ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 North Grand Avenue East, P.O. Box 19276, Springfield, Illinois 62794-9276 Mary A. Gade, Director

MEMORANDUM

US EPA RECORDS CENTER REGION 5

499989

To: Tracey E. Virgin, OCS

From: Paul E. Takács, BOL/RPMS/NPL

Date: January 7, 1999

Subject: L2010300074 -- Winnebago County
Southeast Rockford Groundwater Contamination Site - Rockford
Superfund/Technical Reports

Attached, please find a copy of the analytical results for a sampling event that took place just north of the Area 7 playground. A total of six samples were taken on December 16, 1998 in the low-lying "wooded" areas that exist north of the playground. Four water samples were collected from the stream which was sampled earlier in the RI. Two sediment samples were collected close to this stream as well.

I discussed with U.S. EPA how this data would be analyzed in the Risk Assessment. U.S. EPA's opinion was that there was no need at this time to make any changes in the Risk Assessment based on this data, but that the data should be noted somewhere in the Remedial Investigation document. I would feel much more comfortable discussing what these numbers mean with you before speaking with the property owner. As such, if you could provide me a toxicological opinion on these results within the next two weeks, it would be greatly appreciated.

Please let me know if there is anything you need. Thank you again!

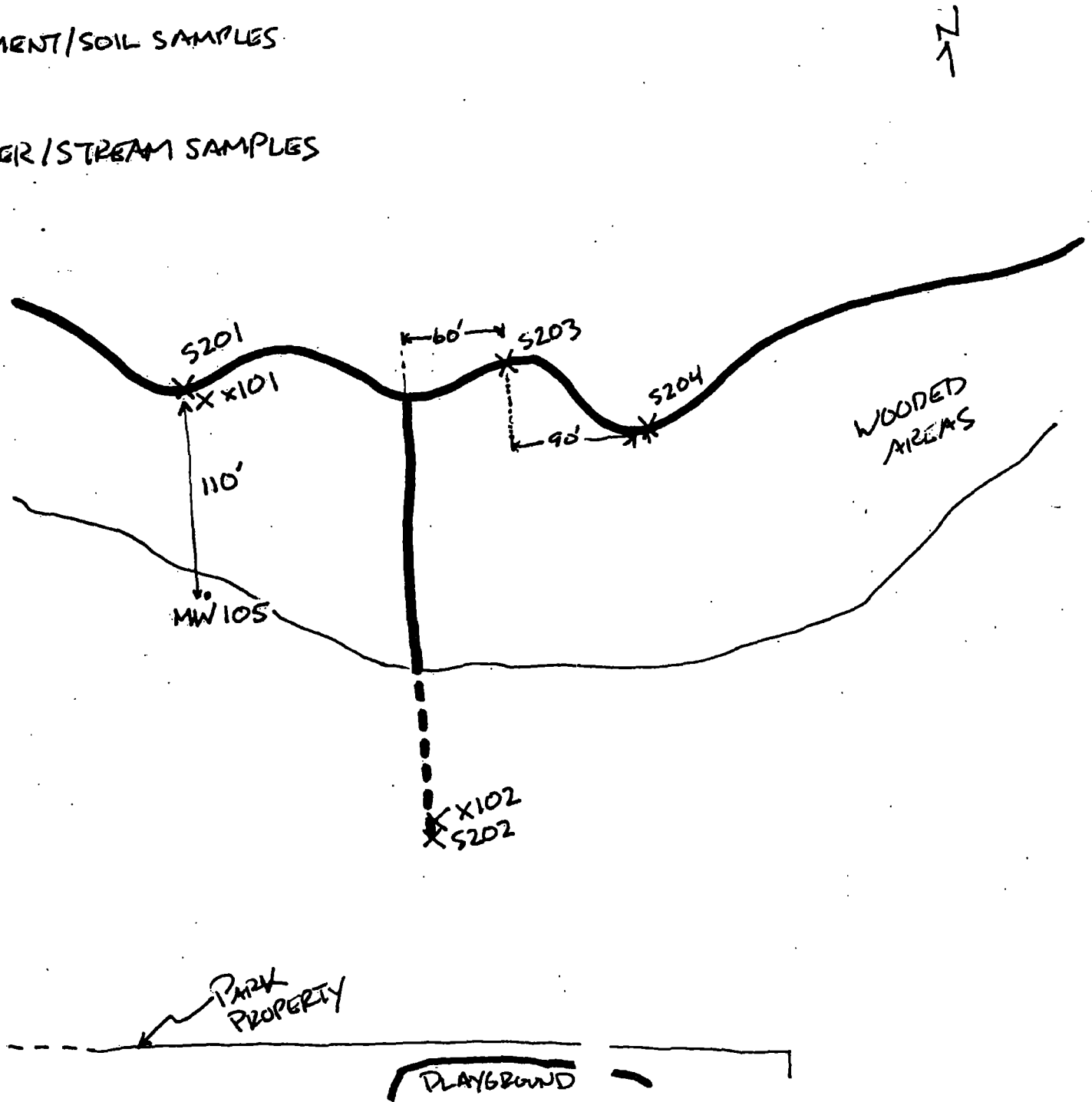
Attachments - Analytical Results, Sample Location Map

cc: Terry Ayers (w/o attachments)
Jason Thorpe
Division File

SAMPLE LOCATION MAP - ALL SAMPLES TAKEN ON 12-16-98
(NOT DRAWN TO SCALE)

X101, X102 — SEDIMENT/SOIL SAMPLES

S201, S202, S203, S204 — WATER/STREAM SAMPLES



Recra LabNet - Chicago (Gulf Coast)
SEMIVOLATILES BY GC/MS, HSL LIST

RFW Batch Number: 9812G552 Client: Illinois EPA Work Order: 0000-00-0 Report Date: 12/31/98 12:19 Page: 1a

	Cust ID:	S201		S202		S203		S204		X101		X101	
Sample Information	RFW#:	001		002		003		004		005		005 MS	
	Matrix:	WATER		WATER		WATER		WATER		SOIL		SOIL	
	D.F.:	2		2		2		2		1		1	
	Units:	ug/L		ug/L		ug/L		ug/L		ug/Kg		ug/Kg	
Surrogate Recovery	Nitrobenzene-d5	50	%	66	%	67	%	67	%	70	%	85	%
	2-Fluorobiphenyl	56	%	64	%	62	%	65	%	72	%	80	%
	p-Terphenyl-d14	42	%	41	%	43	%	42	%	85	%	103	%
	Phenol-d5	39	%	54	%	53	%	53	%	63	%	71	%
	2-Fluorophenol	36	%	51	%	50	%	50	%	56	%	66	%
	2,4,6-Tribromophenol	46	%	53	%	58	%	58	%	74	%	88	%
	2-Chlorophenol-d4	45	%	60	%	58	%	62	%	62	%	69	%
	1,2-Dichlorobenzene-d4	50	%	69	%	68	%	67	%	62	%	72	%
			fl		fl		fl		fl		fl		fl
Phenol		10	U	10	U	10	U	10	U	440	U	71	%
bis(2-Chloroethyl)ether		10	U	10	U	10	U	10	U	440	U	440	U
2-Chlorophenol		10	U	10	U	10	U	10	U	440	U	71	%
1,3-Dichlorobenzene		10	U	10	U	10	U	10	U	440	U	440	U
1,4-Dichlorobenzene		10	U	10	U	10	U	10	U	440	U	66	%
1,2-Dichlorobenzene		10	U	10	U	10	U	10	U	440	U	440	U
2-Methylphenol		10	U	10	U	10	U	10	U	440	U	440	U
2,2'-oxybis(1-Chloropropane)		10	U	10	U	10	U	10	U	440	U	440	U
4-Methylphenol		10	U	10	U	10	U	10	U	440	U	440	U
N-Nitroso-di-n-propylamine		10	U	10	U	10	U	10	U	440	U	84	%
Hexachloroethane		10	U	10	U	10	U	10	U	440	U	440	U
Nitrobenzene		10	U	10	U	10	U	10	U	440	U	440	U
Isophorone		10	U	3	J	10	U	10	U	440	U	440	U
2-Nitrophenol		10	U	10	U	10	U	10	U	440	U	440	U
2,4-Dimethylphenol		10	U	10	U	10	U	10	U	440	U	440	U
bis(2-Chloroethoxy)methane		10	U	10	U	10	U	10	U	440	U	440	U
2,4-Dichlorophenol		10	U	10	U	10	U	10	U	440	U	440	U
1,2,4-Trichlorobenzene		10	U	10	U	10	U	10	U	440	U	79	%
Naphthalene		10	U	10	U	10	U	10	U	63	J	440	U
4-Chloroaniline		10	U	10	U	10	U	10	U	440	U	440	U
Hexachlorobutadiene		10	U	10	U	10	U	10	U	440	U	440	U
4-Chloro-3-methylphenol		10	U	10	U	10	U	10	U	440	U	76	%
2-Methylnaphthalene		10	U	10	U	10	U	10	U	440	U	440	U
Hexachlorocyclopentadiene		10	U	10	U	10	U	10	U	440	U	440	U

*= Outside of EPA CLP QC limits.

RFW Batch Number: 9812G552 Client: Illinois EPA Work Order: 0000-00-0 Page: 1b

Cust ID:	S201	S202	S203	S204	X101	X101
RFW#:	001	002	003	004	005	005 MS
2,4,6-Trichlorophenol	10 U	10 U	10 U	10 U	440 U	440 U
2,4,5-Trichlorophenol	25 U	25 U	26 U	25 U	1100 U	1100 U
2-Chloronaphthalene	10 U	10 U	10 U	10 U	440 U	440 U
2-Nitroaniline	25 U	25 U	26 U	25 U	1100 U	1100 U
Dimethylphthalate	10 U	10 U	10 U	10 U	440 U	440 U
Acenaphthylene	10 U	10 U	10 U	10 U	440 U	440 U
2,6-Dinitrotoluene	10 U	10 U	10 U	10 U	440 U	440 U
3-Nitroaniline	25 U	25 U	26 U	25 U	1100 U	1100 U
Acenaphthene	10 U	10 U	10 U	10 U	170 J	69 %
2,4-Dinitrophenol	25 U	25 U	26 U	25 U	1100 U	1100 U
4-Nitrophenol	25 U	25 U	26 U	25 U	1100 U	91 %
Dibenzofuran	10 U	10 U	10 U	10 U	91 J	440 U
2,4-Dinitrotoluene	10 U	10 U	10 U	10 U	440 U	92 * %
Diethylphthalate	10 U	10 U	10 U	10 U	440 U	440 U
4-Chlorophenyl-phenylether	10 U	10 U	10 U	10 U	440 U	440 U
Fluorene	10 U	10 U	10 U	10 U	180 J	440 U
4-Nitroaniline	25 U	25 U	26 U	25 U	1100 U	1100 U
4,6-Dinitro-2-methylphenol	25 U	25 U	26 U	25 U	1100 U	1100 U
N-Nitrosodiphenylamine (1)	10 U	10 U	10 U	10 U	440 U	440 U
4-Bromophenyl-phenylether	10 U	10 U	10 U	10 U	440 U	440 U
Hexachlorobenzene	10 U	10 U	10 U	10 U	440 U	440 U
Pentachlorophenol	25 U	25 U	26 U	25 U	1100 U	82 %
Phenanthrene	10 U	10 U	10 U	10 U	1300	400 J
Anthracene	10 U	10 U	10 U	10 U	240 J	48 J
Carbazole	10 U	10 U	10 U	10 U	310 J	55 J
Di-n-butylphthalate	10 U	10 U	10 U	10 U	440 U	50 J
Fluoranthene	10 U	10 U	10 U	10 U	1600	630
Pyrene	10 U	10 U	10 U	10 U	1300	63 %
Butylbenzylphthalate	10 U	10 U	10 U	10 U	440 U	440 U
3,3'-Dichlorobenzidine	10 U	10 U	10 U	10 U	440 U	440 U
Benzo(a)anthracene	10 U	10 U	10 U	10 U	690	260 J
Chrysene	10 U	10 U	10 U	10 U	740	350 J
bis(2-Ethylhexyl)phthalate	10 U	3 J	13	11	440 U	160 J
Di-n-octylphthalate	10 U	10 U	10 U	10 U	440 U	440 U
Benzo(b)fluoranthene	10 U	10 U	10 U	10 U	870	390 J
Benzo(k)fluoranthene	10 U	10 U	10 U	10 U	340 J	190 J
Benzo(a)pyrene	10 U	10 U	10 U	10 U	590	260 J
Indeno(1,2,3-cd)pyrene	10 U	10 U	10 U	10 U	440 J	280 J
Dibenzo(a,h)anthracene	10 U	10 U	10 J	10 U	110 J	57 J
Benzo(g,h,i)perylene	10 U	10 U	10 U	10 U	390 J	220 J

(1) - Cannot be separated from Diphenylamine. *= Outside of EPA CLP QC limits.

Recra LabNet - Chicago (Gulf Coast)
SEMIVOLATILES BY GC/MS. HSL LIST

RFW Batch Number: 9812G552 Client: Illinois EPA Work Order: 0000-00-0 Report Date: 12/31/98 12:19 Page: 2a

	Cust ID:	X101		X102		SBLKHG		SBLKHG BS		SBLKHS		SBLKHS BS	
Sample Information	RFW#:	005 MSD		006		98GB0679-MB1		98GB0679-MB1		98GB0678-MB1		98GB0678-MB1	
	Matrix:	SOIL		SOIL		WATER		WATER		SOIL		SOIL	
	D.F.:	1		1		~~2~~ 1		~~2~~ 1		1		1	
	Units:	ug/Kg		ug/Kg		ug/L		109 ug/L 12-31-98		ug/Kg		ug/Kg	
Surrogate Recovery	Nitrobenzene-d5	76	%	46	%	71	%	77	%	91	%	82	%
	2-Fluorobiphenyl	81	%	51	%	60	%	72	%	86	%	79	%
	p-Terphenyl-d14	107	%	58	%	72	%	67	%	110	%	97	%
	Phenol-d5	69	%	39	%	54	%	57	%	79	%	70	%
	2-Fluorophenol	63	%	37	%	52	%	50	%	68	%	63	%
	2,4,6-Tribromophenol	86	%	50	%	65	%	68	%	77	%	70	%
	2-Chlorophenol-d4	67	%	39	%	63	%	63	%	75	%	73	%
	1,2-Dichlorobenzene-d4	66	%	38	%	66	%	69	%	82	%	83	%
			fl		fl		fl		fl		fl		fl
Phenol		65	%	520	U	10	U	56	%	330	U	73	%
bis(2-Chloroethyl)ether		430	U	520	U	10	U	10	U	330	U	330	U
2-Chlorophenol		71	%	520	U	10	U	62	%	330	U	76	%
1,3-Dichlorobenzene		430	U	520	U	10	U	10	U	330	U	330	U
1,4-Dichlorobenzene		60	%	520	U	10	U	63	%	330	U	71	%
1,2-Dichlorobenzene		430	U	520	U	10	U	10	U	330	U	330	U
2-Methylphenol		430	U	520	U	10	U	10	U	330	U	330	U
2,2'-oxybis(1-Chloropropane)		430	U	520	U	10	U	10	U	330	U	330	U
4-Methylphenol		430	U	520	U	10	U	10	U	330	U	330	U
N-Nitroso-di-n-propylamine		72	%	520	U	10	U	88	%	330	U	78	%
Hexachloroethane		430	U	520	U	10	U	10	U	330	U	330	U
Nitrobenzene		430	U	520	U	10	U	10	U	330	U	330	U
Isophorone		430	U	520	U	10	U	10	U	330	U	330	U
2-Nitrophenol		430	U	520	U	10	U	10	U	330	U	330	U
2,4-Dimethylphenol		430	U	520	U	10	U	10	U	330	U	330	U
bis(2-Chloroethoxy)methane		430	U	520	U	10	U	10	U	330	U	330	U
2,4-Dichlorophenol		430	U	520	U	10	U	10	U	330	U	330	U
1,2,4-Trichlorobenzene		72	%	520	U	10	U	71	%	330	U	79	%
Naphthalene		430	U	520	U	10	U	10	U	330	U	330	U
4-Chloroaniline		430	U	520	U	10	U	10	U	330	U	330	U
Hexachlorobutadiene		430	U	520	U	10	U	10	U	330	U	330	U
4-Chloro-3-methylphenol		71	%	520	U	10	U	74	%	330	U	68	%
2-Methylnaphthalene		430	U	520	U	10	U	10	U	330	U	330	U
Hexachlorocyclopentadiene		430	U	520	U	10	U	10	U	330	U	330	U

*= Outside of EPA CLP QC limits.

RFW Batch Number: 9812G552 Client: Illinois EPA Work Order: 0000-00-0 Page: 2b

Cust ID:	X101		X102		SBLKHG		SBLKHG BS		SBLKHS		SBLKHS BS	
RFW#:	005 MSD		006		98GB0679-MB1		98GB0679-MB1		98GB0678-MB1		98GB0678-MB1	
2,4,6-Trichlorophenol	430	U	520	U	10	U	10	U	330	U	330	U
2,4,5-Trichlorophenol	1100	U	1300	U	25	U	25	U	830	U	830	U
2-Chloronaphthalene	430	U	520	U	10	U	10	U	330	U	330	U
2-Nitroaniline	1100	U	1300	U	25	U	25	U	830	U	830	U
Dimethylphthalate	430	U	520	U	10	U	10	U	330	U	330	U
Acenaphthylene	430	U	520	U	10	U	10	U	330	U	330	U
2,6-Dinitrotoluene	430	U	520	U	10	U	10	U	330	U	330	U
3-Nitroaniline	1100	U	1300	U	25	U	25	U	830	U	830	U
Acenaphthene	66	%	520	U	10	U	72	%	330	U	78	%
2,4-Dinitrophenol	1100	U	1300	U	25	U	25	U	830	U	830	U
4-Nitrophenol	86	%	1300	U	25	U	61	%	830	U	91	%
Dibenzofuran	430	U	520	U	10	U	10	U	330	U	330	U
2,4-Dinitrotoluene	90 *	%	520	U	10	U	80	%	330	U	89	%
Diethylphthalate	430	U	520	U	10	U	10	U	330	U	330	U
4-Chlorophenyl-phenylether	430	U	520	U	10	U	10	U	330	U	330	U
Fluorene	430	U	520	U	10	U	10	U	330	U	330	U
4-Nitroaniline	1100	U	1300	U	25	U	25	U	830	U	830	U
4,6-Dinitro-2-methylphenol	1100	U	1300	U	25	U	25	U	830	U	830	U
N-Nitrosodiphenylamine (1)	430	U	520	U	10	U	10	U	330	U	330	U
4-Bromophenyl-phenylether	430	U	520	U	10	U	10	U	330	U	330	U
Hexachlorobenzene	430	U	520	U	10	U	10	U	330	U	330	U
Pentachlorophenol	89	%	1300	U	25	U	76	%	830	U	90	%
Phenanthrene	210	J	520	U	10	U	10	U	330	U	330	U
Anthracene	430	U	520	U	10	U	10	U	330	U	330	U
Carbazole	430	U	520	U	10	U	10	U	330	U	330	U
Di-n-butylphthalate	55	J	110	J ✓	10	U	10	U	330	U	330	U
Fluoranthene	420	J	520	U	10	U	10	U	330	U	330	U
Pyrene	56	%	520	U	10	U	84	%	330	U	97	%
Butylbenzylphthalate	430	U	520	U	10	U	10	U	330	U	330	U
3,3'-Dichlorobenzidine	430	U	520	U	10	U	10	U	330	U	330	U
Benzo(a)anthracene	210	J	520	U	10	U	10	J	330	U	330	U
Chrysene	290	J	520	U	10	U	10	J	330	U	330	U
bis(2-Ethylhexyl)phthalate	100	J	520	U	10	U	10	U	330	U	330	U
Di-n-octylphthalate	430	U	520	U	10	U	10	U	330	U	330	U
Benzo(b)fluoranthene	330	J	520	U	10	U	10	U	330	U	330	U
Benzo(k)fluoranthene	150	J	520	U	10	U	10	U	330	U	330	U
Benzo(a)pyrene	200	J	520	U	10	U	10	U	330	U	330	U
Indeno(1,2,3-cd)pyrene	200	J	520	U	10	U	10	U	330	U	330	U
Dibenzo(a,h)anthracene	430	U	520	U	10	U	10	U	330	U	330	U
Benzo(g,h,i)perylene	160	J	520	U	10	U	10	U	330	U	330	U

(1) - Cannot be separated from Diphenylamine. *= Outside of EPA CLP QC limits.

12/31/98

Preliminary

Recra LabNet - Chicago (Gulf Coast)
VOLATILES BY GC/MS. HSL LIST

RFW Batch Number: 9812G552 Client: Illinois EPA Work Order: 0000-00-0 Report Date: 12/31/98 11:54 Page: 1a

REPORT

	CuSt ID:	S201	S202	S202	S203	S204	S204
Sample Information	RFW#:	001	002	002 DL	003	004	004
	Matrix:	WATER	WATER	WATER	WATER	WATER	WATER
	D.F.:	1	5	25	1	1	1
	Units:	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L REPREP
Surrogate Recovery	1,2-Dichloroethane-d4	97 %	98 %	103 %	106 %	110 %	104 %
	Toluene-d8	104 %	106 %	110 %	109 %	112 * %	113 * %
	4-Bromofluorobenzene	95 %	108 %	111 %	103 %	106 %	99 %
		fl	fl	fl	fl	fl	fl
Chloromethane		10 U	50 U	250 U	10 U	10 U	10 U
Bromomethane		10 U	50 U	250 U	10 U	10 U	10 U
Vinyl chloride		10 U	48 J	250 U	10 U	10 U	10 U
Chloroethane		10 U	87	250 U	10 U	10 U	10 U
Methylene Chloride		10 U	50 U	250 U	10 U	10 U	10 U
Acetone		17	50 U	250 U	10 U	10 U	10 U
Carbon Disulfide		10 U	50 U	250 U	10 U	10 U	10 U
1,1-Dichloroethene		10 U	88	250 U	10 U	10 U	10 U
1,1-Dichloroethane		10 U	1000 E	1300 D	10 U	10 U	10 U
1,2-Dichloroethene (total)		10 U	1700 E	2200 D	10 U	10 U	10 U
Chloroform		10 U	10 J	250 U	10 U	10 U	10 U
1,2-Dichloroethane		10 U	40 J	250 U	10 U	10 U	10 U
2-Butanone		10 U	50 U	250 U	10 U	10 U	10 U
1,1,1-Trichloroethane		10 U	1200 E	1800 D	10 U	10 U	10 U
Carbon Tetrachloride		10 U	50 U	250 U	10 U	10 U	10 U
Bromodichloromethane		10 U	50 U	250 U	10 U	10 U	10 U
1,2-Dichloropropane		10 U	50 U	250 U	10 U	10 U	10 U
cis-1,3-Dichloropropene		10 U	50 U	250 U	10 U	10 U	10 U
Trichloroethene		10 U	22 J	250 U	10 U	10 U	10 U
Dibromochloromethane		10 U	50 U	250 U	10 U	10 U	10 U
1,1,2-Trichloroethane		10 U	50 U	250 U	10 U	10 U	10 U
Benzene		10 U	50 U	250 U	10 U	10 U	10 U
trans-1,3-Dichloropropene		10 U	50 U	250 U	10 J	10 U	10 U
Bromoform		10 U	50 U	250 U	10 J	10 U	10 U
4-Methyl-2-pentanone		10 U	50 U	250 U	10 J	10 U	10 U
2-Hexanone		10 U	50 U	250 U	10 U	10 U	10 U
Tetrachloroethene		10 J	50 U	250 U	10 U	10 U	10 U
1,1,2,2-Tetrachloroethane		10 J	50 U	250 U	10 U	10 U	10 U
Toluene		10 J	50 U	250 U	10 U	10 U	10 U

*= Outside of EPA CLP QC limits.

RFW Batch Number: 9812G552 Client: Illinois EPA Work Order: 0000-00-0 Page: 1b

Cust ID:	S201	S202	S202	S203	S204	S204
RFW#:	001	002	002 DL	003	004	004 REPREP
Chlorobenzene	10 U	50 U	250 U	10 U	10 U	10 U
Ethylbenzene	10 U	50 U	250 U	10 U	10 U	10 U
Styrene	10 U	50 U	250 U	10 U	10 U	10 U
Xylene (total)	10 U	21 J	250 U	10 U	10 U	10 U

*= Outside of EPA CLP QC limits.

PRELIMINARY REPORT

Recra LabNet - Chicago (Gulf Coast)
VOLATILES BY GC/MS. HSL LIST

RFW Batch Number: 9812G552 Client: Illinois EPA Work Order: 0000-00-0 Report Date: 12/31/98 11:54 Page: 2a

Sample Information	Cust_ID:	X101	X102	X102	TB	VBLKBU	VBLKBU BS
	RFW#:	005	006	006	007	98GVC435-MB1	98GVC435-MB1
	Matrix:	SOIL	SOIL	SOIL	WATER	WATER	WATER
	D.F.:	1	1	1	1	1	1
	Units:	ug/Kg	ug/Kg	ug/Kg REPREP	ug/L	ug/L	ug/L
Surrogate Recovery	1.2-Dichloroethane-d4	107 %	96 %	109 %	101 %	98 %	97 %
	Toluene d8	125 %	99 %	119 %	110 %	106 %	102 %
	4-Bromofluorobenzene	81 %	97 %	107 %	96 %	93 %	91 %
Chloromethane		13 J	16 U	16 U	10 U	10 U	10 U
Bromomethane		13 U	16 U	16 U	10 U	10 U	10 U
Vinyl chloride		13 U	28	5 J	10 U	10 U	10 U
Chloroethane		13 U	14 J	3 J	10 U	10 U	10 U
Methylene Chloride		13 U	16 U	16 U	10 U	10 U	10 U
Acetone		14	29	17	10 U	10 U	10 U
Carbon Disulfide		13 U	16 U	16 U	10 U	10 U	10 U
1,1-Dichloroethene		13 U	16 U	16 U	10 U	10 U	102 %
1,1-Dichloroethane		13 U	110	48	10 U	10 U	10 U
1,2-Dichloroethene (total)		13 U	190	99	10 U	10 U	10 U
Chloroform		13 U	16 U	16 U	10 U	10 U	10 U
1,2-Dichloroethane		13 U	16 U	16 U	10 U	10 U	10 U
2-Butanone		13 U	16 U	16 U	10 U	10 U	10 U
1,1,1-Trichloroethane		13 U	62	27	10 U	10 U	10 U
Carbon Tetrachloride		13 U	16 U	16 U	10 U	10 U	10 U
Bromodichloromethane		13 U	16 U	16 U	10 U	10 U	10 U
1,2-Dichloropropane		13 U	16 U	16 U	10 U	10 U	10 U
cis-1,3-Dichloropropene		13 U	16 U	16 U	10 U	10 U	10 U
Trichloroethene		13 U	4 J	16 U	10 U	10 U	102 %
Dibromochloromethane		13 U	16 U	16 U	10 U	10 U	10 U
1,1,2-Trichloroethane		13 U	16 U	16 U	10 U	10 U	10 U
Benzene		13 U	16 U	16 U	10 U	10 U	104 %
trans-1,3-Dichloropropene		13 U	16 U	16 U	10 U	10 U	10 U
Bromoform		13 U	16 U	16 U	10 U	10 U	10 U
4-Methyl-2-pentanone		13 U	16 U	16 U	10 U	10 U	10 U
2-Hexanone		13 U	16 U	16 U	10 U	10 U	10 U
Tetrachloroethene		13 U	16 U	16 U	10 U	10 U	10 U
1,1,2,2-Tetrachloroethane		13 U	16 U	16 U	10 U	10 U	10 U
Toluene		13 U	16 U	16 U	10 U	10 U	104 %

*= Outside of EPA CLP QC limits.

RFW Batch Number: 9812G552 Client: Illinois EPA Work Order: 0000-00-0 Page: 2b

Cust ID:	X101	X102	X102	TB	VBLKBU	VBLKBU BS
RFW#:	005	006	006 REPREP	007	98GVC435-MB1	98GVC435-MB1
Chlorobenzene	13 U	16 U	16 U	10 U	10 U	102 %
Ethylbenzene	13 U	16 U	16 U	10 U	10 U	10 U
Styrene	13 U	16 U	16 U	10 U	10 U	10 U
Xylene (total)	13 U	16 U	16 U	10 U	10 U	10 U

*= Outside of EPA CLP QC limits.

Recra LabNet - Chicago (Gulf Coast)
VOLATILES BY GC/MS, HSL LIST

RFW Batch Number: 9812G552 Client: Illinois EPA Work Order: 0000-00-0 Report Date: 12/31/98 11:54 Page: 3a

Sample Information	Cust ID:	VBLKEY		VBLKEY BS		VBLKLH		VBLKLH BS		VBLKEW		VBLKEW BS	
	RFW#:	98GVC474-MB1		98GVC474-MB1		98GVC434-MB1		98GVC434-MB1		98GVC467-MB1		98GVC467-MB1	
	Matrix:	WATER		WATER		WATER		WATER		SOIL		SOIL	
	D.F.:	1		1		1		1		1		1	
	Units:	ug/L		ug/L		ug/L		ug/L		ug/Kg		ug/Kg	
Surrogate Recovery	1,2-Dichloroethane-d4	98	%	104	%	101	%	104	%	86	%	90	%
	Toluene-d8	106	%	110	%	108	%	107	%	96	%	99	%
	4-Bromofluorobenzene	106	%	115	%	100	%	101	%	75	%	73	%
			fl		fl		fl		fl		fl		fl
Chloromethane		10	U	10	U	10	U	10	U	10	U	10	U
Bromomethane		10	U	10	U	10	U	10	U	10	U	10	U
Vinyl chloride		10	U	10	U	10	U	10	U	10	U	10	U
Chloroethane		10	U	10	U	10	U	10	U	10	U	10	U
Methylene Chloride		10	U	10	U	10	U	10	U	10	U	10	U
Acetone		10	U	10	U	10	U	10	U	10	U	10	U
Carbon Disulfide		10	U	10	U	10	U	10	U	10	U	10	U
1,1-Dichloroethene		10	U	95	%	10	U	94	%	10	U	80	%
1,1-Dichloroethane		10	U	10	U	10	U	10	U	10	U	10	U
1,2-Dichloroethene (Total)		10	U	10	U	10	U	10	U	10	U	10	U
Chloroform		10	U	10	U	10	U	10	U	10	U	10	U
1,2-Dichloroethane		10	U	10	U	10	U	10	U	10	U	10	U
2-Butanone		10	U	10	U	10	U	10	U	10	U	10	U
1,1,1-Trichloroethane		10	U	10	U	10	U	10	U	10	U	10	U
Carbon Tetrachloride		10	U	10	U	10	U	10	U	10	U	10	U
Bromodichloromethane		10	U	10	U	10	U	10	U	10	U	10	U
1,2-Dichloropropane		10	U	10	U	10	U	10	U	10	U	10	U
cis-1,3-Dichloropropene		10	U	10	U	10	U	10	U	10	U	10	U
Trichloroethene		10	U	107	%	10	U	98	%	10	U	83	%
Dibromochloromethane		10	U	10	U	10	U	10	U	10	U	10	U
1,1,2-Trichloroethane		10	U	10	U	10	U	10	U	10	U	10	U
Benzene		10	U	111	%	10	U	100	%	10	U	90	%
trans-1,3-Dichloropropene		10	U	10	U	10	U	10	U	10	U	10	U
Bromoform		10	U	10	U	10	U	10	U	10	U	10	U
4-Methyl-2-pentanone		10	U	10	U	10	U	10	U	10	U	10	U
2-Hexanone		10	U	10	U	10	U	10	U	10	U	10	U
Tetrachloroethene		10	U	10	U	10	U	10	U	10	U	10	U
1,1,2,2-Tetrachloroethane		10	U	10	U	10	U	10	U	10	U	10	U
Toluene		10	U	108	%	10	U	100	%	10	U	96	%

*= Outside of EPA CLP QC limits.

RFW Batch Number: 9812G552 Client: Illinois EPA Work Order: 0000-00-0 Page: 3b

Cust ID:	VBLKEY		VBLKEY BS		VBLKLH		VBLKLH BS		VBLKEW		VBLKEW BS	
RFW#:	98GVC474-MB1		98GVC474-MB1		98GVC434-MB1		98GVC434-MB1		98GVC467-MB1		98GVC467-MB1	
Chlorobenzene	10	U	109	%	10	U	101	%	10	U	89	%
Ethylbenzene	10	U	10	U	10	U	10	U	10	U	10	U
Styrene	10	U	10	U	10	U	10	U	10	U	10	U
Xylene (total)	10	U	10	U	10	U	10	U	10	U	10	U

*= Outside of EPA CLP QC limits.

Recra LabNet - Chicago (Gulf Coast)
VOLATILES BY GC/MS. HSL LIST

RFW Batch Number: 9812G552 Client: Illinois EPA Work Order: 0000-00-0 Report Date: 12/31/98 11:54 Page: 4a

	Cust ID:	VBLKFA		VBLKFA BS	
Sample Information	RFW#:	98GVC475-MB1		98GVC475-MB1	
	Matrix:	SOIL		SOIL	
	D.F.:	1		1	
	Units:	ug/Kg		ug/Kg	
Surrogate Recovery	1,2-Dichloroethane-d4	99	%	95	%
	Toluene-d8	105	%	101	%
	4-Bromofluorobenzene	105	%	103	%
Chloromethane		10	U	10	U
Bromomethane		10	U	10	U
Vinyl chloride		10	U	10	U
Chloroethane		10	U	10	U
Methylene Chloride		10	U	10	U
Acetone		10	U	10	U
Carbon Disulfide		10	U	10	U
1,1-Dichloroethene		10	U	98	%
1,1-Dichloroethane		10	U	10	U
1,2-Dichloroethene (Total)		10	U	10	U
Chloroform		10	U	10	U
1,2-Dichloroethane		10	U	10	U
2-Butanone		10	U	10	U
1,1,1-Trichloroethane		10	U	10	U
Carbon Tetrachloride		10	U	10	U
Bromodichloromethane		10	U	10	U
1,2-Dichloropropane		10	U	10	U
cis-1,3-Dichloropropene		10	U	10	U
Trichloroethene		10	U	98	%
Dibromochloromethane		10	U	10	U
1,1,2-Trichloroethane		10	U	10	U
Benzene		10	U	103	%
trans-1,3-Dichloropropene		10	U	10	U
Bromoform		10	U	10	U
4-Methyl-2-pentanone		10	U	10	U
2-Hexanone		10	U	10	U
Tetrachloroethene		10	U	10	U
1,1,2,2-Tetrachloroethane		10	U	10	U
Toluene		10	U	10[illegible]	%

*= Outside of EPA CLP QC limits.

RFW Batch Number: 9812G552 Client: Illinois EPA Work Order: 0000-00-0 Page: 4b

	Cust ID: VBLKFA		VBLKFA BS	
	RF#: 98GVC475-MB1		98GVC475-MB1	
Chlorobenzene	10	U	101	%
Ethylbenzene	10	U	10	U
Styrene	10	U	10	U
Xylene (total)	10	U	10	U

*= Outside of EPA CLP QC limits.

Recra LabNet - Chicago (Gulf Coast)
PESTICIDE/PCBs BY GC. CLP LIST

RFW Batch Number: 9812G552 Client: Illinois EPA Work Order: 00000-000-000-0000-00-000 Report Date: 12/30/98 11:21 Page: 1

	Cust ID:	S201		S201		S202		S202		S203		S203	
Sample Information	RFW#:	001		001		002		002		003		003	
	Matrix:	WATER		WATER		WATER		WATER		WATER		WATER	
	D.F.:	1.00		1.00		1.00		1.00		1.00		1.00	
	Units:	ug/L		ug/L Col 2		ug/L		ug/L Col 2		ug/L		ug/L Col 2	
Surrogate:	Tetrachloro-m-xylene	50	%	60	%	45	%	45	%	35	%	40	%
Surrogate:	Decachlorobiphenyl	60	%	75	%	30	%	35	%	30	%	50	%
			fl		fl		fl		fl		fl		fl
alpha-BHC		0.050	U	0.050	U	0.050	U	0.050	U	0.050	U	0.050	U
beta-BHC		0.050	U	0.050	U	0.050	U	0.050	U	0.050	U	0.050	U
delta-BHC		0.050	U	0.050	U	0.050	U	0.050	U	0.050	U	0.050	U
gamma-BHC (Lindane)		0.050	U	0.050	U	0.050	U	0.050	U	0.050	U	0.050	U
Heptachlor		0.050	U	0.050	U	0.050	U	0.050	U	0.050	U	0.050	U
Aldrin		0.050	U	0.050	U	0.050	U	0.050	U	0.050	U	0.050	U
Heptachlor epoxide		0.050	U	0.050	U	0.050	U	0.050	U	0.050	U	0.050	U
Endosulfan I		0.050	U	0.050	U	0.050	U	0.050	U	0.050	U	0.050	U
Dieldrin		0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U
4,4'-DDE		0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U
Endrin		0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U
Endosulfan II		0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U
4,4'-DDD		0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U
Endosulfan sulfate		0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U
4,4'-DDT		0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U
Methoxychlor		0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Endrin ketone		0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U
Endrin aldehyde		0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U
alpha-Chlordane		0.050	U	0.050	U	0.050	U	0.050	U	0.050	U	0.050	U
gamma-Chlordane		0.050	U	0.050	U	0.050	U	0.050	U	0.050	U	0.050	U
Toxaphene		5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U
Aroclor-1016		1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Aroclor-1221		2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Aroclor-1232		1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Aroclor-1242		1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Aroclor-1248		1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Aroclor-1254		1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Aroclor-1260		1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U

U= Analyzed, not detected. J= Present below detection limit. B= Present in blank. NR= Not requested. NS= Not spiked.
%= Percent recovery. D= Diluted out. I= Interference. NA= Not Applicable. *= Outside of Advisory limits.

Recra LabNet - Chicago (Gulf Coast)
PESTICIDE/PCBs BY GC, CLP LIST

RFW Batch Number: 9812G552 Client: Illinois EPA Work Order: 00000-000-000-0000-00-000 Report Date: 12/30/98 11:21 Page: 2

	Cust ID:	S204		S204		X101		X101		X102		X102	
Sample Information	RFW#:	004		004		005		005		006		006	
	Matrix:	WATER		WATER		SOIL		SOIL		SOIL		SOIL	
	D.F.:	1.00		1.00		1.00		1.00		1.00		1.00	
	Units:	ug/L		ug/L Col 2		ug/Kg		ug/Kg Col 2		ug/Kg		ug/Kg Col 2	
Surrogate:	Tetrachloro-m-xylene	50	%	55	%	85	%	82	%	72	%	75	%
Surrogate:	Decachlorobiphenyl	35	%	35	%	95	%	120	%	85	%	105	%
			fl		fl		fl		fl		fl		fl
alpha-BHC		0.050	U	0.050	U	2.2	U	2.2	U	2.6	U	2.6	U
beta-BHC		0.050	U	0.050	U	2.2	U	2.2	U	2.6	U	2.6	U
delta-BHC		0.050	U	0.050	U	2.2	U	2.2	U	2.6	U	2.6	U
gamma-BHC (Lindane)		0.050	U	0.050	U	2.2	U	2.2	U	2.6	U	2.6	U
Heptachlor		0.050	U	0.050	U	2.2	U	2.2	U	2.6	U	2.6	U
Aldrin		0.050	U	0.050	U	2.2	U	2.2	U	2.6	U	2.6	U
Heptachlor epoxide		0.050	U	0.050	U	2.6	✓	3.4	✓	2.6	U	2.6	U
Endosulfan I		0.050	U	0.050	U	2.2	U	2.2	U	2.6	U	2.6	U
Dieldrin		0.10	U	0.10	U	4.3	U	4.3	U	5.2	U	5.2	U
4,4'-DDE		0.10	U	0.10	U	4.3	U	4.3	U	5.2	U	5.2	U
Endrin		0.10	U	0.10	U	4.3	U	4.3	U	5.2	U	5.2	U
Endosulfan II		0.10	U	0.10	U	4.3	U	4.3	U	5.2	U	5.2	U
4,4'-DDD		0.10	U	0.10	U	4.3	U	4.3	U	5.2	U	5.2	U
Endosulfan sulfate		0.10	U	0.10	U	4.3	U	4.3	U	5.2	U	5.2	U
4,4'-DDT		0.10	U	0.10	U	4.3	U	4.3	U	5.2	U	5.2	U
Methoxychlor		0.50	U	0.50	U	22	U	22	U	26	U	26	U
Endrin ketone		0.10	U	0.10	U	4.3	U	4.3	U	5.2	U	5.2	U
Endrin aldehyde		0.10	U	0.10	U	4.3	U	4.3	U	5.2	U	5.2	U
alpha-Chlordane		0.050	U	0.050	U	2.2	U	2.2	U	2.6	U	2.6	U
gamma-Chlordane		0.050	U	0.050	U	2.2	U	2.2	U	2.6	U	2.6	U
Toxaphene		5.0	U	5.0	U	220	U	220	U	260	U	260	U
Aroclor-1016		1.0	U	1.0	U	43	U	43	U	52	U	52	U
Aroclor-1221		2.0	U	2.0	U	86	U	86	U	100	U	100	U
Aroclor-1232		1.0	U	1.0	U	43	U	43	U	52	U	52	U
Aroclor-1242		1.0	U	1.0	U	43	U	43	U	52	U	52	U
Aroclor-1248		1.0	U	1.0	U	43	U	43	U	52	U	52	U
Aroclor-1254		1.0	U	1.0	U	43	U	43	U	52	U	52	U
Aroclor-1260		1.0	U	1.0	U	43	U	43	U	52	U	52	U

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Recra LabNet - Chicago (Gulf Coast)
PESTICIDE/PCBs BY GC, CLP LIST

RFW Batch Number: 9812G552 Client: Illinois EPA Work Order: 00000-000-000-0000-00-000 Report Date: 12/30/98 11:2 Page: 3

	Cust ID:	PBLKZY	PBLKZY	PBLKZY BS	PBLKZY BS	PBLKZY BSD	PBLKZY BSD
Sample Information	RFW#:	98GP1189-MB1	98GP1189-MB1	98GP1189-MB1	98GP1189-MB1	98GP1189-MB1	98GP1189-MB1
	Matrix:	WATER	WATER	WATER	WATER	WATER	WATER
	D.F.:	1.00	1.00	1.00	1.00	1.00	1.00
	Units:	ug/L	ug/L Col 2	ug/L	ug/L Col 2	ug/L	ug/L Col 2
Surrogate: Tetrachloro-m-xylene		45 %	55 %	70 %	75 %	65 %	70 %
Surrogate: Decachlorobiphenyl		50 %	60 %	60 %	65 %	70 %	70 %
alpha-BHC		0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
beta-BHC		0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
delta-BHC		0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
gamma-BHC (Lindane)		0.050 U	0.050 U	92 %	76 %	88 %	74 %
Heptachlor		0.050 U	0.050 U	84 %	82 %	78 %	76 %
Aldrin		0.050 U	0.050 U	90 %	78 %	82 %	74 %
Heptachlor epoxide		0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
Endosulfan I		0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
Dieldrin		0.10 U	0.10 U	100 %	90 %	95 %	84 %
4,4'-DDE		0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Endrin		0.10 U	0.10 U	107 %	101 %	99 %	93 %
Endosulfan II		0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
4,4'-DDD		0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Endosulfan sulfate		0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
4,4' DDT		0.10 U	0.10 U	90 %	94 %	85 %	88 %
Methoxychlor		0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Endrin ketone		0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Endrin aldehyde		0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
alpha-Chlordane		0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
gamma-Chlordane		0.050 J	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
Toxaphene		5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Aroclor-1016		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Aroclor-1221		2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Aroclor-1232		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Aroclor-1242		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Aroclor-1248		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Aroclor-1254		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Aroclor-1260		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

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%= Percent recovery. D= Diluted out. I= Interference. NA= Not Applicable. *= Outside of Advisory limits.

Recra LabNet - Chicago (Gulf Coast)
PESTICIDE/PCBs BY GC, CLP LIST

RFW Batch Number: 9812G552 Client: Illinois EPA Work Order: 00000-000-000-0000-00-000 Report Date: 12/30/98 11:21 Page: 4

Cust ID:	PBLKZX	PBLKZX	PBLKZX BS	PBLKZX BS	PBLKZX BSD	PBLKZX BSD
Sample Information RFW#:	98GP1183-MB1	98GP1183-MB1	98GP1183-MB1	98GP1183-MB1	98GP1183-MB1	98GP1183-MB1
Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
D.F.:	1.00	1.00	1.00	1.00	1.00	1.00
Units:	ug/Kg	ug/Kg Col 2	ug/Kg	ug/Kg Col 2	ug/Kg	ug/Kg Col 2
Surrogate: Tetrachloro-m-xylene	75 %	68 %	10 * %	12 * %	70 %	70 %
Surrogate: Decachlorobiphenyl	98 %	92 %	100 %	90 %	98 %	95 %
	fl	fl	fl	fl	fl	fl
alpha-BHC	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
beta-BHC	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
delta-BHC	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
gamma-BHC (Lindane)	1.7 U	1.7 U	54 %	40 * %	90 %	68 %
Heptachlor	1.7 U	1.7 U	64 %	54 %	90 %	84 %
Aldrin	1.7 U	1.7 U	74 %	58 %	88 %	78 %
Heptachlor epoxide	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
Endosulfan I	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
Dieldrin	3.3 U	3.3 U	96 %	74 %	103 %	88 %
4,4'-DDE	3.3 U	3.3 U	3.3 U	3.3 U	3.3 U	3.3 U
Endrin	3.3 U	3.3 U	98 %	82 %	105 %	98 %
Endosulfan II	3.3 U	3.3 U	3.3 U	3.3 U	3.3 U	3.3 U
4,4'-DDD	3.3 U	3.3 U	3.3 U	3.3 U	3.3 U	3.3 U
Endosulfan sulfate	3.3 U	3.3 U	3.3 U	3.3 U	3.3 U	3.3 U
4,4'-DDT	3.3 U	3.3 U	90 %	79 %	94 %	93 %
Methoxychlor	17 U	17 U	17 U	17 U	17 U	17 U
Endrin ketone	3.3 U	3.3 U	3.3 U	3.3 U	3.3 U	3.3 U
Endrin aldehyde	3.3 U	3.3 U	3.3 U	3.3 U	3.3 U	3.3 U
alpha-Chlordane	2.3 ✓	2.3 ✓	1.7 U	1.7 U	1.7 U	1.7 U
gamma-Chlordane	3.0 ✓	3.0 ✓	1.7 U	1.7 U	1.7 U	1.7 U
Toxaphene	170 U	170 U	170 U	170 U	170 U	170 U
Aroclor-1016	33 U	33 U	33 U	33 U	33 U	33 U
Aroclor-1221	67 U	67 U	67 U	67 U	67 U	67 U
Aroclor-1232	33 U	33 U	33 U	33 U	33 U	33 U
Aroclor-1242	33 U	33 U	33 U	33 U	33 U	33 U
Aroclor-1248	33 U	33 U	33 U	33 U	33 U	33 U
Aroclor-1254	33 U	33 U	33 U	33 U	33 U	33 U
Aroclor-1260	33 U	33 U	33 U	33 U	33 U	33 U

U= Analyzed, not detected. J= Present below detection limit. B= Present in blank. NR= Not requested. NS= Not spiked.
%= Percent recovery. D= Diluted out. I= Interference. NA= Not Applicable. *= Outside of Advisory limits.

RECRA LABNET - CHICAGO

INORGANICS DATA SUMMARY REPORT 12/29/98

CLIENT: Illinois EPA
WORK ORDER: 00000-000-000-0000-00-000

RECRA LOT #: 9812G552

SAMPLE	SITE ID	ANALYTE	RESULT		UNITS	REPORTING LIMIT
-001	S201	Silver, Total	1.2	u	UG/L	1.2
		Aluminum, Total	42.8		UG/L	17.5
		Arsenic, Total	3.8	u	UG/L	3.8
		Barium, Total	106		UG/L	0.20
		Beryllium, Total	0.30	u	UG/L	0.30
		Calcium, Total	99400		UG/L	14.7
		Cadmium, Total	0.40	u	UG/L	0.40
		Cobalt, Total	1.0	u	UG/L	1.0
		Chromium, Total	0.90	u	UG/L	0.90
		Copper, Total	1.1	u	UG/L	1.1
		Iron, Total	6650		UG/L	19.9
		Mercury, Total	0.10	u	UG/L	0.10
		Potassium, Total	1140		UG/L	33.0
		Magnesium, Total	41500		UG/L	13.7
		Manganese, Total	630		UG/L	0.40
		Sodium, Total	9900		UG/l	419
		Nickel, Total	1.2		UG/L	1.1
		Lead, Total	1.9	u	UG/L	1.9
		Antimony, Total	2.1	u	UG/L	2.1
		Selenium, Total	2.1	u	UG/L	2.1
		Thallium, Total	2.9	u	UG/L	2.9
		Vanadium, Total	0.70	u	UG/L	0.70
		Zinc, Total	7.6		UG/L	0.60
-002	S202	Silver, Total	1.2	u	UG/L	1.2
		Aluminum, Total	6310		UG/L	17.5
		Arsenic, Total	3.8	u	UG/L	3.8
		Barium, Total	124		UG/L	0.20
		Beryllium, Total	0.30	u	UG/L	0.30
		Calcium, Total	110000		UG/L	14.7
		Cadmium, Total	0.40	u	UG/L	0.40
		Cobalt, Total	4.3		UG/L	1.0
		Chromium, Total	7.4		UG/L	0.90
		Copper, Total	9.6		UG/L	1.1
		Iron, Total	9940		UG/L	19.9
		Mercury, Total	0.10	u	UG/L	0.10
		Potassium, Total	2950		UG/L	33.0
		Magnesium, Total	41900		UG/L	13.7
		Manganese, Total	790		UG/L	0.40
		Sodium, Total	8440		UG/L	419

RECRA LABNET - CHICAGO

INORGANICS DATA SUMMARY REPORT 12/29/98

CLIENT: Illinois EPA
WORK ORDER: 00000-000-000-0000-00-000

RECRA LOT #: 9812G552

SAMPLE	SITE ID	ANALYTE	RESULT		UNITS	REPORTING LIMIT
-002	S202	Nickel, Total	11.0		UG/L	1.1
		Lead, Total	11.5		UG/L	1.9
		Antimony, Total	2.1	u	UG/L	2.1
		Selenium, Total	2.1	u	UG/L	2.1
		Thallium, Total	2.9	u	UG/L	2.9
		Vanadium, Total	12.6		UG/L	0.70
		Zinc, Total	49.0		UG/L	0.60
-003	S203	Silver, Total	1.2	u	UG/L	1.2
		Aluminum, Total	7770		UG/L	17.5
		Arsenic, Total	60.2		UG/L	3.8
		Barium, Total	1230		UG/L	0.20
		Beryllium, Total	0.63		UG/L	0.30
		Calcium, Total	171000		UG/L	14.7
		Cadmium, Total	0.80	u	UG/L	0.80
		Cobalt, Total	9.9		UG/L	1.0
		Chromium, Total	14.0		UG/L	0.90
		Copper, Total	43.2		UG/L	1.1
		Iron, Total	251000		UG/L	19.9
		Mercury, Total	0.16		UG/L	0.10
		Potassium, Total	2400		UG/L	33.0
		Magnesium, Total	65200		UG/L	13.7
		Manganese, Total	3210		UG/L	0.40
		Sodium, Total	11900		UG/L	419
		Nickel, Total	19.9		UG/L	1.1
		Lead, Total	54.4		UG/L	1.9
		Antimony, Total	3.7		UG/L	2.1
		Selenium, Total	2.1	u	UG/L	2.1
		Thallium, Total	2.9	u	UG/L	2.9
		Vanadium, Total	28.4		UG/L	0.70
		Zinc, Total	193		UG/L	0.60
-004	S204	Silver, Total	1.2	u	UG/L	1.2
		Aluminum, Total	27900		UG/L	17.5
		Arsenic, Total	149		UG/L	3.8
		Barium, Total	1840		UG/L	0.20
		Beryllium, Total	1.4		UG/L	0.30
		Calcium, Total	217000		UG/L	14.7
		Cadmium, Total	2.0	u	UG/L	2.0
		Cobalt, Total	31.0		UG/L	1.0

RECRA LABNET - CHICAGO

INORGANICS DATA SUMMARY REPORT 12/29/98

CLIENT: Illinois EPA
WORK ORDER: 00000-000-000-0000-00-000

RECRA LOT #: 9812G552

SAMPLE	SITE ID	ANALYTE	RESULT		UNITS	REPORTING LIMIT
-004	S204	Chromium, Total	46.6		UG/L	0.90
		Copper, Total	84.9		UG/L	1.1
		Iron, Total	527000		UG/L	19.9
		Mercury, Total	0.39		UG/L	0.10
		Potassium, Total	4530		UG/L	33.0
		Magnesium, Total	77200		UG/L	13.7
		Manganese, Total	8670		UG/L	0.40
		Sodium, Total	10700		UG/L	419
		Nickel, Total	46.0		UG/L	1.1
		Lead, Total	108		UG/L	1.9
		Antimony, Total	7.0		UG/L	2.1
		Selenium, Total	10.5	u	UG/L	10.5
		Thallium, Total	2.9	u	UG/L	2.9
		Vanadium, Total	90.1		UG/L	0.70
		Zinc, Total	340		UG/L	0.60
-005	X101	Silver, Total	2.2	u	MG/KG	2.2
		Aluminum, Total	1880		MG/KG	43.8
		Arsenic, Total	21.9	u	MG/KG	21.9
		Barium, Total	16.0		MG/KG	10.9
		Beryllium, Total	1.1	u	MG/KG	1.1
		Calcium, Total	29100		MG/KG	21.9
		Cadmium, Total	2.2	u	MG/KG	2.2
		Cobalt, Total	4.4	u	MG/KG	4.4
		Chromium, Total	4.9		MG/KG	4.4
		Copper, Total	7.1		MG/KG	4.4
		Iron, Total	6690		MG/KG	6.6
		Mercury, Total	0.09	u	MG/KG	0.09
		Potassium, Total	438	u	MG/KG	438
		Magnesium, Total	14400		MG/KG	43.8
		Manganese, Total	87.0		MG/KG	2.2
		Sodium, Total	247		MG/KG	43.8
		Nickel, Total	4.4	u	MG/KG	4.4
		Lead, Total	10.9	u	MG/KG	10.9
		Antimony, Total	21.9	u	MG/KG	21.9
		Selenium, Total	21.9	u	MG/KG	21.9
		Thallium, Total	109	u	MG/KG	109
		Vanadium, Total	12.1		MG/KG	2.2
		Zinc, Total	31.4		MG/KG	2.2
-006	X102	Silver, Total	2.5	u	MG/KG	2.5

RECRA LABNET - CHICAGO

INORGANICS DATA SUMMARY REPORT 12/29/98

CLIENT: Illinois EPA
WORK ORDER: 00000-000-000-0000-00-000

RECRA LOT #: 9812G552

SAMPLE	SITE ID	ANALYTE	RESULT		UNITS	REPORTING LIMIT
-006	X102	Aluminum, Total	12600		MG/KG	50.2
		Arsenic, Total	25.1	u	MG/KG	25.1
		Barium, Total	101		MG/KG	12.6
		Beryllium, Total	1.3	u	MG/KG	1.3
		Calcium, Total	8530		MG/KG	25.1
		Cadmium, Total	2.5	u	MG/KG	2.5
		Cobalt, Total	5.1		MG/KG	5.0
		Chromium, Total	17.5		MG/KG	5.0
		Copper, Total	15.1		MG/KG	5.0
		Iron, Total	13400		MG/KG	7.5
		Mercury, Total	0.13	u	MG/KG	0.13
		Potassium, Total	1320		MG/KG	502
		Magnesium, Total	5210		MG/KG	50.2
		Manganese, Total	252		MG/KG	2.5
		Sodium, Total	551		MG/KG	50.2
		Nickel, Total	12.1		MG/KG	5.0
		Lead, Total	88.9		MG/KG	12.6
		Antimony, Total	25.1	u	MG/KG	25.1
		Selenium, Total	25.1	u	MG/KG	25.1
		Thallium, Total	126	u	MG/KG	126
		Vanadium, Total	31.2		MG/KG	2.5
		Zinc, Total	78.8		MG/KG	2.5

RECRA LABNET - CHICAGO

INORGANICS DATA SUMMARY REPORT 12/30/98

CLIENT: Illinois EPA
WORK ORDER: 00000-000-000-0000-00-000

RECRA LOT #: 9812G552

SAMPLE	SITE ID	ANALYTE	RESULT	UNITS	REPORTING LIMIT
-005	X101	% Solids	75.5	%	0.10
		Total Organic Carbon	0.51	%	0.23
-006	X102	% Solids	62.7	%	0.10
		Total Organic Carbon	2.4	%	0.28