SDMS US EPA REGION V -1

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EPA METHOD 8270
TCL SEMIVOLATILE ORGANIC COMPOUND RESULTS

Client ID:	GS-C304-101	Lab ID (HSN):	25147
Matrix:	SOIL	Filename:	4163P06
Date Sampled:	05/27/94	Sample Size:	1 grams
Date Received:	05/31/94	Extract Vol.:	500 uL
Date Extracted:	06/09/94	Dil. Factor:	1
Date Analyzed:	06/12/94	GPC Factor:	2
		% Moisture:	20.6

Compounds:	ug/Kg (PPB)		EQL
Phenol	3300	J	13000
bis(2-Chloroethyl)ether	13000	U	13000
2-Chlorophenol	13000	U	13000
1,3-Dichlorobenzene	13000	U	13000
1,4-Dichlorobenzene	13000	U	13000
1,2-Dichlorobenzene	13000	U	13000
2-Methylphenol	13000	U	13000
2,2'-oxybis(1-Chloropropane)	13000	U	13000
4-Methylphenol	13000	U	13000
N-Nitroso-di-n-propylamine	13000	U	13000
Hexachloroethane	13000	U	13000
Nitrobenzene	13000	U	13000
Isophorone	13000	U	13000
2-Nitrophenol	13000	U	13000
2,4-Dimethylphenol	13000	U	13000
bis(2-Chloroethoxy)methane	13000	U	13000
2,4-Dichlorophenol	13000	U	13000
1,2,4-Trichlorobenzene	13000	U	13000
Naphthalene	6000	J	13000
4-Chloroaniline	13000	U	13000
Hexachlorobutadiene	13000	U	13000
4-Chloro-3-methylphenol	13000	U	13000
2-Methylnaphthalene	13000	U	13000
Hexachlorocyclopentadiene	13000	U	13000
2,4,6-Trichlorophenol	13000	U	13000
2,4,5-Trichlorophenol	31000	U	31000
2-Chloronaphthalene	13000	U	13000
2-Nitroaniline	31000	U	31000
Dimethylphthalate	13000	U	13000
Acenaphthylene	13000	U	13000
2,6-Dinitrotoluene	13000	U	13000
3-Nitroaniline	31000	U	31000
Acenaphthene	13000	U	13000
2,4-Dinitrophenol	31000	U	31000
4-Nitrophenol	31000	U	31000
Dibenzofuran	13000	U	13000
2,4-Dinitrotoluene	13000	U	13000
Diethylphthalate	13000	U	13000
4-Chlorophenyl-phenylether	13000	U	13000
Fluorene	13000	U	13000
4-Nitroaniline	31000	U	31000
4,6-Dinitro-2-methylphenol	31000	U	31000

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EPA METHOD 8270
TCL SEMIVOLATILE ORGANIC COMPOUND RESULTS

Client ID: GS-C304-101 Lab ID (HSN): 25147
Matrix: SOIL Filename: 4163P06

Compounds:	ug/Kg (PPB)		EQL
N-Nitrosodiphenylamine	13000 U		13000
4-Bromophenyl-phenylether	13000 U		13000
Hexachlorobenzene	13000 U		13000
Pentachlorophenol	2800 J		31000
Phenanthrene	13000 U		13000
Anthracene	13000 U		13000
Carbazole	13000 U		13000
Di-n-butylphthalate	13000 U		13000
Fluoranthene	13000 U		13000
Pyrene	13000 U	Y	13000
Butylbenzylphthalate	13000 U	Y	13000
3,3'-Dichlorobenzidine	13000 U	Y	13000
Benz(a)anthracene	13000 U	Y	13000
Chrysene	13000 U	Y	13000
bis(2-Ethylhexyl)phthalate	13000 U	Y	13000
Di-n-octylphthalate	13000 U	Y	13000
Benzo(b)fluoranthene	13000 U	Y	13000
Benzo(k)fluoranthene	13000 U	Y	13000
Benzo(a)pyrene	13000 U	Y	13000
Indeno(1,2,3-cd)pyrene	13000 U	Y	13000
Dibenz(a,h)anthracene	13000 U	Y	13000
Benzo(g,h,i)perylene	13000 U	Y	13000

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Surrogate Recovery			QC LIMITS
2-Fluorophenol	69%		25-121%
Phenol-d5	77%		24-113%
2-Chlorophenol-d4	72%		20-130%
1,2-Dichlorobenzene-d4	64%		20-130%
Nitrobenzene-d5	69%		23-120%
2-Fluorobiphenyl	90%		30-115%
2,4,6-Tribromophenol	70%		19-122%
Terphenyl-d14	136%	Y	18-137%

TCL = Target Coumpound List EPA Contract Laboratory Program (OLM01)
EQL = Estimated Quantitation Limit (lower calibration limit)
U = Undetected at the given EQL
J = Detected below the EQL (estimated value)
E = Exceeds the upper calibration limit (estimated value)
B = Also detected in the associated Blank
Y = Associated internal standard failed method criteria

Note: All results are reported on a dry weight basis.
Reference: "EPA Test Methods for Evaluating Solid Waste", SW-846, November 1986, 3rd Edition.

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EPA METHOD 8270
TCL SEMIVOLATILE ORGANIC COMPOUND RESULTS

Client ID:	CS-C304-101	Lab ID (HSN):	25147MS
Matrix:	SOIL	Filename:	4163P07
Date Sampled:	05/27/94	Sample Size:	1 grams
Date Received:	05/31/94	Extract Vol.:	500 uL
Date Extracted:	06/09/94	Dil. Factor:	10
Date Analyzed:	06/13/94	GPC Factor:	2
		% Moisture:	20.6

Compounds:	ug/Kg (PPB)		EQL
Phenol	85000	JD	130000
bis(2-Chloroethyl)ether	130000	UD	130000
2-Chlorophenol	84000	JD	130000
1,3-Dichlorobenzene	130000	UD	130000
1,4-Dichlorobenzene	54000	JD	130000
1,2-Dichlorobenzene	130000	UD	130000
2-Methylphenol	130000	UD	130000
2,2'-oxybis(1-Chloropropane)	130000	UD	130000
4-Methylphenol	130000	UD	130000
N-Nitroso-di-n-propylamine	51000	JD	130000
Hexachloroethane	130000	UD	130000
Nitrobenzene	130000	UD	130000
Isophorone	130000	UD	130000
2-Nitrophenol	130000	UD	130000
2,4-Dimethylphenol	130000	UD	130000
bis(2-Chloroethoxy)methane	130000	UD	130000
2,4-Dichlorophenol	130000	UD	130000
1,2,4-Trichlorobenzene	55000	JD	130000
Naphthalene	130000	UD	130000
4-Chloroaniline	130000	UD	130000
Hexachlorobutadiene	130000	UD	130000
4-Chloro-3-methylphenol	81000	JD	130000
2-Methylnaphthalene	130000	UD	130000
Hexachlorocyclopentadiene	130000	UD	130000
2,4,6-Trichlorophenol	130000	UD	130000
2,4,5-Trichlorophenol	310000	UD	310000
2-Chloronaphthalene	130000	UD	130000
2-Nitroaniline	310000	UD	310000
Dimethylphthalate	130000	UD	130000
Acenaphthylene	130000	UD	130000
2,6-Dinitrotoluene	130000	UD	130000
3-Nitroaniline	310000	UD	310000
Acenaphthene	47000	JD	130000
2,4-Dinitrophenol	310000	UD	310000
4-Nitrophenol	74000	JD	310000
Dibenzofuran	130000	UD	130000
2,4-Dinitrotoluene	55000	JD	130000
Diethylphthalate	130000	UD	130000
4-Chlorophenyl-phenylether	130000	UD	130000
Fluorene	130000	UD	130000
4-Nitroaniline	310000	UD	310000
4,6-Dinitro-2-methylphenol	310000	UD	310000

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EPA METHOD 8270
TCL SEMIVOLATILE ORGANIC COMPOUND RESULTS

Client ID: GS-C304-101 Lab ID (HSN): 25147MS
Matrix: SOIL Filename: 4163P07

Compounds:	ug/Kg (PPB)	EQL
N-Nitrosodiphenylamine	130000 UD	130000
4-Bromophenyl-phenylether	130000 UD	130000
Hexachlorobenzene	130000 UD	130000
Pentachlorophenol	99000 JD	310000
Phenanthrene	130000 UD	130000
Anthracene	130000 UD	130000
Carbazole	130000 UD	130000
Di-n-butylphthalate	130000 UD	130000
Fluoranthene	130000 UD	130000
Pyrene	67000 JD	130000
Butylbenzylphthalate	130000 UD	130000
3,3'-Dichlorobenzidine	130000 UD	130000
Benz(a)anthracene	130000 UD	130000
Chrysene	130000 UD	130000
bis(2-Ethylhexyl)phthalate	1600000 EDB	130000
Di-n-octylphthalate	130000 UD Y	130000
Benzo(b)fluoranthene	130000 UD Y	130000
Benzo(k)fluoranthene	130000 UD Y	130000
Benzo(a)pyrene	130000 UD Y	130000
Indeno(1,2,3-cd)pyrene	130000 UD Y	130000
Dibenz(a,h)anthracene	130000 UD Y	130000
Benzo(g,h,i)perylene	130000 UD Y	130000

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Surrogate Recovery		QC LIMITS
2-Fluorophenol	82%JD	25-121%
Phenol-d5	91%JD	24-113%
2-Chlorophenol-d4	89%JD	20-130%
1,2-Dichlorobenzene-d4	81%JD	20-130%
Nitrobenzene-d5	81%JD	23-120%
2-Fluorobiphenyl	92%JD	30-115%
2,4,6-Tribromophenol	91%JD	19-122%
Terphenyl-d14	121%JD	18-137%

TCL = Target Coumpound List EPA Contract Laboratory Program (OLM01)
EQL = Estimated Quantitation Limit (lower calibration limit)
U = Undetected at the given EQL
J = Detected below the EQL (estimated value)
E = Exceeds the upper calibration limit (estimated value)
B = Also detected in the associated Blank
D = Analysis at a secondary Dilution factor
Y = Associated internal standard failed method criteria
Note: All results are reported on a dry weight basis.
Reference: "EPA Test Methods for Evaluating Solid Waste", SW-846, November 1986, 3rd Edition.

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EPA METHOD 8270
TCL SEMIVOLATILE ORGANIC COMPOUND RESULTS

Client ID:	GS-C304-101	Lab ID (HSN):	25147MSD
Matrix:	SOIL	Filename:	4163P08
Date Sampled:	05/27/94	Sample Size:	1 grams
Date Received:	05/31/94	Extract Vol.:	500 uL
Date Extracted:	06/09/94	Dil. Factor:	10
Date Analyzed:	06/13/94	GPC Factor:	2
		% Moisture:	20.6

Compounds:	ug/Kg (PPB)		EQL
Phenol	89000	JD	130000
bis(2-Chloroethyl)ether	130000	UD	130000
2-Chlorophenol	88000	JD	130000
1,3-Dichlorobenzene	130000	UD	130000
1,4-Dichlorobenzene	57000	JD	130000
1,2-Dichlorobenzene	130000	UD	130000
2-Methylphenol	130000	UD	130000
2,2'-oxybis(1-Chloropropane)	130000	UD	130000
4-Methylphenol	130000	UD	130000
N-Nitroso-di-n-propylamine	54000	JD	130000
Hexachloroethane	130000	UD	130000
Nitrobenzene	130000	UD	130000
Isophorone	130000	UD	130000
2-Nitrophenol	130000	UD	130000
2,4-Dimethylphenol	130000	UD	130000
bis(2-Chloroethoxy)methane	130000	UD	130000
2,4-Dichlorophenol	130000	UD	130000
1,2,4-Trichlorobenzene	58000	JD	130000
Naphthalene	130000	UD	130000
4-Chloroaniline	130000	UD	130000
Hexachlorobutadiene	130000	UD	130000
4-Chloro-3-methylphenol	85000	JD	130000
2-Methylnaphthalene	130000	UD	130000
Hexachlorocyclopentadiene	130000	UD	130000
2,4,6-Trichlorophenol	130000	UD	130000
2,4,5-Trichlorophenol	310000	UD	310000
2-Chloronaphthalene	130000	UD	130000
2-Nitroaniline	310000	UD	310000
Dimethylphthalate	130000	UD	130000
Acenaphthylene	130000	UD	130000
2,6-Dinitrotoluene	130000	UD	130000
3-Nitroaniline	310000	UD	310000
Acenaphthene	47000	JD	130000
2,4-Dinitrophenol	310000	UD	310000
4-Nitrophenol	72000	JD	310000
Dibenzofuran	130000	UD	130000
2,4-Dinitrotoluene	56000	JD	130000
Diethylphthalate	130000	UD	130000
4-Chlorophenyl-phenylether	130000	UD	130000
Fluorene	130000	UD	130000
4-Nitroaniline	310000	UD	310000
4,6-Dinitro-2-methylphenol	310000	UD	310000

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EPA METHOD 8270
TCL SEMIVOLATILE ORGANIC COMPOUND RESULTS

Client ID: GS-C304-101 Lab ID (HSN): 25147MSD
Matrix: SOIL Filename: 4163P08

Compounds:	ug/Kg (PPB)	EQL
N-Nitrosodiphenylamine	130000 UD	130000
4-Bromophenyl-phenylether	130000 UD	130000
Hexachlorobenzene	130000 UD	130000
Pentachlorophenol	98000 JD	310000
Phenanthrene	130000 UD	130000
Anthracene	130000 UD	130000
Carbazole	130000 UD	130000
Di-n-butylphthalate	130000 UD	130000
Fluoranthene	130000 UD	130000
Pyrene	73000 JD	130000
Butylbenzylphthalate	130000 UD	130000
3,3'-Dichlorobenzidine	130000 UD	130000
Benz(a)anthracene	130000 UD	130000
Chrysene	130000 UD	130000
bis(2-Ethylhexyl)phthalate	130000 UD	130000
Di-n-octylphthalate	130000 UD Y	130000
Benzo(b)fluoranthene	130000 UD Y	130000
Benzo(k)fluoranthene	130000 UD Y	130000
Benzo(a)pyrene	130000 UD Y	130000
Indeno(1,2,3-cd)pyrene	130000 UD Y	130000
Dibenz(a,h)anthracene	130000 UD Y	130000
Benzo(g,h,i)perylene	130000 UD Y	130000

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Surrogate Recovery		QC LIMITS
2-Fluorophenol	89%JD	25-121%
Phenol-d5	96%JD	24-113%
2-Chlorophenol-d4	95%JD	20-130%
1,2-Dichlorobenzene-d4	91%JD	20-130%
Nitrobenzene-d5	84%JD	23-120%
2-Fluorobiphenyl	94%JD	30-115%
2,4,6-Tribromophenol	89%JD	19-122%
Terphenyl-d14	129%JD	18-137%

TCL = Target Coumpound List EPA Contract Laboratory Program (OLM01)
EQL = Estimated Quantitation Limit (lower calibration limit)
U = Undetected at the given EQL
J = Detected below the EQL (estimated value)
E = Exceeds the upper calibration limit (estimated value)
B = Also detected in the associated Blank
D = Analysis at a secondary Dilution factor
Y = Associated internal standard failed method criteria
Note: All results are reported on a dry weight basis.
Reference: "EPA Test Methods for Evaluating Solid Waste", SW-846, November 1986, 3rd Edition.

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EPA METHOD 8270
TCL SEMIVOLATILE ORGANIC COMPOUND RESULTS

Client ID:	GS-C4-102	Lab ID (HSN):	25150DL
Matrix:	SOIL	Filename:	4164P06
Date Sampled:	05/27/94	Sample Size:	1 grams
Date Received:	05/31/94	Extract Vol.:	1000 uL
Date Extracted:	06/10/94	Dil. Factor:	5
Date Analyzed:	06/13/94	GPC Factor:	2
		% Moisture:	6.6

Compounds:	ug/Kg (PPB)		EQL
Phenol	110000	UD	110000
bis(2-Chloroethyl)ether	110000	UD	110000
2-Chlorophenol	110000	UD	110000
1,3-Dichlorobenzene	110000	UD	110000
1,4-Dichlorobenzene	110000	UD	110000
1,2-Dichlorobenzene	110000	UD	110000
2-Methylphenol	110000	UD	110000
2,2'-oxybis(1-Chloropropane)	110000	UD	110000
4-Methylphenol	110000	UD	110000
N-Nitroso-di-n-propylamine	110000	UD	110000
Hexachloroethane	110000	UD	110000
Nitrobenzene	110000	UD	110000
Isophorone	110000	UD	110000
2-Nitrophenol	110000	UD	110000
2,4-Dimethylphenol	110000	UD	110000
bis(2-Chloroethoxy)methane	110000	UD	110000
2,4-Dichlorophenol	110000	UD	110000
1,2,4-Trichlorobenzene	110000	UD	110000
Naphthalene	400000	D	110000
4-Chloroaniline	110000	UD	110000
Hexachlorobutadiene	110000	UD	110000
4-Chloro-3-methylphenol	110000	UD	110000
2-Methylnaphthalene	110000	UD	110000
Hexachlorocyclopentadiene	110000	UD	110000
2,4,6 Trichlorophenol	110000	UD	110000
2,4,5-Trichlorophenol	270000	UD	270000
2-Chloronaphthalene	110000	UD	110000
2-Nitroaniline	270000	UD	270000
Dimethylphthalate	110000	UD	110000
Acenaphthylene	110000	UD	110000
2,6-Dinitrotoluene	110000	UD	110000
3-Nitroaniline	270000	UD	270000
Acenaphthene	110000	UD	110000
2,4-Dinitrophenol	270000	UD	270000
4-Nitrophenol	270000	UD	270000
Dibenzofuran	110000	UD	110000
2,4-Dinitrotoluene	110000	UD	110000
Diethylphthalate	110000	UD	110000
4-Chlorophenyl-phenylether	110000	UD	110000
Fluorene	110000	UD	110000
4-Nitroaniline	270000	UD	270000
4,6-Dinitro-2-methylphenol	270000	UD	270000

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EPA METHOD 8270
TCL SEMIVOLATILE ORGANIC COMPOUND RESULTS

Client ID: GS-C4-102 Lab ID (HSN): 25150DL
Matrix: SOIL Filename: 4164P06

Compounds:	ug/Kg (PPB)	EQL
N-Nitrosodiphenylamine	110000 UD	110000
4-Bromophenyl-phenylether	110000 UD	110000
Hexachlorobenzene	110000 UD	110000
Pentachlorophenol	270000 UD	270000
Phenanthrene	37000 JD	110000
Anthracene	110000 UD	110000
Carbazole	110000 UD	110000
Di-n-butylphthalate	110000 UD	110000
Fluoranthene	110000 UD	110000
Pyrene	110000 UD	110000
Butylbenzylphthalate	110000 UD	110000
3,3'-Dichlorobenzidine	110000 UD	110000
Benz(a)anthracene	110000 UD	110000
Chrysene	26000 JD	110000
bis(2-Ethylhexyl)phthalate	110000 UD	110000
Di-n-octylphthalate	110000 UD	110000
Benzo(b)fluoranthene	110000 UD	110000
Benzo(k)fluoranthene	110000 UD	110000
Benzo(a)pyrene	110000 UD	110000
Indeno(1,2,3-cd)pyrene	110000 UD	110000
Dibenz(a,h)anthracene	110000 UD	110000
Benzo(g,h,i)perylene	110000 UD	110000

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Surrogate Recovery		QC LIMITS
2-Fluorophenol	82%JD	25-121%
Phenol-d5	84%JD	24-113%
2-Chlorophenol-d4	83%JD	20-130%
1,2-Dichlorobenzene-d4	80%JD	20-130%
Nitrobenzene-d5	73%JD	23-120%
2-Fluorobiphenyl	85%JD	30-115%
2,4,6-Tribromophenol	95%JD	19-122%
Terphenyl-d14	109%JD	18-137%

TCL - Target Coumpound List EPA Contract Laboratory Program (OLM01)
EQL - Estimated Quantitation Limit (lower calibration limit)
U - Undetected at the given EQL
J - Detected below the EQL (estimated value)
E - Exceeds the upper calibration limit (estimated value)
B - Also detected in the associated Blank
D - Analysis at a secondary Dilution factor

Note: All results are reported on a dry weight basis.
Reference: "EPA Test Methods for Evaluating Solid Waste", SW-846, November 1986, 3rd Edition.

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EPA METHOD 8270
TCL SEMIVOLATILE ORGANIC COMPOUND RESULTS

Client ID:	GS-C6-103	Lab ID (HSN):	25152
Matrix:	SOIL	Filename:	4163P14
Date Sampled:	05/27/94	Sample Size:	1 grams
Date Received:	05/31/94	Extract Vol.:	500 uL
Date Extracted:	06/09/94	Dil. Factor:	10
Date Analyzed:	06/13/94	GPC Factor:	2
		% Moisture:	19.4

Compounds:	ug/Kg (PPB)		EQL
Phenol	120000	UD	120000
bis(2-Chloroethyl)ether	120000	UD	120000
2-Chlorophenol	120000	UD	120000
1,3-Dichlorobenzene	120000	UD	120000
1,4-Dichlorobenzene	120000	UD	120000
1,2-Dichlorobenzene	120000	UD	120000
2-Methylphenol	120000	UD	120000
2,2'-oxybis(1-Chloropropane)	120000	UD	120000
4-Methylphenol	120000	UD	120000
N-Nitroso-di-n-propylamine	120000	UD	120000
Hexachloroethane	120000	UD	120000
Nitrobenzene	120000	UD	120000
Isophorone	120000	UD	120000
2-Nitrophenol	120000	UD	120000
2,4-Dimethylphenol	120000	UD	120000
bis(2-Chloroethoxy)methane	120000	UD	120000
2,4-Dichlorophenol	120000	UD	120000
1,2,4-Trichlorobenzene	120000	UD	120000
Naphthalene	170000	D	120000
4-Chloroaniline	120000	UD	120000
Hexachlorobutadiene	120000	UD	120000
4-Chloro-3-methylphenol	120000	UD	120000
2-Methylnaphthalene	14000	JD	120000
Hexachlorocyclopentadiene	120000	UD	120000
2,4,6-Trichlorophenol	120000	UD	120000
2,4,5-Trichlorophenol	310000	UD	310000
2-Chloronaphthalene	120000	UD	120000
2-Nitroaniline	310000	UD	310000
Dimethylphthalate	120000	UD	120000
Acenaphthylene	120000	UD	120000
2,6-Dinitrotoluene	120000	UD	120000
3-Nitroaniline	310000	UD	310000
Acenaphthene	120000	UD	120000
2,4-Dinitrophenol	310000	UD	310000
4-Nitrophenol	310000	UD	310000
Dibenzofuran	120000	UD	120000
2,4-Dinitrotoluene	120000	UD	120000
Diethylphthalate	120000	UD	120000
4-Chlorophenyl-phenylether	120000	UD	120000
Fluorene	120000	UD	120000
4-Nitroaniline	310000	UD	310000
4,6-Dinitro-2-methylphenol	310000	UD	310000

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EPA METHOD 8270
TCL SEMIVOLATILE ORGANIC COMPOUND RESULTS

Client ID: GS-C6-103 Lab ID (HSN): 25152
Matrix: SOIL Filename: 4163P14

Compounds:	ug/Kg (PPB)			EQL
N-Nitrosodiphenylamine	120000	UD		120000
4-Bromophenyl-phenylether	120000	UD		120000
Hexachlorobenzene	120000	UD		120000
Pentachlorophenol	310000	UD		310000
Phenanthrene	78000	JD		120000
Anthracene	120000	UD		120000
Carbazole	120000	UD		120000
Di-n-butylphthalate	120000	UD		120000
Fluoranthene	17000	JD		120000
Pyrene	180000	D	Y	120000
Butylbenzylphthalate	120000	UD	Y	120000
3,3'-Dichlorobenzidine	120000	UD	Y	120000
Benz(a)anthracene	40000	JD	Y	120000
Chrysene	110000	JD	Y	120000
bis(2-Ethylhexyl)phthalate	120000	UD	Y	120000
Di-n-octylphthalate	120000	UD	Y	120000
Benzo(b)fluoranthene	24000	JD	Y	120000
Benzo(k)fluoranthene	120000	UD	Y	120000
Benzo(a)pyrene	25000	JD	Y	120000
Indeno(1,2,3-cd)pyrene	120000	UD	Y	120000
Dibenz(a,h)anthracene	120000	UD	Y	120000
Benzo(g,h,i)perylene	120000	UD	Y	120000

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Surrogate Recovery				QC LIMITS
2-Fluorophenol	86%	JD		25-121%
Phenol-d5	95%	JD		24-113%
2-Chlorophenol-d4	89%	JD		20-130%
1,2-Dichlorobenzene-d4	88%	JD		20-130%
Nitrobenzene-d5	90%	JD		23-120%
2-Fluorobiphenyl	107%	JD		30-115%
2,4,6-Tribromophenol	73%	JD		19-122%
Terphenyl-d14	150%	JD	Y	18-137%

TCL = Target Coumpound List EPA Contract Laboratory Program (OLM01)
EQL = Estimated Quantitation Limit (lower calibration limit)
U = Undetected at the given EQL
J = Detected below the EQL (estimated value)
E = Exceeds the upper calibration limit (estimated value)
B = Also detected in the associated Blank
D = Analysis at a secondary Dilution factor
Y = Associated internal standard failed method criteria
Note: All results are reported on a dry weight basis.
Reference: "EPA Test Methods for Evaluating Solid Waste", SW-846, November 1986, 3rd Edition.

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EPA METHOD 8270
TCL SEMIVOLATILE ORGANIC COMPOUND RESULTS

Client ID:	GS-C6-103	Lab ID (HSN):	25152RI
Matrix:	SOIL	Filename:	4164P08
Date Sampled:	05/27/94	Sample Size:	1 grams
Date Received:	05/31/94	Extract Vol.:	500 uL
Date Extracted:	06/09/94	Dil. Factor:	10
Date Analyzed:	06/13/94	GPC Factor:	2
		% Moisture:	19.4

Compounds:	ug/Kg (PPB)		EQL
Phenol	120000	UD	120000
bis(2-Chloroethyl)ether	120000	UD	120000
2-Chlorophenol	120000	UD	120000
1,3-Dichlorobenzene	120000	UD	120000
1,4-Dichlorobenzene	120000	UD	120000
1,2-Dichlorobenzene	120000	UD	120000
2-Methylphenol	120000	UD	120000
2,2'-oxybis(1-Chloropropane)	120000	UD	120000
4-Methylphenol	120000	UD	120000
N-Nitroso-di-n-propylamine	120000	UD	120000
Hexachloroethane	120000	UD	120000
Nitrobenzene	120000	UD	120000
Isophorone	120000	UD	120000
2-Nitrophenol	120000	UD	120000
2,4-Dimethylphenol	120000	UD	120000
bis(2-Chloroethoxy)methane	120000	UD	120000
2,4-Dichlorophenol	120000	UD	120000
1,2,4-Trichlorobenzene	120000	UD	120000
Naphthalene	170000	D	120000
4-Chloroaniline	120000	UD	120000
Hexachlorobutadiene	120000	UD	120000
4-Chloro-3-methylphenol	120000	UD	120000
2-Methylnaphthalene	15000	JD	120000
Hexachlorocyclopentadiene	120000	UD	120000
2,4,6-Trichlorophenol	120000	UD	120000
2,4,5-Trichlorophenol	310000	UD	310000
2-Chloronaphthalene	120000	UD	120000
2-Nitroaniline	310000	UD	310000
Dimethylphthalate	120000	UD	120000
Acenaphthylene	120000	UD	120000
2,6-Dinitrotoluene	120000	UD	120000
3-Nitroaniline	310000	UD	310000
Acenaphthene	120000	UD	120000
2,4-Dinitrophenol	310000	UD	310000
4-Nitrophenol	310000	UD	310000
Dibenzofuran	120000	UD	120000
2,4-Dinitrotoluene	120000	UD	120000
Diethylphthalate	120000	UD	120000
4-Chlorophenyl-phenylether	120000	UD	120000
Fluorene	120000	UD	120000
4-Nitroaniline	310000	UD	310000
4,6-Dinitro-2-methylphenol	310000	UD	310000

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EPA METHOD 8270
TCL SEMIVOLATILE ORGANIC COMPOUND RESULTS

Client ID: GS-C6-103 Lab ID (HSN): 25152RI
Matrix: SOIL Filename: 4164P08

Compounds:	ug/Kg (PPB)		EQL
N-Nitrosodiphenylamine	120000	UD	120000
4-Bromophenyl-phenylether	120000	UD	120000
Hexachlorobenzene	120000	UD	120000
Pentachlorophenol	310000	UD	310000
Phenanthrene	76000	JD	120000
Anthracene	120000	UD	120000
Carbazole	120000	UD	120000
Di-n-butylphthalate	120000	UD	120000
Fluoranthene	20000	JD	120000
Pyrene	180000	D Y	120000
Butylbenzylphthalate	120000	UD Y	120000
3,3'-Dichlorobenzidine	120000	UD Y	120000
Benz(a)anthracene	45000	JD Y	120000
Chrysene	110000	JD Y	120000
bis(2-Ethylhexyl)phthalate	24000	JDBY	120000
Di-n-octylphthalate	120000	UD Y	120000
Benzo(b)fluoranthene	25000	JD Y	120000
Benzo(k)fluoranthene	120000	UD Y	120000
Benzo(a)pyrene	24000	JD Y	120000
Indeno(1,2,3-cd)pyrene	120000	UD Y	120000
Dibenz(a,h)anthracene	120000	UD Y	120000
Benzo(g,h,i)perylene	46000	JD Y	120000

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Surrogate Recovery		QC LIMITS
2-Fluorophenol	86%JD	25-121%
Phenol d5	90%JD	24-113%
2-Chlorophenol-d4	93%JD	20-130%
1,2-Dichlorobenzene-d4	88%JD	20-130%
Nitrobenzene-d5	82%JD	23-120%
2-Fluorobiphenyl	101%JD	30-115%
2,4,6-Tribromophenol	81%JD	19-122%
Terphenyl-d14	158%JD Y	18-137%

TCL = Target Coumpound List EPA Contract Laboratory Program (OLM01)
EQL = Estimated Quantitation Limit (lower calibration limit)
U = Undetected at the given EQL
J = Detected below the EQL (estimated value)
E = Exceeds the upper calibration limit (estimated value)
B = Also detected in the associated Blank
D = Analysis at a secondary Dilution factor
Y = Associated internal standard failed method criteria
Note: All results are reported on a dry weight basis.
Reference: "EPA Test Methods for Evaluating Solid Waste", SW-846, November 1986, 3rd Edition.

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EPA METHOD 8270
TCL SEMIVOLATILE ORGANIC COMPOUND RESULTS

Client ID:	GS-B6-104	Lab ID (HSN):	25154
Matrix:	SOIL	Filename:	4163P15
Date Sampled:	05/27/94	Sample Size:	1 grams
Date Received:	05/31/94	Extract Vol.:	500 uL
Date Extracted:	06/09/94	Dil. Factor:	10
Date Analyzed:	06/13/94	GPC Factor:	2
		% Moisture:	83

Compounds:	ug/Kg (PPB)		EQL
Phenol	97000	JD	590000
bis(2-Chloroethyl)ether	590000	UD	590000
2-Chlorophenol	590000	UD	590000
1,3-Dichlorobenzene	590000	UD	590000
1,4-Dichlorobenzene	590000	UD	590000
1,2-Dichlorobenzene	590000	UD	590000
2-Methylphenol	590000	UD	590000
2,2'-oxybis(1-Chloropropane)	590000	UD	590000
4-Methylphenol	590000	UD	590000
N-Nitroso-di-n-propylamine	590000	UD	590000
Hexachloroethane	590000	UD	590000
Nitrobenzene	590000	UD	590000
Isophorone	590000	UD	590000
2-Nitrophenol	590000	UD	590000
2,4-Dimethylphenol	590000	UD	590000
bis(2-Chloroethoxy)methane	590000	UD	590000
2,4-Dichlorophenol	260000	JD	590000
1,2,4-Trichlorobenzene	590000	UD	590000
Naphthalene	5200000	ED	590000
4-Chloroaniline	1700000	D	590000
Hexachlorobutadiene	590000	UD	590000
4-Chloro-3-methylphenol	590000	UD	590000
2-Methylnaphthalene	130000	JD	590000
Hexachlorocyclopentadiene	590000	UD	590000
2,4,6-Trichlorophenol	200000	JD	590000
2,4,5-Trichlorophenol	1500000	UD	1500000
2-Chloronaphthalene	590000	UD	590000
2-Nitroaniline	1500000	UD	1500000
Dimethylphthalate	590000	UD	590000
Acenaphthylene	590000	UD	590000
2,6-Dinitrotoluene	590000	UD	590000
3-Nitroaniline	1500000	UD	1500000
Acenaphthene	590000	UD	590000
2,4-Dinitrophenol	1500000	UD	1500000
4-Nitrophenol	1500000	UD	1500000
Dibenzofuran	590000	UD	590000
2,4-Dinitrotoluene	590000	UD	590000
Diethylphthalate	590000	UD	590000
4-Chlorophenyl-phenylether	590000	UD	590000
Fluorene	590000	UD	590000
4-Nitroaniline	1500000	UD	1500000
4,6-Dinitro-2-methylphenol	1500000	UD	1500000

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HPN: 5037

Huntingdon

EPA METHOD 8270
TCL SEMIVOLATILE ORGANIC COMPOUND RESULTS

Client ID: GS-B6-104 Lab ID (HSN): 25154
Matrix: SOIL Filename: 4163P15

Compounds:	ug/Kg (PPB)			EQL
N-Nitrosodiphenylamine	200000	JD		590000
4-Bromophenyl-phenylether	590000	UD		590000
Hexachlorobenzene	590000	UD		590000
Pentachlorophenol	280000	JD		1500000
Phenanthrene	340000	JD		590000
Anthracene	590000	UD		590000
Carbazole	590000	UD		590000
Di-n-butylphthalate	590000	UD		590000
Fluoranthene	74000	JD		590000
Pyrene	1000000	D	Y	590000
Butylbenzylphthalate	590000	UD	Y	590000
3,3'-Dichlorobenzidine	590000	UD	Y	590000
Benz(a)anthracene	440000	JD	Y	590000
Chrysene	1200000	D	Y	590000
bis(2-Ethylhexyl)phthalate	590000	UD	Y	590000
Di-n-octylphthalate	590000	UD	Y	590000
Benzo(b)fluoranthene	370000	JD	Y	590000
Benzo(k)fluoranthene	590000	UD	Y	590000
Benzo(a)pyrene	330000	JD	Y	590000
Indeno(1,2,3-cd)pyrene	590000	UD	Y	590000
Dibenz(a,h)anthracene	590000	UD	Y	590000
Benzo(g,h,i)perylene	310000	JD	Y	590000

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Surrogate Recovery			QC LIMITS
2-Fluorophenol	75%JD		25-121%
Phenol-d5	87%JD		24-113%
2-Chlorophenol-d4	81%JD		20-130%
1,2-Dichlorobenzene-d4	74%JD		20-130%
Nitrobenzene-d5	78%JD		23-120%
2-Fluorobiphenyl	94%JD		30-115%
2,4,6-Tribromophenol	65%JD		19-122%
Terphenyl-d14	176%JD	Y	18-137%

TCL = Target Coumpound List EPA Contract Laboratory Program (OLM01)
EQL = Estimated Quantitation Limit (lower calibration limit)
U = Undetected at the given EQL
J = Detected below the EQL (estimated value)
E = Exceeds the upper calibration limit (estimated value)
B = Also detected in the associated Blank
D = Analysis at a secondary Dilution factor
Y = Associated internal standard failed method criteria
Note: All results are reported on a dry weight basis.
Reference: "EPA Test Methods for Evaluating Solid Waste", SW-846, November 1986, 3rd Edition.

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EPA METHOD 8270
TCL SEMIVOLATILE ORGANIC COMPOUND RESULTS

Client ID:	GS-B6-104	Lab ID (HSN):	25154DL
Matrix:	SOIL	Filename:	4164P07
Date Sampled:	05/27/94	Sample Size:	1 grams
Date Received:	05/27/94	Extract Vol.:	500 uL
Date Extracted:	06/09/94	Dil. Factor:	40
Date Analyzed:	06/13/94	GPC Factor:	2
		% Moisture:	83

Compounds:	ug/Kg (PPB)		EQL
Phenol	2400000	UD	2400000
bis(2-Chloroethyl)ether	2400000	UD	2400000
2-Chlorophenol	2400000	UD	2400000
1,3-Dichlorobenzene	2400000	UD	2400000
1,4-Dichlorobenzene	2400000	UD	2400000
1,2-Dichlorobenzene	2400000	UD	2400000
2-Methylphenol	2400000	UD	2400000
2,2'-oxybis(1-Chloropropane)	2400000	UD	2400000
4-Methylphenol	2400000	UD	2400000
N-Nitroso-di-n-propylamine	2400000	UD	2400000
Hexachloroethane	2400000	UD	2400000
Nitrobenzene	2400000	UD	2400000
Isophorone	2400000	UD	2400000
2-Nitrophenol	2400000	UD	2400000
2,4-Dimethylphenol	2400000	UD	2400000
bis(2-Chloroethoxy)methane	2400000	UD	2400000
2,4-Dichlorophenol	250000	JD	2400000
1,2,4-Trichlorobenzene	2400000	UD	2400000
Naphthalene	7000000	D	2400000
4-Chloroaniline	1100000	JD	2400000
Hexachlorobutadiene	2400000	UD	2400000
4-Chloro-3-methylphenol	2400000	UD	2400000
2-Methylnaphthalene	2400000	UD	2400000
Hexachlorocyclopentadiene	2400000	UD	2400000
2,4,6-Trichlorophenol	2400000	UD	2400000
2,4,5-Trichlorophenol	5900000	UD	5900000
2-Chloronaphthalene	2400000	UD	2400000
2-Nitroaniline	5900000	UD	5900000
Dimethylphthalate	2400000	UD	2400000
Acenaphthylene	2400000	UD	2400000
2,6-Dinitrotoluene	2400000	UD	2400000
3-Nitroaniline	5900000	UD	5900000
Acenaphthene	2400000	UD	2400000
2,4-Dinitrophenol	5900000	UD	5900000
4-Nitrophenol	5900000	UD	5900000
Dibenzofuran	2400000	UD	2400000
2,4-Dinitrotoluene	2400000	UD	2400000
Diethylphthalate	2400000	UD	2400000
4-Chlorophenyl-phenylether	2400000	UD	2400000
Fluorene	2400000	UD	2400000
4-Nitroaniline	5900000	UD	5900000
4,6 Dinitro-2-methylphenol	5900000	UD	5900000

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EPA METHOD 8270
TCL SEMIVOLATILE ORGANIC COMPOUND RESULTS

Client ID: GS-B6-104 Lab ID (HSN): 25154DL
Matrix: SOIL Filename: 1164P07

Compounds:	ug/Kg (PPB)		EQL
N-Nitrosodiphenylamine	2400000	UD	2400000
4-Bromophenyl-phenylether	2400000	UD	2400000
Hexachlorobenzene	2400000	UD	2400000
Pentachlorophenol	5900000	UD	5900000
Phenanthrene	340000	JD	2400000
Anthracene	2400000	UD	2400000
Carbazole	2400000	UD	2400000
Di-n-butylphthalate	2400000	UD	2400000
Fluoranthene	2400000	UD	2400000
Pyrene	730000	JD	2400000
Butylbenzylphthalate	2400000	UD	2400000
3,3'-Dichlorobenzidine	2400000	UD	2400000
Benz(a)anthracene	440000	JD	2400000
Chrysene	1300000	JD	2400000
bis(2-Ethylhexyl)phthalate	2400000	UD	2400000
Di-n-octylphthalate	2400000	UD	2400000
Benzo(b)fluoranthene	420000	JD	2400000
Benzo(k)fluoranthene	2400000	UD	2400000
Benzo(a)pyrene	350000	JD	2400000
Indeno(1,2,3-cd)pyrene	2400000	UD	2400000
Dibenz(a,h)anthracene	2400000	UD	2400000
Benzo(g,h,i)perylene	360000	JD	2400000

Surrogate Recovery		QC LIMITS
2-Fluorophenol	75%JD	25-121%
Phenol-d5	83%JD	24-113%
2-Chlorophenol-d4	80%JD	20-130%
1,2-Dichlorobenzene-d4	76%JD	20-130%
Nitrobenzene-d5	72%JD	23-120%
2-Fluorobiphenyl	88%JD	30-115%
2,4,6-Tribromophenol	75%JD	19-122%
Terphenyl-d14	136%JD	18-137%

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TCL = Target Coumpound List EPA Contract Laboratory Program (OLM01)
EQL = Estimated Quantitation Limit (lower calibration limit)
U = Undetected at the given EQL
J = Detected below the EQL (estimated value)
E = Exceeds the upper calibration limit (estimated value)
B = Also detected in the associated Blank
D = Analysis at a secondary Dilution factor

Note: All results are reported on a dry weight basis.
Reference: "EPA Test Methods for Evaluating Solid Waste", SW-846, November 1986, 3rd Edition.

HPN: 5037

TCL SEMIVOLATILE ORGANIC COMPOUND RESULTS
EPA METHOD 8270

Huntingdon

Client ID:	GS-D2W-105	Lab ID (HSN):	25155
Matrix:	WATER	Filename:	4160P13
Date Sampled:	05/27/94	Sample Size:	375 mL
Date Received:	05/31/94	Extract Vol.:	1000 uL
Date Extracted:	06/03/94	Dil. Factor:	1
Date Analyzed:	06/09/94		

Compounds:	ug/L (PPB)	EQL
Phenol	27 U	27
bis(2-Chloroethyl)ether	27 U	27
2-Chlorophenol	27 U	27
1,3-Dichlorobenzene	27 U	27
1,4-Dichlorobenzene	27 U	27
1,2-Dichlorobenzene	27 U	27
2-Methylphenol	27 U	27
2,2'-oxybis(1-Chloropropane)	27 U	27
4-Methylphenol	27 U	27
N-Nitroso-di-n-propylamine	27 U	27
Hexachloroethane	27 U	27
Nitrobenzene	27 U	27
Isophorone	27 U	27
2-Nitrophenol	27 U	27
2,4-Dimethylphenol	27 U	27
bis(2-Chloroethoxy)methane	27 U	27
2,4-Dichlorophenol	27 U	27
1,2,4-Trichlorobenzene	27 U	27
Naphthalene	27 U	27
4-Chloroaniline	27 U	27
Hexachlorobutadiene	27 U	27
4-Chloro-3-methylphenol	27 U	27
2-Methylnaphthalene	27 U	27
Hexachlorocyclopentadiene	27 U	27
2,4,6-Trichlorophenol	27 U	27
2,4,5-Trichlorophenol	67 U	67
2-Chloronaphthalene	27 U	27
2-Nitroaniline	8.4 J	67
Dimethylphthalate	27 U	27
Acenaphthylene	27 U	27
2,6-Dinitrotoluene	27 U	27
3-Nitroaniline	67 U	67
Acenaphthene	27 U	27
2,4-Dinitrophenol	67 U	67
4-Nitrophenol	67 U	67
Dibenzofuran	27 U	27
2,4-Dinitrotoluene	27 U	27
Diethylphthalate	27 U	27
4-Chlorophenyl-phenylether	27 U	27
Fluorene	27 U	27
4-Nitroaniline	67 U	67
4,6-Dinitro-2-methylphenol	67 U	67

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TCL SEMIVOLATILE ORGANIC COMPOUND RESULTS
EPA METHOD 8270

Huntingdon

Client ID: GS-D2W-105 Lab ID (HSN): 25155
Matrix: WATER Filename: 4160P13

Compounds:	ug/L (PPB)	EQL
N-Nitrosodiphenylamine	27 U	27
4-Bromophenyl-phenylether	27 U	27
Hexachlorobenzene	27 U	27
Pentachlorophenol	67 U	67
Phenanthrene	27 U	27
Anthracene	27 U	27
Carbazole	27 U	27
Di-n-butylphthalate	27 U	27
Fluoranthene	27 U	27
Pyrene	27 U	27
Butylbenzylphthalate	27 U	27
3,3'-Dichlorobenzidine	27 U	27
Benz(a)anthracene	27 U	27
Chrysene	27 U	27
bis(2-Ethylhexyl)phthalate	13 J	27
Di-n-octylphthalate	27 U	27
Benzo(b)fluoranthene	27 U	27
Benzo(k)fluoranthene	27 U	27
Benzo(a)pyrene	27 U	27
Indeno(1,2,3-cd)pyrene	27 U	27
Dibenz(a,h)anthracene	27 U	27
Benzo(g,h,i)perylene	27 U	27

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Surrogate Recovery		QC LIMITS
2-Fluorophenol	57%	21-110%
Phenol-d5	50%	10-110%
2-Chlorophenol-d4	64%	33-110%
Nitrobenzene-d5	61%	35-114%
2-Fluorobiphenyl	60%	43-116%
2,4,6-Tribromophenol	79%	10-123%
Terphenyl-d14	82%	33-141%

TCL = Target Coumpound List EPA Contract Laboratory Program (OLM01)
EQL = Estimated Quantitation Limit (lower calibration limit)
U = Undetected at the given EQL
J = Detected below the EQL (estimated value)
E = Exceeds the upper calibration limit (estimated value)
B = Also detected in the associated Blank

Reference: "EPA Test Methods for Evaluating Solid Waste", SW-846, November 1986, 3rd Edition.

HDN: 5037

QC SEMIVOLATILE SURROGATE RECOVERY

Lab Name: HUNTINGDON ST PAUL Method: EP8270C (OLM01 Target Cpds)

	SAMPLE NO. HSN	SAMPLE MATRIX	DATE PREPPED	DATE ANALYZED	INSTR ID	INSTRUMENT FILENAME	ANLYST
01	LAB. BLANK	SOIL	06/09/94	06/12/94	VGTRIO1	4163P04	GNM
02	LCS	SOIL	06/09/94	06/12/94	VGTRIO1	4163P05	GNM
03	25147	SOIL	06/09/94	06/12/94	VGTRIO1	4163P06	GNM
04	25147MS	SOIL	06/09/94	06/13/94	VGTRIO1	4163P07	GNM
05	25147MSD	SOIL	06/09/94	06/13/94	VGTRIO1	4163P08	GNM
06	25160MSD	SOIL	06/09/94	06/13/94	VGTRIO1	4163P09	GNM
07	25160MS	SOIL	06/09/94	06/13/94	VGTRIO1	4163P10	GNM
08	25160	SOIL	06/09/94	06/13/94	VGTRIO1	4163P11	GNM
09	25161	SOIL	06/09/94	06/13/94	VGTRIO1	4163P12	GNM
10	25162	SOIL	06/09/94	06/13/94	VGTRIO1	4163P13	GNM
11	25152	SOIL	06/09/94	06/13/94	VGTRIO1	4163P14	GNM
12	25154	SOIL	06/09/94	06/13/94	VGTRIO1	4163P15	GNM
13							
14							
15							

	SAMPLE NO. HSN	S1 (2FP)#	S2 (PHL)#	S3 (2CP)	S4 (DCB)#	S5 (NBZ)#	S6 (FBP)#	S7 (TBP)#	S8 (TPH)#	TOT OUT
01	LAB. BLANK	74	76	76	70	69	73	67	89	0
02	LCS	79	82	82	79	75	76	86	96	0
03	25147	69	77	72	64	69	90	70	136	0
04	25147MS	82	91	89	81	81	92	91	121	0
05	25147MSD	89	96	95	91	84	94	89	129	0
06	25160MSD	71	93	87	95	90	114	46	177 *	1
07	25160MS	78	91	87	87	87	112	60	169 *	1
08	25160	43	73	61	69	85	107	29	96	0
09	25161	62	72	69	70	82	106	69	178 *	1
10	25162	42	78	59	76	86	110	17 *	169 *	2
11	25152	86	95	89	88	90	107	73	150 *	1
12	25154	75	87	81	74	78	94	65	176 *	1
13										
14										
15										

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			QC LIMITS WATER	SOIL	OTHER
S1	(2FP)	- 2-Fluorophenol	21-110%	25-121%	25-121%
S2	(PHL)	- Phenol-d5	10-110%	24-113%	24-113%
S3	(2CP)	- 2-Chlorophenol-d4	33-110%	20-130%	20-130%
S4	(DCB)	- 1,2-Dichlorobenzene-d4	16-110%	20-130%	20-130%
S5	(NBZ)	- Nitrobenzene-d5	35-114%	23-120%	23-120%
S6	(FBP)	- 2 Fluorobiphenyl	43-116%	30-115%	30-115%
S7	(TBP)	- 2,4,6-Tribromophenol	10-123%	19-122%	19-122%
S8	(TPH)	- Terphenyl-d14	33-141%	18-137%	18-137%

Column to be used to flag recovery values
* Values outside of contract required QC limits
D Surrogate diluted out

Poost-it™ brand fax transmittal memo 7671 | # of pages ▸ 3

To Sam Borries	From Nabil Poyoumi
Co. EPA / OSC	Co. Chicago TAT
Dept. (217)	Phone # (312) 663-9415
Fax # (618) 8675	Fax # (312) 663-0791

[redacted]

(last FAX.)

Huntingdon

D 8270
IC COMPOUND RESULTS

ID (HSN):
Filename: 4163P04
ple Size: 30 grams
act Vol.: 500 uL
. Factor: 1
C Factor: 2
isture: 0

Compounds:	ug/Kg (PPB)	EQL
Phenol	330 U	330
bis(2-Chloroethyl)ether	330 U	330
2-Chlorophenol	330 U	330
1,3-Dichlorobenzene	330 U	330
1,4-Dichlorobenzene	330 U	330
1,2-Dichlorobenzene	330 U	330
2-Methylphenol	330 U	330
2,2'-oxybis(1-Chloropropane)	330 U	330
4-Methylphenol	330 U	330
N-Nitroso-di-n-propylamine	330 U	330
Hexachloroethane	330 U	330
Nitrobenzene	330 U	330
Isophorone	330 U	330
2-Nitrophenol	330 U	330
2,4-Dimethylphenol	330 U	330
bis(2-Chloroethoxy)methane	330 U	330
2,4-Dichlorophenol	330 U	330
1,2,4-Trichlorobenzene	330 U	330
Naphthalene	330 U	330
4-Chloroaniline	330 U	330
Hexachlorobutadiene	330 U	330
4-Chloro-3-methylphenol	330 U	330
2-Methylnaphthalene	330 U	330
Hexachlorocyclopentadiene	330 U	330
2,4,6-Trichlorophenol	330 U	330
2,4,5-Trichlorophenol	830 U	830
2-Chloronaphthalene	330 U	330
2-Nitroaniline	830 U	830
Dimethylphthalate	330 U	330
Acenaphthylene	330 U	330
2,6-Dinitrotoluene	330 U	330
3-Nitroaniline	830 U	830
Acenaphthene	330 U	330
2,4-Dinitrophenol	830 U	830
4-Nitrophenol	830 U	830
Dibenzofuran	330 U	330
2,4-Dinitrotoluene	330 U	330
Diethylphthalate	330 U	330
4-Chlorophenyl-phenylether	330 U	330
Fluorene	330 U	330
4-Nitroaniline	830 U	830
4,6-Dinitro-2-methylphenol	830 U	830

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(continued)

HPN: 5037/5039

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EPA METHOD 8270
TCL SEMIVOLATILE ORGANIC COMPOUND RESULTS

Client ID: LAB. BLANK Lab ID (HSN):
Matrix: SOIL Filename: 4163P04

Compounds:	ug/Kg (PPB)	EQL
N-Nitrosodiphenylamine	330 U	330
4-Bromophenyl-phenylether	330 U	330
Hexachlorobenzene	330 U	330
Pentachlorophenol	830 U	830
Phenanthrene	330 U	330
Anthracene	330 U	330
Carbazole	330 U	330
Di-n-butylphthalate	330 U	330
Fluoranthene	330 U	330
Pyrene	330 U	330
Butylbenzylphthalate	330 U	330
3,3'-Dichlorobenzidine	330 U	330
Benz(a)anthracene	330 U	330
Chrysene	330 U	330
bis(2-Ethylhexyl)phthalate	110 JB	330
Di-n-octylphthalate	330 U	330
Benzo(b)fluoranthene	330 U	330
Benzo(k)fluoranthene	330 U	330
Benzo(a)pyrene	330 U	330
Indeno(1,2,3-cd)pyrene	330 U	330
Dibenz(a,h)anthracene	330 U	330
Benzo(g,h,i)perylene	330 U	330

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Surrogate Recovery		QC LIMITS
2-Fluorophenol	74%	25-121%
Phenol-d5	76%	24-113%
2-Chlorophenol-d4	76%	20-130%
1,2-Dichlorobenzene-d4	70%	20-130%
Nitrobenzene-d5	69%	23-120%
2-Fluorobiphenyl	73%	30-115%
2,4,6-Tribromophenol	67%	19-122%
Terphenyl-d14	89%	18-137%

TCL = Target Coumpound List EPA Contract Laboratory Program (OLM01)
EQL = Estimated Quantitation Limit (lower calibration limit)
U = Undetected at the given EQL
J = Detected below the EQL (estimated value)
E = Exceeds the upper calibration limit (estimated value)
B = Also detected in the associated Blank

Note: All results are reported on a dry weight basis.
Reference: "EPA Test Methods for Evaluating Solid Waste", SW-846, November 1986, 3rd Edition.

HPN: 5037/5039

Huntingdon

3C

SOIL SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Matrix Spiked: SAND

HPN: 5037/5039	HSN:	BLANK	LAB SPIKE
INST: VGTRIO1A	Filename:	4163P04	4163P05
	Date Extracted:	06/09/94	06/09/94
	Date Analyzed:	06/12/94	06/12/94

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC. LIMITS REC.
Phenol	2500	0	1800	72	26- 90
2-Chlorophenol	2500	0	1900	76	25-102
1,4-Dichlorobenzene	1700	0	1300	76	28-104
N-Nitroso-di-n-prop.(1)	1700	0	1200	71	41-126
1,2,4-Trichlorobenzene	1700	0	1200	71	38-107
4-Chloro-3-methylphenol	2500	0	2000	80	26-103
Acenaphthene	1700	0	1100	65	31-137
4-Nitrophenol	2500	0	2000	80	11-114
2,4-Dinitrotoluene	1700	0	1400	82	28- 89
Pentachlorophenol	2500	0	2100	84	17-109
Pyrene	1700	0	1400	82	35-142

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(1) N-Nitroso-di-n-propylamine

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

Spike Recovery: 0 out of 11 outside limits

COMMENTS:

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EPA METHOD 8270
TCL SEMIVOLATILE ORGANIC COMPOUND RESULTS

Client ID:	LCS	Lab ID (HSN):	
Matrix:	SOIL	Filename:	4163P05
Date Sampled:		Sample Size:	30 grams
Date Received:		Extract Vol.:	500 uL
Date Extracted:	06/09/94	Dil. Factor:	1
Date Analyzed:	06/12/94	GPC Factor:	2
		% Moisture:	0

Compounds:	ug/Kg (PPB)	EQL
Phenol	1800	330
bis(2-Chloroethyl)ether	330 U	330
2-Chlorophenol	1900	330
1,3-Dichlorobenzene	330 U	330
1,4-Dichlorobenzene	1300	330
1,2-Dichlorobenzene	330 U	330
2-Methylphenol	330 U	330
2,2'-oxybis(1-Chloropropane)	330 U	330
4-Methylphenol	330 U	330
N-Nitroso-di-n-propylamine	1200	330
Hexachloroethane	330 U	330
Nitrobenzene	330 U	330
Isophorone	330 U	330
2-Nitrophenol	330 U	330
2,4-Dimethylphenol	330 U	330
bis(2-Chloroethoxy)methane	330 U	330
2,4-Dichlorophenol	330 U	330
1,2,4-Trichlorobenzene	1200	330
Naphthalene	330 U	330
4-Chloroaniline	330 U	330
Hexachlorobutadiene	330 U	330
4-Chloro-3-methylphenol	2000	330
2-Methylnaphthalene	330 U	330
Hexachlorocyclopentadiene	330 U	330
2,4,6-Trichlorophenol	330 U	330
2,4,5-Trichlorophenol	830 U	830
2-Chloronaphthalene	330 U	330
2-Nitroaniline	830 U	830
Dimethylphthalate	330 U	330
Acenaphthylene	330 U	330
2,6-Dinitrotoluene	330 U	330
3-Nitroaniline	830 U	830
Acenaphthene	1100	330
2,4-Dinitrophenol	830 U	830
4-Nitrophenol	2000	830
Dibenzofuran	330 U	330
2,4-Dinitrotoluene	1400	330
Diethylphthalate	330 U	330
4-Chlorophenyl-phenylether	330 U	330
Fluorene	330 U	330
4-Nitroaniline	830 U	830
4,6-Dinitro-2-methylphenol	830 U	830

DRAFT DOCUMENT NOT VALIDATED

(continued)

HPN: 5037/5039

Huntingdon

EPA METHOD 8270
TCL SEMIVOLATILE ORGANIC COMPOUND RESULTS

Client ID: LCS
Matrix: SOIL

Lab ID (HSN):
Filename: 4163P05

Compounds:	ug/Kg (PPB)	EQL
N-Nitrosodiphenylamine	330 U	330
4-Bromophenyl-phenylether	330 U	330
Hexachlorobenzene	330 U	330
Pentachlorophenol	2100	830
Phenanthrene	330 U	330
Anthracene	330 U	330
Carbazole	330 U	330
Di-n-butylphthalate	330 U	330
Fluoranthene	330 U	330
Pyrene	1400	330
Butylbenzylphthalate	330 U	330
3,3'-Dichlorobenzidine	330 U	330
Benz(a)anthracene	330 U	330
Chrysene	330 U	330
bis(2-Ethylhexyl)phthalate	330 U	330
Di-n-octylphthalate	330 U	330
Benzo(b)fluoranthene	330 U	330
Benzo(k)fluoranthene	330 U	330
Benzo(a)pyrene	330 U	330
Indeno(1,2,3-cd)pyrene	330 U	330
Dibenz(a,h)anthracene	330 U	330
Benzo(g,h,i)perylene	330 U	330

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Surrogate Recovery		QC LIMITS
2-Fluorophenol	79%	25-121%
Phenol-d5	82%	24-113%
2-Chlorophenol-d4	82%	20-130%
1,2-Dichlorobenzene-d4	79%	20-130%
Nitrobenzene-d5	75%	23-120%
2-Fluorobiphenyl	76%	30-115%
2,4,6-Tribromophenol	86%	19-122%
Terphenyl-d14	96%	18-137%

TCL = Target Coumpound List EPA Contract Laboratory Program (OLM01)
EQL = Estimated Quantitation Limit (lower calibration limit)
U = Undetected at the given EQL
J = Detected below the EQL (estimated value)
E = Exceeds the upper calibration limit (estimated value)
B = Also detected in the associated Blank

Note: All results are reported on a dry weight basis.
Reference: "EPA Test Methods for Evaluating Solid Waste", SW-846, November 1986, 3rd Edition.

HPN: 5037/5039

Huntingdon

3C

SOIL SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Matrix Spiked: GS-C304-101

HPN: 5037	HSN:	25147	25147MS	25147MSD
INST: VGTR101A	Filename:	4163P06	4163P07	4163P08
	Date Extracted:	06/09/94	06/09/94	06/09/94
	Date Analyzed:	06/12/94	06/12/94	06/12/94

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC. LIMITS REC.
Phenol	94000	3300	85000	87	26- 90
2-Chlorophenol	94000	0	84000	89	25-102
1,4-Dichlorobenzene	63000	0	54000	86	28-104
N-Nitroso-di-n-prop.(1)	63000	0	51000	81	41-126
1,2,4-Trichlorobenzene	63000	0	55000	87	38-107
4-Chloro-3-methylphenol	94000	0	81000	86	26-103
Acenaphthene	63000	0	47000	75	31-137
4-Nitrophenol	94000	0	74000	79	11-114
2,4-Dinitrotoluene	63000	0	55000	87	28- 89
Pentachlorophenol	94000	2800	99000	102	17-109
Pyrene	63000	0	67000	106	35-142

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Phenol	94000	89000	91 *	5	35	26- 90
2-Chlorophenol	94000	88000	94	5	50	25-102
1,4-Dichlorobenzene	63000	57000	90	5	27	28-104
N-Nitroso-di-n-prop.(1)	63000	54000	86	6	38	41-126
1,2,4-Trichlorobenzene	63000	58000	92	5	23	38-107
4-Chloro-3-methylphenol	94000	85000	90	4	33	26-103
Acenaphthene	63000	47000	75	1	19	31-137
4-Nitrophenol	94000	72000	77	2	50	11-114
2,4-Dinitrotoluene	63000	56000	89	2	47	28- 89
Pentachlorophenol	94000	98000	101	1	47	17-109
Pyrene	63000	73000	116	9	36	35-142

(1) N-Nitroso-di-n-propylamine

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 0 out of 11 outside limits
Spike Recovery: 1 out of 22 outside limits

COMMENTS: - DRAFT DOCUMENT - NOT VALIDATED

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EPA METHOD 8270
TCL SEMIVOLATILE ORGANIC COMPOUND RESULTS

Client ID:	LAB. BLANK	Lab ID (HSN):	
Matrix:	SOIL	Filename:	4164P05
Date Sampled:		Sample Size:	30 grams
Date Received:		Extract Vol.:	500 uL
Date Extracted:	06/10/94	Dil. Factor:	1
Date Analyzed:	06/13/94	GPC Factor:	2
		% Moisture:	0

Compounds:	ug/Kg (PPB)		RQL
Phenol	330	U	330
bis(2-Chloroethyl)ether	330	U	330
2-Chlorophenol	330	U	330
1,3-Dichlorobenzene	330	U	330
1,4-Dichlorobenzene	330	U	330
1,2-Dichlorobenzene	330	U	330
2-Methylphenol	330	U	330
2,2'-oxybis(1-Chloropropane)	330	U	330
4-Methylphenol	330	U	330
N-Nitroso-di-n-propylamine	330	U	330
Hexachloroethane	330	U	330
Nitrobenzene	330	U	330
Isophorone	330	U	330
2-Nitrophenol	330	U	330
2,4-Dimethylphenol	330	U	330
bis(2-Chloroethoxy)methane	330	U	330
2,4-Dichlorophenol	330	U	330
1,2,4-Trichlorobenzene	330	U	330
Naphthalene	330	U	330
4-Chloroaniline	330	U	330
Hexachlorobutadiene	330	U	330
4-Chloro-3-methylphenol	330	U	330
2-Methylnaphthalene	330	U	330
Hexachlorocyclopentadiene	330	U	330
2,4,6-Trichlorophenol	330	U	330
2,4,5-Trichlorophenol	830	U	830
2-Chloronaphthalene	330	U	330
2-Nitroaniline	830	U	830
Dimethylphthalate	330	U	330
Acenaphthylene	330	U	330
2,6-Dinitrotoluene	330	U	330
3-Nitroaniline	830	U	830
Acenaphthene	330	U	330
2,4-Dinitrophenol	830	U	830
4-Nitrophenol	830	U	830
Dibenzofuran	330	U	330
2,4-Dinitrotoluene	330	U	330
Diethylphthalate	330	U	330
4-Chlorophenyl-phenylether	330	U	330
Fluorene	330	U	330
4-Nitroaniline	830	U	830
4,6-Dinitro-2-methylphenol	830	U	830

(continued)

- DRAFT DOCUMENT -
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HPN: 5037

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Huntingdon

EPA METHOD 8270
TCL SEMIVOLATILE ORGANIC COMPOUND RESULTS

Client ID: LAB. BLANK Lab ID (HSN):
Matrix: SOIL Filename: 4164P05

Compounds:	ug/Kg (PPB)	EQL
N-Nitrosodiphenylamine	330 U	330
4-Bromophenyl-phenylether	330 U	330
Hexachlorobenzene	330 U	330
Pentachlorophenol	830 U	830
Phenanthrene	330 U	330
Anthracene	330 U	330
Carbazole	330 U	330
Di-n-butylphthalate	330 U	330
Fluoranthene	330 U	330
Pyrene	330 U	330
Butylbenzylphthalate	330 U	330
3,3'-Dichlorobenzidine	330 U	330
Benz(a)anthracene	330 U	330
Chrysene	330 U	330
bis(2 Ethylhexyl)phthalate	330 U	330
Di-n octylphthalate	330 U	330
Benzo(b)fluoranthene	330 U	330
Benzo(k)fluoranthene	330 U	330
Benzo(a)pyrene	330 U	330
Indeno(1,2,3-cd)pyrene	330 U	330
Dibenz(a,h)anthracene	330 U	330
Benzo(g,h,i)perylene	330 U	330

Surrogate Recovery		QC LIMITS
2-Fluorophenol	80%	25-121%
Phenol-d5	80%	24-113%
2-Chlorophenol-d4	80%	20-130%
1,2-Dichlorobenzene-d4	77%	20-130%
Nitrobenzene-d5	74%	23-120%
2-Fluorobiphenyl	77%	30-115%
2,4,6-Tribromophenol	80%	19-122%
Terphenyl-d14	91%	18-137%

- DRAFT DOCUMENT - NOT VALIDATED

TCL = Target Coumpound List EPA Contract Laboratory Program (OLM01)
EQL = Estimated Quantitation Limit (lower calibration limit)
U = Undetected at the given EQL
J = Detected below the EQL (estimated value)
E = Exceeds the upper calibration limit (estimated value)
B = Also detected in the associated Blank

Note: All results are reported on a dry weight basis.
Reference: "EPA Test Methods for Evaluating Solid Waste", SW-846, November 1986, 3rd Edition.

HPN: 5037

QC SEMIVOLATILE SURROGATE RECOVERY

Lab Name: HUNTINGDON ST PAUL Method: EP8270C (OLM01 Target Cpds)

	SAMPLE NO. HSN	SAMPLE MATRIX	DATE PREPPED	DATE ANALYZED	INSTR ID	INSTRUMENT FILENAME	ANLYST
01	BLANK 06/10	SOIL	06/10/94	06/13/94	VGTRIO1	4164P05	GNM
02	25150DL	SOIL	06/10/94	06/13/94	VGTRIO1	4164P06	GNM
03	25154DL	SOIL	06/09/94	06/13/94	VGTRIO1	4164P07	GNM
04	25152RI	SOIL	06/09/94	06/13/94	VGTRIO1	4164P08	GNM
05	25160MSD RI	SOIL	06/09/94	06/13/94	VGTRIO1	4164P09	GNM
06	25160RI	SOIL	06/09/94	06/13/94	VGTRIO1	4164P10	GNM
07	25161RI	SOIL	06/09/94	06/13/94	VGTRIO1	4164P11	GNM
08	25162RI	SOIL	06/09/94	06/13/94	VGTRIO1	4164P12	GNM
09							
10							
11							
12							
13							
14							
15							

	SAMPLE NO. HSN	S1 (2FP)#	S2 (PHL)#	S3 (2CP)	S4 (DCB)#	S5 (NBZ)#	S6 (FBP)#	S7 (TBP)#	S8 (TPH)#	TOT OUT
01	BLANK 06/10	80	80	80	77	74	77	80	91	0
02	25150DL	82	84	83	80	73	85	95	109	0
03	25154DL	75	83	80	76	72	88	75	136	0
04	25152RI	86	90	93	88	82	101	81	158 *	1
05	25160MSD RI	70	89	85	91	87	111	50	161 *	1
06	25160RI	41	63	59	68	72	101	25	142 *	1
07	25161RI	63	70	69	69	80	103	79	154 *	1
08	25162RI	43	74	61	76	81	103	21	158 *	1
09										
10										
11										
12										
13										
14										
15										

DRAFT DOCUMENT - NOT VALIDATED

		QC LIMITS WATER	SOIL	OTHER
S1	(2FP) = 2-Fluorophenol	21-110%	25-121%	25-121%
S2	(PHL) = Phenol-d5	10-110%	24-113%	24-113%
S3	(2CP) = 2-Chlorophenol-d4	33-110%	20-130%	20-130%
S4	(DCB) = 1,2-Dichlorobenzene-d4	16-110%	20-130%	20-130%
S5	(NBZ) = Nitrobenzene-d5	35-114%	23-120%	23-120%
S6	(FBP) = 2-Fluorobiphenyl	43-116%	30-115%	30-115%
S7	(TBP) = 2,4,6-Tribromophenol	10-123%	19-122%	19-122%
S8	(TPH) = Terphenyl-d14	33-141%	18-137%	18-137%

Column to be used to flag recovery values
* Values outside of contract required QC limits
D Surrogate diluted out