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September 6, 1993

Florida Department of Environmental Protection  
2295 Victoria Avenue, Suite 364  
Fort Myers, FL 33901

Attention: Phillip Barbacia

RE: Lee County Solid Waste Energy Recovery Facility  
Power Plant Site Certification Case # PA 90-30

Dear Mr. Barbacia:

In accordance with the subject certification, Condition XIV D.3.d & e, please find attached two (2) copies of initial groundwater sampling results.

We have previously sent you certified prints with monitoring well identifications, locations and elevations.

If you have any questions please call me at 338-3100.

Sincerely,

DEPARTMENT OF SOLID WASTE MANAGEMENT



Larry A. Johnson, P. E.  
Director

LAJ:sln

Attachment

cc: L. Johnson  
D. Dee  
H. Oven  
S. Coughanour  
D. Cerrato  
D. Markley w/attachment  
L. P. Young w/attachment  
II A204

RECEIVED

SEP 13 1993

D.E.P. SOUTH DISTRICT

Lee County Environmental Laboratory  
 60 Danley Drive # 2  
 Fort Myers, Florida 33907  
 (813) 278-7288  
 HRS ID 45031/E45049

August 24, 1993

RECEIVED

Mr. Lindsey Sampson  
 L.C. Dept. of Solid Waste  
 cc: Malcom Perney

SEP 13 1993

D.E.P. SOUTH DISTRICT

Dear: Mr. Sampson:

Below are the results of analysis of 12 samples received for examination on July 28, 1993:

**Sample I.D. AA38393** Location code: WTE-1S  
 Location Description: Waste to Energy M.W. # 1-S  
 Sample collector: VICKI/KEITH  
 Sample collection date: 07/27/93 Time: 10:00  
 Lab submittal date: 07/28/93 Time: 15:10

TEST PARAMETER	UNITS	TEST RESULT	DETECTION LIMIT
Arsenic, AA furnace technique	mg/L	0.007	0.001
Cadmium by flame AA	mg/L	Not detected	0.005
Chromium by flame AA	mg/L	0.01	0.01
Iron by flame AA	mg/L	4.62	0.03
Lead, AA furnace technique	ug/L	2	1
Mercury, AA cold vapor technique	ug/L	Not detected	0.2
Nitrate	mg/L as N	Not detected	0.01
Nitrite	mg/L as N	Not detected	0.001
Nitrate + Nitrite	mg/L as N	Not detected	0.01
pH (electrometric)	pH units	7.3	
Total Dissolved Solids	mg/L	442	2
Selenium, AA furnace technique	mg/L	0.002	0.002
Specific Conductance @ 25°C	umhos/cm	725	1
Barium, AA direct aspiration	mg/L	0.06	0.01
Copper by flame AA	mg/L	Not detected	0.01
Manganese by flame AA	mg/L	0.04	0.01
Nickel by flame AA	mg/L	Not detected	0.04
Silver by flame AA	mg/L	Not detected	0.01
Sodium, AA direct aspiration	mg/L	17.5	0.1
Thallium by flame AA	mg/L	Not detected	0.1
Zinc by flame AA	mg/L	0.01	0.01
Chloride titrimetric HgNO3	mg/L	35	1
Color	CU	111	1
Corrosivity (towards steel)	mg/L	Not detected	6.35
Fluoride by selective ion	mg/L	0.25	0.01
Surfactants (colorimetric)	mg/L	Not detected	0.01
Odor	TON	1	1
Sulfate (turbidimetric)	mg/L	34	1
Priority Pollutants (full list)	ug/L	Completed	
Coliform, Total, membrane filter	colonies/100mL	4	1
Coliform, Fecal, membrane filter	colonies/100mL	Not detected	1

August 24, 1993

Mr. Lindsey Sampson Sample I.D. AA38393 (continued)

TEST PARAMETER	UNITS	TEST RESULT	DETECTION LIMIT
4002 Gross Alpha	pCi/L	6.6	
4100 Gross Beta	pCi/L	4.7	
Elevation, Water Table	Feet NGVD	18.89	0.01

Sample I.D. AA38394

Location code: WTE-1D

Location Description: Waste to Energy M.W. # 1-D

Sample collector: VICKI/KEITH

Sample collection date: 07/27/93 Time: 10:00

Lab submittal date: 07/28/93 Time: 15:10

TEST PARAMETER	UNITS	TEST RESULT	DETECTION LIMIT
Arsenic, AA furnace technique	mg/L	Not detected	0.001
Cadmium by flame AA	mg/L	Not detected	0.005
Chromium by flame AA	mg/L	Not detected	0.01
Iron by flame AA	mg/L	0.03	0.03
Lead, AA furnace technique	ug/L	Not detected	1
Mercury, AA cold vapor technique	ug/L	Not detected	0.2
Nitrate	mg/L as N	Not detected	0.01
Nitrite	mg/L as N	Not detected	0.001
Nitrate + Nitrite	mg/L as N	Not detected	0.01
pH (electrometric)	pH units	7.7	
Total Dissolved Solids	mg/L	548	2
Selenium, AA furnace technique	mg/L	0.002	0.002
Specific Conductance @ 25°C	umhos/cm	925	1
Barium, AA direct aspiration	mg/L	0.04	0.01
Copper by flame AA	mg/L	Not detected	0.01
Manganese by flame AA	mg/L	0.01	0.01
Nickel by flame AA	mg/L	Not detected	0.04
Silver by flame AA	mg/L	Not detected	0.01
Sodium, AA direct aspiration	mg/L	54.7	0.1
Thallium by flame AA	mg/L	Not detected	0.1
Zinc by flame AA	mg/L	Not detected	0.01
Chloride titrimetric HgNO3	mg/L	97	1
Color	CU	15.4	1
Corrosivity (towards steel)	mg/L	Not detected	6.35
Fluoride by selective ion	mg/L	0.49	0.01
Surfactants (colorimetric)	mg/L	0.02	0.01
Odor	TON	256	1
Sulfate (turbidimetric)	mg/L	50	1
Priority Pollutants (full list)	ug/L	Completed	
Coliform, Total, membrane filter	colonies/100mL	1	1
Coliform, Fecal, membrane filter	colonies/100mL	Not detected	1
4002 Gross Alpha	pCi/L	3.7	
4100 Gross Beta	pCi/L	6.5	
Elevation, Water Table	Feet NGVD	17.74	0.01

Sample I.D. AA38395 Location code: WTE-2S  
 Location Description: Waste to Energy M.W. # 2-S  
 Sample collector: VICKI/KEITH  
 Sample collection date: 07/27/93 Time: 10:00  
 Lab submittal date: 07/28/93 Time: 15:10

TEST PARAMETER	UNITS	TEST RESULT	DETECTION LIMIT
Arsenic, AA furnace technique	mg/L	0.006	0.001
Cadmium by flame AA	mg/L	Not detected	0.005
Chromium by flame AA	mg/L	0.01	0.01
Iron by flame AA	mg/L	0.39	0.03
Lead, AA furnace technique	ug/L	Not detected	1
Mercury, AA cold vapor technique	ug/L	Not detected	0.2
Nitrate	mg/L as N	Not detected	0.01
Nitrite	mg/L as N	Not detected	0.001
Nitrate + Nitrite	mg/L as N	Not detected	0.01
pH (electrometric)	pH units	7.4	
Total Dissolved Solids	mg/L	526	2
Selenium, AA furnace technique	mg/L	0.003	0.002
Specific Conductance @ 25oC	umhos/cm	895	1
Barium, AA direct aspiration	mg/L	0.10	0.01
Copper by flame AA	mg/L	Not detected	0.01
Manganese by flame AA	mg/L	0.10	0.01
Nickel by flame AA	mg/L	0.09	0.04
Silver by flame AA	mg/L	Not detected	0.01
Sodium, AA direct aspiration	mg/L	33.8	0.1
Thallium by flame AA	mg/L	Not detected	0.1
Zinc by flame AA	mg/L	0.01	0.01
Chloride titrimetric HgNO3	mg/L	73	1
Color	CU	174	1
Corrosivity (towards steel)	mg/L	Not detected	6.35
Fluoride by selective ion	mg/L	0.37	0.01
Surfactants (colorimetric)	mg/L	Not detected	0.01
Odor	TON	1	1
Sulfate (turbidimetric)	mg/L	34	1
Coliform, Total, membrane filter	colonies/100mL	Confluent	1
Coliform, Fecal, membrane filter	colonies/100mL	Not detected	1
4002 Gross Alpha	pCi/L	28.7	
4100 Gross Beta	pCi/L	7.6	
Priority Pollutants (full list)	ug/L	Completed	
Elevation, Water Table	Feet NGVD	18.73	0.01

Summary of specification violations or warnings:

Analyte: Cadmium by flame AA  
 Upper specification value: 0.01 Result: Not detected

Sample I.D. AA38396 Location code: WTE-2D  
 Location Description: Waste to Energy M.W. # 2-D  
 Sample collector: VICKI/KEITH

Sample collection date: 07/28/93 Time: 10:00  
 Lab submittal date: 07/28/93 Time: 15:10

TEST PARAMETER	UNITS	TEST RESULT	DETECTION LIMIT
Arsenic, AA furnace technique	mg/L	0.002	0.001
Cadmium by flame AA	mg/L	Not detected	0.005
Chromium by flame AA	mg/L	Not detected	0.01
Iron by flame AA	mg/L	0.07	0.03
Lead, AA furnace technique	ug/L	Not detected	1
Mercury, AA cold vapor technique	ug/L	Not detected	0.2
Nitrate	mg/L as N	Not detected	0.01
Nitrite	mg/L as N	Not detected	0.001
Nitrate + Nitrite	mg/L as N	Not detected	0.01
pH (electrometric)	pH units	7.5	
Total Dissolved Solids	mg/L	920	2
Selenium, AA furnace technique	mg/L	0.002	0.002
Specific Conductance @ 25°C	umhos/cm	1740	1
Barium, AA direct aspiration	mg/L	0.06	0.01
Copper by flame AA	mg/L	Not detected	0.01
Manganese by flame AA	mg/L	0.02	0.01
Nickel by flame AA	mg/L	Not detected	0.04
Silver by flame AA	mg/L	Not detected	0.01
Sodium, AA direct aspiration	mg/L	134.6	0.1
Thallium by flame AA	mg/L	Not detected	0.1
Zinc by flame AA	mg/L	0.01	0.01
Chloride titrimetric HgNO3	mg/L	313	1
Color	CU	16.2	1
Corrosivity (towards steel)	mg/L	Not detected	6.35
Fluoride by selective ion	mg/L	0.72	0.01
Surfactants (colorimetric)	mg/L	Not detected	0.01
Odor	TON	2	1
Sulfate (turbidimetric)	mg/L	160	1
Priority Pollutants (full list)	ug/L	Completed	
Coliform, Total, membrane filter	colonies/100mL	1	1
Coliform, Fecal, membrane filter	colonies/100mL	1	1
4002 Gross Alpha	pCi/L	4.4	
4100 Gross Beta	pCi/L	10.4	
Elevation, Water Table	Feet NGVD	18.56	0.01

Sample I.D. AA38397 Location code: WTE-3S  
 Location Description: Waste to Energy M.W. # 3-S  
 Sample collector: VICKI/KEITH  
 Sample collection date: 07/27/93 Time: 10:00  
 Lab submittal date: 07/28/93 Time: 15:10

TEST PARAMETER	UNITS	TEST RESULT	DETECTION LIMIT
Arsenic, AA furnace technique	mg/L	0.003	0.001
Cadmium by flame AA	mg/L	Not detected	0.005

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Mr. Lindsey Sampson Sample I.D. AA38397 (continued)

TEST PARAMETER	UNITS	TEST RESULT	DETECTION LIMIT
Chromium by flame AA	mg/L	Not detected	0.01
Iron by flame AA	mg/L	1.50	0.03
Lead, AA furnace technique	ug/L	Not detected	1
Mercury, AA cold vapor technique	ug/L	Not detected	0.2
Nitrate	mg/L as N	Not detected	0.01
Nitrite	mg/L as N	Not detected	0.001
Nitrate + Nitrite	mg/L as N	Not detected	0.01
pH (electrometric)	pH units	7.5	
Total Dissolved Solids	mg/L	592	2
Selenium, AA furnace technique	ug/L	Not detected	0.002
Specific Conductance @ 25oC	umhos/cm	923	1
Barium, AA direct aspiration	mg/L	0.07	0.01
Copper by flame AA	mg/L	Not detected	0.01
Manganese by flame AA	mg/L	0.03	0.01
Nickel by flame AA	mg/L	Not detected	0.04
Silver by flame AA	mg/L	Not detected	0.01
Sodium, AA direct aspiration	mg/L	46.1	0.1
Thallium by flame AA	mg/L	Not detected	0.1
Zinc by flame AA	mg/L	0.04	0.01
Chloride titrimetric HgNO3	mg/L	101	1
Color	CU	65.3	1
Corrosivity (towards steel)	mg/L	Not detected	6.35
Fluoride by selective ion	mg/L	0.28	0.01
Surfactants (colorimetric)	mg/L	Not detected	0.01
Odor	TON	1	1
Sulfate (turbidimetric)	mg/L	70	1
Priority Pollutants (full list)	ug/L	Completed	
Coliform, Total, membrane filter	colonies/100mL	Not detected	1
Coliform, Fecal, membrane filter	colonies/100mL	Not detected	1
4002 Gross Alpha	pCi/L	13.8	
4100 Gross Beta	pCi/L	16.4	
Elevation, Water Table	Feet NGVD	18.70	0.01

## Summary of specification violations or warnings:

Analyte: Cadmium by flame AA  
Upper specification value: 0.01

Result: Not detected

Sample I.D. AA38398

Location code: WTE-3D

Location Description: Waste to Energy M.W. # 3-D

Sample collector: VICKI/KEITH

Sample collection date: 07/28/93 Time: 10:00

Lab submittal date: 07/28/93 Time: 15:10

TEST PARAMETER	UNITS	TEST RESULT	DETECTION LIMIT
Arsenic, AA furnace technique	mg/L	Not detected	0.001
Cadmium by flame AA	mg/L	Not detected	0.005
Chromium by flame AA	mg/L	Not detected	0.01
Iron by flame AA	mg/L	0.13	0.03
Lead, AA furnace technique	ug/L	Not detected	1
Mercury, AA cold vapor technique	ug/L	Not detected	0.2
Nitrate	mg/L as N	Not detected	0.01
Nitrite	mg/L as N	Not detected	0.001
Nitrate + Nitrite	mg/L as N	Not detected	0.01
pH (electrometric)	pH units	7.8	
Total Dissolved Solids	mg/L	590	2
Selenium, AA furnace technique	mg/L	Not detected	0.002
Specific Conductance @ 25oC	umhos/cm	1100	1
Barium, AA direct aspiration	mg/L	0.08	0.01
Copper by flame AA	mg/L	Not detected	0.01
Manganese by flame AA	mg/L	0.01	0.01
Nickel by flame AA	mg/L	Not detected	0.04
Silver by flame AA	mg/L	Not detected	0.01
Sodium, AA direct aspiration	mg/L	76.5	0.1
Thallium by flame AA	mg/L	Not detected	0.1
Zinc by flame AA	mg/L	Not detected	0.01
Chloride titrimetric HgNO3	mg/L	150	1
Color	CU	23.0	1
Corrosivity (towards steel)	mg/L	Not detected	6.35
Fluoride by selective ion	mg/L	0.46	0.01
Surfactants (colorimetric)	mg/L	Not detected	0.01
Odor	TON	256	1
Sulfate (turbidimetric)	mg/L	84	1
Priority Pollutants (full list)	ug/L	Completed	
Coliform, Total, membrane filter	colonies/100mL	Not detected	1
Coliform, Fecal, membrane filter	colonies/100mL	Not detected	1
4002 Gross Alpha	pCi/L	3.4	
4100 Gross Beta	pCi/L	19.2	
Elevation, Water Table	Feet NGVD	18.55	0.01

Sample I.D. AA38399 Location code: WTE-4S  
 Location Description: Waste to Energy M.W. # 4-S  
 Sample collector: VICKI/KEITH  
 Sample collection date: 07/27/93 Time: 10:00  
 Lab submittal date: 07/28/93 Time: 15:10

TEST PARAMETER	UNITS	TEST RESULT	DETECTION LIMIT
Arsenic, AA furnace technique	mg/L	0.001	0.001
Cadmium by flame AA	mg/L	Not detected	0.005
Chromium by flame AA	mg/L	Not detected	0.01
Iron by flame AA	mg/L	2.50	0.03

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Mr. Lindsey Sampson Sample I.D. AA38399 (continued)

TEST PARAMETER	UNITS	TEST RESULT	DETECTION LIMIT
Lead, AA furnace technique	ug/L	Not detected	1
Mercury, AA cold vapor technique	ug/L	Not detected	0.2
Nitrate	mg/L as N	Not detected	0.01
Nitrite	mg/L as N	Not detected	0.001
Nitrate + Nitrite	mg/L as N	Not detected	0.01
pH (electrometric)	pH units	7.4	
Total Dissolved Solids	mg/L	998	2
Selenium, AA furnace technique	mg/L	0.002	0.002
Specific Conductance @ 25oC	umhos/cm	1730	1
Barium, AA direct aspiration	mg/L	0.07	0.01
Copper by flame AA	mg/L	Not detected	0.01
Manganese by flame AA	mg/L	0.02	0.01
Nickel by flame AA	mg/L	Not detected	0.04
Silver by flame AA	mg/L	Not detected	0.01
Sodium, AA direct aspiration	mg/L	138.1	0.1
Thallium by flame AA	mg/L	Not detected	0.1
Zinc by flame AA	mg/L	0.01	0.01
Chloride titrimetric HgNO3	mg/L	275	1
Color	CU	76.4	1
Corrosivity (towards steel)	mg/L	Not detected	6.35
Fluoride by selective ion	mg/L	0.43	0.01
Surfactants (colorimetric)	mg/L	Not detected	0.01
Odor	TON	1	1
Sulfate (turbidimetric)	mg/L	186	1
Priority Pollutants (full list)	ug/L	Completed	
Coliform, Total, membrane filter	colonies/100mL	1	1
Coliform, Fecal, membrane filter	colonies/100mL	1	1
4002 Gross Alpha	pCi/L	18.8	
4100 Gross Beta	pCi/L	15.3	
Elevation, Water Table	Feet NGVD	18.98	0.01

## Summary of specification violations or warnings:

Analyte: Cadmium by flame AA  
Upper specification value: 0.01

Result: Not detected

Sample I.D. AA38400

Location code: WTE-4D

Location Description: Waste to Energy M.W. # 4-D

Sample collector: VICKI/KEITH

Sample collection date: 07/28/93 Time: 10:00

Lab submittal date: 07/28/93 Time: 15:10

TEST PARAMETER	UNITS	TEST RESULT	DETECTION LIMIT
Arsenic, AA furnace technique	mg/L	Not detected	0.001
Cadmium by flame AA	mg/L	Not detected	0.005



TEST PARAMETER	UNITS	TEST RESULT	DETECTION LIMIT
Chromium by flame AA	mg/L	Not detected	0.01
Iron by flame AA	mg/L	0.23	0.03
Lead, AA furnace technique	ug/L	2	1
Mercury, AA cold vapor technique	ug/L	Not detected	0.2
Nitrate	mg/L as N	Not detected	0.01
Nitrite	mg/L as N	Not detected	0.001
Nitrate + Nitrite	mg/L as N	Not detected	0.01
pH (electrometric)	pH units	7.6	
Total Dissolved Solids	mg/L	514	2
Selenium, AA furnace technique	ug/L	Not detected	0.002
Specific Conductance @ 25oC	umhos/cm	900	1
Barium, AA direct aspiration	mg/L	0.08	0.01
Copper by flame AA	mg/L	Not detected	0.01
Manganese by flame AA	mg/L	0.02	0.01
Nickel by flame AA	mg/L	Not detected	0.04
Silver by flame AA	mg/L	Not detected	0.01
Sodium, AA direct aspiration	mg/L	65.5	0.1
Thallium by flame AA	mg/L	Not detected	0.1
Zinc by flame AA	mg/L	0.01	0.01
Chloride titrimetric HgNO3	mg/L	127	1
Color	CU	17.3	1
Corrosivity (towards steel)	mg/L	Not detected	6.35
Fluoride by selective ion	mg/L	0.63	0.01
Surfactants (colorimetric)	mg/L	Not detected	0.01
Odor	TON	8	1
Sulfate (turbidimetric)	mg/L	51	1
Priority Pollutants (full list)	ug/L	Completed	
Coliform, Total, membrane filter	colonies/100mL	2	1
Coliform, Fecal, membrane filter	colonies/100mL	1	1
4002 Gross Alpha	pCi/L	7.8	
4100 Gross Beta	pCi/L	15.9	
Elevation, Water Table	Feet NGVD	18.69	0.01

Summary of specification violations or warnings:

Analyte: Cadmium by flame AA  
 Upper specification value: 0.01                      Result: Not detected

Sample I.D. AA38401                      Location code: WTE-5S  
 Location Description: Waste to Energy M.W. # 5-S  
 Sample collector: VICKI/KEITH  
 Sample collection date: 07/27/93      Time: 10:00  
 Lab submittal date: 07/28/93        Time: 15:10

August 24, 1993

Mr. Lindsey Sampson Sample I.D. AA38401 (continued)

TEST PARAMETER	UNITS	TEST RESULT	DETECTION LIMIT
Arsenic, AA furnace technique	mg/L	0.002	0.001
Cadmium by flame AA	mg/L	Not detected	0.005
Chromium by flame AA	mg/L	Not detected	0.01
Iron by flame AA	mg/L	1.38	0.03
Lead, AA furnace technique	ug/L	1	1
Mercury, AA cold vapor technique	ug/L	Not detected	0.2
Nitrate	mg/L as N	Not detected	0.01
Nitrite	mg/L as N	Not detected	0.001
Nitrate + Nitrite	mg/L as N	Not detected	0.01
pH (electrometric)	pH units	7.4	
Total Dissolved Solids	mg/L	504	2
Selenium, AA furnace technique	mg/L	Not detected	0.002
Specific Conductance @ 25oC	umhos/cm	812	1
Barium, AA direct aspiration	mg/L	0.06	0.01
Copper by flame AA	mg/L	Not detected	0.01
Manganese by flame AA	mg/L	0.03	0.01
Nickel by flame AA	mg/L	0.04	0.04
Silver by flame AA	mg/L	Not detected	0.01
Sodium, AA direct aspiration	mg/L	34.1	0.1
Thallium by flame AA	mg/L	Not detected	0.1
Zinc by flame AA	mg/L	0.03	0.01
Chloride titrimetric HgNO3	mg/L	68	1
Color	CU	123	1
Corrosivity (towards steel)	mg/L	Not detected	6.35
Fluoride by selective ion	mg/L	0.37	0.01
Surfactants (colorimetric)	mg/L	Not detected	0.01
Odor	TON	4	1
Sulfate (turbidimetric)	mg/L	71	1
Priority Pollutants (full list)	ug/L	Completed	
Coliform, Total, membrane filter	colonies/100mL	Not detected	1
Coliform, Fecal, membrane filter	colonies/100mL	Not detected	1
4002 Gross Alpha	pCi/L	8.5	
4100 Gross Beta	pCi/L	12.1	
Elevation, Water Table	Feet NGVD	19.26	0.01

## Summary of specification violations or warnings:

Analyte: Cadmium by flame AA

Upper specification value: 0.01

Result: Not detected

Sample I.D. AA38402

Location code: WTE-5D

Location Description: Waste to Energy M.W. # 5-D

Sample collector: VICKI/KEITH

Sample collection date: 07/27/93 Time: 10:00

Lab submittal date: 07/28/93 Time: 15:10

August 24, 1993

Mr. Lindsey Sampson Sample I.D. AA38402 (continued)

TEST PARAMETER	UNITS	TEST RESULT	DETECTION LIMIT
Arsenic, AA furnace technique	mg/L	0.005	0.001
<b>Cadmium by flame AA</b>	<b>mg/L</b>	<b>Not detected</b>	<b>0.005</b>
Chromium by flame AA	mg/L	Not detected	0.01
Iron by flame AA	mg/L	0.29	0.03
Lead, AA furnace technique	ug/L	Not detected	1
Mercury, AA cold vapor technique	ug/L	Not detected	0.2
Nitrate	mg/L as N	Not detected	0.01
Nitrite	mg/L as N	Not detected	0.001
Nitrate + Nitrite	mg/L as N	Not detected	0.01
pH (electrometric)	pH units	7.5	
Total Dissolved Solids	mg/L	998	2
Selenium, AA furnace technique	mg/L	Not detected	0.002
Specific Conductance @ 25oC	umhos/cm	1820	1
Barium, AA direct aspiration	mg/L	0.07	0.01
Copper by flame AA	mg/L	Not detected	0.01
Manganese by flame AA	mg/L	0.01	0.01
Nickel by flame AA	mg/L	Not detected	0.04
Silver by flame AA	mg/L	Not detected	0.01
Sodium, AA direct aspiration	mg/L	130.2	0.1
Thallium by flame AA	mg/L	Not detected	0.1
Zinc by flame AA	mg/L	0.01	0.01
Chloride titrimetric HgNO3	mg/L	395	1
Color	CU	21.7	1
Corrosivity (towards steel)	mg/L	Not detected	6.35
Fluoride by selective ion	mg/L	0.62	0.01
Surfactants (colorimetric)	mg/L	Not detected	0.01
Odor	TON	4	1
Sulfate (turbidimetric)	mg/L	146	1
Priority Pollutants (full list)	ug/L	Completed	
Coliform, Total, membrane filter	colonies/100mL	Not detected	1
Coliform, Fecal, membrane filter	colonies/100mL	Not detected	1
4002 Gross Alpha	pCi/L	4.1	
4100 Gross Beta	pCi/L	13.2	
Elevation, Water Table	Feet NGVD	18.68	0.01

## Summary of specification violations or warnings:

Analyte: Cadmium by flame AA  
Upper specification value: 0.01

Result: Not detected

Sample I.D. AA38403

Location code: WTE-6S

Location Description: Waste to Energy M.W. # 6-S

Sample collector: VICKI/KEITH

Sample collection date: 07/27/93 Time: 10:00

Lab submittal date: 07/28/93 Time: 15:10

August 24, 1993

Mr. Lindsey Sampson Sample I.D. AA38403 (continued)

TEST PARAMETER	UNITS	TEST RESULT	DETECTION LIMIT
Arsenic, AA furnace technique	mg/L	0.002	0.001
<b>Cadmium by flame AA</b>	<b>mg/L</b>	<b>Not detected</b>	<b>0.005</b>
Chromium by flame AA	mg/L	Not detected	0.01
Iron by flame AA	mg/L	0.12	0.03
Lead, AA furnace technique	ug/L	Not detected	1
Mercury, AA cold vapor technique	ug/L	Not detected	0.2
Nitrate	mg/L as N	Not detected	0.01
Nitrite	mg/L as N	Not detected	0.001
Nitrate + Nitrite	mg/L as N	Not detected	0.01
pH (electrometric)	pH units	7.5	
Total Dissolved Solids	mg/L	662	2
Selenium, AA furnace technique	mg/L	Not detected	0.002
Specific Conductance @ 25oC	umhos/cm	1090	1
Barium, AA direct aspiration	mg/L	0.06	0.01
Copper by flame AA	mg/L	Not detected	0.01
Manganese by flame AA	mg/L	Not detected	0.01
Nickel by flame AA	mg/L	Not detected	0.04
Silver by flame AA	mg/L	Not detected	0.01
Sodium, AA direct aspiration	mg/L	93.0	0.1
Thallium by flame AA	mg/L	Not detected	0.1
Zinc by flame AA	mg/L	0.01	0.01
Chloride titrimetric HgNO3	mg/L	110	1
Color	CU	96.5	1
Corrosivity (towards steel)	mg/L	Not detected	6.35
Fluoride by selective ion	mg/L	0.47	0.01
Surfactants (colorimetric)	mg/L	Not detected	0.01
Odor	TON	1	1
Sulfate (turbidimetric)	mg/L	98	1
Priority Pollutants (full list)	ug/L	Completed	
Coliform, Total, membrane filter	colonies/100mL	Confluent	1
Coliform, Fecal, membrane filter	colonies/100mL	Not detected	1
4002 Gross Alpha	pCi/L	31.2	
4100 Gross Beta	pCi/L	12.1	
Elevation, Water Table	Feet NGVD	19.08	0.01

## Summary of specification violations or warnings:

Analyte: Cadmium by flame AA  
Upper specification value: 0.01

Result: Not detected

Sample I.D. AA38404

Location code: WTE-6D

Location Description: Waste to Energy M.W. # 6-D

Sample collector: VICKI/KEITH

Sample collection date: 07/27/93 Time: 10:00

Lab submittal date: 07/28/93 Time: 15:10

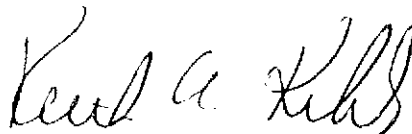
August 24, 1993

Mr. Lindsey Sampson Sample I.D. AA38404 (continued)

TEST PARAMETER	UNITS	TEST RESULT	DETECTION LIMIT
Arsenic, AA furnace technique	mg/L	0.005	0.001
Cadmium by flame AA	mg/L	Not detected	0.005
Chromium by flame AA	mg/L	Not detected	0.01
Iron by flame AA	mg/L	0.45	0.03
Lead, AA furnace technique	ug/L	Not detected	1
Mercury, AA cold vapor technique	ug/L	Not detected	0.2
Nitrate	mg/L as N	Not detected	0.01
Nitrite	mg/L as N	Not detected	0.001
Nitrate + Nitrite	mg/L as N	Not detected	0.01
pH (electrometric)	pH units	7.8	
Total Dissolved Solids	mg/L	1076	2
Selenium, AA furnace technique	mg/L	Not detected	0.002
Specific Conductance @ 25oC	umhos/cm	1950	1
Barium, AA direct aspiration	mg/L	0.06	0.01
Copper by flame AA	mg/L	Not detected	0.01
Manganese by flame AA	mg/L	0.02	0.01
Nickel by flame AA	mg/L	Not detected	0.04
Silver by flame AA	mg/L	Not detected	0.01
Sodium, AA direct aspiration	mg/L	162.7	0.1
Thallium by flame AA	mg/L	Not detected	0.1
Zinc by flame AA	mg/L	0.02	0.01
Chloride titrimetric HgNO3	mg/L	433	1
Color	CU	21.3	1
Corrosivity (towards steel)	mg/L	Not detected	6.35
Fluoride by selective ion	mg/L	0.81	0.01
Surfactants (colorimetric)	mg/L	Not detected	0.01
Odor	TON	16	1
Sulfate (turbidimetric)	mg/L	189	1
Priority Pollutants (full list)	ug/L	Completed	
Coliform, Total, membrane filter	colonies/100mL	Not detected	1
Coliform, Fecal, membrane filter	colonies/100mL	1	1
4002 Gross Alpha	pCi/L	9.9	
4100 Gross Beta	pCi/L	21.8	
Elevation, Water Table	Feet NGVD	18.61	0.01

Please advise should you have questions concerning these data.

Respectfully submitted,



Keith A. Kibbey  
Laboratory Director  
Division of Natural Resources Management



# ORLANDO LABORATORIES INC.

P.O. BOX 149127 • ORLANDO, FLORIDA 32814

(407) 896-6645 • FAX: (407) 898-6588

## REPORT OF ANALYSIS

Lee County Environmental Lab  
60 Danley Drive , Unit 2  
Fort Myers, FL 33907

Work Order # : 93-07-423  
Date Received: 07/30/93  
Date Reported: 08/18/93  
OLI Contact: J\_DENT

Attn: Julie Tanner

Work ID: AA38393-405 Waste II Energy  
Samples collected by: Client  
Total Samples: 14

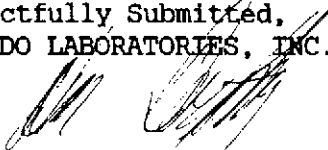
<u>Sample Identification</u>	<u>Description of Analysis</u>	<u>Description of Analysis</u>
01A AA38393	Priority Pollutant (BNA) Gross Alpha/Gross Beta	Corrosivity to Metal
02A AA38394	Priority Pollutant (BNA) Gross Alpha/Gross Beta	Corrosivity to Metal
03A AA38395	Priority Pollutant (BNA) Gross Alpha/Gross Beta	Corrosivity to Metal
04A AA38396	Priority Pollutant (BNA) Gross Alpha/Gross Beta	Corrosivity to Metal
05A AA38397	Priority Pollutant (BNA) Gross Alpha/Gross Beta	Corrosivity to Metal
06A AA38398	Priority Pollutant (BNA) Gross Alpha/Gross Beta	Corrosivity to Metal
07A AA38399	Priority Pollutant (BNA) Gross Alpha/Gross Beta	Corrosivity to Metal
08A AA38400	Priority Pollutant (BNA) Gross Alpha/Gross Beta	Corrosivity to Metal
09A AA38401	Priority Pollutant (BNA) Gross Alpha/Gross Beta	Corrosivity to Metal
10A AA38402	Priority Pollutant (BNA) Gross Alpha/Gross Beta	Corrosivity to Metal
11A AA38403	Priority Pollutant (BNA) Gross Alpha/Gross Beta	Corrosivity to Metal
12A AA38404	Priority Pollutant (BNA)	Corrosivity to Metal


Lee County Environmental Lab  
Work ID: AA38393-405 Waste II Energy

Work Order # : 93-07-423  
C o n t i n u e d

<u>Sample Identification</u>	<u>Description of Analysis</u>	<u>Description of Analysis</u>
12A AA38404	Gross Alpha/Gross Beta	
13A AA38405	Cyanides, Total	
14A Method Blank	Priority Pollutant (BNA) QC for Wet Chemistry	QC for Radiochemistry

Respectfully Submitted,  
ORLANDO LABORATORIES, INC.

  
\_\_\_\_\_  
Alan Doughty, Ph.D.  
LABORATORY DIRECTOR

  
\_\_\_\_\_  
Eric Malarek  
QUALITY CONTROL

## Results of Analysis

Work ID: AA38393-405 Waste II Energy

Work Order: 93-07-423

Client Number:	AA38393	AA38394	AA38395	AA38396
OLI Number:	01A	02A	03A	04A
Dilution:	1	1	1	1

Priority Pollutant (BNA): Water

<u>EPA 625</u>	<u>Units</u>	<u>Result/Flag</u>	<u>Result/Flag</u>	<u>Result/Flag</u>	<u>Result/Flag</u>	<u>MDL</u>
Phenol	ug/l	10 U	10 U	10 U	10 U	10
2-Chlorophenol	ug/l	10 U	10 U	10 U	10 U	10
2-Nitrophenol	ug/l	10 U	10 U	10 U	10 U	10
2,4-Dimethylphenol	ug/l	10 U	10 U	10 U	10 U	10
2,4-Dichlorophenol	ug/l	10 U	10 U	10 U	10 U	10
4-Chloro-3-methyl phenol	ug/l	10 U	10 U	10 U	10 U	10
2,4,6-Trichlorophenol	ug/l	10 U	10 U	10 U	10 U	10
2,4-Dinitrophenol	ug/l	50 U	50 U	50 U	50 U	50
4-Nitrophenol	ug/l	50 U	50 U	50 U	50 U	50
4,6-Dinitro-2-methylphenol	ug/l	50 U	50 U	50 U	50 U	50
Pentachlorophenol	ug/l	50 U	50 U	50 U	50 U	50
N-Nitroso-dimethylamine	ug/l	10 U	10 U	10 U	10 U	10
Bis(2-chloroethyl)ether	ug/l	10 U	10 U	10 U	10 U	10
1,3-Dichlorobenzene	ug/l	10 U	10 U	10 U	10 U	10
1,4-Dichlorobenzene	ug/l	10 U	10 U	10 U	10 U	10
1,2-Dichlorobenzene	ug/l	10 U	10 U	10 U	10 U	10
Bis(2-chloroisopropyl)ether	ug/l	10 U	10 U	10 U	10 U	10
N-Nitroso-di-n-propylamine	ug/l	10 U	10 U	10 U	10 U	10
Hexachloroethane	ug/l	10 U	10 U	10 U	10 U	10
Nitrobenzene	ug/l	10 U	10 U	10 U	10 U	10
Isophorone	ug/l	10 U	10 U	10 U	10 U	10
Bis(2-chloroethoxy)methane	ug/l	10 U	10 U	10 U	10 U	10
1,2,4-Trichlorobenzene	ug/l	10 U	10 U	10 U	10 U	10
Naphthalene	ug/l	10 U	10 U	10 U	10 U	10
Hexachlorobutadiene	ug/l	10 U	10 U	10 U	10 U	10
Hexachlorocyclopentadiene	ug/l	10 U	10 U	10 U	10 U	10
2-Chloronaphthalene	ug/l	10 U	10 U	10 U	10 U	10
Dimethyl Phthalate	ug/l	10 U	10 U	10 U	10 U	10
Acenaphthylene	ug/l	10 U	10 U	10 U	10 U	10
Acenaphthene	ug/l	10 U	10 U	10 U	10 U	10
2,4-Dinitrotoluene	ug/l	10 U	10 U	10 U	10 U	10
2,6-Dinitrotoluene	ug/l	10 U	10 U	10 U	10 U	10
Diethyl Phthalate	ug/l	10 U	10 U	10 U	10 U	10
4-Chlorophenyl phenyl ether	ug/l	10 U	10 U	10 U	10 U	10
Fluorene	ug/l	10 U	10 U	10 U	10 U	10
N-Nitrosodiphenylamine	ug/l	10 U	10 U	10 U	10 U	10
4-Bromophenyl phenyl ether	ug/l	10 U	10 U	10 U	10 U	10
Hexachlorobenzene	ug/l	10 U	10 U	10 U	10 U	10
Phenanthrene	ug/l	10 U	10 U	10 U	10 U	10
Anthracene	ug/l	10 U	10 U	10 U	10 U	10



## Results of Analysis

Work ID: AA38393-405 Waste II Energy

Work Order: 93-07-423

Client Number:	AA38393	AA38394	AA38395	AA38396
OLI Number:	01A	02A	03A	04A

Continued from preceding page

<u>EPA 625</u>	<u>Units</u>	<u>Result/Flag</u>	<u>Result/Flag</u>	<u>Result/Flag</u>	<u>Result/Flag</u>	<u>MDL</u>
Di-n-butyl Phthalate	ug/l	10 U	10 U	10 U	10 U	10
Fluoranthene	ug/l	10 U	10 U	10 U	10 U	10
Benzidine	ug/l	50 U	50 U	50 U	50 U	50
Pyrene	ug/l	10 U	10 U	10 U	10 U	10
Butyl benzyl phthalate	ug/l	10 U	10 U	10 U	10 U	10
3,3'-Dichlorobenzidine	ug/l	20 U	20 U	20 U	20 U	20
Benzo(a)anthracene	ug/l	10 U	10 U	10 U	10 U	10
bis(2-ethylhexyl)phthalate	ug/l	10 U	10 U	10 U	10 U	10
Chrysene	ug/l	10 U	10 U	10 U	10 U	10
Di-n-octyl Phthalate	ug/l	10 U	10 U	10 U	10 U	10
Benzo(b)fluoranthene	ug/l	10 U	10 U	10 U	10 U	10
Benzo(k)fluoranthene	ug/l	10 U	10 U	10 U	10 U	10
Benzo(a)pyrene	ug/l	10 U	10 U	10 U	10 U	10
Indeno (1,2,3-cd)pyrene	ug/l	10 U	10 U	10 U	10 U	10
Dibenz(a,h)perylene	ug/l	10 U	10 U	10 U	10 U	10
Benzo(g,h,i)perylene	ug/l	10 U	10 U	10 U	10 U	10
2,3,7,8-TCDD (dioxin)	ug/l	1000 U	1000 U	1000 U	1000 U	1000
1,2-Diphenylhydrazine	ug/l	10 U	10 U	10 U	10 U	10
<u>Surrogates/Internal Standard</u>						
2-Fluorophenol (SS1)		64 %	61 %	54 %	57 %	
Phenol-d5 (SS2)		59 %	59 %	54 %	56 %	
Nitrobenzene-d5 (SS3)		85 %	85 %	76 %	82 %	
2-Fluorobiphenyl (SS4)		80 %	82 %	75 %	81 %	
2,4,6-Tribromophenol (SS5)		120 %	117 %	112 %	114 %	
p-Terphenyl-d14 (SS6)		109 %	105 %	103 %	113 %	

## Results of Analysis

Work ID: AA38393-405 Waste II Energy

Work Order: 93-07-423

Client Number:	AA38397	AA38398	AA38399	AA38400
OLI Number:	05A	06A	07A	08A
Dilution:	1	1	1	1

Priority Pollutant (BNA): Water

<u>EPA 625</u>	<u>Units</u>	<u>Result/Flag</u>	<u>Result/Flag</u>	<u>Result/Flag</u>	<u>Result/Flag</u>	<u>MDL</u>
Phenol	ug/l	10 U	10 U	10 U	10 U	10
2-Chlorophenol	ug/l	10 U	10 U	10 U	10 U	10
2-Nitrophenol	ug/l	10 U	10 U	10 U	10 U	10
2,4-Dimethylphenol	ug/l	10 U	10 U	10 U	10 U	10
2,4-Dichlorophenol	ug/l	10 U	10 U	10 U	10 U	10
4-Chloro-3-methyl phenol	ug/l	10 U	10 U	10 U	10 U	10
2,4,6-Trichlorophenol	ug/l	10 U	10 U	10 U	10 U	10
2,4-Dinitrophenol	ug/l	50 U	50 U	50 U	50 U	50
4-Nitrophenol	ug/l	50 U	50 U	50 U	50 U	50
4,6-Dinitro-2-methylphenol	ug/l	50 U	50 U	50 U	50 U	50
Pentachlorophenol	ug/l	50 U	50 U	50 U	50 U	50
N-Nitroso-dimethylamine	ug/l	10 U	10 U	10 U	10 U	10
Bis(2-chloroethyl)ether	ug/l	10 U	10 U	10 U	10 U	10
1,3-Dichlorobenzene	ug/l	10 U	10 U	10 U	10 U	10
1,4-Dichlorobenzene	ug/l	10 U	10 U	10 U	10 U	10
1,2-Dichlorobenzene	ug/l	10 U	10 U	10 U	10 U	10
Bis(2-chloroisopropyl)ether	ug/l	10 U	10 U	10 U	10 U	10
N-Nitroso-di-n-propylamine	ug/l	10 U	10 U	10 U	10 U	10
Hexachloroethane	ug/l	10 U	10 U	10 U	10 U	10
Nitrobenzene	ug/l	10 U	10 U	10 U	10 U	10
Isophorone	ug/l	10 U	10 U	10 U	10 U	10
Bis(2-chloroethoxy)methane	ug/l	10 U	10 U	10 U	10 U	10
1,2,4-Trichlorobenzene	ug/l	10 U	10 U	10 U	10 U	10
Naphthalene	ug/l	10 U	10 U	10 U	10 U	10
Hexachlorobutadiene	ug/l	10 U	10 U	10 U	10 U	10
Hexachlorocyclopentadiene	ug/l	10 U	10 U	10 U	10 U	10
2-Chloronaphthalene	ug/l	10 U	10 U	10 U	10 U	10
Dimethyl Phthalate	ug/l	10 U	10 U	10 U	10 U	10
Acenaphthylene	ug/l	10 U	10 U	10 U	10 U	10
Acenaphthene	ug/l	10 U	10 U	10 U	10 U	10
2,4-Dinitrotoluene	ug/l	10 U	10 U	10 U	10 U	10
2,6-Dinitrotoluene	ug/l	10 U	10 U	10 U	10 U	10
Diethyl Phthalate	ug/l	10 U	10 U	10 U	10 U	10
4-Chlorophenyl phenyl ether	ug/l	10 U	10 U	10 U	10 U	10
Fluorene	ug/l	10 U	10 U	10 U	10 U	10
N-Nitrosodiphenylamine	ug/l	10 U	10 U	10 U	10 U	10
4-Bromophenyl phenyl ether	ug/l	10 U	10 U	10 U	10 U	10
Hexachlorobenzene	ug/l	10 U	10 U	10 U	10 U	10
Phenanthrene	ug/l	10 U	10 U	10 U	10 U	10
Anthracene	ug/l	10 U	10 U	10 U	10 U	10

## Results of Analysis

Work ID: AA38393-405 Waste II Energy

Work Order: 93-07-423

Client Number:	AA38397	AA38398	AA38399	AA38400
OLI Number:	05A	06A	07A	08A

Continued from preceding page

<u>EPA 625</u>	<u>Units</u>	<u>Result/Flag</u>	<u>Result/Flag</u>	<u>Result/Flag</u>	<u>Result/Flag</u>	<u>MDL</u>
Di-n-butyl Phthalate	ug/l	10 U	10 U	10 U	10 U	10
Fluoranthene	ug/l	10 U	10 U	10 U	10 U	10
Benzidine	ug/l	50 U	50 U	50 U	50 U	50
Pyrene	ug/l	10 U	10 U	10 U	10 U	10
Butyl benzyl phthalate	ug/l	10 U	10 U	10 U	10 U	10
3,3'-Dichlorobenzidine	ug/l	20 U	20 U	20 U	20 U	20
Benzo(a)anthracene	ug/l	10 U	10 U	10 U	10 U	10
bis(2-ethylhexyl)phthalate	ug/l	10 U	10 U	10 U	10 U	10
Chrysene	ug/l	10 U	10 U	10 U	10 U	10
Di-n-octyl Phthalate	ug/l	10 U	10 U	10 U	10 U	10
Benzo(b)fluoranthene	ug/l	10 U	10 U	10 U	10 U	10
Benzo(k)fluoranthene	ug/l	10 U	10 U	10 U	10 U	10
Benzo(a)pyrene	ug/l	10 U	10 U	10 U	10 U	10
Indeno (1,2,3-cd)pyrene	ug/l	10 U	10 U	10 U	10 U	10
Dibenz(a,h)perylene	ug/l	10 U	10 U	10 U	10 U	10
Benzo(g,h,i)perylene	ug/l	10 U	10 U	10 U	10 U	10
2,3,7,8-TCDD (dioxin)	ug/l	1000 U	1000 U	1000 U	1000 U	1000
1,2-Diphenylhydrazine	ug/l	10 U	10 U	10 U	10 U	10
<u>Surrogates/Internal Standard</u>						
2-Fluorophenol (SS1)		46 %	55 %	55 %	54 %	
Phenol-d5 (SS2)		45 %	52 %	56 %	55 %	
Nitrobenzene-d5 (SS3)		64 %	81 %	80 %	79 %	
2-Fluorobiphenyl (SS4)		61 %	77 %	78 %	78 %	
2,4,6-Tribromophenol (SS5)		81 %	113 %	105 %	112 %	
p-Terphenyl-d14 (SS6)		86 %	113 %	110 %	110 %	

## Results of Analysis

Work ID: AA38393-405 Waste II Energy

Work Order: 93-07-423

Client Number:	AA38401	AA38402	AA38403	AA38404
OLI Number:	09A	10A	11A	12A
Dilution:	1	1	1	1

Priority Pollutant (BNA): Water

<u>EPA 625</u>	<u>Units</u>	<u>Result/Flag</u>	<u>Result/Flag</u>	<u>Result/Flag</u>	<u>Result/Flag</u>	<u>MDL</u>
Phenol	ug/l	10 U	10 U	10 U	10 U	10
2-Chlorophenol	ug/l	10 U	10 U	10 U	10 U	10
2-Nitrophenol	ug/l	10 U	10 U	10 U	10 U	10
2,4-Dimethylphenol	ug/l	10 U	10 U	10 U	10 U	10
2,4-Dichlorophenol	ug/l	10 U	10 U	10 U	10 U	10
4-Chloro-3-methyl phenol	ug/l	10 U	10 U	10 U	10 U	10
2,4,6-Trichlorophenol	ug/l	10 U	10 U	10 U	10 U	10
2,4-Dinitrophenol	ug/l	50 U	50 U	50 U	50 U	50
4-Nitrophenol	ug/l	50 U	50 U	50 U	50 U	50
4,6-Dinitro-2-methylphenol	ug/l	50 U	50 U	50 U	50 U	50
Pentachlorophenol	ug/l	50 U	50 U	50 U	50 U	50
N-Nitroso-dimethylamine	ug/l	10 U	10 U	10 U	10 U	10
Bis(2-chloroethyl)ether	ug/l	10 U	10 U	10 U	10 U	10
1,3-Dichlorobenzene	ug/l	10 U	10 U	10 U	10 U	10
1,4-Dichlorobenzene	ug/l	10 U	10 U	10 U	10 U	10
1,2-Dichlorobenzene	ug/l	10 U	10 U	10 U	10 U	10
Bis(2-chloroisopropyl)ether	ug/l	10 U	10 U	10 U	10 U	10
N-Nitroso-di-n-propylamine	ug/l	10 U	10 U	10 U	10 U	10
Hexachloroethane	ug/l	10 U	10 U	10 U	10 U	10
Nitrobenzene	ug/l	10 U	10 U	10 U	10 U	10
Isophorone	ug/l	10 U	10 U	10 U	10 U	10
Bis(2-chloroethoxy)methane	ug/l	10 U	10 U	10 U	10 U	10
1,2,4-Trichlorobenzene	ug/l	10 U	10 U	10 U	10 U	10
Naphthalene	ug/l	10 U	10 U	10 U	10 U	10
Hexachlorobutadiene	ug/l	10 U	10 U	10 U	10 U	10
Hexachlorocyclopentadiene	ug/l	10 U	10 U	10 U	10 U	10
2-Chloronaphthalene	ug/l	10 U	10 U	10 U	10 U	10
Dimethyl Phthalate	ug/l	10 U	10 U	10 U	10 U	10
Acenaphthylene	ug/l	10 U	10 U	10 U	10 U	10
Acenaphthene	ug/l	10 U	10 U	10 U	10 U	10
2,4-Dinitrotoluene	ug/l	10 U	10 U	10 U	10 U	10
2,6-Dinitrotoluene	ug/l	10 U	10 U	10 U	10 U	10
Diethyl Phthalate	ug/l	10 U	10 U	10 U	10 U	10
4-Chlorophenyl phenyl ether	ug/l	10 U	10 U	10 U	10 U	10
Fluorene	ug/l	10 U	10 U	10 U	10 U	10
N-Nitrosodiphenylamine	ug/l	10 U	10 U	10 U	10 U	10
4-Bromophenyl phenyl ether	ug/l	10 U	10 U	10 U	10 U	10
Hexachlorobenzene	ug/l	10 U	10 U	10 U	10 U	10
Phenanthrene	ug/l	10 U	10 U	10 U	10 U	10
Anthracene	ug/l	10 U	10 U	10 U	10 U	10

## Results of Analysis

Work ID: AA38393-405 Waste II Energy

Work Order: 93-07-423

Client Number:	AA38401	AA38402	AA38403	AA38404
OLI Number:	09A	10A	11A	12A

Continued from preceding page

<u>EPA 625</u>	<u>Units</u>	<u>Result/Flag</u>	<u>Result/Flag</u>	<u>Result/Flag</u>	<u>Result/Flag</u>	<u>MDL</u>
Di-n-butyl Phthalate	ug/l	10 U	10 U	10 U	10 U	10
Fluoranthene	ug/l	10 U	10 U	10 U	10 U	10
Benzidine	ug/l	50 U	50 U	50 U	50 U	50
Pyrene	ug/l	10 U	10 U	10 U	10 U	10
Butyl benzyl phthalate	ug/l	10 U	10 U	10 U	10 U	10
3,3'-Dichlorobenzidine	ug/l	20 U	20 U	20 U	20 U	20
Benzo(a)anthracene	ug/l	10 U	10 U	10 U	10 U	10
bis(2-ethylhexyl)phthalate	ug/l	10 U	10 U	10 U	10 U	10
Chrysene	ug/l	10 U	10 U	10 U	10 U	10
Di-n-octyl Phthalate	ug/l	10 U	10 U	10 U	10 U	10
Benzo(b)fluoranthene	ug/l	10 U	10 U	10 U	10 U	10
Benzo(k)fluoranthene	ug/l	10 U	10 U	10 U	10 U	10
Benzo(a)pyrene	ug/l	10 U	10 U	10 U	10 U	10
Indeno (1,2,3-cd)pyrene	ug/l	10 U	10 U	10 U	10 U	10
Dibenz(a,h)perylene	ug/l	10 U	10 U	10 U	10 U	10
Benzo(g,h,i)perylene	ug/l	10 U	10 U	10 U	10 U	10
2,3,7,8-TCDD (dioxin)	ug/l	1000 U	1000 U	1000 U	1000 U	1000
1,2-Diphenylhydrazine	ug/l	10 U	10 U	10 U	10 U	10
<u>Surrogates/Internal Standard</u>						
2-Fluorophenol (SS1)		55 %	49 %	55 %	55 %	
Phenol-d5 (SS2)		54 %	50 %	55 %	55 %	
Nitrobenzene-d5 (SS3)		77 %	72 %	80 %	82 %	
2-Fluorobiphenyl (SS4)		72 %	73 %	77 %	81 %	
2,4,6-Tribromophenol (SS5)		108 %	106 %	107 %	113 %	
p-Terphenyl-d14 (SS6)		115 %	114 %	120 %	117 %	

## Results of Analysis

Work ID: AA38393-405 Waste II Energy

Work Order: 93-07-423

Client Number:	Method Blank
OLI Number:	14A
Dilution:	1

Priority Pollutant (BNA): Method BI

<u>EPA 625</u>	<u>Units</u>	<u>Result/Flag</u>	<u>MDL</u>
Phenol	ug/l	10 U	10
2-Chlorophenol	ug/l	10 U	10
2-Nitrophenol	ug/l	10 U	10
2,4-Dimethylphenol	ug/l	10 U	10
2,4-Dichlorophenol	ug/l	10 U	10
4-Chloro-3-methyl phenol	ug/l	10 U	10
2,4,6-Trichlorophenol	ug/l	10 U	10
2,4-Dinitrophenol	ug/l	50 U	50
4-Nitrophenol	ug/l	50 U	50
4,6-Dinitro-2-methylphenol	ug/l	50 U	50
Pentachlorophenol	ug/l	50 U	50
N-Nitroso-dimethylamine	ug/l	10 U	10
Bis(2-chloroethyl)ether	ug/l	10 U	10
1,3-Dichlorobenzene	ug/l	10 U	10
1,4-Dichlorobenzene	ug/l	10 U	10
1,2-Dichlorobenzene	ug/l	10 U	10
Bis(2-chloroisopropyl)ether	ug/l	10 U	10
N-Nitroso-di-n-propylamine	ug/l	10 U	10
Hexachloroethane	ug/l	10 U	10
Nitrobenzene	ug/l	10 U	10
Isophorone	ug/l	10 U	10
Bis(2-chloroethoxy)methane	ug/l	10 U	10
1,2,4-Trichlorobenzene	ug/l	10 U	10
Naphthalene	ug/l	10 U	10
Hexachlorobutadiene	ug/l	10 U	10
Hexachlorocyclopentadiene	ug/l	10 U	10
2-Chloronaphthalene	ug/l	10 U	10
Dimethyl Phthalate	ug/l	10 U	10
Acenaphthylene	ug/l	10 U	10
Acenaphthene	ug/l	10 U	10
2,4-Dinitrotoluene	ug/l	10 U	10
2,6-Dinitrotoluene	ug/l	10 U	10
Diethyl Phthalate	ug/l	10 U	10
4-Chlorophenyl phenyl ether	ug/l	10 U	10
Fluorene	ug/l	10 U	10
N-Nitrosodiphenylamine	ug/l	10 U	10
4-Bromophenyl phenyl ether	ug/l	10 U	10
Hexachlorobenzene	ug/l	10 U	10
Phenanthrene	ug/l	10 U	10
Anthracene	ug/l	10 U	10

## Results of Analysis

Work ID: AA38393-405 Waste II Energy

Work Order: 93-07-423

Client Number: Method Blank  
 OLI Number: 14A

Continued from preceding page

<u>EPA 625</u>	<u>Units</u>	<u>Result/Flag</u>	<u>MDL</u>
Di-n-butyl Phthalate	ug/l	10 U	10
Fluoranthene	ug/l	10 U	10
Benzidine	ug/l	50 U	50
Pyrene	ug/l	10 U	10
Butyl benzyl phthalate	ug/l	10 U	10
3,3'-Dichlorobenzidine	ug/l	20 U	20
Benzo(a)anthracene	ug/l	10 U	10
bis(2-ethylhexyl)phthalate	ug/l	10 U	10
Chrysene	ug/l	10 U	10
Di-n-octyl Phthalate	ug/l	10 U	10
Benzo(b)fluoranthene	ug/l	10 U	10
Benzo(k)fluoranthene	ug/l	10 U	10
Benzo(a)pyrene	ug/l	10 U	10
Indeno (1,2,3-cd)pyrene	ug/l	10 U	10
Dibenz(a,h)perylene	ug/l	10 U	10
Benzo(g,h,i)perylene	ug/l	10 U	10
2,3,7,8-TCDD (dioxin)	ug/l	1000 U	1000
1,2-Diphenylhydrazine	ug/l	10 U	10

Surrogates/Internal Standard

2-Fluorophenol (SS1)	56 %
Phenol-d5 (SS2)	51 %
Nitrobenzene-d5 (SS3)	71 %
2-Fluorobiphenyl (SS4)	66 %
2,4,6-Tribromophenol (SS5)	95 %
p-Terphenyl-d14 (SS6)	90 %

Client Number: AA38393 AA38394 AA38395 AA38396  
 OLI Number: 01A 02A 03A 04A

Gross Alpha/Gross Beta: Water

<u>EPA 900.0</u>	<u>Units</u>	<u>Result/Flag</u>	<u>Result/Flag</u>	<u>Result/Flag</u>	<u>Result/Flag</u>
Gross Alpha: EPA 900.0	pCi/l	6.6	3.7	28.7	4.4
Gross Beta: EPA 900.0	pCi/l	4.7	6.5	7.6	10.4
G/A Counting Error: APPX B	pCi/l	+/- 2.9	+/- 2.3	+/- 4.7	+/- 2.0
G/B Counting Error: APPX B	pCi/l	+/- 2.5	+/- 2.5	+/- 3.5	+/- 2.3

## Results of Analysis

Work ID: AA38393-405 Waste II Energy

Work Order: 93-07-423

Client Number:	AA38397	AA38398	AA38399	AA38400
OLI Number:	05A	06A	07A	08A

Gross Alpha/Gross Beta: Water

<u>EPA 900 0</u>	<u>Units</u>	<u>Result/Flag</u>	<u>Result/Flag</u>	<u>Result/Flag</u>	<u>Result/Flag</u>
Gross Alpha: EPA 900.0	pCi/l	13.8	3.4	18.8	7.8
Gross Beta: EPA 900.0	pCi/l	16.4	19.2	15.3	15.9
G/A Counting Error: APPX B	pCi/l	+/- 2.0	+/- 1.6	+/- 3.4	+/- 1.8
G/B Counting Error: APPX B	pCi/l	+/- 1.9	+/- 2.0	+/- 2.9	+/- 1.9

Client Number:	AA38401	AA38402	AA38403	AA38404
OLI Number:	09A	10A	11A	12A

Gross Alpha/Gross Beta: Water

<u>EPA 900 0</u>	<u>Units</u>	<u>Result/Flag</u>	<u>Result/Flag</u>	<u>Result/Flag</u>	<u>Result/Flag</u>
Gross Alpha: EPA 900.0	pCi/l	8.5	4.1	31.2	9.9
Gross Beta: EPA 900.0	pCi/l	12.1	13.2	12.1	21.8
G/A Counting Error: APPX B	pCi/l	+/- 2.4	+/- 2.2	+/- 5.1	+/- 2.7
G/B Counting Error: APPX B	pCi/l	+/- 2.7	+/- 2.5	+/- 3.9	+/- 3.1



## Results of Analysis

Work ID: AA38393-405 Waste II Energy

Work Order: 93-07-423

Client Number:	AA38393	AA38394	AA38395	AA38396	
OLI Number:	01A	02A	03A	04A	
Analyte	Units	Result/Flag	Result/Flag	Result/Flag	MDL
Corrosivity to Metal	MM/YR	6.35 U	6.35 U	6.35 U	6.35 U

Client Number:	AA38397	AA38398	AA38399	AA38400	
OLI Number:	05A	06A	07A	08A	
Analyte	Units	Result/Flag	Result/Flag	Result/Flag	MDL
Corrosivity to Metal	MM/YR	6.35 U	6.35 U	6.35 U	6.35 U

Client Number:	AA38401	AA38402	AA38403	AA38404	
OLI Number:	09A	10A	11A	12A	
Analyte	Units	Result/Flag	Result/Flag	Result/Flag	MDL
Corrosivity to Metal	MM/YR	6.35 U	6.35 U	6.35 U	6.35 U

Client Number:	AA38405			
OLI Number:	13A			
Analyte	Units	Result/Flag	MDL	
Cyanides, Total	mg/l	0.005 U	0.005	

## QA for Analysis

Work ID: AA38393-405 Waste II Energy

Work Order: 93-07-423

	<u>Test Description</u>	<u>Method</u>	<u>Prep</u>	<u>Run</u>	<u>Analyst</u>
Client No: AA38393	Priority Pollutant (BNA)	EPA_625	08/04/93	08/04/93	EP
OLI No: 01A	Corrosivity to Metal	EPA_1110	NA	08/02/93	PC
Matrix: Water	Gross Alpha/Gross Beta	EPA_900_0	NA	08/02/93	MJN
Collected: 07/28/93 10:00:00					

	<u>Test Description</u>	<u>Method</u>	<u>Prep</u>	<u>Run</u>	<u>Analyst</u>
Client No: AA38394	Priority Pollutant (BNA)	EPA_625	08/04/93	08/04/93	EP
OLI No: 02A	Corrosivity to Metal	EPA_1110	NA	08/02/93	PC
Matrix: Water	Gross Alpha/Gross Beta	EPA_900_0	NA	08/02/93	MJN
Collected: 07/28/93 10:00:00					

	<u>Test Description</u>	<u>Method</u>	<u>Prep</u>	<u>Run</u>	<u>Analyst</u>
Client No: AA38395	Priority Pollutant (BNA)	EPA_625	08/04/93	08/04/93	EP
OLI No: 03A	Corrosivity to Metal	EPA_1110	NA	08/03/93	PC
Matrix: Water	Gross Alpha/Gross Beta	EPA_900_0	NA	08/02/93	MJN
Collected: 07/28/93 10:00:00					

	<u>Test Description</u>	<u>Method</u>	<u>Prep</u>	<u>Run</u>	<u>Analyst</u>
Client No: AA38396	Priority Pollutant (BNA)	EPA_625	08/04/93	08/04/93	EP
OLI No: 04A	Corrosivity to Metal	EPA_1110	NA	08/03/93	PC
Matrix: Water	Gross Alpha/Gross Beta	EPA_900_0	NA	08/02/93	MJN
Collected: 07/28/93 10:00:00					

	<u>Test Description</u>	<u>Method</u>	<u>Prep</u>	<u>Run</u>	<u>Analyst</u>
Client No: AA38397	Priority Pollutant (BNA)	EPA_625	08/04/93	08/04/93	EP
OLI No: 05A	Corrosivity to Metal	EPA_1110	NA	08/04/93	KS
Matrix: Water	Gross Alpha/Gross Beta	EPA_900_0	NA	08/02/93	MJN
Collected: 07/28/93 10:00:00					

## QA for Analysis

Work ID: AA38393-405 Waste II Energy

Work Order: 93-07-423

	<u>Test Description</u>	<u>Method</u>	<u>Prep</u>	<u>Run</u>	<u>Analyst</u>
Client No: AA38398	Priority Pollutant (BNA)	EPA_625	08/04/93	08/04/93	EP
OLI No: 06A	Corrosivity to Metal	EPA_1110	NA	08/04/93	KS
Matrix: Water	Gross Alpha/Gross Beta	EPA_900_0	NA	08/02/93	MJN
Collected: 07/28/93 10:00:00					

	<u>Test Description</u>	<u>Method</u>	<u>Prep</u>	<u>Run</u>	<u>Analyst</u>
Client No: AA38399	Priority Pollutant (BNA)	EPA_625	08/04/93	08/04/93	EP
OLI No: 07A	Corrosivity to Metal	EPA_1110	NA	08/05/93	KS
Matrix: Water	Gross Alpha/Gross Beta	EPA_900_0	NA	08/03/93	MJN
Collected: 07/28/93 10:00:00					

	<u>Test Description</u>	<u>Method</u>	<u>Prep</u>	<u>Run</u>	<u>Analyst</u>
Client No: AA38400	Priority Pollutant (BNA)	EPA_625	08/04/93	08/04/93	EP
OLI No: 08A	Corrosivity to Metal	EPA_1110	NA	08/05/93	KS
Matrix: Water	Gross Alpha/Gross Beta	EPA_900_0	NA	08/03/93	MJN
Collected: 07/28/93 10:00:00					

	<u>Test Description</u>	<u>Method</u>	<u>Prep</u>	<u>Run</u>	<u>Analyst</u>
Client No: AA38401	Priority Pollutant (BNA)	EPA_625	08/04/93	08/04/93	EP
OLI No: 09A	Corrosivity to Metal	EPA_1110	NA	08/09/93	KS
Matrix: Water	Gross Alpha/Gross Beta	EPA_900_0	NA	08/03/93	MJN
Collected: 07/28/93 10:00:00					

	<u>Test Description</u>	<u>Method</u>	<u>Prep</u>	<u>Run</u>	<u>Analyst</u>
Client No: AA38402	Priority Pollutant (BNA)	EPA_625	08/04/93	08/04/93	EP
OLI No: 10A	Corrosivity to Metal	EPA_1110	NA	08/09/93	KS
Matrix: Water	Gross Alpha/Gross Beta	EPA_900_0	NA	08/03/93	MJN
Collected: 07/28/93 10:00:00					

## QA for Analysis

Work ID: AA38393-405 Waste II Energy

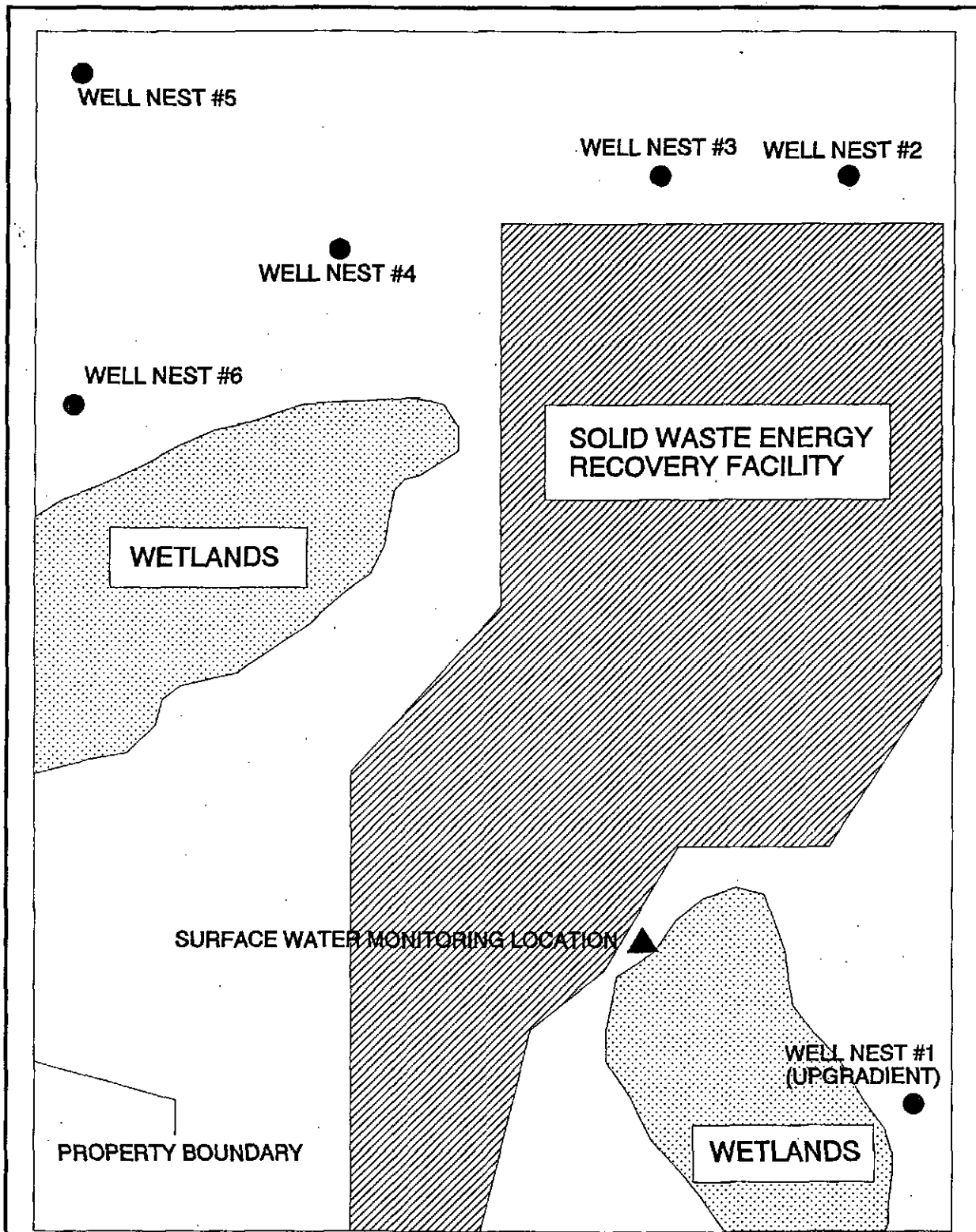
Work Order: 93-07-423

	<u>Test Description</u>	<u>Method</u>	<u>Prep</u>	<u>Run</u>	<u>Analyst</u>
Client No: AA38403	Priority Pollutant (BNA)	EPA_625	08/04/93	08/04/93	EP
OLI No: 11A	Corrosivity to Metal	EPA_1110	NA	08/10/93	KS
Matrix: Water	Gross Alpha/Gross Beta	EPA_900_0	NA	08/04/93	MJN
Collected: 07/28/93 10:00:00					

	<u>Test Description</u>	<u>Method</u>	<u>Prep</u>	<u>Run</u>	<u>Analyst</u>
Client No: AA38404	Priority Pollutant (BNA)	EPA_625	08/04/93	08/04/93	EP
OLI No: 12A	Corrosivity to Metal	EPA_1110	NA	08/10/93	KS
Matrix: Water	Gross Alpha/Gross Beta	EPA_900_0	NA	08/04/93	MJN
Collected: 07/28/93 10:00:00					

	<u>Test Description</u>	<u>Method</u>	<u>Prep</u>	<u>Run</u>	<u>Analyst</u>
Client No: AA38405	Cyanides, Total	EPA_335_2	08/17/93	08/17/93	RMT
OLI No: 13A					
Matrix: Water					
Collected: 07/28/93 10:00:00					

	<u>Test Description</u>	<u>Method</u>	<u>Prep</u>	<u>Run</u>	<u>Analyst</u>
Client No: Method Blank	Priority Pollutant (BNA)	EPA_625	08/04/93	08/04/93	EP
OLI No: 14A					
Matrix: Method Blank					
Collected: Not specified					



**MALCOLM  
PIRNIE**

LEE COUNTY - FORT MYERS FLORIDA  
 PROPOSED ON-SITE  
 MONITORING LOCATIONS

MALCOLM PIRNIE, INC

REVISED  
 FIGURE 13

November 1992