b)fluoranthene	ug/l	<10 U		<10 U		<10 U		<10 U
Benzo(g,h,i)perylene	ug/l	<10 U		<10 U		<10 U		<10 U
Benzo(k)fluoranthene	ug/l	<10 U		<10 U		<10 U		<10 U
Naphthalene	ug/L							
Pentachlorophenol	ug/l							

Table 8a
EXCEEDANCES OF P&W VCAP RISK-BASED GROUNDWATER LIMITS BASED ON CT SURFACE WATER CRITERIA
Pratt & Whitney, East Hartford, CT: Step 4 Investigation - Groundwater Data

Loureiro Engineering Associates, Inc.

	Location ID	ET-MW-19D	ET-MW-19D	ET-MW-19S	ET-MW-19S	ET-MW-20D	ET-MW-20D	ET-MW-20S
	Sample ID	2003535	2003535	2003534	2003534	2003529	2003529	2003528
	Sample Date	08/16/2001	08/16/2001	08/16/2001	08/16/2001	08/16/2001	08/16/2001	08/16/2001
	Sample Time	10:55	10:55	10:40	10:40	12:20	12:20	12:15
	Sample Depth	32.50' - 35.5	32.50' - 35.5	7.00' - 16.00	7.00' - 16.00	33.00' - 36.0	33.00' - 36.0	9.00' - 17.00
	Laboratory	STLC	STLC	STLC	STLC	STLC	STLC	STLC
	Lab. Number	A1H170215014	A1H170215015	A1H170215012	A1H170215013	A1H170228004	A1H170228005	A1H170228002
Constituent	Units							
1,1,1,2-Tetrachloroethane	ug/l							
1,1-Dichloroethane	ug/l							
1,1-Dichloroethene	ug/l							
1,2,3-Trichloropropane	ug/l							
1,2-Dibromoethane (Ethylene Dibromide)	ug/l							
1,2-Dichloropropane	ug/l							
1,4-Dioxane (p-Dioxane)	ug/l							
2-Chloro-1,3-butadiene	ug/l							
Acetone	ug/l							
Acetonitrile	ug/l							
Acrylonitrile	ug/l							
Bromodichloromethane	ug/l							
Bromomethane	ug/l							
Carbon Disulfide	ug/l							
Carbon Tetrachloride	ug/l							
Dichlorodifluoromethane	ug/l							
Isobutanol	ug/l							
Methyl Ethyl Ketone (2-Butanone)	ug/l							
Methyl Isobutyl Ketone (4-methyl-2-penta	ug/l							
Methylacrylonitrile	ug/l							
Propane Nitrile (propionitrile)	ug/l							
Styrene	ug/l							
Tetrachloroethylene (PCE)	ug/l							
Trichlorofluoromethane	ug/l							
Vinyl Acetate	ug/l							
Xylenes	ug/l							
cis-1,2-Dichloroethylene	ug/l							
tert-Butyl Methyl Ether	ug/l							

Table 8a
EXCEEDANCES OF P&W VCAP RISK-BASED GROUNDWATER LIMITS BASED ON CT SURFACE WATER CRITERIA
Pratt & Whitney, East Hartford, CT: Step 4 Investigation - Groundwater Data

Loureiro Engineering Associates, Inc.

	Location ID	ET-MW-20S	ET-MW-21D	ET-MW-21D	ET-MW-21S	ET-MW-21S	WT-GW-31D	WT-GW-31D
	Sample ID	2003528	2003533	2003533	2003532	2003532	2000982	2000982
	Sample Date	08/16/2001	08/16/2001	08/16/2001	08/16/2001	08/16/2001	08/03/2001	08/03/2001
	Sample Time	12:15	13:30	13:30	13:15	13:15	13:00	13:00
	Sample Depth	9.00' - 17.00	33.00' - 36.0	33.00' - 36.0	7.50' - 16.50	7.50' - 16.50	14' - 18'	14' - 18'
	Laboratory	STLC	STLC	STLC	STLC	STLC	STLC	STLC
	Lab. Number	A1H170228003	A1H170215004	A1H170215005	A1H170215002	A1H170215003	A1H080137007	A1H080137008
Constituent	Units							
Depth of Well	Ft	16.72	35.68	35.68	16.90	16.90		
Depth to Water	Ft	9.98	11.21	11.21	11.07	11.07		
Water Elevation	Ft	30.29	30.14	30.14	30.14	30.14		
Date Metals Analyzed	-	08/26/2001	08/24/2001	08/24/2001	08/24/2001	08/24/2001	08/17/2001	08/17/2001
Date Organics Analyzed	-						08/14/2001	
Date Physical Analyzed	-							
Date Semi-volatile Organics Analyzed	-		08/23/2001		08/23/2001		08/15/2001	
Arsenic	mg/L							
Arsenic (Unfiltered)	mg/L							
Beryllium	mg/L		<0.0050 U		<0.0050 U		<0.0050	
Beryllium (Unfiltered)	mg/L	<0.0050 U		<0.0050 U		<0.0050 U		<0.0050
Cadmium (Unfiltered)	mg/L							
Chromium, Total (Unfiltered)	mg/L							
Copper (Unfiltered)	mg/L							
Lead (Unfiltered)	mg/L							
Mercury (Unfiltered)	mg/L							
Zinc (Unfiltered)	mg/L							
Famphur	ug/l							
Hexachlorobenzene	ug/l		<10 U		<10 U		<10	
Cyanide (Total)	mg/L							
Acenaphthene	ug/l							
Benzo(a)anthracene	ug/l		<10 U		<10 U		<10	
Benzo(a)pyrene	ug/l		<10 U		<10 U		<10	
Benzo(b)fluoranthene	ug/l		<10 U		<10 U		<10	
Benzo(g,h,i)perylene	ug/l		<10 U		<10 U		<10	
Benzo(k)fluoranthene	ug/l		<10 U		<10 U		<10	
Naphthalene	ug/L							
Pentachlorophenol	ug/l							

Table 8a
EXCEEDANCES OF P&W VCAP RISK-BASED GROUNDWATER LIMITS BASED ON CT SURFACE WATER CRITERIA
Pratt & Whitney, East Hartford, CT: Step 4 Investigation - Groundwater Data

Loureiro Engineering Associates, Inc.

	Location ID	ET-MW-20S	ET-MW-21D	ET-MW-21D	ET-MW-21S	ET-MW-21S	WT-GW-31D	WT-GW-31D
	Sample ID	2003528	2003533	2003533	2003532	2003532	2000982	2000982
	Sample Date	08/16/2001	08/16/2001	08/16/2001	08/16/2001	08/16/2001	08/03/2001	08/03/2001
	Sample Time	12:15	13:30	13:30	13:15	13:15	13:00	13:00
	Sample Depth	9.00' - 17.00	33.00' - 36.0	33.00' - 36.0	7.50' - 16.50	7.50' - 16.50	14' - 18'	14' - 18'
	Laboratory	STLC	STLC	STLC	STLC	STLC	STLC	STLC
	Lab. Number	A1H170228003	A1H170215004	A1H170215005	A1H170215002	A1H170215003	A1H080137007	A1H080137008
Constituent	Units							
1,1,1,2-Tetrachloroethane	ug/l							
1,1-Dichloroethane	ug/l							
1,1-Dichloroethene	ug/l							
1,2,3-Trichloropropane	ug/l							
1,2-Dibromoethane (Ethylene Dibromide)	ug/l						<2.5	
1,2-Dichloropropane	ug/l							
1,4-Dioxane (p-Dioxane)	ug/l							
2-Chloro-1,3-butadiene	ug/l							
Acetone	ug/l							
Acetonitrile	ug/l							
Acrylonitrile	ug/l							
Bromodichloromethane	ug/l							
Bromomethane	ug/l							
Carbon Disulfide	ug/l							
Carbon Tetrachloride	ug/l							
Dichlorodifluoromethane	ug/l							
Isobutanol	ug/l							
Methyl Ethyl Ketone (2-Butanone)	ug/l							
Methyl Isobutyl Ketone (4-methyl-2-penta	ug/l							
Methylacrylonitrile	ug/l							
Propane Nitrile (propionitrile)	ug/l							
Styrene	ug/l							
Tetrachloroethylene (PCE)	ug/l							
Trichlorofluoromethane	ug/l							
Vinyl Acetate	ug/l							
Xylenes	ug/l							
cis-1,2-Dichloroethylene	ug/l							
tert-Butyl Methyl Ether	ug/l							

Table 8a

EXCEEDANCES OF P&W VCAP RISK-BASED GROUNDWATER LIMITS BASED ON CT SURFACE WATER CRITERIA

Pratt & Whitney, East Hartford, CT: Step 4 Investigation - Groundwater Data

Loureiro Engineering Associates, Inc.

	Location ID	WT-GW-31S	WT-GW-31S	WT-GW-32D	WT-GW-32D	WT-GW-32D	WT-GW-32D	WT-GW-32S
	Sample ID	2000983	2000983	1998471	1998471	1998472	1998472	1998475
	Sample Date	08/03/2001	08/03/2001	08/01/2001	08/01/2001	08/01/2001	08/01/2001	08/01/2001
	Sample Time	13:40	13:40	09:05	09:05	09:05	09:05	09:35
	Sample Depth	10' - 14'	10' - 14'	17' - 20'	17' - 20'	17' - 20'	17' - 20'	11' - 14'
	Laboratory	STLC	STLC	STLC	STLC	STLC	STLC	STLC
	Lab. Number	A1H080137009	A1H080137010	A1H020176001	A1H020176002	A1H020176003	A1H020176004	A1H020176005
Constituent	Units							
Depth of Well	Ft							
Depth to Water	Ft			12.5	12.5	12.5	12.5	12.5
Water Elevation	Ft							
Date Metals Analyzed	-	08/17/2001	08/17/2001	08/03/2001	08/03/2001	08/03/2001	08/03/2001	08/03/2001
Date Organics Analyzed	-							08/08/2001
Date Physical Analyzed	-							
Date Semi-volatile Organics Analyzed	-	08/15/2001		08/13/2001		08/13/2001		08/13/2001
Arsenic	mg/L							
Arsenic (Unfiltered)	mg/L						0.0047	
Beryllium	mg/L	<0.0050		<0.0050 U		<0.0050 U		<0.0050 U
Beryllium (Unfiltered)	mg/L		<0.0050		<0.0050 U		<0.0050 U	
Cadmium (Unfiltered)	mg/L							
Chromium, Total (Unfiltered)	mg/L							
Copper (Unfiltered)	mg/L							
Lead (Unfiltered)	mg/L							
Mercury (Unfiltered)	mg/L							
Zinc (Unfiltered)	mg/L							
Famphur	ug/l							
Hexachlorobenzene	ug/l	<10		<10 U		<10 U		<10 U
Cyanide (Total)	mg/L							
Acenaphthene	ug/l							
Benzo(a)anthracene	ug/l	<10		<10 U		<10 U		<10 U
Benzo(a)pyrene	ug/l	<10		<10 U		<10 U		<10 U
Benzo(b)fluoranthene	ug/l	<10		<10 U		<10 U		<10 U
Benzo(g,h,i)perylene	ug/l	<10		<10 U		<10 U		<10 U
Benzo(k)fluoranthene	ug/l	<10		<10 U		<10 U		<10 U
Naphthalene	ug/L							
Pentachlorophenol	ug/l							

Table 8a
EXCEEDANCES OF P&W VCAP RISK-BASED GROUNDWATER LIMITS BASED ON CT SURFACE WATER CRITERIA
Pratt & Whitney, East Hartford, CT: Step 4 Investigation - Groundwater Data

Loureiro Engineering Associates, Inc.

	Location ID	WT-GW-31S	WT-GW-31S	WT-GW-32D	WT-GW-32D	WT-GW-32D	WT-GW-32D	WT-GW-32S
	Sample ID	2000983	2000983	1998471	1998471	1998472	1998472	1998475
	Sample Date	08/03/2001	08/03/2001	08/01/2001	08/01/2001	08/01/2001	08/01/2001	08/01/2001
	Sample Time	13:40	13:40	09:05	09:05	09:05	09:05	09:35
	Sample Depth	10' - 14'	10' - 14'	17' - 20'	17' - 20'	17' - 20'	17' - 20'	11' - 14'
	Laboratory	STLC	STLC	STLC	STLC	STLC	STLC	STLC
	Lab. Number	A1H080137009	A1H080137010	A1H020176001	A1H020176002	A1H020176003	A1H020176004	A1H020176005
Constituent	Units							
1,1,1,2-Tetrachloroethane	ug/l							
1,1-Dichloroethane	ug/l							
1,1-Dichloroethene	ug/l							
1,2,3-Trichloropropane	ug/l							
1,2-Dibromoethane (Ethylene Dibromide)	ug/l							<1.0 UR
1,2-Dichloropropane	ug/l							
1,4-Dioxane (p-Dioxane)	ug/l							
2-Chloro-1,3-butadiene	ug/l							
Acetone	ug/l							
Acetonitrile	ug/l							
Acrylonitrile	ug/l							
Bromodichloromethane	ug/l							
Bromomethane	ug/l							
Carbon Disulfide	ug/l							
Carbon Tetrachloride	ug/l							
Dichlorodifluoromethane	ug/l							
Isobutanol	ug/l							
Methyl Ethyl Ketone (2-Butanone)	ug/l							
Methyl Isobutyl Ketone (4-methyl-2-penta	ug/l							
Methylacrylonitrile	ug/l							
Propane Nitrile (propionitrile)	ug/l							
Styrene	ug/l							
Tetrachloroethylene (PCE)	ug/l							
Trichlorofluoromethane	ug/l							
Vinyl Acetate	ug/l							
Xylenes	ug/l							
cis-1,2-Dichloroethylene	ug/l							
tert-Butyl Methyl Ether	ug/l							

Table 8a
EXCEEDANCES OF P&W VCAP RISK-BASED GROUNDWATER LIMITS BASED ON CT SURFACE WATER CRITERIA
Pratt & Whitney, East Hartford, CT: Step 4 Investigation - Groundwater Data

Loureiro Engineering Associates, Inc.

	Location ID	WT-GW-32S	WT-GW-33D	WT-GW-33D	WT-GW-33S	WT-GW-33S	WT-GW-34S	WT-GW-34S
	Sample ID	1998475	2000984	2000984	2000985	2000985	1998459	1998459
	Sample Date	08/01/2001	08/03/2001	08/03/2001	08/03/2001	08/03/2001	07/31/2001	07/31/2001
	Sample Time	09:35	14:05	14:05	14:45	14:45	08:45	08:45
	Sample Depth	11' - 14'	14' - 18'	14' - 18'	10' - 13'	10' - 13'	11' - 14'	11' - 14'
	Laboratory	STLC	STLC	STLC	STLC	STLC	STLC	STLC
	Lab. Number	A1H020176006	A1H060128015	A1H060128016	A1H060128017	A1H060128018	A1H010261006	A1H010261007
Constituent	Units							
Depth of Well	Ft							
Depth to Water	Ft	12.5					12.25	12.25
Water Elevation	Ft							
Date Metals Analyzed	-	08/03/2001	08/10/2001	08/10/2001	08/10/2001	08/10/2001	08/02/2001	08/02/2001
Date Organics Analyzed	-				08/11/2001		08/06/2001	
Date Physical Analyzed	-							
Date Semi-volatile Organics Analyzed	-		08/15/2001		08/15/2001		08/13/2001	
Arsenic	mg/L		0.0044					
Arsenic (Unfiltered)	mg/L							
Beryllium	mg/L		<0.0050 U		<0.0050 U		<0.0050 U	
Beryllium (Unfiltered)	mg/L	<0.0050 U		<0.0050 U		<0.0050 U		<0.0050 U
Cadmium (Unfiltered)	mg/L							
Chromium, Total (Unfiltered)	mg/L							
Copper (Unfiltered)	mg/L							
Lead (Unfiltered)	mg/L	0.0217		0.0165				0.0128
Mercury (Unfiltered)	mg/L							
Zinc (Unfiltered)	mg/L							
Famphur	ug/l							
Hexachlorobenzene	ug/l		<10 U		<10 U		<10 U	
Cyanide (Total)	mg/L							
Acenaphthene	ug/l							
Benzo(a)anthracene	ug/l		<10 U		<10 U		<10 U	
Benzo(a)pyrene	ug/l		<10 U		<10 U		<10 U	
Benzo(b)fluoranthene	ug/l		<10 U		<10 U		<10 U	
Benzo(g,h,i)perylene	ug/l		<10 U		<10 U		<10 U	
Benzo(k)fluoranthene	ug/l		<10 U		<10 U		<10 U	
Naphthalene	ug/L							
Pentachlorophenol	ug/l							

Table 8a
EXCEEDANCES OF P&W VCAP RISK-BASED GROUNDWATER LIMITS BASED ON CT SURFACE WATER CRITERIA
Pratt & Whitney, East Hartford, CT: Step 4 Investigation - Groundwater Data

Loureiro Engineering Associates, Inc.

	Location ID	WT-GW-32S	WT-GW-33D	WT-GW-33D	WT-GW-33S	WT-GW-33S	WT-GW-34S	WT-GW-34S
	Sample ID	1998475	2000984	2000984	2000985	2000985	1998459	1998459
	Sample Date	08/01/2001	08/03/2001	08/03/2001	08/03/2001	08/03/2001	07/31/2001	07/31/2001
	Sample Time	09:35	14:05	14:05	14:45	14:45	08:45	08:45
	Sample Depth	11' - 14'	14' - 18'	14' - 18'	10' - 13'	10' - 13'	11' - 14'	11' - 14'
	Laboratory	STLC	STLC	STLC	STLC	STLC	STLC	STLC
	Lab. Number	A1H020176006	A1H060128015	A1H060128016	A1H060128017	A1H060128018	A1H010261006	A1H010261007
Constituent	Units							
1,1,1,2-Tetrachloroethane	ug/l							
1,1-Dichloroethane	ug/l							
1,1-Dichloroethene	ug/l							
1,2,3-Trichloropropane	ug/l							
1,2-Dibromoethane (Ethylene Dibromide)	ug/l				<3.8 U		<1.2 U	
1,2-Dichloropropane	ug/l							
1,4-Dioxane (p-Dioxane)	ug/l							
2-Chloro-1,3-butadiene	ug/l							
Acetone	ug/l							
Acetonitrile	ug/l							
Acrylonitrile	ug/l							
Bromodichloromethane	ug/l							
Bromomethane	ug/l							
Carbon Disulfide	ug/l							
Carbon Tetrachloride	ug/l							
Dichlorodifluoromethane	ug/l							
Isobutanol	ug/l							
Methyl Ethyl Ketone (2-Butanone)	ug/l							
Methyl Isobutyl Ketone (4-methyl-2-penta	ug/l							
Methylacrylonitrile	ug/l							
Propane Nitrile (propionitrile)	ug/l							
Styrene	ug/l							
Tetrachloroethylene (PCE)	ug/l							
Trichlorofluoromethane	ug/l							
Vinyl Acetate	ug/l							
Xylenes	ug/l							
cis-1,2-Dichloroethylene	ug/l							
tert-Butyl Methyl Ether	ug/l							

Table 8a
EXCEEDANCES OF P&W VCAP RISK-BASED GROUNDWATER LIMITS BASED ON CT SURFACE WATER CRITERIA
Pratt & Whitney, East Hartford, CT: Step 4 Investigation - Groundwater Data

Loureiro Engineering Associates, Inc.

	Location ID	WT-GW-35D	WT-GW-35D	WT-GW-35S	WT-GW-35S	WT-GW-36D	WT-GW-36D	WT-GW-36S
	Sample ID	2000987	2000987	2000988	2000988	1998463	1998463	1998464
	Sample Date	08/06/2001	08/06/2001	08/06/2001	08/06/2001	07/31/2001	07/31/2001	07/31/2001
	Sample Time	14:30	14:30	14:10	14:10	13:15	13:15	13:45
	Sample Depth	15.00' - 18.0	15.00' - 18.0	12.6' - 15.6'	12.6' - 15.6'	21' - 22'	21' - 22'	11' - 14'
	Laboratory	STLC	STLC	STLC	STLC	STLC	STLC	STLC
	Lab. Number	A1H080223005	A1H080223006	A1H080223002	A1H080223003	A1H010261001	A1H010261002	A1H010261003
Constituent	Units							
Depth of Well	Ft							
Depth to Water	Ft	14.00	14.00	11.6	11.6	12	12	12
Water Elevation	Ft							
Date Metals Analyzed	-	08/17/2001	08/17/2001	08/17/2001	08/17/2001	08/02/2001	08/02/2001	08/02/2001
Date Organics Analyzed	-	08/14/2001		08/14/2001				
Date Physical Analyzed	-							
Date Semi-volatile Organics Analyzed	-	08/17/2001		08/17/2001		08/13/2001		08/13/2001
Arsenic	mg/L							
Arsenic (Unfiltered)	mg/L							
Beryllium	mg/L	<0.0050 U		<0.0050 U		<0.0050 U		<0.0050 U
Beryllium (Unfiltered)	mg/L		<0.0050 U		<0.0050 U		<0.0050 U	
Cadmium (Unfiltered)	mg/L							
Chromium, Total (Unfiltered)	mg/L							
Copper (Unfiltered)	mg/L							
Lead (Unfiltered)	mg/L		0.0227					
Mercury (Unfiltered)	mg/L							
Zinc (Unfiltered)	mg/L							
Famphur	ug/l							
Hexachlorobenzene	ug/l	<10 U		<10 U		<10 U		<10 U
Cyanide (Total)	mg/L							
Acenaphthene	ug/l							
Benzo(a)anthracene	ug/l	<10 U		<10 U		1.0 J		<10 U
Benzo(a)pyrene	ug/l	<10 U		<10 U		<10 U		<10 U
Benzo(b)fluoranthene	ug/l	<10 U		<10 U		1.1 J		<10 U
Benzo(g,h,i)perylene	ug/l	<10 U		<10 U		<10 U		<10 U
Benzo(k)fluoranthene	ug/l	<10 U		<10 U		<10 U		<10 U
Naphthalene	ug/L							
Pentachlorophenol	ug/l							

Table 8a

EXCEEDANCES OF P&W VCAP RISK-BASED GROUNDWATER LIMITS BASED ON CT SURFACE WATER CRITERIA

Pratt & Whitney, East Hartford, CT: Step 4 Investigation - Groundwater Data

Loureiro Engineering Associates, Inc.

	Location ID	WT-GW-35D	WT-GW-35D	WT-GW-35S	WT-GW-35S	WT-GW-36D	WT-GW-36D	WT-GW-36S
	Sample ID	2000987	2000987	2000988	2000988	1998463	1998463	1998464
	Sample Date	08/06/2001	08/06/2001	08/06/2001	08/06/2001	07/31/2001	07/31/2001	07/31/2001
	Sample Time	14:30	14:30	14:10	14:10	13:15	13:15	13:45
	Sample Depth	15.00' - 18.0	15.00' - 18.0	12.6' - 15.6'	12.6' - 15.6'	21' - 22'	21' - 22'	11' - 14'
	Laboratory	STLC	STLC	STLC	STLC	STLC	STLC	STLC
	Lab. Number	A1H080223005	A1H080223006	A1H080223002	A1H080223003	A1H010261001	A1H010261002	A1H010261003
Constituent	Units							
1,1,1,2-Tetrachloroethane	ug/l			<20 U				
1,1-Dichloroethane	ug/l			<100 U				
1,1-Dichloroethene	ug/l	140		400				
1,2,3-Trichloropropane	ug/l			<100 U				
1,2-Dibromoethane (Ethylene Dibromide)	ug/l	<4.2 U		<10 U				
1,2-Dichloropropane	ug/l			<100 U				
1,4-Dioxane (p-Dioxane)	ug/l			<3000 U				
2-Chloro-1,3-butadiene	ug/l			<100 U				
Acetone	ug/l			<2000 U				
Acetonitrile	ug/l			<2000 U				
Acrylonitrile	ug/l			<30 U				
Bromodichloromethane	ug/l			<100 U				
Bromomethane	ug/l			<200 U				
Carbon Disulfide	ug/l			<100 U				
Carbon Tetrachloride	ug/l							
Dichlorodifluoromethane	ug/l			<100 U				
Isobutanol	ug/l			<1000 U				
Methyl Ethyl Ketone (2-Butanone)	ug/l			<2000 U				
Methyl Isobutyl Ketone (4-methyl-2-penta	ug/l			<100 U				
Methylacrylonitrile	ug/l			<100 U				
Propane Nitrile (propionitrile)	ug/l			<100 U				
Styrene	ug/l			<100 U				
Tetrachloroethylene (PCE)	ug/l			<100 U				
Trichlorofluoromethane	ug/l			<100 U				
Vinyl Acetate	ug/l			<100 U				
Xylenes	ug/l			<100 U				
cis-1,2-Dichloroethylene	ug/l			<100 U				
tert-Butyl Methyl Ether	ug/l			<100 U				

Table 8a

EXCEEDANCES OF P&W VCAP RISK-BASED GROUNDWATER LIMITS BASED ON CT SURFACE WATER CRITERIA

Pratt & Whitney, East Hartford, CT: Step 4 Investigation - Groundwater Data

Loureiro Engineering Associates, Inc.

	Location ID	WT-GW-36S	WT-GW-37D	WT-GW-37D	WT-GW-37S	WT-GW-37S	WT-GW-38D	WT-GW-38D
	Sample ID	1998464	1998481	1998481	1998482	1998482	1998476	1998476
	Sample Date	07/31/2001	08/01/2001	08/01/2001	08/01/2001	08/01/2001	08/02/2001	08/02/2001
	Sample Time	13:45	09:45	09:45	10:45	10:45	09:45	09:45
	Sample Depth	11' - 14'	17.5' - 20.5'	17.5' - 20.5'	12' - 15'	12' - 15'	19' - 22'	19' - 22'
	Laboratory	STLC	STLC	STLC	STLC	STLC	STLC	STLC
	Lab. Number	A1H010261004	A1H020176032	A1H020176033	A1H020176034	A1H020176035	A1H030191006	A1H030191007
Constituent	Units							
Depth of Well	Ft							
Depth to Water	Ft	12	12.5	12.5	20.5	20.5		
Water Elevation	Ft							
Date Metals Analyzed	-	08/02/2001	08/03/2001	08/03/2001	08/03/2001	08/03/2001	08/10/2001	08/10/2001
Date Organics Analyzed	-							
Date Physical Analyzed	-							
Date Semi-volatile Organics Analyzed	-		08/13/2001		08/13/2001		08/15/2001	
Arsenic	mg/L							
Arsenic (Unfiltered)	mg/L					0.0089		0.0059
Beryllium	mg/L		<0.0050 U		<0.0050 U		<0.0050 U	
Beryllium (Unfiltered)	mg/L	<0.0050 U		<0.0050 U		<0.0050 U		<0.0050 U
Cadmium (Unfiltered)	mg/L							
Chromium, Total (Unfiltered)	mg/L							
Copper (Unfiltered)	mg/L					0.0626		
Lead (Unfiltered)	mg/L					0.0751		
Mercury (Unfiltered)	mg/L							
Zinc (Unfiltered)	mg/L							
Famphur	ug/l							
Hexachlorobenzene	ug/l		<10 U		<10 U		<10 U	
Cyanide (Total)	mg/L							
Acenaphthene	ug/l							
Benzo(a)anthracene	ug/l		<10 U		<10 U		<10 U	
Benzo(a)pyrene	ug/l		<10 U		<10 U		<10 U	
Benzo(b)fluoranthene	ug/l		<10 U		<10 U		<10 U	
Benzo(g,h,i)perylene	ug/l		<10 U		<10 U		<10 U	
Benzo(k)fluoranthene	ug/l		<10 U		<10 U		<10 U	
Naphthalene	ug/L							
Pentachlorophenol	ug/l							

Table 8a

EXCEEDANCES OF P&W VCAP RISK-BASED GROUNDWATER LIMITS BASED ON CT SURFACE WATER CRITERIA

Pratt & Whitney, East Hartford, CT: Step 4 Investigation - Groundwater Data

Loureiro Engineering Associates, Inc.

	Location ID	WT-GW-36S	WT-GW-37D	WT-GW-37D	WT-GW-37S	WT-GW-37S	WT-GW-38D	WT-GW-38D
	Sample ID	1998464	1998481	1998481	1998482	1998482	1998476	1998476
	Sample Date	07/31/2001	08/01/2001	08/01/2001	08/01/2001	08/01/2001	08/02/2001	08/02/2001
	Sample Time	13:45	09:45	09:45	10:45	10:45	09:45	09:45
	Sample Depth	11' - 14'	17.5' - 20.5'	17.5' - 20.5'	12' - 15'	12' - 15'	19' - 22'	19' - 22'
	Laboratory	STLC	STLC	STLC	STLC	STLC	STLC	STLC
	Lab. Number	A1H010261004	A1H020176032	A1H020176033	A1H020176034	A1H020176035	A1H030191006	A1H030191007
Constituent	Units							
1,1,1,2-Tetrachloroethane	ug/l							
1,1-Dichloroethane	ug/l							
1,1-Dichloroethene	ug/l							
1,2,3-Trichloropropane	ug/l							
1,2-Dibromoethane (Ethylene Dibromide)	ug/l							
1,2-Dichloropropane	ug/l							
1,4-Dioxane (p-Dioxane)	ug/l							
2-Chloro-1,3-butadiene	ug/l							
Acetone	ug/l							
Acetonitrile	ug/l							
Acrylonitrile	ug/l							
Bromodichloromethane	ug/l							
Bromomethane	ug/l							
Carbon Disulfide	ug/l							
Carbon Tetrachloride	ug/l							
Dichlorodifluoromethane	ug/l							
Isobutanol	ug/l							
Methyl Ethyl Ketone (2-Butanone)	ug/l							
Methyl Isobutyl Ketone (4-methyl-2-penta	ug/l							
Methylacrylonitrile	ug/l							
Propane Nitrile (propionitrile)	ug/l							
Styrene	ug/l							
Tetrachloroethylene (PCE)	ug/l							
Trichlorofluoromethane	ug/l							
Vinyl Acetate	ug/l							
Xylenes	ug/l							
cis-1,2-Dichloroethylene	ug/l							
tert-Butyl Methyl Ether	ug/l							

Table 8a

EXCEEDANCES OF P&W VCAP RISK-BASED GROUNDWATER LIMITS BASED ON CT SURFACE WATER CRITERIA

Pratt & Whitney, East Hartford, CT: Step 4 Investigation - Groundwater Data

Loureiro Engineering Associates, Inc.

	Location ID	WT-GW-38S	WT-GW-38S	WT-GW-39D	WT-GW-39D	WT-GW-39D	WT-GW-39S	WT-GW-39S
	Sample ID	1998477	1998477	1998496	1998496	1998496	1998497	1998497
	Sample Date	08/02/2001	08/02/2001	08/02/2001	08/02/2001	08/02/2001	08/02/2001	08/02/2001
	Sample Time	10:15	10:15	13:00	13:00	13:00	13:30	13:30
	Sample Depth	12' - 18'	12' - 18'	18' - 21'	18' - 21'	18' - 21'	13' - 16'	13' - 16'
	Laboratory	STLC	STLC	STLC	STLC	STLC	STLC	STLC
	Lab. Number	A1H030191008	A1H030191009	A1H030191001	A1H030191001R	A1H030191002	A1H030191003	A1H030191003R
Constituent	Units							
Depth of Well	Ft							
Depth to Water	Ft			12.5	12.5	12.5		
Water Elevation	Ft							
Date Metals Analyzed	-	08/10/2001	08/10/2001	08/10/2001		08/10/2001	08/10/2001	
Date Organics Analyzed	-						08/10/2001	
Date Physical Analyzed	-							
Date Semi-volatile Organics Analyzed	-	08/15/2001		08/15/2001	08/20/2001		08/15/2001	08/20/2001
Arsenic	mg/L			0.0110			0.0069	
Arsenic (Unfiltered)	mg/L		0.0067			0.0253		
Beryllium	mg/L	<0.0050 U		<0.0050 U			<0.0050 U	
Beryllium (Unfiltered)	mg/L		<0.0050 U			<0.0050 U		
Cadmium (Unfiltered)	mg/L		0.0206					
Chromium, Total (Unfiltered)	mg/L					0.136		
Copper (Unfiltered)	mg/L					0.0880		
Lead (Unfiltered)	mg/L		0.0543			0.303		
Mercury (Unfiltered)	mg/L							
Zinc (Unfiltered)	mg/L							
Famphur	ug/l							
Hexachlorobenzene	ug/l	<10 U		<10 U	<10 UJ		<10 U	<10 UJ
Cyanide (Total)	mg/L							
Acenaphthene	ug/l							
Benzo(a)anthracene	ug/l	<10 U		1.1 J	1.2 J		<10 U	2.6 J
Benzo(a)pyrene	ug/l	<10 U		1.1 J	1.5 J		<10 U	3.8 J
Benzo(b)fluoranthene	ug/l	<10 U		1.4 J	1.9 J		<10 U	4.7 J
Benzo(g,h,i)perylene	ug/l	<10 U		1.2 J	1.1 J		<10 U	2.7 J
Benzo(k)fluoranthene	ug/l	<10 U		<10 U	<10 UJ		<10 U	2.5 J
Naphthalene	ug/L							
Pentachlorophenol	ug/l							

Table 8a
EXCEEDANCES OF P&W VCAP RISK-BASED GROUNDWATER LIMITS BASED ON CT SURFACE WATER CRITERIA
Pratt & Whitney, East Hartford, CT: Step 4 Investigation - Groundwater Data

Loureiro Engineering Associates, Inc.

	Location ID	WT-GW-38S	WT-GW-38S	WT-GW-39D	WT-GW-39D	WT-GW-39D	WT-GW-39S	WT-GW-39S
	Sample ID	1998477	1998477	1998496	1998496	1998496	1998497	1998497
	Sample Date	08/02/2001	08/02/2001	08/02/2001	08/02/2001	08/02/2001	08/02/2001	08/02/2001
	Sample Time	10:15	10:15	13:00	13:00	13:00	13:30	13:30
	Sample Depth	12' - 18'	12' - 18'	18' - 21'	18' - 21'	18' - 21'	13' - 16'	13' - 16'
	Laboratory	STLC	STLC	STLC	STLC	STLC	STLC	STLC
	Lab. Number	A1H030191008	A1H030191009	A1H030191001	A1H030191001R	A1H030191002	A1H030191003	A1H030191003R
Constituent	Units							
1,1,1,2-Tetrachloroethane	ug/l							
1,1-Dichloroethane	ug/l							
1,1-Dichloroethene	ug/l							
1,2,3-Trichloropropane	ug/l							
1,2-Dibromoethane (Ethylene Dibromide)	ug/l						<1.7 U	
1,2-Dichloropropane	ug/l							
1,4-Dioxane (p-Dioxane)	ug/l							
2-Chloro-1,3-butadiene	ug/l							
Acetone	ug/l							
Acetonitrile	ug/l							
Acrylonitrile	ug/l							
Bromodichloromethane	ug/l							
Bromomethane	ug/l							
Carbon Disulfide	ug/l							
Carbon Tetrachloride	ug/l							
Dichlorodifluoromethane	ug/l							
Isobutanol	ug/l							
Methyl Ethyl Ketone (2-Butanone)	ug/l							
Methyl Isobutyl Ketone (4-methyl-2-penta	ug/l							
Methylacrylonitrile	ug/l							
Propane Nitrile (propionitrile)	ug/l							
Styrene	ug/l							
Tetrachloroethylene (PCE)	ug/l							
Trichlorofluoromethane	ug/l							
Vinyl Acetate	ug/l							
Xylenes	ug/l							
cis-1,2-Dichloroethylene	ug/l							
tert-Butyl Methyl Ether	ug/l							

Table 8a
EXCEEDANCES OF P&W VCAP RISK-BASED GROUNDWATER LIMITS BASED ON CT SURFACE WATER CRITERIA
Pratt & Whitney, East Hartford, CT: Step 4 Investigation - Groundwater Data

Loureiro Engineering Associates, Inc.

	Location ID	WT-GW-39S	WT-GW-40D	WT-GW-40D	WT-GW-40S	WT-GW-40S	WT-GW-41D	WT-GW-41D
	Sample ID	1998497	2000986	2000986	2000989	2000989	2000990	2000990
	Sample Date	08/02/2001	08/07/2001	08/07/2001	08/07/2001	08/07/2001	08/08/2001	08/08/2001
	Sample Time	13:30	14:20	14:20	15:00	15:00	12:20	12:20
	Sample Depth	13' - 16'	14' - 18'	14' - 18'	10' - 14'	10' - 14'	14' - 18'	14' - 18'
	Laboratory	STLC	STLC	STLC	STLC	STLC	STLC	STLC
	Lab. Number	A1H030191004	A1H080236001	A1H080236002	A1H080236003	A1H080236004	A1H090276012	A1H090276013
Constituent	Units							
Depth of Well	Ft							
Depth to Water	Ft							
Water Elevation	Ft							
Date Metals Analyzed	-	08/10/2001	08/11/2001	08/11/2001	08/11/2001	08/11/2001	08/11/2001	08/11/2001
Date Organics Analyzed	-		08/14/2001		08/14/2001		08/15/2001	
Date Physical Analyzed	-							
Date Semi-volatile Organics Analyzed	-		08/17/2001		08/17/2001		08/22/2001	
Arsenic	mg/L				0.0043			
Arsenic (Unfiltered)	mg/L	0.0474		0.0152				
Beryllium	mg/L		<0.0050 U		<0.0050 U		<0.0050 U	
Beryllium (Unfiltered)	mg/L	<0.0050 U		<0.0050 U		<0.0050 U		<0.0050 U
Cadmium (Unfiltered)	mg/L	0.0076						
Chromium, Total (Unfiltered)	mg/L	0.112						
Copper (Unfiltered)	mg/L	0.307						
Lead (Unfiltered)	mg/L	1.23		0.0586		0.0279		
Mercury (Unfiltered)	mg/L							
Zinc (Unfiltered)	mg/L	0.996						
Famphur	ug/l							
Hexachlorobenzene	ug/l		<10 U		<10 U		<10 U	
Cyanide (Total)	mg/L							
Acenaphthene	ug/l							
Benzo(a)anthracene	ug/l		<10 U		<10 U		<10 U	
Benzo(a)pyrene	ug/l		<10 U		<10 U		<10 U	
Benzo(b)fluoranthene	ug/l		<10 U		<10 U		<10 U	
Benzo(g,h,i)perylene	ug/l		<10 U		<10 U		<10 U	
Benzo(k)fluoranthene	ug/l		<10 U		<10 U		<10 U	
Naphthalene	ug/L							
Pentachlorophenol	ug/l							

Table 8a
EXCEEDANCES OF P&W VCAP RISK-BASED GROUNDWATER LIMITS BASED ON CT SURFACE WATER CRITERIA
Pratt & Whitney, East Hartford, CT: Step 4 Investigation - Groundwater Data

Loureiro Engineering Associates, Inc.

	Location ID	WT-GW-39S	WT-GW-40D	WT-GW-40D	WT-GW-40S	WT-GW-40S	WT-GW-41D	WT-GW-41D
	Sample ID	1998497	2000986	2000986	2000989	2000989	2000990	2000990
	Sample Date	08/02/2001	08/07/2001	08/07/2001	08/07/2001	08/07/2001	08/08/2001	08/08/2001
	Sample Time	13:30	14:20	14:20	15:00	15:00	12:20	12:20
	Sample Depth	13' - 16'	14' - 18'	14' - 18'	10' - 14'	10' - 14'	14' - 18'	14' - 18'
	Laboratory	STLC	STLC	STLC	STLC	STLC	STLC	STLC
	Lab. Number	A1H030191004	A1H080236001	A1H080236002	A1H080236003	A1H080236004	A1H090276012	A1H090276013
Constituent	Units							
1,1,1,2-Tetrachloroethane	ug/l						<33 U	
1,1-Dichloroethane	ug/l						<170 U	
1,1-Dichloroethene	ug/l				130		850	
1,2,3-Trichloropropane	ug/l						<170 U	
1,2-Dibromoethane (Ethylene Dibromide)	ug/l		<0.84 U		<3.6 U		<17 U	
1,2-Dichloropropane	ug/l						<170 U	
1,4-Dioxane (p-Dioxane)	ug/l						<5000 UR	
2-Chloro-1,3-butadiene	ug/l						<170 U	
Acetone	ug/l						<3300 UJ	
Acetonitrile	ug/l						<3300 UR	
Acrylonitrile	ug/l						<50 U	
Bromodichloromethane	ug/l						<170 U	
Bromomethane	ug/l						<330 U	
Carbon Disulfide	ug/l						<170 U	
Carbon Tetrachloride	ug/l						<170 UJ	
Dichlorodifluoromethane	ug/l						<170 U	
Isobutanol	ug/l						<1700 UR	
Methyl Ethyl Ketone (2-Butanone)	ug/l						<3300 U	
Methyl Isobutyl Ketone (4-methyl-2-penta	ug/l						<170 U	
Methylacrylonitrile	ug/l						<170 U	
Propane Nitrile (propionitrile)	ug/l						<170 UR	
Styrene	ug/l						<170 U	
Tetrachloroethylene (PCE)	ug/l						<170 U	
Trichlorofluoromethane	ug/l						<170 UJ	
Vinyl Acetate	ug/l						<170 UJ	
Xylenes	ug/l						<170 U	
cis-1,2-Dichloroethylene	ug/l						<170 U	
tert-Butyl Methyl Ether	ug/l						<170 U	

Table 8a

EXCEEDANCES OF P&W VCAP RISK-BASED GROUNDWATER LIMITS BASED ON CT SURFACE WATER CRITERIA

Pratt & Whitney, East Hartford, CT: Step 4 Investigation - Groundwater Data

Loureiro Engineering Associates, Inc.

	Location ID	WT-GW-41S	WT-GW-41S	WT-GW-41S	WT-GW-43D	WT-GW-43D	WT-GW-43S	WT-GW-43S
	Sample ID	2000991	2000991	2000991	2010156	2010156	2010157	2010157
	Sample Date	08/08/2001	08/08/2001	08/08/2001	12/12/2001	12/12/2001	12/12/2001	12/12/2001
	Sample Time	12:50	12:50	12:50	13:00	13:00	14:00	14:00
	Sample Depth	10' - 14'	10' - 14'	10' - 14'	24' - 28'	24' - 28'	16' - 19'	16' - 19'
	Laboratory	STLC	STLC	STLC	CAN	CAN	CAN	CAN
	Lab. Number	A1H090289004	A1H090289004R	A1H090289005	A1L130227015	A1L130227016	A1L130227017	A1L130227017A
Constituent	Units							
Depth of Well	Ft							
Depth to Water	Ft							
Water Elevation	Ft							
Date Metals Analyzed	-	08/17/2001		08/17/2001	12/16/2001	12/16/2001	12/16/2001	
Date Organics Analyzed	-	08/15/2001					12/19/2001	
Date Physical Analyzed	-							
Date Semi-volatile Organics Analyzed	-	08/22/2001	08/29/2001		12/20/2001		12/21/2001	
Arsenic	mg/L							
Arsenic (Unfiltered)	mg/L							
Beryllium	mg/L	<0.0050 U			<0.0050		<0.0050	
Beryllium (Unfiltered)	mg/L			<0.0050 U		<0.0050		
Cadmium (Unfiltered)	mg/L							
Chromium, Total (Unfiltered)	mg/L							
Copper (Unfiltered)	mg/L							
Lead (Unfiltered)	mg/L							
Mercury (Unfiltered)	mg/L							
Zinc (Unfiltered)	mg/L							
Famphur	ug/l						<200	
Hexachlorobenzene	ug/l	<10 U	<10 U		<10		<20	<10
Cyanide (Total)	mg/L							
Acenaphthene	ug/l							
Benzo(a)anthracene	ug/l	<10 U	<10 U		<10		2.4 J	2.4 J
Benzo(a)pyrene	ug/l	<10 U	<10 U		<10		2.1 J	1.9 J
Benzo(b)fluoranthene	ug/l	<10 U	<10 U		<10		2.5 J	3.0 J
Benzo(g,h,i)perylene	ug/l	<10 U	<10 U		<10		<20	1.1 J
Benzo(k)fluoranthene	ug/l	<10 U	<10 U		<10		<20	<10
Naphthalene	ug/L						110	110 E
Pentachlorophenol	ug/l						<20	

Table 8a
EXCEEDANCES OF P&W VCAP RISK-BASED GROUNDWATER LIMITS BASED ON CT SURFACE WATER CRITERIA
Pratt & Whitney, East Hartford, CT: Step 4 Investigation - Groundwater Data

Loureiro Engineering Associates, Inc.

	Location ID	WT-GW-41S	WT-GW-41S	WT-GW-41S	WT-GW-43D	WT-GW-43D	WT-GW-43S	WT-GW-43S
	Sample ID	2000991	2000991	2000991	2010156	2010156	2010157	2010157
	Sample Date	08/08/2001	08/08/2001	08/08/2001	12/12/2001	12/12/2001	12/12/2001	12/12/2001
	Sample Time	12:50	12:50	12:50	13:00	13:00	14:00	14:00
	Sample Depth	10' - 14'	10' - 14'	10' - 14'	24' - 28'	24' - 28'	16' - 19'	16' - 19'
	Laboratory	STLC	STLC	STLC	CAN	CAN	CAN	CAN
	Lab. Number	A1H090289004	A1H090289004R	A1H090289005	A1L130227015	A1L130227016	A1L130227017	A1L130227017A
Constituent	Units							
1,1,1,2-Tetrachloroethane	ug/l	<33 U						
1,1-Dichloroethane	ug/l	<170 U						
1,1-Dichloroethene	ug/l	680						
1,2,3-Trichloropropane	ug/l	<170 U						
1,2-Dibromoethane (Ethylene Dibromide)	ug/l	<17 U					<3.4	
1,2-Dichloropropane	ug/l	<170 U						
1,4-Dioxane (p-Dioxane)	ug/l	<5000 U						
2-Chloro-1,3-butadiene	ug/l	<170 U						
Acetone	ug/l	<3300 UJ						
Acetonitrile	ug/l	<3300 UR						
Acrylonitrile	ug/l	<50 U						
Bromodichloromethane	ug/l	<170 U						
Bromomethane	ug/l	<330 U						
Carbon Disulfide	ug/l	<170 U						
Carbon Tetrachloride	ug/l	<170 UJ						
Dichlorodifluoromethane	ug/l	<170 U						
Isobutanol	ug/l	<1700 UR						
Methyl Ethyl Ketone (2-Butanone)	ug/l	<3300 U						
Methyl Isobutyl Ketone (4-methyl-2-penta	ug/l	<170 U						
Methylacrylonitrile	ug/l	<170 U						
Propane Nitrile (propionitrile)	ug/l	<170 U						
Styrene	ug/l	<170 U						
Tetrachloroethylene (PCE)	ug/l	<170 U						
Trichlorofluoromethane	ug/l	<170 UJ						
Vinyl Acetate	ug/l	<170 U						
Xylenes	ug/l	<170 U						
cis-1,2-Dichloroethylene	ug/l	<170 U						
tert-Butyl Methyl Ether	ug/l	<170 U						

Table 8a

EXCEEDANCES OF P&W VCAP RISK-BASED GROUNDWATER LIMITS BASED ON CT SURFACE WATER CRITERIA

Pratt & Whitney, East Hartford, CT: Step 4 Investigation - Groundwater Data

Loureiro Engineering Associates, Inc.

	Location ID	WT-GW-43S	WT-GW-44D	WT-GW-44D	WT-GW-44D	WT-GW-44D	WT-GW-44S	WT-GW-44S
	Sample ID	2010157	2010173	2010173	2010174	2010174	2010158	2010158
	Sample Date	12/12/2001	12/21/2001	12/21/2001	12/21/2001	12/21/2001	12/13/2001	12/13/2001
	Sample Time	14:00	11:00	11:00	11:00	11:00	09:50	09:50
	Sample Depth	16' - 19'	20' - 24'	20' - 24'	20' - 24'	20' - 24'	16' - 20'	16' - 20'
	Laboratory	CAN	CAN	CAN	CAN	CAN	CAN	CAN
	Lab. Number	A1L130227018	A1L220124002	A1L220124003	A1L220124004	A1L220124005	A1L150107002	A1L150107003
Constituent	Units							
Depth of Well	Ft							
Depth to Water	Ft		14.85	14.85	14.85	14.85		
Water Elevation	Ft							
Date Metals Analyzed	-	12/16/2001	01/02/2002	01/02/2002	01/02/2002	01/02/2002	12/20/2001	12/20/2001
Date Organics Analyzed	-		12/28/2001		12/28/2001			
Date Physical Analyzed	-							
Date Semi-volatile Organics Analyzed	-		01/02/2002		01/02/2002		12/20/2001	
Arsenic	mg/L							
Arsenic (Unfiltered)	mg/L							
Beryllium	mg/L		<0.0050		<0.0050		<0.0050	
Beryllium (Unfiltered)	mg/L	<0.0050		<0.0050		<0.0050		<0.0050
Cadmium (Unfiltered)	mg/L							
Chromium, Total (Unfiltered)	mg/L							
Copper (Unfiltered)	mg/L							
Lead (Unfiltered)	mg/L							
Mercury (Unfiltered)	mg/L							
Zinc (Unfiltered)	mg/L							
Famphur	ug/l							
Hexachlorobenzene	ug/l		<10		<10		<10	
Cyanide (Total)	mg/L							
Acenaphthene	ug/l							
Benzo(a)anthracene	ug/l		<10		<10		<10	
Benzo(a)pyrene	ug/l		<10		<10		<10	
Benzo(b)fluoranthene	ug/l		<10		<10		<10	
Benzo(g,h,i)perylene	ug/l		<10		<10		<10	
Benzo(k)fluoranthene	ug/l		<10		<10		<10	
Naphthalene	ug/L							
Pentachlorophenol	ug/l							

Table 8a

EXCEEDANCES OF P&W VCAP RISK-BASED GROUNDWATER LIMITS BASED ON CT SURFACE WATER CRITERIA

Pratt & Whitney, East Hartford, CT: Step 4 Investigation - Groundwater Data

Loureiro Engineering Associates, Inc.

	Location ID	WT-GW-43S	WT-GW-44D	WT-GW-44D	WT-GW-44D	WT-GW-44D	WT-GW-44S	WT-GW-44S
	Sample ID	2010157	2010173	2010173	2010174	2010174	2010158	2010158
	Sample Date	12/12/2001	12/21/2001	12/21/2001	12/21/2001	12/21/2001	12/13/2001	12/13/2001
	Sample Time	14:00	11:00	11:00	11:00	11:00	09:50	09:50
	Sample Depth	16' - 19'	20' - 24'	20' - 24'	20' - 24'	20' - 24'	16' - 20'	16' - 20'
	Laboratory	CAN	CAN	CAN	CAN	CAN	CAN	CAN
	Lab. Number	A1L130227018	A1L220124002	A1L220124003	A1L220124004	A1L220124005	A1L150107002	A1L150107003
Constituent	Units							
1,1,1,2-Tetrachloroethane	ug/l							
1,1-Dichloroethane	ug/l							
1,1-Dichloroethene	ug/l							
1,2,3-Trichloropropane	ug/l							
1,2-Dibromoethane (Ethylene Dibromide)	ug/l		<2.5		<2.5			
1,2-Dichloropropane	ug/l							
1,4-Dioxane (p-Dioxane)	ug/l							
2-Chloro-1,3-butadiene	ug/l							
Acetone	ug/l							
Acetonitrile	ug/l							
Acrylonitrile	ug/l							
Bromodichloromethane	ug/l							
Bromomethane	ug/l							
Carbon Disulfide	ug/l							
Carbon Tetrachloride	ug/l							
Dichlorodifluoromethane	ug/l							
Isobutanol	ug/l							
Methyl Ethyl Ketone (2-Butanone)	ug/l							
Methyl Isobutyl Ketone (4-methyl-2-penta	ug/l							
Methylacrylonitrile	ug/l							
Propane Nitrile (propionitrile)	ug/l							
Styrene	ug/l							
Tetrachloroethylene (PCE)	ug/l							
Trichlorofluoromethane	ug/l							
Vinyl Acetate	ug/l							
Xylenes	ug/l							
cis-1,2-Dichloroethylene	ug/l							
tert-Butyl Methyl Ether	ug/l							

Table 8a

EXCEEDANCES OF P&W VCAP RISK-BASED GROUNDWATER LIMITS BASED ON CT SURFACE WATER CRITERIA

Pratt & Whitney, East Hartford, CT: Step 4 Investigation - Groundwater Data

Loureiro Engineering Associates, Inc.

	Location ID	WT-GW-45D	WT-GW-45D	WT-GW-45S	WT-GW-45S	WT-MW-29D	WT-MW-29D	WT-MW-29S
	Sample ID	2010168	2010168	2010167	2010167	1998513	1998513	1998512
	Sample Date	12/14/2001	12/14/2001	12/14/2001	12/14/2001	08/14/2001	08/14/2001	08/14/2001
	Sample Time	10:50	10:50	09:30	09:30	11:05	11:05	11:30
	Sample Depth	19' - 22'	19' - 22'	16' - 19'	16' - 19'	13.50' - 16.5	13.50' - 16.5	1.50' - 10.50
	Laboratory	CAN	CAN	CAN	CAN	STLC	STLC	STLC
	Lab. Number	A1L150184003	A1L150184004	A1L150184001	A1L150184002	A1H150222004	A1H150222005	A1H150222002
Constituent	Units							
Depth of Well	Ft					16.16	16.16	10.05
Depth to Water	Ft					4.60	4.60	4.43
Water Elevation	Ft					26.82	26.82	26.79
Date Metals Analyzed	-	12/20/2001	12/20/2001	12/20/2001	12/20/2001	08/17/2001	08/17/2001	08/17/2001
Date Organics Analyzed	-			12/21/2001				
Date Physical Analyzed	-							
Date Semi-volatile Organics Analyzed	-	12/20/2001		12/20/2001		08/28/2001		08/28/2001
Arsenic	mg/L							
Arsenic (Unfiltered)	mg/L						0.0046	
Beryllium	mg/L	<0.0050		<0.0050		<0.0050 U		<0.0050 U
Beryllium (Unfiltered)	mg/L		<0.0050		<0.0050		<0.0050 U	
Cadmium (Unfiltered)	mg/L							
Chromium, Total (Unfiltered)	mg/L							
Copper (Unfiltered)	mg/L							
Lead (Unfiltered)	mg/L						0.0126	
Mercury (Unfiltered)	mg/L							
Zinc (Unfiltered)	mg/L							
Famphur	ug/l							
Hexachlorobenzene	ug/l	<10		<10		<10 U		<10 U
Cyanide (Total)	mg/L							
Acenaphthene	ug/l							
Benzo(a)anthracene	ug/l	<10		<10		<10 U		<10 U
Benzo(a)pyrene	ug/l	<10		<10		<10 U		<10 U
Benzo(b)fluoranthene	ug/l	<10		<10		<10 U		<10 U
Benzo(g,h,i)perylene	ug/l	<10		<10		<10 U		<10 U
Benzo(k)fluoranthene	ug/l	<10		<10		<10 U		<10 U
Naphthalene	ug/L							
Pentachlorophenol	ug/l							

Table 8a
EXCEEDANCES OF P&W VCAP RISK-BASED GROUNDWATER LIMITS BASED ON CT SURFACE WATER CRITERIA
Pratt & Whitney, East Hartford, CT: Step 4 Investigation - Groundwater Data

Loureiro Engineering Associates, Inc.

	Location ID	WT-GW-45D	WT-GW-45D	WT-GW-45S	WT-GW-45S	WT-MW-29D	WT-MW-29D	WT-MW-29S
	Sample ID	2010168	2010168	2010167	2010167	1998513	1998513	1998512
	Sample Date	12/14/2001	12/14/2001	12/14/2001	12/14/2001	08/14/2001	08/14/2001	08/14/2001
	Sample Time	10:50	10:50	09:30	09:30	11:05	11:05	11:30
	Sample Depth	19' - 22'	19' - 22'	16' - 19'	16' - 19'	13.50' - 16.5	13.50' - 16.5	1.50' - 10.50
	Laboratory	CAN	CAN	CAN	CAN	STLC	STLC	STLC
	Lab. Number	A1L150184003	A1L150184004	A1L150184001	A1L150184002	A1H150222004	A1H150222005	A1H150222002
Constituent	Units							
1,1,1,2-Tetrachloroethane	ug/l							
1,1-Dichloroethane	ug/l							
1,1-Dichloroethene	ug/l							
1,2,3-Trichloropropane	ug/l							
1,2-Dibromoethane (Ethylene Dibromide)	ug/l			<1.0				
1,2-Dichloropropane	ug/l							
1,4-Dioxane (p-Dioxane)	ug/l							
2-Chloro-1,3-butadiene	ug/l							
Acetone	ug/l							
Acetonitrile	ug/l							
Acrylonitrile	ug/l							
Bromodichloromethane	ug/l							
Bromomethane	ug/l							
Carbon Disulfide	ug/l							
Carbon Tetrachloride	ug/l							
Dichlorodifluoromethane	ug/l							
Isobutanol	ug/l							
Methyl Ethyl Ketone (2-Butanone)	ug/l							
Methyl Isobutyl Ketone (4-methyl-2-penta	ug/l							
Methylacrylonitrile	ug/l							
Propane Nitrile (propionitrile)	ug/l							
Styrene	ug/l							
Tetrachloroethylene (PCE)	ug/l							
Trichlorofluoromethane	ug/l							
Vinyl Acetate	ug/l							
Xylenes	ug/l							
cis-1,2-Dichloroethylene	ug/l							
tert-Butyl Methyl Ether	ug/l							

Table 8a

EXCEEDANCES OF P&W VCAP RISK-BASED GROUNDWATER LIMITS BASED ON CT SURFACE WATER CRITERIA

Pratt & Whitney, East Hartford, CT: Step 4 Investigation - Groundwater Data

Loureiro Engineering Associates, Inc.

	Location ID	WT-MW-29S	WT-MW-30	WT-MW-30	WT-MW-31	WT-MW-31	WT-MW-32D	WT-MW-32D
	Sample ID	1998512	2001002	2001002	1998516	1998516	2000993	2000993
	Sample Date	08/14/2001	08/14/2001	08/14/2001	08/14/2001	08/14/2001	08/15/2001	08/15/2001
	Sample Time	11:30	11:15	11:15	11:35	11:35	11:40	11:40
	Sample Depth	1.50' - 10.50	4.50' - 13.50	4.50' - 13.50	5.00' - 14.00	5.00' - 14.00	17.50' - 20.5	17.50' - 20.5
	Laboratory	STLC	STLC	STLC	STLC	STLC	STLC	STLC
	Lab. Number	A1H150222003	A1H150229003	A1H150229004	A1H150229001	A1H150229002	A1H160236013	A1H160236014
Constituent	Units							
Depth of Well	Ft	10.05	11.77	11.77	13.90	13.90	19.94	19.94
Depth to Water	Ft	4.43	9.68	9.68	9.52	9.52	11.32	11.32
Water Elevation	Ft	26.79	25.04	25.04	24.39	24.39	21.71	21.71
Date Metals Analyzed	-	08/17/2001	08/26/2001	08/26/2001	08/26/2001	08/26/2001	08/26/2001	08/26/2001
Date Organics Analyzed	-						08/21/2001	
Date Physical Analyzed	-							
Date Semi-volatile Organics Analyzed	-		08/28/2001		08/28/2001		08/27/2001	
Arsenic	mg/L							
Arsenic (Unfiltered)	mg/L	0.0049						
Beryllium	mg/L		<0.0050 U		<0.0050 U		<0.0050 U	
Beryllium (Unfiltered)	mg/L	<0.0050 U		<0.0050 U		<0.0050 U		<0.0050 U
Cadmium (Unfiltered)	mg/L							
Chromium, Total (Unfiltered)	mg/L							
Copper (Unfiltered)	mg/L							
Lead (Unfiltered)	mg/L	0.0209						
Mercury (Unfiltered)	mg/L							
Zinc (Unfiltered)	mg/L							
Famphur	ug/l							
Hexachlorobenzene	ug/l		<10 U		<10 U		<10 U	
Cyanide (Total)	mg/L							
Acenaphthene	ug/l							
Benzo(a)anthracene	ug/l		<10 U		<10 U		<10 U	
Benzo(a)pyrene	ug/l		<10 U		<10 U		<10 U	
Benzo(b)fluoranthene	ug/l		<10 U		<10 U		<10 U	
Benzo(g,h,i)perylene	ug/l		<10 U		<10 U		<10 U	
Benzo(k)fluoranthene	ug/l		<10 U		<10 U		<10 U	
Naphthalene	ug/L							
Pentachlorophenol	ug/l							

Table 8a

EXCEEDANCES OF P&W VCAP RISK-BASED GROUNDWATER LIMITS BASED ON CT SURFACE WATER CRITERIA

Pratt & Whitney, East Hartford, CT: Step 4 Investigation - Groundwater Data

Loureiro Engineering Associates, Inc.

	Location ID	WT-MW-29S	WT-MW-30	WT-MW-30	WT-MW-31	WT-MW-31	WT-MW-32D	WT-MW-32D
	Sample ID	1998512	2001002	2001002	1998516	1998516	2000993	2000993
	Sample Date	08/14/2001	08/14/2001	08/14/2001	08/14/2001	08/14/2001	08/15/2001	08/15/2001
	Sample Time	11:30	11:15	11:15	11:35	11:35	11:40	11:40
	Sample Depth	1.50' - 10.50	4.50' - 13.50	4.50' - 13.50	5.00' - 14.00	5.00' - 14.00	17.50' - 20.5	17.50' - 20.5
	Laboratory	STLC	STLC	STLC	STLC	STLC	STLC	STLC
	Lab. Number	A1H150222003	A1H150229003	A1H150229004	A1H150229001	A1H150229002	A1H160236013	A1H160236014
Constituent	Units							
1,1,1,2-Tetrachloroethane	ug/l						<20 U	
1,1-Dichloroethane	ug/l						<100 U	
1,1-Dichloroethene	ug/l							
1,2,3-Trichloropropane	ug/l						<100 U	
1,2-Dibromoethane (Ethylene Dibromide)	ug/l						<10 U	
1,2-Dichloropropane	ug/l						<100 U	
1,4-Dioxane (p-Dioxane)	ug/l						<3000 U	
2-Chloro-1,3-butadiene	ug/l						<100 U	
Acetone	ug/l						<2000 U	
Acetonitrile	ug/l						<2000 U	
Acrylonitrile	ug/l						<30 U	
Bromodichloromethane	ug/l						<100 U	
Bromomethane	ug/l						<200 U	
Carbon Disulfide	ug/l						<100 U	
Carbon Tetrachloride	ug/l							
Dichlorodifluoromethane	ug/l						<100 U	
Isobutanol	ug/l						<1000 U	
Methyl Ethyl Ketone (2-Butanone)	ug/l						<2000 U	
Methyl Isobutyl Ketone (4-methyl-2-penta	ug/l						<100 U	
Methylacrylonitrile	ug/l						<100 U	
Propane Nitrile (propionitrile)	ug/l						<100 U	
Styrene	ug/l						<100 U	
Tetrachloroethylene (PCE)	ug/l						<100 U	
Trichlorofluoromethane	ug/l						<100 U	
Vinyl Acetate	ug/l						<100 U	
Xylenes	ug/l						<100 U	
cis-1,2-Dichloroethylene	ug/l						<100 U	
tert-Butyl Methyl Ether	ug/l						<100 U	

Table 8a

EXCEEDANCES OF P&W VCAP RISK-BASED GROUNDWATER LIMITS BASED ON CT SURFACE WATER CRITERIA

Pratt & Whitney, East Hartford, CT: Step 4 Investigation - Groundwater Data

Loureiro Engineering Associates, Inc.

	Location ID	WT-MW-32S	WT-MW-32S	WT-MW-33D	WT-MW-33D	WT-MW-33S	WT-MW-33S	WT-MW-34D
	Sample ID	2000992	2000992	1998525	1998525	1998524	1998524	1998521
	Sample Date	08/15/2001	08/15/2001	08/15/2001	08/15/2001	08/15/2001	08/15/2001	08/15/2001
	Sample Time	11:30	11:30	10:55	10:55	10:41	10:41	09:35
	Sample Depth	7.00' - 16.00	7.00' - 16.00	15.50' - 18.5	15.50' - 18.5	7.00' - 16.00	7.00' - 16.00	15.50' - 18.5
	Laboratory	STLC	STLC	STLC	STLC	STLC	STLC	STLC
	Lab. Number	A1H160236011	A1H160236012	A1H160236008	A1H160236009	A1H160236006	A1H160236007	A1H160230003
Constituent	Units							
Depth of Well	Ft	15.52	15.52	17.92	17.92	14.95	14.95	18.15
Depth to Water	Ft	11.00	11.00	11.39	11.39	10.30	10.30	10.85
Water Elevation	Ft	22.03	22.03	20.01	20.01	21.04	21.04	22.73
Date Metals Analyzed	-	08/26/2001	08/26/2001	08/26/2001	08/26/2001	08/26/2001	08/26/2001	08/26/2001
Date Organics Analyzed	-	08/21/2001						08/21/2001
Date Physical Analyzed	-							
Date Semi-volatile Organics Analyzed	-	08/27/2001		08/27/2001		08/27/2001		08/27/2001
Arsenic	mg/L							
Arsenic (Unfiltered)	mg/L							
Beryllium	mg/L	<0.0050 U		<0.0050 U		<0.0050 U		<0.0050 U
Beryllium (Unfiltered)	mg/L		<0.0050 U		<0.0050 U		<0.0050 U	
Cadmium (Unfiltered)	mg/L							
Chromium, Total (Unfiltered)	mg/L							
Copper (Unfiltered)	mg/L							
Lead (Unfiltered)	mg/L							
Mercury (Unfiltered)	mg/L							
Zinc (Unfiltered)	mg/L							
Famphur	ug/l							
Hexachlorobenzene	ug/l	<10 U		<10 U		<10 U		<10 U
Cyanide (Total)	mg/L							
Acenaphthene	ug/l			13		27		
Benzo(a)anthracene	ug/l	<10 U		<10 U		<10 U		<10 U
Benzo(a)pyrene	ug/l	<10 U		<10 U		<10 U		<10 U
Benzo(b)fluoranthene	ug/l	<10 U		<10 U		<10 U		<10 U
Benzo(g,h,i)perylene	ug/l	<10 U		<10 U		<10 U		<10 U
Benzo(k)fluoranthene	ug/l	<10 U		<10 U		<10 U		<10 U
Naphthalene	ug/L							
Pentachlorophenol	ug/l							

Table 8a
EXCEEDANCES OF P&W VCAP RISK-BASED GROUNDWATER LIMITS BASED ON CT SURFACE WATER CRITERIA
Pratt & Whitney, East Hartford, CT: Step 4 Investigation - Groundwater Data

Loureiro Engineering Associates, Inc.

	Location ID	WT-MW-32S	WT-MW-32S	WT-MW-33D	WT-MW-33D	WT-MW-33S	WT-MW-33S	WT-MW-34D
	Sample ID	2000992	2000992	1998525	1998525	1998524	1998524	1998521
	Sample Date	08/15/2001	08/15/2001	08/15/2001	08/15/2001	08/15/2001	08/15/2001	08/15/2001
	Sample Time	11:30	11:30	10:55	10:55	10:41	10:41	09:35
	Sample Depth	7.00' - 16.00	7.00' - 16.00	15.50' - 18.5	15.50' - 18.5	7.00' - 16.00	7.00' - 16.00	15.50' - 18.5
	Laboratory	STLC	STLC	STLC	STLC	STLC	STLC	STLC
	Lab. Number	A1H160236011	A1H160236012	A1H160236008	A1H160236009	A1H160236006	A1H160236007	A1H160230003
Constituent	Units							
1,1,1,2-Tetrachloroethane	ug/l	<20 U						<40 U
1,1-Dichloroethane	ug/l	<100 U						<200 U
1,1-Dichloroethene	ug/l							700
1,2,3-Trichloropropane	ug/l	<100 U						<200 U
1,2-Dibromoethane (Ethylene Dibromide)	ug/l	<10 U						<20 U
1,2-Dichloropropane	ug/l	<100 U						<200 U
1,4-Dioxane (p-Dioxane)	ug/l	<3000 U						<6000 UR
2-Chloro-1,3-butadiene	ug/l	<100 U						<200 U
Acetone	ug/l	<2000 U						<4000 U
Acetonitrile	ug/l	<2000 U						<4000 UR
Acrylonitrile	ug/l	<30 U						<60 U
Bromodichloromethane	ug/l	<100 U						<200 U
Bromomethane	ug/l	<200 U						<400 U
Carbon Disulfide	ug/l	<100 U						<200 U
Carbon Tetrachloride	ug/l							<200 UJ
Dichlorodifluoromethane	ug/l	<100 U						<200 UJ
Isobutanol	ug/l	<1000 U						<2000 UR
Methyl Ethyl Ketone (2-Butanone)	ug/l	<2000 U						<4000 U
Methyl Isobutyl Ketone (4-methyl-2-penta	ug/l	<100 U						<200 U
Methylacrylonitrile	ug/l	<100 U						<200 U
Propane Nitrile (propionitrile)	ug/l	<100 U						<200 UR
Styrene	ug/l	<100 U						<200 U
Tetrachloroethylene (PCE)	ug/l	<100 U						<200 U
Trichlorofluoromethane	ug/l	<100 U						<200 UJ
Vinyl Acetate	ug/l	<100 U						<200 UJ
Xylenes	ug/l	<100 U						<200 U
cis-1,2-Dichloroethylene	ug/l	<100 U						<200 U
tert-Butyl Methyl Ether	ug/l	<100 U						<200 U

Table 8a
EXCEEDANCES OF P&W VCAP RISK-BASED GROUNDWATER LIMITS BASED ON CT SURFACE WATER CRITERIA
Pratt & Whitney, East Hartford, CT: Step 4 Investigation - Groundwater Data

Loureiro Engineering Associates, Inc.

	Location ID	WT-MW-34D	WT-MW-34S	WT-MW-34S	WT-MW-35D	WT-MW-35D	WT-MW-35S	WT-MW-35S
	Sample ID	1998521	1998522	1998522	2000995	2000995	2000994	2000994
	Sample Date	08/15/2001	08/15/2001	08/15/2001	08/15/2001	08/15/2001	08/15/2001	08/15/2001
	Sample Time	09:35	09:30	09:30	14:05	14:05	14:00	14:00
	Sample Depth	15.50' - 18.5	7.00' - 16.00	7.00' - 16.00	22.50' - 25.5	22.50' - 25.5	5.00' - 14.00	5.00' - 14.00
	Laboratory	STLC	STLC	STLC	STLC	STLC	STLC	STLC
	Lab. Number	A1H160230004	A1H160230001	A1H160230002	A1H160230008	A1H160230009	A1H160230006	A1H160230007
Constituent	Units							
Depth of Well	Ft	18.15	15.30	15.30	25.07	25.07	12.78	12.78
Depth to Water	Ft	10.85	10.65	10.65	8.92	8.92	8.81	8.81
Water Elevation	Ft	22.73	22.93	22.93	26.64	26.64	26.87	26.87
Date Metals Analyzed	-	08/26/2001	08/26/2001	08/26/2001	08/26/2001	08/26/2001	08/26/2001	08/26/2001
Date Organics Analyzed	-		08/21/2001					
Date Physical Analyzed	-							
Date Semi-volatile Organics Analyzed	-		08/27/2001		08/27/2001		08/27/2001	
Arsenic	mg/L							
Arsenic (Unfiltered)	mg/L							
Beryllium	mg/L		<0.0050 U		<0.0050 U		<0.0050 U	
Beryllium (Unfiltered)	mg/L	<0.0050 U		<0.0050 U		<0.0050 U		<0.0050 U
Cadmium (Unfiltered)	mg/L							
Chromium, Total (Unfiltered)	mg/L							
Copper (Unfiltered)	mg/L							
Lead (Unfiltered)	mg/L							
Mercury (Unfiltered)	mg/L							
Zinc (Unfiltered)	mg/L							
Famphur	ug/l							
Hexachlorobenzene	ug/l		<10 U		<10 U		<10 U	
Cyanide (Total)	mg/L							
Acenaphthene	ug/l							
Benzo(a)anthracene	ug/l		<10 U		<10 U		<10 U	
Benzo(a)pyrene	ug/l		<10 U		<10 U		<10 U	
Benzo(b)fluoranthene	ug/l		<10 U		<10 U		<10 U	
Benzo(g,h,i)perylene	ug/l		<10 U		<10 U		<10 U	
Benzo(k)fluoranthene	ug/l		<10 U		<10 U		<10 U	
Naphthalene	ug/L							
Pentachlorophenol	ug/l							

Table 8a

EXCEEDANCES OF P&W VCAP RISK-BASED GROUNDWATER LIMITS BASED ON CT SURFACE WATER CRITERIA

Pratt & Whitney, East Hartford, CT: Step 4 Investigation - Groundwater Data

Loureiro Engineering Associates, Inc.

	Location ID	WT-MW-34D	WT-MW-34S	WT-MW-34S	WT-MW-35D	WT-MW-35D	WT-MW-35S	WT-MW-35S
	Sample ID	1998521	1998522	1998522	2000995	2000995	2000994	2000994
	Sample Date	08/15/2001	08/15/2001	08/15/2001	08/15/2001	08/15/2001	08/15/2001	08/15/2001
	Sample Time	09:35	09:30	09:30	14:05	14:05	14:00	14:00
	Sample Depth	15.50' - 18.5	7.00' - 16.00	7.00' - 16.00	22.50' - 25.5	22.50' - 25.5	5.00' - 14.00	5.00' - 14.00
	Laboratory	STLC	STLC	STLC	STLC	STLC	STLC	STLC
	Lab. Number	A1H160230004	A1H160230001	A1H160230002	A1H160230008	A1H160230009	A1H160230006	A1H160230007
Constituent	Units							
1,1,1,2-Tetrachloroethane	ug/l		<20 U					
1,1-Dichloroethane	ug/l		<100 U					
1,1-Dichloroethene	ug/l		210					
1,2,3-Trichloropropane	ug/l		<100 U					
1,2-Dibromoethane (Ethylene Dibromide)	ug/l		<10 U					
1,2-Dichloropropane	ug/l		<100 U					
1,4-Dioxane (p-Dioxane)	ug/l		<3000 UR					
2-Chloro-1,3-butadiene	ug/l		<100 U					
Acetone	ug/l		<2000 U					
Acetonitrile	ug/l		<2000 UR					
Acrylonitrile	ug/l		<30 U					
Bromodichloromethane	ug/l		<100 U					
Bromomethane	ug/l		<200 U					
Carbon Disulfide	ug/l		<100 U					
Carbon Tetrachloride	ug/l							
Dichlorodifluoromethane	ug/l		<100 UJ					
Isobutanol	ug/l		<1000 UR					
Methyl Ethyl Ketone (2-Butanone)	ug/l		<2000 U					
Methyl Isobutyl Ketone (4-methyl-2-penta	ug/l		<100 U					
Methylacrylonitrile	ug/l		<100 U					
Propane Nitrile (propionitrile)	ug/l		<100 UR					
Styrene	ug/l		<100 U					
Tetrachloroethylene (PCE)	ug/l		<100 U					
Trichlorofluoromethane	ug/l		<100 UJ					
Vinyl Acetate	ug/l		<100 UJ					
Xylenes	ug/l		<100 U					
cis-1,2-Dichloroethylene	ug/l		<100 U					
tert-Butyl Methyl Ether	ug/l		<100 U					

Table 8a
EXCEEDANCES OF P&W VCAP RISK-BASED GROUNDWATER LIMITS BASED ON CT SURFACE WATER CRITERIA
Pratt & Whitney, East Hartford, CT: Step 4 Investigation - Groundwater Data

Loureiro Engineering Associates, Inc.

	Location ID	WT-MW-36D	WT-MW-36D	WT-MW-36S	WT-MW-36S	WT-MW-37	WT-MW-37	WT-MW-37
	Sample ID	2000997	2000997	2000996	2000996	1998517	1998517	1998518
	Sample Date	08/15/2001	08/15/2001	08/15/2001	08/15/2001	08/14/2001	08/14/2001	08/14/2001
	Sample Time	01:53	01:53	02:03	02:03	13:00	13:00	13:00
	Sample Depth	32.3' - 35.3'	32.3' - 35.3'	5.0' - 14.0'	5.0' - 14.0'	4.00' - 14.00	4.00' - 14.00	4.00' - 14.00
	Laboratory	STLC	STLC	STLC	STLC	STLC	STLC	STLC
	Lab. Number	A1H160236002	A1H160236004	A1H160236001	A1H160236003	A1H150222007	A1H150222008	A1H150222009
Constituent	Units							
Depth of Well	Ft	34.52	34.52	14.39	14.39	13.95	13.95	13.95
Depth to Water	Ft	12.26	12.26	12.26	12.26	7.61	7.61	7.61
Water Elevation	Ft	23.65	23.65	23.80	23.80	26.28	26.28	26.28
Date Metals Analyzed	-	08/26/2001	08/26/2001	08/26/2001	08/26/2001	08/17/2001	08/17/2001	08/17/2001
Date Organics Analyzed	-							
Date Physical Analyzed	-	08/23/2001						
Date Semi-volatile Organics Analyzed	-	08/27/2001		08/27/2001		08/28/2001		08/28/2001
Arsenic	mg/L							
Arsenic (Unfiltered)	mg/L		0.0378					
Beryllium	mg/L	<0.0050 U		<0.0050 U		<0.0050 U		<0.0050 U
Beryllium (Unfiltered)	mg/L		<0.0050 U		<0.0050 U		<0.0050 U	
Cadmium (Unfiltered)	mg/L							
Chromium, Total (Unfiltered)	mg/L		0.366					
Copper (Unfiltered)	mg/L		0.211					
Lead (Unfiltered)	mg/L		0.0660					
Mercury (Unfiltered)	mg/L							
Zinc (Unfiltered)	mg/L							
Famphur	ug/l							
Hexachlorobenzene	ug/l	<10 U		<10 U		<10 U		<10 UR
Cyanide (Total)	mg/L	0.058						
Acenaphthene	ug/l							
Benzo(a)anthracene	ug/l	<10 U		<10 U		<10 U		<10 UR
Benzo(a)pyrene	ug/l	<10 U		<10 U		<10 U		<10 UR
Benzo(b)fluoranthene	ug/l	<10 U		<10 U		<10 U		<10 UR
Benzo(g,h,i)perylene	ug/l	<10 U		<10 U		<10 U		<10 UR
Benzo(k)fluoranthene	ug/l	<10 U		<10 U		<10 U		<10 UR
Naphthalene	ug/L							
Pentachlorophenol	ug/l							

Table 8a

EXCEEDANCES OF P&W VCAP RISK-BASED GROUNDWATER LIMITS BASED ON CT SURFACE WATER CRITERIA

Pratt & Whitney, East Hartford, CT: Step 4 Investigation - Groundwater Data

Loureiro Engineering Associates, Inc.

	Location ID	WT-MW-36D	WT-MW-36D	WT-MW-36S	WT-MW-36S	WT-MW-37	WT-MW-37	WT-MW-37
	Sample ID	2000997	2000997	2000996	2000996	1998517	1998517	1998518
	Sample Date	08/15/2001	08/15/2001	08/15/2001	08/15/2001	08/14/2001	08/14/2001	08/14/2001
	Sample Time	01:53	01:53	02:03	02:03	13:00	13:00	13:00
	Sample Depth	32.3' - 35.3'	32.3' - 35.3'	5.0' - 14.0'	5.0' - 14.0'	4.00' - 14.00	4.00' - 14.00	4.00' - 14.00
	Laboratory	STLC	STLC	STLC	STLC	STLC	STLC	STLC
	Lab. Number	A1H160236002	A1H160236004	A1H160236001	A1H160236003	A1H150222007	A1H150222008	A1H150222009
Constituent	Units							
1,1,1,2-Tetrachloroethane	ug/l							
1,1-Dichloroethane	ug/l							
1,1-Dichloroethene	ug/l							
1,2,3-Trichloropropane	ug/l							
1,2-Dibromoethane (Ethylene Dibromide)	ug/l							
1,2-Dichloropropane	ug/l							
1,4-Dioxane (p-Dioxane)	ug/l							
2-Chloro-1,3-butadiene	ug/l							
Acetone	ug/l							
Acetonitrile	ug/l							
Acrylonitrile	ug/l							
Bromodichloromethane	ug/l							
Bromomethane	ug/l							
Carbon Disulfide	ug/l							
Carbon Tetrachloride	ug/l							
Dichlorodifluoromethane	ug/l							
Isobutanol	ug/l							
Methyl Ethyl Ketone (2-Butanone)	ug/l							
Methyl Isobutyl Ketone (4-methyl-2-penta	ug/l							
Methylacrylonitrile	ug/l							
Propane Nitrile (propionitrile)	ug/l							
Styrene	ug/l							
Tetrachloroethylene (PCE)	ug/l							
Trichlorofluoromethane	ug/l							
Vinyl Acetate	ug/l							
Xylenes	ug/l							
cis-1,2-Dichloroethylene	ug/l							
tert-Butyl Methyl Ether	ug/l							

Table 8a
EXCEEDANCES OF P&W VCAP RISK-BASED GROUNDWATER LIMITS BASED ON CT SURFACE WATER CRITERIA
Pratt & Whitney, East Hartford, CT: Step 4 Investigation - Groundwater Data

Loureiro Engineering Associates, Inc.

	Location ID	WT-MW-37	WT-MW-37	WT-MW-38D	WT-MW-38D	WT-MW-38S	WT-MW-38S	WT-MW-39
	Sample ID	1998518	1998518	1998515	1998515	1998514	1998514	1998519
	Sample Date	08/14/2001	08/14/2001	08/14/2001	08/14/2001	08/14/2001	08/14/2001	08/14/2001
	Sample Time	13:00	13:00	13:30	13:30	13:35	13:35	14:21
	Sample Depth	4.00' - 14.00	4.00' - 14.00	17.50' - 20.5	17.50' - 20.5	8.00' - 17.00	8.00' - 17.00	9.00' - 18.00
	Laboratory	STLC	STLC	STLC	STLC	STLC	STLC	STLC
	Lab. Number	A1H150222009R	A1H150222010	A1H150229008	A1H150229009	A1H150229006	A1H150229007	A1H150229011
Constituent	Units							
Depth of Well	Ft	13.95	13.95	20.38	20.38	16.52	16.52	17.56
Depth to Water	Ft	7.61	7.61	12.03	12.03	11.61	11.61	13.25
Water Elevation	Ft	26.28	26.28	20.65	20.65	20.97	20.97	20.94
Date Metals Analyzed	-		08/17/2001	08/26/2001	08/26/2001	08/26/2001	08/26/2001	08/26/2001
Date Organics Analyzed	-							
Date Physical Analyzed	-							
Date Semi-volatile Organics Analyzed	-	09/04/2001		08/29/2001		08/28/2001		08/29/2001
Arsenic	mg/L							
Arsenic (Unfiltered)	mg/L				0.0567			
Beryllium	mg/L			<0.0050 U		<0.0050 U		<0.0050 U
Beryllium (Unfiltered)	mg/L		<0.0050 U		<0.0050 U		<0.0050 U	
Cadmium (Unfiltered)	mg/L							
Chromium, Total (Unfiltered)	mg/L				0.564			
Copper (Unfiltered)	mg/L				0.317			
Lead (Unfiltered)	mg/L				0.923		0.0158	
Mercury (Unfiltered)	mg/L				0.0037		<0.00052 U	
Zinc (Unfiltered)	mg/L				2.59			
Famphur	ug/l							
Hexachlorobenzene	ug/l	<10 UR		<10 U		<10 U		<10 U
Cyanide (Total)	mg/L							
Acenaphthene	ug/l							
Benzo(a)anthracene	ug/l	<10 UR		4.2 J		<10 U		<10 U
Benzo(a)pyrene	ug/l	<10 UR		3.7 J		<10 U		<10 U
Benzo(b)fluoranthene	ug/l	<10 UR		4.8 J		<10 U		<10 U
Benzo(g,h,i)perylene	ug/l	<10 UR		2.6 J		<10 U		<10 U
Benzo(k)fluoranthene	ug/l	<10 UR		2.3 J		<10 U		<10 U
Naphthalene	ug/L							
Pentachlorophenol	ug/l							

Table 8a

EXCEEDANCES OF P&W VCAP RISK-BASED GROUNDWATER LIMITS BASED ON CT SURFACE WATER CRITERIA

Pratt & Whitney, East Hartford, CT: Step 4 Investigation - Groundwater Data

Loureiro Engineering Associates, Inc.

	Location ID	WT-MW-37	WT-MW-37	WT-MW-38D	WT-MW-38D	WT-MW-38S	WT-MW-38S	WT-MW-39
	Sample ID	1998518	1998518	1998515	1998515	1998514	1998514	1998519
	Sample Date	08/14/2001	08/14/2001	08/14/2001	08/14/2001	08/14/2001	08/14/2001	08/14/2001
	Sample Time	13:00	13:00	13:30	13:30	13:35	13:35	14:21
	Sample Depth	4.00' - 14.00	4.00' - 14.00	17.50' - 20.5	17.50' - 20.5	8.00' - 17.00	8.00' - 17.00	9.00' - 18.00
	Laboratory	STLC	STLC	STLC	STLC	STLC	STLC	STLC
	Lab. Number	A1H150222009R	A1H150222010	A1H150229008	A1H150229009	A1H150229006	A1H150229007	A1H150229011
Constituent	Units							
1,1,1,2-Tetrachloroethane	ug/l							
1,1-Dichloroethane	ug/l							
1,1-Dichloroethene	ug/l							
1,2,3-Trichloropropane	ug/l							
1,2-Dibromoethane (Ethylene Dibromide)	ug/l							
1,2-Dichloropropane	ug/l							
1,4-Dioxane (p-Dioxane)	ug/l							
2-Chloro-1,3-butadiene	ug/l							
Acetone	ug/l							
Acetonitrile	ug/l							
Acrylonitrile	ug/l							
Bromodichloromethane	ug/l							
Bromomethane	ug/l							
Carbon Disulfide	ug/l							
Carbon Tetrachloride	ug/l							
Dichlorodifluoromethane	ug/l							
Isobutanol	ug/l							
Methyl Ethyl Ketone (2-Butanone)	ug/l							
Methyl Isobutyl Ketone (4-methyl-2-penta	ug/l							
Methylacrylonitrile	ug/l							
Propane Nitrile (propionitrile)	ug/l							
Styrene	ug/l							
Tetrachloroethylene (PCE)	ug/l							
Trichlorofluoromethane	ug/l							
Vinyl Acetate	ug/l							
Xylenes	ug/l							
cis-1,2-Dichloroethylene	ug/l							
tert-Butyl Methyl Ether	ug/l							

Table 8a

EXCEEDANCES OF P&W VCAP RISK-BASED GROUNDWATER LIMITS BASED ON CT SURFACE WATER CRITERIA

Pratt & Whitney, East Hartford, CT: Step 4 Investigation - Groundwater Data

Loureiro Engineering Associates, Inc.

	Location ID	WT-MW-39	WT-MW-39	WT-MW-39				
	Sample ID	1998519	2010169	2010169				
	Sample Date	08/14/2001	12/14/2001	12/14/2001				
	Sample Time	14:21	10:00	10:00				
	Sample Depth	9.00' - 18.00	9.00' - 18.00	9.00' - 18.00				
	Laboratory	STLC	CAN	CAN				
	Lab. Number	A1H150229012	A1L150184005	A1L150184006				
Constituent	Units							
Depth of Well	Ft	17.56	17.55	17.55				
Depth to Water	Ft	13.25	13.47	13.47				
Water Elevation	Ft	20.94	20.72	20.72				
Date Metals Analyzed	-	08/26/2001	12/20/2001	12/20/2001				
Date Organics Analyzed	-							
Date Physical Analyzed	-							
Date Semi-volatile Organics Analyzed	-		12/20/2001					
Arsenic	mg/L							
Arsenic (Unfiltered)	mg/L	0.0138						
Beryllium	mg/L		<0.0050					
Beryllium (Unfiltered)	mg/L	<0.0050 U		<0.0050				
Cadmium (Unfiltered)	mg/L							
Chromium, Total (Unfiltered)	mg/L							
Copper (Unfiltered)	mg/L	0.408						
Lead (Unfiltered)	mg/L	0.129						
Mercury (Unfiltered)	mg/L							
Zinc (Unfiltered)	mg/L							
Famphur	ug/l							
Hexachlorobenzene	ug/l		<10					
Cyanide (Total)	mg/L							
Acenaphthene	ug/l							
Benzo(a)anthracene	ug/l		<10					
Benzo(a)pyrene	ug/l		<10					
Benzo(b)fluoranthene	ug/l		<10					
Benzo(g,h,i)perylene	ug/l		<10					
Benzo(k)fluoranthene	ug/l		<10					
Naphthalene	ug/L							
Pentachlorophenol	ug/l							

Table 8a

EXCEEDANCES OF P&W VCAP RISK-BASED GROUNDWATER LIMITS BASED ON CT SURFACE WATER CRITERIA

Pratt & Whitney, East Hartford, CT: Step 4 Investigation - Groundwater Data

Loureiro Engineering Associates, Inc.

	Location ID	WT-MW-39	WT-MW-39	WT-MW-39				
	Sample ID	1998519	2010169	2010169				
	Sample Date	08/14/2001	12/14/2001	12/14/2001				
	Sample Time	14:21	10:00	10:00				
	Sample Depth	9.00' - 18.00	9.00' - 18.00	9.00' - 18.00				
	Laboratory	STLC	CAN	CAN				
	Lab. Number	A1H150229012	A1L150184005	A1L150184006				
Constituent	Units							
1,1,1,2-Tetrachloroethane	ug/l							
1,1-Dichloroethane	ug/l							
1,1-Dichloroethene	ug/l							
1,2,3-Trichloropropane	ug/l							
1,2-Dibromoethane (Ethylene Dibromide)	ug/l							
1,2-Dichloropropane	ug/l							
1,4-Dioxane (p-Dioxane)	ug/l							
2-Chloro-1,3-butadiene	ug/l							
Acetone	ug/l							
Acetonitrile	ug/l							
Acrylonitrile	ug/l							
Bromodichloromethane	ug/l							
Bromomethane	ug/l							
Carbon Disulfide	ug/l							
Carbon Tetrachloride	ug/l							
Dichlorodifluoromethane	ug/l							
Isobutanol	ug/l							
Methyl Ethyl Ketone (2-Butanone)	ug/l							
Methyl Isobutyl Ketone (4-methyl-2-penta	ug/l							
Methylacrylonitrile	ug/l							
Propane Nitrile (propionitrile)	ug/l							
Styrene	ug/l							
Tetrachloroethylene (PCE)	ug/l							
Trichlorofluoromethane	ug/l							
Vinyl Acetate	ug/l							
Xylenes	ug/l							
cis-1,2-Dichloroethylene	ug/l							
tert-Butyl Methyl Ether	ug/l							

Table 8b

EXCEEDANCES OF P&W VCAP RISK-BASED GROUNDWATER LIMITIS BASED ON DERMAL CONTACT

Pratt & Whitney, East Hartford, CT: Step 4 Investigation - Groundwater Data

Loureiro Engineering Associates, Inc.

	Location ID	ET-MW-18D	ET-MW-18D	ET-MW-18D	ET-MW-18S	ET-MW-19D	ET-MW-19S	ET-MW-20D
	Sample ID	2003527	2003527	2003531	2003530	2003535	2003534	2003529
	Sample Date	08/16/2001	08/16/2001	08/16/2001	08/16/2001	08/16/2001	08/16/2001	08/16/2001
	Sample Time	11:50	11:50	11:40	11:30	10:55	10:40	12:20
	Sample Depth	32.50' - 35.5	32.50' - 35.5	32.50' - 35.5	7.00' - 16.00	32.50' - 35.5	7.00' - 16.00	33.00' - 36.0
	Laboratory	STLC	STLC	STLC	STLC	STLC	STLC	STLC
	Lab. Number	A1H170215009	A1H170215009R	A1H170215019	A1H170215017	A1H170215014	A1H170215012	A1H170228004
Constituent	Units							
Depth of Well	Ft	35.3	35.3	35.3	15.46	35.00	15.40	35.13
Depth to Water	Ft	10.6	10.6	10.6	10.46	9.88	9.83	10.14
Water Elevation	Ft	30.32	30.32	30.32	30.40	30.15	30.22	30.31
Date Organics Analyzed	-	08/23/2001		08/23/2001				
Date Semi-volatile Organics Analyzed	-	08/23/2001	09/04/2001	08/23/2001	08/23/2001	08/23/2001	08/23/2001	08/23/2001
Famphur	ug/l	<100 UJ	<100 UJ	<100 UJ	<100 UJ	<100 UJ	<100 UJ	<100 U
Hexachlorobenzene	ug/l	<10 U	<10 UJ	<10 U	<10 U	<10 U	<10 U	<10 U
Phorate	ug/l	<50 U	<50 UJ	<50 U	<50 U	<50 U	<50 U	<50 U
2-Methylnaphthalene	ug/L							
7,12-Dimethylbenz(a)anthracene	ug/l	<20 U	<20 UJ	<20 U	<20 U	<20 U	<20 U	<20 U
Benzo(a)anthracene	ug/l	<10 U	<10 UJ	<10 U	<10 U	<10 U	<10 U	<10 U
Benzo(a)pyrene	ug/l	<10 U	<10 UJ	<10 U	<10 U	<10 U	<10 U	<10 U
Benzo(b)fluoranthene	ug/l	<10 U	<10 UJ	<10 U	<10 U	<10 U	<10 U	<10 U
Benzo(g,h,i)perylene	ug/l							
Benzo(k)fluoranthene	ug/l	<10 U	<10 UJ	<10 U	<10 U	<10 U	<10 U	<10 U
Bis(2-chloroethoxy) Methane	ug/l							
Dibenz(a,h)anthracene	ug/l							
Indeno(1,2,3-c,d)pyrene	ug/l							
Naphthalene	ug/L							
Phenacetin	ug/l	<20 U	<20 UJ	<20 U	<20 U	<20 U	<20 U	<20 U
o,o,o-Triethyl Phosphorothioate	ug/l	<50 U	<50 UJ	<50 U	<50 U	<50 U	<50 U	<50 U
1,1-Dichloroethene	ug/l							
1,2,3-Trichloropropane	ug/l							
1,2-Dibromoethane (Ethylene Dibromide)	ug/l							
Methyl Isobutyl Ketone (4-methyl-2-penta	ug/l	<20 UJ		<25 U				
Methylacrylonitrile	ug/l	<20 UJ		<25 U				
Pentachloroethane	ug/l	<50 U	<50 UJ	<50 U	<50 U	<50 U	<50 U	<50 U
Propane Nitrile (propionitrile)	ug/l	<20 UR		<25 UR				

Table 8b
EXCEEDANCES OF P&W VCAP RISK-BASED GROUNDWATER LIMITIS BASED ON DERMAL CONTACT
Pratt & Whitney, East Hartford, CT: Step 4 Investigation - Groundwater Data

Loureiro Engineering Associates, Inc.

	Location ID	ET-MW-20S	ET-MW-21D	ET-MW-21S	WT-GW-31D	WT-GW-31S	WT-GW-32D	WT-GW-32D
	Sample ID	2003528	2003533	2003532	2000982	2000983	1998471	1998472
	Sample Date	08/16/2001	08/16/2001	08/16/2001	08/03/2001	08/03/2001	08/01/2001	08/01/2001
	Sample Time	12:15	13:30	13:15	13:00	13:40	09:05	09:05
	Sample Depth	9.00' - 17.00	33.00' - 36.0	7.50' - 16.50	14' - 18'	10' - 14'	17' - 20'	17' - 20'
	Laboratory	STLC	STLC	STLC	STLC	STLC	STLC	STLC
	Lab. Number	A1H170228002	A1H170215004	A1H170215002	A1H080137007	A1H080137009	A1H020176001	A1H020176003
Constituent	Units							
Depth of Well	Ft	16.72	35.68	16.90				
Depth to Water	Ft	9.98	11.21	11.07			12.5	12.5
Water Elevation	Ft	30.29	30.14	30.14				
Date Organics Analyzed	-				08/14/2001			
Date Semi-volatile Organics Analyzed	-	08/23/2001	08/23/2001	08/23/2001	08/15/2001	08/15/2001	08/13/2001	08/13/2001
Famphur	ug/l	<100 U	<100 UJ	<100 UJ	<100	<100	<100 U	<100 U
Hexachlorobenzene	ug/l	<10 U	<10 U	<10 U	<10	<10	<10 U	<10 U
Phorate	ug/l	<50 U	<50 U	<50 U	<50	<50	<50 U	<50 U
2-Methylnaphthalene	ug/L							
7,12-Dimethylbenz(a)anthracene	ug/l	<20 U	<20 U	<20 U	<20	<20	<20 U	<20 U
Benzo(a)anthracene	ug/l	<10 U	<10 U	<10 U	<10	<10	<10 U	<10 U
Benzo(a)pyrene	ug/l	<10 U	<10 U	<10 U	<10	<10	<10 U	<10 U
Benzo(b)fluoranthene	ug/l	<10 U	<10 U	<10 U	<10	<10	<10 U	<10 U
Benzo(g,h,i)perylene	ug/l							
Benzo(k)fluoranthene	ug/l	<10 U	<10 U	<10 U	<10	<10	<10 U	<10 U
Bis(2-chloroethoxy) Methane	ug/l							
Dibenz(a,h)anthracene	ug/l							
Indeno(1,2,3-c,d)pyrene	ug/l							
Naphthalene	ug/L							
Phenacetin	ug/l	<20 U	<20 U	<20 U	<20	<20	<20 U	<20 U
o,o,o-Triethyl Phosphorothioate	ug/l	<50 U	<50 U	<50 U	<50	<50	<50 U	<50 U
1,1-Dichloroethene	ug/l							
1,2,3-Trichloropropane	ug/l							
1,2-Dibromoethane (Ethylene Dibromide)	ug/l							
Methyl Isobutyl Ketone (4-methyl-2-penta	ug/l				<25			
Methylacrylonitrile	ug/l				<25			
Pentachloroethane	ug/l	<50 U	<50 U	<50 U	<50	<50	<50 U	<50 U
Propane Nitrile (propionitrile)	ug/l				<25			

Table 8b
EXCEEDANCES OF P&W VCAP RISK-BASED GROUNDWATER LIMITIS BASED ON DERMAL CONTACT
Pratt & Whitney, East Hartford, CT: Step 4 Investigation - Groundwater Data

Loureiro Engineering Associates, Inc.

	Location ID	WT-GW-32S	WT-GW-33D	WT-GW-33S	WT-GW-34S	WT-GW-35D	WT-GW-35S	WT-GW-36D
	Sample ID	1998475	2000984	2000985	1998459	2000987	2000988	1998463
	Sample Date	08/01/2001	08/03/2001	08/03/2001	07/31/2001	08/06/2001	08/06/2001	07/31/2001
	Sample Time	09:35	14:05	14:45	08:45	14:30	14:10	13:15
	Sample Depth	11' - 14'	14' - 18'	10' - 13'	11' - 14'	15.00' - 18.0	12.6' - 15.6'	21' - 22'
	Laboratory	STLC	STLC	STLC	STLC	STLC	STLC	STLC
	Lab. Number	A1H020176005	A1H060128015	A1H060128017	A1H010261006	A1H080223005	A1H080223002	A1H010261001
Constituent	Units							
Depth of Well	Ft							
Depth to Water	Ft	12.5			12.25	14.00	11.6	12
Water Elevation	Ft							
Date Organics Analyzed	-	08/08/2001		08/11/2001	08/06/2001	08/14/2001	08/14/2001	
Date Semi-volatile Organics Analyzed	-	08/13/2001	08/15/2001	08/15/2001	08/13/2001	08/17/2001	08/17/2001	08/13/2001
Famphur	ug/l	<100 U	<100 UJ	<100 UJ	<100 UJ	<100 U	<100 U	<100 UJ
Hexachlorobenzene	ug/l	<10 U	<10 U	<10 U	<10 U	<10 U	<10 U	<10 U
Phorate	ug/l	<50 U	<50 U	<50 U	<50 U	<50 U	<50 U	<50 U
2-Methylnaphthalene	ug/L							
7,12-Dimethylbenz(a)anthracene	ug/l	<20 U	<20 U	<20 U	<20 U	<20 U	<20 U	<20 U
Benzo(a)anthracene	ug/l	<10 U	<10 U	<10 U	<10 U	<10 U	<10 U	
Benzo(a)pyrene	ug/l	<10 U	<10 U	<10 U	<10 U	<10 U	<10 U	<10 U
Benzo(b)fluoranthene	ug/l	<10 U	<10 U	<10 U	<10 U	<10 U	<10 U	
Benzo(g,h,i)perylene	ug/l							
Benzo(k)fluoranthene	ug/l	<10 U	<10 U	<10 U	<10 U	<10 U	<10 U	<10 U
Bis(2-chloroethoxy) Methane	ug/l							
Dibenz(a,h)anthracene	ug/l							
Indeno(1,2,3-c,d)pyrene	ug/l							
Naphthalene	ug/L							
Phenacetin	ug/l	<20 U	<20 U	<20 U	<20 UJ	<20 U	<20 U	<20 UJ
o,o,o-Triethyl Phosphorothioate	ug/l	<50 U	<50 U	<50 U	<50 U	<50 U	<50 U	<50 U
1,1-Dichloroethene	ug/l						400	
1,2,3-Trichloropropane	ug/l						<100 U	
1,2-Dibromoethane (Ethylene Dibromide)	ug/l							
Methyl Isobutyl Ketone (4-methyl-2-penta	ug/l	<10 UR		<38 U	<12 U	<42 U	<100 U	
Methylacrylonitrile	ug/l	<10 UR		<38 U	<12 U	<42 U	<100 U	
Pentachloroethane	ug/l	<50 U	<50 U	<50 U	<50 U	<50 U	<50 U	<50 U
Propane Nitrile (propionitrile)	ug/l	<10 UR		<38 UR	<12 UR	<42 U	<100 U	

Table 8b
EXCEEDANCES OF P&W VCAP RISK-BASED GROUNDWATER LIMITIS BASED ON DERMAL CONTACT
Pratt & Whitney, East Hartford, CT: Step 4 Investigation - Groundwater Data

Loureiro Engineering Associates, Inc.

	Location ID	WT-GW-36S	WT-GW-37D	WT-GW-37S	WT-GW-38D	WT-GW-38S	WT-GW-39D	WT-GW-39D
	Sample ID	1998464	1998481	1998482	1998476	1998477	1998496	1998496
	Sample Date	07/31/2001	08/01/2001	08/01/2001	08/02/2001	08/02/2001	08/02/2001	08/02/2001
	Sample Time	13:45	09:45	10:45	09:45	10:15	13:00	13:00
	Sample Depth	11' - 14'	17.5' - 20.5'	12' - 15'	19' - 22'	12' - 18'	18' - 21'	18' - 21'
	Laboratory	STLC	STLC	STLC	STLC	STLC	STLC	STLC
	Lab. Number	A1H010261003	A1H020176032	A1H020176034	A1H030191006	A1H030191008	A1H030191001	A1H030191001R
Constituent	Units							
Depth of Well	Ft							
Depth to Water	Ft	12	12.5	20.5			12.5	12.5
Water Elevation	Ft							
Date Organics Analyzed	-							
Date Semi-volatile Organics Analyzed	-	08/13/2001	08/13/2001	08/13/2001	08/15/2001	08/15/2001	08/15/2001	08/20/2001
Famphur	ug/l	<100 UJ	<100 U	<100 U	<100 UJ	<100 UJ	<100 UJ	<100 UJ
Hexachlorobenzene	ug/l	<10 U	<10 U	<10 U	<10 U	<10 U	<10 U	<10 UJ
Phorate	ug/l	<50 U	<50 U	<50 U	<50 U	<50 U	<50 U	<50 UJ
2-Methylnaphthalene	ug/L							
7,12-Dimethylbenz(a)anthracene	ug/l	<20 U	<20 U	<20 U	<20 U	<20 U	<20 U	<20 UJ
Benzo(a)anthracene	ug/l	<10 U	<10 U	<10 U	<10 U	<10 U		
Benzo(a)pyrene	ug/l	<10 U	<10 U	<10 U	<10 U	<10 U	1.1 J	1.5 J
Benzo(b)fluoranthene	ug/l	<10 U	<10 U	<10 U	<10 U	<10 U		
Benzo(g,h,i)perylene	ug/l							
Benzo(k)fluoranthene	ug/l	<10 U	<10 U	<10 U	<10 U	<10 U	<10 U	<10 UJ
Bis(2-chloroethoxy) Methane	ug/l							
Dibenz(a,h)anthracene	ug/l							
Indeno(1,2,3-c,d)pyrene	ug/l							
Naphthalene	ug/L							
Phenacetin	ug/l	<20 UJ	<20 U	<20 U	<20 U	<20 U	<20 U	<20 UJ
o,o,o-Triethyl Phosphorothioate	ug/l	<50 U	<50 U	<50 U	<50 U	<50 U	<50 U	<50 UJ
1,1-Dichloroethene	ug/l							
1,2,3-Trichloropropane	ug/l							
1,2-Dibromoethane (Ethylene Dibromide)	ug/l							
Methyl Isobutyl Ketone (4-methyl-2-penta	ug/l							
Methylacrylonitrile	ug/l							
Pentachloroethane	ug/l	<50 U	<50 U	<50 U	<50 U	<50 U	<50 U	<50 UJ
Propane Nitrile (propionitrile)	ug/l							

Table 8b

EXCEEDANCES OF P&W VCAP RISK-BASED GROUNDWATER LIMITIS BASED ON DERMAL CONTACT

Pratt & Whitney, East Hartford, CT: Step 4 Investigation - Groundwater Data

Loureiro Engineering Associates, Inc.

	Location ID	WT-GW-39S	WT-GW-39S	WT-GW-40D	WT-GW-40S	WT-GW-41D	WT-GW-41S	WT-GW-41S
	Sample ID	1998497	1998497	2000986	2000989	2000990	2000991	2000991
	Sample Date	08/02/2001	08/02/2001	08/07/2001	08/07/2001	08/08/2001	08/08/2001	08/08/2001
	Sample Time	13:30	13:30	14:20	15:00	12:20	12:50	12:50
	Sample Depth	13' - 16'	13' - 16'	14' - 18'	10' - 14'	14' - 18'	10' - 14'	10' - 14'
	Laboratory	STLC	STLC	STLC	STLC	STLC	STLC	STLC
	Lab. Number	A1H030191003	A1H030191003R	A1H080236001	A1H080236003	A1H090276012	A1H090289004	A1H090289004R
Constituent	Units							
Depth of Well	Ft							
Depth to Water	Ft							
Water Elevation	Ft							
Date Organics Analyzed	-	08/10/2001		08/14/2001	08/14/2001	08/15/2001	08/15/2001	
Date Semi-volatile Organics Analyzed	-	08/15/2001	08/20/2001	08/17/2001	08/17/2001	08/22/2001	08/22/2001	08/29/2001
Famphur	ug/l	<100 UJ	<100 UJ	<100 UJ	<100 UJ	<100 UJ	<100 UJ	<100 U
Hexachlorobenzene	ug/l	<10 U	<10 UJ	<10 U	<10 U	<10 U	<10 U	<10 U
Phorate	ug/l	<50 U	<50 UJ	<50 U	<50 U	<50 U	<50 U	<50 U
2-Methylnaphthalene	ug/L							
7,12-Dimethylbenz(a)anthracene	ug/l	<20 U	<20 UJ	<20 U	<20 U	<20 U	<20 U	<20 U
Benzo(a)anthracene	ug/l	<10 U		<10 U	<10 U	<10 U	<10 U	<10 U
Benzo(a)pyrene	ug/l	<10 U	3.8 J	<10 U	<10 U	<10 U	<10 U	<10 U
Benzo(b)fluoranthene	ug/l	<10 U	4.7 J	<10 U	<10 U	<10 U	<10 U	<10 U
Benzo(g,h,i)perylene	ug/l							
Benzo(k)fluoranthene	ug/l	<10 U		<10 U	<10 U	<10 U	<10 U	<10 U
Bis(2-chloroethoxy) Methane	ug/l							
Dibenz(a,h)anthracene	ug/l							
Indeno(1,2,3-c,d)pyrene	ug/l							
Naphthalene	ug/L							
Phenacetin	ug/l	<20 U	<20 UJ	<20 U	<20 U	<20 U	<20 U	<20 U
o,o,o-Triethyl Phosphorothioate	ug/l	<50 U	<50 UJ	<50 U	<50 U	<50 U	<50 U	<50 U
1,1-Dichloroethene	ug/l					850	680	
1,2,3-Trichloropropane	ug/l					<170 U	<170 U	
1,2-Dibromoethane (Ethylene Dibromide)	ug/l					<17 U	<17 U	
Methyl Isobutyl Ketone (4-methyl-2-penta	ug/l	<17 U		<8.4 U	<36 U	<170 U	<170 U	
Methylacrylonitrile	ug/l	<17 U		<8.4 U	<36 U	<170 U	<170 U	
Pentachloroethane	ug/l	<50 U	<50 UJ	<50 U	<50 U	<50 U	<50 U	<50 U
Propane Nitrile (propionitrile)	ug/l	<17 UR		<8.4 UR	<36 UR	<170 UR	<170 U	

Table 8b

EXCEEDANCES OF P&W VCAP RISK-BASED GROUNDWATER LIMITIS BASED ON DERMAL CONTACT

Pratt & Whitney, East Hartford, CT: Step 4 Investigation - Groundwater Data

Loureiro Engineering Associates, Inc.

	Location ID	WT-GW-43D	WT-GW-43S	WT-GW-43S	WT-GW-44D	WT-GW-44D	WT-GW-44S	WT-GW-45D
	Sample ID	2010156	2010157	2010157	2010173	2010174	2010158	2010168
	Sample Date	12/12/2001	12/12/2001	12/12/2001	12/21/2001	12/21/2001	12/13/2001	12/14/2001
	Sample Time	13:00	14:00	14:00	11:00	11:00	09:50	10:50
	Sample Depth	24' - 28'	16' - 19'	16' - 19'	20' - 24'	20' - 24'	16' - 20'	19' - 22'
	Laboratory	CAN	CAN	CAN	CAN	CAN	CAN	CAN
	Lab. Number	A1L130227015	A1L130227017	A1L130227017A	A1L220124002	A1L220124004	A1L150107002	A1L150184003
Constituent	Units							
Depth of Well	Ft							
Depth to Water	Ft				14.85	14.85		
Water Elevation	Ft							
Date Organics Analyzed	-		12/19/2001		12/28/2001	12/28/2001		
Date Semi-volatile Organics Analyzed	-	12/20/2001	12/21/2001		01/02/2002	01/02/2002	12/20/2001	12/20/2001
Famphur	ug/l	<100	<200	<100	<100	<100	<100	<100
Hexachlorobenzene	ug/l	<10	<20	<10	<10	<10	<10	<10
Phorate	ug/l	<50	<100		<50	<50	<50	<50
2-Methylnaphthalene	ug/L		20	20				
7,12-Dimethylbenz(a)anthracene	ug/l	<20	<40	<20	<20	<20	<20	<20
Benzo(a)anthracene	ug/l	<10			<10	<10	<10	<10
Benzo(a)pyrene	ug/l	<10	2.1 J	1.9 J	<10	<10	<10	<10
Benzo(b)fluoranthene	ug/l	<10	2.5 J	3.0 J	<10	<10	<10	<10
Benzo(g,h,i)perylene	ug/l		<20					
Benzo(k)fluoranthene	ug/l	<10	<20	<10	<10	<10	<10	<10
Bis(2-chloroethoxy) Methane	ug/l		<20					
Dibenz(a,h)anthracene	ug/l		<20					
Indeno(1,2,3-c,d)pyrene	ug/l		<20					
Naphthalene	ug/L		110	110 E				
Phenacetin	ug/l	<20	<40	<20	<20	<20	<20	<20
o,o,o-Triethyl Phosphorothioate	ug/l	<50	<100	<50	<50	<50	<50	<50
1,1-Dichloroethene	ug/l							
1,2,3-Trichloropropane	ug/l							
1,2-Dibromoethane (Ethylene Dibromide)	ug/l							
Methyl Isobutyl Ketone (4-methyl-2-penta	ug/l		<34		<25	<25		
Methylacrylonitrile	ug/l		<34		<25	<25		
Pentachloroethane	ug/l	<50	<100	<50	<50	<50	<50	<50
Propane Nitrile (propionitrile)	ug/l		<34		<25	<25		

Table 8b
EXCEEDANCES OF P&W VCAP RISK-BASED GROUNDWATER LIMITIS BASED ON DERMAL CONTACT
Pratt & Whitney, East Hartford, CT: Step 4 Investigation - Groundwater Data

Loureiro Engineering Associates, Inc.

	Location ID	WT-GW-45S	WT-MW-29D	WT-MW-29S	WT-MW-30	WT-MW-31	WT-MW-32D	WT-MW-32S
	Sample ID	2010167	1998513	1998512	2001002	1998516	2000993	2000992
	Sample Date	12/14/2001	08/14/2001	08/14/2001	08/14/2001	08/14/2001	08/15/2001	08/15/2001
	Sample Time	09:30	11:05	11:30	11:15	11:35	11:40	11:30
	Sample Depth	16' - 19'	13.50' - 16.5	1.50' - 10.50	4.50' - 13.50	5.00' - 14.00	17.50' - 20.5	7.00' - 16.00
	Laboratory	CAN	STLC	STLC	STLC	STLC	STLC	STLC
	Lab. Number	A1L150184001	A1H150222004	A1H150222002	A1H150229003	A1H150229001	A1H160236013	A1H160236011
Constituent	Units							
Depth of Well	Ft		16.16	10.05	11.77	13.90	19.94	15.52
Depth to Water	Ft		4.60	4.43	9.68	9.52	11.32	11.00
Water Elevation	Ft		26.82	26.79	25.04	24.39	21.71	22.03
Date Organics Analyzed	-	12/21/2001					08/21/2001	08/21/2001
Date Semi-volatile Organics Analyzed	-	12/20/2001	08/28/2001	08/28/2001	08/28/2001	08/28/2001	08/27/2001	08/27/2001
Famphur	ug/l	<100	<100 UJ	<100 UJ	<100 UJ	<100 UJ	<100 U	<100 U
Hexachlorobenzene	ug/l	<10	<10 U	<10 U	<10 U	<10 U	<10 U	<10 U
Phorate	ug/l	<50	<50 U	<50 U	<50 U	<50 U	<50 U	<50 U
2-Methylnaphthalene	ug/L							
7,12-Dimethylbenz(a)anthracene	ug/l	<20	<20 U	<20 U	<20 U	<20 U	<20 U	<20 U
Benzo(a)anthracene	ug/l	<10	<10 U	<10 U	<10 U	<10 U	<10 U	<10 U
Benzo(a)pyrene	ug/l	<10	<10 U	<10 U	<10 U	<10 U	<10 U	<10 U
Benzo(b)fluoranthene	ug/l	<10	<10 U	<10 U	<10 U	<10 U	<10 U	<10 U
Benzo(g,h,i)perylene	ug/l							
Benzo(k)fluoranthene	ug/l	<10	<10 U	<10 U	<10 U	<10 U	<10 U	<10 U
Bis(2-chloroethoxy) Methane	ug/l							
Dibenz(a,h)anthracene	ug/l							
Indeno(1,2,3-c,d)pyrene	ug/l							
Naphthalene	ug/L							
Phenacetin	ug/l	<20	<20 U	<20 U	<20 U	<20 U	<20 U	<20 U
o,o,o-Triethyl Phosphorothioate	ug/l	<50	<50 U	<50 U	<50 U	<50 U	<50 U	<50 U
1,1-Dichloroethene	ug/l							
1,2,3-Trichloropropane	ug/l						<100 U	<100 U
1,2-Dibromoethane (Ethylene Dibromide)	ug/l							
Methyl Isobutyl Ketone (4-methyl-2-penta	ug/l	<10					<100 U	<100 U
Methylacrylonitrile	ug/l	<10					<100 U	<100 U
Pentachloroethane	ug/l	<50	<50 U	<50 U	<50 U	<50 U	<50 U	<50 U
Propane Nitrile (propionitrile)	ug/l	<10					<100 U	<100 U

Table 8b
EXCEEDANCES OF P&W VCAP RISK-BASED GROUNDWATER LIMITIS BASED ON DERMAL CONTACT
Pratt & Whitney, East Hartford, CT: Step 4 Investigation - Groundwater Data

Loureiro Engineering Associates, Inc.

	Location ID	WT-MW-33D	WT-MW-33S	WT-MW-34D	WT-MW-34S	WT-MW-35D	WT-MW-35S	WT-MW-36D
	Sample ID	1998525	1998524	1998521	1998522	2000995	2000994	2000997
	Sample Date	08/15/2001	08/15/2001	08/15/2001	08/15/2001	08/15/2001	08/15/2001	08/15/2001
	Sample Time	10:55	10:41	09:35	09:30	14:05	14:00	01:53
	Sample Depth	15.50' - 18.5	7.00' - 16.00	15.50' - 18.5	7.00' - 16.00	22.50' - 25.5	5.00' - 14.00	32.3' - 35.3'
	Laboratory	STLC	STLC	STLC	STLC	STLC	STLC	STLC
	Lab. Number	A1H160236008	A1H160236006	A1H160230003	A1H160230001	A1H160230008	A1H160230006	A1H160236002
Constituent	Units							
Depth of Well	Ft	17.92	14.95	18.15	15.30	25.07	12.78	34.52
Depth to Water	Ft	11.39	10.30	10.85	10.65	8.92	8.81	12.26
Water Elevation	Ft	20.01	21.04	22.73	22.93	26.64	26.87	23.65
Date Organics Analyzed	-			08/21/2001	08/21/2001			
Date Semi-volatile Organics Analyzed	-	08/27/2001	08/27/2001	08/27/2001	08/27/2001	08/27/2001	08/27/2001	08/27/2001
Famphur	ug/l	<100 U	<100 U	<100 UJ	<100 UJ	<100 UJ	<100 UJ	<100 U
Hexachlorobenzene	ug/l	<10 U	<10 U	<10 U	<10 U	<10 U	<10 U	<10 U
Phorate	ug/l	<50 U	<50 U	<50 U	<50 U	<50 U	<50 U	<50 U
2-Methylnaphthalene	ug/L							
7,12-Dimethylbenz(a)anthracene	ug/l	<20 U	<20 U	<20 U	<20 U	<20 U	<20 U	<20 U
Benzo(a)anthracene	ug/l	<10 U	<10 U	<10 U	<10 U	<10 U	<10 U	<10 U
Benzo(a)pyrene	ug/l	<10 U	<10 U	<10 U	<10 U	<10 U	<10 U	<10 U
Benzo(b)fluoranthene	ug/l	<10 U	<10 U	<10 U	<10 U	<10 U	<10 U	<10 U
Benzo(g,h,i)perylene	ug/l							
Benzo(k)fluoranthene	ug/l	<10 U	<10 U	<10 U	<10 U	<10 U	<10 U	<10 U
Bis(2-chloroethoxy) Methane	ug/l							
Dibenz(a,h)anthracene	ug/l							
Indeno(1,2,3-c,d)pyrene	ug/l							
Naphthalene	ug/L							
Phenacetin	ug/l	<20 U	<20 U	<20 U	<20 U	<20 U	<20 U	<20 U
o,o,o-Triethyl Phosphorothioate	ug/l	<50 U	<50 U	<50 U	<50 U	<50 U	<50 U	<50 U
1,1-Dichloroethene	ug/l			700				
1,2,3-Trichloropropane	ug/l			<200 U	<100 U			
1,2-Dibromoethane (Ethylene Dibromide)	ug/l			<20 U				
Methyl Isobutyl Ketone (4-methyl-2-penta	ug/l			<200 U	<100 U			
Methylacrylonitrile	ug/l			<200 U	<100 U			
Pentachloroethane	ug/l	<50 U	<50 U	<50 U	<50 U	<50 U	<50 U	<50 U
Propane Nitrile (propionitrile)	ug/l			<200 UR	<100 UR			

Table 8b

EXCEEDANCES OF P&W VCAP RISK-BASED GROUNDWATER LIMITIS BASED ON DERMAL CONTACT

Pratt & Whitney, East Hartford, CT: Step 4 Investigation - Groundwater Data

Loureiro Engineering Associates, Inc.

	Location ID	WT-MW-36S	WT-MW-37	WT-MW-37	WT-MW-37	WT-MW-38D	WT-MW-38S	WT-MW-39
	Sample ID	2000996	1998517	1998518	1998518	1998515	1998514	1998519
	Sample Date	08/15/2001	08/14/2001	08/14/2001	08/14/2001	08/14/2001	08/14/2001	08/14/2001
	Sample Time	02:03	13:00	13:00	13:00	13:30	13:35	14:21
	Sample Depth	5.0' - 14.0'	4.00' - 14.00	4.00' - 14.00	4.00' - 14.00	17.50' - 20.5	8.00' - 17.00	9.00' - 18.00
	Laboratory	STLC	STLC	STLC	STLC	STLC	STLC	STLC
	Lab. Number	A1H160236001	A1H150222007	A1H150222009	A1H150222009R	A1H150229008	A1H150229006	A1H150229011
Constituent	Units							
Depth of Well	Ft	14.39	13.95	13.95	13.95	20.38	16.52	17.56
Depth to Water	Ft	12.26	7.61	7.61	7.61	12.03	11.61	13.25
Water Elevation	Ft	23.80	26.28	26.28	26.28	20.65	20.97	20.94
Date Organics Analyzed	-							
Date Semi-volatile Organics Analyzed	-	08/27/2001	08/28/2001	08/28/2001	09/04/2001	08/29/2001	08/28/2001	08/29/2001
Famphur	ug/l	<100 U	<100 UJ	<100 UR	<100 UR	<100 UJ	<100 UJ	<100 UJ
Hexachlorobenzene	ug/l	<10 U	<10 U	<10 UR	<10 UR	<10 U	<10 U	<10 U
Phorate	ug/l	<50 U	<50 U	<50 UR	<50 UR	<50 U	<50 U	<50 U
2-Methylnaphthalene	ug/L							
7,12-Dimethylbenz(a)anthracene	ug/l	<20 U	<20 U	<20 UR	<20 UR	<20 U	<20 U	<20 U
Benzo(a)anthracene	ug/l	<10 U	<10 U	<10 UR	<10 UR	4.2 J	<10 U	<10 U
Benzo(a)pyrene	ug/l	<10 U	<10 U	<10 UR	<10 UR	3.7 J	<10 U	<10 U
Benzo(b)fluoranthene	ug/l	<10 U	<10 U	<10 UR	<10 UR	4.8 J	<10 U	<10 U
Benzo(g,h,i)perylene	ug/l							
Benzo(k)fluoranthene	ug/l	<10 U	<10 U	<10 UR	<10 UR		<10 U	<10 U
Bis(2-chloroethoxy) Methane	ug/l							
Dibenz(a,h)anthracene	ug/l							
Indeno(1,2,3-c,d)pyrene	ug/l							
Naphthalene	ug/L							
Phenacetin	ug/l	<20 U	<20 U	<20 UR	<20 UR	<20 U	<20 U	<20 U
o,o,o-Triethyl Phosphorothioate	ug/l	<50 U	<50 U	<50 UR	<50 UR	<50 U	<50 U	<50 U
1,1-Dichloroethene	ug/l							
1,2,3-Trichloropropane	ug/l							
1,2-Dibromoethane (Ethylene Dibromide)	ug/l							
Methyl Isobutyl Ketone (4-methyl-2-penta	ug/l							
Methylacrylonitrile	ug/l							
Pentachloroethane	ug/l	<50 U	<50 U	<50 UR	<50 UR	<50 U	<50 U	<50 U
Propane Nitrile (propionitrile)	ug/l							

Table 8b
EXCEEDANCES OF P&W VCAP RISK-BASED GROUNDWATER LIMITIS BASED ON DERMAL CONTACT
Pratt & Whitney, East Hartford, CT: Step 4 Investigation - Groundwater Data

Loureiro Engineering Associates, Inc.

	Location ID	WT-MW-39						
	Sample ID	2010169						
	Sample Date	12/14/2001						
	Sample Time	10:00						
	Sample Depth	9.00' - 18.00						
	Laboratory	CAN						
	Lab. Number	A1L150184005						
Constituent	Units							
Depth of Well	Ft	17.55						
Depth to Water	Ft	13.47						
Water Elevation	Ft	20.72						
Date Organics Analyzed	-							
Date Semi-volatile Organics Analyzed	-	12/20/2001						
Famphur	ug/l	<100						
Hexachlorobenzene	ug/l	<10						
Phorate	ug/l	<50						
2-Methylnaphthalene	ug/L							
7,12-Dimethylbenz(a)anthracene	ug/l	<20						
Benzo(a)anthracene	ug/l	<10						
Benzo(a)pyrene	ug/l	<10						
Benzo(b)fluoranthene	ug/l	<10						
Benzo(g,h,i)perylene	ug/l							
Benzo(k)fluoranthene	ug/l	<10						
Bis(2-chloroethoxy) Methane	ug/l							
Dibenz(a,h)anthracene	ug/l							
Indeno(1,2,3-c,d)pyrene	ug/l							
Naphthalene	ug/L							
Phenacetin	ug/l	<20						
o,o,o-Triethyl Phosphorothioate	ug/l	<50						
1,1-Dichloroethene	ug/l							
1,2,3-Trichloropropane	ug/l							
1,2-Dibromoethane (Ethylene Dibromide)	ug/l							
Methyl Isobutyl Ketone (4-methyl-2-penta	ug/l							
Methylacrylonitrile	ug/l							
Pentachloroethane	ug/l	<50						
Propane Nitrile (propionitrile)	ug/l							

Table 8c
EXCEEDANCES OF RSR VOLATILIZATION CRITERIA - GROUNDWATER, RESIDENTIAL
Pratt & Whitney, East Hartford, CT: Step 4 Investigation - Groundwater Data

Loureiro Engineering Associates, Inc.

	Location ID	ET-MW-18D	ET-MW-18D	ET-MW-20D	WT-GW-31D	WT-GW-31S	WT-GW-32S	WT-GW-32S
	Sample ID	2003527	2003531	2003529	2000982	2000983	1998475	2000942
	Sample Date	08/16/2001	08/16/2001	08/16/2001	08/03/2001	08/03/2001	08/01/2001	08/07/2001
	Sample Time	11:50	11:40	12:20	13:00	13:40	09:35	13:35
	Sample Depth	32.50' - 35.5	32.50' - 35.5	33.00' - 36.0	14' - 18'	10' - 14'	11' - 14'	10' - 14'
	Laboratory	STLC	STLC	STLC	STLC	STLC	STLC	STLC
	Lab. Number	A1H170215009	A1H170215019	A1H170228004	A1H080137007	A1H080137009	A1H020176005	A1H080236005
Constituent	Units							
Depth of Well	Ft	35.3	35.3	35.13				
Depth to Water	Ft	10.6	10.6	10.14			12.5	
Water Elevation	Ft	30.32	30.32	30.31				
Date Organics Analyzed	-	08/23/2001	08/23/2001	08/23/2001	08/14/2001	08/14/2001	08/08/2001	08/14/2001
1,1,1,2-Tetrachloroethane	ug/l							
1,1-Dichloroethene	ug/l	<4.0 U	<5.0 U	5.8	52	21	36 J	31
1,2-Dibromoethane (Ethylene Dibromide)	ug/l							
1,2-Dichloroethane	ug/l							
1,2-Dichloropropane	ug/l	<20 U	<25 U		<25			
Carbon Tetrachloride	ug/l	<20 UJ	<25 U		<25			
Total 1,3-dichloropropene (cis and trans	ug/l							
Trichloroethylene (TCE)	ug/l							
Trichloroethylene (TCE) (screening)	ug/L							
Vinyl Chloride	ug/l	<8.0 U	<10 U		<10		<4.0 UR	20

Table 8c
EXCEEDANCES OF RSR VOLATILIZATION CRITERIA - GROUNDWATER, RESIDENTIAL
Pratt & Whitney, East Hartford, CT: Step 4 Investigation - Groundwater Data

Loureiro Engineering Associates, Inc.

	Location ID	WT-GW-33D	WT-GW-33S	WT-GW-34S	WT-GW-35D	WT-GW-35S	WT-GW-36S	WT-GW-39S
	Sample ID	2000984	2000985	1998459	2000987	2000988	1998464	1998497
	Sample Date	08/03/2001	08/03/2001	07/31/2001	08/06/2001	08/06/2001	07/31/2001	08/02/2001
	Sample Time	14:05	14:45	08:45	14:30	14:10	13:45	13:30
	Sample Depth	14' - 18'	10' - 13'	11' - 14'	15.00' - 18.0	12.6' - 15.6'	11' - 14'	13' - 16'
	Laboratory	STLC	STLC	STLC	STLC	STLC	STLC	STLC
	Lab. Number	A1H060128015	A1H060128017	A1H010261006	A1H080223005	A1H080223002	A1H010261003	A1H030191003
Constituent	Units							
Depth of Well	Ft							
Depth to Water	Ft			12.25	14.00	11.6	12	
Water Elevation	Ft							
Date Organics Analyzed	-	08/11/2001	08/11/2001	08/06/2001	08/14/2001	08/14/2001	08/06/2001	08/10/2001
1,1,1,2-Tetrachloroethane	ug/l					<20 U		
1,1-Dichloroethene	ug/l	30	81	64	140	400	20	46
1,2-Dibromoethane (Ethylene Dibromide)	ug/l				<4.2 U	<10 U		
1,2-Dichloroethane	ug/l							
1,2-Dichloropropane	ug/l		<38 U		<42 U	<100 U		<17 U
Carbon Tetrachloride	ug/l		<38 U		<42 U	<100 U		<17 U
Total 1,3-dichloropropene (cis and trans	ug/l					<10 U		
Trichloroethylene (TCE)	ug/l				270	610		
Trichloroethylene (TCE) (screening)	ug/L							
Vinyl Chloride	ug/l	3.2	<15 U	<5.0 U	<17 U	<40 U		<6.7 U

Table 8c
EXCEEDANCES OF RSR VOLATILIZATION CRITERIA - GROUNDWATER, RESIDENTIAL
Pratt & Whitney, East Hartford, CT: Step 4 Investigation - Groundwater Data

Loureiro Engineering Associates, Inc.

	Location ID	WT-GW-39S	WT-GW-40D	WT-GW-40S	WT-GW-40S	WT-GW-41D	WT-GW-41D	WT-GW-41S
	Sample ID	2000944	2000986	2000989	2000989	2000990	2000990	2000991
	Sample Date	08/07/2001	08/07/2001	08/07/2001	08/07/2001	08/08/2001	08/08/2001	08/08/2001
	Sample Time	15:30	14:20	15:00	15:00	12:20	12:20	12:50
	Sample Depth	12' - 16'	14' - 18'	10' - 14'	10' - 14'	14' - 18'	14' - 18'	10' - 14'
	Laboratory	STLC	STLC	LEA	STLC	LEA	STLC	LEA
	Lab. Number	A1H080236007	A1H080236001	35052-0591	A1H080236003	35052-0613	A1H090276012	35052-0614
Constituent	Units							
Depth of Well	Ft							
Depth to Water	Ft							
Water Elevation	Ft							
Date Organics Analyzed	-	08/14/2001	08/14/2001	08/08/2001	08/14/2001	08/09/2001	08/15/2001	08/09/2001
1,1,1,2-Tetrachloroethane	ug/l						<33 U	
1,1-Dichloroethene	ug/l	2.3	56		130		850	
1,2-Dibromoethane (Ethylene Dibromide)	ug/l						<17 U	
1,2-Dichloroethane	ug/l						<33 U	
1,2-Dichloropropane	ug/l				<36 U		<170 U	
Carbon Tetrachloride	ug/l				<36 U		<170 UJ	
Total 1,3-dichloropropene (cis and trans	ug/l						<17 U	
Trichloroethylene (TCE)	ug/l				260		1300	
Trichloroethylene (TCE) (screening)	ug/L			241 E		452 E		460 E
Vinyl Chloride	ug/l		<3.3 U		<14 U		<67 U	

Table 8c
EXCEEDANCES OF RSR VOLATILIZATION CRITERIA - GROUNDWATER, RESIDENTIAL
Pratt & Whitney, East Hartford, CT: Step 4 Investigation - Groundwater Data

Loureiro Engineering Associates, Inc.

	Location ID	WT-GW-41S	WT-GW-42	WT-GW-42	WT-GW-42	WT-GW-42	WT-GW-42	WT-GW-42
	Sample ID	2000991	2000923	2000924	2000925	2000927	2000928	2000929
	Sample Date	08/08/2001	08/07/2001	08/07/2001	08/07/2001	08/07/2001	08/07/2001	08/07/2001
	Sample Time	12:50	09:25	09:40	09:50	10:14	10:19	10:35
	Sample Depth	10' - 14'	11' - 12'	12' - 13'	13' - 14'	15' - 16'	16' - 17'	17' - 18'
	Laboratory	STLC	LEA	LEA	LEA	LEA	LEA	LEA
	Lab. Number	A1H090289004	35052-0592	35052-0593	35052-0594	35052-0596	35052-0597	35052-0598
Constituent	Units							
Depth of Well	Ft							
Depth to Water	Ft							
Water Elevation	Ft							
Date Organics Analyzed	-	08/15/2001	08/08/2001	08/08/2001	08/08/2001	08/08/2001	08/08/2001	08/08/2001
1,1,1,2-Tetrachloroethane	ug/l	<33 U						
1,1-Dichloroethene	ug/l	680						
1,2-Dibromoethane (Ethylene Dibromide)	ug/l	<17 U						
1,2-Dichloroethane	ug/l	<33 U						
1,2-Dichloropropane	ug/l	<170 U						
Carbon Tetrachloride	ug/l	<170 UJ						
Total 1,3-dichloropropene (cis and trans	ug/l	<17 U						
Trichloroethylene (TCE)	ug/l	1100						
Trichloroethylene (TCE) (screening)	ug/L		343 E	444 E	332 E	515 E	532 E	317 E
Vinyl Chloride	ug/l	<67 U						

Table 8c
EXCEEDANCES OF RSR VOLATILIZATION CRITERIA - GROUNDWATER, RESIDENTIAL
Pratt & Whitney, East Hartford, CT: Step 4 Investigation - Groundwater Data

Loureiro Engineering Associates, Inc.

	Location ID	WT-GW-43S	WT-GW-44D	WT-GW-44D	WT-GW-44S	WT-GW-45D	WT-GW-45S	WT-MW-32D
	Sample ID	2010157	2010173	2010174	2010158	2010168	2010167	2000993
	Sample Date	12/12/2001	12/21/2001	12/21/2001	12/13/2001	12/14/2001	12/14/2001	08/15/2001
	Sample Time	14:00	11:00	11:00	09:50	10:50	09:30	11:40
	Sample Depth	16' - 19'	20' - 24'	20' - 24'	16' - 20'	19' - 22'	16' - 19'	17.50' - 20.5
	Laboratory	CAN	CAN	CAN	CAN	CAN	CAN	STLC
	Lab. Number	A1L130227017	A1L220124002	A1L220124004	A1L150107002	A1L150184003	A1L150184001	A1H160236013
Constituent	Units							
Depth of Well	Ft							19.94
Depth to Water	Ft		14.85	14.85				11.32
Water Elevation	Ft							21.71
Date Organics Analyzed	-	12/19/2001	12/28/2001	12/28/2001	12/21/2001	12/21/2001	12/21/2001	08/21/2001
1,1,1,2-Tetrachloroethane	ug/l							<20 U
1,1-Dichloroethene	ug/l	36	73	71	36	22	35	51
1,2-Dibromoethane (Ethylene Dibromide)	ug/l							<10 U
1,2-Dichloroethane	ug/l							
1,2-Dichloropropane	ug/l	<34	<25	<25				<100 U
Carbon Tetrachloride	ug/l	<34	<25	<25				<100 U
Total 1,3-dichloropropene (cis and trans	ug/l							<10 U
Trichloroethylene (TCE)	ug/l							530
Trichloroethylene (TCE) (screening)	ug/L							
Vinyl Chloride	ug/l	<14	<10	<10			<4.0	<40 U

Table 8c
EXCEEDANCES OF RSR VOLATILIZATION CRITERIA - GROUNDWATER, RESIDENTIAL
Pratt & Whitney, East Hartford, CT: Step 4 Investigation - Groundwater Data

Loureiro Engineering Associates, Inc.

	Location ID	WT-MW-32S	WT-MW-34D	WT-MW-34S				
	Sample ID	2000992	1998521	1998522				
	Sample Date	08/15/2001	08/15/2001	08/15/2001				
	Sample Time	11:30	09:35	09:30				
	Sample Depth	7.00' - 16.00	15.50' - 18.5	7.00' - 16.00				
	Laboratory	STLC	STLC	STLC				
	Lab. Number	A1H160236011	A1H160230003	A1H160230001				
Constituent	Units							
Depth of Well	Ft	15.52	18.15	15.30				
Depth to Water	Ft	11.00	10.85	10.65				
Water Elevation	Ft	22.03	22.73	22.93				
Date Organics Analyzed	-	08/21/2001	08/21/2001	08/21/2001				
1,1,1,2-Tetrachloroethane	ug/l	<20 U	<40 U	<20 U				
1,1-Dichloroethene	ug/l	64	700	210				
1,2-Dibromoethane (Ethylene Dibromide)	ug/l	<10 U	<20 U	<10 U				
1,2-Dichloroethane	ug/l		<40 U					
1,2-Dichloropropane	ug/l	<100 U	<200 U	<100 U				
Carbon Tetrachloride	ug/l	<100 U	<200 UJ	<100 UJ				
Total 1,3-dichloropropene (cis and trans	ug/l	<10 U	<20 U	<10 U				
Trichloroethylene (TCE)	ug/l	620	1200	480				
Trichloroethylene (TCE) (screening)	ug/L							
Vinyl Chloride	ug/l	<40 U	<80 U	<40 U				

Table 9
SUMMARY OF SAMPLING AND ANALYTICAL INFORMATION
Pratt & Whitney, East Hartford, CT - Step 4 Investigation - QA/QC Data

Loureiro Engineering Associates, Inc.

Sample Information					Analysis Information							
Location ID	Sample ID	Sample Date	Sampled Interval (ft)	Sample Class	LEA Volatiles	Volatile Organics	Semivolatile Organics	Herbicides	Pesticides	PCBs	Metals	Miscellaneous Analyses
EQUIPMENT	1998453	07/30/2001		BKE	x							
EQUIPMENT	1998401	07/31/2001		BKE	x							
EQUIPMENT	1998460	07/31/2001		BKE		x	x			x	x	x
EQUIPMENT	1998412	08/01/2001		BKE	x							
EQUIPMENT	1998435	08/02/2001		BKE	x	x						
EQUIPMENT	1998480	08/03/2001		BKE	x	X	X			x	x	x
EQUIPMENT	1998510	08/13/2001		BKE	x							
EQUIPMENT	1998520	08/14/2001		BKE		x	x			x	x	x
EQUIPMENT	2003259	08/14/2001		BKE	x							
EQUIPMENT	2003526	08/16/2001		BKE		x	x			x	x	x
EQUIPMENT	2010159	12/13/2001		BKE	x	X	x			x	x	x
EQUIPMENT	2010172	12/21/2001		BKE		X	x			x	x	x
TRIP BLANK	1998308	07/30/2001		BKT	x	x						
TRIP BLANK	1998452	07/30/2001		BKT	x							
TRIP BLANK	1998457	07/30/2001		BKT		x						
TRIP BLANK	1998320	07/31/2001		BKT	x							
TRIP BLANK	1998400	07/31/2001		BKT	x							
TRIP BLANK	1998462	07/31/2001		BKT		x						
TRIP BLANK	1998467	07/31/2001		BKT		x						
TRIP BLANK	1998468	07/31/2001		BKT		x						
TRIP BLANK	1998331	08/01/2001		BKT	x	x						
TRIP BLANK	1998411	08/01/2001		BKT	x							
TRIP BLANK	1998473	08/01/2001		BKT		x						
TRIP BLANK	1998346	08/02/2001		BKT		x						
TRIP BLANK	1998347	08/02/2001		BKT		x						
TRIP BLANK	1998348	08/02/2001		BKT		x						
TRIP BLANK	1998434	08/02/2001		BKT	x							
TRIP BLANK	1998447	08/03/2001		BKT	x							
TRIP BLANK	1998498	08/03/2001		BKT	x	x						
TRIP BLANK	2000981	08/03/2001		BKT		x						
TRIP BLANK	2000919	08/06/2001		BKT	x	x						
TRIP BLANK	2000920	08/06/2001		BKT		x						
TRIP BLANK	2000921	08/06/2001		BKT		x						

Legend: x - mass, t - TCLP, s - SPLP, e - EPTOX, z - ZHE, d - Thermal Desorption, r - Charcoal Tube, a - SEM/AVS, f - filtered, nr - not received; Capitalized - at least one analyte in class detected

Printed on 03/04/2002

Table 9
SUMMARY OF SAMPLING AND ANALYTICAL INFORMATION
Pratt & Whitney, East Hartford, CT - Step 4 Investigation - QA/QC Data

Loureiro Engineering Associates, Inc.

Sample Information					Analysis Information							
Location ID	Sample ID	Sample Date	Sampled Interval (ft)	Sample Class	LEAVolatiles	Volatile Organics	Semivolatile Organics	Herbicides	Pesticides	PCBs	Metals	Miscellaneous Analyses
TRIP BLANK	2000922	08/07/2001		BKT	x	x						
TRIP BLANK	2000941	08/07/2001		BKT		x						
TRIP BLANK	2000946	08/08/2001		BKT	x	x						
TRIP BLANK	2000956	08/08/2001		BKT		x						
TRIP BLANK	2000958	08/08/2001		BKT		x						
TRIP BLANK	2000961	08/09/2001		BKT		x						
TRIP BLANK	1998509	08/13/2001		BKT	x							
TRIP BLANK	1998511	08/13/2001		BKT		x						
TRIP BLANK	2003258	08/14/2001		BKT	x							
TRIP BLANK	2003261	08/14/2001		BKT		x						
TRIP BLANK	2003262	08/14/2001		BKT		x						
TRIP BLANK	2003263	08/14/2001		BKT		x						
TRIP BLANK	2003264	08/14/2001		BKT		x						
TRIP BLANK	2003265	08/14/2001		BKT		x						
TRIP BLANK	2003266	08/15/2001		BKT		x						
TRIP BLANK	2003267	08/15/2001		BKT		x						
TRIP BLANK	2003268	08/15/2001		BKT		x						
TRIP BLANK	2003269	08/15/2001		BKT		x						
TRIP BLANK	1998526	08/16/2001		BKT		x						
TRIP BLANK	2003270	08/16/2001		BKT		x						
TRIP BLANK	2003271	08/16/2001		BKT		x						
TRIP BLANK	2003536	08/16/2001		BKT		x						
TRIP BLANK	2003537	08/16/2001		BKT		x						
TRIP BLANK	2001487	12/12/2001		BKT		x						
TRIP BLANK	2001499	12/12/2001		BKT		x						
TRIP BLANK	2010113	12/12/2001		BKT	x	x						
TRIP BLANK	2010112	12/13/2001		BKT		x						
TRIP BLANK	2010127	12/13/2001		BKT	x	x						
TRIP BLANK	2010128	12/13/2001		BKT		x						
TRIP BLANK	2010170	12/14/2001		BKT		x						
TRIP BLANK	2001549	12/21/2001		BKT		x						
TRIP BLANK	2010171	12/21/2001		BKT		x						

Legend: x - mass, t - TCLP, s - SPLP, e - EPTOX, z - ZHE, d - Thermal Desorption, r - Charcoal Tube, a - SEM/AVS, f - filtered, nr - not received; Capitalized - at least one analyte in class detected

Printed: 2/04/2002

Table 10
SUMMARY OF ANALYTICAL RESULTS (DETECTS)
Pratt & Whitney, East Hartford, CT - Step 4 Investigation - QA/QC Data

Loureiro Engineering Associates, Inc.

	Location ID	EQUIPMENT	EQUIPMENT	EQUIPMENT				
	Sample ID	1998480	2010159	2010172				
	Sample Date	08/03/2001	12/13/2001	12/21/2001				
	Sample Time	14:15	10:00	10:20				
	Laboratory	STLC	CAN	CAN				
	Lab. Number	A1H060128013	A1L150107004	A1L220124007				
Constituent	Units							
Date Organics Analyzed	-	08/11/2001	12/21/2001	12/28/2001				
Date Semi-volatile Organics Analyzed	-	08/15/2001						
bis(2-ethylhexyl) Phthalate	ug/l	5.8 J						
Chloroform	ug/l	4.4	38	29				

Table 11
SUMMARY OF ANALYTICAL RESULTS
Pratt & Whitney, East Hartford, CT: Performance Evaluation Samples

Loureiro Engineering Associates, Inc.

	Location ID	performance	performance	performance	performance	performance	performance	performance
	Sample ID	2001023	2001023	2001027	2001027	2000957	2001001	2001001
	Sample Date	08/07/2001	08/07/2001	08/07/2001	08/07/2001	08/08/2001	08/08/2001	08/08/2001
	Sample Time	15:00	15:00	15:00	15:00	15:00	15:00	15:00
	Laboratory	STLC	STLC	STLC	STLC	STLC	STLC	STLC
	Lab. Number	A1H080223008	A1H080223008R	A1H080223009	A1H080223010	A1H090289007	A1H090289002	A1H090289003
Constituent	Units							
Date PCBs Analyzed	-	08/31/2001	09/13/2001			08/31/2001		
Date Metals Analyzed	-			08/17/2001	08/17/2001		08/17/2001	08/17/2001
Date Organics Analyzed	-			08/14/2001			08/15/2001	
Date Physical Analyzed	-			08/17/2001			08/17/2001	
Date Semi-volatile Organics Analyzed	-			08/17/2001			08/22/2001	
Dinoseb	ug/l			<20 U			<20 U	
Arsenic	mg/L			<0.0040 U			0.192	
Arsenic (Unfiltered)	mg/L				<0.0040 U			0.179
Barium	mg/L			<0.2 U			<0.2 U	
Barium (Unfiltered)	mg/L				<0.2 U			<0.2 U
Beryllium	mg/L			<0.0050 U			<0.0050 U	
Beryllium (Unfiltered)	mg/L				<0.0050 U			<0.0050 U
Cadmium	mg/L			<0.0050 U			<0.0050 U	
Cadmium (Unfiltered)	mg/L				<0.0050 U			<0.0050 U
Chromium, Total	mg/L			0.376			<0.0050 U	
Chromium, Total (Unfiltered)	mg/L				0.377			<0.0050 U
Copper	mg/L			<0.0250 U			<0.0250 U	
Copper (Unfiltered)	mg/L				<0.0250 U			<0.0250 U
Lead	mg/L			<0.0030 U			0.506	
Lead (Unfiltered)	mg/L				<0.0030 U			0.466
Mercury	mg/L			<0.00020 U			<0.00020 U	
Mercury (Unfiltered)	mg/L				<0.00020 U			<0.00020 U
Nickel	mg/L			<0.0400 U			<0.0400 U	
Nickel (Unfiltered)	mg/L				<0.0400 U			<0.0400 U
Selenium	mg/L			<0.0050 U			<0.0050 U	
Selenium (Unfiltered)	mg/L				<0.0050 U			<0.0050 U
Silver	mg/L			<0.0050 U			<0.0050 U	
Silver (Unfiltered)	mg/L				<0.0050 U			<0.0050 U
Zinc	mg/L			0.505			<0.0200 U	

Table 11
SUMMARY OF ANALYTICAL RESULTS
Pratt & Whitney, East Hartford, CT: Performance Evaluation Samples

Loureiro Engineering Associates, Inc.

	Location ID	performance	performance	performance	performance	performance	performance	performance
	Sample ID	2001023	2001023	2001027	2001027	2000957	2001001	2001001
	Sample Date	08/07/2001	08/07/2001	08/07/2001	08/07/2001	08/08/2001	08/08/2001	08/08/2001
	Sample Time	15:00	15:00	15:00	15:00	15:00	15:00	15:00
	Laboratory	STLC	STLC	STLC	STLC	STLC	STLC	STLC
	Lab. Number	A1H080223008	A1H080223008R	A1H080223009	A1H080223010	A1H090289007	A1H090289002	A1H090289003
Constituent	Units							
Zinc (Unfiltered)	mg/L				0.508			<0.0200 U
PCB-1016 (Arochlor 1016)	ug/l	<0.50 U	<0.50 U			<0.50 U		
PCB-1221 (Arochlor 1221)	ug/l	<0.50 U	<0.50 U			<0.50 U		
PCB-1232 (Arochlor 1232)	ug/l	<0.50 U	<0.50 U			<0.50 U		
PCB-1242 (Arochlor 1242)	ug/l	<0.50 U	<0.50 U			<0.50 U		
PCB-1248 (Arochlor 1248)	ug/l	<0.50 U	<0.50 U			0.74		
PCB-1254 (Arochlor 1254)	ug/l	<0.50 U	<0.50 U			<0.50 U		
PCB-1260 (Arochlor 1260)	ug/l	1.7	1.6			<0.50 U		
1,2-Dibromo-3-chloropropane	ug/l			<12 U			<17 U	
2-Acetylaminofluorene	ug/l			<100 U			<100 U	
Aramite (total)	ug/l			<20 U			<20 U	
Dimethoate	ug/l			<20 U			<20 U	
Disulfoton	ug/l			<50 U			<50 U	
Famphur	ug/l			<100 U			<100 U	
Hexachlorobenzene	ug/l			<10 U			<10 U	
Hexachlorocyclopentadiene	ug/l			<50 U			<50 U	
Phorate	ug/l			<50 U			<50 U	
Thiodiphosphoric Acid Tetraethyl Ester	ug/l			<50 U			<50 U	
Zinophos	ug/l			<50 U			<50 U	
Cyanide (Total)	mg/L			0.58			0.39	
Total Petroleum Hydrocarbons EPA 418.1	mg/L			1.3			1	
1,2,4,5-Tetrachlorobenzene	ug/l			<10 U			<10 U	
1,3,5-Trinitrobenzene	ug/l			<50 U			<50 U	
1,3-Dinitrobenzene	ug/l			<10 U			<10 U	
1,4-Naphthoquinone	ug/l			<50 U			<50 U	
1-Naphthylamine	ug/l			<10 U			<10 U	
2,2'-Oxybis(2-chloropropane)	ug/l			<10 U			<10 U	
2,3,4,6-Tetrachlorophenol	ug/l			<50 U			<50 U	
2,4,5-Trichlorophenol	ug/l			<10 U			<10 U	

Table 11
SUMMARY OF ANALYTICAL RESULTS
Pratt & Whitney, East Hartford, CT: Performance Evaluation Samples

Loureiro Engineering Associates, Inc.

	Location ID	performance	performance	performance	performance	performance	performance	performance
	Sample ID	2001023	2001023	2001027	2001027	2000957	2001001	2001001
	Sample Date	08/07/2001	08/07/2001	08/07/2001	08/07/2001	08/08/2001	08/08/2001	08/08/2001
	Sample Time	15:00	15:00	15:00	15:00	15:00	15:00	15:00
	Laboratory	STLC	STLC	STLC	STLC	STLC	STLC	STLC
	Lab. Number	A1H080223008	A1H080223008R	A1H080223009	A1H080223010	A1H090289007	A1H090289002	A1H090289003
Constituent	Units							
2,4,6-Trichlorophenol	ug/l			<10 U			<10 U	
2,4-Dichlorophenol	ug/l			<10 U			<10 U	
2,4-Dimethylphenol	ug/l			<10 U			<10 U	
2,4-Dinitrophenol	ug/l			<50 U			<50 U	
2,4-Dinitrotoluene	ug/l			<10 U			<10 U	
2,6-Dinitrotoluene	ug/l			<10 U			<10 U	
2-Aminonaphthalene (beta Naphthylamine)	ug/l			<10 U			<10 U	
2-Chloronaphthalene	ug/l			<10 U			<10 U	
2-Chlorophenol	ug/l			<10 U			<10 U	
2-Methylnaphthalene	ug/l			<10 U			<10 U	
2-Methylphenol (o-Cresol)	ug/l			<10 U			<10 U	
2-Nitroaniline	ug/l			<50 U			<50 U	
2-Nitrophenol	ug/l			<10 U			<10 U	
2-Picoline (alpha-Picoline)	ug/l			<20 U			<20 U	
3,3'-Dichlorobenzidine	ug/l			<50 U			<50 U	
3,3'-Dimethylbenzidine	ug/l			<50 U			<50 U	
3-Methylcholanthrene	ug/l			<20 U			<20 U	
3-Methylphenol	ug/l			<10 U			<10 U	
3-Nitroaniline	ug/l			<50 U			<50 U	
4,6-Dinitro-2-methylphenol	ug/l			<50 U			<50 U	
4-Aminobiphenyl (4-biphenylamine)	ug/l			<50 U			<50 U	
4-Bromophenyl Phenyl Ether	ug/l			<10 U			<10 U	
4-Chloro-3-methylphenol	ug/l			<10 U			<10 U	
4-Chloroaniline	ug/l			<10 U			<10 U	
4-Chlorophenyl Phenyl Ether	ug/l			<10 U			<10 U	
4-Methylphenol (p-Cresol)	ug/l			<10 U			<10 U	
4-Nitroaniline	ug/l			<50 U			<50 U	
4-Nitrophenol	ug/l			<50 U			<50 U	
4-Nitroquinoline-n-oxide	ug/l			<100 U			<100 U	

Table 11
SUMMARY OF ANALYTICAL RESULTS
Pratt & Whitney, East Hartford, CT: Performance Evaluation Samples

Loureiro Engineering Associates, Inc.

	Location ID	performance	performance	performance	performance	performance	performance	performance
	Sample ID	2001023	2001023	2001027	2001027	2000957	2001001	2001001
	Sample Date	08/07/2001	08/07/2001	08/07/2001	08/07/2001	08/08/2001	08/08/2001	08/08/2001
	Sample Time	15:00	15:00	15:00	15:00	15:00	15:00	15:00
	Laboratory	STLC	STLC	STLC	STLC	STLC	STLC	STLC
	Lab. Number	A1H080223008	A1H080223008R	A1H080223009	A1H080223010	A1H090289007	A1H090289002	A1H090289003
Constituent	Units							
5-Nitro-o-toluidine	ug/l			<20 U			<20 U	
7,12-Dimethylbenz(a)anthracene	ug/l			<20 U			<20 U	
Acenaphthene	ug/l			<10 U			<10 U	
Acenaphthylene	ug/l			<10 U			<10 U	
Acetophenone	ug/l			<10 U			<10 U	
Aniline (phenylamine, Aminobenzene)	ug/l			<10 U			<10 U	
Anthracene	ug/l			<10 U			<10 U	
Benzo(a)anthracene	ug/l			<10 U			<10 U	
Benzo(a)pyrene	ug/l			<10 U			6.6 J	
Benzo(b)fluoranthene	ug/l			<10 U			6.7 J	
Benzo(g,h,i)perylene	ug/l			<10 U			<10 U	
Benzo(k)fluoranthene	ug/l			<10 U			<10 U	
Benzyl Alcohol	ug/l			<10 U			<10 U	
Benzyl Butyl Phthalate	ug/l			<10 U			<10 U	
Bis(2-chloroethoxy) Methane	ug/l			<10 U			<10 U	
Carbazole	ug/l			<10 U			<10 U	
Chrysene	ug/l			<10 U			<10 U	
Di-n-butyl Phthalate	ug/l			<10 U			<10 U	
Di-n-octylphthalate	ug/l			<10 U			<10 U	
Dibenz(a,h)anthracene	ug/l			<10 U			<10 U	
Dibenzofuran	ug/l			<10 U			<10 U	
Diethyl Phthalate	ug/l			<10 U			<10 U	
Dimethyl Phthalate	ug/l			<10 U			<10 U	
Diphenylamine	ug/l			<10 U			<10 U	
Ethyl Methanesulfonate	ug/l			<10 U			<10 U	
Fluoranthene	ug/l			<10 U			<10 U	
Fluorene	ug/l			<10 U			<10 U	
Hexachlorobutadiene	ug/l			<10 U			<10 U	
Hexachloroethane	ug/l			<10 U			<10 U	

Table 11
SUMMARY OF ANALYTICAL RESULTS
Pratt & Whitney, East Hartford, CT: Performance Evaluation Samples

Loureiro Engineering Associates, Inc.

	Location ID	performance	performance	performance	performance	performance	performance	performance
	Sample ID	2001023	2001023	2001027	2001027	2000957	2001001	2001001
	Sample Date	08/07/2001	08/07/2001	08/07/2001	08/07/2001	08/08/2001	08/08/2001	08/08/2001
	Sample Time	15:00	15:00	15:00	15:00	15:00	15:00	15:00
	Laboratory	STLC	STLC	STLC	STLC	STLC	STLC	STLC
	Lab. Number	A1H080223008	A1H080223008R	A1H080223009	A1H080223010	A1H090289007	A1H090289002	A1H090289003
Constituent	Units							
Hexachloropropene	ug/l			<100 U			<100 U	
Indeno(1,2,3-c,d)pyrene	ug/l			<10 U			<10 U	
Isophorone	ug/l			<10 U			<10 U	
Isosafrole	ug/l			<20 U			<20 U	
Methapyrilene	ug/l			<50 U			<50 U	
Methyl Methanesulfonate	ug/l			<10 U			<10 U	
Naphthalene	ug/l			57			<10 U	
Nitrobenzene	ug/l			<10 U			<10 U	
Nitrosomethylethylamine	ug/l			<10 U			<10 U	
Pentachlorophenol	ug/l			<10 U			<10 U	
Phenacetin	ug/l			<20 U			<20 U	
Phenanthrene	ug/l			<10 U			3.7 J	
Phenol	ug/l			<10 U			<10 U	
Pronamide	ug/l			<20 U			<20 U	
Pyrene	ug/l			80			<10 U	
Pyridine	ug/l			<20 U			<20 U	
Safrole	ug/l			<20 U			<20 U	
alpha,alpha-Dimethylphenethylamine	ug/l			<50 U			<50 U	
bis(2-chloroethyl) Ether (2-chloroethyl	ug/l			<10 U			<10 U	
bis(2-ethylhexyl) Phthalate	ug/l			41 B			<10 U	
n-Nitroso-di-n-butylamine	ug/l			<10 U			<10 U	
n-Nitrosodi-n-propylamine	ug/l			<10 U			<10 U	
n-Nitrosodiethylamine	ug/l			<10 U			<10 U	
n-Nitrosodimethylamine	ug/l			<10 U			<10 U	
n-Nitrosodiphenylamine	ug/l			<10 U			<10 U	
n-Nitrosomorpholine	ug/l			<10 U			<10 U	
n-Nitrosopiperidine	ug/l			<10 U			<10 U	
n-Nitrosopyrrolidine	ug/l			<10 U			<10 U	
o,o,o-Triethyl Phosphorothioate	ug/l			<50 U			<50 U	

Table 11
SUMMARY OF ANALYTICAL RESULTS
Pratt & Whitney, East Hartford, CT: Performance Evaluation Samples

Loureiro Engineering Associates, Inc.

	Location ID	performance	performance	performance	performance	performance	performance	performance
	Sample ID	2001023	2001023	2001027	2001027	2000957	2001001	2001001
	Sample Date	08/07/2001	08/07/2001	08/07/2001	08/07/2001	08/08/2001	08/08/2001	08/08/2001
	Sample Time	15:00	15:00	15:00	15:00	15:00	15;00	15:00
	Laboratory	STLC	STLC	STLC	STLC	STLC	STLC	STLC
	Lab. Number	A1H080223008	A1H080223008R	A1H080223009	A1H080223010	A1H090289007	A1H090289002	A1H090289003
Constituent	Units							
o-Toluidine	ug/l			<20 U			<20 U	
p-Dimethylaminoazobenzene	ug/l			<20 U			<20 U	
p-Phenylenediamine	ug/l			<100 U			<100 U	
trans-1,4-Dichloro-2-butene	ug/l			<12 U			<17 U	
1,1,1,2-Tetrachloroethane	ug/l			<2.5 U			<3.3 U	
1,1,1-Trichloroethane	ug/l			<12 U			27	
1,1,2,2-Tetrachloroethane	ug/l			<1.2 U			<1.7 U	
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/l			<2.5 U			<3.3 U	
1,1,2-Trichloroethane	ug/l			<12 U			<17 U	
1,1-Dichloroethane	ug/l			<12 U			<17 U	
1,1-Dichloroethene	ug/l			<2.5 U			<3.3 U	
1,2,3-Trichloropropane	ug/l			<12 U			<17 U	
1,2,4-Trichlorobenzene	ug/l			<10 U			<10 U	
1,2-Dibromoethane (Ethylene Dibromide)	ug/l			<1.2 U			<1.7 U	
1,2-Dichlorobenzene	ug/l			<10 U			<10 U	
1,2-Dichloroethane	ug/l			<2.5 U			<3.3 U	
1,2-Dichloropropane	ug/l			<12 U			<17 U	
1,3-Dichlorobenzene	ug/l			<10 U			<10 U	
1,4-Dichlorobenzene	ug/l			<10 U			<10 U	
1,4-Dioxane (p-Dioxane)	ug/l			<380 U			<500 U	
2-Chloro-1,3-butadiene	ug/l			<12 U			<17 U	
2-Hexanone	ug/l			<120 U			<170 U	
Acetone	ug/l			<250 U			<330 U	
Acetonitrile	ug/l			<250 U			<330 U	
Acrolein	ug/l			<12 U			<17 U	
Acrylonitrile	ug/l			<3.8 U			<5.0 U	
Allyl Chloride (3-Chloropropene)	ug/l			<250 U			<330 U	
Benzene	ug/l			4.0			<3.3 U	
Bromodichloromethane	ug/l			<12 U			<17 U	

Table 11
SUMMARY OF ANALYTICAL RESULTS
Pratt & Whitney, East Hartford, CT: Performance Evaluation Samples

Loureiro Engineering Associates, Inc.

	Location ID	performance	performance	performance	performance	performance	performance	performance
	Sample ID	2001023	2001023	2001027	2001027	2000957	2001001	2001001
	Sample Date	08/07/2001	08/07/2001	08/07/2001	08/07/2001	08/08/2001	08/08/2001	08/08/2001
	Sample Time	15:00	15:00	15:00	15:00	15:00	15:00	15:00
	Laboratory	STLC	STLC	STLC	STLC	STLC	STLC	STLC
	Lab. Number	A1H080223008	A1H080223008R	A1H080223009	A1H080223010	A1H090289007	A1H090289002	A1H090289003
Constituent	Units							
Bromoform	ug/l			<10 U			<13 U	
Bromomethane	ug/l			<25 U			<33 U	
Carbon Disulfide	ug/l			<12 U			<17 U	
Carbon Tetrachloride	ug/l			<12 U			<17 U	
Chlorobenzene	ug/l			<12 U			<17 U	
Chloroethane	ug/l			<5.0 U			<6.7 U	
Chloroform	ug/l			<2.5 U			<3.3 U	
Chloromethane	ug/l			<25 U			<33 U	
Dibromochloromethane	ug/l			<1.2 U			<1.7 U	
Dibromomethane	ug/l			<12 U			<17 U	
Dichlorodifluoromethane	ug/l			<12 U			<17 U	
Ethyl Methacrylate	ug/l			<12 U			<17 U	
Ethylbenzene	ug/l			55			<17 U	
Iodomethane (methyl Iodide)	ug/l			<12 U			<17 U	
Isobutanol	ug/l			<120 U			<170 U	
Methyl Ethyl Ketone (2-Butanone)	ug/l			<250 U			<330 U	
Methyl Isobutyl Ketone (4-methyl-2-penta	ug/l			<12 U			<17 U	
Methyl Methacrylate	ug/l			<12 U			<17 U	
Methylacrylonitrile	ug/l			<12 U			<17 U	
Methylene Chloride	ug/l			<12 U			22	
Pentachlorobenzene	ug/l			<10 U			<10 U	
Pentachloroethane	ug/l			<50 U			<50 U	
Pentachloronitrobenzene	ug/l			<50 U			<50 U	
Propane Nitrile (propionitrile)	ug/l			<12 U			<17 U	
Styrene	ug/l			<12 U			<17 U	
Tetrachloroethylene (PCE)	ug/l			<12 U			91	
Toluene	ug/l			81			<17 U	
Total 1,3-dichloropropene (cis and trans	ug/l			<1.2 U			<1.7 U	
Trichloroethylene (TCE)	ug/l			<12 U			<17 U	

Table 11
SUMMARY OF ANALYTICAL RESULTS
Pratt & Whitney, East Hartford, CT: Performance Evaluation Samples

Loureiro Engineering Associates, Inc.

	Location ID	performance	performance	performance	performance	performance	performance	performance
	Sample ID	2001023	2001023	2001027	2001027	2000957	2001001	2001001
	Sample Date	08/07/2001	08/07/2001	08/07/2001	08/07/2001	08/08/2001	08/08/2001	08/08/2001
	Sample Time	15:00	15:00	15:00	15:00	15:00	15:00	15:00
	Laboratory	STLC	STLC	STLC	STLC	STLC	STLC	STLC
	Lab. Number	A1H080223008	A1H080223008R	A1H080223009	A1H080223010	A1H090289007	A1H090289002	A1H090289003
Constituent	Units							
Trichlorofluoromethane	ug/l			<12 U			<17 U	
Vinyl Acetate	ug/l			<12 U			<17 U	
Vinyl Chloride	ug/l			<5.0 U			<6.7 U	
Xylenes	ug/l			<12 U			<17 U	
cis-1,2-Dichloroethylene	ug/l			<12 U			<17 U	
tert-Butyl Methyl Ether	ug/l			<12 U			<17 U	
trans-1,2-Dichloroethene	ug/l			<12 U			<17 U	

Table 11
SUMMARY OF ANALYTICAL RESULTS
Pratt & Whitney, East Hartford, CT: Performance Evaluation Samples

Loureiro Engineering Associates, Inc.

	Location ID	performance	performance	performance				
	Sample ID	2010165	2010165	2010166				
	Sample Date	12/13/2001	12/13/2001	12/13/2001				
	Sample Time	16:50	16:50	16:55				
	Laboratory	CAN	CAN	CAN				
	Lab. Number	A1L150107006	A1L150107007	A1L150107008				
Constituent	Units							
Date PCBs Analyzed	-			12/17/2001				
Date Metals Analyzed	-	12/20/2001	12/20/2001					
Date Organics Analyzed	-	12/21/2001						
Date Physical Analyzed	-	12/20/2001						
Date Semi-volatile Organics Analyzed	-	12/20/2001						
Dinoseb	ug/l	<20						
Arsenic	mg/L	<0.0040						
Arsenic (Unfiltered)	mg/L		<0.0040					
Barium	mg/L	<0.2						
Barium (Unfiltered)	mg/L		<0.2					
Beryllium	mg/L	0.00056 B						
Beryllium (Unfiltered)	mg/L		<0.0050					
Cadmium	mg/L	<0.0050						
Cadmium (Unfiltered)	mg/L		<0.0050					
Chromium, Total	mg/L	0.361						
Chromium, Total (Unfiltered)	mg/L		0.37					
Copper	mg/L	<0.0250						
Copper (Unfiltered)	mg/L		<0.0250					
Lead	mg/L	<0.0030						
Lead (Unfiltered)	mg/L		<0.0030					
Mercury	mg/L	<0.00020						
Mercury (Unfiltered)	mg/L		<0.00020					
Nickel	mg/L	<0.0400						
Nickel (Unfiltered)	mg/L		<0.0400					
Selenium	mg/L	<0.0050						
Selenium (Unfiltered)	mg/L		<0.0050					
Silver	mg/L	<0.0050						
Silver (Unfiltered)	mg/L		<0.0050					
Zinc	mg/L	0.481						

Table 11
SUMMARY OF ANALYTICAL RESULTS
Pratt & Whitney, East Hartford, CT: Performance Evaluation Samples

Loureiro Engineering Associates, Inc.

	Location ID	performance	performance	performance				
	Sample ID	2010165	2010165	2010166				
	Sample Date	12/13/2001	12/13/2001	12/13/2001				
	Sample Time	16:50	16:50	16:55				
	Laboratory	CAN	CAN	CAN				
	Lab. Number	A1L150107006	A1L150107007	A1L150107008				
Constituent	Units							
Zinc (Unfiltered)	mg/L		0.498					
PCB-1016 (Arochlor 1016)	ug/l			<0.50				
PCB-1221 (Arochlor 1221)	ug/l			<0.50				
PCB-1232 (Arochlor 1232)	ug/l			<0.50				
PCB-1242 (Arochlor 1242)	ug/l			<0.50				
PCB-1248 (Arochlor 1248)	ug/l			<0.50				
PCB-1254 (Arochlor 1254)	ug/l			<0.50				
PCB-1260 (Arochlor 1260)	ug/l			1.2				
1,2-Dibromo-3-chloropropane	ug/l	<17						
2-Acetylaminofluorene	ug/l	<100						
Aramite (total)	ug/l	<20						
Dimethoate	ug/l	<20						
Disulfoton	ug/l	<50						
Famphur	ug/l	<100						
Hexachlorobenzene	ug/l	<10						
Hexachlorocyclopentadiene	ug/l	<50						
Phorate	ug/l	<50						
Thiodiphosphoric Acid Tetraethyl Ester	ug/l	<50						
Zinophos	ug/l	<50						
Cyanide (Total)	mg/L	0.20						
Total Petroleum Hydrocarbons EPA 418.1	mg/L	1.4						
1,2,4,5-Tetrachlorobenzene	ug/l	<10						
1,3,5-Trinitrobenzene	ug/l	<50						
1,3-Dinitrobenzene	ug/l	<10						
1,4-Naphthoquinone	ug/l	<50						
1-Naphthylamine	ug/l	<10						
2,2'-Oxybis(2-chloropropane)	ug/l	<10						
2,3,4,6-Tetrachlorophenol	ug/l	<50						
2,4,5-Trichlorophenol	ug/l	<10						

Table 11
SUMMARY OF ANALYTICAL RESULTS
Pratt & Whitney, East Hartford, CT: Performance Evaluation Samples

Loureiro Engineering Associates, Inc.

	Location ID	performance	performance	performance				
	Sample ID	2010165	2010165	2010166				
	Sample Date	12/13/2001	12/13/2001	12/13/2001				
	Sample Time	16:50	16:50	16:55				
	Laboratory	CAN	CAN	CAN				
	Lab. Number	A1L150107006	A1L150107007	A1L150107008				
Constituent	Units							
2,4,6-Trichlorophenol	ug/l	<10						
2,4-Dichlorophenol	ug/l	<10						
2,4-Dimethylphenol	ug/l	<10						
2,4-Dinitrophenol	ug/l	<50						
2,4-Dinitrotoluene	ug/l	<10						
2,6-Dinitrotoluene	ug/l	<10						
2-Aminonaphthalene (beta Naphthylamine)	ug/l	<10						
2-Chloronaphthalene	ug/l	<10						
2-Chlorophenol	ug/l	<10						
2-Methylnaphthalene	ug/l	<10						
2-Methylphenol (o-Cresol)	ug/l	<10						
2-Nitroaniline	ug/l	<50						
2-Nitrophenol	ug/l	<10						
2-Picoline (alpha-Picoline)	ug/l	<20						
3,3'-Dichlorobenzidine	ug/l	<50						
3,3'-Dimethylbenzidine	ug/l	<50						
3-Methylcholanthrene	ug/l	<20						
3-Methylphenol	ug/l	<10						
3-Nitroaniline	ug/l	<50						
4,6-Dinitro-2-methylphenol	ug/l	<50						
4-Aminobiphenyl (4-biphenylamine)	ug/l	<50						
4-Bromophenyl Phenyl Ether	ug/l	<10						
4-Chloro-3-methylphenol	ug/l	<10						
4-Chloroaniline	ug/l	<10						
4-Chlorophenyl Phenyl Ether	ug/l	<10						
4-Methylphenol (p-Cresol)	ug/l	<10						
4-Nitroaniline	ug/l	<50						
4-Nitrophenol	ug/l	<50						
4-Nitroquinoline-n-oxide	ug/l	<100						

Table 11
SUMMARY OF ANALYTICAL RESULTS
Pratt & Whitney, East Hartford, CT: Performance Evaluation Samples

Loureiro Engineering Associates, Inc.

	Location ID	performance	performance	performance				
	Sample ID	2010165	2010165	2010166				
	Sample Date	12/13/2001	12/13/2001	12/13/2001				
	Sample Time	16:50	16:50	16:55				
	Laboratory	CAN	CAN	CAN				
	Lab. Number	A1L150107006	A1L150107007	A1L150107008				
Constituent	Units							
5-Nitro-o-toluidine	ug/l	<20						
7,12-Dimethylbenz(a)anthracene	ug/l	<20						
Acenaphthene	ug/l	<10						
Acenaphthylene	ug/l	<10						
Acetophenone	ug/l	<10						
Aniline (phenylamine, Aminobenzene)	ug/l	<10						
Anthracene	ug/l	<10						
Benzo(a)anthracene	ug/l	<10						
Benzo(a)pyrene	ug/l	<10						
Benzo(b)fluoranthene	ug/l	<10						
Benzo(g,h,i)perylene	ug/l	<10						
Benzo(k)fluoranthene	ug/l	<10						
Benzyl Alcohol	ug/l	<10						
Benzyl Butyl Phthalate	ug/l	<10						
Bis(2-chloroethoxy) Methane	ug/l	<10						
Carbazole	ug/l	<10						
Chrysene	ug/l	<10						
Di-n-butyl Phthalate	ug/l	<10						
Di-n-octylphthalate	ug/l	<10						
Dibenz(a,h)anthracene	ug/l	<10						
Dibenzofuran	ug/l	<10						
Diethyl Phthalate	ug/l	<10						
Dimethyl Phthalate	ug/l	<10						
Diphenylamine	ug/l	<10						
Ethyl Methanesulfonate	ug/l	<10						
Fluoranthene	ug/l	<10						
Fluorene	ug/l	<10						
Hexachlorobutadiene	ug/l	<10						
Hexachloroethane	ug/l	<10						

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Pratt & Whitney, East Hartford, CT: Performance Evaluation Samples

Loureiro Engineering Associates, Inc.

	Location ID	performance	performance	performance				
	Sample ID	2010165	2010165	2010166				
	Sample Date	12/13/2001	12/13/2001	12/13/2001				
	Sample Time	16:50	16:50	16:55				
	Laboratory	CAN	CAN	CAN				
	Lab. Number	A1L150107006	A1L150107007	A1L150107008				
Constituent	Units							
Hexachloropropene	ug/l	<100						
Indeno(1,2,3-c,d)pyrene	ug/l	<10						
Isophorone	ug/l	<10						
Isosafrole	ug/l	<20						
Methapyrilene	ug/l	<50						
Methyl Methanesulfonate	ug/l	<10						
Naphthalene	ug/l	51						
Nitrobenzene	ug/l	<10						
Nitrosomethylethylamine	ug/l	<10						
Pentachlorophenol	ug/l	<10						
Phenacetin	ug/l	<20						
Phenanthrene	ug/l	<10						
Phenol	ug/l	<10						
Pronamide	ug/l	<20						
Pyrene	ug/l	74						
Pyridine	ug/l	<20						
Safrole	ug/l	<20						
alpha,alpha-Dimethylphenethylamine	ug/l	<50						
bis(2-chloroethyl) Ether (2-chloroethyl	ug/l	<10						
bis(2-ethylhexyl) Phthalate	ug/l	32						
n-Nitroso-di-n-butylamine	ug/l	<10						
n-Nitrosodi-n-propylamine	ug/l	<10						
n-Nitrosodiethylamine	ug/l	<10						
n-Nitrosodimethylamine	ug/l	<10						
n-Nitrosodiphenylamine	ug/l	<10						
n-Nitrosomorpholine	ug/l	<10						
n-Nitrosopiperidine	ug/l	<10						
n-Nitrosopyrrolidine	ug/l	<10						
o,o,o-Triethyl Phosphorothioate	ug/l	<50						

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Pratt & Whitney, East Hartford, CT: Performance Evaluation Samples

Loureiro Engineering Associates, Inc.

	Location ID	performance	performance	performance				
	Sample ID	2010165	2010165	2010166				
	Sample Date	12/13/2001	12/13/2001	12/13/2001				
	Sample Time	16:50	16:50	16:55				
	Laboratory	CAN	CAN	CAN				
	Lab. Number	A1L150107006	A1L150107007	A1L150107008				
Constituent	Units							
o-Toluidine	ug/l	<20						
p-Dimethylaminoazobenzene	ug/l	<20						
p-Phenylenediamine	ug/l	<100						
trans-1,4-Dichloro-2-butene	ug/l	<17						
1,1,1,2-Tetrachloroethane	ug/l	<3.3						
1,1,1-Trichloroethane	ug/l	20						
1,1,2,2-Tetrachloroethane	ug/l	<1.7						
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/l	<3.3						
1,1,2-Trichloroethane	ug/l	<17						
1,1-Dichloroethane	ug/l	<17						
1,1-Dichloroethene	ug/l	<3.3						
1,2,3-Trichloropropane	ug/l	<17						
1,2,4-Trichlorobenzene	ug/l	<10						
1,2-Dibromoethane (Ethylene Dibromide)	ug/l	<1.7						
1,2-Dichlorobenzene	ug/l	<10						
1,2-Dichloroethane	ug/l	<3.3						
1,2-Dichloropropane	ug/l	<17						
1,3-Dichlorobenzene	ug/l	<10						
1,4-Dichlorobenzene	ug/l	<10						
1,4-Dioxane (p-Dioxane)	ug/l	<500						
2-Chloro-1,3-butadiene	ug/l	<17						
2-Hexanone	ug/l	<170						
Acetone	ug/l	<330						
Acetonitrile	ug/l	<330						
Acrolein	ug/l	<17						
Acrylonitrile	ug/l	<5.0						
Allyl Chloride (3-Chloropropene)	ug/l	<330						
Benzene	ug/l	<3.3						
Bromodichloromethane	ug/l	<17						

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SUMMARY OF ANALYTICAL RESULTS
Pratt & Whitney, East Hartford, CT: Performance Evaluation Samples

Loureiro Engineering Associates, Inc.

	Location ID	performance	performance	performance				
	Sample ID	2010165	2010165	2010166				
	Sample Date	12/13/2001	12/13/2001	12/13/2001				
	Sample Time	16:50	16:50	16:55				
	Laboratory	CAN	CAN	CAN				
	Lab. Number	A1L150107006	A1L150107007	A1L150107008				
Constituent	Units							
Bromoform	ug/l	<13						
Bromomethane	ug/l	<33						
Carbon Disulfide	ug/l	<17						
Carbon Tetrachloride	ug/l	<17						
Chlorobenzene	ug/l	<17						
Chloroethane	ug/l	<6.7						
Chloroform	ug/l	<3.3						
Chloromethane	ug/l	<33						
Dibromochloromethane	ug/l	<1.7						
Dibromomethane	ug/l	<17						
Dichlorodifluoromethane	ug/l	<17						
Ethyl Methacrylate	ug/l	<17						
Ethylbenzene	ug/l	<17						
Iodomethane (methyl Iodide)	ug/l	<17						
Isobutanol	ug/l	<170						
Methyl Ethyl Ketone (2-Butanone)	ug/l	<330						
Methyl Isobutyl Ketone (4-methyl-2-penta	ug/l	<17						
Methyl Methacrylate	ug/l	<17						
Methylacrylonitrile	ug/l	<17						
Methylene Chloride	ug/l	20						
Pentachlorobenzene	ug/l	<10						
Pentachloroethane	ug/l	<50						
Pentachloronitrobenzene	ug/l	<50						
Propane Nitrile (propionitrile)	ug/l	<17						
Styrene	ug/l	<17						
Tetrachloroethylene (PCE)	ug/l	77						
Toluene	ug/l	<17						
Total 1,3-dichloropropene (cis and trans	ug/l	<1.7						
Trichloroethylene (TCE)	ug/l	<17						

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SUMMARY OF ANALYTICAL RESULTS
Pratt & Whitney, East Hartford, CT: Performance Evaluation Samples

Loureiro Engineering Associates, Inc.

	Location ID	performance	performance	performance				
	Sample ID	2010165	2010165	2010166				
	Sample Date	12/13/2001	12/13/2001	12/13/2001				
	Sample Time	16:50	16:50	16:55				
	Laboratory	CAN	CAN	CAN				
	Lab. Number	A1L150107006	A1L150107007	A1L150107008				
Constituent	Units							
Trichlorofluoromethane	ug/l	<17						
Vinyl Acetate	ug/l	<17						
Vinyl Chloride	ug/l	<6.7						
Xylenes	ug/l	<17						
cis-1,2-Dichloroethylene	ug/l	<17						
tert-Butyl Methyl Ether	ug/l	<17						
trans-1,2-Dichloroethene	ug/l	<17						

Printed on 11/16/2001
Data Management

RESULTS OF PERFORMANCE SAMPLE EVALUATION
P&W East Hartford: Step 4 Investigation - Performance Evaluation Samples

Location Identifier performance P&W East Hartford

Sample Date 08/07/20
Sample Identifier 2001023 15:00 Performance Evaluation - Water Jason Miller

Chemical Name	Concentration	Units	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
PCB 1016	ND<0.50 U	ug/l	STLC	A1H080223008				
PCB 1016	ND<0.50 U	ug/l	STLC	A1H080223008				
PCB 1221	ND<0.50 U	ug/l	STLC	A1H080223008				
PCB 1221	ND<0.50 U	ug/l	STLC	A1H080223008				
PCB 1232	ND<0.50 U	ug/l	STLC	A1H080223008				
PCB 1232	ND<0.50 U	ug/l	STLC	A1H080223008				
PCB 1242	ND<0.50 U	ug/l	STLC	A1H080223008				
PCB 1242	ND<0.50 U	ug/l	STLC	A1H080223008				
PCB 1248	ND<0.50 U	ug/l	STLC	A1H080223008				
PCB 1248	ND<0.50 U	ug/l	STLC	A1H080223008				
PCB 1254	ND<0.50 U	ug/l	STLC	A1H080223008				
PCB 1254	ND<0.50 U	ug/l	STLC	A1H080223008				
PCB 1260	1.7	ug/l	STLC	A1H080223008	1.39	1.67	0.878	FAIL
PCB 1260	1.6	ug/l	STLC	A1H080223008	1.39	1.67	0.878	Pass

Sample Identifier 2001027 15:00 Performance Evaluation - Water Jason Miller

Chemical Name	Concentration	Units	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
Arsenic	ND<0.0040 U	mg/L	STLC	A1H080223009				
Arsenic (Unfiltered)	ND<0.0040 U	mg/L	STLC	A1H080223010				
Barium	ND<0.2 U	mg/L	STLC	A1H080223009				
Barium (Unfiltered)	ND<0.2 U	mg/L	STLC	A1H080223010				
Beryllium	ND<0.0050 U	mg/L	STLC	A1H080223009				
Beryllium (Unfiltered)	ND<0.0050 U	mg/L	STLC	A1H080223010				
Cadmium	ND<0.0050 U	mg/L	STLC	A1H080223009				
Cadmium (Unfiltered)	ND<0.0050 U	mg/L	STLC	A1H080223010				
Chromium	0.376	mg/L	STLC	A1H080223009	0.400	0.472	0.328	Pass
Chromium (Unfiltered)	0.377	mg/L	STLC	A1H080223010	0.400	0.472	0.328	Pass
Copper	ND<0.0250 U	mg/L	STLC	A1H080223009				
Copper (Unfiltered)	ND<0.0250 U	mg/L	STLC	A1H080223010				
Lead	ND<0.0030 U	mg/L	STLC	A1H080223009				

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RESULTS OF PERFORMANCE SAMPLE EVALUATION
P&W East Hartford: Step 4 Investigation - Performance Evaluation Samples

Lead (Unfiltered)	ND<0.0030	U	mg/L	STLC	A1H080223010				
Mercury	ND<0.00020		mg/L	STLC	A1H080223009				
Mercury (Unfiltered)	ND<0.00020		mg/L	STLC	A1H080223010				
Nickel	ND<0.0400	U	mg/L	STLC	A1H080223009				
Nickel (Unfiltered)	ND<0.0400	U	mg/L	STLC	A1H080223010				
Selenium	ND<0.0050	U	mg/L	STLC	A1H080223009				
Selenium (Unfiltered)	ND<0.0050	U	mg/L	STLC	A1H080223010				
Silver	ND<0.0050	U	mg/L	STLC	A1H080223009				
Silver (Unfiltered)	ND<0.0050	U	mg/L	STLC	A1H080223010				
Zinc	0.505		mg/L	STLC	A1H080223009	0.500	0.590	0.410	Pass
Zinc (Unfiltered)	0.508		mg/L	STLC	A1H080223010	0.500	0.590	0.410	Pass
Cyanide (Total)	0.58		mg/l	STLC	A1H080223009	0.592	0.752	0.432	Pass
TPH	1.3		mg/l	STLC	A1H080223009	1.20	1.50	0.900	Pass
1,2,4-trichlorobenzene	ND<10	U	ug/l	STLC	A1H080223009				
1,2,4,5-tetrachlorobenzene	ND<10	U	ug/l	STLC	A1H080223009				
1,3,5-trinitrobenzene	ND<50	U	ug/l	STLC	A1H080223009				
1,4-naphthoquinone	ND<50	U	ug/l	STLC	A1H080223009				
2-Picoline	ND<20	U	ug/l	STLC	A1H080223009				
2-acetylaminofluorene	ND<100	U	ug/l	STLC	A1H080223009				
2-chloronaphthalene	ND<10	U	ug/l	STLC	A1H080223009				
2-methylnaphthalene	ND<10	U	ug/l	STLC	A1H080223009				
2,2'-Oxybis(2-Chloropropane)	ND<10	U	ug/l	STLC	A1H080223009				
2,3,4,6-tetrachlorophenol	ND<50	U	ug/l	STLC	A1H080223009				
2,4-Xylenol	ND<10	U	ug/l	STLC	A1H080223009				
2,4-dichlorophenol	ND<10	U	ug/l	STLC	A1H080223009				
2,4-dinitrophenol	ND<50	U	ug/l	STLC	A1H080223009				
2,4-dinitrotoluene	ND<10	U	ug/l	STLC	A1H080223009				
2,4,5-trichlorophenol	ND<10	U	ug/l	STLC	A1H080223009				
2,4,6-trichlorophenol	ND<10	U	ug/l	STLC	A1H080223009				
2,6-dinitrotoluene	ND<10	U	ug/l	STLC	A1H080223009				
3-Methylchloanthrene	ND<20	U	ug/l	STLC	A1H080223009				
3,3'-dichlorobenzidine	ND<50	U	ug/l	STLC	A1H080223009				
4-Nitroquinoline, 1-oxide	ND<100	U	ug/l	STLC	A1H080223009				
4-bromophenyl Phenyl Ether	ND<10	U	ug/l	STLC	A1H080223009				
4-chlorophenyl Phenyl Ether	ND<10	U	ug/l	STLC	A1H080223009				

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5-nitro-o-toluidine	ND<20	U	ug/l	STLC	A1H080223009
7,12-Dimethylbenz[a]anthracene	ND<20	U	ug/l	STLC	A1H080223009
Acenaphthylene	ND<10	U	ug/l	STLC	A1H080223009
Acenapthalene	ND<10	U	ug/l	STLC	A1H080223009
Acetophenone	ND<10	U	ug/l	STLC	A1H080223009
Aniline	ND<10	U	ug/l	STLC	A1H080223009
Anthracene	ND<10	U	ug/l	STLC	A1H080223009
Aramite	ND<20	U	ug/l	STLC	A1H080223009
Benzo[a]anthracene	ND<10	U	ug/l	STLC	A1H080223009
Benzo[a]pyrene	ND<10	U	ug/l	STLC	A1H080223009
Benzo[b]fluoranthene	ND<10	U	ug/l	STLC	A1H080223009
Benzo[ghi]perylene	ND<10	U	ug/l	STLC	A1H080223009
Benzo[k]fluoranthene	ND<10	U	ug/l	STLC	A1H080223009
Benzyl Alcohol	ND<10	U	ug/l	STLC	A1H080223009
Butyl Benzyl Phthalate	ND<10	U	ug/l	STLC	A1H080223009
Carbazole	ND<10	U	ug/l	STLC	A1H080223009
Chrysene	ND<10	U	ug/l	STLC	A1H080223009
Dibenzofuran	ND<10	U	ug/l	STLC	A1H080223009
Dibenz(a,h)anthracene	ND<10	U	ug/l	STLC	A1H080223009
Dichloroethyl Ether	ND<10	U	ug/l	STLC	A1H080223009
Diethyl Phthalate	ND<10	U	ug/l	STLC	A1H080223009
Dimethoate	ND<20	U	ug/l	STLC	A1H080223009
Dimethyl Phthalate	ND<10	U	ug/l	STLC	A1H080223009
Dinitro-o-cresol	ND<50	U	ug/l	STLC	A1H080223009
Dinoseb	ND<20	U	ug/l	STLC	A1H080223009
Diphenylamine	ND<10	U	ug/l	STLC	A1H080223009
Disulfoton	ND<50	U	ug/l	STLC	A1H080223009
Di-n-butyl Phthalate	ND<10	U	ug/l	STLC	A1H080223009
Di-n-octyl Phthalate	ND<10	U	ug/l	STLC	A1H080223009
Ethylmethanesulfonate	ND<10	U	ug/l	STLC	A1H080223009
Famphur	ND<100	U	ug/l	STLC	A1H080223009
Fluoranthene	ND<10	U	ug/l	STLC	A1H080223009
Fluorene	ND<10	U	ug/l	STLC	A1H080223009
Hexachlorobenzene	ND<10	U	ug/l	STLC	A1H080223009
Hexachlorobutadiene	ND<10	U	ug/l	STLC	A1H080223009

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RESULTS OF PERFORMANCE SAMPLE EVALUATION
P&W East Hartford: Step 4 Investigation - Performance Evaluation Samples

Hexachlorocyclopentadiene	ND<50	U	ug/l	STLC	A1H080223009					
Hexachloroethane	ND<10	U	ug/l	STLC	A1H080223009					
Hexachloropropylene	ND<100	U	ug/l	STLC	A1H080223009					
Indeno(1,2,3-cd)pyrene	ND<10	U	ug/l	STLC	A1H080223009					
Isophorone	ND<10	U	ug/l	STLC	A1H080223009					
Isosafrole	ND<20	U	ug/l	STLC	A1H080223009					
Methapyrilene	ND<50	U	ug/l	STLC	A1H080223009					
Methylmethanesulfonate	ND<10	U	ug/l	STLC	A1H080223009					
Naphthalene	57		ug/l	STLC	A1H080223009	73.9	77.6	32.1	Pass	
Nitrobenzene	ND<10	U	ug/l	STLC	A1H080223009					
O,O,O-Triethyl phosphorothioa	ND<50	U	ug/l	STLC	A1H080223009					
Pentachlorobenzene	ND<10	U	ug/l	STLC	A1H080223009					
Pentachloroethane	ND<50	U	ug/l	STLC	A1H080223009					
Pentachloronitrobenzene	ND<50	U	ug/l	STLC	A1H080223009					
Pentachlorophenol	ND<10	U	ug/l	STLC	A1H080223009					
Phenacetin	ND<20	U	ug/l	STLC	A1H080223009					
Phenanthrene	ND<10	U	ug/l	STLC	A1H080223009					
Phenol	ND<10	U	ug/l	STLC	A1H080223009					
Phorate	ND<50	U	ug/l	STLC	A1H080223009					
Pronamide	ND<20	U	ug/l	STLC	A1H080223009					
Pyrene	80		ug/l	STLC	A1H080223009	125	148	67.9	Pass	
Pyridine	ND<20	U	ug/l	STLC	A1H080223009					
Safrole	ND<20	U	ug/l	STLC	A1H080223009					
Tetraethyl Dithiopyrophosphate	ND<50	U	ug/l	STLC	A1H080223009					
Thioanzin	ND<50	U	ug/l	STLC	A1H080223009					
alpha-Naphthylamine	ND<10	U	ug/l	STLC	A1H080223009					
alpha,alpha-Dimethylphenethylamine	ND<50	U	ug/l	STLC	A1H080223009					
beta-Naphthylamine	ND<10	U	ug/l	STLC	A1H080223009					
bis(2-Chloroethoxy)methane	ND<10	U	ug/l	STLC	A1H080223009					
bis(2-Ethylhexyl)phthalate	41	B	ug/l	STLC	A1H080223009	50.4	61.5	24.6	Pass	
m-Cresol	ND<10	U	ug/l	STLC	A1H080223009					
m-Dichlorobenzene	ND<10	U	ug/l	STLC	A1H080223009					
m-Dinitrobenzene	ND<10	U	ug/l	STLC	A1H080223009					
m-Nitroaniline	ND<50	U	ug/l	STLC	A1H080223009					
n-Methyl-n-nitrosoethylamine	ND<10	U	ug/l	STLC	A1H080223009					

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n-Nitrosodiethylamine	ND<10	U	ug/l	STLC	A1H080223009
n-Nitrosodimethylamine	ND<10	U	ug/l	STLC	A1H080223009
n-Nitrosodiphenylamine	ND<10	U	ug/l	STLC	A1H080223009
n-Nitrosodipropylamine	ND<10	U	ug/l	STLC	A1H080223009
n-Nitrosodi-n-butylamine	ND<10	U	ug/l	STLC	A1H080223009
n-Nitrosomorpholine	ND<10	U	ug/l	STLC	A1H080223009
n-Nitrosopiperidine	ND<10	U	ug/l	STLC	A1H080223009
n-Nitrosopyrrolidine	ND<10	U	ug/l	STLC	A1H080223009
o-Chlorophenol	ND<10	U	ug/l	STLC	A1H080223009
o-Cresol	ND<10	U	ug/l	STLC	A1H080223009
o-Dichlorobenzene	ND<10	U	ug/l	STLC	A1H080223009
o-Nitroaniline	ND<50	U	ug/l	STLC	A1H080223009
o-Nitrophenol	ND<10	U	ug/l	STLC	A1H080223009
o-Tolidine	ND<50	U	ug/l	STLC	A1H080223009
o-Toluidine	ND<20	U	ug/l	STLC	A1H080223009
p-Aminobiphenyl	ND<50	U	ug/l	STLC	A1H080223009
p-Chloroaniline	ND<10	U	ug/l	STLC	A1H080223009
p-Chloro-m-cresol	ND<10	U	ug/l	STLC	A1H080223009
p-Cresol	ND<10	U	ug/l	STLC	A1H080223009
p-Dichlorobenzene	ND<10	U	ug/l	STLC	A1H080223009
p-Dimethylamino azobenzene	ND<20	U	ug/l	STLC	A1H080223009
p-Nitroaniline	ND<50	U	ug/l	STLC	A1H080223009
p-Nitrophenol	ND<50	U	ug/l	STLC	A1H080223009
p-Phenylenediamine	ND<100	U	ug/l	STLC	A1H080223009
1,1-Dichloroethylene	ND<2.5	U	ug/l	STLC	A1H080223009
1,1-dichloroethane	ND<12	U	ug/l	STLC	A1H080223009
1,1,1-trichloroethane	ND<12	U	ug/l	STLC	A1H080223009
1,1,1,2-tetrachloroethane	ND<2.5	U	ug/l	STLC	A1H080223009
1,1,2-trichloroethane	ND<12	U	ug/l	STLC	A1H080223009
1,1,2-trichloro-1,2,2-trifluoroethane	ND<2.5	U	ug/l	STLC	A1H080223009
1,1,2,2-tetrachloroethane	ND<1.2	U	ug/l	STLC	A1H080223009
1,2-dibromo-3-chloropropane	ND<12	U	ug/l	STLC	A1H080223009
1,2-dichloroethane	ND<2.5	U	ug/l	STLC	A1H080223009
1,2,3-Trichloropropane	ND<12	U	ug/l	STLC	A1H080223009
1,3-Dichloropropene	ND<1.2	U	ug/l	STLC	A1H080223009

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RESULTS OF PERFORMANCE SAMPLE EVALUATION
P&W East Hartford: Step 4 Investigation - Performance Evaluation Samples

2-Butanone	ND<250	U	ug/l	STLC	A1H080223009				
2-hexanone	ND<120	U	ug/l	STLC	A1H080223009				
3-Chloropropylene	ND<250	U	ug/l	STLC	A1H080223009				
Acetone	ND<250	U	ug/l	STLC	A1H080223009				
Acetonitrile	ND<250	U	ug/l	STLC	A1H080223009				
Acrolein	ND<12	U	ug/l	STLC	A1H080223009				
Acrylonitrile	ND<3.8	U	ug/l	STLC	A1H080223009				
Benzene	4.0		ug/l	STLC	A1H080223009	4.94	6.15	3.82	Pass
Bromodichloromethane	ND<12	U	ug/l	STLC	A1H080223009				
Bromoform	ND<10	U	ug/l	STLC	A1H080223009				
Bromomethane	ND<25	U	ug/l	STLC	A1H080223009				
Carbon Disulfide	ND<12	U	ug/l	STLC	A1H080223009				
Carbon Tetrachloride	ND<12	U	ug/l	STLC	A1H080223009				
Chlorobenzene	ND<12	U	ug/l	STLC	A1H080223009				
Chloroethane	ND<5.0	U	ug/l	STLC	A1H080223009				
Chloroform	ND<2.5	U	ug/l	STLC	A1H080223009				
Chloromethane	ND<25	U	ug/l	STLC	A1H080223009				
Dibromochloromethane	ND<1.2	U	ug/l	STLC	A1H080223009				
Dibromomethane	ND<12	U	ug/l	STLC	A1H080223009				
Dichlorodifluoromethane	ND<12	U	ug/l	STLC	A1H080223009				
Dioxane	ND<380	U	ug/l	STLC	A1H080223009				
Ethyl Benzene	55		ug/l	STLC	A1H080223009	73.9	86.4	55.3	FAIL
Ethylene Dibromide	ND<1.2	U	ug/l	STLC	A1H080223009				
Ethylmethacrylate	ND<12	U	ug/l	STLC	A1H080223009				
Fluorotrichloromethane	ND<12	U	ug/l	STLC	A1H080223009				
Iodomethane	ND<12	U	ug/l	STLC	A1H080223009				
Isobutyl Alcohol	ND<120	U	ug/l	STLC	A1H080223009				
Methacrylonitrile	ND<12	U	ug/l	STLC	A1H080223009				
Methyl Isobutyl Ketone	ND<12	U	ug/l	STLC	A1H080223009				
Methyl Methacrylate	ND<12	U	ug/l	STLC	A1H080223009				
Methylene Chloride	ND<12	U	ug/l	STLC	A1H080223009				
Methyl-tert-butyl Ether	ND<12	U	ug/l	STLC	A1H080223009				
Propionitrile	ND<12	U	ug/l	STLC	A1H080223009				
Propylene Dichloride	ND<12	U	ug/l	STLC	A1H080223009				
Styrene	ND<12	U	ug/l	STLC	A1H080223009				

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Tetrachloroethylene	ND<12	U	ug/l	STLC	A1H080223009				
Toluene	81		ug/l	STLC	A1H080223009	99.2	120	76.4	Pass
Trichloroethylene	ND<12	U	ug/l	STLC	A1H080223009				
Vinyl Acetate	ND<12	U	ug/l	STLC	A1H080223009				
Vinyl Chloride	ND<5.0	U	ug/l	STLC	A1H080223009				
Xylenes	ND<12	U	ug/l	STLC	A1H080223009				
beta-Chloroprene	ND<12	U	ug/l	STLC	A1H080223009				
cis-1,2-dichloroethylene	ND<12	U	ug/l	STLC	A1H080223009				
trans-1,2-Dichloroethylene	ND<12	U	ug/l	STLC	A1H080223009				
trans-1,4-Dichloro-2-butylene	ND<12	U	ug/l	STLC	A1H080223009				

Sample Date 08/08/20
Sample Identifier 2000957 15:00 **Performance Evaluation - Water** **Jason Miller**

Chemical Name	Concentration		Units	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
PCB 1016	ND<0.50	U	ug/l	STLC	A1H090289007				
PCB 1221	ND<0.50	U	ug/l	STLC	A1H090289007				
PCB 1232	ND<0.50	U	ug/l	STLC	A1H090289007				
PCB 1242	ND<0.50	U	ug/l	STLC	A1H090289007				
PCB 1248	0.74		ug/l	STLC	A1H090289007	0.796	1.03	0.425	Pass
PCB 1254	ND<0.50	U	ug/l	STLC	A1H090289007				
PCB 1260	ND<0.50	U	ug/l	STLC	A1H090289007				

Sample Identifier 2001001 15:00 Performance Evaluation - Water Jason Miller

Chemical Name	Concentration		Units	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
Arsenic	0.192		mg/L	STLC	A1H090289002	0.200	0.236	0.150	Pass
Arsenic (Unfiltered)	0.179		mg/L	STLC	A1H090289003	0.200	0.236	0.150	Pass
Barium	ND<0.2	U	mg/L	STLC	A1H090289002				
Barium (Unfiltered)	ND<0.2	U	mg/L	STLC	A1H090289003				
Beryllium	ND<0.0050	U	mg/L	STLC	A1H090289002				
Beryllium (Unfiltered)	ND<0.0050	U	mg/L	STLC	A1H090289003				
Cadmium	ND<0.0050	U	mg/L	STLC	A1H090289002				
Cadmium (Unfiltered)	ND<0.0050	U	mg/L	STLC	A1H090289003				
Chromium	ND<0.0050	U	mg/L	STLC	A1H090289002				
Chromium (Unfiltered)	ND<0.0050	U	mg/L	STLC	A1H090289003				

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Copper	ND<0.0250	U	mg/L	STLC	A1H090289002				
Copper (Unfiltered)	ND<0.0250	U	mg/L	STLC	A1H090289003				
Lead	0.506		mg/L	STLC	A1H090289002	0.500	0.590	0.410	Pass
Lead (Unfiltered)	0.466		mg/L	STLC	A1H090289003	0.500	0.590	0.410	Pass
Mercury	ND<0.00020		mg/L	STLC	A1H090289002				
Mercury (Unfiltered)	ND<0.00020		mg/L	STLC	A1H090289003				
Nickel	ND<0.0400	U	mg/L	STLC	A1H090289002				
Nickel (Unfiltered)	ND<0.0400	U	mg/L	STLC	A1H090289003				
Selenium	ND<0.0050	U	mg/L	STLC	A1H090289002				
Selenium (Unfiltered)	ND<0.0050	U	mg/L	STLC	A1H090289003				
Silver	ND<0.0050	U	mg/L	STLC	A1H090289002				
Silver (Unfiltered)	ND<0.0050	U	mg/L	STLC	A1H090289003				
Zinc	ND<0.0200	U	mg/L	STLC	A1H090289002				
Zinc (Unfiltered)	ND<0.0200	U	mg/L	STLC	A1H090289003				
Cyanide (Total)	0.39		mg/l	STLC	A1H090289002	0.421	0.535	0.307	Pass
TPH	1		mg/l	STLC	A1H090289002	0.840	1.05	0.504	Pass
1,2,4-trichlorobenzene	ND<10	U	ug/l	STLC	A1H090289002				
1,2,4,5-tetrachlorobenzene	ND<10	U	ug/l	STLC	A1H090289002				
1,3,5-trinitrobenzene	ND<50	U	ug/l	STLC	A1H090289002				
1,4-naphthoquinone	ND<50	U	ug/l	STLC	A1H090289002				
2-Picoline	ND<20	U	ug/l	STLC	A1H090289002				
2-acetylaminofluorene	ND<100	U	ug/l	STLC	A1H090289002				
2-chloronaphthalene	ND<10	U	ug/l	STLC	A1H090289002				
2-methylnaphthalene	ND<10	U	ug/l	STLC	A1H090289002				
2,2'-Oxybis(2-Chloropropane)	ND<10	U	ug/l	STLC	A1H090289002				
2,3,4,6-tetrachlorophenol	ND<50	U	ug/l	STLC	A1H090289002				
2,4-Xylenol	ND<10	U	ug/l	STLC	A1H090289002				
2,4-dichlorophenol	ND<10	U	ug/l	STLC	A1H090289002				
2,4-dinitrophenol	ND<50	U	ug/l	STLC	A1H090289002				
2,4-dinitrotoluene	ND<10	U	ug/l	STLC	A1H090289002				
2,4,5-trichlorophenol	ND<10	U	ug/l	STLC	A1H090289002				
2,4,6-trichlorophenol	ND<10	U	ug/l	STLC	A1H090289002				
2,6-dinitrotoluene	ND<10	U	ug/l	STLC	A1H090289002				
3-Methylchloanthrene	ND<20	U	ug/l	STLC	A1H090289002				
3,3'-dichlorobenzidine	ND<50	U	ug/l	STLC	A1H090289002				

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4-Nitroquinoline, 1-oxide	ND<100	U	ug/l	STLC	A1H090289002					
4-bromophenyl Phenyl Ether	ND<10	U	ug/l	STLC	A1H090289002					
4-chlorophenyl Phenyl Ether	ND<10	U	ug/l	STLC	A1H090289002					
5-nitro-o-toluidine	ND<20	U	ug/l	STLC	A1H090289002					
7,12-Dimethylbenz[a]anthracene	ND<20	U	ug/l	STLC	A1H090289002					
Acenaphthylene	ND<10	U	ug/l	STLC	A1H090289002					
Acenapthalene	ND<10	U	ug/l	STLC	A1H090289002					
Acetophenone	ND<10	U	ug/l	STLC	A1H090289002					
Aniline	ND<10	U	ug/l	STLC	A1H090289002					
Anthracene	ND<10	U	ug/l	STLC	A1H090289002					
Aramite	ND<20	U	ug/l	STLC	A1H090289002					
Benzo[a]anthracene	ND<10	U	ug/l	STLC	A1H090289002					
Benzo[a]pyrene	6.6	J	ug/l	STLC	A1H090289002	9.85	12.5	4.68	Pass	
Benzo[b]fluoranthene	6.7	J	ug/l	STLC	A1H090289002	9.86	12.0	3.98	Pass	
Benzo[ghi]perylene	ND<10	U	ug/l	STLC	A1H090289002					
Benzo[k]fluoranthene	ND<10	U	ug/l	STLC	A1H090289002					
Benzyl Alcohol	ND<10	U	ug/l	STLC	A1H090289002					
Butyl Benzyl Phthalate	ND<10	U	ug/l	STLC	A1H090289002					
Carbazole	ND<10	U	ug/l	STLC	A1H090289002					
Chrysene	ND<10	U	ug/l	STLC	A1H090289002					
Dibenzofuran	ND<10	U	ug/l	STLC	A1H090289002					
Dibenz(a,h)anthracene	ND<10	U	ug/l	STLC	A1H090289002					
Dichloroethyl Ether	ND<10	U	ug/l	STLC	A1H090289002					
Diethyl Phthalate	ND<10	U	ug/l	STLC	A1H090289002					
Dimethoate	ND<20	U	ug/l	STLC	A1H090289002					
Dimethyl Phthalate	ND<10	U	ug/l	STLC	A1H090289002					
Dinitro-o-cresol	ND<50	U	ug/l	STLC	A1H090289002					
Dinoseb	ND<20	U	ug/l	STLC	A1H090289002					
Diphenylamine	ND<10	U	ug/l	STLC	A1H090289002					
Disulfoton	ND<50	U	ug/l	STLC	A1H090289002					
Di-n-butyl Phthalate	ND<10	U	ug/l	STLC	A1H090289002					
Di-n-octyl Phthalate	ND<10	U	ug/l	STLC	A1H090289002					
Ethylmethanesulfonate	ND<10	U	ug/l	STLC	A1H090289002					
Famphur	ND<100	U	ug/l	STLC	A1H090289002					
Fluoranthene	ND<10	U	ug/l	STLC	A1H090289002					

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Fluorene	ND<10	U	ug/l	STLC	A1H090289002					
Hexachlorobenzene	ND<10	U	ug/l	STLC	A1H090289002					
Hexachlorobutadiene	ND<10	U	ug/l	STLC	A1H090289002					
Hexachlorocyclopentadiene	ND<50	U	ug/l	STLC	A1H090289002					
Hexachloroethane	ND<10	U	ug/l	STLC	A1H090289002					
Hexachloropropylene	ND<100	U	ug/l	STLC	A1H090289002					
Indeno(1,2,3-cd)pyrene	ND<10	U	ug/l	STLC	A1H090289002					
Isophorone	ND<10	U	ug/l	STLC	A1H090289002					
Isosafrole	ND<20	U	ug/l	STLC	A1H090289002					
Methapyrilene	ND<50	U	ug/l	STLC	A1H090289002					
Methylmethanesulfonate	ND<10	U	ug/l	STLC	A1H090289002					
Naphthalene	ND<10	U	ug/l	STLC	A1H090289002					
Nitrobenzene	ND<10	U	ug/l	STLC	A1H090289002					
O,O,O-Triethyl phosphorothioa	ND<50	U	ug/l	STLC	A1H090289002					
Pentachlorobenzene	ND<10	U	ug/l	STLC	A1H090289002					
Pentachloroethane	ND<50	U	ug/l	STLC	A1H090289002					
Pentachloronitrobenzene	ND<50	U	ug/l	STLC	A1H090289002					
Pentachlorophenol	ND<10	U	ug/l	STLC	A1H090289002					
Phenacetin	ND<20	U	ug/l	STLC	A1H090289002					
Phenanthrene	3.7	J	ug/l	STLC	A1H090289002	4.88	5.62	2.64	Pass	
Phenol	ND<10	U	ug/l	STLC	A1H090289002					
Phorate	ND<50	U	ug/l	STLC	A1H090289002					
Pronamide	ND<20	U	ug/l	STLC	A1H090289002					
Pyrene	ND<10	U	ug/l	STLC	A1H090289002					
Pyridine	ND<20	U	ug/l	STLC	A1H090289002					
Safrole	ND<20	U	ug/l	STLC	A1H090289002					
Tetraethyl Dithiopyrophosphate	ND<50	U	ug/l	STLC	A1H090289002					
Thioanzin	ND<50	U	ug/l	STLC	A1H090289002					
alpha-Naphthylamine	ND<10	U	ug/l	STLC	A1H090289002					
alpha,alpha-Dimethylphenethylamine	ND<50	U	ug/l	STLC	A1H090289002					
beta-Naphthylamine	ND<10	U	ug/l	STLC	A1H090289002					
bis(2-Chloroethoxy)methane	ND<10	U	ug/l	STLC	A1H090289002					
bis(2-Ethylhexyl)phthalate	ND<10	U	ug/l	STLC	A1H090289002					
m-Cresol	ND<10	U	ug/l	STLC	A1H090289002					
m-Dichlorobenzene	ND<10	U	ug/l	STLC	A1H090289002					

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m-Dinitrobenzene	ND<10	U	ug/l	STLC	A1H090289002				
m-Nitroaniline	ND<50	U	ug/l	STLC	A1H090289002				
n-Methyl-n-nitrosoethylamine	ND<10	U	ug/l	STLC	A1H090289002				
n-Nitrosodiethylamine	ND<10	U	ug/l	STLC	A1H090289002				
n-Nitrosodimethylamine	ND<10	U	ug/l	STLC	A1H090289002				
n-Nitrosodiphenylamine	ND<10	U	ug/l	STLC	A1H090289002				
n-Nitrosodipropylamine	ND<10	U	ug/l	STLC	A1H090289002				
n-Nitrosodi-n-butylamine	ND<10	U	ug/l	STLC	A1H090289002				
n-Nitrosomorpholine	ND<10	U	ug/l	STLC	A1H090289002				
n-Nitrosopiperidine	ND<10	U	ug/l	STLC	A1H090289002				
n-Nitrosopyrrolidine	ND<10	U	ug/l	STLC	A1H090289002				
o-Chlorophenol	ND<10	U	ug/l	STLC	A1H090289002				
o-Cresol	ND<10	U	ug/l	STLC	A1H090289002				
o-Dichlorobenzene	ND<10	U	ug/l	STLC	A1H090289002				
o-Nitroaniline	ND<50	U	ug/l	STLC	A1H090289002				
o-Nitrophenol	ND<10	U	ug/l	STLC	A1H090289002				
o-Tolidine	ND<50	U	ug/l	STLC	A1H090289002				
o-Toluidine	ND<20	U	ug/l	STLC	A1H090289002				
p-Aminobiphenyl	ND<50	U	ug/l	STLC	A1H090289002				
p-Chloroaniline	ND<10	U	ug/l	STLC	A1H090289002				
p-Chloro-m-cresol	ND<10	U	ug/l	STLC	A1H090289002				
p-Cresol	ND<10	U	ug/l	STLC	A1H090289002				
p-Dichlorobenzene	ND<10	U	ug/l	STLC	A1H090289002				
p-Dimethylamino azobenzene	ND<20	U	ug/l	STLC	A1H090289002				
p-Nitroaniline	ND<50	U	ug/l	STLC	A1H090289002				
p-Nitrophenol	ND<50	U	ug/l	STLC	A1H090289002				
p-Phenylenediamine	ND<100	U	ug/l	STLC	A1H090289002				
1,1-Dichloroethylene	ND<3.3	U	ug/l	STLC	A1H090289002				
1,1-dichloroethane	ND<17	U	ug/l	STLC	A1H090289002				
1,1,1-trichloroethane	27		ug/l	STLC	A1H090289002	24.8	29.3	17.7	Pass
1,1,1,2-tetrachloroethane	ND<3.3	U	ug/l	STLC	A1H090289002				
1,1,2-trichloroethane	ND<17	U	ug/l	STLC	A1H090289002				
1,1,2-trichloro-1,2,2-trifluoroethane	ND<3.3	U	ug/l	STLC	A1H090289002				
1,1,2,2-tetrachloroethane	ND<1.7	U	ug/l	STLC	A1H090289002				
1,2-dibromo-3-chloropropane	ND<17	U	ug/l	STLC	A1H090289002				

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RESULTS OF PERFORMANCE SAMPLE EVALUATION
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1,2-dichloroethane	ND<3.3	U	ug/l	STLC	A1H090289002					
1,2,3-Trichloropropane	ND<17	U	ug/l	STLC	A1H090289002					
1,3-Dichloropropene	ND<1.7	U	ug/l	STLC	A1H090289002					
2-Butanone	ND<330	U	ug/l	STLC	A1H090289002					
2-hexanone	ND<170	U	ug/l	STLC	A1H090289002					
3-Chloropropylene	ND<330	U	ug/l	STLC	A1H090289002					
Acetone	ND<330	U	ug/l	STLC	A1H090289002					
Acetonitrile	ND<330	U	ug/l	STLC	A1H090289002					
Acrolein	ND<17	U	ug/l	STLC	A1H090289002					
Acrylonitrile	ND<5.0	U	ug/l	STLC	A1H090289002					
Benzene	ND<3.3	U	ug/l	STLC	A1H090289002					
Bromodichloromethane	ND<17	U	ug/l	STLC	A1H090289002					
Bromoform	ND<13	U	ug/l	STLC	A1H090289002					
Bromomethane	ND<33	U	ug/l	STLC	A1H090289002					
Carbon Disulfide	ND<17	U	ug/l	STLC	A1H090289002					
Carbon Tetrachloride	ND<17	U	ug/l	STLC	A1H090289002					
Chlorobenzene	ND<17	U	ug/l	STLC	A1H090289002					
Chloroethane	ND<6.7	U	ug/l	STLC	A1H090289002					
Chloroform	ND<3.3	U	ug/l	STLC	A1H090289002					
Chloromethane	ND<33	U	ug/l	STLC	A1H090289002					
Dibromochloromethane	ND<1.7	U	ug/l	STLC	A1H090289002					
Dibromomethane	ND<17	U	ug/l	STLC	A1H090289002					
Dichlorodifluoromethane	ND<17	U	ug/l	STLC	A1H090289002					
Dioxane	ND<500	U	ug/l	STLC	A1H090289002					
Ethyl Benzene	ND<17	U	ug/l	STLC	A1H090289002					
Ethylene Dibromide	ND<1.7	U	ug/l	STLC	A1H090289002					
Ethylmethacrylate	ND<17	U	ug/l	STLC	A1H090289002					
Fluorotrichloromethane	ND<17	U	ug/l	STLC	A1H090289002					
Iodomethane	ND<17	U	ug/l	STLC	A1H090289002					
Isobutyl Alcohol	ND<170	U	ug/l	STLC	A1H090289002					
Methacrylonitrile	ND<17	U	ug/l	STLC	A1H090289002					
Methyl Isobutyl Ketone	ND<17	U	ug/l	STLC	A1H090289002					
Methyl Methacrylate	ND<17	U	ug/l	STLC	A1H090289002					
Methylene Chloride	22		ug/l	STLC	A1H090289002	24.8	31.7	17.1	Pass	
Methyl-tert-butyl Ether	ND<17	U	ug/l	STLC	A1H090289002					

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Propionitrile	ND<17	U	ug/l	STLC	A1H090289002				
Propylene Dichloride	ND<17	U	ug/l	STLC	A1H090289002				
Styrene	ND<17	U	ug/l	STLC	A1H090289002				
Tetrachloroethylene	91		ug/l	STLC	A1H090289002	100	118	66.4	Pass
Toluene	ND<17	U	ug/l	STLC	A1H090289002				
Trichloroethylene	ND<17	U	ug/l	STLC	A1H090289002				
Vinyl Acetate	ND<17	U	ug/l	STLC	A1H090289002				
Vinyl Chloride	ND<6.7	U	ug/l	STLC	A1H090289002				
Xylenes	ND<17	U	ug/l	STLC	A1H090289002				
beta-Chloroprene	ND<17	U	ug/l	STLC	A1H090289002				
cis-1,2-dichloroethylene	ND<17	U	ug/l	STLC	A1H090289002				
trans-1,2-Dichloroethylene	ND<17	U	ug/l	STLC	A1H090289002				
trans-1,4-Dichloro-2-butylene	ND<17	U	ug/l	STLC	A1H090289002				

RESULTS OF PERFORMANCE SAMPLE EVALUATION

P&W East Hartford: Step 4 Investivation - Performance Evaluation

Loureiro Engineering Associates, Inc.

Location Identifier: performance
Sample Identifier 2010165 12/13/2001 16:50 Performance Evaluation - Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
1,1,1,2-Tetrachloroethane	ND<3.3		3.3	0.37	ug/l	3.33	:AN	A1L150107006				
1,1,1-Trichloroethane	20		17	0.50	ug/l	3.33	:AN	A1L150107006	24.8	29.3	17.7	Pass
1,1,2,2-Tetrachloroethane	ND<1.7		1.7	0.83	ug/l	3.33	:AN	A1L150107006				
1,1,2-Trichloro-1,2,2-trifluoroethane	ND<3.3		3.3	1.1	ug/l	3.33	:AN	A1L150107006				
1,1,2-Trichloroethane	ND<17		17	1.0	ug/l	3.33	:AN	A1L150107006				
1,1-Dichloroethane	ND<17		17	0.53	ug/l	3.33	:AN	A1L150107006				
1,1-Dichloroethene	ND<3.3		3.3	0.80	ug/l	3.33	:AN	A1L150107006				
1,2,3-Trichloropropane	ND<17		17	0.63	ug/l	3.33	:AN	A1L150107006				
1,2,4,5-Tetrachlorobenzene	ND<10		10	2.4	ug/l	1	:AN	A1L150107006				
1,2,4-Trichlorobenzene	ND<10		10	0.65	ug/l	1	:AN	A1L150107006				
1,2-Dibromo-3-chloropropane	ND<17		17	2.1	ug/l	3.33	:AN	A1L150107006				
1,2-Dibromoethane (Ethylene Dibromide)	ND<1.7		1.7	0.73	ug/l	3.33	:AN	A1L150107006				
1,2-Dichlorobenzene	ND<10		10	0.81	ug/l	1	:AN	A1L150107006				
1,2-Dichloroethane	ND<3.3		3.3	0.70	ug/l	3.33	:AN	A1L150107006				
1,2-Dichloropropane	ND<17		17	0.57	ug/l	3.33	:AN	A1L150107006				
1,3,5-Trinitrobenzene	ND<50		50	0.87	ug/l	1	:AN	A1L150107006				
1,3-Dichlorobenzene	ND<10		10	0.83	ug/l	1	:AN	A1L150107006				
1,3-Dinitrobenzene	ND<10		10	1.1	ug/l	1	:AN	A1L150107006				
1,4-Dichlorobenzene	ND<10		10	0.77	ug/l	1	:AN	A1L150107006				
1,4-Dioxane (p-Dioxane)	ND<500		500	60	ug/l	3.33	:AN	A1L150107006				
1,4-Naphthoquinone	ND<50		50	5.1	ug/l	1	:AN	A1L150107006				
1-Naphthylamine	ND<10		10	1.3	ug/l	1	:AN	A1L150107006				
2,2'-Oxybis(2-chloropropane)	ND<10		10	0.78	ug/l	1	:AN	A1L150107006				
2,3,4,6-Tetrachlorophenol	ND<50		50	3.5	ug/l	1	:AN	A1L150107006				
2,4,5-Trichlorophenol	ND<10		10	1.2	ug/l	1	:AN	A1L150107006				
2,4,6-Trichlorophenol	ND<10		10	1.7	ug/l	1	:AN	A1L150107006				
2,4-Dichlorophenol	ND<10		10	0.85	ug/l	1	:AN	A1L150107006				
2,4-Dimethylphenol	ND<10		10	0.85	ug/l	1	:AN	A1L150107006				
2,4-Dinitrophenol	ND<50		50	3.0	ug/l	1	:AN	A1L150107006				
2,4-Dinitrotoluene	ND<10		10	0.79	ug/l	1	:AN	A1L150107006				
2,6-Dinitrotoluene	ND<10		10	0.57	ug/l	1	:AN	A1L150107006				
2-Acetylaminofluorene	ND<100		100	5.9	ug/l	1	:AN	A1L150107006				
2-Aminonaphthalene (beta Naphthylamine)	ND<10		10	0.97	ug/l	1	:AN	A1L150107006				
2-Chloro-1,3-butadiene	ND<17		17	0.70	ug/l	3.33	:AN	A1L150107006				
2-Chloronaphthalene	ND<10		10	0.85	ug/l	1	:AN	A1L150107006				

RESULTS OF PERFORMANCE SAMPLE EVALUATION

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Loureiro Engineering Associates, Inc.

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2-Chlorophenol	ND<10	10	1.0	ug/l	1	:AN	A1L150107006
2-Hexanone	ND<170	170	1.5	ug/l	3.33	:AN	A1L150107006
2-Methylnaphthalene	ND<10	10	0.64	ug/l	1	:AN	A1L150107006
2-Methylphenol (o-Cresol)	ND<10	10	1.1	ug/l	1	:AN	A1L150107006
2-Nitroaniline	ND<50	50	0.70	ug/l	1	:AN	A1L150107006
2-Nitrophenol	ND<10	10	2.1	ug/l	1	:AN	A1L150107006
2-Picoline (alpha-Picoline)	ND<20	20	0.80	ug/l	1	:AN	A1L150107006
3,3'-Dichlorobenzidine	ND<50	50	0.93	ug/l	1	:AN	A1L150107006
3,3'-Dimethylbenzidine	ND<50	50	5.3	ug/l	1	:AN	A1L150107006
3-Methylcholanthrene	ND<20	20	4.0	ug/l	1	:AN	A1L150107006
3-Methylphenol	ND<10	10	2.9	ug/l	1	:AN	A1L150107006
3-Nitroaniline	ND<50	50	0.71	ug/l	1	:AN	A1L150107006
4,6-Dinitro-2-methylphenol	ND<50	50	1.3	ug/l	1	:AN	A1L150107006
4-Aminobiphenyl (4-biphenylamine)	ND<50	50	1.0	ug/l	1	:AN	A1L150107006
4-Bromophenyl Phenyl Ether	ND<10	10	0.88	ug/l	1	:AN	A1L150107006
4-Chloro-3-methylphenol	ND<10	10	0.99	ug/l	1	:AN	A1L150107006
4-Chloroaniline	ND<10	10	0.61	ug/l	1	:AN	A1L150107006
4-Chlorophenyl Phenyl Ether	ND<10	10	0.79	ug/l	1	:AN	A1L150107006
4-Methylphenol (p-Cresol)	ND<10	10	1.3	ug/l	1	:AN	A1L150107006
4-Nitroaniline	ND<50	50	1.3	ug/l	1	:AN	A1L150107006
4-Nitrophenol	ND<50	50	1.9	ug/l	1	:AN	A1L150107006
4-Nitroquinoline-n-oxide	ND<100	100	2.9	ug/l	1	:AN	A1L150107006
5-Nitro-o-toluidine	ND<20	20	1.3	ug/l	1	:AN	A1L150107006
7,12-Dimethylbenz(a)anthracene	ND<20	20	2.0	ug/l	1	:AN	A1L150107006
Acenaphthene	ND<10	10	0.80	ug/l	1	:AN	A1L150107006
Acenaphthylene	ND<10	10	0.71	ug/l	1	:AN	A1L150107006
Acetone	ND<330	330	1.7	ug/l	3.33	:AN	A1L150107006
Acetonitrile	ND<330	330	6.0	ug/l	3.33	:AN	A1L150107006
Acetophenone	ND<10	10	2.6	ug/l	1	:AN	A1L150107006
Acrolein	ND<17	17	11	ug/l	3.33	:AN	A1L150107006
Acrylonitrile	ND<5.0	5.0	3.7	ug/l	3.33	:AN	A1L150107006
Allyl Chloride (3-Chloropropene)	ND<330	330	0.83	ug/l	3.33	:AN	A1L150107006
Aniline (phenylamine, Aminobenzene)	ND<10	10	1.2	ug/l	1	:AN	A1L150107006
Anthracene	ND<10	10	0.68	ug/l	1	:AN	A1L150107006
Aramite (total)	ND<20	20	0.81	ug/l	1	:AN	A1L150107006
Arsenic	ND<0.0040	0.0040	0.0039	mg/L	1	:AN	A1L150107006
Arsenic (Unfiltered)	ND<0.0040	0.0040	0.0039	mg/L	1	:AN	A1L150107007
Barium	ND<0.2	0.2	0.0030	mg/L	1	:AN	A1L150107006
Barium (Unfiltered)	ND<0.2	0.2	0.0030	mg/L	1	:AN	A1L150107007
Benzene	ND<3.3	3.3	0.53	ug/l	3.33	:AN	A1L150107006

RESULTS OF PERFORMANCE SAMPLE EVALUATION

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Benzo(a)anthracene	ND<10		10	0.70	ug/l	1	:AN	A1L150107006				
Benzo(a)pyrene	ND<10		10	0.73	ug/l	1	:AN	A1L150107006				
Benzo(b)fluoranthene	ND<10		10	0.94	ug/l	1	:AN	A1L150107006				
Benzo(g,h,i)perylene	ND<10		10	0.85	ug/l	1	:AN	A1L150107006				
Benzo(k)fluoranthene	ND<10		10	0.84	ug/l	1	:AN	A1L150107006				
Benzyl Alcohol	ND<10		10	1.1	ug/l	1	:AN	A1L150107006				
Benzyl Butyl Phthalate	ND<10		10	0.88	ug/l	1	:AN	A1L150107006				
Beryllium	0.00056	B	0.0050	0.00054	mg/L	1	:AN	A1L150107006				FALSE POSITIVE
Beryllium (Unfiltered)	ND<0.0050		0.0050	0.00054	mg/L	1	:AN	A1L150107007				
Bis(2-chloroethoxy) Methane	ND<10		10	0.87	ug/l	1	:AN	A1L150107006				
Bromodichloromethane	ND<17		17	0.57	ug/l	3.33	:AN	A1L150107006				
Bromoform	ND<13		13	0.60	ug/l	3.33	:AN	A1L150107006				
Bromomethane	ND<33		33	0.67	ug/l	3.33	:AN	A1L150107006				
Cadmium	ND<0.0050		0.0050	0.00028	mg/L	1	:AN	A1L150107006				
Cadmium (Unfiltered)	ND<0.0050		0.0050	0.00028	mg/L	1	:AN	A1L150107007				
Carbazole	ND<10		10	0.82	ug/l	1	:AN	A1L150107006				
Carbon Disulfide	ND<17		17	0.67	ug/l	3.33	:AN	A1L150107006				
Carbon Tetrachloride	ND<17		17	0.40	ug/l	3.33	:AN	A1L150107006				
Chlorobenzene	ND<17		17	0.47	ug/l	3.33	:AN	A1L150107006				
Chloroethane	ND<6.7		6.7	0.87	ug/l	3.33	:AN	A1L150107006				
Chloroform	ND<3.3		3.3	0.47	ug/l	3.33	:AN	A1L150107006				
Chloromethane	ND<33		33	0.43	ug/l	3.33	:AN	A1L150107006				
Chromium, Total	0.361		0.0050	0.0014	mg/L	1	:AN	A1L150107006	0.400	0.472	0.328	Pass
Chromium, Total (Unfiltered)	0.37		0.0050	0.0014	mg/L	1	:AN	A1L150107007	0.400	0.472	0.328	Pass
Chrysene	ND<10		10	0.75	ug/l	1	:AN	A1L150107006				
Copper	ND<0.0250		0.0250	0.0042	mg/L	1	:AN	A1L150107006				
Copper (Unfiltered)	ND<0.0250		0.0250	0.0042	mg/L	1	:AN	A1L150107007				
Cyanide (Total)	0.20		0.010	0.0017	mg/L	1	:AN	A1L150107006	0.214	0.276	0.152	Pass
Di-n-butyl Phthalate	ND<10		10	0.67	ug/l	1	:AN	A1L150107006				
Di-n-octylphthalate	ND<10		10	1.1	ug/l	1	:AN	A1L150107006				
Dibenz(a,h)anthracene	ND<10		10	0.79	ug/l	1	:AN	A1L150107006				
Dibenzofuran	ND<10		10	1.1	ug/l	1	:AN	A1L150107006				
Dibromochloromethane	ND<1.7		1.7	0.87	ug/l	3.33	:AN	A1L150107006				
Dibromomethane	ND<17		17	0.57	ug/l	3.33	:AN	A1L150107006				
Dichlorodifluoromethane	ND<17		17	0.87	ug/l	3.33	:AN	A1L150107006				
Diethyl Phthalate	ND<10		10	0.65	ug/l	1	:AN	A1L150107006				
Dimethoate	ND<20		20	4.0	ug/l	1	:AN	A1L150107006				
Dimethyl Phthalate	ND<10		10	0.76	ug/l	1	:AN	A1L150107006				
Dinoseb	ND<20		20	3.8	ug/l	1	:AN	A1L150107006				
Diphenylamine	ND<10		10	1.4	ug/l	1	:AN	A1L150107006				

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Disulfoton	ND<50	50	0.96	ug/l	1	:AN	A1L150107006				
Ethyl Methacrylate	ND<17	17	0.70	ug/l	3.33	:AN	A1L150107006				
Ethyl Methanesulfonate	ND<10	10	0.95	ug/l	1	:AN	A1L150107006				
Ethylbenzene	ND<17	17	0.40	ug/l	3.33	:AN	A1L150107006				
Famphur	ND<100	100	1.8	ug/l	1	:AN	A1L150107006				
Fluoranthene	ND<10	10	0.81	ug/l	1	:AN	A1L150107006				
Fluorene	ND<10	10	1.0	ug/l	1	:AN	A1L150107006				
Hexachlorobenzene	ND<10	10	0.74	ug/l	1	:AN	A1L150107006				
Hexachlorobutadiene	ND<10	10	0.73	ug/l	1	:AN	A1L150107006				
Hexachlorocyclopentadiene	ND<50	50	1.1	ug/l	1	:AN	A1L150107006				
Hexachloroethane	ND<10	10	0.74	ug/l	1	:AN	A1L150107006				
Hexachloropropene	ND<100	100	4.2	ug/l	1	:AN	A1L150107006				
Indeno(1,2,3-c,d)pyrene	ND<10	10	0.63	ug/l	1	:AN	A1L150107006				
Iodomethane (methyl Iodide)	ND<17	17	0.50	ug/l	3.33	:AN	A1L150107006				
Isobutanol	ND<170	170	18	ug/l	3.33	:AN	A1L150107006				
Isophorone	ND<10	10	0.63	ug/l	1	:AN	A1L150107006				
Isosafrole	ND<20	20	0.92	ug/l	1	:AN	A1L150107006				
Lead	ND<0.0030	0.0030	0.0025	mg/L	1	:AN	A1L150107006				
Lead (Unfiltered)	ND<0.0030	0.0030	0.0025	mg/L	1	:AN	A1L150107007				
Mercury	ND<0.00020	0.0002	(0.00006	mg/L	1	:AN	A1L150107006				
Mercury (Unfiltered)	ND<0.00020	0.0002	(0.00006	mg/L	1	:AN	A1L150107007				
Methapyrilene	ND<50	50	2.6	ug/l	1	:AN	A1L150107006				
Methyl Ethyl Ketone (2-Butanone)	ND<330	330	1.4	ug/l	3.33	:AN	A1L150107006				
Methyl Isobutyl Ketone (4-methyl-2-penta	ND<17	17	0.77	ug/l	3.33	:AN	A1L150107006				
Methyl Methacrylate	ND<17	17	1.1	ug/l	3.33	:AN	A1L150107006				
Methyl Methanesulfonate	ND<10	10	1.1	ug/l	1	:AN	A1L150107006				
Methylacrylonitrile	ND<17	17	0.60	ug/l	3.33	:AN	A1L150107006				
Methylene Chloride	20	17	1.1	ug/l	3.33	:AN	A1L150107006	24.8	31.7	17.1	Pass
Naphthalene	51	10	0.75	ug/l	1	:AN	A1L150107006	73.9	77.6	32.1	Pass
Nickel	ND<0.0400	0.0400	0.0022	mg/L	1	:AN	A1L150107006				
Nickel (Unfiltered)	ND<0.0400	0.0400	0.0022	mg/L	1	:AN	A1L150107007				
Nitrobenzene	ND<10	10	0.81	ug/l	1	:AN	A1L150107006				
Nitrosomethylethylamine	ND<10	10	1.1	ug/l	1	:AN	A1L150107006				
Pentachlorobenzene	ND<10	10	3.1	ug/l	1	:AN	A1L150107006				
Pentachloroethane	ND<50	50	1.1	ug/l	1	:AN	A1L150107006				
Pentachloronitrobenzene	ND<50	50	5.1	ug/l	1	:AN	A1L150107006				
Pentachlorophenol	ND<10	10	2.4	ug/l	1	:AN	A1L150107006				
Phenacetin	ND<20	20	0.87	ug/l	1	:AN	A1L150107006				
Phenanthrene	ND<10	10	0.82	ug/l	1	:AN	A1L150107006				
Phenol	ND<10	10	2.6	ug/l	1	:AN	A1L150107006				

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Phorate	ND<50	50	0.91	ug/l	1	:AN	A1L150107006				
Pronamide	ND<20	20	1.1	ug/l	1	:AN	A1L150107006				
Propane Nitrile (propionitrile)	ND<17	17	2.0	ug/l	3.33	:AN	A1L150107006				
Pyrene	74	10	1.1	ug/l	1	:AN	A1L150107006	125	148	67.9	Pass
Pyridine	ND<20	20	1.5	ug/l	1	:AN	A1L150107006				
Safrole	ND<20	20	1.2	ug/l	1	:AN	A1L150107006				
Selenium	ND<0.0050	0.0050	0.0045	mg/L	1	:AN	A1L150107006				
Selenium (Unfiltered)	ND<0.0050	0.0050	0.0045	mg/L	1	:AN	A1L150107007				
Silver	ND<0.0050	0.0050	0.0015	mg/L	1	:AN	A1L150107006				
Silver (Unfiltered)	ND<0.0050	0.0050	0.0015	mg/L	1	:AN	A1L150107007				
Styrene	ND<17	17	0.50	ug/l	3.33	:AN	A1L150107006				
Tetrachloroethylene (PCE)	77	17	0.77	ug/l	3.33	:AN	A1L150107006	100.	118	66.4	Pass
Thiodiphosphoric Acid Tetraethyl Ester	ND<50	50	2.9	ug/l	1	:AN	A1L150107006				
Toluene	ND<17	17	0.60	ug/l	3.33	:AN	A1L150107006				
Total 1,3-dichloropropene (cis and trans	ND<1.7	1.7	0.47	ug/l	3.33	:AN	A1L150107006				
Total Petroleum Hydrocarbons EPA 418.1	1.4	0.5	0.3	mg/L	1	:AN	A1L150107006	1.20	1.50	0.720	Pass
Trichloroethylene (TCE)	ND<17	17	0.47	ug/l	3.33	:AN	A1L150107006				
Trichlorofluoromethane	ND<17	17	0.93	ug/l	3.33	:AN	A1L150107006				
Vinyl Acetate	ND<17	17	0.87	ug/l	3.33	:AN	A1L150107006				
Vinyl Chloride	ND<6.7	6.7	0.50	ug/l	3.33	:AN	A1L150107006				
Xylenes	ND<17	17	1.1	ug/l	3.33	:AN	A1L150107006				
Zinc	0.481	0.0200	0.0120	mg/L	1	:AN	A1L150107006	0.500	0.590	0.410	Pass
Zinc (Unfiltered)	0.498	0.0200	0.0120	mg/L	1	:AN	A1L150107007	0.500	0.590	0.410	Pass
Zinophos	ND<50	50	0.99	ug/l	1	:AN	A1L150107006				
alpha,alpha-Dimethylphenethylamine	ND<50	50	3.1	ug/l	1	:AN	A1L150107006				
bis(2-chloroethyl) Ether (2-chloroethyl	ND<10	10	0.97	ug/l	1	:AN	A1L150107006				
bis(2-ethylhexyl) Phthalate	32	10	2.7	ug/l	1	:AN	A1L150107006	50.4	61.5	24.6	Pass
cis-1,2-Dichloroethylene	ND<17	17	0.73	ug/l	3.33	:AN	A1L150107006				
n-Nitroso-di-n-butylamine	ND<10	10	0.91	ug/l	1	:AN	A1L150107006				
n-Nitrosodi-n-propylamine	ND<10	10	0.67	ug/l	1	:AN	A1L150107006				
n-Nitrosodiethylamine	ND<10	10	0.87	ug/l	1	:AN	A1L150107006				
n-Nitrosodimethylamine	ND<10	10	0.79	ug/l	1	:AN	A1L150107006				
n-Nitrosodiphenylamine	ND<10	10	1.4	ug/l	1	:AN	A1L150107006				
n-Nitrosomorpholine	ND<10	10	3.5	ug/l	1	:AN	A1L150107006				
n-Nitrosopiperidine	ND<10	10	0.94	ug/l	1	:AN	A1L150107006				
n-Nitrosopyrrolidine	ND<10	10	0.84	ug/l	1	:AN	A1L150107006				
o,o,o-Triethyl Phosphorothioate	ND<50	50	0.98	ug/l	1	:AN	A1L150107006				
o-Toluidine	ND<20	20	0.98	ug/l	1	:AN	A1L150107006				
p-Dimethylaminoazobenzene	ND<20	20	3.6	ug/l	1	:AN	A1L150107006				
p-Phenylenediamine	ND<100	100	4.0	ug/l	1	:AN	A1L150107006				

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tert-Butyl Methyl Ether	ND<17	17	0.43	ug/l	3.33	:AN	A1L150107006				
trans-1,2-Dichloroethene	ND<17	17	0.50	ug/l	3.33	:AN	A1L150107006				
trans-1,4-Dichloro-2-butene	ND<17	17	0.67	ug/l	3.33	:AN	A1L150107006				
PCB-1016 (Arochlor 1016)	ND<0.50	0.50	0.018	ug/l	1	:AN	A1L150107008				
PCB-1221 (Arochlor 1221)	ND<0.50	0.50	0.094	ug/l	1	:AN	A1L150107008				
PCB-1232 (Arochlor 1232)	ND<0.50	0.50	0.16	ug/l	1	:AN	A1L150107008				
PCB-1242 (Arochlor 1242)	ND<0.50	0.50	0.30	ug/l	1	:AN	A1L150107008				
PCB-1248 (Arochlor 1248)	ND<0.50	0.50	0.22	ug/l	1	:AN	A1L150107008				
PCB-1254 (Arochlor 1254)	ND<0.50	0.50	0.096	ug/l	1	:AN	A1L150107008				
PCB-1260 (Arochlor 1260)	1.2	0.50	0.065	ug/l	1	:AN	A1L150107008	1.48	1.77	0.931	Pass

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Location Identifier: performance
Sample Identifier 2010165 12/13/2001 16:50 Performance Evaluation - Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
1,1,1,2-Tetrachloroethane	ND<3.3		3.3	0.37	ug/l	3.33	:AN	A1L150107006				
1,1,1-Trichloroethane	20		17	0.50	ug/l	3.33	:AN	A1L150107006	24.8	29.3	17.7	Pass
1,1,2,2-Tetrachloroethane	ND<1.7		1.7	0.83	ug/l	3.33	:AN	A1L150107006				
1,1,2-Trichloro-1,2,2-trifluoroethane	ND<3.3		3.3	1.1	ug/l	3.33	:AN	A1L150107006				
1,1,2-Trichloroethane	ND<17		17	1.0	ug/l	3.33	:AN	A1L150107006				
1,1-Dichloroethane	ND<17		17	0.53	ug/l	3.33	:AN	A1L150107006				
1,1-Dichloroethene	ND<3.3		3.3	0.80	ug/l	3.33	:AN	A1L150107006				
1,2,3-Trichloropropane	ND<17		17	0.63	ug/l	3.33	:AN	A1L150107006				
1,2,4,5-Tetrachlorobenzene	ND<10		10	2.4	ug/l	1	:AN	A1L150107006				
1,2,4-Trichlorobenzene	ND<10		10	0.65	ug/l	1	:AN	A1L150107006				
1,2-Dibromo-3-chloropropane	ND<17		17	2.1	ug/l	3.33	:AN	A1L150107006				
1,2-Dibromoethane (Ethylene Dibromide)	ND<1.7		1.7	0.73	ug/l	3.33	:AN	A1L150107006				
1,2-Dichlorobenzene	ND<10		10	0.81	ug/l	1	:AN	A1L150107006				
1,2-Dichloroethane	ND<3.3		3.3	0.70	ug/l	3.33	:AN	A1L150107006				
1,2-Dichloropropane	ND<17		17	0.57	ug/l	3.33	:AN	A1L150107006				
1,3,5-Trinitrobenzene	ND<50		50	0.87	ug/l	1	:AN	A1L150107006				
1,3-Dichlorobenzene	ND<10		10	0.83	ug/l	1	:AN	A1L150107006				
1,3-Dinitrobenzene	ND<10		10	1.1	ug/l	1	:AN	A1L150107006				
1,4-Dichlorobenzene	ND<10		10	0.77	ug/l	1	:AN	A1L150107006				
1,4-Dioxane (p-Dioxane)	ND<500		500	60	ug/l	3.33	:AN	A1L150107006				
1,4-Naphthoquinone	ND<50		50	5.1	ug/l	1	:AN	A1L150107006				
1-Naphthylamine	ND<10		10	1.3	ug/l	1	:AN	A1L150107006				
2,2'-Oxybis(2-chloropropane)	ND<10		10	0.78	ug/l	1	:AN	A1L150107006				
2,3,4,6-Tetrachlorophenol	ND<50		50	3.5	ug/l	1	:AN	A1L150107006				
2,4,5-Trichlorophenol	ND<10		10	1.2	ug/l	1	:AN	A1L150107006				
2,4,6-Trichlorophenol	ND<10		10	1.7	ug/l	1	:AN	A1L150107006				
2,4-Dichlorophenol	ND<10		10	0.85	ug/l	1	:AN	A1L150107006				
2,4-Dimethylphenol	ND<10		10	0.85	ug/l	1	:AN	A1L150107006				
2,4-Dinitrophenol	ND<50		50	3.0	ug/l	1	:AN	A1L150107006				
2,4-Dinitrotoluene	ND<10		10	0.79	ug/l	1	:AN	A1L150107006				
2,6-Dinitrotoluene	ND<10		10	0.57	ug/l	1	:AN	A1L150107006				
2-Acetylaminofluorene	ND<100		100	5.9	ug/l	1	:AN	A1L150107006				
2-Aminonaphthalene (beta Naphthylamine)	ND<10		10	0.97	ug/l	1	:AN	A1L150107006				
2-Chloro-1,3-butadiene	ND<17		17	0.70	ug/l	3.33	:AN	A1L150107006				
2-Chloronaphthalene	ND<10		10	0.85	ug/l	1	:AN	A1L150107006				

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2-Chlorophenol	ND<10	10	1.0	ug/l	1	:AN	A1L150107006
2-Hexanone	ND<170	170	1.5	ug/l	3.33	:AN	A1L150107006
2-Methylnaphthalene	ND<10	10	0.64	ug/l	1	:AN	A1L150107006
2-Methylphenol (o-Cresol)	ND<10	10	1.1	ug/l	1	:AN	A1L150107006
2-Nitroaniline	ND<50	50	0.70	ug/l	1	:AN	A1L150107006
2-Nitrophenol	ND<10	10	2.1	ug/l	1	:AN	A1L150107006
2-Picoline (alpha-Picoline)	ND<20	20	0.80	ug/l	1	:AN	A1L150107006
3,3'-Dichlorobenzidine	ND<50	50	0.93	ug/l	1	:AN	A1L150107006
3,3'-Dimethylbenzidine	ND<50	50	5.3	ug/l	1	:AN	A1L150107006
3-Methylcholanthrene	ND<20	20	4.0	ug/l	1	:AN	A1L150107006
3-Methylphenol	ND<10	10	2.9	ug/l	1	:AN	A1L150107006
3-Nitroaniline	ND<50	50	0.71	ug/l	1	:AN	A1L150107006
4,6-Dinitro-2-methylphenol	ND<50	50	1.3	ug/l	1	:AN	A1L150107006
4-Aminobiphenyl (4-biphenylamine)	ND<50	50	1.0	ug/l	1	:AN	A1L150107006
4-Bromophenyl Phenyl Ether	ND<10	10	0.88	ug/l	1	:AN	A1L150107006
4-Chloro-3-methylphenol	ND<10	10	0.99	ug/l	1	:AN	A1L150107006
4-Chloroaniline	ND<10	10	0.61	ug/l	1	:AN	A1L150107006
4-Chlorophenyl Phenyl Ether	ND<10	10	0.79	ug/l	1	:AN	A1L150107006
4-Methylphenol (p-Cresol)	ND<10	10	1.3	ug/l	1	:AN	A1L150107006
4-Nitroaniline	ND<50	50	1.3	ug/l	1	:AN	A1L150107006
4-Nitrophenol	ND<50	50	1.9	ug/l	1	:AN	A1L150107006
4-Nitroquinoline-n-oxide	ND<100	100	2.9	ug/l	1	:AN	A1L150107006
5-Nitro-o-toluidine	ND<20	20	1.3	ug/l	1	:AN	A1L150107006
7,12-Dimethylbenz(a)anthracene	ND<20	20	2.0	ug/l	1	:AN	A1L150107006
Acenaphthene	ND<10	10	0.80	ug/l	1	:AN	A1L150107006
Acenaphthylene	ND<10	10	0.71	ug/l	1	:AN	A1L150107006
Acetone	ND<330	330	1.7	ug/l	3.33	:AN	A1L150107006
Acetonitrile	ND<330	330	6.0	ug/l	3.33	:AN	A1L150107006
Acetophenone	ND<10	10	2.6	ug/l	1	:AN	A1L150107006
Acrolein	ND<17	17	11	ug/l	3.33	:AN	A1L150107006
Acrylonitrile	ND<5.0	5.0	3.7	ug/l	3.33	:AN	A1L150107006
Allyl Chloride (3-Chloropropene)	ND<330	330	0.83	ug/l	3.33	:AN	A1L150107006
Aniline (phenylamine, Aminobenzene)	ND<10	10	1.2	ug/l	1	:AN	A1L150107006
Anthracene	ND<10	10	0.68	ug/l	1	:AN	A1L150107006
Aramite (total)	ND<20	20	0.81	ug/l	1	:AN	A1L150107006
Arsenic	ND<0.0040	0.0040	0.0039	mg/L	1	:AN	A1L150107006
Arsenic (Unfiltered)	ND<0.0040	0.0040	0.0039	mg/L	1	:AN	A1L150107007
Barium	ND<0.2	0.2	0.0030	mg/L	1	:AN	A1L150107006
Barium (Unfiltered)	ND<0.2	0.2	0.0030	mg/L	1	:AN	A1L150107007
Benzene	ND<3.3	3.3	0.53	ug/l	3.33	:AN	A1L150107006

RESULTS OF PERFORMANCE SAMPLE EVALUATION

P&W East Hartford: Step 4 Investigation - Performance Evaluation

Loureiro Engineering Associates, Inc.

Benzo(a)anthracene	ND<10		10	0.70	ug/l	1	:AN	A1L150107006				
Benzo(a)pyrene	ND<10		10	0.73	ug/l	1	:AN	A1L150107006				
Benzo(b)fluoranthene	ND<10		10	0.94	ug/l	1	:AN	A1L150107006				
Benzo(g,h,i)perylene	ND<10		10	0.85	ug/l	1	:AN	A1L150107006				
Benzo(k)fluoranthene	ND<10		10	0.84	ug/l	1	:AN	A1L150107006				
Benzyl Alcohol	ND<10		10	1.1	ug/l	1	:AN	A1L150107006				
Benzyl Butyl Phthalate	ND<10		10	0.88	ug/l	1	:AN	A1L150107006				
Beryllium	0.00056	B	0.0050	0.00054	mg/L	1	:AN	A1L150107006				FALSE POSITIVE
Beryllium (Unfiltered)	ND<0.0050		0.0050	0.00054	mg/L	1	:AN	A1L150107007				
Bis(2-chloroethoxy) Methane	ND<10		10	0.87	ug/l	1	:AN	A1L150107006				
Bromodichloromethane	ND<17		17	0.57	ug/l	3.33	:AN	A1L150107006				
Bromoform	ND<13		13	0.60	ug/l	3.33	:AN	A1L150107006				
Bromomethane	ND<33		33	0.67	ug/l	3.33	:AN	A1L150107006				
Cadmium	ND<0.0050		0.0050	0.00028	mg/L	1	:AN	A1L150107006				
Cadmium (Unfiltered)	ND<0.0050		0.0050	0.00028	mg/L	1	:AN	A1L150107007				
Carbazole	ND<10		10	0.82	ug/l	1	:AN	A1L150107006				
Carbon Disulfide	ND<17		17	0.67	ug/l	3.33	:AN	A1L150107006				
Carbon Tetrachloride	ND<17		17	0.40	ug/l	3.33	:AN	A1L150107006				
Chlorobenzene	ND<17		17	0.47	ug/l	3.33	:AN	A1L150107006				
Chloroethane	ND<6.7		6.7	0.87	ug/l	3.33	:AN	A1L150107006				
Chloroform	ND<3.3		3.3	0.47	ug/l	3.33	:AN	A1L150107006				
Chloromethane	ND<33		33	0.43	ug/l	3.33	:AN	A1L150107006				
Chromium, Total	0.361		0.0050	0.0014	mg/L	1	:AN	A1L150107006	0.400	0.472	0.328	Pass
Chromium, Total (Unfiltered)	0.37		0.0050	0.0014	mg/L	1	:AN	A1L150107007	0.400	0.472	0.328	Pass
Chrysene	ND<10		10	0.75	ug/l	1	:AN	A1L150107006				
Copper	ND<0.0250		0.0250	0.0042	mg/L	1	:AN	A1L150107006				
Copper (Unfiltered)	ND<0.0250		0.0250	0.0042	mg/L	1	:AN	A1L150107007				
Cyanide (Total)	0.20		0.010	0.0017	mg/L	1	:AN	A1L150107006	0.214	0.276	0.152	Pass
Di-n-butyl Phthalate	ND<10		10	0.67	ug/l	1	:AN	A1L150107006				
Di-n-octylphthalate	ND<10		10	1.1	ug/l	1	:AN	A1L150107006				
Dibenz(a,h)anthracene	ND<10		10	0.79	ug/l	1	:AN	A1L150107006				
Dibenzofuran	ND<10		10	1.1	ug/l	1	:AN	A1L150107006				
Dibromochloromethane	ND<1.7		1.7	0.87	ug/l	3.33	:AN	A1L150107006				
Dibromomethane	ND<17		17	0.57	ug/l	3.33	:AN	A1L150107006				
Dichlorodifluoromethane	ND<17		17	0.87	ug/l	3.33	:AN	A1L150107006				
Diethyl Phthalate	ND<10		10	0.65	ug/l	1	:AN	A1L150107006				
Dimethoate	ND<20		20	4.0	ug/l	1	:AN	A1L150107006				
Dimethyl Phthalate	ND<10		10	0.76	ug/l	1	:AN	A1L150107006				
Dinoseb	ND<20		20	3.8	ug/l	1	:AN	A1L150107006				
Diphenylamine	ND<10		10	1.4	ug/l	1	:AN	A1L150107006				

RESULTS OF PERFORMANCE SAMPLE EVALUATION

P&W East Hartford: Step 4 Investigation - Performance Evaluation

Loureiro Engineering Associates, Inc.

Disulfoton	ND<50	50	0.96	ug/l	1	:AN	A1L150107006				
Ethyl Methacrylate	ND<17	17	0.70	ug/l	3.33	:AN	A1L150107006				
Ethyl Methanesulfonate	ND<10	10	0.95	ug/l	1	:AN	A1L150107006				
Ethylbenzene	ND<17	17	0.40	ug/l	3.33	:AN	A1L150107006				
Famphur	ND<100	100	1.8	ug/l	1	:AN	A1L150107006				
Fluoranthene	ND<10	10	0.81	ug/l	1	:AN	A1L150107006				
Fluorene	ND<10	10	1.0	ug/l	1	:AN	A1L150107006				
Hexachlorobenzene	ND<10	10	0.74	ug/l	1	:AN	A1L150107006				
Hexachlorobutadiene	ND<10	10	0.73	ug/l	1	:AN	A1L150107006				
Hexachlorocyclopentadiene	ND<50	50	1.1	ug/l	1	:AN	A1L150107006				
Hexachloroethane	ND<10	10	0.74	ug/l	1	:AN	A1L150107006				
Hexachloropropene	ND<100	100	4.2	ug/l	1	:AN	A1L150107006				
Indeno(1,2,3-c,d)pyrene	ND<10	10	0.63	ug/l	1	:AN	A1L150107006				
Iodomethane (methyl Iodide)	ND<17	17	0.50	ug/l	3.33	:AN	A1L150107006				
Isobutanol	ND<170	170	18	ug/l	3.33	:AN	A1L150107006				
Isophorone	ND<10	10	0.63	ug/l	1	:AN	A1L150107006				
Isosafrole	ND<20	20	0.92	ug/l	1	:AN	A1L150107006				
Lead	ND<0.0030	0.0030	0.0025	mg/L	1	:AN	A1L150107006				
Lead (Unfiltered)	ND<0.0030	0.0030	0.0025	mg/L	1	:AN	A1L150107007				
Mercury	ND<0.00020	0.0002	(0.00006	mg/L	1	:AN	A1L150107006				
Mercury (Unfiltered)	ND<0.00020	0.0002	(0.00006	mg/L	1	:AN	A1L150107007				
Methapyrilene	ND<50	50	2.6	ug/l	1	:AN	A1L150107006				
Methyl Ethyl Ketone (2-Butanone)	ND<330	330	1.4	ug/l	3.33	:AN	A1L150107006				
Methyl Isobutyl Ketone (4-methyl-2-penta	ND<17	17	0.77	ug/l	3.33	:AN	A1L150107006				
Methyl Methacrylate	ND<17	17	1.1	ug/l	3.33	:AN	A1L150107006				
Methyl Methanesulfonate	ND<10	10	1.1	ug/l	1	:AN	A1L150107006				
Methylacrylonitrile	ND<17	17	0.60	ug/l	3.33	:AN	A1L150107006				
Methylene Chloride	20	17	1.1	ug/l	3.33	:AN	A1L150107006	24.8	31.7	17.1	Pass
Naphthalene	51	10	0.75	ug/l	1	:AN	A1L150107006	73.9	77.6	32.1	Pass
Nickel	ND<0.0400	0.0400	0.0022	mg/L	1	:AN	A1L150107006				
Nickel (Unfiltered)	ND<0.0400	0.0400	0.0022	mg/L	1	:AN	A1L150107007				
Nitrobenzene	ND<10	10	0.81	ug/l	1	:AN	A1L150107006				
Nitrosomethylethylamine	ND<10	10	1.1	ug/l	1	:AN	A1L150107006				
Pentachlorobenzene	ND<10	10	3.1	ug/l	1	:AN	A1L150107006				
Pentachloroethane	ND<50	50	1.1	ug/l	1	:AN	A1L150107006				
Pentachloronitrobenzene	ND<50	50	5.1	ug/l	1	:AN	A1L150107006				
Pentachlorophenol	ND<10	10	2.4	ug/l	1	:AN	A1L150107006				
Phenacetin	ND<20	20	0.87	ug/l	1	:AN	A1L150107006				
Phenanthrene	ND<10	10	0.82	ug/l	1	:AN	A1L150107006				
Phenol	ND<10	10	2.6	ug/l	1	:AN	A1L150107006	268	353	183	FAIL

RESULTS OF PERFORMANCE SAMPLE EVALUATION

P&W East Hartford: Step 4 Investigation - Performance Evaluation

Loureiro Engineering Associates, Inc.

Phorate	ND<50	50	0.91	ug/l	1	:AN	A1L150107006				
Pronamide	ND<20	20	1.1	ug/l	1	:AN	A1L150107006				
Propane Nitrile (propionitrile)	ND<17	17	2.0	ug/l	3.33	:AN	A1L150107006				
Pyrene	74	10	1.1	ug/l	1	:AN	A1L150107006	125	148	67.9	Pass
Pyridine	ND<20	20	1.5	ug/l	1	:AN	A1L150107006				
Safrole	ND<20	20	1.2	ug/l	1	:AN	A1L150107006				
Selenium	ND<0.0050	0.0050	0.0045	mg/L	1	:AN	A1L150107006				
Selenium (Unfiltered)	ND<0.0050	0.0050	0.0045	mg/L	1	:AN	A1L150107007				
Silver	ND<0.0050	0.0050	0.0015	mg/L	1	:AN	A1L150107006				
Silver (Unfiltered)	ND<0.0050	0.0050	0.0015	mg/L	1	:AN	A1L150107007				
Styrene	ND<17	17	0.50	ug/l	3.33	:AN	A1L150107006				
Tetrachloroethylene (PCE)	77	17	0.77	ug/l	3.33	:AN	A1L150107006	100.	118	66.4	Pass
Thiodiphosphoric Acid Tetraethyl Ester	ND<50	50	2.9	ug/l	1	:AN	A1L150107006				
Toluene	ND<17	17	0.60	ug/l	3.33	:AN	A1L150107006				
Total 1,3-dichloropropene (cis and trans	ND<1.7	1.7	0.47	ug/l	3.33	:AN	A1L150107006				
Total Petroleum Hydrocarbons EPA 418.1	1.4	0.5	0.3	mg/L	1	:AN	A1L150107006	1.20	1.50	0.720	Pass
Trichloroethylene (TCE)	ND<17	17	0.47	ug/l	3.33	:AN	A1L150107006				
Trichlorofluoromethane	ND<17	17	0.93	ug/l	3.33	:AN	A1L150107006				
Vinyl Acetate	ND<17	17	0.87	ug/l	3.33	:AN	A1L150107006				
Vinyl Chloride	ND<6.7	6.7	0.50	ug/l	3.33	:AN	A1L150107006				
Xylenes	ND<17	17	1.1	ug/l	3.33	:AN	A1L150107006				
Zinc	0.481	0.0200	0.0120	mg/L	1	:AN	A1L150107006	0.500	0.590	0.410	Pass
Zinc (Unfiltered)	0.498	0.0200	0.0120	mg/L	1	:AN	A1L150107007	0.500	0.590	0.410	Pass
Zinophos	ND<50	50	0.99	ug/l	1	:AN	A1L150107006				
alpha,alpha-Dimethylphenethylamine	ND<50	50	3.1	ug/l	1	:AN	A1L150107006				
bis(2-chloroethyl) Ether (2-chloroethyl	ND<10	10	0.97	ug/l	1	:AN	A1L150107006				
bis(2-ethylhexyl) Phthalate	32	10	2.7	ug/l	1	:AN	A1L150107006	50.4	61.5	24.6	Pass
cis-1,2-Dichloroethylene	ND<17	17	0.73	ug/l	3.33	:AN	A1L150107006				
n-Nitroso-di-n-butylamine	ND<10	10	0.91	ug/l	1	:AN	A1L150107006				
n-Nitrosodi-n-propylamine	ND<10	10	0.67	ug/l	1	:AN	A1L150107006				
n-Nitrosodiethylamine	ND<10	10	0.87	ug/l	1	:AN	A1L150107006				
n-Nitrosodimethylamine	ND<10	10	0.79	ug/l	1	:AN	A1L150107006				
n-Nitrosodiphenylamine	ND<10	10	1.4	ug/l	1	:AN	A1L150107006				
n-Nitrosomorpholine	ND<10	10	3.5	ug/l	1	:AN	A1L150107006				
n-Nitrosopiperidine	ND<10	10	0.94	ug/l	1	:AN	A1L150107006				
n-Nitrosopyrrolidine	ND<10	10	0.84	ug/l	1	:AN	A1L150107006				
o,o,o-Triethyl Phosphorothioate	ND<50	50	0.98	ug/l	1	:AN	A1L150107006				
o-Toluidine	ND<20	20	0.98	ug/l	1	:AN	A1L150107006				
p-Dimethylaminoazobenzene	ND<20	20	3.6	ug/l	1	:AN	A1L150107006				
p-Phenylenediamine	ND<100	100	4.0	ug/l	1	:AN	A1L150107006				

RESULTS OF PERFORMANCE SAMPLE EVALUATION

P&W East Hartford: Step 4 Investigation - Performance Evaluation

Loureiro Engineering Associates, Inc.

Page

tert-Butyl Methyl Ether	ND<17	17	0.43	ug/l	3.33	:AN	A1L150107006
trans-1,2-Dichloroethene	ND<17	17	0.50	ug/l	3.33	:AN	A1L150107006
trans-1,4-Dichloro-2-butene	ND<17	17	0.67	ug/l	3.33	:AN	A1L150107006

Location Identifier: performance

Sample Identifier 2010166 12/13/2001 16:55 Performance Evaluation - Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	)il.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
PCB-1016 (Arochlor 1016)	ND<0.50		0.50	0.018	ug/l	1	:AN	A1L150107008				
PCB-1221 (Arochlor 1221)	ND<0.50		0.50	0.094	ug/l	1	:AN	A1L150107008				
PCB-1232 (Arochlor 1232)	ND<0.50		0.50	0.16	ug/l	1	:AN	A1L150107008				
PCB-1242 (Arochlor 1242)	ND<0.50		0.50	0.30	ug/l	1	:AN	A1L150107008				
PCB-1248 (Arochlor 1248)	ND<0.50		0.50	0.22	ug/l	1	:AN	A1L150107008				
PCB-1254 (Arochlor 1254)	ND<0.50		0.50	0.096	ug/l	1	:AN	A1L150107008				
PCB-1260 (Arochlor 1260)	1.2		0.50	0.065	ug/l	1	:AN	A1L150107008	1.48	1.77	0.931	Pass

CASE NARRATIVE
A1G310192

The following report contains the analytical results for two water samples and five solid samples submitted to STL North Canton by UTC Shared Services from the P&W EH GW INVEST. STEP 4 Site, project number 68VD135. The samples were received July 31, 2001, according to documented sample acceptance procedures. Twenty-two additional samples were received and archived.

Please refer to the Facsimile Transmittal Sheet for the client requested samples to be analyzed.

STL North Canton utilizes only USEPA approved methods in all analytical work. The samples presented in this report were analyzed for the parameters listed on the following page in accordance with the methods indicated. Preliminary results were provided to Nick Skoularikis on July 31, 2001 and Joe Tota on August 14, 2001.

The results included in this report have been reviewed for compliance with the laboratory QA/QC plan. All data have been found to be compliant with laboratory protocol.

SUPPLEMENTAL QC INFORMATION

SAMPLE RECEIVING

The samples were received at the laboratory at temperatures of 1.6, 1.3, and 1.4° C.

See STL's Cooler Receipt Form for additional information.

GC/MS VOLATILES

Sample(s) that contain results between the MDL and the RL were flagged with "J". There is the possibility of false positive or mis-identification at these quantitation levels. In analytical methods requiring confirmation of the analyte reported, confirmation was performed only down to the standard reporting limit (SRL). The acceptance criteria for QC samples may not be met at these quantitation levels.

CASE NARRATIVE (continued)

GC/MS VOLATILES (continued)

The reporting limit is lower than our standard reporting limit (SRL) but is supported by the laboratory's MDL and/or IDLs; however, there are no standards in the calibration curve low enough to support this value. The continuing calibration blanks and method blanks may not support the lower RL.

The pH of the sample 1998308 was greater than 2. The sample was analyzed within the normal 14 day holding time; however, experimental evidence suggests that some aromatic compounds in wastewater samples, notably Benzene, Toluene, and Ethylbenzene are susceptible to biological degradation if samples are not preserved to a pH of 2.

The internal standard areas were outside acceptance limits for sample 1998371 due to matrix effects.

GC/MS SEMIVOLATILES

Sample(s) that contain results between the MDL and the RL were flagged with "J". There is the possibility of false positive or mis-identification at these quantitation levels. In analytical methods requiring confirmation of the analyte reported, confirmation was performed only down to the standard reporting limit (SRL). The acceptance criteria for QC samples may not be met at these quantitation levels.

METALS

Sample(s) that contain results between the MDL and the RL were flagged with "B". There is the possibility of false positive or mis-identification at these quantitation levels. The acceptance criteria for the ICB, CCB, and Method Blank are ± the standard reporting limit (SRL).

No Form IX was provided for batch 1218121. The serial dilution was performed on a different client's sample from the same QC batch.

GENERAL CHEMISTRY

Sample(s) that contain results between the MDL and the RL were flagged with "B". There is the possibility of false positive or mis-identification at these quantitation levels. In analytical methods requiring confirmation of the analyte reported, confirmation was performed only down to the standard reporting limit (SRL). The acceptance criteria for QC samples may not be met at these quantitation levels.

REPORTING QUALIFIERS AND TERMINOLOGY

ORGANIC QUALIFIERS

B FLAG Sample(s) that contain concentrations of target analyte(s) at a reportable level in the associated method blank(s) have been flagged with B. All target analytes in the method blank must be below the reporting limits (RL) or the associated sample(s) must be ND with the exception of Methylene chloride, Acetone, 2-Butanone, and Phthalate Esters. These are common laboratory contaminants and may be present in concentrations up to five times the reporting limits.

"DIL" in the analytical report or the quality control section means that due to high analyte concentration in the sample, the surrogates or spiking analytes added to the sample are diluted out and cannot be quantitated.

E FLAG Sample that contains a target analyte at a concentration above the instrument calibration range is flagged with an "E".

I FLAG During volatile analyses by gas chromatography, hydrocarbon interferences are sometimes encountered which cause an erratic baseline on the chromatogram, making accurate identification and quantitation of an individual compound difficult.

J FLAG Sample(s) which contain results between the MDL and the RL are flagged with a "J". There is the possibility of false positive or mis-identification at these quantitation levels. In analytical methods requiring confirmation of the analyte reported, confirmation will be performed only down to the standard reporting limit (SRL). The acceptance criteria for QC criteria may not be met at these quantitation levels.

"PG" The GC Semivolatile analyses reported herein were performed using a GC instrument that has two columns, one of which is used to confirm the results of the other. Peak interferences may result in some cases, which cause a quantitation difference between the two columns. If the difference between the two results is greater than 40%, the lower of the two results is normally reported. The higher result is reported if there is obvious chromatographic interference on the column with the lower result, or if the continuing or bracketing calibration on the column with the lower result fails. The reported results are flagged with "PG".

U FLAG Compound was analyzed for but not detected.

 # FLAG This value represents a probable combination of 3-Methylphenol and 4-Methylphenol.

INORGANIC QUALIFIERS

B FLAG Samples which contain results between the Method Detection Limit (MDL) and the Reporting Limit (RL) are flagged with "B". There is the possibility of false positive results at these quantitation levels. The acceptance criteria for ICB, CCB, and Method Blank is $\pm$ the RL.

J Flag Sample(s) that contained concentrations of target analyte(s) at a reportable level in the associated Method Blank(s) were flagged with "J".

DRAWINGS

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Comments:
DRAWING 1: GENERALIZED GROUNDWATER CONTOUR MAP - SHALLOW AQUIFER ZONE - STEP 4 (AUGUST 20, 2001)

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Comments:
DRAWING 2: GENERALIZED GROUNDWATER CONTOUR MAP - TOP OF CLAY AQUIFER ZONE - STEP 4 (AUGUST 20, 2001)

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Comments:
DRAWING 3: GROUNDWATER INVESTIGATION DATA - SHALLOW AQUIFER ZONE (ALL DATES)

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Comments:
DRAWING 4: GROUNDWATER INVESTIGATION DATA - TOP OF CLAY AQUIFER ZONE (ALL DATES)

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Comments:
DRAWING 5: HIGHEST TOTAL VOC CONCENTRATIONS DETECTED IN GROUNDWATER - ET AL AREA

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Phase Classification: R-5

Document Title: VOLUNTARY CORRECTIVE ACTION PROGRAM PROGRESS REPORT FOR FIRST QUARTER 2002 [PART 5 OF 6]

Date of Document: 04/01/2002

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Comments:
DRAWING 6: HIGHEST TOTAL VOC CONCENTRATIONS DETECTED IN GROUNDWATER - WASTE TREATMENT AREA

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Comments:
DRAWING 7: GENERALIZED GEOLOGIC CROSS SECTIONS - WILLOW BROOK/MAIN STREET

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ATTACHMENT 1

Temporary Screen Point Name Changes

SCREEN POINT NAME CHANGES
Pratt Whitney, East Hartford, CT

	SHALLOW		TOP-OF-CLAY	
	OLD NAMES	NEW NAMES	OLD NAMES	NEW NAMES
Step 4	WT-GW-01	WT-GW-31S	WT-GW-01	WT-GW-31D
	WT-GW-02	WT-GW-32S	WT-GW-02	WT-GW-32D
	WT-GW-03	WT-GW-33S	WT-GW-03	WT-GW-33D
	WT-GW-04	WT-GW-34S	WT-GW-04	WT-GW-34D
	WT-GW-05	WT-GW-35S	WT-GW-05	WT-GW-35D
	WT-GW-06	WT-GW-36S	WT-GW-06	WT-GW-36D
	WT-GW-07	WT-GW-37S	WT-GW-07	WT-GW-37D
	WT-GW-08	WT-GW-38S	WT-GW-08	WT-GW-38D
	WT-GW-09	WT-GW-39S	WT-GW-09	WT-GW-39D
	WT-GW-10	WT-GW-40S	WT-GW-10	WT-GW-40D
	WT-GW-11	WT-GW-41S	WT-GW-11	WT-GW-41D
	WT-GW-12	WT-GW-42	WT-GW-12	WT-GW-42
Step 2	EH-RSK-GW-01A	WT-GW-01S	EH-RSK-GW-01B	WT-GW-01D
	EH-RSK-GW-02A	WT-GW-02S	EH-RSK-GW-02B	WT-GW-02D
	EH-RSK-GW-03A	WT-GW-03S	EH-RSK-GW-03B	WT-GW-03D
	EH-RSK-GW-04A	WT-GW-04S	EH-RSK-GW-04B	WT-GW-04D
	EH-RSK-GW-05A	WT-GW-05S	EH-RSK-GW-05B	WT-GW-05D
	EH-RSK-GW-06A	WT-GW-06S	EH-RSK-GW-06B	WT-GW-06D
	EH-RSK-GW-08A	WT-GW-08S	EH-RSK-GW-08A	WT-GW-08D
	EH-RSK-GW-10A	WT-GW-10S	EH-RSK-GW-10B	WT-GW-10D
	EH-RSK-GW-11A	WT-GW-11S	EH-RSK-GW-11B	WT-GW-11D
	EH-RSK-GW-12A	WT-GW-12S	EH-RSK-GW-12B	WT-GW-12D
	EH-RSK-GW-13A	WT-GW-13S	EH-RSK-GW-13B	WT-GW-13D
	EH-RSK-GW-14A	WT-GW-14S	EH-RSK-GW-14B	WT-GW-14D
	EH-RSK-GW-15A	WT-GW-15S	EH-RSK-GW-15B	WT-GW-15D
	EH-RSK-GW-16A	WT-GW-16S	EH-RSK-GW-16B	WT-GW-16D
	EH-RSK-GW-19A	WT-GW-19S	EH-RSK-GW-19B	WT-GW-19D
	EH-RSK-GW-20A	WT-GW-20S	EH-RSK-GW-20B	WT-GW-20D
	EH-RSK-GW-21A	WT-GW-21S	EH-RSK-GW-21B	WT-GW-21D
	EH-RSK-GW-22A	WT-GW-22S	EH-RSK-GW-22B	WT-GW-22D
	EH-RSK-GW-23A	WT-GW-23S	EH-RSK-GW-23B	WT-GW-23D
	EH-RSK-GW-24A	WT-GW-24S	EH-RSK-GW-24B	WT-GW-24D
	EH-RSK-GW-25A	WT-GW-25S	EH-RSK-GW-25B	WT-GW-25D
	EH-RSK-GW-26A	WT-GW-26S	EH-RSK-GW-26B	WT-GW-26D
	EH-RSK-GW-27A	WT-GW-27S	EH-RSK-GW-27B	WT-GW-27D
	EH-RSK-GW-28A	WT-GW-28S	EH-RSK-GW-28B	WT-GW-28D
	EH-RSK-GW-29A	WT-GW-29S	EH-RSK-GW-29B	WT-GW-29D
	EH-RSK-GW-30A	WT-GW-30S	EH-RSK-GW-30B	WT-GW-30D
	EH-RSK-GW-30C	**WT-GW-07S**	EH-RSK-GW-30D	**WT-GW-07D**
	EH-RSK-GW-31A	**EG**-GW-31	EH-RSK-GW-31B	**EG**-GW-31
	EH-RSK-GW-32A	EG-GW-32	EH-RSK-GW-32B	EG-GW-32
	EH-RSK-GW-33A	EG-GW-33	EH-RSK-GW-33B	EG-GW-33
	EH-RSK-GW-34A	EG-GW-34S	EH-RSK-GW-34B	EG-GW-34D
	EH-RSK-GW-35A	EG-GW-35S	EH-RSK-GW-35B	EG-GW-35D
	EH-RSK-GW-36A	EG-GW-36S	EH-RSK-GW-36B	EG-GW-36D

SCREEN POINT NAME CHANGES
Pratt Whitney, East Hartford, CT

SHALLOW		TOP-OF-CLAY	
OLD NAMES	NEW NAMES	OLD NAMES	NEW NAMES
EH-RSK-GW-37A	EG-GW-37S	EH-RSK-GW-37B	EG-GW-37D
EH-RSK-GW-38A	PH-GW-38S	EH-RSK-GW-38B	PH-GW-38D
EH-RSK-GW-39A	PH-GW-39S	EH-RSK-GW-39B	PH-GW-39D
EH-RSK-GW-40A	PH-GW-40S	EH-RSK-GW-40B	PH-GW-40D
EH-RSK-GW-41A	PH-GW-41S	EH-RSK-GW-41B	PH-GW-41D
EH-RSK-GW-42A	PH-GW-42S	EH-RSK-GW-42B	PH-GW-42D
EH-RSK-GW-43A	PH-GW-43S	EH-RSK-GW-43B	PH-GW-43D
EH-RSK-GW-44A	PH-GW-44S	EH-RSK-GW-44B	PH-GW-44D
EH-RSK-GW-45A	PH-GW-45S	EH-RSK-GW-45B	PH-GW-45D
EH-RSK-GW-46A	PH-GW-46S	EH-RSK-GW-46B	PH-GW-46D
EH-RSK-GW-47A	PH-GW-47S	EH-RSK-GW-47B	PH-GW-47D
EH-RSK-GW-48A	PH-GW-48S	EH-RSK-GW-48B	PH-GW-48D
EH-RSK-GW-49A	PH-GW-49S	EH-RSK-GW-49B	PH-GW-49D
EH-RSK-GW-50A	PH-GW-50S	EH-RSK-GW-50B	PH-GW-50D
EH-RSK-GW-51A	EA-GW-51S	EH-RSK-GW-51B	EA-GW-51D
EH-RSK-GW-52A	EA-GW-52S	EH-RSK-GW-52B	EA-GW-52D
EH-RSK-GW-53A	EA-GW-53S	EH-RSK-GW-53B	EA-GW-53D
EH-RSK-GW-54A	EA-GW-54S	EH-RSK-GW-54B	EA-GW-54D
EH-RSK-GW-55A	EA-GW-55S	EH-RSK-GW-55B	EA-GW-55D

ATTACHMENT 2

Geologic Boring Logs and Monitoring Well Completion Logs

GEOLOGIC BORING LOG

Project: Groundwater Investigation Step 4	**Start Date** 7/30/2001	**Boring ID**
LEA Commission Number: 68VD135.001		
Client: Pratt & Whitney	**End Date** 7/30/2001	**WT-GW-01**
Location: P&W East Hartford		

Drilling Contractor: Loureiro Engineering Associates, Inc.
Drilling Method: direct push
Sampling Method: Hand auger
Groundwater Observation
Depth: 10.00 **at:** **Hours** ▽
Depth: **at:** **Hours** ▼

Logged by: Dave Brisson
Drilling Foreman: Dave Brisson
Drill Rig: Geoprobe 5400 - LEA ??
Surface Elevation:
Northing:
Easting:

Depth	Sample Information			Soil Description	
	Sample No.	Recovery %	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity Angularity, Sedimentary Structure, Density, Cohesiveness, Other	PID/FID ppm
0	1998361, 1998349	100		light brown fine to medium SAND, trace coarse Sand, trace medium to coarse Gravel, trace organics, dry, loose	7.1
2 3.5	1998362, 1998350	100		light brown fine to medium SAND, trace coarse Sand, trace medium to coarse Gravel, trace organics, concrete and brick fragments, dry, loose refusal at 3.5'	4.6
4	1998351	100		orange brown medium to fine SAND, trace Silt, moist	0
6	1998352	100		0" - 12" orange brown medium to fine SAND, trace Silt, moist 12" - 24" red brown SILT and CLAY with medium to fine Sand, trace fine Gravel	0
8	1998353	50		0" - 2" red brown SILT and CLAY with medium to fine Sand, trace fine Gravel 2" - 5" brown medium to fine SAND and SILT, moist 5" - 12" brown medium to fine SAND, trace Silt	0
10 ▽	1998354	50		brown medium to fine SAND, trace Silt, wet	0
12	1998355	63		brown medium to fine SAND, trace Silt, wet	0
14	1998356	63		brown medium to fine SAND, trace Silt, wet	0
16	1998357	75		0" - 4" brown medium to fine SAND and SILT, trace coarse Sand, with strong brown lense of medium and fine SAND 4" - 18" grey fine SAND and SILT with CLAY, wet	0
18 20	1998358	75		grey CLAY with SILT varves about 0.5" apart, wet	0

Comments: NOTE: May be same location as WT-GW-01D and WT-GW-01Shal

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GEOLOGIC BORING LOG

Project: Groundwater Investigation Step 4	**Start Date**	**Boring ID**
LEA Commission Number: 68VD135.001	7/31/2001	
Client: Pratt & Whitney	**End Date**	**WT-GW-02**
Location: P&W East Hartford	7/31/2001	

Drilling Contractor: Loureiro Engineering Associates, Inc.
Drilling Method: direct push
Sampling Method: Hand auger
Groundwater Observation
Depth: 10.67 **at:** **Hours** ▽
Depth: **at:** **Hours** ▼

Logged by: Dave Brisson
Drilling Foreman: Jason Miller
Drill Rig: Geoprobe 5400 - LEA ??
Surface Elevation:
Northing:
Easting:

Depth	Sample Information			Soil Description	
	Sample No.	Recovery %	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity Angularity, Sedimentary Structure, Density, Cohesiveness, Other	PID/FID ppm
0	1998387	100		light brown fine SAND, trace coarse Sand, dry, loose	0
2	1998388	100		light brown fine SAND, trace coarse Sand, dry, loose	0
4	1998389	100		light brown fine SAND, trace coarse Sand, dry, loose	0
6	1998390	100		light brown fine SAND, trace coarse Sand, dry, loose	0
8	1998391	67		light brown fine SAND, trace coarse Sand, dry, loose	0
10 ▽	1998392	67		0" - 8" light brown fine SAND, trace coarse Sand, dry, loose 8" - 16" strong brown fine SAND, wet, loose	0
12	1998393	25		strong brown to black medium to fine SAND, trace coarse Sand, strong odour, wet, loose	0
16	1998394	79		0" - 10" strong brown organic SILT, trace fine Wand, wet, moderately dense 10" - 19" grey brown fine to coarse SAND, wet, loose	0
18 20	1998395, 1998396	79		grey CLAY with SILT laminations, wet, moderately dense	0

Comments:

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GEOLOGIC BORING LOG

Project: Groundwater Investigation Step 4	**Start Date**	**Boring ID**
LEA Commission Number: 68VD135.001	8/ 3/2001	
Client: Pratt & Whitney	**End Date**	**WT-GW-03**
Location: P&W East Hartford	8/ 3/2001	

Drilling Contractor: Loureiro Engineering Associates, Inc. **Logged by:** Dave Brisson
Drilling Method: direct push **Drilling Foreman:** Jon Sweeton
Sampling Method: hand auger **Drill Rig:** Geoprobe 5400 - LEA 95
Groundwater Observation **Surface Elevation:**
Depth: 10.00 **at:** **Hours** ▽ **Northing:**
Depth: **at:** **Hours** ▼ **Easting:**

Depth	Sample Information			Soil Description	
	Sample No.	Recovery %	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity Angularity, Sedimentary Structure, Density, Cohesiveness, Other	PID/FID ppm
0	1998448	100		0" - 3" asphalt reddish brown medium to fine SAND, some Silt, trace coarse to fine Gravel, trace coarse Sand, moderately dense, moist	0.0
2	1998449	100		reddish brown medium to fine SAND, some Silt, trace coarse to fine Gravel, trace coarse Sand, moderately dense, moist	0.0
4	1998438	33		reddish brown medium to fine SAND, some Silt, trace coarse to fine Gravel, trace coarse Sand, moderately dense, moist coarse GRAVEL layer at 5.0'	0.0
6	1998439	33		reddish brown medium to fine SAND, some Silt, little coarse Sand, little medium to fine Gravel, moist	0.0
8	1998440	58		reddish brown medium tofine SAND, some Silt, trace medium Gravel, moderately dense	0.0
10 ▽	1998441	58		reddish brown medium tofine SAND, some Silt, trace medium Gravel, moderately dense dense, wet at 10'	0.0
12	1998442	56		brownish grey medium to fine SAND, little Silt, loose, wet	0.0
14	1998443	56		brownish grey medium to fine SAND, little Silt, loose, wet to 14.2' black to dark brown silty PEAT, roots, moderately dense, wet	0.0
16	1998444, 1998445	100		brownish grey medium to fine SAND, little Silt to [18' fine grey silty SAND, loose, wet] [does not make sense; 18' is bottom of interval, but doesn't show up in next interval]	0.0
18 20	1998446	100		grey silty CLAY, varved, moderately dense, wet	0.0

Comments:

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GEOLOGIC BORING LOG

Project: Groundwater Investigation Step 4	**Start Date**	**Boring ID**
LEA Commission Number: 68VD135.001	7/30/2001	
Client: Pratt & Whitney	**End Date**	**WT-GW-04**
Location: P&W East Hartford	7/30/2001	

Drilling Contractor: Loureiro Engineering Associates, Inc.
Drilling Method: direct push
Sampling Method: Hand auger
Groundwater Observation
Depth: 10.00 **at:** **Hours** ▽
Depth: **at:** **Hours** ▼

Logged by: Dave Brisson
Drilling Foreman: Jason Miller
Drill Rig: Geoprobe 5400 - LEA ??
Surface Elevation:
Northing:
Easting:

Depth	Sample Information			Soil Description	
	Sample No.	Recovery %	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity Angularity, Sedimentary Structure, Density, Cohesiveness, Other	PID/FID ppm
0	1998363	100		brown fine to medum SAND, trace medium to coarse Gravel, trace brick and concrete fragments, dry, loose	0
2 4	1998364	100			0
8	1998365	46		brown fine to medium SAND, trace coarse Sand, moist, loose	0
10 ▽	1998366	46		brown fine SAND, trace medium Sand, wet, loose	1.4
12	1998367	42		strong brown fine to medium SAND, trace organics, wet, loose	1.3
14	1998368	42		strong brown fine to medium SAND, trace organics, wet, loose	1.5
16	1998369	79		brown to black fine to very fine SAND and SILT, some organic matter, wet, moderately dense	1.4
18	1998370	79		0" - 14" brown to black fine to very fine SAND and SILT, some organic matter, wet, moderately dense 14" - 19" black to gry fine SAND, wet, loose	1.6

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GEOLOGIC BORING LOG

Project: Groundwater Investigation Step 4	**Start Date**	**Boring ID**
LEA Commission Number: 68VD135.001	7/30/2001	
Client: Pratt & Whitney	**End Date**	**WT-GW-04**
Location: P&W East Hartford	7/30/2001	

Drilling Contractor: Loureiro Engineering Associates, Inc.
Logged by: james lardie
Drilling Method: direct push
Drilling Foreman: Jason Miller
Sampling Method: Macro Core
Drill Rig: Geoprobe 5400 - LEA ??
Groundwater Observation
Surface Elevation:
Depth: 10.00 **at:** **Hours** ▽
Northing:
Depth: **at:** **Hours** ▼
Easting:

Depth	Sample Information			Soil Description	
	Sample No.	Recovery %	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity Angularity, Sedimentary Structure, Density, Cohesiveness, Other	PID/FID ppm
20	1998371, 1998372	63		brown to grey fine to coarse SAND, trace organics, wet, loose	1.2
21.4 – 24	1998373	63		grey CLAY with Silt laminations throughout, wet, moderately dense	1.0

Comments:

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GEOLOGIC BORING LOG

Project: Groundwater Investigation Step 4	**Start Date**	**Boring ID**
LEA Commission Number: 68VD135.001	8/ 6/2001	
Client: Pratt & Whitney	**End Date**	**WT-GW-05**
Location: P&W East Hartford	8/ 6/2001	

Drilling Contractor: Loureiro Engineering Associates, Inc.
Drilling Method: direct push
Sampling Method: Hand auger
Groundwater Observation
Depth: 12.00 **at:** 13:30 ▽
Depth: **at:** **Hours** ▼

Logged by: Dave Brisson
Drilling Foreman: Dave Brisson
Drill Rig: Geoprobe 5400 - LEA 97
Surface Elevation:
Northing:
Easting:

Depth	Sample Information			Soil Description	
	Sample No.	Recovery %	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity Angularity, Sedimentary Structure, Density, Cohesiveness, Other	PID/FID ppm
0	2000909	100		0" - 2" pavement 2" - 6" process stone brown red fine SAND and SILT, some fine Gravel, some small Cobbles. Fill material	0
2	2000910	100		brown medium to fine SAND and SILT, some fine Gravel, some small Cobbles, some broken glass. Fill material	0
4	2000911	100		Offset south 6" , then east 2' brown medium to fine SAND and SILT, trace Gravel	0
6	2000912	100		brown medium to fine SAND and SILT, trace Gravel	0
8	2000913	25		0" - 10" brown medium to fine SAND and SILT, trace Gravel 10" - 12" dark brown medium to fine SAND and SILT with very fine Sand, moist	0
12 ▽	2000914	83		brown medum to fine SAND and SILT, wet	0
14	2000915	83		brown medum to fine SAND and SILT, wet 2" thick lense of medium and coarse darl brown SAND between 20" and 22"	0
16	2000916	100		0" - 20" brown medum to fine SAND and SILT, wet 20" - 24" black medium to coarse SAND and SILT	
18 20	2000917	100		0" - 4" black medium to coarse SAND and SILT 4" - 24" grey CLAY and SILT	

Comments:

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GEOLOGIC BORING LOG

Project: Groundwater Investigation Step 4 **LEA Commission Number:** 68VD135.001 **Client:** Pratt & Whitney **Location:** P&W East Hartford	**Start Date** 7/31/2001 **End Date** 7/31/2001	**Boring ID** **WT-GW-06**

Drilling Contractor: Loureiro Engineering Associates, Inc. **Logged by:** Dave Brisson
Drilling Method: direct push **Drilling Foreman:** Jason Miller
Sampling Method: Hand auger **Drill Rig:** Geoprobe 5400 - LEA ??
Groundwater Observation **Surface Elevation:**
Depth: 10.54 **at:** **Hours** ▽ **Northing:**
Depth: **at:** **Hours** ▼ **Easting:**

Depth	Sample Information			Soil Description	
	Sample No.	Recovery %	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity Angularity, Sedimentary Structure, Density, Cohesiveness, Other	PID/FID ppm
0	1998374	100		0" - 6" asphalt and traprock orange brown fine to medium SAND, trace coarse to fine Gravel and Fill material, dry, loose	2.1
2	1998375	100		orange brown fine to medium SAND, trace coarse to fine Gravel and Fill material, dry, loose	0
4	1998376	100		yellow brown fine to medium SAND, trace Silt, trace fine Gravel	0
6	1998377	100		yellow brown fine to medium SAND, trace Silt, trace fine Gravel	0
8	1998378	52		brown fine SAND, trace medium Sand, moist, loose	0
10 ▽	1998379	52		brown fine SAND, trace medium Sand, moist, loose wet at 6.5"	0
12	1998380	38		grey to black medium to fine SAND, trace coarse Sand, wet, slight odour	5.4
14	1998381	38		grey to black medium to fine SAND, trace coarse Sand, wet, slight odour	5.6
16	1998382	67		dark brown to black organic SILT, trace fine Sand, wet, dense	4.2
18	1998383	67		grey to black grey fine to medium SAND, trace organics, wet, loose	4.0
20	1998384	83		0" - 11" grey fine to coarse SAND, trace organics, wet, loose 11" - 20" grey CLAY with SILT laminations, wet, moderately dense	0

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GEOLOGIC BORING LOG

Project: Groundwater Investigation Step 4	**Start Date**	**Boring ID**
LEA Commission Number: 68VD135.001	7/31/2001	
Client: Pratt & Whitney	**End Date**	**WT-GW-06**
Location: P&W East Hartford	7/31/2001	

Drilling Contractor: Loureiro Engineering Associates, Inc. **Logged by:** Dave Brisson
Drilling Method: direct push **Drilling Foreman:** Jason Miller
Sampling Method: Macro Core **Drill Rig:** Geoprobe 5400 - LEA ??
Groundwater Observation **Surface Elevation:**
Depth: 10.54 **at:** **Hours** ▽ **Northing:**
Depth: **at:** **Hours** ▼ **Easting:**

Depth	Sample Information			Soil Description	
	Sample No.	Recovery %	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity Angularity, Sedimentary Structure, Density, Cohesiveness, Other	PID/FID ppm
22 – 24	1998385	83		grey CLAY with SILT laminations, wet, moderately dense	0

Comments:

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GEOLOGIC BORING LOG

Project: Groundwater Investigation Step 4 **LEA Commission Number:** 68VD135.001 **Client:** Pratt & Whitney **Location:** P&W East Hartford	**Start Date** 7/31/2001 **End Date** 7/31/2001	**Boring ID** **WT-GW-07**

Drilling Contractor: Loureiro Engineering Associates, Inc.
Drilling Method: direct push
Sampling Method: Hand auger
Groundwater Observation
Depth: 12.0 **at:** 13:25 ▽
Depth: **at:** **Hours** ▼

Logged by: Dave Brisson
Drilling Foreman: Jon Sweeton
Drill Rig: Geoprobe 5400 - LEA 95
Surface Elevation:
Northing:
Easting:

Depth	Sample Information			Soil Description	
	Sample No.	Recovery %	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity Angularity, Sedimentary Structure, Density, Cohesiveness, Other	PID/FID ppm
0	1998321	100		brown fine silty SAND, little medium Sand, little roots, little organic matter, loose, dry	0.0
2	1998322	100		brown fine silty SAND, little medium Sand, little roots, trace organic matter, loose, dry	0.0
4	1998323	100		brown fine silty SAND, little medium Sand, little roots, trace organic matter, trace coarse Sand, trace medium to fine Gravel, loose, slightly moist	0.0
6	1998324	100		brown fine silty SAND, little medium Sand, little roots, trace coarse Sand, trace medium to fine Gravel, loose, slightly moist	0.0
8	1998325	50		brown fine silty SAND, little medium Sand, little roots, trace coarse Sand, trace medium to fine Gravel, loose, slightly moist	0.0
10	1998326	50		brown fine silty SAND, little medium Sand, little roots, trace coarse Sand, trace medium to fine Gravel, loose, slightly moist to 10.5' dark brown medium to fine SAND, some Siult, some organic matter visible, dense, moist	0.0
12 ▽	1998327	73		dark brown medium to fine SAND, some Silt, trace medium to fine Gravel, trace coarse Sand, moderately dense, wet	0.0
14	1998328	73		dark brown to black medium to fine SAND, some Silt, trace medium to fine Gravel, trace coarse Sand, trace Peat, moderately dense, wet	0.0
16	1998329	63		black to dark grey medium to fine SAND and black SILT layers	0.0
18 20	1998330	63		black to dark grey medium to fine SAND and black SILT layers at 18.5' to 19.75' grey CLAY, loose to moderately dense, wet	0.0

Comments:

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GEOLOGIC BORING LOG

Project: Groundwater Investigation Step 4	**Start Date**	**Boring ID**
LEA Commission Number: 68VD135.001	8/ 1/2001	
Client: Pratt & Whitney	**End Date**	**WT-GW-08**
Location: P&W East Hartford	8/ 1/2001	

Drilling Contractor: Loureiro Engineering Associates, Inc.
Drilling Method: direct push
Sampling Method: Macro Core
Groundwater Observation
Depth: 13.50 **at:** **Hours** ▽
Depth: **at:** **Hours** ▼

Logged by: Dave Brisson
Drilling Foreman: Jon Sweeton
Drill Rig: Geoprobe 5400 - LEA 95
Surface Elevation:
Northing:
Easting:

Depth	Sample Information			Soil Description	
	Sample No.	Recovery %	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity Angularity, Sedimentary Structure, Density, Cohesiveness, Other	PID/FID ppm
0	1998332	56		brown fine SAND, some Silt, little medium Sand, trace coarse Sand, trace medium to fine Gravel, loose, dry	0.6
2	1998333	56		brown fine SAND, some Silt, little medium Sand, trace coarse Sand, trace medium to fine Gravel, loose, dry	0.0
4	1998334	40		brown fine SAND, some Silt, little medium Sand, trace coarse Sand, trace medium to fine Gravel, loose, dry	0.0
6	1998335	40		brown fine SAND, some Silt, little medium Sand, trace coarse Sand, trace medium to fine Gravel, loose, dry	0.0
8	1998336	83		brown fine SAND, some Silt, little medium Sand, trace coarse Sand, trace medium to fine Gravel, loose, dry	0.0
10	1998337, 1998338	83		brown fine SAND, some Silt, little medium Sand, trace coarse Sand, trace medium to fine Gravel, loose, dry to 10.2' dark grey to black coal ash, slag, loose, dry	0.0
12 ▽	1998339	56		brown medium to fine SAND, some Silt, moderately dense wet at 13.5'	0.1
14	1998340	56		brown medium to fine SAND, some Silt, moderately dense, wet to 15.75' black silty PEAT (?), soft, wet	0.1
16	1998341	77		black to dark brown silty PEAT (?), soft, wet	0.2
18	1998342	77		grey medium to fine SAND, little Silt, interlayred with silty PEAT layers to 18.5' grey medium to fine SAND, loose, wet	0.0
20	1998343	92		brownish grey medium to fine SAND, little coarse Sand, little Silt, trace fine Gravel to 21.8' fine grey SAND	0.0

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GEOLOGIC BORING LOG

Project: Groundwater Investigation Step 4	**Start Date**	**Boring ID**
LEA Commission Number: 68VD135.001	8/ 1/2001	
Client: Pratt & Whitney	**End Date**	**WT-GW-08**
Location: P&W East Hartford	8/ 1/2001	

Drilling Contractor: Loureiro Engineering Associates, Inc.
Drilling Method: direct push
Sampling Method: Macro Core
Groundwater Observation
Depth: 13.50 **at:** **Hours** ∇
Depth: **at:** **Hours** ▼

Logged by: James Lardie
Drilling Foreman: Jon Sweeton
Drill Rig: Geoprobe 5400 - LEA 95
Surface Elevation:
Northing:
Easting:

Depth	Sample Information			Soil Description	
	Sample No.	Recovery %	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity Angularity, Sedimentary Structure, Density, Cohesiveness, Other	PID/FID ppm
22	1998344	92		grey fine silty CLAY, varved, moist	0.0
24					

Comments:

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GEOLOGIC BORING LOG

Project: Groundwater Investigation Step 4	**Start Date**	**Boring ID**
LEA Commission Number: 68VD135.001	8/ 2/2001	
Client: Pratt & Whitney	**End Date**	**WT-GW-09**
Location: P&W East Hartford	8/ 2/2001	

Drilling Contractor: Loureiro Engineering Associates, Inc.
Drilling Method: direct push
Sampling Method: Hand auger
Groundwater Observation
Depth: 8.67 **at:** **Hours** ▽
Depth: **at:** **Hours** ▼

Logged by: Dave Brisson
Drilling Foreman: Jason Miller
Drill Rig: Geoprobe 5400 - LEA ??
Surface Elevation:
Northing:
Easting:

Depth	Sample Information			Soil Description	
	Sample No.	Recovery %	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity Angularity, Sedimentary Structure, Density, Cohesiveness, Other	PID/FID ppm
0	1998421	100		0" - 12" aspahlt and traprock 12" - 24" brown fine to medium SAND, trace Gravel, moist, loose	0
2	1998422	100		brown fine to medium SAND, trace Gravel, moist, loose	0
4	1998423	100		strong brown fine to very fine SAND, trace Silt, moist, loose	0
6	1998424	100		strong brown fine to very fine SAND, trace Silt, moist, loose	0
8 ▽	1998425	25		strong brown fine to very fine SAND, trace Silt, moist, loose wet at 8"	0
12	1998426	33		0" - 6" brown fine to medium SAND, trace coarse Sand, wet, loose 6" - 16" dark grey black fine to medium SAND, trace coarse Sand, wet, loose, TPH (?) odor	0
16	1998427	75		0" - 9" grey fine to medium SAND, wet, loose 9" - 18" strong brown organic SILT, trace fine Sand, wet, moderately dense	0
18	1998428	75		0" - 4" strong brown organic SILT, trace fine Sand, wet, moderately dense 4" - 18" brown fine SAND, little organics, wet, loose	0
20 22	1998429	100		grey CLAY with Silt laminations, wet, moderately dense	0

Comments:

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GEOLOGIC BORING LOG

Project: Groundwater Investigation Step 4 **LEA Commission Number:** 68VD135.001 **Client:** Pratt & Whitney **Location:** P&W East Hartford	**Start Date** 8/ 2/2001 **End Date** 8/ 2/2001	**Boring ID** **WT-GW-09**

Drilling Contractor: Loureiro Engineering Associates, Inc. **Logged by:** Dave Brisson
Drilling Method: direct push **Drilling Foreman:** Jason Miller
Sampling Method: Hand auger **Drill Rig:** Geoprobe 5400 - LEA ??
Groundwater Observation **Surface Elevation:**
Depth: 8.67 **at:** **Hours** ▽ **Northing:**
Depth: **at:** **Hours** ▼ **Easting:**

Depth	Sample Information			Soil Description	
	Sample No.	Recovery %	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity Angularity, Sedimentary Structure, Density, Cohesiveness, Other	PID/FID ppm
0	1998421	100		0" - 12" aspahlt and traprock 12" - 24" brown fine to medium SAND, trace Gravel, moist, loose	0
2	1998422	100		brown fine to medium SAND, trace Gravel, moist, loose	0
4	1998423	100		strong brown fine to very fine SAND, trace Silt, moist, loose	0
6	1998424	100		strong brown fine to very fine SAND, trace Silt, moist, loose	0
8 ▽	1998425	25		strong brown fine to very fine SAND, trace Silt, moist, loose wet at 8"	0
12	1998426	33		0" - 6" brown fine to medium SAND, trace coarse Sand, wet, loose 6" - 16" dark grey black fine to medium SAND, trace coarse Sand, wet, loose, TPH (?) odor	0
16	1998427	75		0" - 9" grey fine to medium SAND, wet, loose 9" - 18" strong brown organic SILT, trace fine Sand, wet, moderately dense	0
18	1998428	75		0" - 4" strong brown organic SILT, trace fine Sand, wet, moderately dense 4" - 18" brown fine SAND, little organics, wet, loose	0
20 22	1998429	100		grey CLAY with Silt laminations, wet, moderately dense	0

Comments:

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GEOLOGIC BORING LOG

Project: Groundwater Investigation Step 4 **LEA Commission Number:** 68VD135.001 **Client:** Pratt & Whitney **Location:** P&W East Hartford	**Start Date** 8/ 7/2001 **End Date** 8/ 7/2001	**Boring ID** **WT-GW-10**

Drilling Contractor: Loureiro Engineering Associates, Inc. **Logged by:** Dave Brisson
Drilling Method: direct push **Drilling Foreman:** Dave Brisson
Sampling Method: hand auger **Drill Rig:** Geoprobe 5400 - LEA 97
Groundwater Observation **Surface Elevation:**
Depth: 12.00 **at:** **Hours** ∇ **Northing:**
Depth: **at:** **Hours** ▼ **Easting:**

Depth	Sample Information			Soil Description	
	Sample No.	Recovery %	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity Angularity, Sedimentary Structure, Density, Cohesiveness, Other	PID/FID ppm
0	2000918	100		0" - 2" pavement 2" - 8" process stone brown medium to fine SAND and SILT with fine Sand	0
2	2000931	100		brown medium to fine SAND and SILT with fine Sand	0.0
4	2000932	100		brown medium to fine SAND	0
6	2000933	8		brown medium to fine SAND cement in shoe	0
8	2000934	13		dark brown medium to fine SAND and SILT	0
12 ∇	2000935	25		dark brown medium to fine SAND and SILT, wet	0
14	2000936	25		dark brown medium to fine SAND and SILT with strong brown organics, wet	0
16	2000937	8		medium to fine SAND, trace Siult, trace coarse Sand, wet	0
18 20	2000938	8		grey CLAY	0

Comments:

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GEOLOGIC BORING LOG

Project: Groundwater Investigation Step 4	**Start Date**	**Boring ID**
LEA Commission Number: 68VD135.001	8/ 8/2001	
Client: Pratt & Whitney	**End Date**	**WT-GW-11**
Location: P&W East Hartford	8/ 8/2001	

Drilling Contractor: Loureiro Engineering Associates, Inc.
Drilling Method: direct push
Sampling Method: hand auger
Groundwater Observation
Depth: 10.00 **at:** **Hours** ▽
Depth: **at:** **Hours** ▼

Logged by: Dave Brisson
Drilling Foreman: Jason Miller
Drill Rig: Geoprobe 5400 - LEA 95
Surface Elevation:
Northing:
Easting:

Depth	Sample Information			Soil Description	
	Sample No.	Recovery %	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity Angularity, Sedimentary Structure, Density, Cohesiveness, Other	PID/FID ppm
0	2000939	100		0" - 2" asphalt 2" - 6" subbase brown medium to fine SAND, some Silt, little coarse to fine Gravel, little coarse Sand, red brick and concrete pieces, very dense, moist	0.0
2	2000947	100		brown medium to fine SAND, some Silt, little coarse to fine Gravel, little coarse Sand, red brick and concrete pieces, very dense, moist	0.0
4	2000948	100		reddish brown medium to fine SAND, some Silt, little coarse Sand, trace fine Gravel, loose, moist	0.0
6	2000949	100		reddish brown medium to fine SAND, some Silt, little coarse Sand, trace fine Gravel, loose, moist	0.0
8	2000950	54		reddish brown medium to fine SAND, some Silt, little coarse Sand, trace fine Gravel, loose, moist	0.0
10 ▽	2000951	54		reddish brown medium to fine SAND, some Silt, little coarse Sand, trace fine Gravel, silty fine SAND layer at 10' to 10.2', moderately dense, wet	0.0
12	2000952	63		reddish brown medium to fine SAND, some Silt, little coarse Sand, trace fine Gravel, 1.5" layer of dark brown silty PEAT, moderately dense, wet	0.0
14	2000953	63		reddish brown medium to fine SAND, some Silt, little coarse Sand, trace fine Gravel, 1.5" layer of dark brown silty PEAT, moderately dense, wet	0.0
16	2000954	75		brown medium to fine SAND, som Silt to 17.5' dark brown silty CLAY to 17.7' grey fine to medium SAND	0.0
18 20	2000955	75		grey fine to medium SAND interlayers with grey silty CLAY varved, moderately dense, moist	0.0

Comments:

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GEOLOGIC BORING LOG

Project: Groundwater Investigation Step 4	**Start Date**	**Boring ID**
LEA Commission Number: 68VD135.001	8/13/2001	
Client: Pratt & Whitney	**End Date**	**ET-MW-21**
Location: P&W East Hartford	8/13/2001	

Drilling Contractor: Loureiro Engineering Associates, Inc. **Logged by:** Dave Brisson
Drilling Method: Direct push MacroCore **Drilling Foreman:** Jason Miller
Sampling Method: hand auger **Drill Rig:** Geoprobe 5400 - LEA 97
Groundwater Observation **Surface Elevation:**
Depth: 11.3 **at:** 10:15 ▽ **Northing:** 148,466.9
Depth: **at:** **Hours** ▼ **Easting:** 179,877.5

Depth	Sample Information			Soil Description	
	Sample No.	Recovery %	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity Angularity, Sedimentary Structure, Density, Cohesiveness, Other	PID/FID ppm
0	2000969	100		yellow orange fine SAND, dry, loose	0
2	2000970, 2000977	100		yellow orange fine SAND, dry, loose	0
4	2000971, 1998508	100		light brown fine to medium SAND, trace coarse Sand, moist, loose	0
6	2000972	100		light brown fine to coarse SAND, moist, loose	0
8	2000973	71		light brown fine to coarse SAND, moist, loose	0
10 ▽	2000974	71		0" - 15" light brown fine to coarse SAND, moist, loose 15" - 17" grey fine SAND, trace very fine Sand, wet, loose	3.8
12	2000975	79		0" - 18" grey fine SAND, trace very fine Sand, wet, loose 18" - 19" light brown fine SAND, trace medium to coarse Sand, wet, loose	6.0
14	2000976	79		brown fine to medium SAND, little coarse Sand, coarsening downwards to fine to coarse SAND, trace fine Gravel, wet, loose	5.6
16	1998499	29		brown fine to medium SAND, trace (+) coarse Sand, wet, loose	5.6
20	1998500	29		brown fine to medium SAND, trace (+) coarse Sand, wet, loose	5.6

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GEOLOGIC BORING LOG

Project: Groundwater Investigation Step 4	**Start Date** 8/13/2001	**Boring ID**
LEA Commission Number: 68VD135.001		
Client: Pratt & Whitney	**End Date** 8/13/2001	**ET-MW-21**
Location: P&W East Hartford		

Drilling Contractor: Loureiro Engineering Associates, Inc.
Drilling Method: Direct push MacroCore
Sampling Method: Macro Core
Groundwater Observation
Depth: 11.3 **at:** 10:15 ∇
Depth: **at:** **Hours** ▼

Logged by: Dave Brisson
Drilling Foreman: Jason Miller
Drill Rig: Geoprobe 5400 - LEA 97
Surface Elevation:
Northing: 148,466.9
Easting: 179,877.5

Depth	Sample Information			Soil Description	
	Sample No.	Recovery %	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity Angularity, Sedimentary Structure, Density, Cohesiveness, Other	PID/FID ppm
24	1998501	38		iron stained fine to coarse SAND, wet, loose	5.4
28	1998502	27		0" - 4" iron stained fine to coarse SAND, wet, loose 4" - 6.5" brown to olive brown very fine to fine SAND, trace Silt, wet, moderately dense	5.1
30	1998503	27		0" - 3" brown to olive brown very fine to fine SAND, trace Silt, wet, moderately dense 3" - 6.5" grey SILT with very fine Sand 1 millimeter thick laminations, wet, moderately dense	5.1
32	1998504	98		grey very fine SAND with Silt laminations, wet, moderately dense	4.7
34	1998505	98		grey very fine SAND with Silt laminations, wet, moderately dense	4.3
36	1998506	63		grey very fine SAND with Silt laminations, wet, moderately dense	0
38 40	1998507	63		grey SILT and CLAY, wet, moderately dense	0

Comments: Renamed from ET-MW-26 to ET-MW-21 on 08/20/2001 by Jamie Hall on request of PM; same location as ET-MW-21D

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MONITORING WELL COMPLETION LOG

Project: Groundwater Investigation Step 4	**Start Date**	**Boring ID**
LEA Commission Number: 68VD135.001	8/13/2001	
Client: Pratt & Whitney	**End Date**	**ET-MW-21D**
Location: P&W East Hartford	8/13/2001	

Drilling Contractor: Loureiro Engineering Associates, Inc.
Drilling Method: Direct push / MacroCore
Sampling Method:
Groundwater Observations:
Depth: 11.3 **at:** **Hours**
Average depth to water is 11.25

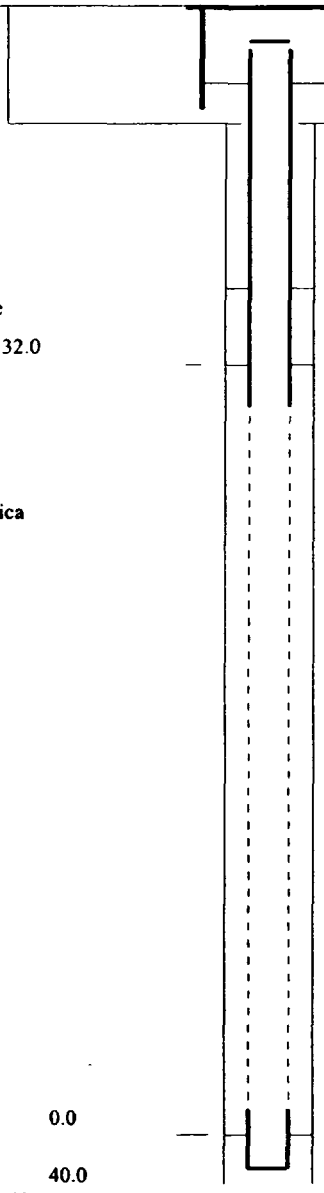
Logged by:
Drilling Foreman: Jason Miller
Drill Rig: Geoprobe 5400 - LEA 95
Northing: 148,466.9
Easting: 179,877.5

Concrete Pad Diameter 1.5'

Key Number 32278
Cover Type Road box

Surface Elevation: 0.00
Top of Casing 41.35
Reference Elevation 41.35
Description of Reference Point
Top of 0.5" PVC Riser

Concrete Pad Thickness
1.5'



Casing
Diameter 0.5"
Length 32.5'
Material Sch 80 PVC

Top Seal
Top
Bottom
Material Grout

Depth to top of seal 30.0

Backfill Material Granular bentonite

Seal Material Granular bentonite

Depth to top of filter 32.0

Depth to bottom of seal 32.0

Secondary
Sand Top
Sand Bottom
Sand Size #0 silica

Depth to top of screen 33.0

Filter pack material Prepack #0 silica

Screen
Diameter 0.5"
Length 3.0'
Material Sch 80 PVC
Slot size 0.010"

Description of Screened Soils

See boring log ET-MW-21 for description of screened soils

Depth to bottom of screen 36.0

Depth to bottom of filter 0.0

Note: Drawing Not To Scale

Depth to bottom of boring 40.0

Last measured depth = 35.68

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MONITORING WELL COMPLETION LOG

Project: Groundwater Investigation Step 4	**Start Date**	**Boring ID**
LEA Commission Number: 68VD135.001	8/13/2001	
Client: Pratt & Whitney	**End Date**	**ET-MW-21S**
Location: P&W East Hartford	8/13/2001	

Drilling Contractor: Loureiro Engineering Associates, Inc.
Drilling Method: Direct push / MacroCore
Sampling Method:
Groundwater Observations:
Depth: **at:** **Hours**
Average depth to water is 11.11

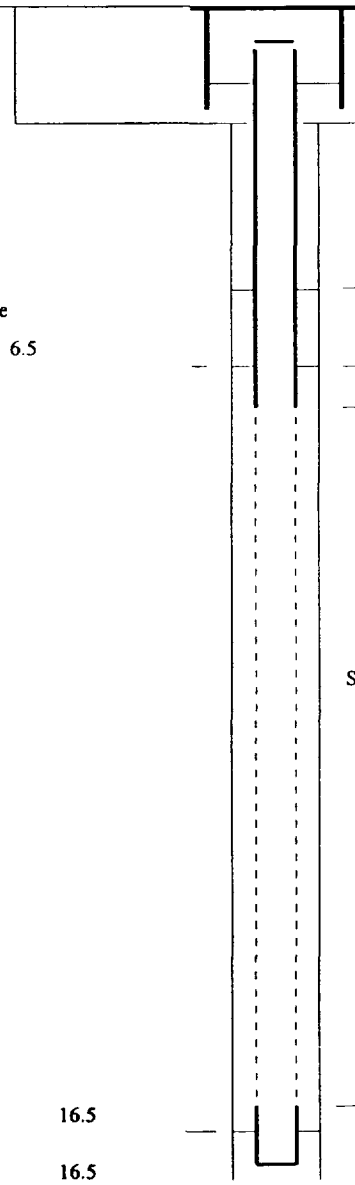
Logged by:
Drilling Foreman: Jason Miller
Drill Rig: Geoprobe 5400 - LEA 95
Northing: 148,469.7
Easting: 179,877.4

Concrete Pad Diameter 1.5'

Key Number 32278
Cover Type Roadbox

Surface Elevation: 0.00
Top of Casing 41.21
Reference Elevation 41.21
Description of Reference Point
Top of 0.5" PVC Riser

Concrete Pad Thickness
1.5'



Casing
Diameter 0.5"
Length 7.'
Material Sch 80 PVC

Top Seal
Top 5.50'
Bottom 6.50'
Material Granular Bentonite

Depth to top of seal 5.5

Backfill Material Granular Benonite

Seal Material Granular Bentonite

Depth to top of filter 6.5

Depth to bottom of seal 6.5

Secondary
Sand Top
Sand Bottom
Sand Size

Depth to top of screen 7.5

Filter pack material #0 Silica

Screen
Diameter 0.5"
Length 9.0'
Material Sch 80 PVC
Slot size 0.01"

Description of Screened Soils

See boring log ET-MW-21 for description of screened soils.

Depth to bottom of screen 16.5

Depth to bottom of filter 16.5

Note: Drawing Not To Scale

Depth to bottom of boring 16.5
Last measured depth = 16.90

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GEOLOGIC BORING LOG

Project: Groundwater Investigation Step 4	**Start Date**	**Boring ID**
LEA Commission Number: 68VD135.001	8/ 2/2001	
Client: Pratt & Whitney	**End Date**	**WT-MW-37**
Location: P&W East Hartford	8/ 2/2001	

Drilling Contractor: Soil Testing, Inc. Oxford, CT
Drilling Method: Hollow Stem Auger
Sampling Method: Split Spoon
Groundwater Observation
Depth: 7.6 **at:** **Hours** ▽
Depth: **at:** **Hours** ▼

Logged by: Rob Whittaker
Drilling Foreman: Larry DeAngelis
Drill Rig: Skid Rig
Surface Elevation:
Northing: 146,727.5
Easting: 178,228.0

Depth	Sample Information			Soil Description	PID/FID
	Sample No.	Recovery %	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity Angularity, Sedimentary Structure, Density, Cohesiveness, Other	ppm
0	1998483	63	2 2 4 4	0" - 3" dark brown loam 3" - 15" yellowish brown fine to coarse SAND, trace Silt, trace Gravel, dry	0.0
2	1998484	67	4 4 4 4	yellowish brown fine to medium SAND, trace Silt, dry	3.1
4	1998485	71	3 4 4 4	yellowish brown fine to medium SAND, trace coarse Sand, little Silt, dry	3.6
6 ▽	1998486	75	3 4 4 5	light brown fine to medium SAND, trace coarse Sand, trace Cobble, moist	4.6
8	1998487	75	5 6 6 7	light brown fine to medium SAND, trace coarse Sand, trace Cobble, wet	0.0
10	1998488	67	2 3 4 4	0" - 3" brown fine SAND and SILT, wet 3" - 16" brown SILT, wet, packed Soil Testing, Inc. log: grey SILT	0.0
12	1998489	96	5 6 7 6	brown SILT, trace Clay, wet Soil Testing Inc. log: grey SILT	0.0
14	1998490	75	2 3 3 4	grey SILT and CLAY, Clay at 14' [sic] Soil Testing Inc. log: grey SILT	0.0
16.00 18.00		100	3 3 3 3	Soil Testing Inc. log: grey silty CLAY	

Comments:

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MONITORING WELL COMPLETION LOG

Project: Groundwater Investigation Step 4	**Start Date**	**Boring ID**
LEA Commission Number: 68VD135.001	8/ 2/2001	
Client: Pratt & Whitney	**End Date**	**WT-MW-37**
Location: P&W East Hartford	8/ 2/2001	

Drilling Contractor: Soil Testing, Inc. Oxford, CT
Drilling Method: Hollow Stem Auger / Split spoon
Sampling Method:
Groundwater Observations:
Depth: 7.6 **at:** **Hours**
Average depth to water is 7.65

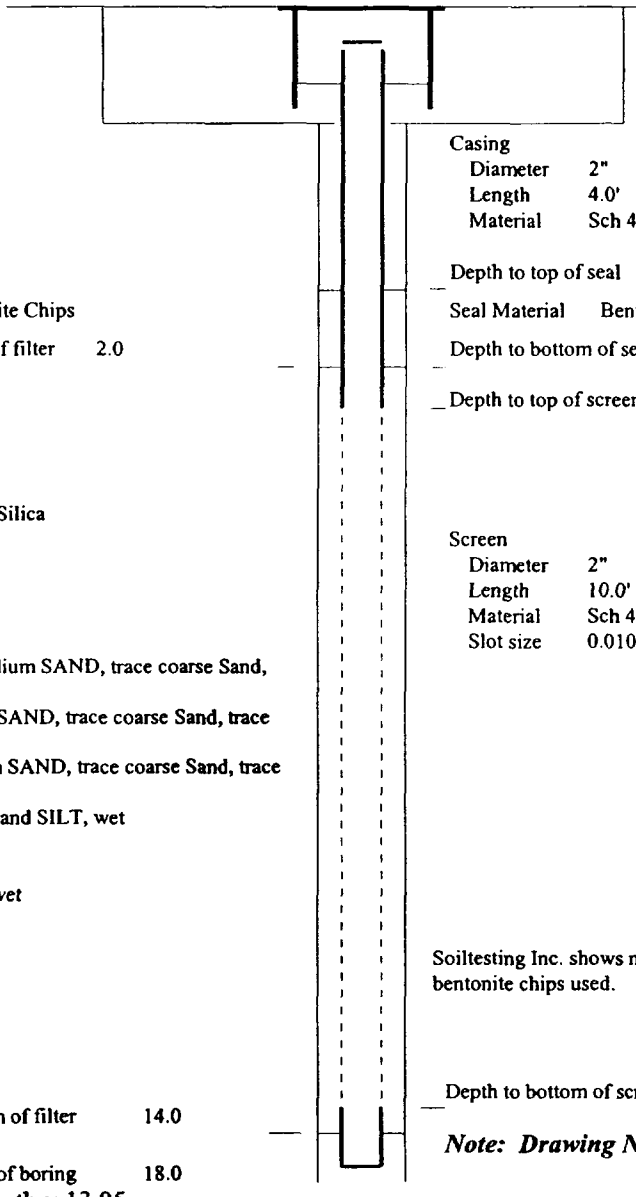
Logged by: Rob Whittaker
Drilling Foreman: Larry DeAngelis
Drill Rig: Skid Rig
Northing: 146,727.5
Easting: 178,228.0

Concrete Pad Diameter 2'

Key Number 32278
Cover Type Road box

Surface Elevation: 0.00
Top of Casing 33.89
Reference Elevation 33.89
Description of Reference Point
Top of 2" PVC Riser.

Concrete Pad Thickness
1'



Casing
Diameter 2"
Length 4.0'
Material Sch 40 PVC

Top Seal
Top 1'
Bottom 2'
Material Bentonite Chips

Depth to top of seal 1.0

Backfill Material Bentonite Chips

Seal Material Bentonite Chips

Depth to top of filter 2.0

Depth to bottom of seal 2.0

Secondary
Sand Top 2'
Sand Bottom 14'
Sand Size #1 Silica Sand

Depth to top of screen 4.0

Filter pack material #1 Silica

Screen
Diameter 2"
Length 10.0'
Material Sch 40 PVC
Slot size 0.010"

Description of Screened Soils

4' to 6': yellowish brown fine to medium SAND, trace coarse Sand, little Silt, dry
6' to 8': light brown fine to medium SAND, trace coarse Sand, trace Cobble, moist
8' to 10': light brown fine to medium SAND, trace coarse Sand, trace Cobble, wet
10' to 12': 0" - 3" brown fine SAND and SILT, wet
3" - 16" brown SILT, wet, packed
Soil Testing, Inc. log: grey SILT
12' to 14': brown SILT, trace Clay, wet
Soil Testing Inc. log: grey SILT

Soiltesting Inc. shows no seal; 1' of concrete, lists 1 bag bentonite chips used.

Depth to bottom of screen 14.0

Depth to bottom of filter 14.0

Note: Drawing Not To Scale

Depth to bottom of boring 18.0
Last measured depth = 13.95

LOUREIRO ENGINEERING ASSOCIATES,Inc
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GEOLOGIC BORING LOG

Project: Groundwater Investigation Step 4	**Start Date**	**Boring ID**
LEA Commission Number: 68VD135.001	7/30/2001	
Client: Pratt & Whitney	**End Date**	**WT-MW-38**
Location: P&W East Hartford	7/30/2001	

Drilling Contractor: Loureiro Engineering Associates, Inc. **Logged by:** James Lardie
Drilling Method: direct push **Drilling Foreman:** Jon Sweeton
Sampling Method: Macro Core **Drill Rig:** Geoprobe 5400 - LEA 95
Groundwater Observation **Surface Elevation:**
Depth: 11.5 **at:** **Hours** ▽ **Northing:** 146,542.9
Depth: **at:** **Hours** ▼ **Easting:** 178,086.0

Depth	Sample Information			Soil Description	PID/FID
	Sample No.	Recovery %	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity Angularity, Sedimentary Structure, Density, Cohesiveness, Other	ppm
0	1998309	63		brown fine SAND, some Silt [little] medium Sand, medium to fine trace Gravel, loose, dry	28.6
2	1998310	63		brown fine SAND, some Silt [little] medium Sand, medium to fine trace Gravel, loose, dry to 3.8' dark brown to black medium to fine SAND [~] roofing shingles, loose, dry	4.6
4	1998311	56		brown fine SAND to 4.2' brown to grey 'cinder block pieces' [sic], coarse, dry	2.4
6	1998312	56		brown to grey 'cinder block pieces' [sic], coarse, dry, strong 'tar' odour	2.1
8 ▽	1998313	19		'cinder block' pieces to brown fine SAND, some Silt, trace medium Sand, loose, very moist wet at 11.5'	19
12	1998314	71		brown fine SAND to 12.5' grey silty CLAY, dense, moist	1.3
14	1998315	71		grey silty CLAY to 14.2' brown medium to fine SAND, some Silt, very moist, moderately dense	1.8
16 18	1998316	58		brown medium to fine SAND, little Silt, wood fragments, organic matter, wet, moderately dense	1.7
20	1998318	100		brown medium to fine SAND, little Silt, little coarse Sand to brown to grey silty CLAY varves	1.7

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GEOLOGIC BORING LOG

Project: Groundwater Investigation Step 4	**Start Date**	**Boring ID**
LEA Commission Number: 68VD135.001	7/30/2001	
Client: Pratt & Whitney	**End Date**	**WT-MW-38**
Location: P&W East Hartford	7/30/2001	

Drilling Contractor: Loureiro Engineering Associates, Inc.
Logged by: James Lardie
Drilling Method: direct push
Drilling Foreman: Jon Sweeton
Sampling Method: Macro Core
Drill Rig: Geoprobe 5400 - LEA 95
Groundwater Observation
Surface Elevation:
Depth: 11.5 **at:** **Hours** ▽
Northing: 146,542.9
Depth: **at:** **Hours** ▼
Easting: 178,086.0

Depth	Sample Information			Soil Description	
	Sample No.	Recovery %	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity Angularity, Sedimentary Structure, Density, Cohesiveness, Other	PID/FID ppm
22	1998319	100		grey silty CLAY varved plastic coherence	2.1
24 – 26	1998317	58		reddish brown medium to fine SAND, some Silt, litle coarse Sand, loose, wet	2.0

Comments: Same location as WT-MW-38D.

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MONITORING WELL COMPLETION LOG

Project: Groundwater Investigation Step 4	**Start Date**	**Boring ID**
LEA Commission Number: 68VD135.001	7/31/2001	
Client: Pratt & Whitney	**End Date**	**WT-MW-38S**
Location: P&W East Hartford	7/31/2001	

Drilling Contractor: Loureiro Engineering Associates, Inc.
Drilling Method: Direct push
Sampling Method:
Groundwater Observations:
Depth: 11.5 **at:** 0:0
Average depth to water is 11.75

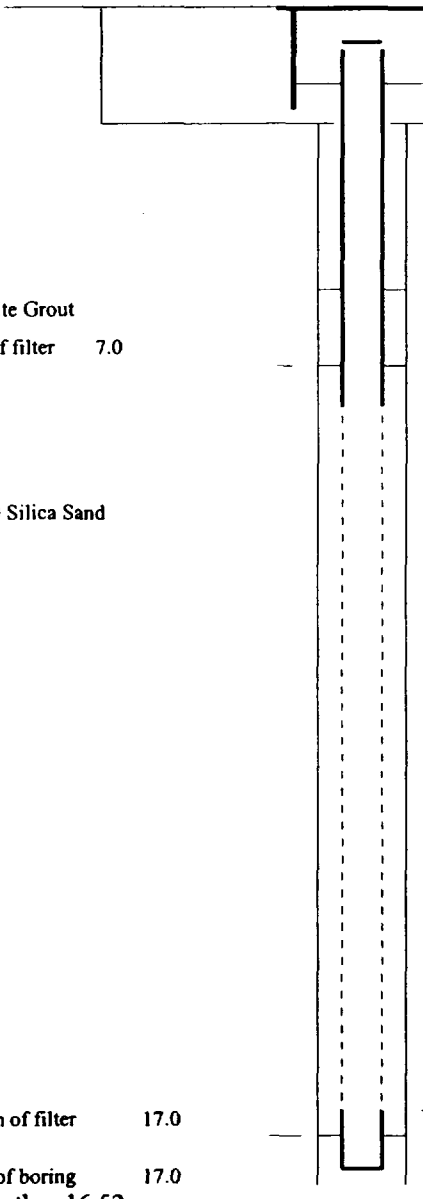
Logged by:
Drilling Foreman: Jon Sweeton
Drill Rig: Geoprobe 5400 - LEA 95
Northing: 146,542.0
Easting: 178,083.3

Concrete Pad Diameter 1.5

Key Number 32278
Cover Type Road box

Surface Elevation: 0.00
Top of Casing 32.58
Reference Elevation 32.58
Description of Reference Point
Top of 0.5" PVC Riser

Concrete Pad Thickness
1.5



Casing
Diameter 0.5"
Length 8.0'
Material Sch 80 PVC

Top Seal
Top 1.5'
Bottom 3.0'
Material Granular Bentonite

Depth to top of seal 5.0

Backfill Material Bentonite Grout

Seal Material Granular Bentonite

Depth to top of filter 7.0

Depth to bottom of seal 7.0

Secondary
Sand Top
Sand Bottom
Sand Size

Depth to top of screen 8.0

Filter pack material #00 Silica Sand

Screen
Diameter 0.5"
Length 9.0'
Material Sch 80 PVC
Slot size 0.010"

Description of Screened Soils

See WT-MW-38 for description of screened interval.

Depth to bottom of screen 17.0

Depth to bottom of filter 17.0

Note: Drawing Not To Scale

Depth to bottom of boring 17.0
Last measured depth = 16.52

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MONITORING WELL COMPLETION LOG

Project: Groundwater Investigation Step 4	**Start Date**	**Boring ID**
LEA Commission Number: 68VD135.001	7/31/2001	
Client: Pratt & Whitney	**End Date**	**WT-MW-38D**
Location: P&W East Hartford	7/31/2001	

Drilling Contractor: Loureiro Engineering Associates, Inc.
Drilling Method: Direct push / MacroCore
Sampling Method:
Groundwater Observations:
Depth: 11.5' **at:** 0 **Hours**
Average depth to water is 12.15

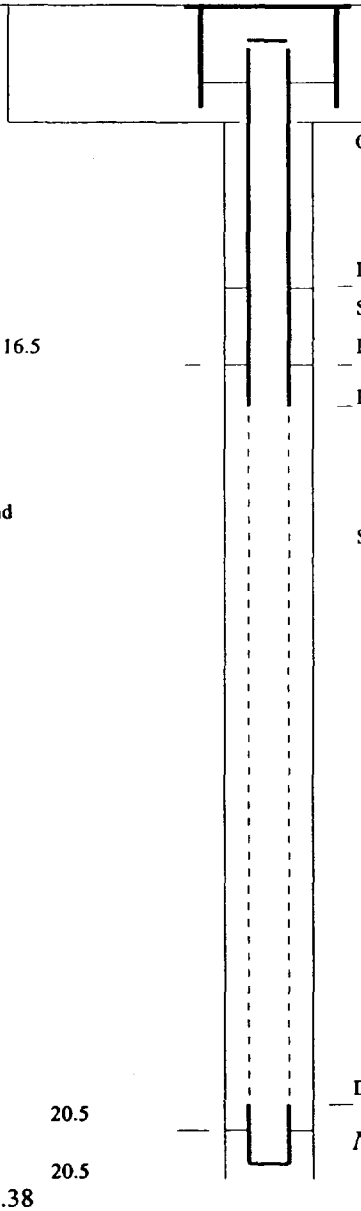
Logged by:
Drilling Foreman: Jon Sweeton
Drill Rig: Geoprobe 5400 - LEA 95
Northing: 146,542.9
Easting: 178,086.0

Concrete Pad Diameter 1.5'

Key Number
Cover Type road box

Surface Elevation: 0.00
Top of Casing 32.68
Reference Elevation 32.68
Description of Reference Point
Top of 0.5" PVC Riser

Concrete Pad Thickness
1.5'



Casing
Diameter 0.5"
Length 17.5'
Material Sch80 PVC

Top Seal
Top 1.5'
Bottom 3.'
Material Granular Bentonite

Depth to top of seal 1.5

Backfill Material Bentonite Grout

Seal Material Bentonite Grout

Depth to top of filter 16.5

Depth to bottom of seal 16.5

Secondary
Sand Top 16.5'
Sand Bottom 20.5'
Sand Size #00 Silica

Depth to top of screen 17.5

Filter pack material #00 Silica Sand

Screen
Diameter 0.5"
Length 3.0'
Material Sch80 PVC
Slot size 0.010"

Description of Screened Soils

Depth to bottom of screen 20.5

Depth to bottom of filter 20.5

Note: Drawing Not To Scale

Depth to bottom of boring 20.5
Last measured depth = 20.38

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GEOLOGIC BORING LOG

Project: Groundwater Investigation Step 4	**Start Date**	**Boring ID**
LEA Commission Number: 68VD135.001	8/ 1/2001	
Client: Pratt & Whitney	**End Date**	**WT-MW-39**
Location: P&W East Hartford	8/ 1/2001	

Drilling Contractor: Loureiro Engineering Associates, Inc. **Logged by:** Dave Brisson
Drilling Method: Geoprobe **Drilling Foreman:** Jason Miller
Sampling Method: Macro Core **Drill Rig:** Geoprobe 5400 - LEA 97
Groundwater Observation **Surface Elevation:**
Depth: 13.3 **at:** **Hours** ▽ **Northing:** 146,249.7
Depth: **at:** **Hours** ▼ **Easting:** 178,020.2

Depth	Sample Information			Soil Description	
	Sample No.	Recovery %	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity Angularity, Sedimentary Structure, Density, Cohesiveness, Other	PID/FID ppm
0	1998402	83		brown fine to medium SAND, trace coarse to fine Gravel, trace asphalt pieces, dry, loose (fill)	0
2	1998403	83		brown fine to medium SAND, trace coarse to fine Gravel, trace asphalt pieces, dry, loose (fill)	0
4	1998404	85		light brown fine to very fine SAND and crusher stone, dry, loose (fill)	0
6	1998405	85		grey crushed stone, trace fine to very fine Sand, dry, loose	0
8	1998406	40		grey crushed stone, trace fine to very fine Sand, dry, loose	0
12 ▽	1998407	29		grey crushed stone, trace fine to very fine Sand, dry, loose	0
14	1998408	29		yellow orange fine SAND, trace very fine Sand, wet, loose	5.5
16	1998409	67		yellow orange fine SAND, trace very fine Sand, trace Silt, wet, loose	4.2
18	1998410	67		grey CLAY with Silt laminations, wet, moderately dense	0
20					

Comments:

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MONITORING WELL COMPLETION LOG

Project: Groundwater Investigation Step 4	**Start Date**	**Boring ID**
LEA Commission Number: 68VD135.001	8/ 1/2001	
Client: Pratt & Whitney	**End Date**	**WT-MW-39**
Location: P&W East Hartford	8/ 1/2001	

Drilling Contractor: Loureiro Engineering Associates, Inc.
Drilling Method: Direct Push / MacroCore
Sampling Method:
Groundwater Observations:
Depth: 13.3 **at:** **Hours**
Average depth to water is 13.29

Logged by: james lardie
Drilling Foreman: Jason Miller
Drill Rig: Geoprobe 5400 - LEA 97
Northing: 146,249.7
Easting: 178,020.2

Concrete Pad Diameter 1.5'

Key Number 32278
Cover Type Road box

Surface Elevation: 0.00
Top of Casing 34.19
Reference Elevation 34.19
Description of Reference Point
Top of 0.5" PVC riser.

Concrete Pad Thickness
2'

Casing
Diameter 0.5"
Length 9.0'
Material Sch 80 PVC

Top Seal
Top 2.0'
Bottom 7.0'
Material Granular Bentonite

Depth to top of seal 2.0

Backfill Material Granular bentonite

Seal Material Granular bentonite

Depth to top of filter 7.0

Depth to bottom of seal 7.0

Secondary
Sand Top
Sand Bottom
Sand Size #0 Silica

Depth to top of screen 9.0

Filter pack material prepack

Screen
Diameter 0.5"
Length 9.0'
Material Sch 80 PVC
Slot size 0.010"

Description of Screened Soils

8' to 12': grey crushed stone, trace fine to very fine Sand, dry, loose
12' to 14': grey crushed stone, trace fine to very fine Sand, dry, loose
14' to 16': yellow orange fine SAND, trace very fine Sand, wet, loose
16' to 18': yellow orange fine SAND, trace very fine Sand, trace Silt, wet, loose

Depth to bottom of screen 18.0

Depth to bottom of filter 18.0

Note: Drawing Not To Scale

Depth to bottom of boring 20.0
Last measured depth = 17.56

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GEOLOGIC BORING LOG

Project: Groundwater Investigation - Speedy Muffl **LEA Commission Number** 68VD136.001 **Client** United Technologies **Location** P&W East Hartford	**Start Date** 12/12/2001 **End Date** 12/12/2001	**Boring ID** **WT-GW-43D**

Drilling Contractor	Loureiro Engineering	**Logged by**	james lardie
Drilling Method	direct push	**Drilling Foreman**	Jason Miller
Sampling Method	Macro Core	**Drill Rig**	Geoprobe 5400 - LEA 97
Groundwater Observation		**Surface Elevation**	0.00
Depth 15.75 **at**	**Hours**	**Latitude**	
Depth **at**	**Hours**	**Longitude**	

Depth	Sample Information			Soil Description	PID/FID ppm
	Sample No.	Recovery (%)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structure, Density, Cohesiveness, Other	
0-	2010114	100		0" - 6" concrete 6" - 24" brown fine loamy SAND, little medium Sand, trace coarse Sand, trace fine to medium Gravel, moderately dense, moist	0
2-	2010115	100		brown fine SAND, some SIlt, little medium Sand, trace coarse to fine Gravel, trace coare Sand, moderately dense, moist	0
4-	2010116	83		brown fine SAND, some SIlt, little medium Sand, trace coarse to fine Gravel, trace coare Sand, moderately dense, moist	0
6-	2010117	83		brown fine SAND, some SIlt, little medium Sand, trace coarse to fine Gravel, trace coare Sand, moderately dense, moist red brick at 7'	0
8-	2010118	75		brown fine SAND, some SIlt, little medium Sand, trace coarse to fine Gravel, trace coare Sand, moderately dense, moist	0
10-	2010119	75		brown fine SAND, some Silt, little medium Sand, little grey siltstone pieces, little [illegible] Gravel 1/2" layer of brown PEAT at 11.5'	0
12-	2010120	63		brown fine SAND, some Silt, little medium to coare Sand, little medium to fine Gravel, moderately dense, moist	0
14- V	2010121	63		brown fine SAND, some Silt, little medium to coare Sand, little medium to fine Gravel, moderately dense, moist wet at 15.75'	0
16-	2010122			brown fine SAND, little Silt, trace coarse to fine Gravel, moderately dense, wet	0
18-	2010123			brown fine SAND, little Silt, moderately dense, wet dark brown PEAT layer at 14.5'	0
20-	2010124	63		brown fine SAND, some Silt interlayered with dark brown fine silty SAND (PEAT), loose, wet	0
22-	2010125	63		brown fine SAND, some Silt interlayered with dark brown fine silty SAND (PEAT), loose, wet to	0

GEOLOGIC BORING LOG

Project: Groundwater Investigation - Speedy Muffl **LEA Commission Number** 68VD136.001 **Client** United Technologies **Location** P&W East Hartford	**Start Date** 12/12/2001 **End Date** 12/12/2001	**Boring ID** **WT-GW-43D**

Drilling Contractor	Loureiro Engineering	**Logged by**	James Lardie
Drilling Method	direct push	**Drilling Foreman**	Jason Miller
Sampling Method	Macro Core	**Drill Rig**	Geoprobe 5400 - LEA 97
Groundwater Observation		**Surface Elevation**	0.00
Depth 15.75 **at**	**Hours**	**Latitude**	
Depth **at**	**Hours**	**Longitude**	

Depth	Sample Information			Soil Description	PID/FID ppm
	Sample No.	Recovery (%)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structure, Density, Cohesiveness, Other	
				23' medium to fine brown SAND, some coarse Sand, little Silt, wet, loose	
24-	2010126	96		medium to fine brown SAND, some coarse Sand, little Silt, wet, loose to 24.25' grey CLAY and SILT (varved)	0
26-		96		grey CLAY (varved)	
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GEOLOGIC BORING LOG

Project: Groundwater Investigation - Speedy Muffl **LEA Commission Number** 68VD136.001 **Client** United Technologies **Location** P&W East Hartford	**Start Date** 12/13/2001 **End Date** 12/13/2001	**Boring ID** **WT-GW-44D**

Drilling Contractor	Loureiro Engineering	**Logged by**	james lardie
Drilling Method	direct push	**Drilling Foreman**	
Sampling Method	Macro Core	**Drill Rig**	Geoprobe 5400 - LEA 97
Groundwater Observation		**Surface Elevation**	0.00
Depth 14.8	**at** **Hours**	**Latitude**	
Depth	**at** **Hours**	**Longitude**	

Depth	Sample Information			Soil Description	PID/FID ppm
	Sample No.	Recovery (%)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structure, Density, Cohesiveness, Other	
0-	2010130	100		brown fine loamy SAND, some Silt, little fine Gravel, trace medium to fine Sand, moderately dense, moist	0.0
2-	2010131	100		reddish brown fine SAND, some Silt, trace medium to coarse Sand, trace fine Gravel, loose, moist	0.0
4-	2010132	83		reddish brown fine SAND with shale fragments, some Silt, trace medium to coarse Sand, trace fine Gravel, loose, moist	0.0
6-	2010133	83		dark reddish brown fine SAND, some Silt, trace medium Sand, loose, moist	0.0
8-	2010134	75		dark reddish brown fine SAND, some Silt, trace medium Sand, loose, moist	0.0
10-	2010135	75		dark reddish brown fine SAND, some Silt, trace medium Sand, loose, moist to 11.5' brown medium to fine SAND, trace medium Gravel, little Silt, lose, moist	0.0
12-	2010136	63		reddish brown medium to fine SAND, some Silt, trace coarse Sand, trace medium to fine Gravel, loose, moist	0.0
14- V	2010137	63		reddish brown medium to fine SAND, some Silt, trace coarse Sand, trace medium to fine Gravel, loose, moist wet at 15' PEAT in tip	0.0
16-	2010138	63		brown to dark brown medium to fine SAND, some Silt, trace Clay to 17.75' lose to moderatlye dense, wet, with organic matter	0.0
18-	2010139	63		'AA' [sic - no valid reference] to 19.5' organic PEAT and brown fine SAND, trace Silt, trace fine Gravel	0.0
20-	2010140, 2010141	90		dark brown medium to fine SAND, some Silt, trace organic Peat layers, loose to moderately dense, wet	0.0
22-	2010142	90		dark brown medium to fine SAND, some Silt, trace organic Peat layers, loose to	0.0

GEOLOGIC BORING LOG

Project: Groundwater Investigation - Speedy Muffl **LEA Commission Number** 68VD136.001 **Client** United Technologies **Location** P&W East Hartford	**Start Date** 12/13/2001 **End Date** 12/13/2001	**Boring ID** **WT-GW-44D**

Drilling Contractor	Loureiro Engineering	**Logged by**	james lardie
Drilling Method	direct push	**Drilling Foreman**	
Sampling Method	Macro Core	**Drill Rig**	Geoprobe 5400 - LEA 97
Groundwater Observation		**Surface Elevation**	0.00
Depth 14.8	**at** **Hours**	**Latitude**	
Depth	**at** **Hours**	**Longitude**	

Depth	Sample Information			Soil Description	PID/FID ppm
	Sample No.	Recovery (%)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structure, Density, Cohesiveness, Other	
|				moderately dense, wet to	
|				23.5' grey CLAY (varved)	
|					
24					

GEOLOGIC BORING LOG

Project: Groundwater Investigation - Speedy Muffl **LEA Commission Number** 68VD136.001 **Client** United Technologies **Location** P&W East Hartford	**Start Date** 12/13/2001 **End Date** 12/13/2001	**Boring ID** **WT-GW-45D**

Drilling Contractor	Loureiro Engineering	**Logged by**	james lardie
Drilling Method	direct push	**Drilling Foreman**	
Sampling Method	Macro Core	**Drill Rig**	Geoprobe 5400 - LEA 97
Groundwater Observation		**Surface Elevation**	0.00
Depth 15.0	**at** **Hours**	**Latitude**	
Depth	**at** **Hours**	**Longitude**	

Depth	Sample Information			Soil Description	PID/FID ppm
	Sample No.	Recovery (%)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structure, Density, Cohesiveness, Other	
0-	2010143	100		0" - 2" asphalt pavement 2" - 6" subbase 6" - 24" brown fine SAND, little Silt, little coare to fine Gravel, trace coarse to medium Sand, dense, moist	0.0
2-	2010144, 2010155	100		reddish brown fine SAND, little Silt, trace medium to coarse Sand, loose, moist	0.0
4-	2010145	100		reddish brown fine SAND, little Silt, trace medium to coarse Sand, loose, moist	0.0
6-	2010146	100		reddish brown fine SAND, little Silt, trace medium to coarse Sand, loose, moist	0.0
8-	2010147	79		reddish brown fine SAND, little Silt, trace medium to coarse Sand, loose, moist	0.0
10-	2010148	79		reddish brown fine SAND, little Silt, trace medium to coarse Sand, loose, moist 1" dark brown fine SAND, some Silt layer at 11'	0.0
12-	2010149	71		reddishbrown fine SAND, some Silt, trace medium to coarse Sand, loose, moist	0.0
14- V	2010150	71		reddishbrown fine SAND, some Silt, trace medium to coarse Sand, loose, very moist wet at 15'	0.0
16-	2010151	71		brown fine SAND, some Silt, trace medium to coarse Sand, slight petroleum odour (?), loose, wet	0.0
18-	2010162	71		brown fine SAND, some Silt, trace medium to coarse Sand, slight petroleum odour (?), loose, wet to 19' dark brown organic PEAT, saturated	0.0
20-	2010163	83		brown fine SAND, some SIlt, little medium Sand	0.0
22-	2010164	83		reddish brown silty CLAY changing to grey	0.0

GEOLOGIC BORING LOG

Project: Groundwater Investigation - Speedy Muffl **LEA Commission Number** 68VD136.001 **Client** United Technologies **Location** P&W East Hartford	**Start Date** 12/13/2001 **End Date** 12/13/2001	**Boring ID** **WT-GW-45D**

Drilling Contractor	Loureiro Engineering	**Logged by**	james lardie
Drilling Method	direct push	**Drilling Foreman**	
Sampling Method	Macro Core	**Drill Rig**	Geoprobe 5400 - LEA 97
Groundwater Observation		**Surface Elevation**	0.00
Depth 15.0 **at** **Hours**		**Latitude**	
Depth **at** **Hours**		**Longitude**	

Depth	Sample Information			Soil Description	PID/FID ppm
	Sample No.	Recovery (%)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structure, Density, Cohesiveness, Other	
| | 24					

LEA