Stablex-Reutter Inc.

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3D

September 25, 1984

Roy F. Weston, Inc.
5090 Central Highway
Pennsauken, NJ 08109

Attention: Tim Travers

Reference: Test Report No. SR10174, Fetrow Dump Site

This report covers the analysis of ten (10) samples submitted to Stablex-Reutter, Inc. (S-R) on September 14, 1984. The following analysis was requested:

- Acid Extractable Organics
- Base/Neutral Extractable Organics
- Purgeable Organics
- Pesticides and Polychlorinated Biphenyls
- Inorganic Parameters

This report is organized in the following manner:

- Sample Designations
- Preparation and Analysis
- Analytical Results
- Quality Assurance Data

AR300002

Stablex-Reutter Inc.

Purgeable Organic Compounds (Method 624)

Constituent	SR10174-5 Sta. 05	SR10174-5 Duplicate	SR10174-6 Blank	SR10174-8 Blank	SR10174-10 Sta. 06
	Sample Designation				
Chloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Bromomethane	<0.001	<0.001	<0.001	<0.001	<0.001
Vinyl chloride	<0.001	<0.001	<0.001	<0.001	<0.001
Chloroethane	<0.001	<0.001	<0.001	<0.001	<0.001
Methylene chloride	<0.001	<0.001	*	0.004	<0.001
1,1-Dichloroethylene	<0.001	<0.001	<0.001	<0.001	<0.001
1,1-Dichloroethane	<0.001	<0.001	<0.001	<0.001	<0.001
trans-1,2-Dichloroethylene	<0.001	<0.001	<0.001	<0.001	<0.001
Chloroform	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,1-Trichloroethane	<0.001	<0.001	<0.001	<0.001	<0.001
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	<0.001
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloropropane	<0.001	<0.001	<0.001	<0.001	<0.001
trans-1,3-Dichloropropene	<0.001	<0.001	<0.001	<0.001	<0.001
Trichloroethylene	<0.001	<0.001	<0.001	<0.001	<0.001
Benzene	<0.001	<0.001	<0.001	<0.001	<0.001
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2-Trichloroethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropene	<0.001	<0.001	<0.001	<0.001	<0.001
2-Chloroethylvinyl ether	<0.001	<0.001	<0.001	<0.001	<0.001
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-tetrachloroethane	<0.001	<0.001	<0.001	<0.001	<0.001
Tetrachloroethylene	<0.001	<0.001	<0.001	<0.001	<0.001
Toluene	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	<0.001	<0.001	<0.001	<0.001	<0.001
Ethyl Benzene	<0.001	<0.001	<0.001	<0.001	<0.001
Units	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)

*Note: This sample has an obvious odor of methylene chloride and can not be quantitated due to GC/MS saturation.

I. Sample Designations

The sample designations are outlined as follows:

S-R No.	Sta. No.	Time	Weston Designation	Matrix
SR10174-1	01	1240	Southeast Corner, Ponding Area	Solid
SR10174-2	02	1242	Southeast Corner, Ponding Area	Solid
SR10174-3	03	1242	Southeast Corner, Ponding Area	Solid
SR10174-4	04	1255	Southeast Corner, Ponding Area Well	Aqueous
SR10174-5	05	1330	Bray Residence, Well Water	Aqueous
SR10174-6	00	1300	Sample Blank	Aqueous
SR10174-7	00	1300	Sample Blank	Aqueous
SR10174-8	00	1300	Sample Blank	Aqueous
SR1-174-9	00	1300	Sample Blank	Aqueous
SR10174-10	06	1450	North Fork of Kreutz Creek	Aqueous

II. Preparation and Analysis

A brief description of the analytical methods and preparation steps, where applicable, are delineated below:

Acid Extractable and Base/Neutral Extractable Organics

Preparation and Analytical Reference:

- Method 625 Federal Register, Vol. 44, No. 233, December 3, 1979. (Columns and GC/MS conditions for acid extractables and base/neutrals)

Purgeable Organics

Preparation and Analytical Reference:

- Method 624 Federal Register, Vol. 44, No. 233, December 3, 1979. (Columns and GC/MS conditions for purgeable organic compounds)

Pesticides and Polychlorinated Biphenyls (PCBs)

Preparation and Analytical Reference:

- EPA Method 608, Organochlorine Pesticides and PCB's Federal Register, Vol. 44, No. 233, December 3, 1979.

Inorganic Parameters

Preparation and Analytical Reference:

- Standard Methods for the Examination of Water and Wastewater, 15th edition.
- EPA Chemical Analysis of Water and Wastes, EPA-600, 1979.

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III. Analytical Results

Acid Extractable Organics

Constituent	SR10174-1 Sta. 01	SR10174-1 Duplicate	SR10174-2 Sta. 02	SR10174-3 Sta. 03
	Sample Designation			
Phenol	<5	<5	<5	<5
2-Nitrophenol	<5	<5	<5	<5
4-Nitrophenol	<5	<5	<5	<5
2,4-Dinitrophenol	<5	<5	<5	<5
2,6-Dinitro-o-cresol	<5	<5	<5	<5
Pentachlorophenol	<5	<5	<5	<5
4-Chloro-3-Methyl-Phenol	<5	<5	<5	<5
2-Chlorophenol	<5	<5	<5	<5
2,4-Dichlorophenol	<5	<5	<5	<5
2,4,6-Trichlorophenol	<5	<5	<5	<5
2,4-Dimethylphenol	<5	<5	<5	<5
Units	(ppm)	(ppm)	(ppm)	(ppm)

Constituent	SR10174-5 Sta. 05	SR10174-6 Blank	SR10174-7 Blank
Phenol	<25	<25	<25
2-Nitrophenol	<25	<25	<25
4-Nitrophenol	<25	<25	<25
2,4-Dinitrophenol	<25	<25	<25
2,6-Dinitro-o-cresol	<25	<25	<25
Pentachlorophenol	<25	<25	<25
4-Chloro-3-Methyl-Phenol	<25	<25	<25
2-Chlorophenol	<25	<25	<25
2,4-Dichlorophenol	<25	<25	<25
2,4,6-Trichlorophenol	<25	<25	<25
2,4-Dimethylphenol	<25	<25	<25
Units	(ppb)	(ppb)	(ppb)

Base/Neutral Extractable Organics (Method 625 by GC/MS)

Constituent	SR10174-1 Sta. 01	SR10174-1 Duplicate	SR10174-2 Sta. 02	SR10174-3 Sta. 03
	Sample Designation			
1,2-Dichlorobenzene	<1	<1	<1	<1
1,3-Dichlorobenzene	<1	<1	<1	<1
1,4-Dichlorobenzene	<1	<1	<1	<1
Hexachloroethane	<1	<1	<1	<1
Hexachlorobutadiene	<1	<1	<1	<1
Hexachlorobenzene	<1	<1	<1	<1
1,2,4-Trichlorobenzene	<1	<1	<1	<1
bis (2-Chloroethoxy) methane	<1	<1	<1	<1
Naphthalene	<1	<1	<1	<1
2-Chloronapthalene	<1	<1	<1	<1
Isophorone	<1	<1	<1	<1
Nitrobenzene	<1	<1	<1	<1
2,4-Dinitrotoluene	<1	<1	<1	<1
2,6-Dinitrotoluene	<1	<1	<1	<1
4-Bromophenyl phenyl ether	<1	<1	<1	<1
bis (2-Ethylhexyl) phthalate	<1	<1	<1	<1
Di-n-octyl phthalate	<1	<1	<1	<1
Dimethyl phthalate	<1	<1	<1	<1
Diethyl phthalate	<1	<1	<1	<1
Di-n-butyl phthalate	<1	<1	<1	<1
Acenaphthylene	<1	<1	<1	<1
Acenaphthene	<1	<1	<1	<1
Butyl benzyl phthalate	<1	<1	<1	<1
Fluorene	<1	<1	<1	<1
Fluoranthene	<1	<1	<1	<1
Chrysene	<1	<1	<1	<1
Pyrene	<1	<1	<1	<1
Phenanthracene	<1	<1	<1	<1
Anthracene	<1	<1	<1	<1
Benzo(a)anthracene	<1	<1	<1	<1
Benzo(b)fluoranthene	<1	<1	<1	<1
Benzo(k)fluoranthene	<1	<1	<1	<1
Benzo(a)pyrene	<1	<1	<1	<1
Indeno(1,2,3-c,d)pyrene	<1	<1	<1	<1
Dibenzo(a,h)anthracene	<1	<1	<1	<1
Benzo(g,h,i)perylene	<1	<1	<1	<1
4-Chlorophenyl-phenyl ether	<1	<1	<1	<1
3,3'-Dichlorobenzidine	<1	<1	<1	<1
Benzidine	<1	<1	<1	<1
bis(2-Chloroethyl)ether	<1	<1	<1	<1
1,2-Diphenylhydrazine	<1	<1	<1	<1
Hexachlorocyclopentadiene	<1	<1	<1	<1
N-Nitrosodiphenyl amine	<1	<1	<1	<1
N-Nitrosodimethyl amine	<1	<1	<1	<1
N-Nitrosodi-n-propylamine	<1	<1	<1	<1
bis(2-Chloroisopropyl)ether	<1	<1	<1	<1
Units	(ppm)	(ppm)	(ppm)	(ppm)

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Base/Neutral Extractable Organics (Method 625 by GC/MS)

Constituent	Sample Designation SR10174-5 Sta. 05	SR10174-6 Blank	SR10174-7 Blank
1,2-Dichlorobenzene	<5	<5	<5
1,3-Dichlorobenzene	<5	<5	<5
1,4-Dichlorobenzene	<5	<5	<5
Hexachloroethane	<5	<5	<5
Hexachlorobutadiene	<5	<5	<5
Hexachlorobenzene	<5	<5	<5
1,2,4-Trichlorobenzene	<5	<5	<5
bis (2-Chloroethoxy) methane	<5	<5	<5
Naphthalene	<5	<5	<5
2-Chloronapthalene	<5	<5	<5
Isophorone	<5	<5	<5
Nitrobenzene	<5	<5	<5
2,4-Dinitrotoluene	<5	<5	<5
2,6-Dinitrotoluene	<5	<5	<5
4-Bromophenyl phenyl ether	<5	<5	<5
bis (2-Ethylhexyl) phthalate	<5	<5	<5
Di-n-octyl phthalate	<5	<5	<5
Dimethyl phthalate	<5	<5	<5
Diethyl phthalate	<5	<5	<5
Di-n-butyl phthalate	<5	<5	<5
Acenaphthylene	<5	<5	<5
Acenaphthene	<5	<5	<5
Butyl benzyl phthalate	<5	<5	<5
Fluorene	<5	<5	<5
Fluoranthene	<5	<5	<5
Chrysene	<5	<5	<5
Pyrene	<5	<5	<5
Phenanthracene	<5	<5	<5
Anthracene	<5	<5	<5
Benzo(a)anthracene	<5	<5	<5
Benzo(b)fluoranthene	<5	<5	<5
Benzo(k)fluoranthene	<5	<5	<5
Benzo(a)pyrene	<5	<5	<5
Indeno(1,2,3-c,d)pyrene	<5	<5	<5
Dibenzo(a,h)anthracene	<5	<5	<5
Benzo(g,h,i)perylene	<5	<5	<5
4-Chlorophenyl-phenyl ether	<5	<5	<5
3,3'-Dichlorobenzidine	<5	<5	<5
Benzidine	<5	<5	<5
bis(2-Chloroethyl)ether	<5	<5	<5
1,2-Diphenylhydrazine	<5	<5	<5
Hexachlorocyclopentadiene	<5	<5	<5
N-Nitrosodiphenyl amine	<5	<5	<5
N-Nitrosodimethyl amine	<5	<5	<5
N-Nitrosodi-n-propylamine	<5	<5	<5
bis(2-Chloroisopropyl)ether	<5	<5	<5
Units	(ppb)	(ppb)	(ppb)

Stablex-Reutter Inc.

Purgeable Organic Compounds (Method 624)

Constituent	SR10174-1 Sta. 01	SR10174-1 Duplicate	SR10174-2 Sta. 02	SR10174-3 Sta. 03	SR10174-4 Sta. 04
	Sample Designation				
Chloromethane	<10	<10	<10	<10	<0.001
Bromomethane	<10	<10	<10	<10	<0.001
Vinyl chloride	<10	<10	<10	<10	<0.001
Chloroethane	<10	<10	<10	<10	<0.001
Methylene chloride	<10	<10	<10	<10	<0.001
1,1-Dichloroethylene	<10	<10	<10	<10	<0.001
1,1-Dichloroethane	<10	<10	<10	<10	<0.001
trans-1,2-Dichloroethylen	<10	<10	<10	<10	<0.001
Chloroform	<10	<10	<10	<10	<0.001
1,2-Dichloroethane	<10	<10	<10	<10	<0.001
1,1,1-Trichloroethane	<10	<10	<10	<10	<0.001
Carbon tetrachloride	<10	<10	<10	<10	<0.001
Bromodichloromethane	<10	<10	<10	<10	<0.001
1,2-Dichloropropane	<10	<10	<10	<10	<0.001
trans-1,3-Dichloropropene	<10	<10	<10	<10	<0.001
Trichloroethylene	<10	<10	<10	<10	<0.001
Benzene	<10	<10	<10	<10	<0.001
Dibromochloromethane	<10	<10	<10	<10	<0.001
1,1,2-Trichloroethane	<10	<10	<10	<10	<0.001
cis-1,3-Dichloropropene	<10	<10	<10	<10	<0.001
2-Chloroethylvinyl ether	<10	<10	<10	<10	<0.001
Bromoform	<10	<10	<10	<10	<0.001
1,1,2,2-tetrachloroethane	<10	<10	<10	<10	<0.001
Tetrachloroethylene	<10	<10	<10	870	<0.001
Toluene	<10	<10	<10	<10	<0.001
Chlorobenzene	<10	<10	<10	<10	0.002
Ethyl Benzene	<10	<10	<10	<10	<0.001
Units	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)

Stablex-Reutter Inc.

Pesticides and Polychlorinated Biphenyls (EPA Method 608 by GC)

	Sample Designation			
Constituent	SR10174-1 Sta. 01	SR10174-1 Duplicate	SR10174-2 Sta. 02	SR10174-3 Sta. 03
Aldrin	<1	<1	<1	<1
alpha BHC	<1	<1	<1	<1
beta BHC	<5	<5	<5	<5
delta BHC	<5	<5	<5	<5
gamma BHC	<5	<5	<5	<5
Chlordane	<10	<10	<10	<10
Dieldrin	<5	<5	<5	<5
p,p'-DDE	<5	<5	<5	<5
p,p'-DDD	<5	<5	<5	<5
p,p'-DDT	<5	<5	<5	<5
Endosulfan I	<10	<10	<10	<10
Endosulfan II	<10	<10	<10	<10
Endosulfan Sulfate	<10	<10	<10	<10
Endrin	<5	<5	<5	<5
Endrin Aldehyde	<10	<10	<10	<10
Heptachlor	<1	<1	<1	<1
Heptachlor Epoxide	<5	<5	<5	<5
Toxaphene	<10	<10	<10	<10
Polychlorinated Biphenyls, total as Aroclor 1260	<1	<1	<1	<1
Units	(ppm)	(ppm)	(ppm)	(ppm)

Stablex-Reutter Inc.

Pesticides and Polychlorinated Biphenyls (EPA Method 608 by GC)

	Sample Designation		
Constituent	SR10174-5 Sta. 05	SR10174-6 Blank	SR10174-7 Blank
Aldrin	<1	<1	<1
alpha BHC	<1	<1	<1
beta BHC	<5	<5	<5
delta BHC	<5	<5	<5
gamma BHC	<5	<5	<5
Chlordane	<10	<10	<10
Dieldrin	<5	<5	<5
p,p'-DDE	<5	<5	<5
p,p'-DDD	<5	<5	<5
p,p'-DDT	<5	<5	<5
Endosulfan I	<10	<10	<10
Endosulfan II	<10	<10	<10
Endosulfan Sulfate	<10	<10	<10
Endrin	<5	<5	<5
Endrin Aldehyde	<10	<10	<10
Heptachlor	<1	<1	<1
Heptachlor Epoxide	<5	<5	<5
Toxaphene	<10	<10	<10
Polychlorinated Biphenyls, total as Aroclor 1260	<1	<1	<1
Units	(ppb)	(ppb)	(ppb)

Stablex-Reutter Inc.

Inorganic Parameters

Constituent	SR10174-1 Sta. 01	SR10174-2 Sta. 02	SR10174-2 Duplicate	SR10174-3 Sta. 03
	Sample Designation			
Antimony, total	<1	<1	<1	<1
Arsenic, total	<5	<5	<5	<5
Beryllium, total	<1	<1	<1	<1
Cadmium, total	<1	<1	<1	<1
Chromium, total	<5	8.9	8.9	14
Copper, total	16	10	9.4	13
Lead, total	<5	7.9	6.6	13
Mercury, total	<0.2	<0.2	---	<0.2
Nickel, total	<5	<5	<5	<5
Selenium, total	<1	<1	<1	<1
Silver, total	<5	<5	<5	<5
Thallium, total	<10	<10	<10	<10
Zinc, total	450	220	200	410
Cyanide, total	7.2	3.7	3.8	2.6
Phenolics, as phenol	2.5	<1	<1	1.0
Units	(ppm)	(ppm)	(ppm)	(ppm)

Constituent	SR10174-5 Sta. 05	SR10174-5 Duplicate	SR10174-6 Blank	SR10174-9 Blank
	Sample Designation			
Antimony, total	<0.05	<0.05	<1	<0.05
Arsenic, total	<0.05	<0.05	<5	<0.05
Beryllium, total	<0.01	<0.01	<1	<0.01
Cadmium, total	<0.01	<0.01	<1	<0.01
Chromium, total	<0.05	<0.05	<5	<0.05
Copper, total	<0.05	<0.05	<5	<0.05
Lead, total	<0.05	<0.05	<5	<0.05
Mercury, total	<0.002	<0.002	<0.2	<0.002
Nickel, total	<0.05	<0.05	<5	<0.05
Selenium, total	<0.01	<0.01	<1	<0.01
Silver, total	<0.05	<0.05	<5	<0.05
Thallium, total	<0.1	<0.1	<10	<0.1
Zinc, total	<0.01	<0.01	<1	<0.01
Cyanide, total	<0.1	---	<1	<0.1
Phenolics, as phenol	<0.1	<0.1	<1	<0.1
Units	(ppm)	(ppm)	(ppm)	(ppm)

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IV. Quality Assurance Data

Acid Extractable Organics (Method 625 by GC/MS)

Constituent	SR10174-1 plus Spike Amount of Spike, ug	% Recovery
Phenol	58	11
2-Nitrophenol	43	142
2,6-Dinitro-o-cresol	50	52
Pentachlorophenol	51	94
4-Chloro-3-Methyl-Phenol	50	36
2-Chlorophenol	49	36
2,4-Dichlorophenol	50	138
2,4,6-Trichlorophenol	50	68
2,4-Dimethylphenol	50	194
4-Nitrophenol	50	38

Base/Neutral Extractable Organics (Method 625 by GC/MS)

Constituent	SR10174-1 plus Spike Amount of Spike, ug	% Recovery
Bis (2-chloroethyl) ether	50	62
1,4-Dichlorobenzene	50	31
Bis (2-chloroisopropyl) ether	50	95
Nitrobenzene	50	115
Acenaphtylene	50	105
2,6-Dinitrotoluene	50	25
4-Bromophenylphenyl ether	50	120
Bis (2-ethylhexyl) phthalate	50	123
Benzo (B) Fluoranthene	50	15
Dimethylphthalate	50	120

Pesticides and Polychlorinated Biphenyls

Constituent	SR10174-1 plus Spike Amount of Spike, ppm	% Recovery
Aldrin	1.6	81
alpha BHC	0.8	71
beta BHC	4.6	56
gamma BHC	4.6	56
Dieldrin	0.8	72
p,p'-DDE	3.9	82
p,p'-DDD	3.9	69
p,p'-DDT	3.9	118
Endrin	1.4	75
Heptachlor	0.8	88
Heptachlor Epoxide	1.5	73
Polychlorinated Biphenyls, total, as Arclor 1260	59	56

Purgeable Organic Compounds (Method 624 by GC/MS)

Constituent	SR10174-5 plus Spike Amount of Spike, ug	% Recovery
Chloromethane	1.0	105
Bromomethane	1.0	120
Vinyl chloride	1.0	84
Chloroethane	1.0	77
Methylene chloride	1.0	70
1,1-Dichloroethylene	1.0	83
1,1-Dichloroethane	1.0	100
trans-1,2-Dichloroethylene	1.0	64
Chloroform	1.0	108
1,2-Dichloroethane	1.0	69
1,1,1-Trichloroethane	1.0	75
Carbon tetrachloride	1.0	18
Bromodichloromethane	1.0	90
1,2-Dichloropropane	1.0	98
trans-1,3-Dichloropropene	1.0	76
Trichloroethylene	1.0	111
Benzene	1.0	95
Dibromochloromethane	1.0	101
1,1,2-Trichloroethane	1.0	88
cis-1,3-Dichloropropene	1.0	64
2-Chloroethylvinyl ether	1.0	124
Bromoform	1.0	72
1,1,2,2-Tetrachloroethylene	1.0	61
Tetrachloroethylene	1.0	102
Toluene	1.0	139
Chlorobenzene	1.0	161
Ethyl Benzene	1.0	144

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Stablex-Reutter Inc.

Inorganic Parameters

	SR10174-3		SR10174-5	
Parameters	Amount of Spike, ug	% Recovery	Amount of Spike, ug	% Recovery
Antimony	500	11	100	100
Arsenic	500	154	100	74
Beryllium	500	83	500	120
Cadmium	500	93	600	81
Chromium	500	121	600	134
Copper	500	97	500	97
Lead	500	94	600	89
Mercury	200	62	200	89
Nickel	500	107	500	107
Selenium	500	102	100	92
Thallium	500	86	500	99
Zinc	500	60	500	94
Cyanide	219	82	---	---
Phenol	70	93	35	84

Should you have any questions concerning this analysis, please don't hesitate to contact me.

Respectfully submitted,

STABLEX-REUTTER, INC.

Ian Lambert

AR300014

Ian C. Lambert
Laboratory Manger

ICL/dk