Project Name: Winnebago Reclamation
Project Number: WRS
Lab Sample Number: L72971410-054
Client ID: L301

Report Date: 6/17/97
Collection Date: 5/29/97
Analysis Date: 6/ 3/97
Method: 8260A

Winnebago Leachate Compound List
GCMS Volatiles Analysis

Compound	Result	PQL	Dilution Factor	Units	Qualifiers
Dichlorodifluoromethane	< 50	50	10	ug/l	
Chloromethane	< 100	100	10	ug/l	
Vinyl Chloride	< 20	20	10	ug/l	
Bromomethane	< 100	100	10	ug/l	
Chloroethane	< 100	100	10	ug/l	
Trichlorofluoromethane	< 50	50	10	ug/l	
1,1-Dichloroethene	< 20	20	10	ug/l	
Methylene Chloride	< 50	50	10	ug/l	
trans-1,2-Dichloroethene	< 50	50	10	ug/l	
1,1-Dichloroethane	< 50	50	10	ug/l	
2,2-Dichloropropane	< 50	50	10	ug/l	
cis-1,2-Dichloroethene	< 50	50	10	ug/l	
Bromochloromethane	< 50	50	10	ug/l	
Chloroform	< 50	50	10	ug/l	
1,1,1-Trichloroethane	< 50	50	10	ug/l	
1,1-Dichloropropene	< 50	50	10	ug/l	
Carbon Tetrachloride	< 50	50	10	ug/l	
Benzene	< 20	20	10	ug/l	
1,2-Dichloroethane	< 20	20	10	ug/l	
Trichloroethene	< 50	50	10	ug/l	
Dibromomethane	< 50	50	10	ug/l	
1,2-Dichloropropane	< 50	50	10	ug/l	
Bromodichloromethane	< 50	50	10	ug/l	
Toluene	< 50	50	10	ug/l	
trans-1,3-Dichloropropene	< 50	50	10	ug/l	
1,1,2-Trichloroethane	< 50	50	10	ug/l	
1,3-Dichloropropane	< 50	50	10	ug/l	
Tetrachloroethene	< 50	50	10	ug/l	
Dibromochloromethane	< 50	50	10	ug/l	
1,2-Dibromoethane	< 50	50	10	ug/l	
Chlorobenzene	< 50	50	10	ug/l	
1,1,1,2-Tetrachloroethane	< 50	50	10	ug/l	
Ethylbenzene	< 50	50	10	ug/l	
m,p-Xylene	< 100	100	10	ug/l	
o-Xylene	< 50	50	10	ug/l	
Styrene	< 50	50	10	ug/l	
Bromoform	< 50	50	10	ug/l	
Isopropylbenzene	< 50	50	10	ug/l	
1,1,2,2-Tetrachloroethane	< 50	50	10	ug/l	
Bromobenzene	< 50	50	10	ug/l	

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Method: 8260A

Winnebago Leachate Compound List
GCMS Volatiles Analysis

Compound	Result	PQL	Dilution Factor	Units	Qualifiers
1,2,3-Trichloropropane	< 50	50	10	ug/l	
n-Propylbenzene	< 50	50	10	ug/l	
2-Chlorotoluene	< 50	50	10	ug/l	
1,3,5-Trimethylbenzene	< 50	50	10	ug/l	
1,2,4-Trimethylbenzene	< 50	50	10	ug/l	
tert-Butylbenzene	< 50	50	10	ug/l	
sec-Butylbenzene	< 50	50	10	ug/l	
1,3-Dichlorobenzene	< 50	50	10	ug/l	
1,4-Dichlorobenzene	< 50	50	10	ug/l	
n-Butylbenzene	< 50	50	10	ug/l	
1,2-Dibromo-3-Chloropropane	< 50	50	10	ug/l	
1,2,4-Trichlorobenzene	< 50	50	10	ug/l	
1,2,3-Trichlorobenzene	< 50	50	10	ug/l	
Acetone	150	100	10	ug/l	
Carbon Disulfide	< 50	50	10	ug/l	
Vinyl Acetate	< 100	100	10	ug/l	
2-Butanone	120	100	10	ug/l	
2-Chloroethyl Vinyl Ether	< 100	100	10	ug/l	
2-Hexanone	< 100	100	10	ug/l	
p-Isopropyltoluene	< 50	50	10	ug/l	
Iodomethane	< 50	50	10	ug/l	
1-Propanol	< 5,000	5,000	10	ug/l	
2-Propanol	< 5,000	5,000	10	ug/l	
Ethyl Acetate	< 100	100	10	ug/l	
Tetrahydrofuran	60	50	10	ug/l	
Butanol	< 5,000	5,000	10	ug/l	
Bis-(Chloromethyl) Ether			10	ug/l	See Note Below
4-Methyl-2-Pentanone	< 100	100	10	ug/l	
trans-1,4-Dichloro-2-Butene	< 50	50	10	ug/l	
4-Chlorotoluene	< 50	50	10	ug/l	

PQL = Practical Quantitation Limit

Note: **When this compound is present in water, it decomposes to hydrochloric acid and formaldehyde.**

Client: Winnebago Reclamation
IEA Job#: L72971410
Project ID: WRS
Matrix: Leachate
Method: 8270A

Winnebago Leachate Compound List
Base Neutral Acids
ug/L

Dilution Factor	5	1				PQL
Method Blank	SW0530	SW0530				
Client ID	L301	METHOD BLANK				
Analyte Lab ID	054	SW0530				
N-Nitrosodimethylamine	UD	U				10
Bis (2-Chloroethyl) ether	UD	U				10
2-Chlorophenol	UD	U				10
bis(2-Chloromethylethyl)ether	UD	U				10
p-Cresol	62	U				10
N-Nitroso-di-n-propylamine	UD	U				10
Hexachloroethane	UD	U				10
Nitrobenzene	UD	U				10
o-Nitrophenol	UD	U				10
2,4-Dimethylphenol	UD	U				10
bis (2-Chloroethoxy) methane	UD	U				10
2,4-Dichlorophenol	UD	U				10
Naphthalene	UD	U				10
Hexachlorobutadiene	UD	U				5.0
Hexachlorocyclopentadiene	UD	U				10
2,4,6-Trichlorophenol	UD	U				10
2-Chloronaphthalene	UD	U				10
Dimethylphthalate	UD	U				10
2,6-Dinitrotoluene	UD	U				10
Acenaphthene	UD	U				10
2,4-Dinitrophenol	UD	U				50
p-Nitrophenol	UD	U				50
2,4-Dinitrotoluene	UD	U				10
Diethylphthalate	UD	U				10
4-Chlorophenyl phenyl ether	UD	U				10
Fluorene	UD	U				10
4,6-Dinitro-o-cresol	UD	U				50
N-Nitrosodiphenylamine (1)	UD	U				10
4-Bromophenyl phenyl ether	UD	U				10
Hexachlorobenzene	UD	U				10

To obtain sample-specific quantitation limit, multiply the PQL by the Dilution Factor.

Client: Winnebago Reclamation
IEA Job#: L72971410
Project ID: WRS
Matrix: Leachate
Method: 8270A

Winnebago Leachate Compound List
Base Neutral Acids
ug/L

Analyte / Lab ID	Dilution Factor	5	1				PQL
	Method Blank	SW0530	SW0530				
	Client ID	L301	METHOD BLANK				
	Lab ID	054	SW0530				
Pentachlorophenol		UD	U				25
Phenanthrene		UD	U				10
Anthracene		UD	U				10
Di-n-butylphthalate		UD	U				10
Fluoranthene		UD	U				10
Pyrene		UD	U				10
Butyl benzyl phthalate		UD	U				10
3,3'-Dichlorobenzidine		UD	U				50
Benzo (a) anthracene		UD	U				10
Chrysene		UD	U				10
bis (2-ethylhexyl) phthalate		UD	U				10
Di-n-octylphthalate		UD	U				10
Benzo (b) fluoranthene		UD	U				10
Benzo (k) fluoranthene		UD	U				10
Benzo (a) pyrene		UD	U				5.0
Indeno (1,2,3-cd) pyrene		UD	U				10
Dibenz (a,h) anthracene		UD	U				10
Benzo (g,h,i) perylene		UD	U				10
Date Sampled		5/29/97	---				
Date Extracted		5/30/97	5/30/97				
Date Analyzed		6/4/97	6/2/97				

(1) - Cannot be separated from Diphenylamine
PQL = Practical Quantitation Limit
To obtain sample-specific quantitation limit, multiply the PQL by the Dilution Factor.

Client: Winnebago Reclamation
IEA Job#: L72971410
Project ID: WRS
Matrix: Leachate
Method: 8080A

Winnebago Leachate Compound List
Pesticides / PCB'S
µg / L

Dilution Factor	2.5	1				
Method Blank	PW0530	PW0530				
Client ID	L301	METHOD BLANK				PQL
Analyte Lab ID	054	PW0530				
alpha-BHC	U	U				0.05
beta-BHC	U	U				0.05
delta-BHC	U	U				0.05
gamma-BHC (Lindane)	U	U				0.05
Heptachlor	U	U				0.05
Aldrin	U	U				0.05
Heptachlor epoxide	U	U				0.05
Endosulfan I	U	U				0.05
Dieldrin	U	U				0.10
4,4'-DDE	U	U				0.10
Endrin	U	U				0.10
Endosulfan II	U	U				0.10
4,4'-DDD	U	U				0.10
Endosulfan sulfate	U	U				0.10
4,4'-DDT	U	U				0.10
Methoxychlor	U	U				0.50
Endrin Aldehyde	U	U				0.10
Chlordane	U	U				3.0
Toxaphene	U	U				3.0
Aroclor - 1016	U	U				1.0
Aroclor - 1221	U	U				1.0
Aroclor - 1232	U	U				1.0
Aroclor - 1242	U	U				1.0
Aroclor - 1248	U	U				1.0
Aroclor - 1254	U	U				1.0
Aroclor - 1260	U	U				1.0
Date Sampled	5/29/97	---				
Date Extracted	5/30/97	5/30/97				
Date Analyzed	6/7/97	6/2/97				

PQL = Practical Quantitation Limit
To obtain sample-specific quantitation limit, multiply PQL by the Dilution Factor.

Client: Winnebago Reclamation
IEA Job#: L72971410
Project ID: WRS
Matrix: Water

Organic Analytes
ug/L

	Client ID	L301					PQL
	Lab ID	54			Date Sampled	Date Analyzed	
Analyte	**Method**						
2,4-D	8150	U			5/28/97	6/20/97	0.5
Dalapon	8150	U			5/28/97	6/20/97	1.0
Dinoseb	632	U			5/28/97	6/20/97	0.25
Picloram	632	U			5/28/97	6/20/97	0.1
2,4,5-TP	8080	U			5/28/97	6/20/97	0.1
Alachlor	8141	U			5/28/97	6/4/97	0.05
Atrazine	8141	3			5/28/97	6/10/97	0.05
Parathion	8141	U			5/28/97	6/10/97	0.1
Simazine	8141	U			5/28/97	6/10/97	0.5
Aldicarb	632	U			5/28/97	6/8/97	1.0
Carbofuran	632	U			5/28/97	6/8/97	1.0
Endothall	548.1	U*			5/28/97	6/6/97	15

* Analyzed 06/09/97 ; PQL = 300

Client: Winnebago Reclamation
IEA Job#: L72971410
Project ID: WRS
Matrix: Water

Dioxin Analysis
ppt

	Client ID	L301			Date Sampled	Date Analyzed	PQL
	Lab ID	054					
Analyte	**Method**						
2,3,7,8-TCDD	**8280**	U			5/29/97	6/6/97	0.30

PQL=Practical Quantitation Limit

CLIENT:Winnebago Reclamation
CLIENT PROJECT#:WRS
SITE:-
CLIENT P.O.#:-
IEA PROJECT#:L72971410
MATRIX:WATER

METALS

LAB ID#	CLIENT ID	ANALYTE	RESULT	QUAL	PQL	UNITS	DIL. FACTOR	DATE DIGESTED	DATE ANALYZED	METHOD
L72971410-053	BLANK (DISS)									
		Arsenic	U		0.002	mg/l	1	05/30/97	06/02/97	7060
		Boron	U		0.11	mg/l	1	05/30/97	05/31/97	6010
		Cadmium	U		0.00044	mg/l	1	05/30/97	05/31/97	7131
		Iron	U		0.056	mg/l	1	05/30/97	05/31/97	6010
		Lead	U		0.003	mg/l	1	05/30/97	06/04/97	7421
		Manganese	U		0.017	mg/l	1	05/30/97	05/31/97	6010
		Zinc	U		0.022	mg/l	1	05/30/97	06/03/97	6010
	Date Sampled:	05/28/97								
L72971410-054	L301									
		Aluminum	0.42		0.11	mg/l	1	05/30/97	05/31/97	6010
		Antimony	0.029		0.028	mg/l	1	05/30/97	05/31/97	6010
		Arsenic	0.019		0.002	mg/l	1	05/30/97	06/02/97	7060
		Barium	0.49		0.056	mg/l	1	05/30/97	05/31/97	6010
		Beryllium	U		0.0056	mg/l	1	05/30/97	05/31/97	6010
		Boron	10		0.11	mg/l	1	05/30/97	05/31/97	6010
		Cadmium	U		0.00044	mg/l	1	05/30/97	05/31/97	7131
		Calcium	77		0.22	mg/l	1	05/30/97	05/31/97	6010
		Chromium	0.28		0.011	mg/l	1	05/30/97	05/31/97	6010
		Cobalt	0.059		0.056	mg/l	1	05/30/97	05/31/97	6010
		Copper	U		0.028	mg/l	1	05/30/97	05/31/97	6010
		Iron	4.9		0.056	mg/l	1	05/30/97	05/31/97	6010
		Lead	0.021		0.003	mg/l	1	05/30/97	06/04/97	7421
		Magnesium	64		0.22	mg/l	1	05/30/97	05/31/97	6010
		Manganese	0.6		0.017	mg/l	1	05/30/97	05/31/97	6010
		Mercury	U		0.0002	mg/l	1	06/02/97	06/02/97	7470
		Nickel	0.4		0.033	mg/l	1	05/30/97	05/31/97	6010
		Potassium	660		2.2	mg/l	2	05/30/97	06/03/97	6010
		Selenium	U		0.0033	mg/l	1	05/30/97	06/02/97	7740
		Silver	U		0.011	mg/l	1	05/30/97	05/31/97	6010
		Sodium	1300		1.1	mg/l	5	05/30/97	06/03/97	6010
		Thallium	U		0.0022	mg/l	1	05/30/97	06/04/97	7841
		Tin	U		0.22	mg/l	1	05/30/97	06/03/97	6010
		Vanadium	U		0.056	mg/l	1	05/30/97	05/31/97	6010
		Zinc	0.36		0.022	mg/l	1	05/30/97	06/03/97	6010
	Date Sampled:	05/29/97								

Client: Winnebago Reclamation
IEA Job#: L72971410
Project ID: WRS
Matrix: Water

Wet Chemistry Analytes
mg/L

	Client ID	L301		Date Sampled	Date Analyzed	PQL
	Lab ID	054/055				
Analyte	Method					
Ammonia	350.2	1610		5/29/97	6/13/97	0.05
Dissolved Ammonia	350.2	1240		5/29/97	6/13/97	0.05
Chloride	325.2	3380		5/29/97	6/16/97	3.0
Bicarbonate Alkalinity	310.1	4120		5/29/97	6/9/97	4.0
Nitrate	353.2	2.96		5/29/97	5/30/97	0.10
Hexavalent Chromium	7196	<0.010		5/29/97	5/29/97	0.010
Sulfate	375.4	13.6		5/29/97	6/2/97	5.0
Total Suspended Solids	160.2	160		5/29/97	6/3/97	4.0
Total Dissolved Solids	160.1	5190		5/29/97	5/30/97	4.0
Phosphorus	365.3	3.34		5/29/97	6/12/97	0.02
Fluoride	340.2	0.53		5/29/97	6/10/97	0.10
Cyanide	335.2	0.005		5/29/97	6/9/97	0.005
Oil and Grease	413.1	<5.0		5/29/97	6/17/97	5.0
TOC	9060	1010		5/31/97	6/9/97	1.0
BOD	405.1	503		5/27/97	5/30/97	2.0
Fecal Coliform	9222D	6480		5/27/97	5/29/97	0/100 ml
Phenols	420.2	0.356		5/29/97	6/4/97	0.010
COD	410.4	1790		5/29/97	6/16/97	10.0

PQL=Practical Quantitation Limit