2C1d
Laubscher Meadows
LF
Vanderburgh County

June 25, 1997

MW-12D
MW-10R, MW-11R,
MW-12I, MW-13D,
MW-14D
MW-14R
MW-14D
Arsenic only included for MW-3R
JC 1/2/98

John Guerrettaz
Indiana Department of Environmental Management
100 North Senate
Indianapolis, Indiana 46204

Re: May 1997 Ground Water Analytical Report and Statistical Analysis Laubscher Meadows Landfill, Vanderburgh County, Evansville, Indiana

Dear Mr. Guerrettaz

In accordance with the Laubscher Meadows Landfill Operating Permit (FP 82-2, Part F) and all applicable IDEM regulations, submitted herewith, is the May 1997 Ground Water Analytical Report and Statistical Analysis for Laubscher Meadows Landfill.

Please note that both total and dissolved arsenic in monitoring well 3R, which is currently in assessment, passed statistically when compared to background monitoring wells in the R Zone.

Should you have any questions regarding the information submitted herein, or require additional information, please feel free to contact Mr. Mike McGovern at (281) 870 - 8100, or myself at (812) 963- 3295 ext. 17.

Sincerely,

Jeffrey W. Jenkins

Jeffrey W. Jenkins,
Landfill Manager, C.P.G.
Browning-Ferris Industries
Laubscher Meadows Landfill

JUL 3 11 04 AM '97

Laubscher Meadows Landfill · 6717 N. St. Joseph Ave. · Evansville, Indiana 47720
Phone 812-963-3295 · Fax 812-963-3575

30% Post-Consumer

All analytical Data
entered in Access DATA BASE

JG 2/3/98

All Water Levels
Entered into Access
DATABASE

JG 2/3/98

BROWNING-FERRIS INDUSTRIES

FIELD SAMPLE SUMMARY LOG

Page 1 of 2

Facility: LAUBSCHER MEADOWS

Location: EVANSVILLE, IL

Laboratory: HE-TAGE

Sample Dates: 5-12, 13, 14, 15

Monitoring Event: SEMI-ANNUAL

Lab #	Sample Point	SAMPLE PARAMETERS/CONTAINER						
		NH_3	TOTAL METALS	DISS. METALS	GEN. CHEM	COD	EXPANDED LIST FOR METALS	
		1L(P) H_2SO_4	1L (P) HNO_3	1L(P) FLTR HNO_3	1L(P) unP.	1L(P) H_2SO_4		
	MW-1R	5.13.97 •	X	X	X	X N/R	•	
	MW 10R	5.14.97	•	•	•	• N/R		
	MW 14D	5.13.97	•	•	•	• N/R		
	MW 13D	5.13.97	•	•	•	• N/R	•	
	MW 14R	5.14.97	•	•	•	• N/R		
	MW 13R	5.14.97	•	•	•	• N/R		
	MW 12I	5.14.97	•	•	•	• N/R		
	MW 2R	5.14.97	•	•	•	• N/R		
	MW 15D	5.14.97	•	•	•	• N/R		
	MW 3R	5.15.97	•	•	•	• N/R	•	
	MW 3R1	5.15.97	•	•	•	•		
	MW 3R2	5.15.97	•	•	•	•		
	MW 33I	5.15.97	•	•	•	• N/R		
	MW 33S	5.15.97	•	•	•	• N/R		

Comments:

Legend:

•	• DATE	• N/R	• INS.

•-Required Sample Parameter
Date-Date of Sample Collection (Date/Month/Year)
N/R-Not Requested
INS.-Insufficient Water for Sample
(G)-Glass Container
(P)-Plastic Container

JUL 3 11 05 AM '97
OFFICE OF SOLID WASTE MGMT. DEM

BROWNING-FERRIS INDUSTRIES

FIELD SAMPLE SUMMARY LOG

Page 2 of 2

Facility: Laubscher Meadows

Location: Evansville IN

Laboratory: Heitzse

Sample Dates: 5-12-13-14-15

Monitoring Event: Semi-Annual

Lab #	Sample Point	SAMPLE PARAMETERS/CONTAINER						
		NH3	Total Metals	Diss Metals	Gen chem	COD	Expanded List for Metals	
		1L(P) H2SO4	1L(P) HNO3	1L(P) FTR HNO3	1L(P) UNP	1L(P) H2SO4		
	MW5R	5-15-97	•	•	•	N/R	•	
	MW5R1	5-15-97	•	•	•	•		
	MW5R2	5-15-97	•	•	•	•		
	MW4R	5-15-97	•	•	•	N/R	•	
	MW1/D	5-15-97	•	•	•	N/R	•	
	FB	5-13-97	•	• N/R	•	N/R		
	MW4R Dup.	5-15-97	•	•	•	N/R		
	MW1/D Dup	5-13-97	•	•	•	N/R		
	Trip Blanks	5-12-97	•	•	•			

Comments:

Legend:

•	• DATE	• N/R	• INS.

•-Required Sample Parameter
Date-Date of Sample Collection (Date/Month/Year)
N/R-Not Requested
INS.-Insufficient Water for Sample
(G)-Glass Container
(P)-Plastic Container

BFI FIELD INFORMATION LOG (continued)

SAMPLING INFORMATION: **Sample Point ID:** MW2R

Method of Sampling: Grundfos Pump Dedicated: (Y) / N

Water Level @ Sampling, Feet: 9.92 Well Collection Sequence Number: 8

Parameters: Annual ( ) Semi-Annual (✓) Quarterly ( ) Monthly ( ) Other ( ) _____

SAMPLING DATA:

Date/Time	Sample Rate	Temp. (°C)	pH (std)	DO (mg/l)	eH (mV)	Turb. (NTU)	Spec Cond umhos/cm
5-14-97 10:50	VOA 68 100mL per min Other 74 1L per min	14.5	7.1	0.2	-1	17.1	820

INSTRUMENT CHECK DATA: see 10R

Turbidity Serial #: _____ ___ NTU std. = ___ NTU ___ NTU std. = ___ NTU

pH Serial #: _____ 4.0 std. = ___ 7.0 std. = ___ 10.0 std. = ___

Conductivity Serial #: _____ ___ umhos/cm = ___ ___ umhos/cm = ___

GENERAL INFORMATION:

Weather Conditions @ time of sampling: P Cloudy 59

Sample Characteristics: no color no oder

ANALYTE COLLECTION ORDER, CONTAINERS, PRESERVATIVES AND TESTS PERFORMED:

Field	VOA	Dis metals	T. Metal	NH3	Gen Chem
	2-40mL HCL	Fil 1L(P) HNO3	1L(P) HNO3	1L(P) H2SO4	1L(P) unp

COMMENTS AND OBSERVATIONS: _____

I certify that sampling procedures were in accordance with all applicable EPA, State and BFI protocols.

Date: 5/14/97 By: Steve O'Rourke Company: HES

BFI FIELD INFORMATION LOG

Facility: Laubscher Meadows

Sample Point ID: MW 2R

Location: Evansville, IN

Field Representative: Steve Askew

Sample Matrix: GW

Lab Sample #: A407960

Gascope Calibration: % Gas: 3 % LEL: 60
Gascope Reading: % Gas: 0 % LEL: 0

PURGE INFORMATION:

Method of Well Purge: Grundfos pump

Dedicated: (Y) / N

Date / Time Initiated: 5-13-97 1700

One (1) Casing Volume, Gal: 26.83

Initial Water Level, Feet: 9.16

Total Volume Purged, Gal: 38

Ground Water Elevation, MSL: 388.96

Was Well Purged To Dryness: Yes

Well Total Depth, Feet: 50.43

Water Level After Purge, Feet: NA

Casing Diameter, Inches: 4

Date / Time Completed: 5-13-97 1713

PURGE DATA:

Time	Purge Rate (gpm/htz)	Cumulative Volume	Temp. (°C)	pH (std units)	DO mg/l	eH (mV)	Turb. (NTU)	Spec Cond umhos/cm
1700	1/150	1	14.2	7.1	0.5	-2	15.3	835
1713	2/151	27	14.1	7.1	0.2	-9	15.3	852

BFI FIELD INFORMATION LOG (continued)

SAMPLING INFORMATION:
Method of Sampling: Groundofos pump

Sample Point ID: GW 3R
Dedicated: (Y)

Water Level @ Sampling, Feet: 10.98 Well Collection Sequence Number: 13

Parameters: Annual ( ) Semi-Annual (✓) Quarterly ( ) Monthly ( ) Other ( ) ____

SAMPLING DATA:

Date/Time	Sample Rate	Temp. (°C)	pH (std)	DO (mg/l)	eH (mV)	Turb. (NTU)	Spec Cond umhos/cm
5/15/97 10:20	VOA 76 100mL permin Other 79 1L permin	15.0	6.87	.02	10	8.91	7 60

INSTRUMENT CHECK DATA: See 12I

Turbidity Serial #: ____ ___ NTU std. = ___ NTU ___ NTU std. = ___ NTU

pH Serial #: ____ 4.0 std. = ___ 7.0 std. = ___ 10.0 std. = ____

Conductivity Serial #: ____ ___ umhos/cm = ____ ___ umhos/cm = ____

GENERAL INFORMATION:

Weather Conditions @ time of sampling: Sunny 64

Sample Characteristics: no color no odor

ANALYTE COLLECTION ORDER, CONTAINERS, PRESERVATIVES AND TESTS PERFORMED:

Field, VOA	Dis Metal	T. Metals	NH3	Gen chem
2-40ml HCL	FIT 1L(P) HNO3	1L(P) HNO3	1L(P) H2SO4	1L(P) unp

COMMENTS AND OBSERVATIONS: ____

I certify that sampling procedures were in accordance with all applicable EPA, State and BFI protocols.

Date: 5 15 97 By: Steve Osborn Company: HeS

Rev. ... 95

BFI FIELD INFORMATION LOG

Facility: Laubscher Meadows

Sample Point ID: MW 3R

Location: Evansville, IN

Field Representative: Steve Askew.

Sample Matrix: GW

Lab Sample #: A408107

Gascope Calibration: % Gas: 3 % LEL: 60
Gascope Reading: % Gas: 0 % LEL: 0

PURGE INFORMATION:

Method of Well Purge: Grundfos pump

Dedicated: (Y) N

Date . Time Initiated: 5/14/97 11:52

One (1) Casing Volume, Gal: 22.04

Initial Water Level, Feet: 10.64

Total Volume Purged, Gal: 46

Ground Water Elevation, MSL: 386.33

Was Well Purged To Dryness: yes

Well Total Depth, Feet: 44.55

Water Level After Purge, Feet: NA

Casing Diameter, Inches: 4

Date . Time Completed: 5/14/97 123

PURGE DATA:

Time	Purge Rate (gpm/htz)	Cumulative Volume	Temp. (°C)	pH (std units)	DO mg/l	eH (mV)	Turb. (NTU)	Spec Cond umhos/cm
11:52	/103	1	15.3	7.3	.44	-2	23.4	817
12:11	1.16/114	23	15.6	7.3	.13	-2	9.18	822
1236	/156	45	15.7	7.3	.58	-2	8.13	822

BFI FIELD INFORMATION LOG (continued)

SAMPLING INFORMATION:
Method of Sampling: Groundofos pump

Sample Point ID: MW3R1
Dedicated: Y

Water Level @ Sampling, Feet: 14.15 Well Collection Sequence Number: 12

Parameters: Annual ( ) Semi-Annual (✓) Quarterly ( ) Monthly ( ) Other ( ) ____

SAMPLING DATA:

Date/Time	Sample Rate	Temp. (°C)	pH (std)	DO (mg/l)	eH (mV)	Turb. (NTU)	Spec Cond umhos/cm
5/15/97 1010	VOA 81 100mL per min Other 89 1L per min	14.9	6.94	2.29	9	4.21	1005

INSTRUMENT CHECK DATA: See 12I

Turbidity Serial #: ____ ____ NTU std. = ____ NTU ____ NTU std. = ____ NTU

pH Serial #: ____ 4.0 std. = ____ 7.0 std. = ____ 10.0 std. = ____

Conductivity Serial #: ____ ____ umhos/cm = ____ ____ umhos/cm = ____

GENERAL INFORMATION:

Weather Conditions @ time of sampling: Sunny 64

Sample Characteristics: ____

ANALYTE COLLECTION ORDER, CONTAINERS, PRESERVATIVES AND TESTS PERFORMED:

Field	Dis Metals	T. Metal	NH3-COD	Gen chem
	FiT 1L(P) HNO3	1L(P) ~~Metals~~ HNO3	1L(P) H2SO4	1L(P) unp

COMMENTS AND OBSERVATIONS. ____

I certify that sampling procedures were in accordance with all applicable EPA, State and BFI protocols.

Date: 5/15/97 By: [signature] Company: HES

Rev. ... 95

BFI FIELD INFORMATION LOG

Facility: Laubscher Meadows

Sample Point ID: MW 3R1

Location: Evansville, IN

Field Representative: Steve Askew

Sample Matrix: GW

Lab Sample #: A408115

Gascope Calibration: % Gas: 3 % LEL: 60
Gascope Reading: % Gas: ø % LEL: ø

PURGE INFORMATION:

Method of Well Purge: Grundofos pump

Dedicated: Y N

Date . Time Initiated: 5/14/97 11:30

One (1) Casing Volume, Gal: 11.66

Initial Water Level, Feet: 12.22

Total Volume Purged, Gal: 12.1

Ground Water Elevation, MSL: 384.61

Was Well Purged To Dryness: YES

Well Total Depth, Feet: 30.16

Water Level After Purge, Feet: NA

Casing Diameter, Inches: 4

Date . Time Completed: 5-14-97 11:47

PURGE DATA:

Time	Purge Rate (gpm/htz)	Cumulative Volume	Temp. (°C)	pH (std units)	DO mg/l	eH (mV)	Turb. (NTU)	Spec Cond umhos/cm
11:30	/91	1	14.5	7.3	3.1	-2	23.9	928
11:45	.73/112	12	15.2	7.2	1.5	-1	15.7	927

BFI FIELD INFORMATION LOG (continued)

SAMPLING INFORMATION: **Sample Point ID:** MW 3R2

Method of Sampling: Grundfos Pump Dedicated: ⊗ / N

Water Level @ Sampling, Feet: 13.73 Well Collection Sequence Number: 11

Parameters: Annual ( ) Semi-Annual (✓) Quarterly ( ) Monthly ( ) Other ( ) _____

SAMPLING DATA:

Date/Time	Sample Rate	Temp. (°C)	pH (std)	DO (mg/l)	eH (mV)	Turb. (NTU)	Spec Cond umhos/cm
5/15/97 957	VOA 75 100mL per min Other 80 1L per min	14.1	6.9	1.16	7	6.89	1226

INSTRUMENT CHECK DATA: see MW 12I

Turbidity Serial #: _____ ___ NTU std. = ___ NTU ___ NTU std. = ___ NTU

pH Serial #: _____ 4.0 std. = ___ 7.0 std. = ___ 10.0 std. = _____

Conductivity Serial #: _____ ___ umhos/cm = ___ ___ umhos/cm = _____

GENERAL INFORMATION:

Weather Conditions @ time of sampling: Sunny 64

Sample Characteristics: No color No odor

ANALYTE COLLECTION ORDER, CONTAINERS, PRESERVATIVES AND TESTS PERFORMED:

Field	VOA	Dis Metal	T. Metals	NH3-COD	Gen chem
	2-40mL HCL	FiT 1L(P) HNO3	1 L(P) HNO3	1 L(P) H2SO4	1 L(P) Unp

COMMENTS AND OBSERVATIONS: _____

I certify that sampling procedures were in accordance with all applicable EPA, State and BFI protocols.

Date: 5/15/97 By: [signature] Company: HES

Revision 1995

BFI FIELD INFORMATION LOG

Facility: Larbscher Meadows

Sample Point ID: MW 3R 2

Location: Evansville, IN

Field Representative: Steve Askew

Sample Matrix: GW

Lab Sample #: A408114

Gascope Calibration: % Gas: 3 % LEL: 60
Gascope Reading: % Gas: 0 % LEL: 0

PURGE INFORMATION:

Method of Well Purge: Grundofos pump

Dedicated: Y / N

Date / Time Initiated: 5/14/97 11:05

One (1) Casing Volume, Gal: 5.1

Initial Water Level, Feet: 12.33

Total Volume Purged, Gal: 5.5

Ground Water Elevation, MSL: 384.56

Was Well Purged To Dryness: yes

Well Total Depth, Feet: 20.17

Water Level After Purge, Feet: NA

Casing Diameter, Inches: 4

Date / Time Completed: 5-14-97 11:

PURGE DATA:

Time	Purge Rate (gpm/htz)	Cumulative Volume	Temp. (°C)	pH (std units)	DO mg/l	eH (mV)	Turb. (NTU)	Spec Cond umhos/cm
11:05	181	1	13.7	7.5	7.4	-3	14.3	940
11:20	189	29 ~~5.4~~ 5.4	13.8	7.2	5.0	-1	18.5	936

Revision 1995

BFI FIELD INFORMATION LOG (continued)

Dup

SAMPLING INFORMATION: Sample Point ID: GW 4R

Method of Sampling: Grundfos pump Dedicated: Y / N

Water Level @ Sampling, Feet: 5.32 Well Collection Sequence Number: 18

Parameters: Annual ( ) Semi-Annual (✓) Quarterly ( ) Monthly ( ) Other ( ) _____

SAMPLING DATA:

Date/Time	Sample Rate	Temp. (°C)	pH (Std. Units)	Conduct. (µmhos/cm)	Turb. (NTU)	Other EH ____	Other DO ____
5/15/97 11:45	VOA 57 ml/min Other 68 ml/min	14.4	6.77	1073	17.5	15	1.46

INSTRUMENT CHECK DATA: see 12I

Turbidity Serial #: _____ ___ NTU std. = ___ NTU ___ NTU std. = ___ NTU

pH Serial #: _____ 4.0 std. = ___ 7.0 std. = ___ 10.0 std. = ___

Conductivity Serial #: _____ ___ umhos/cm = ___ ___ umhos/cm = ___

GENERAL INFORMATION:

Weather Conditions @ time of sampling: ~~Sunny~~ Cloudy 60

Sample Characterisitics: No color No odor

ANALYTE COLLECTION ORDER, CONTAINERS, PRESERVATIVES AND TESTS PERFORMED:

Field	VOA	Dis Metals	T. Metals	NH3	Gen chem
	2-40 ml HCL	FT 1L (P) HNO3	1L (P) HNO3	1L (P) H2SO4	1L (P) unp

COMMENTS AND OBSERVATIONS: _____

I certify that sampling procedures were in accordance with all applicable EPA, State and BFI protocols.

Date: 5/15/97 By: [signature] Company: HES

BFI FIELD INFORMATION LOG

Facility: Laubscher Meadows

Sample Point ID: MW 4R

Location: Evansville IN

Field Representative: Steve Askew

Sample Matrix: GW

Lab Sample #: A408110

Gascope Calibration: % Gas: 3 % LEL: 60
Gascope Reading: % Gas: 0 % LEL: 0

PURGE INFORMATION:

Method of Well Purge: GrundFos Pump Dedicated: (Y) / N

Date / Time Initiated: 5/14/97 1745

One (1) Casing Volume, Gal: 22.80

Initial Water Level, Feet: 5.08

Total Volume Purged, Gal: 51

Ground Water Elevation, MSL: 386.37

Was Well Purged To Dryness: yes

Well Total Depth, Feet: 40.17

Water Level After Purge, Feet: NA

Casing Diameter, Inches: 4

Date / Time Completed: 5/14/97 1820

PURGE DATA:

Time	Purge Rate (gpm/htz)	Cumulative Volume	Temp. (C)	pH (std units)	Conduct. (mhos/cm)	Turb. (NTU)	Other EH ( )	DO
1745	/105	1	14.6	6.60	1116	9.92	20	.26
1805	1.1/115	23	15.0	6.7	1108	1.86	10	.12
1818	1.77/150	46	15.	6.8	1100	14.5	8	.17

BFI FIELD INFORMATION LOG (continued)

SAMPLING INFORMATION: Sample Point ID: MW 4D

Method of Sampling: Grundfos pump Dedicated: (Y) / N

Water Level @ Sampling, Feet: 13.87 Well Collection Sequence Number: 19

Parameters: Annual ( ) Semi-Annual (✓) Quarterly ( ) Monthly ( ) Other ( ) _____

SAMPLING DATA:

Date/Time	Sample Rate	Temp. (°C)	pH (Std. Units)	Conduct. (µmhos/cm)	Turb. (NTU)	Other EH	Other DO
5/15/97 1259	VOA 75 1 gal/min Other _____	15.1	6.7	933	1.17	19	.05

INSTRUMENT CHECK DATA: See MW 336

Turbidity Serial #: _____ ___ NTU std. = ___ NTU ___ NTU std. = ___ NTU

pH Serial #: _____ 4.0 std. = ___ 7.0 std. = ___ 10.0 std. = ___

Conductivity Serial #: _____ ___ umhos/cm = ___ ___ umhos/cm = ___

GENERAL INFORMATION:

Weather Conditions @ time of sampling: ~~Sunny~~ Cloudy

Sample Characterisitics: No color no odor

ANALYTE COLLECTION ORDER, CONTAINERS, PRESERVATIVES AND TESTS PERFORMED:

Field	VOA	Dis Metals	Metals	NH3	Gen chem
	2-40mL VOA	F.T. 1L(P) HNO3	1L(P) HNO3	1L(P) H2SO4	1L(P) unp

COMMENTS AND OBSERVATIONS: _____

I certify that sampling procedures were in accordance with all applicable EPA, State and BFI protocols.

Date: 5/15/97 By: Steve Osborne Company: HES

BFI FIELD INFORMATION LOG

Facility: Laubscher pump

Sample Point ID: MW 4D

Location: Evansville, IN

Field Representative: Steve Askew

Sample Matrix: Gw

Lab Sample #: A408113

Gascope Calibration: % Gas: 3 % LEL: 60
Gascope Reading: % Gas: ø % LEL: ø

PURGE INFORMATION:

Method of Well Purge: Grundfos pump Dedicated: Y / N

Date / Time Initiated: 5-15-97 1156

One (1) Casing Volume, Gal: 31

Initial Water Level, Feet: 4.58

Total Volume Purged, Gal: 94

Ground Water Elevation, MSL: 387.47

Was Well Purged To Dryness: No

Well Total Depth, Feet: 52.27

Water Level After Purge, Feet: 13.87

Casing Diameter, Inches: 4

Date / Time Completed: 5/15/97 1258

PURGE DATA:

Time	Purge Rate (gpm/htz)	Cumulative Volume	Temp. (C)	pH (std units)	Conduct. (mhos/cm)	Turb. (NTU)	Other EM ( )	Other DO
11:56	/107	1	14.6	6.7	887	6.25	17	.16
12.21	1.24/107	32	15.1	6.7	935	5.80	19	.06
12:48	1.78/106	80	15.1	6.7	951	~~95~~ 1.78	19	.07
12:52	1.25/116	85	15.1	6.7	949	1.33	19	.06
12 57	/116	93	15.1	6.7	933	1.17	19	.05

BFI FIELD INFORMATION LOG (continued)

SAMPLING INFORMATION: **Sample Point ID:** MW 5R

Method of Sampling: Grundofos Pump Dedicated: (Y) N

Water Level @ Sampling, Feet: 7.71 Well Collection Sequence Number: 14

Parameters: Annual ( ) Semi-Annual (✓) Quarterly ( ) Monthly ( ) Other ( ) _____

SAMPLING DATA:

Date/Time	Sample Rate	Temp. (°C)	pH (std)	DO (mg/l)	eH (mV)	Turb. (NTU)	Spec Cond umhos/cm
5/15/97 1045	VOA 65 100mL per min Other 65 1 L per min	15.1	6.86	1.85	10	20.1	~~948~~ 948

INSTRUMENT CHECK DATA: See 12I

Turbidity Serial #: _____ ___ NTU std. = ___ NTU ___ NTU std. = ___ NTU

pH Serial #: _____ 4.0 std. = ___ 7.0 std. = ___ 10.0 std. = ___

Conductivity Serial #: _____ ___ umhos/cm = ___ ___ umhos/cm = ___

GENERAL INFORMATION:

Weather Conditions @ time of sampling: Sunny 65

Sample Characteristics: no color no odor

ANALYTE COLLECTION ORDER, CONTAINERS, PRESERVATIVES AND TESTS PERFORMED:

Field	VOA	bis Metals	T. Metals	NH3	gen chem
	2-40mL HCL	FT 1L (P) HNO3	1L (P) HNO3	1L (P) H2SO4	1L (P) UNP

COMMENTS AND OBSERVATIONS: _____

I certify that sampling procedures were in accordance with all applicable EPA, State and BFI protocols.

Date: 5/15/97 By: Steve Osker Company: HES

BFI FIELD INFORMATION LOG

Facility: Laubscher Meadows

Sample Point ID: MW5R

Location: Evansville IN

Field Representative: Steve Raske

Sample Matrix: GW

Lab Sample #: A408108

Gascope Calibration: % Gas: 3 % LEL: 60
Gascope Reading: % Gas: 0 % LEL: 0

PURGE INFORMATION:

Method of Well Purge: Grundfos pump

Dedicated: Y / N

Date / Time Initiated: 5/14/97

One (1) Casing Volume, Gal: 22.8l

Initial Water Level, Feet: 6.98

Total Volume Purged, Gal: 33gl

Ground Water Elevation, MSL: 389.33

Was Well Purged To Dryness: yes

Well Total Depth, Feet: 42.08

Water Level After Purge, Feet: NA

Casing Diameter, Inches: 4

Date / Time Completed: 5/14/97 1625

PURGE DATA:

Time	Purge Rate (gpm/htz)	Cumulative Volume	Temp. (°C)	pH (std units)	DO mg/l	eH (mV)	Turb. (NTU)	Spec Cond umhos/cm
1544	/78	1	15.4	7.3	0185	-2	3.9	893
1614	.73/130	23	15.3	7.1	.30	-9	3.7	937

BFI FIELD INFORMATION LOG

Facility: Laubscher Meadows

Sample Point ID: SR1

Location: Evansville, IN

Field Representative: Steve Askew

Sample Matrix: GW

Lab Sample #: A408116

Gascope Calibration: % Gas: 3 % LEL: 60
Gascope Reading: % Gas: 0 % LEL: 0

PURGE INFORMATION:

Method of Well Purge: Groundofos pump

Dedicated: (Y) / N

Date / Time Initiated: 5/18/97

One (1) Casing Volume, Gal: 13.12

Initial Water Level, Feet: 7.57

Total Volume Purged, Gal: 15 Gal

Ground Water Elevation, MSL: 388.86

Was Well Purged To Dryness: yes

Well Total Depth, Feet: 27.76

Water Level After Purge, Feet: NA

Casing Diameter, Inches: 4

Date / Time Completed: 5-14-97 1647

PURGE DATA:

Time	Purge Rate (gpm/htz)	Cumulative Volume	Temp. (°C)	pH (std units)	DO mg/l	eH (mV)	Turb. (NTU)	Spec Cond umhos/cm
1630	188	1	13.9	7.3	5.7	-2	5.3	1077
1645	190	14	14.9	7.2	3.08	-16	6.9	1048

BFI FIELD INFORMATION LOG (continued)

SAMPLING INFORMATION:
Method of Sampling: Grundofos Pump
Sample Point ID: MW5R1
Dedicated: (Y) N

Water Level @ Sampling, Feet: 9.86
Well Collection Sequence Number: 15

Parameters: Annual ( ) Semi-Annual (✓) Quarterly ( ) Monthly ( ) Other ( ) _____

SAMPLING DATA:

Date/Time	Sample Rate	Temp. (°C)	pH (std)	DO (mg/l)	eH (mV)	Turb. (NTU)	Spec Cond umhos/cm
5/15/97 11:00	VOA 72 100mL per min Other 78 L per min	14.0	6.84	3.36	11	6.39	1134

INSTRUMENT CHECK DATA: See 12I

Turbidity Serial #: _____ ___ NTU std. = ___ NTU ___ NTU std. = ___ NTU

pH Serial #: _____ 4.0 std. = ___ 7.0 std. = ___ 10.0 std. = ___

Conductivity Serial #: _____ ___ umhos/cm = ___ ___ umhos/cm = ___

GENERAL INFORMATION:

Weather Conditions @ time of sampling: Sunny/PCloudy 65

Sample Characteristics: No Color no Oder

ANALYTE COLLECTION ORDER, CONTAINERS, PRESERVATIVES AND TESTS PERFORMED:

Field	VOA	Dis Metals	T. Metals	COD NH3	Genchem
	2-40mL HCL	Fil, 1L(P) HNO3	1L(P) HNO3	1L(P) H2SO4	1L(P) unp

COMMENTS AND OBSERVATIONS: _____

I certify that sampling procedures were in accordance with all applicable EPA, State and BFI protocols.

Date: 5/15/97 By: Steve Oster Company: HES

Revision 1995

BFI FIELD INFORMATION LOG (continued)

SAMPLING INFORMATION: **Sample Point ID:** MW 5R2

Method of Sampling: Grundofos pump **Dedicated:** (Y) N

Water Level @ Sampling, Feet: 8.11 Well Collection Sequence Number: 16

Parameters: Annual ( ) Semi-Annual (✓) Quarterly ( ) Monthly ( ) Other ( ) _____

SAMPLING DATA:

Date/Time	Sample Rate	Temp. (°C)	pH (std)	DO (mg/l)	eH (mV)	Turb. (NTU)	Spec Cond umhos/cm
5/15/97 11:11	VOA 54 liters per min Other 64 liters per min	13.5	6.84	2.28	11	3.76	1421

INSTRUMENT CHECK DATA: See 12I

Turbidity Serial #: _____ ___ NTU std. = ___ NTU ___ NTU std. = ___ NTU

pH Serial #: _____ 4.0 std. = ___ 7.0 std. = ___ 10.0 std. = ___

Conductivity Serial #: _____ ___ umhos/cm = ___ ___ umhos/cm = ___

GENERAL INFORMATION:

Weather Conditions @ time of sampling: Sunny / Pcloudy 64

Sample Characteristics: No color no ODER

ANALYTE COLLECTION ORDER, CONTAINERS, PRESERVATIVES AND TESTS PERFORMED:

Field VOA	Dis Metals	T. Metals	COD & NH3	Gen chem
240 mL HCL	F.T 1L(P) HNO3	1L(P) HNO3	1L(P) H2SO4	1L(P) Unp

COMMENTS AND OBSERVATIONS: _____

I certify that sampling procedures were in accordance with all applicable EPA, State and BFI protocols.

Date: 5/15/97 By: Steve Osten Company: HES

Revision 1995

BFI FIELD INFORMATION LOG

Facility: Haubscher Meadows

Sample Point ID: MW 5R2

Location: Evansville IN

Field Representative: Steve Asken

Sample Matrix: GW

Lab Sample #: A408117

Gascope Calibration: % Gas: 3 % LEL: 60
Gascope Reading: % Gas: 0 % LEL: 0

PURGE INFORMATION:

Method of Well Purge: Grundfos pump

Dedicated: (Y) / N

Date / Time Initiated: 5/14/97

One (1) Casing Volume, Gal: 7.13

Initial Water Level, Feet: 7.62

Total Volume Purged, Gal: 8 gal

Ground Water Elevation, MSL: 388.69

Was Well Purged To Dryness: yes

Well Total Depth, Feet: 18.59

Water Level After Purge, Feet: NA

Casing Diameter, Inches: 4

Date / Time Completed: 5/14/97 1700

PURGE DATA:

Time	Purge Rate (gpm/htz)	Cumulative Volume	Temp. (°C)	pH (std units)	DO mg/l	eH (mV)	Turb. (NTU)	Spec Cond umhos/cm
1650	178	1	13.2	7.4	4.1	-2	1.41	1480
1658	178	7.5	13.9	7.3	1.4	-2	4.8	1505

BFI FIELD INFORMATION LOG (continued)

SAMPLING INFORMATION: Sample Point ID: 10R

Method of Sampling: Grundfos pump Dedicated: (Y) / N

Water Level @ Sampling, Feet: 12.19 Well Collection Sequence Number: 4

Parameters: Annual ( ) Semi-Annual (✓) Quarterly ( ) Monthly ( ) Other ( ) _____

SAMPLING DATA:

Date/Time	Sample Rate	Temp. (°C)	pH (Std. Units)	Conduct. (µmhos/cm)	Turb. (NTU)	Other ____ (____)	
5-14-97 / 8:00 am	VOA 74 100mL per min Other 81. 1L per min	13.8	6.64	863	23.6	EH 15	DO .4

INSTRUMENT CHECK DATA:

Turbidity Serial #: 960600010924 ~~5.41~~ 0.100 NTU std. = ~~5.4~~ 55.1 NTU 0.10 NTU std. = 5.4 NTU

pH Serial #: 54510025 4.0 std. = 4.0 7.0 std. = 7.0 10.0 std. = 10.0

Conductivity Serial #: 62234033 1413 umhos/cm = 1670 12.9 umhos/cm = 11.0

Dis O_2 61376037 S/ 1.0

GENERAL INFORMATION:

Weather Conditions @ time of sampling: PCloudy Temp 53

Sample Characterisitics: No color No odor

ANALYTE COLLECTION ORDER, CONTAINERS, PRESERVATIVES AND TESTS PERFORMED:

Field, VOA	Dis Metals	T Metals	NH3	Gen chem
2-40mL HCL	F.H. L(P) HNO3	L(P) HNO3	L(P) H2SO4	L(P) unp

COMMENTS AND OBSERVATIONS: _____

I certify that sampling procedures were in accordance with all applicable EPA, State and BFI protocols.

Date: 5/14/97 By: Steve Ashen Company: HES

PAGE 2 OF 2

BFI FIELD INFORMATION LOG

Facility: Laubscher Meadow Evansville IN

Location: ~~[illegible]~~

Sample Matrix: GW

Sample Point ID: 10R

Field Representative: Steve Askew

Lab Sample #: A407957

Gascope Calibration: % Gas: 3 % LEL: 60
Gascope Reading: % Gas: Ø % LEL: Ø

PURGE INFORMATION:

Method of Well Purge: Grundofos pump. Dedicated: (Y) N

Date / Time Initiated: 5-13-97 0803

One (1) Casing Volume, Gal: 26.34

Initial Water Level, Feet: 12.16

Total Volume Purged, Gal: 35

Ground Water Elevation, MSL: 387.32

Was Well Purged To Dryness: yes

Well Total Depth, Feet: 52.69

Water Level After Purge, Feet: NA

Casing Diameter, Inches: 4

Date / Time Completed: 5-13-97 0924

PURGE DATA:

Time	Purge Rate (gpm/htz)	Cumulative Volume	Temp. (C)	pH (std units)	Conduct. (mhos/cm)	Turb. (NTU)	Other DO ( )	Other CH
0803	/84	1	14.0	6.9	880	8.2	1.5	-6
0908	0.4/138	27	14.9	7.0	829	10.7	0.1	-9

BFI FIELD INFORMATION LOG (continued)

SAMPLING INFORMATION:
Method of Sampling: Grundfos pump

Sample Point ID: MW11R
Dedicated: (Y)

Water Level @ Sampling, Feet: 25.14 Well Collection Sequence Number: 3

Parameters: Annual ( ) Semi-Annual (✓) Quarterly ( ) Monthly ( ) Other ( ) _____

SAMPLING DATA:

Date/Time	Sample Rate	Temp. (°C)	pH (std)	DO (mg/l)	eH (mV)	Turb. (NTU)	Spec Cond umhos/cm
5-13-97 1406	VOA 101 100mL pm Other 108 1L pm	14.5	7.4	1.3	-3	13	760

INSTRUMENT CHECK DATA:

Turbidity Serial #: 96060001024 0.10 NTU std. = 5.4 NTU 0.100 NTU std. = 55.4 NTU

pH Serial #: 54510025 4.0 std. = 4.0 7.0 std. = 7.0 10.0 std. = 10.0

Conductivity Serial #: 62234033 14.3 umhos/cm = 15.9 12.9 umhos/cm = 10.9
Diss Oz. 61376037 Slope 1.00

GENERAL INFORMATION:

Weather Conditions @ time of sampling: par cloudy/sunny 57

Sample Characteristics: No color or odor

ANALYTE COLLECTION ORDER, CONTAINERS, PRESERVATIVES AND TESTS PERFORMED:

Field, VOA	Dis Metals	T. Metals	NH3	Gen Chem
2-40ml vial HCL	PIT, 1L (P) HNO3	1L (P) HNO3	1L (P) H2SO4	1L (P) unp

COMMENTS AND OBSERVATIONS: _____

I certify that sampling procedures were in accordance with all applicable EPA, State and BFI protocols.

Date: 5/13/97 By: [signature] Company: HES

BFI FIELD INFORMATION LOG

Facility: Laubscher Meadows

Sample Point ID: MW 11R

Location: Evansville, Ind

Field Representative: Chris Wright

Sample Matrix: Gas

Lab Sample #: A407861

Gascope Calibration: % Gas: 3 % LEL: 60

Gascope Reading: % Gas: Ø % LEL: Ø

PURGE INFORMATION:

Method of Well Purge: Well Grundfos Pump

Dedicated: Y / N

Date / Time Initiated: 5-12-97 / 1655

One (1) Casing Volume, Gal: 30.32

Initial Water Level, Feet: 3.77

Total Volume Purged, Gal: 33.5

Ground Water Elevation, MSL: 395.77

Was Well Purged To Dryness: YES

Well Total Depth, Feet: 50.42

Water Level After Purge, Feet: N/A

Casing Diameter, Inches: 4

Date / Time Completed: 5-12-97 / 1804

PURGE DATA:

Time	Purge Rate (gpm/htz)	Cumulative Volume	Temp. (°C)	pH (std units)	DO mg/l	eH (mV)	Turb. (NTU)	Spec Cond umhos/cm
1657	1/53	1	13.7	8.1	3.9	62	7.3	765
1800	0.5/149	31	14.1	7.8	0.4	-43	9.0	771
5-13-97 1406			14.5	7.4	1.3	-3	13.0	760

BFI FIELD INFORMATION LOG (continued)

SAMPLING INFORMATION:
Method of Sampling: Grundfos pump

Sample Point ID: MW 12 I
Dedicated: Y

Water Level @ Sampling, Feet: 35.14 Well Collection Sequence Number: 7

Parameters: Annual ( ) Semi-Annual (✓) Quarterly ( ) Monthly ( ) Other ( ) ____

SAMPLING DATA:

Date/Time	Sample Rate	Temp. (°C)	pH (std)	DO (mg/l)	eH (mV)	Turb. (NTU)	Spec Cond umhos/cm
5/14/97 1019	VOA 120 100 mL per min Other 124 1L per min	15.1	7.0	.23	-2	9.82	684

INSTRUMENT CHECK DATA:

Turbidity Serial #: 96060010924 0-100 NTU std. = 54.7 NTU 0-10 NTU std. = 5.4 NTU

pH Serial #: 54510025 4.0 std. = 4.0 7.0 std. = 7.0 10.0 std. = 10.0

Conductivity Serial #: 62234033 1413 umhos/cm = 1642 12.9 umhos/cm = 11.0

Dis O2 61376037 5 / 1.0

GENERAL INFORMATION:

Weather Conditions @ time of sampling: PCloudy, 58

Sample Characteristics: no color no oder

ANALYTE COLLECTION ORDER, CONTAINERS, PRESERVATIVES AND TESTS PERFORMED:

Field VOA	Dis Metals	T. Metal	NH3	Gen chem
2-40mL HCL	F.T. 1L(P) HNO3	1L(P) HNO3	1L(P) H2SO4	1L(P) unp

COMMENTS AND OBSERVATIONS: ____

I certify that sampling procedures were in accordance with all applicable EPA, State and BFI protocols.

Date: 5·14·97 By: [signature] Company: HES

Rev. ... 95

BFI FIELD INFORMATION LOG

Facility: Laubscher Meadows

Sample Point ID: MW 12 I

Location: Evansville IN

Field Representative: Steve Ashen.

Sample Matrix: GW

Lab Sample #: A407961

Gascope Calibration: % Gas: 3 % LEL: 60

Gascope Reading: % Gas: Ø % LEL: Ø

PURGE INFORMATION:

Method of Well Purge: Grundofos pump

Dedicated: (Y) N

Date . Time Initiated: 5-14/97 9:20

One (1) Casing Volume, Gal: 20.12

Initial Water Level, Feet: 18.53

Total Volume Purged, Gal: 64

Ground Water Elevation, MSL: 383.96

Was Well Purged To Dryness: NO

Well Total Depth, Feet: 49.49

Water Level After Purge, Feet: 35.14

Casing Diameter, Inches: 4

Date . Time Completed: 5-14-97 - 1019

PURGE DATA:

Time	Purge Rate (gpm/htz)	Cumulative Volume	Temp. (°C)	pH (std units)	DO mg/l	eH (mV)	Turb. (NTU)	Spec Cond umhos/cm
9:20	/110	1	14.7	7.1	1.3	-7	13.6	743
9:40	1/115	21	15.1	7.0	.43	-3	6.7	686
1010	.96/140	50	15.0	7.0	.42	-1	12.3	682
1014	1.25/140	55	15.	7.0	.33	-1	12.3	684
1019	.62/128	63	15.1	7.0	.23	-2	9.82	684

BFI FIELD INFORMATION LOG (continued)

SAMPLING INFORMATION: Sample Point ID: 13R

Method of Sampling: Grundfos pump Dedicated: (Y)

Water Level @ Sampling, Feet: 35.08 Well Collection Sequence Number: 56

Parameters: Annual ( ) Semi-Annual (✓) Quarterly ( ) Monthly ( ) Other ( ) _____

SAMPLING DATA:

Date/Time	Sample Rate	Temp. (°C)	pH (std)	DO (mg/l)	eH (mV)	Turb. (NTU)	Spec Cond umhos/cm
5-14-97 9:00AM	VOA 124 100mL per min Other 1321L per min	14.9	7.3	4.5	-19	12.9	741

INSTRUMENT CHECK DATA: see 10R

Turbidity Serial #: _____ ___ NTU std. = ___ NTU ___ NTU std. = ___ NTU

pH Serial #: _____ 4.0 std. = ___ 7.0 std. = ___ 10.0 std. = ___

Conductivity Serial #: _____ ___ umhos/cm = ___ ___ umhos/cm = ___

GENERAL INFORMATION:

Weather Conditions @ time of sampling: PCloudy 54

Sample Characteristics: no color no oder

ANALYTE COLLECTION ORDER, CONTAINERS, PRESERVATIVES AND TESTS PERFORMED:

Field ~~Dis Met~~	VOA	Dis Metals	T. Metals	NH3	Gen chem
	2-40mL HCL	~~pH~~ 1L(P) HNO3	1L(P) HNO3	1L(P) H2SO4	1L(P) unp

COMMENTS AND OBSERVATIONS: _____

I certify that sampling procedures were in accordance with all applicable EPA, State and BFI protocols.

Date: 5 14 97 By: Steve O'Neill Company: HES

Rev. ... 095

BFI FIELD INFORMATION LOG

Facility: Laubscher Meadows

Sample Point ID: MW 13R

Location: Evansville IN

Field Representative: Steve Askew

Sample Matrix: GW

Lab Sample #: A407959

Gascope Calibration: % Gas: 3 % LEL: 60

Gascope Reading: % Gas: 0 % LEL: 0

PURGE INFORMATION:

Method of Well Purge: Grundfos pump

Dedicated: (Y) N

Date . Time Initiated: 5-13-97 1609

One (1) Casing Volume, Gal: 15.75

Initial Water Level, Feet: 19.35

Total Volume Purged, Gal: 23gal

Ground Water Elevation, MSL: 386.41

Was Well Purged To Dryness: yes

Well Total Depth, Feet: 43.58

Water Level After Purge, Feet: NA

Casing Diameter, Inches: 4

Date . Time Completed: 5-13-97 1639

PURGE DATA:

Time	Purge Rate (gpm/htz)	Cumulative Volume	Temp. (°C)	pH (std units)	DO mg/l	eH (mV)	Turb. (NTU)	Spec Cond umhos/cm
1609	/105	1	15.2	7.1	2.9	-2	5.0	746
1639	0.5/141	16	15.1	6.9	2.4	-6	1.7	738

BFI FIELD INFORMATION LOG (continued)

SAMPLING INFORMATION:
Method of Sampling: Grundfos pump

Sample Point ID: MW13D
Dedicated: (Y)

Water Level @ Sampling, Feet: _____ Well Collection Sequence Number: 2

Parameters: Annual ( ) Semi-Annual (✓) Quarterly ( ) Monthly ( ) Other ( ) _____

SAMPLING DATA:

Date/Time	Sample Rate	Temp. (°C)	pH (std)	DO (mg/l)	eH (mV)	Turb. (NTU)	Spec Cond umhos/cm
5-13-97 12:55	VOA 117 100 mL per min Other 117 1L. Min	14.5	7.3	0.4	-2	1.4	689

INSTRUMENT CHECK DATA: See 10R

Turbidity Serial #: _____ ___ NTU std. = ___ NTU ___ NTU std. = ___ NTU

pH Serial #: _____ 4.0 std. = ___ 7.0 std. = ___ 10.0 std. = _____

Conductivity Serial #: _____ ___ umhos/cm = ___ ___ umhos/cm = _____

GENERAL INFORMATION:

Weather Conditions @ time of sampling: Par cloudy 55 Tom

Sample Characteristics: No ~~color~~ color oder

ANALYTE COLLECTION ORDER, CONTAINERS, PRESERVATIVES AND TESTS PERFORMED:

Field, VOA	Dis Metal	T. Metals	NH3	Gen chem
2-40 mL vol HCL	Flt. 1L(P) HNO3	1L(P) HNO3	1L(P) H2SO4	1L.(P) unp

COMMENTS AND OBSERVATIONS: _____

I certify that sampling procedures were in accordance with all applicable EPA, State and BFI protocols.

Date: 5 13 97 By: Steve Osken Company: HES

Rev. ... 95

BFI FIELD INFORMATION LOG

Facility: Laubscher Meadow

Sample Point ID: MW13D

Location: Evansville IN

Field Representative: Steve Askew

Sample Matrix: GW

Lab Sample #: A407859

Gascope Calibration: % Gas: 3 % LEL: 60
Gascope Reading: % Gas: 0 % LEL: 0

PURGE INFORMATION:

Method of Well Purge: Grundfos pump

Dedicated: (Y) N

Date / Time Initiated: 5-13-97 1141

One (1) Casing Volume, Gal: 30.62

Initial Water Level, Feet: 9.83

Total Volume Purged, Gal: 95

Ground Water Elevation, MSL: 387.98

Was Well Purged To Dryness: NO

Well Total Depth, Feet: 56.94

Water Level After Purge, Feet: 31.23

Casing Diameter, Inches: 4

Date / Time Completed: 5-13-97 / 1255

PURGE DATA:

Time	Purge Rate (gpm/htz)	Cumulative Volume	Temp. (°C)	pH (std units)	DO mg/l	eH (mV)	Turb. (NTU)	Spec Cond umhos/cm
1141	/120	1	13.9	7.4	1.1	-3	17.4	693
1200	1.6/126	31	13.3	7.3	0.1	-3	3.6	688
1235	1.1/126	70	14.3	7.3	0.4	-2	1.2	686
1244	1.1/133	80	14.3	7.3	0.4	-2	1.2	689
1255	1.2/133	93	14.5	7.3	0.4	-2	1.4	689

BFI FIELD INFORMATION LOG (continued)

SAMPLING INFORMATION:

Method of Sampling: Grundfos pump

Sample Point ID: MW 14R

Dedicated: (Y)

Water Level @ Sampling, Feet: 48.47

Well Collection Sequence Number: 5

Parameters: Annual ( ) Semi-Annual (✓) Quarterly ( ) Monthly ( ) Other ( ) ____

SAMPLING DATA:

Date/Time	Sample Rate	Temp. (°C)	pH (std)	DO (mg/l)	eH (mV)	Turb. (NTU)	Spec Cond umhos/cm
5/14/97 8:30AM	VOA 159 100mL p/min Other 159 1L per min	14.3	7.1	12.5	-9	18.5	807

INSTRUMENT CHECK DATA: SEE 10R

Turbidity Serial #: ____ ___ NTU std. = ___ NTU ___ NTU std. = ___ NTU

pH Serial #: ____ 4.0 std. = ___ 7.0 std. = ___ 10.0 std. = ____

Conductivity Serial #: ____ ___ umhos/cm = ____ ___ umhos/cm = ____

GENERAL INFORMATION:

Weather Conditions @ time of sampling: P Cloudy 54

Sample Characteristics: No Color, No Odor

ANALYTE COLLECTION ORDER, CONTAINERS, PRESERVATIVES AND TESTS PERFORMED:

Field, VOA Dis Metals T. Metals NH3 Gen chem

2-40mL HCL Fit. 1L(P) HNO3 1L(P) HNO3 1L(P) H2SO4 " 1L(P) UNP

COMMENTS AND OBSERVATIONS: ____

I certify that sampling procedures were in accordance with all applicable EPA, State and BFI protocols.

Date: 5 14 '97 By: Steve Osborn Company: HES

Rev ... 95

BFI FIELD INFORMATION LOG

Facility: Laubscher Meadows

Sample Point ID: MW 14R

Location: Evansville IN

Field Representative: Steve Askew.

Sample Matrix: GW

Lab Sample #: A407958

Gascope Calibration: % Gas: 3 % LEL: 60
Gascope Reading: % Gas: 0 % LEL: 0

PURGE INFORMATION:

Method of Well Purge: Grundfos pump

Dedicated: (Y) N

Date . Time Initiated: 5-13-97 1435

One (1) Casing Volume, Gal: 20.09

Initial Water Level, Feet: 22.45

Total Volume Purged, Gal: 32

Ground Water Elevation, MSL: 387.19

Was Well Purged To Dryness: yes

Well Total Depth, Feet: 53.36

Water Level After Purge, Feet: NA

Casing Diameter, Inches: 4

Date Time Completed: 5-13-97 1540

PURGE DATA:

Time	Purge Rate (gpm/htz)	Cumulative Volume	Temp. (°C)	pH (std units)	DO mg/l	eH (mV)	Turb. (NTU)	Spec Cond umhos/cm
1435	112	1	14.8	7.0	1.0	-7	9.5	809
1540	0.3/154	21	16.2	7.1	1.0	-7	9.5	782

DUP

BFI FIELD INFORMATION LOG (continued)

SAMPLING INFORMATION:

Method of Sampling: Grundfos pump

Sample Point ID: MW 14D

Dedicated: (Y)

Water Level @ Sampling, Feet: 23.18

Well Collection Sequence Number: 1

Parameters: Annual ( ) Semi-Annual (✓) Quarterly ( ) Monthly ( ) Other ( ) _____

SAMPLING DATA:

Date/Time	Sample Rate	Temp. (°C)	pH (std)	DO (mg/l)	eH (mV)	Turb. (NTU)	Spec Cond umhos/cm
5-13-97 11:05	VOA 97 100 mL per min Other 100 2L pm	14.5	6.8	0.1	2	4.2	859

INSTRUMENT CHECK DATA: See 10 R

Turbidity Serial #: _____ ___ NTU std. = ___ NTU ___ NTU std. = ___ NTU

pH Serial #: _____ 4.0 std. = ___ 7.0 std. = ___ 10.0 std. = _____

Conductivity Serial #: _____ ___ umhos/cm = _____ ___ umhos/cm = _____

GENERAL INFORMATION:

Weather Conditions @ time of sampling: partcloudy/sun Tem. 55

Sample Characteristics: No ~~cloud~~ color or odor

ANALYTE COLLECTION ORDER, CONTAINERS, PRESERVATIVES AND TESTS PERFORMED:

	Field VOA	Dis Metals	T. Metals	NH3	Gen chem
X-2	2-40mL HCL	FLRT 1L (P) HNO3	1L (P) HNO3	1L (P) H2SO4	1L (P) unp

COMMENTS AND OBSERVATIONS: well cap Donot Fit well

I certify that sampling procedures were in accordance with all applicable EPA, State and BFI protocols.

Date: 5 13 97 By: Steve Ashen Company: HES.

Rev. 2/95

BFI FIELD INFORMATION LOG

Facility: Laubscher Meadow

Sample Point ID: 14D

Location: Evansville IN.

Field Representative: Steve Ashem.

Sample Matrix: GW

Lab Sample #: A407830

Gascope Calibration: % Gas: 3 % LEL: 60
Gascope Reading: % Gas: 0 % LEL: 0

PURGE INFORMATION:

Method of Well Purge: Grundfos pump

Dedicated: (Y) N

Date . Time Initiated: 5-13-97 0940

One (1) Casing Volume, Gal: 30.22

Initial Water Level, Feet: 14.08

Total Volume Purged, Gal: 95

Ground Water Elevation, MSL: 384.84

Was Well Purged To Dryness: NO

Well Total Depth, Feet: 60.57

Water Level After Purge, Feet: 23.18

Casing Diameter, Inches: 4

Date . Time Completed: 5-13-97 1107

PURGE DATA:

Time	Purge Rate (gpm/htz)	Cumulative Volume	Temp. (°C)	pH (std units)	DO mg/l	eH (mV)	Turb. (NTU)	Spec Cond umhos/cm
0940	/119	1	14.5	6.9	0.3	-1	7.8	876
1005	1.2/119	31	14.5	6.8	.09	1	9.1	854
1045	1.0/120	70	14.4	6.8	0.1	2	5.0	862
1055	1.0/120	80	14.5	6.8	0.1	2	4.9	865
1105	/120	93	14.5	6.8	0.1	2	4.2	859

BFI FIELD INFORMATION LOG (continued)

SAMPLING INFORMATION: **Sample Point ID:** BKW 15D

Method of Sampling: GroundoFos pump Dedicated: (Y) 1

Water Level @ Sampling, Feet: 31.17 Well Collection Sequence Number: 9

Parameters: Annual ( ) Semi-Annual (✓) Quarterly ( ) Monthly ( ) Other ( ) _____

SAMPLING DATA:

Date/Time	Sample Rate	Temp. (°C)	pH (std)	DO (mg/l)	eH (mV)	Turb. (NTU)	Spec Cond umhos/cm
5/14/97 1509	VOA 117 100 mL per min Other 126 1L per min.	14.5	7.2	.07	-17	4.0	887

INSTRUMENT CHECK DATA: See 12 F

Turbidity Serial #: _____ ____ NTU std. = ____ NTU ____ NTU std. = ____ NTU

pH Serial #: _____ 4.0 std. = ____ 7.0 std. = ____ 10.0 std. = _____

Conductivity Serial #: _____ ____ umhos/cm = ____ ____ umhos/cm = _____

GENERAL INFORMATION:

Weather Conditions @ time of sampling: PCloudy - 63

Sample Characteristics: No color No oder

ANALYTE COLLECTION ORDER, CONTAINERS, PRESERVATIVES AND TESTS PERFORMED:

Field	VOA	Dis Metal	Metal	NH3	Gen chem
	2-40mL HCL	Fit. 1L(P) HNO3	1L(P) HNO3	1L(P) H2SO4	1L(P) unp

COMMENTS AND OBSERVATIONS: _____

I certify that sampling procedures were in accordance with all applicable EPA, State and BFI protocols.

Date: 5/14/97 By: [signature] Company: HES

BFI FIELD INFORMATION LOG

Facility: Laubscher Meadows

Sample Point ID: MW 15D

Location: Evansville, IN

Field Representative: Steve Askew

Sample Matrix: GW

Lab Sample #: A407962

Gascope Calibration: % Gas: 3 % LEL: 60

Gascope Reading: % Gas: 0 % LEL: 0

PURGE INFORMATION:

Method of Well Purge: Grundfos Pump

Dedicated: (Y) / N

Date / Time Initiated: 5/14/97 1335

One (1) Casing Volume, Gal: 46.44

Initial Water Level, Feet: 8.67

Total Volume Purged, Gal: 141

Ground Water Elevation, MSL: 376.81

Was Well Purged To Dryness: NO

Well Total Depth, Feet: 80.12

Water Level After Purge, Feet: 31.17

Casing Diameter, Inches: 4

Date / Time Completed: 5/14/97 1509

PURGE DATA:

Time	Purge Rate (gpm/htz)	Cumulative Volume	Temp. (°C)	pH (std units)	DO mg/l	eH (mV)	Turb. (NTU)	Spec Cond umhos/cm
1335	/128	1	14.5	7.5	0.12	-3	14.4	933
1405	1.5/134	47	14.4	7.2	.34	-2	3.79	895
1440	1.37/134	95	14.4	7.2	.05	-18	4.2	865
1500	1.25/134	130	14.5	7.2	.03	-18	4.2	885
1504	1.25/139	135	14.5	7.2	.05	-18	4.5	881
1509	1.2/139	141	14.5	7.2	.07	-17	4.0	887

BFI FIELD INFORMATION LOG (continued)

SAMPLING INFORMATION: Sample Point ID: MW 336

Method of Sampling: Ground Fos pump Dedicated: Y / N

Water Level @ Sampling, Feet: 4.55 Well Collection Sequence Number: 10

Parameters: Annual ( ) Semi-Annual (✓) Quarterly ( ) Monthly ( ) Other ( ) ____

SAMPLING DATA:

Date/Time	Sample Rate	Temp. (°C)	pH (Std. Units)	Conduct. (µmhos/cm)	Turb. (NTU)	Other EA ( )	Other DO ( )
5-15-97 9.36	VOA 55 100mL per min Other 75 1L per min	14.9	6.9	877	7.85	7	.84

INSTRUMENT CHECK DATA:

Turbidity Serial #: 960600010924 0-100 NTU std. = 55.2 NTU 0-10 NTU std. = 5.4 NTU

pH Serial #: 54510025 4.0 std. = 4.0 7.0 std. = 7.0 10.0 std. = ____

Conductivity Serial #: 62234033 1413 umhos/cm = 1644 12.9 umhos/cm = 10

DO #61376037 S - 1.00

GENERAL INFORMATION:

Weather Conditions @ time of sampling: Sunny 62

Sample Characterisitics: No color, No odor

ANALYTE COLLECTION ORDER, CONTAINERS, PRESERVATIVES AND TESTS PERFORMED:

Field, VOA Dis Metals T, Metals NH3 Gen chem

2-40mL VOA HCL F.T 1L(P) HNO3 1 L(P) HNO3 1L(P) H2SO4 1 L(P) Unp

COMMENTS AND OBSERVATIONS: ____

I certify that sampling procedures were in accordance with all applicable EPA, State and BFI protocols.

Date: 5/15/97 By: [signature] Company: HES

BFI FIELD INFORMATION LOG

Facility: Laubscher Meadows

Sample Point ID: MW-336

Location: Evansville, IN

Field Representative: Steve Askew

Sample Matrix: GW

Lab Sample #: A408106

Gascope Calibration: % Gas: 3 % LEL: 60
Gascope Reading: % Gas: 0 % LEL: 0

PURGE INFORMATION:

Method of Well Purge: Grundfos pump Dedicated: Y / N

Date / Time Initiated: 5/15/97 8:08

One (1) Casing Volume, Gal: 8.98

Initial Water Level, Feet: 3.84

Total Volume Purged, Gal: 23

Ground Water Elevation, MSL: 387.28

Was Well Purged To Dryness: yes

Well Total Depth, Feet: 59.94

Water Level After Purge, Feet: NA

Casing Diameter, Inches: 2

Date / Time Completed: 5/15/97 8:50

PURGE DATA:

Time	Purge Rate (gpm/htz)	Cumulative Volume	Temp. (C)	pH (std units)	Conduct. (mhos/cm)	Turb. (NTU)	Other CH( )	Other DO
8:08	/70	1	14.5	7.0	891	23.4	4	.4
8:19	.82/79	9	15.0	7.0	895	3.54	5	.07
8:29	1/106	19	15.0	6.9	790	13.6	6	.42

BFI FIELD INFORMATION LOG (continued)

SAMPLING INFORMATION: Sample Point ID: GW 337

Method of Sampling: Groundofos pump Dedicated: 8 / 1

Water Level @ Sampling, Feet: 5.99 Well Collection Sequence Number: 17

Parameters: Annual ( ) Semi-Annual (✓) Quarterly ( ) Monthly ( ) Other ( ) ____

SAMPLING DATA:

Date/Time	Sample Rate	Temp. (°C)	pH (Std. Units)	Conduct. (µmhos/cm)	Turb. (NTU)	Other ____ cfs	Other ____ DO
5/15/97 11:30	VOA 67 100 mL per min Other 76 1L per min	14.6	6.81	721	13.8	13	2.83

INSTRUMENT CHECK DATA: See 12I

Turbidity Serial #: ____ ____ NTU std. = ____ NTU ____ NTU std. = ____ NTU

pH Serial #: ____ 4.0 std. = ____ 7.0 std. = ____ 10.0 std. = ____

Conductivity Serial #: ____ ____ umhos/cm = ____ ____ umhos/cm = ____

GENERAL INFORMATION:

Weather Conditions @ time of sampling: ~~Sunny~~ / PCloudy 63

Sample Characterisitics: No Color no Oder

ANALYTE COLLECTION ORDER, CONTAINERS, PRESERVATIVES AND TESTS PERFORMED:

Field VOA Dis Metals T. Metals NH3 Gen chem

2-40mL HCL Fit 1L(P) HNO3 1L(P) HNO3 1L(P) H2SO4 1L(P) unp

COMMENTS AND OBSERVATIONS: ____

I certify that sampling procedures were in accordance with all applicable EPA, State and BFI protocols.

Date: 5/15/97 By: Steve Osker Company: HES

BFI FIELD INFORMATION LOG

Facility: Laubscher Meadows

Sample Point ID: MW 337

Location: Evansville IN

Field Representative: Steve Askew

Sample Matrix: GW

Lab Sample #: A408109

Gascope Calibration: % Gas: 3 % LEL: 60
Gascope Reading: % Gas: 0 % LEL: 0

PURGE INFORMATION:

Method of Well Purge: Grundfos pump

Dedicated: 8.53 (Y) / N

Date / Time Initiated: 5-14-97 1715

One (1) Casing Volume, Gal: ~~34.64~~

Initial Water Level, Feet: 5.81

Total Volume Purged, Gal: 13

Ground Water Elevation, MSL: 389.35

Was Well Purged To Dryness: yes

Well Total Depth, Feet: 59.10

Water Level After Purge, Feet: NA

Casing Diameter, Inches: 4 2

Date / Time Completed: 5/14/97 1735

PURGE DATA:

Time	Purge Rate (gpm/htz)	Cumulative Volume	Temp. (C)	pH (std units)	Conduct. (mhos/cm)	Turb. (NTU)	Other ZH	Other DO ( )
1715	/92	1	15.0	7.5	714	7.3	-25	.9
1730	.53/130	9	15.9	7.4	714	9.66	-25	.39

CERTIFICATE OF ANALYSIS

Service Location	Received	Project	Lab ID
HERITAGE ENVIRONMENTAL SERVICES, INC. COMMERCIAL LABORATORY OPERATIONS 7901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8304	15-MAY-97	4315	A407960
	Complete	PO Number	
	02-JUN-97	IN21405J0025	
	Printed	Sampled	
	27-JUN-97	14-MAY-97 10:50	

Report To	Bill To
JEFF JENKINS BFI WASTE SYSTEMS 2020 LAUBSCHER ROAD EVANSVILLE, IN 47720	ALISHA CLARK BFI WASTE SYSTEMS 2020 LAUBSCHER ROAD EVANSVILLE, IN 47720

Sample Description

CLIENT ID: MW 2R
DESCRIPTION: GROUNDWATER

FIELD TURBIDITY EPA 180.1

Analyst: S. ASKEW Analysis Date: 14-MAY-97 Instrument: FIELD Test: G602.0.0

Parameter	Result	Det. Limit	Units
TURBIDITY	17.1	0.1	ntu

FIELD TEMPERATURE EPA 170.1

Analyst: S. ASKEW Analysis Date: 14-MAY-97 Instrument: FIELD Test: G603.0.0

Parameter	Result	Det. Limit	Units
TEMPERATURE	14.5		Degrees C

FIELD PH (AQUEOUS) SW846-9040A

Analyst: S. ASKEW Analysis Date: 14-MAY-97 Instrument: FIELD Test: G607.0.0

Parameter	Result	Det. Limit	Units
PH	7.1	0.1	Std. Units

FIELD DISSOLVED OXYGEN SAS

Analyst: S. ASKEW Analysis Date: 14-MAY-97 Instrument: FIELD Test: G600.1.0

Parameter	Result	Det. Limit	Units
DISSOLVED OXYGEN	0.2		mg/L

FIELD OXIDATION-REDUCTION POTENTIAL SM2580B-18TH ED

Analyst: S. ASKEW Analysis Date: 14-MAY-97 Instrument: FIELD Test: G604.7.0

Parameter	Result	Det. Limit	Units
OXIDATION/REDUCTION POTENTIAL	-1		mV

FIELD SPECIFIC CONDUCTANCE SW846-9050

Analyst: S. ASKEW Analysis Date: 14-MAY-97 Instrument: FIELD Test: G604.0.0

Parameter	Result	Det. Limit	Units
CONDUCTIVITY	820	1.0	umHOS/cm

AMMONIA DISTILLATION EPA 350.2

Analyst: K. BAX Analysis Date: 16-MAY-97 18:00 Instrument: PREP Test: P203.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	200		mL
FINAL VOLUME	250		mL

 (continued on next page)

AMMONIA NITROGEN EPA 350.3

Analyst: K. BUNCH Analysis Date: 19-MAY-97 10:30 Test: G203.4.0
Prep: AMMONIA DISTILLATION EPA 350.2 P203.4.0

Parameter	Result	Det. Limit	Units
NITROGEN, AMMONIA	4.9	0.12	mg/L

CHLORIDE BY ION CHROMATOGRAPHY SW846-9056

Analyst: M. ADKINS Analysis Date: 16-MAY-97 18:17 Instrument: IC Test: G310.2.0

Parameter	Result	Det. Limit	Units
CHLORIDE	17	0.25	mg/L

FIELD FILTRATION SAS

Analyst: . Analysis Date: Instrument: FIELD Test: P110.0.0

FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A

Analyst: B. GRAVES Analysis Date: 16-MAY-97 12:30 Instrument: PREP Test: P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

SODIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 20-MAY-97 22:18 Instrument: ICP Test: M131.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
SODIUM	77.	0.20	mg/L

CADMIUM TRACE ICP SW846-6010A

Analyst: A. ROBERTSON Analysis Date: 22-MAY-97 14:29 Instrument: TRACE ICP Test: M108.0.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
CADMIUM	BDL	0.0010	mg/L

CHROMIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 20-MAY-97 22:18 Instrument: ICP Test: M110.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
CHROMIUM	BDL	0.010	mg/L

COPPER ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 20-MAY-97 22:18 Instrument: ICP Test: M112.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
COPPER	BDL	0.020	mg/L

ZINC ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 20-MAY-97 22:18 Instrument: ICP Test: M139.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
ZINC	BDL	0.020	mg/L

IRON ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 20-MAY-97 22:18 Instrument: ICP Test: M115.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
IRON	6.9	0.025	mg/L

MAGNESIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 20-MAY-97 22:18 Instrument: ICP Test: M118.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
MAGNESIUM	29.	0.20	mg/L

MANGANESE ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 20-MAY-97 22:18 Instrument: ICP Test: M119.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
MANGANESE	0.23	0.010	mg/L

POTASSIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 20-MAY-97 22:18 Instrument: ICP Test: M126.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
POTASSIUM	1.2	0.20	mg/L

DISSOLVED SOLIDS EPA 160.1

Analyst: K. SULLIVAN Analysis Date: 20-MAY-97 16:00 Test: G402.7.0

Parameter	Result	Det. Limit	Units
SOLIDS	470	10	mg/L

TOTAL SUSPENDED SOLIDS EPA 160.2

Analyst: K. SULLIVAN Analysis Date: 20-MAY-97 14:00 Test: G403.7.0

Parameter	Result	Det. Limit	Units
SUSPENDED SOLIDS	17	1.0	mg/L

ALKALINITY TOTAL EPA 310.1

Analyst: K. WHITFIELD Analysis Date: 16-MAY-97 12:30 Test: G605.2.0

Parameter	Result	Det. Limit	Units
ALKALINITY	450	1.0	mg/L

ALKALINITY (BICARBONATE) EPA 310.1

Analyst: K. WHITFIELD Analysis Date: 16-MAY-97 12:30 Test: G610.2.0

Parameter	Result	Det. Limit	Units
ALKALINITY	450	1.0	mg/L

ALKALINITY (CARBONATE) EPA 310.1

Analyst: K. WHITFIELD Analysis Date: 16-MAY-97 12:30 Test: G611.2.0

Parameter	Result	Det. Limit	Units
ALKALINITY	BDL	1.0	mg/L

HERITAGE ENVIRONMENTAL SERVICES, INC. Sample ID: A407960 MW 2R

FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A

Analyst: B. GRAVES Analysis Date: 16-MAY-97 12:30 Instrument: PREP Test: P130.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

CALCIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 20-MAY-97 23:10 Instrument: ICP Test: M109.3.0

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
CALCIUM	83.	0.20	mg/L

SULFATE BY ION CHROMATOGRAPHY SW846-9056

Analyst: M. ADKINS Analysis Date: 16-MAY-97 18:17 Instrument: IC Test: G310.7.0

Parameter	Result	Det. Limit	Units
SULFATE	BDL	0.25	mg/L

VOLATILE ORGANICS (CAPILLARY COLUMN) SW846-8260A

Analyst: B. MAZUR Analysis Date: 27-MAY-97 17:50 Instrument: GC/MS VOA Test: O510.6.0

Parameter	Result	Det. Limit	Units
BENZENE	BDL	5.0	ug/L
CIS-1,3-DICHLOROPROPENE	BDL	5.0	ug/L
TRANS-1,3-DICHLOROPROPENE	BDL	5.0	ug/L
ETHYL BENZENE	BDL	5.0	ug/L
BROMOMETHANE	BDL	5.0	ug/L
CARBON TETRACHLORIDE	BDL	5.0	ug/L
CHLOROBENZENE	BDL	5.0	ug/L
CHLOROETHANE	BDL	5.0	ug/L
CHLOROFORM	BDL	5.0	ug/L
CHLOROMETHANE	BDL	5.0	ug/L
1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	BDL	5.0	ug/L
1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	BDL	5.0	ug/L
1,1-DICHLOROETHANE	BDL	5.0	ug/L
CIS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
TRANS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
1,1-DICHLOROETHENE	BDL	5.0	ug/L
1,2-DICHLOROETHANE	BDL	5.0	ug/L
1,2-DICHLOROPROPANE	BDL	5.0	ug/L
DICHLOROMETHANE (METHYLENE CHLORIDE)	BDL	5.0	ug/L
STYRENE	BDL	5.0	ug/L
1,1,1,2-TETRACHLOROETHANE	BDL	5.0	ug/L
1,1,2,2-TETRACHLOROETHANE	BDL	5.0	ug/L
TETRACHLOROETHENE	BDL	5.0	ug/L
TOLUENE	BDL	5.0	ug/L
1,1,1-TRICHLOROETHANE	BDL	5.0	ug/L
1,1,2-TRICHLOROETHANE	BDL	5.0	ug/L
TRICHLOROETHENE	BDL	5.0	ug/L
TRICHLOROFLUOROMETHANE	BDL	5.0	ug/L
VINYL CHLORIDE	BDL	2.0	ug/L
XYLENES (O/M/P-XYLENE)	BDL	5.0	ug/L
...			
SURROGATE RECOVERY			

DICHLOROETHANE-D4	109		% Rec
TOLUENE-D8	99		% Rec
4-BROMOFLUOROBENZENE	97		% Rec

 (continued on next page)

Sample Comments

BDL Below Detection Limit

Sample chain of custody number 64130.

This Certificate shall not be reproduced, except in full, without the written approval of the lab.

Approved : P.K. Spence

CERTIFICATE OF ANALYSIS

Service Location	Received	Project	Lab ID
HERITAGE ENVIRONMENTAL SERVICES, INC. COMMERCIAL LABORATORY OPERATIONS 7901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8304	16-MAY-97	4315	A408107
	Complete	PO Number	
	02-JUN-97	IN21405J0025	
	Printed	Sampled	
	26-JUN-97	15-MAY-97 10:20	

Report To	Bill To
JEFF JENKINS BFI WASTE SYSTEMS 2020 LAUBSCHER ROAD EVANSVILLE, IN 47720	ALISHA CLARK BFI WASTE SYSTEMS 2020 LAUBSCHER ROAD EVANSVILLE, IN 47720

Sample Description

CLIENT ID: MW3R

FIELD TURBIDITY EPA 180.1

Analyst: S. ASKEW Analysis Date: 15-MAY-97 Instrument: FIELD Test: G602.0.0

Parameter	Result	Det. Limit	Units
TURBIDITY	8.91	0.1	ntu

FIELD TEMPERATURE EPA 170.1

Analyst: S. ASKEW Analysis Date: 15-MAY-97 Instrument: FIELD Test: G603.0.0

Parameter	Result	Det. Limit	Units
TEMPERATURE	15.0		Degrees C

FIELD PH (AQUEOUS) SW846-9040A

Analyst: S. ASKEW Analysis Date: 15-MAY-97 Instrument: FIELD Test: G607.0.0

Parameter	Result	Det. Limit	Units
PH	6.87	0.1	Std. Units

FIELD DISSOLVED OXYGEN SAS

Analyst: S. ASKEW Analysis Date: 15-MAY-97 Instrument: FIELD Test: G600.1.0

Parameter	Result	Det. Limit	Units
DISSOLVED OXYGEN	0.02		mg/L

FIELD OXIDATION-REDUCTION POTENTIAL SM2580B-18TH ED

Analyst: S. ASKEW Analysis Date: 15-MAY-97 Instrument: FIELD Test: G604.7.0

Parameter	Result	Det. Limit	Units
OXIDATION/REDUCTION POTENTIAL	10		mV

FIELD SPECIFIC CONDUCTANCE SW846-9050

Analyst: S. ASKEW Analysis Date: 15-MAY-97 Instrument: FIELD Test: G604.0.0

Parameter	Result	Det. Limit	Units
CONDUCTIVITY	760	1.0	umHOS/cm

AMMONIA DISTILLATION EPA 350.2

Analyst: C. PEREGRINE Analysis Date: 22-MAY-97 08:00 Instrument: PREP Test: P203.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	200		mL
FINAL VOLUME	250		mL

HERITAGE ENVIRONMENTAL SERVICES, INC. Sample ID: A408107 MW3R

AMMONIA NITROGEN EPA 350.3

Analyst: K. BUNCH Analysis Date: 23-MAY-97 09:30 Test: G203.4.0
Prep: AMMONIA DISTILLATION EPA 350.2 P203.4.0

Parameter	Result	Det. Limit	Units
NITROGEN, AMMONIA	1.6	0.12	mg/L

CHLORIDE BY ION CHROMATOGRAPHY SW846-9056

Analyst: M. ADKINS Analysis Date: 16-MAY-97 18:17 Instrument: IC Test: G310.2.0

Parameter	Result	Det. Limit	Units
CHLORIDE	9	0.25	mg/L

FIELD FILTRATION SAS

Analyst: . Analysis Date: Instrument: FIELD Test: P110.0.0

FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A

Analyst: N. CARR Analysis Date: 19-MAY-97 09:30 Instrument: PREP Test: P130.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A

Analyst: B. GRAVES Analysis Date: 19-MAY-97 14:00 Instrument: PREP Test: P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

SODIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:21 Instrument: ICP Test: M131.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
SODIUM	47.	0.20	mg/L

ARSENIC TRACE ICP SW846-6010A

Analyst: A. ROBERTSON Analysis Date: 28-MAY-97 09:19 Instrument: TRACE ICP Test: M103.0.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
ARSENIC	0.040	0.0050	mg/L

ARSENIC TRACE ICP SW846-6010A

Analyst: A. ROBERTSON Analysis Date: 28-MAY-97 10:17 Instrument: TRACE ICP Test: M103.0.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
ARSENIC	0.012	0.0050	mg/L

BARIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 22:58 Instrument: ICP Test: M104.3.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
BARIUM	0.20	0.010	mg/L

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BARIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:21 Instrument: ICP Test: M104.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
BARIUM	0.17	0.010	mg/L

CADMIUM TRACE ICP SW846-6010A

Analyst: A. ROBERTSON Analysis Date: 28-MAY-97 10:17 Instrument: TRACE ICP Test: M108.0.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
CADMIUM	BDL	0.0010	mg/L

CHROMIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:21 Instrument: ICP Test: M110.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
CHROMIUM	BDL	0.010	mg/L

COPPER ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:21 Instrument: ICP Test: M112.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
COPPER	BDL	0.020	mg/L

ZINC ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:21 Instrument: ICP Test: M139.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
ZINC	BDL	0.020	mg/L

IRON ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:21 Instrument: ICP Test: M115.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
IRON	1.2	0.025	mg/L

MAGNESIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:21 Instrument: ICP Test: M118.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
MAGNESIUM	33.	0.20	mg/L

MANGANESE ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:21 Instrument: ICP Test: M119.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
MANGANESE	0.91	0.010	mg/L

 (continued on next page)

HERITAGE ENVIRONMENTAL SERVICES, INC. Sample ID: A408107 MW3R

POTASSIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:21 Instrument: ICP Test: M126.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
POTASSIUM	0.50	0.20	mg/L

DISSOLVED SOLIDS EPA 160.1

Analyst: K. SULLIVAN Analysis Date: 20-MAY-97 16:00 Test: G402.7.0

Parameter	Result	Det. Limit	Units
SOLIDS	440	10	mg/L

TOTAL SUSPENDED SOLIDS EPA 160.2

Analyst: K. SULLIVAN Analysis Date: 20-MAY-97 14:00 Test: G403.7.0

Parameter	Result	Det. Limit	Units
SUSPENDED SOLIDS	11	1.0	mg/L

ALKALINITY TOTAL EPA 310.1

Analyst: C. ROBISON Analysis Date: 19-MAY-97 19:00 Test: G605.2.0

Parameter	Result	Det. Limit	Units
ALKALINITY	450	1.0	mg/L

ALKALINITY (BICARBONATE) EPA 310.1

Analyst: C. ROBISON Analysis Date: 19-MAY-97 19:00 Test: G610.2.0

Parameter	Result	Det. Limit	Units
ALKALINITY	450	1.0	mg/L

ALKALINITY (CARBONATE) EPA 310.1

Analyst: C. ROBISON Analysis Date: 19-MAY-97 19:00 Test: G611.2.0

Parameter	Result	Det. Limit	Units
ALKALINITY	BDL	1.0	mg/L

CALCIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 22:58 Instrument: ICP Test: M109.3.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
CALCIUM	93.	0.20	mg/L

SULFATE BY ION CHROMATOGRAPHY SW846-9056

Analyst: M. ADKINS Analysis Date: 16-MAY-97 18:17 Instrument: IC Test: G310.7.0

Parameter	Result	Det. Limit	Units
SULFATE	BDL	0.25	mg/L

VOLATILE ORGANICS (CAPILLARY COLUMN) SW846-8260A

Analyst: B. MAZUR Analysis Date: 27-MAY-97 16:55 Instrument: GC/MS VOA Test: Q510.6.0

Parameter	Result	Det. Limit	Units
BENZENE	BDL	5.0	ug/L
CIS-1,3-DICHLOROPROPENE	BDL	5.0	ug/L
TRANS-1,3-DICHLOROPROPENE	BDL	5.0	ug/L
ETHYL BENZENE	BDL	5.0	ug/L
BROMOMETHANE	BDL	5.0	ug/L
CARBON TETRACHLORIDE	BDL	5.0	ug/L
CHLOROBENZENE	BDL	5.0	ug/L
CHLOROETHANE	BDL	5.0	ug/L
CHLOROFORM	BDL	5.0	ug/L
CHLOROMETHANE	BDL	5.0	ug/L
1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	BDL	5.0	ug/L
1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	BDL	5.0	ug/L

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HERITAGE ENVIRONMENTAL SERVICES, INC. Sample ID: A408107 MW3R

Parameter	Result	Det. Limit	Units
1,1-DICHLOROETHANE	BDL	5.0	ug/L
CIS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
TRANS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
1,1-DICHLOROETHENE	BDL	5.0	ug/L
1,2-DICHLOROETHANE	BDL	5.0	ug/L
1,2-DICHLOROPROPANE	BDL	5.0	ug/L
DICHLOROMETHANE (METHYLENE CHLORIDE)	BDL	5.0	ug/L
STYRENE	BDL	5.0	ug/L
1,1,1,2-TETRACHLOROETHANE	BDL	5.0	ug/L
1,1,2,2-TETRACHLOROETHANE	BDL	5.0	ug/L
TETRACHLOROETHENE	BDL	5.0	ug/L
TOLUENE	BDL	5.0	ug/L
1,1,1-TRICHLOROETHANE	BDL	5.0	ug/L
1,1,2-TRICHLOROETHANE	BDL	5.0	ug/L
TRICHLOROETHENE	BDL	5.0	ug/L
TRICHLOROFLUOROMETHANE	BDL	5.0	ug/L
VINYL CHLORIDE	BDL	2.0	ug/L
XYLENES (O/M/P-XYLENE)	BDL	5.0	ug/L
...			
SURROGATE RECOVERY			

DICHLOROETHANE-D4	109		% Rec
TOLUENE-D8	99		% Rec
4-BROMOFLUOROBENZENE	100		% Rec

Sample Comments

BDL Below Detection Limit

Sample chain of custody number 64131.

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Approved : P.K. Spence

CERTIFICATE OF ANALYSIS

Service Location	Received	Project	Lab ID
HERITAGE ENVIRONMENTAL SERVICES, INC. COMMERCIAL LABORATORY OPERATIONS 7901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8304	16-MAY-97	4315	A408110
	Complete	PO Number	
	02-JUN-97	IN21405J0025	
	Printed	Sampled	
	26-JUN-97	15-MAY-97 11:45	

Report To	Bill To
JEFF JENKINS BFI WASTE SYSTEMS 2020 LAUBSCHER ROAD EVANSVILLE, IN 47720	ALISHA CLARK BFI WASTE SYSTEMS 2020 LAUBSCHER ROAD EVANSVILLE, IN 47720

Sample Description

CLIENT ID: MW4R

FIELD TURBIDITY EPA 180.1

Analyst: S. ASKEW Analysis Date: 15-MAY-97 Instrument: FIELD Test: G602.0.0

Parameter	Result	Det. Limit	Units
TURBIDITY	17.5	0.1	ntu

FIELD TEMPERATURE EPA 170.1

Analyst: S. ASKEW Analysis Date: 15-MAY-97 Instrument: FIELD Test: G603.0.0

Parameter	Result	Det. Limit	Units
TEMPERATURE	14.4		Degrees C

FIELD PH (AQUEOUS) SW846-9040A

Analyst: S. ASKEW Analysis Date: 15-MAY-97 Instrument: FIELD Test: G607.0.0

Parameter	Result	Det. Limit	Units
PH	6.77	0.1	Std. Units

FIELD DISSOLVED OXYGEN SAS

Analyst: S. ASKEW Analysis Date: 15-MAY-97 Instrument: FIELD Test: G600.1.0

Parameter	Result	Det. Limit	Units
DISSOLVED OXYGEN	1.46	1	mg/L

FIELD OXIDATION-REDUCTION POTENTIAL SM2580B-18TH ED

Analyst: S. ASKEW Analysis Date: 15-MAY-97 Instrument: FIELD Test: G604.7.0

Parameter	Result	Det. Limit	Units
OXIDATION/REDUCTION POTENTIAL	15		mV

FIELD SPECIFIC CONDUCTANCE SW846-9050

Analyst: S. ASKEW Analysis Date: 15-MAY-97 Instrument: FIELD Test: G604.0.0

Parameter	Result	Det. Limit	Units
CONDUCTIVITY	1073	1.0	umHOS/cm

AMMONIA DISTILLATION EPA 350.2

Analyst: C. PEREGRINE Analysis Date: 22-MAY-97 08:00 Instrument: PREP Test: P203.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	200		mL
FINAL VOLUME	250		mL

AMMONIA NITROGEN EPA 350.3

Analyst: K. BUNCH Analysis Date: 23-MAY-97 09:30 Test: G203.4.0
Prep: AMMONIA DISTILLATION EPA 350.2 P203.4.0

Parameter	Result	Det. Limit	Units
NITROGEN, AMMONIA	18	0.60	mg/L

1:5 DILUTION

CHLORIDE BY ION CHROMATOGRAPHY SW846-9056

Analyst: M. ADKINS Analysis Date: 16-MAY-97 18:17 Instrument: IC Test: G310.2.0

Parameter	Result	Det. Limit	Units
CHLORIDE	14	0.25	mg/L

BROMIDE BY ION CHROMATOGRAPHY SW846-9056

Analyst: M. ADKINS Analysis Date: 16-MAY-97 18:17 Instrument: IC Test: G310.4.0

Parameter	Result	Det. Limit	Units
BROMIDE	0.21	0.05	mg/L

FIELD FILTRATION SAS

Analyst: . Analysis Date: Instrument: FIELD Test: P110.0.0

FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A

Analyst: B. GRAVES Analysis Date: 19-MAY-97 14:00 Instrument: PREP Test: P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

SODIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 23:08 Instrument: ICP Test: M131.3.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
SODIUM	50	0.20	mg/L

SODIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:31 Instrument: ICP Test: M131.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
SODIUM	47.	0.20	mg/L

CADMIUM TRACE ICP SW846-6010A

Analyst: A. ROBERTSON Analysis Date: 28-MAY-97 10:27 Instrument: TRACE ICP Test: M108.0.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
CADMIUM	BDL	0.0010	mg/L

CHROMIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:31 Instrument: ICP Test: M110.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
CHROMIUM	BDL	0.010	mg/L

COPPER ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:31 Instrument: ICP Test: M112.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
COPPER	BDL	0.020	mg/L

ZINC ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:31 Instrument: ICP Test: M139.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
ZINC	BDL	0.020	mg/L

IRON ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:31 Instrument: ICP Test: M115.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
IRON	18.	0.025	mg/L

MAGNESIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:31 Instrument: ICP Test: M118.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
MAGNESIUM	29.	0.20	mg/L

MANGANESE ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:31 Instrument: ICP Test: M119.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
MANGANESE	0.40	0.010	mg/L

POTASSIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:31 Instrument: ICP Test: M126.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
POTASSIUM	1.9	0.20	mg/L

DISSOLVED SOLIDS EPA 160.1

Analyst: K. SULLIVAN Analysis Date: 20-MAY-97 16:00 Test: G402.7.0

Parameter	Result	Det. Limit	Units
SOLIDS	540	10	mg/L

TOTAL SUSPENDED SOLIDS EPA 160.2

Analyst: K. SULLIVAN Analysis Date: 20-MAY-97 14:00 Test: G403.7.0

Parameter	Result	Det. Limit	Units
SUSPENDED SOLIDS	51	1.0	mg/L

HERITAGE ENVIRONMENTAL SERVICES, INC. Sample ID: A408110 MW4R

ALKALINITY TOTAL EPA 310.1

Analyst: C. ROBISON Analysis Date: 19-MAY-97 19:00 Test: G605.2.0

Parameter	Result	Det. Limit	Units
ALKALINITY	570	1.0	mg/L

ALKALINITY (BICARBONATE) EPA 310.1

Analyst: C. ROBISON Analysis Date: 19-MAY-97 19:00 Test: G610.2.0

Parameter	Result	Det. Limit	Units
ALKALINITY	570	1.0	mg/L

ALKALINITY (CARBONATE) EPA 310.1

Analyst: C. ROBISON Analysis Date: 19-MAY-97 19:00 Test: G611.2.0

Parameter	Result	Det. Limit	Units
ALKALINITY	BDL	1.0	mg/L

FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A

Analyst: N. CARR Analysis Date: 19-MAY-97 09:30 Instrument: PREP Test: P130.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

CALCIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 23:08 Instrument: ICP Test: M109.3.0

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
CALCIUM	120	0.20	mg/L

SULFATE BY ION CHROMATOGRAPHY SW846-9056

Analyst: M. ADKINS Analysis Date: 16-MAY-97 18:17 Instrument: IC Test: G310.7.0

Parameter	Result	Det. Limit	Units
SULFATE	BDL	0.25	mg/L

VOLATILE ORGANICS (CAPILLARY COLUMN) SW846-8260A

Analyst: H. WILLIAMS Analysis Date: 23-MAY-97 05:37 Instrument: GC/MS VOA Test: O510.6.0

Parameter	Result	Det. Limit	Units
BENZENE	BDL	5.0	ug/L
CIS-1,3-DICHLOROPROPENE	BDL	5.0	ug/L
TRANS-1,3-DICHLOROPROPENE	BDL	5.0	ug/L
ETHYL BENZENE	BDL	5.0	ug/L
BROMOMETHANE	BDL	5.0	ug/L
CARBON TETRACHLORIDE	BDL	5.0	ug/L
CHLOROBENZENE	BDL	5.0	ug/L
CHLOROETHANE	BDL	5.0	ug/L
CHLOROFORM	BDL	5.0	ug/L
CHLOROMETHANE	BDL	5.0	ug/L
1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	BDL	5.0	ug/L
1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	BDL	5.0	ug/L
1,1-DICHLOROETHANE	BDL	5.0	ug/L
CIS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
TRANS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
1,1-DICHLOROETHENE	BDL	5.0	ug/L
1,2-DICHLOROETHANE	BDL	5.0	ug/L
1,2-DICHLOROPROPANE	BDL	5.0	ug/L
DICHLOROMETHANE (METHYLENE CHLORIDE)	BDL	5.0	ug/L
STYRENE	BDL	5.0	ug/L
1,1,1,2-TETRACHLOROETHANE	BDL	5.0	ug/L
1,1,2,2-TETRACHLOROETHANE	BDL	5.0	ug/L
TETRACHLOROETHENE	BDL	5.0	ug/L

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HERITAGE ENVIRONMENTAL SERVICES, INC. **Sample ID: A408110 MW4R**

Parameter	Result	Det. Limit	Units
TOLUENE	BDL	5.0	ug/L
1,1,1-TRICHLOROETHANE	BDL	5.0	ug/L
1,1,2-TRICHLOROETHANE	BDL	5.0	ug/L
TRICHLOROETHENE	BDL	5.0	ug/L
TRICHLOROFLUOROMETHANE	BDL	5.0	ug/L
VINYL CHLORIDE	BDL	2.0	ug/L
XYLENES (O/M/P-XYLENE)	BDL	5.0	ug/L
SURROGATE RECOVERY			
DICHLOROETHANE-D4	116		% Rec
TOLUENE-D8	110		% Rec
4-BROMOFLUOROBENZENE	102		% Rec

1:5 DILUTION

BORON ICP SW846-6010A
Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 23:08 Instrument: ICP Test: M107.3.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
BORON	0.12	0.050	mg/L

BORON ICP SW846-6010A
Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:31 Instrument: ICP Test: M107.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
BORON	0.12	0.050	mg/L

BARIUM ICP SW846-6010A
Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 23:08 Instrument: ICP Test: M104.3.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
BARIUM	0.23	0.010	mg/L

BARIUM ICP SW846-6010A
Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:31 Instrument: ICP Test: M104.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
BARIUM	0.16	0.010	mg/L

Sample Comments

Amended report: As was cancelled per clients request. tam 06-26-97.

BDL Below Detection Limit

Sample chain of custody number 64131.

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Approved : P.K. Spence

CERTIFICATE OF ANALYSIS

Service Location	Received	Project	Lab ID
HERITAGE ENVIRONMENTAL SERVICES, INC. COMMERCIAL LABORATORY OPERATIONS 7901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8304	16-MAY-97	4315	A408112
	Complete	PO Number	
	02-JUN-97	IN21405J0025	
	Printed	Sampled	
	27-JUN-97	15-MAY-97 11:45	

Report To	Bill To
JEFF JENKINS BFI WASTE SYSTEMS 2020 LAUBSCHER ROAD EVANSVILLE, IN 47720	ALISHA CLARK BFI WASTE SYSTEMS 2020 LAUBSCHER ROAD EVANSVILLE, IN 47720

Sample Description

CLIENT ID: MW4RDUP

AMMONIA DISTILLATION EPA 350.2

Analyst: C. PEREGRINE Analysis Date: 22-MAY-97 08:00 Instrument: PREP Test: P203.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	200		mL
FINAL VOLUME	250		mL

AMMONIA NITROGEN EPA 350.3

Analyst: K. BUNCH Analysis Date: 23-MAY-97 09:30 Test: G203.4.0

Prep: AMMONIA DISTILLATION EPA 350.2 P203.4.0

Parameter	Result	Det. Limit	Units
NITROGEN, AMMONIA	18	0.60	mg/L

1:5 DILUTION

CHLORIDE BY ION CHROMATOGRAPHY SW846-9056

Analyst: M. ADKINS Analysis Date: 16-MAY-97 18:17 Instrument: IC Test: G310.2.0

Parameter	Result	Det. Limit	Units
CHLORIDE	14	0.25	mg/L

BROMIDE BY ION CHROMATOGRAPHY SW846-9056

Analyst: M. ADKINS Analysis Date: 16-MAY-97 18:17 Instrument: IC Test: G310.4.0

Parameter	Result	Det. Limit	Units
BROMIDE	0.19	0.05	mg/L

FIELD FILTRATION SAS

Analyst: . Analysis Date: Instrument: FIELD Test: P110.0.0

FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A

Analyst: B. GRAVES Analysis Date: 19-MAY-97 14:00 Instrument: PREP Test: P132.4.0

Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

 (continued on next page)

SODIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 22-MAY-97 01:54 Instrument: ICP Test: M131.3.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
SODIUM	47	0.20	mg/L

SODIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:35 Instrument: ICP Test: M131.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
SODIUM	50.	0.20	mg/L

CADMIUM TRACE ICP SW846-6010A

Analyst: A. ROBERTSON Analysis Date: 28-MAY-97 10:30 Instrument: TRACE ICP Test: M108.0.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
CADMIUM	BDL	0.0010	mg/L

CHROMIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:35 Instrument: ICP Test: M110.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
CHROMIUM	BDL	0.010	mg/L

COPPER ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:35 Instrument: ICP Test: M112.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
COPPER	BDL	0.020	mg/L

ZINC ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:35 Instrument: ICP Test: M139.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
ZINC	BDL	0.020	mg/L

IRON ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:35 Instrument: ICP Test: M115.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
IRON	18.	0.025	mg/L

MAGNESIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:35 Instrument: ICP Test: M118.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
MAGNESIUM	30.	0.20	mg/L

MANGANESE ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:35 Instrument: ICP Test: M119.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
MANGANESE	0.42	0.010	mg/L

POTASSIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:35 Instrument: ICP Test: M126.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
POTASSIUM	2.1	0.20	mg/L

DISSOLVED SOLIDS EPA 160.1

Analyst: K. SULLIVAN Analysis Date: 21-MAY-97 16:00 Test: G402.7.0

Parameter	Result	Det. Limit	Units
SOLIDS	580	10	mg/L

TOTAL SUSPENDED SOLIDS EPA 160.2

Analyst: K. SULLIVAN Analysis Date: 20-MAY-97 14:00 Test: G403.7.0

Parameter	Result	Det. Limit	Units
SUSPENDED SOLIDS	53	1.0	mg/L

ALKALINITY TOTAL EPA 310.1

Analyst: C. ROBISON Analysis Date: 19-MAY-97 19:00 Test: G605.2.0

Parameter	Result	Det. Limit	Units
ALKALINITY	560	1.0	mg/L

ALKALINITY (BICARBONATE) EPA 310.1

Analyst: C. ROBISON Analysis Date: 19-MAY-97 19:00 Test: G610.2.0

Parameter	Result	Det. Limit	Units
ALKALINITY	560	1.0	mg/L

ALKALINITY (CARBONATE) EPA 310.1

Analyst: C. ROBISON Analysis Date: 19-MAY-97 19:00 Test: G611.2.0

Parameter	Result	Det. Limit	Units
ALKALINITY	BDL	1.0	mg/L

FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A

Analyst: R. DALAL Analysis Date: 20-MAY-97 10:00 Instrument: PREP Test: P130.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

CALCIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 22-MAY-97 01:54 Instrument: ICP Test: M109.3.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
CALCIUM	110	0.20	mg/L

SULFATE BY ION CHROMATOGRAPHY SW846-9056

Analyst: M. ADKINS Analysis Date: 16-MAY-97 18:17 Instrument: IC Test: G310.7.0

Parameter	Result	Det. Limit	Units
SULFATE	BDL	0.25	mg/L

VOLATILE ORGANICS (CAPILLARY COLUMN) SW846-8260A

Analyst: H. WILLIAMS Analysis Date: 23-MAY-97 06:13 Instrument: GC/MS VOA Test: O510.6.0

Parameter	Result	Det. Limit	Units
BENZENE	BDL	5.0	ug/L
CIS-1,3-DICHLOROPROPENE	BDL	5.0	ug/L
TRANS-1,3-DICHLOROPROPENE	BDL	5.0	ug/L
ETHYL BENZENE	BDL	5.0	ug/L
BROMOMETHANE	BDL	5.0	ug/L
CARBON TETRACHLORIDE	BDL	5.0	ug/L
CHLOROBENZENE	BDL	5.0	ug/L
CHLOROETHANE	BDL	5.0	ug/L
CHLOROFORM	BDL	5.0	ug/L
CHLOROMETHANE	BDL	5.0	ug/L
1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	BDL	5.0	ug/L
1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	BDL	5.0	ug/L
1,1-DICHLOROETHANE	BDL	5.0	ug/L
CIS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
TRANS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
1,1-DICHLOROETHENE	BDL	5.0	ug/L
1,2-DICHLOROETHANE	BDL	5.0	ug/L
1,2-DICHLOROPROPANE	BDL	5.0	ug/L
DICHLOROMETHANE (METHYLENE CHLORIDE)	BDL	5.0	ug/L
STYRENE	BDL	5.0	ug/L
1,1,1,2-TETRACHLOROETHANE	BDL	5.0	ug/L
1,1,2,2-TETRACHLOROETHANE	BDL	5.0	ug/L
TETRACHLOROETHENE	BDL	5.0	ug/L
TOLUENE	BDL	5.0	ug/L
1,1,1-TRICHLOROETHANE	BDL	5.0	ug/L
1,1,2-TRICHLOROETHANE	BDL	5.0	ug/L
TRICHLOROETHENE	BDL	5.0	ug/L
TRICHLOROFLUOROMETHANE	BDL	5.0	ug/L
VINYL CHLORIDE	BDL	2.0	ug/L
XYLENES (O/M/P-XYLENE)	BDL	5.0	ug/L
...			
SURROGATE RECOVERY			

DICHLOROETHANE-D4	118		% Rec
TOLUENE-D8	99		% Rec
4-BROMOFLUOROBENZENE	103		% Rec

1:5 DILUTION

BORON ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 22-MAY-97 01:54 Instrument: ICP Test: M107.3.0

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
BORON	0.11	0.050	mg/L

BORON ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:35 Instrument: ICP Test: M107.3.1

Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0

Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
BORON	0.13	0.050	mg/L

BARIUM ICP SW846-6010A
Analyst: A. STOCKBURGER Analysis Date: 22-MAY-97 01:54 Instrument: ICP Test: M104.3.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
BARIUM	0.22	0.010	mg/L

BARIUM ICP SW846-6010A
Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:35 Instrument: ICP Test: M104.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
BARIUM	0.17	0.010	mg/L

Sample Comments

BDL Below Detection Limit

Sample chain of custody number 64131.

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Approved : P.K. Spence

CERTIFICATE OF ANALYSIS

Service Location	Received	Project	Lab ID
HERITAGE ENVIRONMENTAL SERVICES, INC. COMMERCIAL LABORATORY OPERATIONS 7901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8304	16-MAY-97	4315	A408113
	Complete	PO Number	
	02-JUN-97	IN21405J0025	
	Printed	Sampled	
	27-JUN-97	15-MAY-97 12:59	

Report To	Bill To
JEFF JENKINS BFI WASTE SYSTEMS 2020 LAUBSCHER ROAD EVANSVILLE, IN 47720	ALISHA CLARK BFI WASTE SYSTEMS 2020 LAUBSCHER ROAD EVANSVILLE, IN 47720

Sample Description

CLIENT ID: MW4D

FIELD TURBIDITY EPA 180.1

Analyst: S. ASKEW Analysis Date: 15-MAY-97 Instrument: FIELD Test: G602.0.0

Parameter	Result	Det. Limit	Units
TURBIDITY	1.17	0.1	ntu

FIELD TEMPERATURE EPA 170.1

Analyst: S. ASKEW Analysis Date: 15-MAY-97 Instrument: FIELD Test: G603.0.0

Parameter	Result	Det. Limit	Units
TEMPERATURE	15.1		Degrees C

FIELD PH (AQUEOUS) SW846-9040A

Analyst: S. ASKEW Analysis Date: 15-MAY-97 Instrument: FIELD Test: G607.0.0

Parameter	Result	Det. Limit	Units
PH	6.7	0.1	Std. Units

FIELD DISSOLVED OXYGEN SAS

Analyst: S. ASKEW Analysis Date: 15-MAY-97 Instrument: FIELD Test: G600.1.0

Parameter	Result	Det. Limit	Units
DISSOLVED OXYGEN	0.05		mg/L

FIELD OXIDATION-REDUCTION POTENTIAL SM2580B-18TH ED

Analyst: S. ASKEW Analysis Date: 15-MAY-97 Instrument: FIELD Test: G604.7.0

Parameter	Result	Det. Limit	Units
OXIDATION/REDUCTION POTENTIAL	19		mV

FIELD SPECIFIC CONDUCTANCE SW846-9050

Analyst: S. ASKEW Analysis Date: 15-MAY-97 Instrument: FIELD Test: G604.0.0

Parameter	Result	Det. Limit	Units
CONDUCTIVITY	933	1.0	umHOS/cm

AMMONIA DISTILLATION EPA 350.2

Analyst: C. PEREGRINE Analysis Date: 22-MAY-97 08:00 Instrument: PREP Test: P203.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	200		mL
FINAL VOLUME	250		mL

 (continued on next page)

AMMONIA NITROGEN EPA 350.3

Analyst: K. BUNCH Analysis Date: 23-MAY-97 09:30 Test: G203.4.0
Prep: AMMONIA DISTILLATION EPA 350.2 P203.4.0

Parameter	Result	Det. Limit	Units
NITROGEN, AMMONIA	13	0.60	mg/L

1:5 DILUTION

CHLORIDE BY ION CHROMATOGRAPHY SW846-9056

Analyst: M. ADKINS Analysis Date: 16-MAY-97 18:17 Instrument: IC Test: G310.2.0

Parameter	Result	Det. Limit	Units
CHLORIDE	5.7	0.25	mg/L

BROMIDE BY ION CHROMATOGRAPHY SW846-9056

Analyst: M. ADKINS Analysis Date: 16-MAY-97 18:17 Instrument: IC Test: G310.4.0

Parameter	Result	Det. Limit	Units
BROMIDE	0.068	0.05	mg/L

FIELD FILTRATION SAS

Analyst: Analysis Date: Instrument: FIELD Test: P110.0.0

FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A

Analyst: B. GRAVES Analysis Date: 19-MAY-97 14:00 Instrument: PREP Test: P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

SODIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 22-MAY-97 01:57 Instrument: ICP Test: M131.3.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
SODIUM	41	0.20	mg/L

SODIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:38 Instrument: ICP Test: M131.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
SODIUM	42.	0.20	mg/L

CADMIUM TRACE ICP SW846-6010A

Analyst: A. ROBERTSON Analysis Date: 28-MAY-97 10:34 Instrument: TRACE ICP Test: M108.0.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
CADMIUM	BDL	0.0010	mg/L

CHROMIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:38 Instrument: ICP Test: M110.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
CHROMIUM	BDL	0.010	mg/L

COPPER ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:38 Instrument: ICP Test: M112.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
COPPER	BDL	0.020	mg/L

ZINC ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:38 Instrument: ICP Test: M139.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
ZINC	0.050	0.020	mg/L

IRON ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:38 Instrument: ICP Test: M115.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
IRON	22.	0.025	mg/L

MAGNESIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:38 Instrument: ICP Test: M118.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
MAGNESIUM	28.	0.20	mg/L

MANGANESE ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:38 Instrument: ICP Test: M119.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
MANGANESE	0.21	0.010	mg/L

POTASSIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:38 Instrument: ICP Test: M126.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
POTASSIUM	1.8	0.20	mg/L

DISSOLVED SOLIDS EPA 160.1

Analyst: K. SULLIVAN Analysis Date: 21-MAY-97 16:00 Test: G402.7.0

Parameter	Result	Det. Limit	Units
SOLIDS	500	10	mg/L

TOTAL SUSPENDED SOLIDS EPA 160.2

Analyst: K. SULLIVAN Analysis Date: 20-MAY-97 14:00 Test: G403.7.0

Parameter	Result	Det. Limit	Units
SUSPENDED SOLIDS	57	1.0	mg/L

ALKALINITY TOTAL EPA 310.1

Analyst: C. ROBISON Analysis Date: 19-MAY-97 19:00 Test: G605.2.0

Parameter	Result	Det. Limit	Units
ALKALINITY	490	1.0	mg/L

ALKALINITY (BICARBONATE) EPA 310.1

Analyst: C. ROBISON Analysis Date: 19-MAY-97 19:00 Test: G610.2.0

Parameter	Result	Det. Limit	Units
ALKALINITY	490	1.0	mg/L

ALKALINITY (CARBONATE) EPA 310.1

Analyst: C. ROBISON Analysis Date: 19-MAY-97 19:00 Test: G611.2.0

Parameter	Result	Det. Limit	Units
ALKALINITY	BDL	1.0	mg/L

FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A

Analyst: R. DALAL Analysis Date: 20-MAY-97 10:00 Instrument: PREP Test: P130.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

CALCIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 22-MAY-97 01:57 Instrument: ICP Test: M109.3.0

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
CALCIUM	97.	0.20	mg/L

SULFATE BY ION CHROMATOGRAPHY SW846-9056

Analyst: M. ADKINS Analysis Date: 16-MAY-97 18:17 Instrument: IC Test: G310.7.0

Parameter	Result	Det. Limit	Units
SULFATE	BDL	0.25	mg/L

VOLATILE ORGANICS (CAPILLARY COLUMN) SW846-8260A

Analyst: H. WILLIAMS Analysis Date: 23-MAY-97 06:51 Instrument: GC/MS VOA Test: O510.6.0

Parameter	Result	Det. Limit	Units
BENZENE	BDL	5.0	ug/L
CIS-1,3-DICHLOROPROPENE	BDL	5.0	ug/L
TRANS-1,3-DICHLOROPROPENE	BDL	5.0	ug/L
ETHYL BENZENE	BDL	5.0	ug/L
BROMOMETHANE	BDL	5.0	ug/L
CARBON TETRACHLORIDE	BDL	5.0	ug/L
CHLOROBENZENE	BDL	5.0	ug/L
CHLOROETHANE	BDL	5.0	ug/L
CHLOROFORM	BDL	5.0	ug/L
CHLOROMETHANE	BDL	5.0	ug/L
1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	BDL	5.0	ug/L
1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	BDL	5.0	ug/L
1,1-DICHLOROETHANE	BDL	5.0	ug/L
CIS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
TRANS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
1,1-DICHLOROETHENE	BDL	5.0	ug/L
1,2-DICHLOROETHANE	BDL	5.0	ug/L
1,2-DICHLOROPROPANE	BDL	5.0	ug/L
DICHLOROMETHANE (METHYLENE CHLORIDE)	BDL	5.0	ug/L
STYRENE	BDL	5.0	ug/L
1,1,1,2-TETRACHLOROETHANE	BDL	5.0	ug/L
1,1,2,2-TETRACHLOROETHANE	BDL	5.0	ug/L
TETRACHLOROETHENE	BDL	5.0	ug/L

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HERITAGE ENVIRONMENTAL SERVICES, INC.

Sample ID: A408113 MW4D

Parameter	Result	Det. Limit	Units
TOLUENE	BDL	5.0	ug/L
1,1,1-TRICHLOROETHANE	BDL	5.0	ug/L
1,1,2-TRICHLOROETHANE	BDL	5.0	ug/L
TRICHLOROETHENE	BDL	5.0	ug/L
TRICHLOROFLUOROMETHANE	BDL	5.0	ug/L
VINYL CHLORIDE	BDL	2.0	ug/L
XYLENES (O/M/P-XYLENE)	BDL	5.0	ug/L
...			
SURROGATE RECOVERY			

DICHLOROETHANE-D4	113		% Rec
TOLUENE-D8	102		% Rec
4-BROMOFLUOROBENZENE	110		% Rec

1:5 DILUTION

BORON ICP SW846-6010A
Analyst: A. STOCKBURGER Analysis Date: 22-MAY-97 01:57 Instrument: ICP Test: M107.3.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
BORON	0.10	0.050	mg/L

BORON ICP SW846-6010A
Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:38 Instrument: ICP Test: M107.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
BORON	0.11	0.050	mg/L

BARIUM ICP SW846-6010A
Analyst: A. STOCKBURGER Analysis Date: 22-MAY-97 01:57 Instrument: ICP Test: M104.3.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
BARIUM	0.28	0.010	mg/L

BARIUM ICP SW846-6010A
Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:38 Instrument: ICP Test: M104.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
BARIUM	0.29	0.010	mg/L

Sample Comments

BDL Below Detection Limit

Sample chain of custody number 64131.

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Approved : P.K. Spence

CERTIFICATE OF ANALYSIS

Service Location	Received	Project	Lab ID
HERITAGE ENVIRONMENTAL SERVICES, INC. COMMERCIAL LABORATORY OPERATIONS 7901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8304	16-MAY-97	4315	A408108
	Complete	PO Number	
	02-JUN-97	IN21405J0025	
	Printed	Sampled	
	27-JUN-97	15-MAY-97 10:45	

Report To	Bill To
JEFF JENKINS BFI WASTE SYSTEMS 2020 LAUBSCHER ROAD EVANSVILLE, IN 47720	ALISHA CLARK BFI WASTE SYSTEMS 2020 LAUBSCHER ROAD EVANSVILLE, IN 47720

Sample Description

CLIENT ID: MW5R

FIELD TURBIDITY EPA 180.1

Analyst: S. ASKEW Analysis Date: 15-MAY-97 Instrument: FIELD Test: G602.0.0

Parameter	Result	Det. Limit	Units
TURBIDITY	20.1	0.1	ntu

FIELD TEMPERATURE EPA 170.1

Analyst: S. ASKEW Analysis Date: 15-MAY-97 Instrument: FIELD Test: G603.0.0

Parameter	Result	Det. Limit	Units
TEMPERATURE	15.1		Degrees C

FIELD PH (AQUEOUS) SW846-9040A

Analyst: S. ASKEW Analysis Date: 15-MAY-97 Instrument: FIELD Test: G607.0.0

Parameter	Result	Det. Limit	Units
PH	6.86	0.1	Std. Units

FIELD DISSOLVED OXYGEN SAS

Analyst: S. ASKEW Analysis Date: 15-MAY-97 Instrument: FIELD Test: G600.1.0

Parameter	Result	Det. Limit	Units
DISSOLVED OXYGEN	1.85	1	mg/L

FIELD OXIDATION-REDUCTION POTENTIAL SM2580B-18TH ED

Analyst: S. ASKEW Analysis Date: 15-MAY-97 Instrument: FIELD Test: G604.7.0

Parameter	Result	Det. Limit	Units
OXIDATION/REDUCTION POTENTIAL	10		mV

FIELD SPECIFIC CONDUCTANCE SW846-9050

Analyst: S. ASKEW Analysis Date: 15-MAY-97 Instrument: FIELD Test: G604.0.0

Parameter	Result	Det. Limit	Units
CONDUCTIVITY	948	1.0	umHOS/cm

AMMONIA DISTILLATION EPA 350.2

Analyst: C. PEREGRINE Analysis Date: 22-MAY-97 08:00 Instrument: PREP Test: P203.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	200		mL
FINAL VOLUME	250		mL

 (continued on next page)

AMMONIA NITROGEN EPA 350.3

Analyst: K. BUNCH Analysis Date: 23-MAY-97 09:30 Test: G203.4.0
Prep: AMMONIA DISTILLATION EPA 350.2 P203.4.0

Parameter	Result	Det. Limit	Units
NITROGEN, AMMONIA	0.53	0.12	mg/L

CHLORIDE BY ION CHROMATOGRAPHY SW846-9056

Analyst: M. ADKINS Analysis Date: 20-MAY-97 18:49 Instrument: IC Test: G310.2.0

Parameter	Result	Det. Limit	Units
CHLORIDE	57	1.3	mg/L

1:5 DILUTION

BROMIDE BY ION CHROMATOGRAPHY SW846-9056

Analyst: M. ADKINS Analysis Date: 16-MAY-97 18:17 Instrument: IC Test: G310.4.0

Parameter	Result	Det. Limit	Units
BROMIDE	0.42	0.05	mg/L

FIELD FILTRATION SAS

Analyst: . Analysis Date: Instrument: FIELD Test: P110.0.0

FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A

Analyst: B. GRAVES Analysis Date: 19-MAY-97 14:00 Instrument: PREP Test: P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

SODIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 23:01 Instrument: ICP Test: M131.3.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
SODIUM	110	0.20	mg/L

SODIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:25 Instrument: ICP Test: M131.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
SODIUM	110	0.20	mg/L

CADMIUM TRACE ICP SW846-6010A

Analyst: A. ROBERTSON Analysis Date: 28-MAY-97 10:20 Instrument: TRACE ICP Test: M108.0.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
CADMIUM	BDL	0.0010	mg/L

CHROMIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:25 Instrument: ICP Test: M110.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
CHROMIUM	BDL	0.010	mg/L

COPPER ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:25 Instrument: ICP Test: M112.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
COPPER	BDL	0.020	mg/L

ZINC ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:25 Instrument: ICP Test: M139.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
ZINC	BDL	0.020	mg/L

IRON ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:25 Instrument: ICP Test: M115.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
IRON	2.2	0.025	mg/L

MAGNESIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:25 Instrument: ICP Test: M118.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
MAGNESIUM	31.	0.20	mg/L

MANGANESE ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:25 Instrument: ICP Test: M119.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
MANGANESE	2.1	0.010	mg/L

POTASSIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:25 Instrument: ICP Test: M126.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
POTASSIUM	0.46	0.20	mg/L

DISSOLVED SOLIDS EPA 160.1

Analyst: K. SULLIVAN Analysis Date: 20-MAY-97 16:00 Test: G402.7.0

Parameter	Result	Det. Limit	Units
SOLIDS	540	10	mg/L

TOTAL SUSPENDED SOLIDS EPA 160.2

Analyst: K. SULLIVAN Analysis Date: 20-MAY-97 14:00 Test: G403.7.0

Parameter	Result	Det. Limit	Units
SUSPENDED SOLIDS	4	1.0	mg/L

ALKALINITY TOTAL EPA 310.1

Analyst: C. ROBISON Analysis Date: 19-MAY-97 19:00 Test: G605.2.0

Parameter	Result	Det. Limit	Units
ALKALINITY	440	1.0	mg/L

ALKALINITY (BICARBONATE) EPA 310.1

Analyst: C. ROBISON Analysis Date: 19-MAY-97 19:00 Test: G610.2.0

Parameter	Result	Det. Limit	Units
ALKALINITY	440	1.0	mg/L

ALKALINITY (CARBONATE) EPA 310.1

Analyst: C. ROBISON Analysis Date: 19-MAY-97 19:00 Test: G611.2.0

Parameter	Result	Det. Limit	Units
ALKALINITY	BDL	1.0	mg/L

FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A

Analyst: N. CARR Analysis Date: 19-MAY-97 09:30 Instrument: PREP Test: P130.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

CALCIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 23:01 Instrument: ICP Test: M109.3.0

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
CALCIUM	61.	0.20	mg/L

SULFATE BY ION CHROMATOGRAPHY SW846-9056

Analyst: M. ADKINS Analysis Date: 16-MAY-97 18:17 Instrument: IC Test: G310.7.0

Parameter	Result	Det. Limit	Units
SULFATE	8.2	0.25	mg/L

VOLATILE ORGANICS (CAPILLARY COLUMN) SW846-8260A

Analyst: B. MAZUR Analysis Date: 27-MAY-97 13:16 Instrument: GC/MS VOA Test: Q510.6.0

Parameter	Result	Det. Limit	Units
BENZENE	BDL	5.0	ug/L
CIS-1,3-DICHLOROPROPENE	BDL	5.0	ug/L
TRANS-1,3-DICHLOROPROPENE	BDL	5.0	ug/L
ETHYL BENZENE	BDL	5.0	ug/L
BROMOMETHANE	BDL	5.0	ug/L
CARBON TETRACHLORIDE	BDL	5.0	ug/L
CHLOROBENZENE	BDL	5.0	ug/L
CHLOROETHANE	BDL	5.0	ug/L
CHLOROFORM	BDL	5.0	ug/L
CHLOROMETHANE	BDL	5.0	ug/L
1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	BDL	5.0	ug/L
1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	BDL	5.0	ug/L
1,1-DICHLOROETHANE	BDL	5.0	ug/L
CIS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
TRANS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
1,1-DICHLOROETHENE	BDL	5.0	ug/L
1,2-DICHLOROETHANE	BDL	5.0	ug/L
1,2-DICHLOROPROPANE	BDL	5.0	ug/L
DICHLOROMETHANE (METHYLENE CHLORIDE)	BDL	5.0	ug/L
STYRENE	BDL	5.0	ug/L
1,1,1,2-TETRACHLOROETHANE	BDL	5.0	ug/L
1,1,2,2-TETRACHLOROETHANE	BDL	5.0	ug/L
TETRACHLOROETHENE	BDL	5.0	ug/L

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HERITAGE ENVIRONMENTAL SERVICES, INC. Sample ID: A408108 MW5R

Parameter	Result	Det. Limit	Units
TOLUENE	BDL	5.0	ug/L
1,1,1-TRICHLOROETHANE	BDL	5.0	ug/L
1,1,2-TRICHLOROETHANE	BDL	5.0	ug/L
TRICHLOROETHENE	BDL	5.0	ug/L
TRICHLOROFLUOROMETHANE	BDL	5.0	ug/L
VINYL CHLORIDE	BDL	2.0	ug/L
XYLENES (O/M/P-XYLENE)	BDL	5.0	ug/L
...			
SURROGATE RECOVERY			

DICHLOROETHANE-D4	109		% Rec
TOLUENE-D8	99		% Rec
4-BROMOFLUOROBENZENE	92		% Rec

BORON ICP SW846-6010A
Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 23:01 Instrument: ICP Test: M107.3.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
BORON	0.056	0.050	mg/L

BORON ICP SW846-6010A
Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:25 Instrument: ICP Test: M107.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
BORON	0.057	0.050	mg/L

BARIUM ICP SW846-6010A
Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 23:01 Instrument: ICP Test: M104.3.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
BARIUM	0.15	0.010	mg/L

BARIUM ICP SW846-6010A
Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:25 Instrument: ICP Test: M104.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
BARIUM	0.14	0.010	mg/L

Sample Comments

BDL Below Detection Limit

Sample chain of custody number 64131.

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Approved : P.K. Spence

CERTIFICATE OF ANALYSIS

Service Location	Received	Project	Lab ID
HERITAGE ENVIRONMENTAL SERVICES, INC. COMMERCIAL LABORATORY OPERATIONS 7901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8304	15-MAY-97	4315	A407957
	Complete	PO Number	
	02-JUN-97	IN21405J0025	
	Printed	Sampled	
	26-JUN-97	14-MAY-97 08:00	

Report To	Bill To
JEFF JENKINS BFI WASTE SYSTEMS 2020 LAUBSCHER ROAD EVANSVILLE, IN 47720	ALISHA CLARK BFI WASTE SYSTEMS 2020 LAUBSCHER ROAD EVANSVILLE, IN 47720

Sample Description

CLIENT ID: MW 10R
DESCRIPTION: GROUNDWATER

FIELD TURBIDITY EPA 180.1

Analyst: S. ASKEW | Analysis Date: 14-MAY-97 | Instrument: FIELD | Test: G602.0.0

Parameter	Result	Det. Limit	Units
TURBIDITY	23.6	0.1	ntu

FIELD TEMPERATURE EPA 170.1

Analyst: S. ASKEW | Analysis Date: 14-MAY-97 | Instrument: FIELD | Test: G603.0.0

Parameter	Result	Det. Limit	Units
TEMPERATURE	13.8		Degrees C

FIELD PH (AQUEOUS) SW846-9040A

Analyst: S. ASKEW | Analysis Date: 14-MAY-97 | Instrument: FIELD | Test: G607.0.0

Parameter	Result	Det. Limit	Units
PH	6.64	0.1	Std. Units

FIELD DISSOLVED OXYGEN SAS

Analyst: S. ASKEW | Analysis Date: 14-MAY-97 | Instrument: FIELD | Test: G600.1.0

Parameter	Result	Det. Limit	Units
DISSOLVED OXYGEN	0.4		mg/L

FIELD OXIDATION-REDUCTION POTENTIAL SM2580B-18TH ED

Analyst: S. ASKEW | Analysis Date: 14-MAY-97 | Instrument: FIELD | Test: G604.7.0

Parameter	Result	Det. Limit	Units
OXIDATION/REDUCTION POTENTIAL	15		mV

FIELD SPECIFIC CONDUCTANCE SW846-9050

Analyst: S. ASKEW | Analysis Date: 14-MAY-97 | Instrument: FIELD | Test: G604.0.0

Parameter	Result	Det. Limit	Units
CONDUCTIVITY	863	1.0	umHOS/cm

AMMONIA DISTILLATION EPA 350.2

Analyst: K. BAX | Analysis Date: 15-MAY-97 17:56 | Instrument: PREP | Test: P203.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	200		mL
FINAL VOLUME	250		mL

 (continued on next page)

HERITAGE ENVIRONMENTAL SERVICES, INC.

Sample ID: A407957 MW 10R

AMMONIA NITROGEN EPA 350.3

Analyst: K. BUNCH Analysis Date: 16-MAY-97 13:00 Test: G203.4.0
Prep: AMMONIA DISTILLATION EPA 350.2 P203.4.0

Parameter	Result	Det. Limit	Units
NITROGEN, AMMONIA	9.1	0.24	mg/L
1:2 dilution			

CHLORIDE BY ION CHROMATOGRAPHY SW846-9056

Analyst: N. ADKINS Analysis Date: 16-MAY-97 01:34 Instrument: IC Test: G310.2.0

Parameter	Result	Det. Limit	Units
CHLORIDE	16	0.25	mg/L

FIELD FILTRATION SAS

Analyst: , Analysis Date: Instrument: FIELD Test: P110.0.0

FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A

Analyst: B. GRAVES Analysis Date: 16-MAY-97 12:30 Instrument: PREP Test: P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

ARSENIC TRACE ICP SW846-6010A

Analyst: A. ROBERTSON Analysis Date: 22-MAY-97 14:12 Instrument: TRACE ICP Test: M103.0.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
ARSENIC	0.011	0.0050	mg/L

SODIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 20-MAY-97 22:08 Instrument: ICP Test: M131.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
SODIUM	66.	0.20	mg/L

CADMIUM TRACE ICP SW846-6010A

Analyst: A. ROBERTSON Analysis Date: 22-MAY-97 14:12 Instrument: TRACE ICP Test: M108.0.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
CADMIUM	BDL	0.0010	mg/L

CHROMIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 20-MAY-97 22:08 Instrument: ICP Test: M110.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
CHROMIUM	BDL	0.010	mg/L

HERITAGE ENVIRONMENTAL SERVICES, INC.

Sample ID: A407957 MW 10R

COPPER ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 20-MAY-97 22:08 Instrument: ICP Test: M112.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
COPPER	BDL	0.020	mg/L

ZINC ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 20-MAY-97 22:08 Instrument: ICP Test: M139.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
ZINC	BDL	0.020	mg/L

IRON ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 20-MAY-97 22:08 Instrument: ICP Test: M115.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
IRON	13.	0.025	mg/L

MAGNESIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 20-MAY-97 22:08 Instrument: ICP Test: M118.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
MAGNESIUM	25.	0.20	mg/L

MANGANESE ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 20-MAY-97 22:08 Instrument: ICP Test: M119.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
MANGANESE	0.47	0.010	mg/L

POTASSIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 20-MAY-97 22:08 Instrument: ICP Test: M126.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
POTASSIUM	1.6	0.20	mg/L

DISSOLVED SOLIDS EPA 160.1

Analyst: K. SULLIVAN Analysis Date: 20-MAY-97 16:00 Test: G402.7.0

Parameter	Result	Det. Limit	Units
SOLIDS	440	10	mg/L

TOTAL SUSPENDED SOLIDS EPA 160.2

Analyst: K. SULLIVAN Analysis Date: 20-MAY-97 14:00 Test: G403.7.0

Parameter	Result	Det. Limit	Units
SUSPENDED SOLIDS	25	1.0	mg/L

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HERITAGE ENVIRONMENTAL SERVICES, INC.

Sample ID: A407957 MW 10R

ALKALINITY TOTAL EPA 310.1

Analyst: K. WHITFIELD Analysis Date: 16-MAY-97 12:30 Test: G605.2.0

Parameter	Result	Det. Limit	Units
ALKALINITY	430	1.0	mg/L

ALKALINITY (BICARBONATE) EPA 310.1

Analyst: K. WHITFIELD Analysis Date: 16-MAY-97 12:30 Test: G610.2.0

Parameter	Result	Det. Limit	Units
ALKALINITY	430	1.0	mg/L

ALKALINITY (CARBONATE) EPA 310.1

Analyst: K. WHITFIELD Analysis Date: 16-MAY-97 12:30 Test: G611.2.0

Parameter	Result	Det. Limit	Units
ALKALINITY	BDL	1.0	mg/L

FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A

Analyst: B. GRAVES Analysis Date: 16-MAY-97 12:30 Instrument: PREP Test: P130.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

ARSENIC TRACE ICP SW846-6010A

Analyst: A. ROBERTSON Analysis Date: 22-MAY-97 13:27 Instrument: TRACE ICP Test: M103.0.0

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
ARSENIC	0.011	0.0050	mg/L

CALCIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 20-MAY-97 23:00 Instrument: ICP Test: M109.3.0

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
CALCIUM	72.	0.20	mg/L

SULFATE BY ION CHROMATOGRAPHY SW846-9056

Analyst: M. ADKINS Analysis Date: 16-MAY-97 01:34 Instrument: IC Test: G310.7.0

Parameter	Result	Det. Limit	Units
SULFATE	BDL	0.25	mg/L

VOLATILE ORGANICS (CAPILLARY COLUMN) SW846-8260A

Analyst: H. WILLIAMS Analysis Date: 21-MAY-97 12:45 Instrument: GC/MS VOA Test: O510.4.0

Parameter	Result	Det. Limit	Units
BENZENE	BDL	5.0	ug/L
CIS-1,3-DICHLOROPROPENE	BDL	5.0	ug/L
TRANS-1,3-DICHLOROPROPENE	BDL	5.0	ug/L
ETHYL BENZENE	BDL	5.0	ug/L
BROMOMETHANE	BDL	5.0	ug/L
CARBON TETRACHLORIDE	BDL	5.0	ug/L
CHLOROBENZENE	BDL	5.0	ug/L
CHLOROETHANE	BDL	5.0	ug/L
CHLOROFORM	BDL	5.0	ug/L
CHLOROMETHANE	BDL	5.0	ug/L
1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	BDL	5.0	ug/L
1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	BDL	5.0	ug/L
1,1-DICHLOROETHANE	BDL	5.0	ug/L
CIS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
TRANS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
1,1-DICHLOROETHENE	BDL	5.0	ug/L
1,2-DICHLOROETHANE	BDL	5.0	ug/L

 (continued on next page)

HERITAGE ENVIRONMENTAL SERVICES, INC.

Sample ID: A407957 MW 10R

Parameter	Result	Det. Limit	Units
1,2-DICHLOROPROPANE	BDL	5.0	ug/L
DICHLOROMETHANE (METHYLENE CHLORIDE)	BDL	5.0	ug/L
STYRENE	BDL	5.0	ug/L
1,1,1,2-TETRACHLOROETHANE	BDL	5.0	ug/L
1,1,2,2-TETRACHLOROETHANE	BDL	5.0	ug/L
TETRACHLOROETHENE	BDL	5.0	ug/L
TOLUENE	BDL	5.0	ug/L
1,1,1-TRICHLOROETHANE	BDL	5.0	ug/L
1,1,2-TRICHLOROETHANE	BDL	5.0	ug/L
TRICHLOROETHENE	BDL	5.0	ug/L
TRICHLOROFLUOROMETHANE	BDL	5.0	ug/L
VINYL CHLORIDE	BDL	5.0	ug/L
XYLENES (O/M/P-XYLENE)	BDL	2.0	ug/L
...		5.0	ug/L
SURROGATE RECOVERY			

DICHLOROETHANE-D4	112		% Rec
TOLUENE-D8	95		% Rec
4-BROMOFLUOROBENZENE	107		% Rec

Sample Comments

BDL Below Detection Limit

Sample chain of custody number 64130.

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Approved : P.K. Spence

CERTIFICATE OF ANALYSIS

Service Location	Received	Project	Lab ID
HERITAGE ENVIRONMENTAL SERVICES, INC. COMMERCIAL LABORATORY OPERATIONS 7901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8304	14-MAY-97	4315	A407861
	Complete	PO Number	
	04-JUN-97	IN21405J0025	
	Printed	Sampled	
	26-JUN-97	13-MAY-97 14:06	

Report To	Bill To
JEFF JENKINS BFI WASTE SYSTEMS 2020 LAUBSCHER ROAD EVANSVILLE, IN 47720	ALISHA CLARK BFI WASTE SYSTEMS 2020 LAUBSCHER ROAD EVANSVILLE, IN 47720

Sample Description

CLIENT ID: MW 11R

FIELD TURBIDITY EPA 180.1

Analyst: S. ASKEW Analysis Date: 13-MAY-97 Instrument: FIELD Test: G602.0.0

Parameter	Result	Det. Limit	Units
TURBIDITY	13	0.1	ntu

FIELD TEMPERATURE EPA 170.1

Analyst: C. WRIN Analysis Date: 13-MAY-97 Instrument: FIELD Test: G603.0.0

Parameter	Result	Det. Limit	Units
TEMPERATURE	14.5		Degrees C

FIELD PH (AQUEOUS) SW846-9040A

Analyst: S. ASKEW Analysis Date: 13-MAY-97 Instrument: FIELD Test: G607.0.0

Parameter	Result	Det. Limit	Units
PH	7.4	0.1	Std. Units

FIELD DISSOLVED OXYGEN SAS

Analyst: C. WRIN Analysis Date: 13-MAY-97 Instrument: FIELD Test: G600.1.0

Parameter	Result	Det. Limit	Units
DISSOLVED OXYGEN	1.3	1	mg/L

FIELD OXIDATION-REDUCTION POTENTIAL SM2580B-18TH ED

Analyst: C. WRIN Analysis Date: 13-MAY-97 Instrument: FIELD Test: G604.7.0

Parameter	Result	Det. Limit	Units
OXIDATION/REDUCTION POTENTIAL	-3		mV

FIELD SPECIFIC CONDUCTANCE SW846-9050

Analyst: C. WRIN Analysis Date: 13-MAY-97 Instrument: FIELD Test: G604.0.0

Parameter	Result	Det. Limit	Units
CONDUCTIVITY	760	1.0	umHOS/cm

AMMONIA DISTILLATION EPA 350.2

Analyst: K. BAX Analysis Date: 15-MAY-97 17:56 Instrument: PREP Test: P203.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	200		mL
FINAL VOLUME	250		mL

 (continued on next page)

AMMONIA NITROGEN EPA 350.3

Analyst: K. BUNCH Analysis Date: 16-MAY-97 13:00 Test: G203.4.0
Prep: AMMONIA DISTILLATION EPA 350.2 P203.4.0

Parameter	Result	Det. Limit	Units
NITROGEN, AMMONIA	2.7	0.12	mg/L

CHLORIDE BY ION CHROMATOGRAPHY SW846-9056

Analyst: M. ADKINS Analysis Date: 15-MAY-97 23:35 Instrument: IC Test: G310.2.0

Parameter	Result	Det. Limit	Units
CHLORIDE	27	1.3	mg/L
1:5 DILUTION			

BROMIDE BY ION CHROMATOGRAPHY SW846-9056

Analyst: M. ADKINS Analysis Date: 15-MAY-97 23:18 Instrument: IC Test: G310.4.0

Parameter	Result	Det. Limit	Units
BROMIDE	0.21	0.05	mg/L

FIELD FILTRATION SAS

Analyst: . Analysis Date: Instrument: FIELD Test: P110.0.0

FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A

Analyst: R. DALAL Analysis Date: 15-MAY-97 11:00 Instrument: PREP Test: P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A

Analyst: B. GRAVES Analysis Date: 20-MAY-97 14:30 Instrument: PREP Test: P132.4.1
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

ARSENIC TRACE ICP SW846-6010A

Analyst: A. ROBERTSON Analysis Date: 20-MAY-97 12:01 Instrument: TRACE ICP Test: M103.0.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
ARSENIC	0.044	0.0050	mg/L

SODIUM ICP SW846-6010A

Analyst: A. HILSCHER Analysis Date: 16-MAY-97 18:18 Instrument: ICP Test: M131.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
SODIUM	92.	0.20	mg/L

SODIUM ICP SW846-6010A

Analyst: A. HILSCHER Analysis Date: 16-MAY-97 23:37 Instrument: ICP Test: M131.3.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
SODIUM	110	0.20	mg/L

CADMIUM TRACE ICP SW846-6010A

Analyst: A. ROBERTSON Analysis Date: 20-MAY-97 12:01 Instrument: TRACE ICP Test: M108.0.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
CADMIUM	BDL	0.0010	mg/L

CHROMIUM ICP SW846-6010A

Analyst: A. HILSCHER Analysis Date: 16-MAY-97 18:18 Instrument: ICP Test: M110.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
CHROMIUM	BDL	0.010	mg/L

COPPER ICP SW846-6010A

Analyst: A. HILSCHER Analysis Date: 16-MAY-97 18:18 Instrument: ICP Test: M112.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
COPPER	BDL	0.020	mg/L

ZINC ICP SW846-6010A

Analyst: A. HILSCHER Analysis Date: 16-MAY-97 18:18 Instrument: ICP Test: M139.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
ZINC	BDL	0.020	mg/L

IRON ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 22-MAY-97 01:07 Instrument: ICP Test: M115.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.1
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
IRON	4.2	0.025	mg/L

MAGNESIUM ICP SW846-6010A

Analyst: A. HILSCHER Analysis Date: 16-MAY-97 18:18 Instrument: ICP Test: M118.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
MAGNESIUM	13.	0.20	mg/L

MANGANESE ICP SW846-6010A

Analyst: A. HILSCHER Analysis Date: 16-MAY-97 18:18 Instrument: ICP Test: M119.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
MANGANESE	0.78	0.010	mg/L

POTASSIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 04-JUN-97 00:59 Instrument: ICP Test: M126.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
POTASSIUM	1.0	0.20	mg/L

HERITAGE ENVIRONMENTAL SERVICES, INC. Sample ID: A407861 MW 11R

DISSOLVED SOLIDS EPA 160.1

Analyst: K. SULLIVAN Analysis Date: 19-MAY-97 15:00 Test: G402.7.0

Parameter	Result	Det. Limit	Units
SOLIDS	420	10	mg/L

TOTAL SUSPENDED SOLIDS EPA 160.2

Analyst: K. SULLIVAN Analysis Date: 16-MAY-97 14:00 Test: G403.7.0

Parameter	Result	Det. Limit	Units
SUSPENDED SOLIDS	11	1	mg/L

ALKALINITY TOTAL EPA 310.1

Analyst: K. WHITFIELD Analysis Date: 16-MAY-97 12:30 Test: G605.2.0

Parameter	Result	Det. Limit	Units
ALKALINITY	360	1.0	mg/L

ALKALINITY (BICARBONATE) EPA 310.1

Analyst: K. WHITFIELD Analysis Date: 16-MAY-97 12:30 Test: G610.2.0

Parameter	Result	Det. Limit	Units
ALKALINITY	360	1.0	mg/L

ALKALINITY (CARBONATE) EPA 310.1

Analyst: K. WHITFIELD Analysis Date: 16-MAY-97 12:30 Test: G611.2.0

Parameter	Result	Det. Limit	Units
ALKALINITY	BDL	1.0	mg/L

FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A

Analyst: R. DALAL Analysis Date: 15-MAY-97 11:00 Instrument: PREP Test: P130.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

ARSENIC TRACE ICP SW846-6010A

Analyst: A. ROBERTSON Analysis Date: 20-MAY-97 12:21 Instrument: TRACE ICP Test: M103.0.0

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
ARSENIC	0.047	0.0050	mg/L

CALCIUM ICP SW846-6010A

Analyst: A. HILSCHER Analysis Date: 16-MAY-97 23:37 Instrument: ICP Test: M109.3.0

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
CALCIUM	42.	0.20	mg/L

SULFATE BY ION CHROMATOGRAPHY SW846-9056

Analyst: M. ADKINS Analysis Date: 15-MAY-97 23:18 Instrument: IC Test: G310.7.0

Parameter	Result	Det. Limit	Units
SULFATE	0.54	0.25	mg/L

VOLATILE ORGANICS (CAPILLARY COLUMN) SW846-8260A

Analyst: H. WILLIAMS Analysis Date: 21-MAY-97 09:41 Instrument: GC/MS VOA Test: O510.6.0

Parameter	Result	Det. Limit	Units
BENZENE	BDL	5.0	ug/L
CIS-1,3-DICHLOROPROPENE	BDL	5.0	ug/L
TRANS-1,3-DICHLOROPROPENE	BDL	5.0	ug/L
ETHYL BENZENE	BDL	5.0	ug/L
BROMOMETHANE	BDL	5.0	ug/L
CARBON TETRACHLORIDE	BDL	5.0	ug/L
CHLOROBENZENE	BDL	5.0	ug/L

 (continued on next page)

Parameter	Result	Det. Limit	Units
CHLOROETHANE	BDL	5.0	ug/L
CHLOROFORM	BDL	5.0	ug/L
CHLOROMETHANE	BDL	5.0	ug/L
1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	BDL	5.0	ug/L
1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	BDL	5.0	ug/L
1,1-DICHLOROETHANE	BDL	5.0	ug/L
CIS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
TRANS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
1,1-DICHLOROETHENE	BDL	5.0	ug/L
1,2-DICHLOROETHANE	BDL	5.0	ug/L
1,2-DICHLOROPROPANE	BDL	5.0	ug/L
DICHLOROMETHANE (METHYLENE CHLORIDE)	BDL	5.0	ug/L
STYRENE	BDL	5.0	ug/L
1,1,1,2-TETRACHLOROETHANE	BDL	5.0	ug/L
1,1,2,2-TETRACHLOROETHANE	BDL	5.0	ug/L
TETRACHLOROETHENE	BDL	5.0	ug/L
TOLUENE	BDL	5.0	ug/L
1,1,1-TRICHLOROETHANE	BDL	5.0	ug/L
1,1,2-TRICHLOROETHANE	BDL	5.0	ug/L
TRICHLOROETHENE	BDL	5.0	ug/L
TRICHLOROFLUOROMETHANE	BDL	5.0	ug/L
VINYL CHLORIDE	BDL	2.0	ug/L
XYLENES (O/M/P-XYLENE)	BDL	5.0	ug/L
...			
SURROGATE RECOVERY			

DICHLOROETHANE-D4	116		% Rec
TOLUENE-D8	102		% Rec
4-BROMOFLUOROBENZENE	88		% Rec

BORON ICP SW846-6010A
Analyst: A. HILSCHER Analysis Date: 16-MAY-97 23:37 Instrument: ICP Test: M107.3.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
BORON	0.067	0.050	mg/L

BORON ICP SW846-6010A
Analyst: A. STOCKBURGER Analysis Date: 22-MAY-97 01:07 Instrument: ICP Test: M107.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.1
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
BORON	0.093	0.050	mg/L

BARIUM ICP SW846-6010A
Analyst: A. HILSCHER Analysis Date: 16-MAY-97 23:37 Instrument: ICP Test: M104.3.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
BARIUM	0.24	0.010	mg/L

BARIUM ICP SW846-6010A
Analyst: A. HILSCHER Analysis Date: 16-MAY-97 18:18 Instrument: ICP Test: M104.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
BARIUM	0.20	0.010	mg/L

Sample Comments

BDL Below Detection Limit

Sample chain of custody number 64139.

This Certificate shall not be reproduced, except in full, without the written approval of the lab.

Approved : P.K. Spence

CERTIFICATE OF ANALYSIS

Service Location	Received	Project	Lab ID
HERITAGE ENVIRONMENTAL SERVICES, INC. COMMERCIAL LABORATORY OPERATIONS 7901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8304	15-MAY-97	4315	A407961
	Complete	PO Number	
	02-JUN-97	IN21405J0025	
	Printed	Sampled	
	26-JUN-97	14-MAY-97 10:19	

Report To	Bill To
JEFF JENKINS BFI WASTE SYSTEMS 2020 LAUBSCHER ROAD EVANSVILLE, IN 47720	ALISHA CLARK BFI WASTE SYSTEMS 2020 LAUBSCHER ROAD EVANSVILLE, IN 47720

Sample Description

CLIENT ID: MW 12I
DESCRIPTION: GROUNDWATER

FIELD TURBIDITY EPA 180.1

Analyst: S. ASKEW Analysis Date: 14-MAY-97 Instrument: FIELD Test: G602.0.0

Parameter	Result	Det. Limit	Units
TURBIDITY	9.82	0.1	ntu

FIELD TEMPERATURE EPA 170.1

Analyst: S. ASKEW Analysis Date: 14-MAY-97 Instrument: FIELD Test: G603.0.0

Parameter	Result	Det. Limit	Units
TEMPERATURE	15.1		Degrees C

FIELD PH (AQUEOUS) SW846-9040A

Analyst: S. ASKEW Analysis Date: 14-MAY-97 Instrument: FIELD Test: G607.0.0

Parameter	Result	Det. Limit	Units
PH	7.0	0.1	Std. Units

FIELD DISSOLVED OXYGEN SAS

Analyst: S. ASKEW Analysis Date: 14-MAY-97 Instrument: FIELD Test: G600.1.0

Parameter	Result	Det. Limit	Units
DISSOLVED OXYGEN	0.23		mg/L

FIELD OXIDATION-REDUCTION POTENTIAL SM2580B-18TH ED

Analyst: S. ASKEW Analysis Date: 14-MAY-97 Instrument: FIELD Test: G604.7.0

Parameter	Result	Det. Limit	Units
OXIDATION/REDUCTION POTENTIAL	-2		mV

FIELD SPECIFIC CONDUCTANCE SW846-9050

Analyst: S. ASKEW Analysis Date: 14-MAY-97 Instrument: FIELD Test: G604.0.0

Parameter	Result	Det. Limit	Units
CONDUCTIVITY	684	1.0	umHOS/cm

AMMONIA DISTILLATION EPA 350.2

Analyst: K. BAX Analysis Date: 16-MAY-97 18:00 Instrument: PREP Test: P203.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	200		mL
FINAL VOLUME	250		mL

AMMONIA NITROGEN EPA 350.3

Analyst: K. BUNCH Analysis Date: 19-MAY-97 10:30 Test: G203.4.0
Prep: AMMONIA DISTILLATION EPA 350.2 P203.4.0

Parameter	Result	Det. Limit	Units
NITROGEN, AMMONIA	14	0.60	mg/L

1:5 DILUTION

CHLORIDE BY ION CHROMATOGRAPHY SW846-9056

Analyst: M. ADKINS Analysis Date: 16-MAY-97 18:17 Instrument: IC Test: G310.2.0

Parameter	Result	Det. Limit	Units
CHLORIDE	5	0.25	mg/L

FIELD FILTRATION SAS

Analyst: . Analysis Date: Instrument: FIELD Test: P110.0.0

FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A

Analyst: B. GRAVES Analysis Date: 16-MAY-97 12:30 Instrument: PREP Test: P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

ARSENIC TRACE ICP SW846-6010A

Analyst: A. ROBERTSON Analysis Date: 22-MAY-97 13:58 Instrument: TRACE ICP Test: M103.0.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
ARSENIC	0.029	0.0050	mg/L

SODIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 20-MAY-97 21:51 Instrument: ICP Test: M131.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
SODIUM	31.	0.20	mg/L

CADMIUM TRACE ICP SW846-6010A

Analyst: A. ROBERTSON Analysis Date: 22-MAY-97 13:58 Instrument: TRACE ICP Test: M108.0.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
CADMIUM	BDL	0.0010	mg/L

CHROMIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 20-MAY-97 21:51 Instrument: ICP Test: M110.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
CHROMIUM	BDL	0.010	mg/L

COPPER ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 20-MAY-97 21:51 Instrument: ICP Test: M112.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
COPPER	BDL	0.020	mg/L

ZINC ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 20-MAY-97 21:51 Instrument: ICP Test: M139.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
ZINC	BDL	0.020	mg/L

IRON ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 20-MAY-97 21:51 Instrument: ICP Test: M115.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
IRON	13.	0.025	mg/L

MAGNESIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 20-MAY-97 21:51 Instrument: ICP Test: M118.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
MAGNESIUM	19.	0.20	mg/L

MANGANESE ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 20-MAY-97 21:51 Instrument: ICP Test: M119.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
MANGANESE	0.14	0.010	mg/L

POTASSIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 20-MAY-97 21:51 Instrument: ICP Test: M126.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
POTASSIUM	1.4	0.20	mg/L

DISSOLVED SOLIDS EPA 160.1

Analyst: K. SULLIVAN Analysis Date: 20-MAY-97 16:00 Test: G402.7.0

Parameter	Result	Det. Limit	Units
SOLIDS	330	10	mg/L

TOTAL SUSPENDED SOLIDS EPA 160.2

Analyst: K. SULLIVAN Analysis Date: 20-MAY-97 14:00 Test: G403.7.0

Parameter	Result	Det. Limit	Units
SUSPENDED SOLIDS	35	1.0	mg/L

ALKALINITY TOTAL EPA 310.1

Analyst: K. WHITFIELD Analysis Date: 16-MAY-97 12:30 Test: G605.2.0

Parameter	Result	Det. Limit	Units
ALKALINITY	340	1.0	mg/L

ALKALINITY (BICARBONATE) EPA 310.1

Analyst: K. WHITFIELD Analysis Date: 16-MAY-97 12:30 Test: G610.2.0

Parameter	Result	Det. Limit	Units
ALKALINITY	340	1.0	mg/L

ALKALINITY (CARBONATE) EPA 310.1

Analyst: K. WHITFIELD Analysis Date: 16-MAY-97 12:30 Test: G611.2.0

Parameter	Result	Det. Limit	Units
ALKALINITY	BDL	1.0	mg/L

FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A

Analyst: B. GRAVES Analysis Date: 16-MAY-97 12:30 Instrument: PREP Test: P130.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

ARSENIC TRACE ICP SW846-6010A

Analyst: A. ROBERTSON Analysis Date: 22-MAY-97 13:14 Instrument: TRACE ICP Test: M103.0.0

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
ARSENIC	0.029	0.0050	mg/L

CALCIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 20-MAY-97 22:41 Instrument: ICP Test: M109.3.0

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
CALCIUM	76.	0.20	mg/L

SULFATE BY ION CHROMATOGRAPHY SW846-9056

Analyst: M. ADKINS Analysis Date: 16-MAY-97 18:17 Instrument: IC Test: G310.7.0

Parameter	Result	Det. Limit	Units
SULFATE	BDL	0.25	mg/L

VOLATILE ORGANICS (CAPILLARY COLUMN) SW846-8260A

Analyst: B. MAZUR Analysis Date: 27-MAY-97 18:45 Instrument: GC/MS VOA Test: O510.6.0

Parameter	Result	Det. Limit	Units
BENZENE	BDL	5.0	ug/L
CIS-1,3-DICHLOROPROPENE	BDL	5.0	ug/L
TRANS-1,3-DICHLOROPROPENE	BDL	5.0	ug/L
ETHYL BENZENE	BDL	5.0	ug/L
BROMOMETHANE	BDL	5.0	ug/L
CARBON TETRACHLORIDE	BDL	5.0	ug/L
CHLOROBENZENE	BDL	5.0	ug/L
CHLOROETHANE	BDL	5.0	ug/L
CHLOROFORM	BDL	5.0	ug/L
CHLOROMETHANE	BDL	5.0	ug/L
1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	BDL	5.0	ug/L
1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	BDL	5.0	ug/L
1,1-DICHLOROETHANE	BDL	5.0	ug/L
CIS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
TRANS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
1,1-DICHLOROETHENE	BDL	5.0	ug/L
1,2-DICHLOROETHANE	BDL	5.0	ug/L

 (continued on next page)

HERITAGE ENVIRONMENTAL SERVICES, INC. Sample ID: A407961 MW 12I

Parameter	Result	Det. Limit	Units
1,2-DICHLOROPROPANE	BDL	5.0	ug/L
DICHLOROMETHANE (METHYLENE CHLORIDE)	BDL	5.0	ug/L
STYRENE	BDL	5.0	ug/L
1,1,1,2-TETRACHLOROETHANE	BDL	5.0	ug/L
1,1,2,2-TETRACHLOROETHANE	BDL	5.0	ug/L
TETRACHLOROETHENE	BDL	5.0	ug/L
TOLUENE	BDL	5.0	ug/L
1,1,1-TRICHLOROETHANE	BDL	5.0	ug/L
1,1,2-TRICHLOROETHANE	BDL	5.0	ug/L
TRICHLOROETHENE	BDL	5.0	ug/L
TRICHLOROFLUOROMETHANE	BDL	5.0	ug/L
VINYL CHLORIDE	BDL	2.0	ug/L
XYLENES (O/M/P-XYLENE)	BDL	5.0	ug/L

SURROGATE RECOVERY			

DICHLOROETHANE-D4	107		% Rec
TOLUENE-D8	97		% Rec
4-BROMOFLUOROBENZENE	89		% Rec

Sample Comments

BDL Below Detection Limit

Sample chain of custody number 64130.

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Approved : P.K. Spence

CERTIFICATE OF ANALYSIS

Service Location	Received	Project	Lab ID
HERITAGE ENVIRONMENTAL SERVICES, INC. COMMERCIAL LABORATORY OPERATIONS 7901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8304	15-MAY-97	4315	A407959
	Complete	PO Number	
	02-JUN-97	IN21405J0025	
	Printed	Sampled	
	26-JUN-97	14-MAY-97 09:00	

Report To	Bill To
JEFF JENKINS BFI WASTE SYSTEMS 2020 LAUBSCHER ROAD EVANSVILLE, IN 47720	ALISHA CLARK BFI WASTE SYSTEMS 2020 LAUBSCHER ROAD EVANSVILLE, IN 47720

Sample Description

CLIENT ID: MW 13R
DESCRIPTION: GROUNDWATER

FIELD TURBIDITY EPA 180.1

Analyst: S. ASKEW | Analysis Date: 14-MAY-97 | Instrument: FIELD | Test: G602.0.0

Parameter	Result	Det. Limit	Units
TURBIDITY	12.9	0.1	ntu

FIELD TEMPERATURE EPA 170.1

Analyst: S. ASKEW | Analysis Date: 14-MAY-97 | Instrument: FIELD | Test: G603.0.0

Parameter	Result	Det. Limit	Units
TEMPERATURE	14.9		Degrees C

FIELD PH (AQUEOUS) SW846-9040A

Analyst: S. ASKEW | Analysis Date: 14-MAY-97 | Instrument: FIELD | Test: G607.0.0

Parameter	Result	Det. Limit	Units
PH	7.3	0.1	Std. Units

FIELD DISSOLVED OXYGEN SAS

Analyst: S. ASKEW | Analysis Date: 14-MAY-97 | Instrument: FIELD | Test: G600.1.0

Parameter	Result	Det. Limit	Units
DISSOLVED OXYGEN	4.5	1	mg/L

FIELD OXIDATION-REDUCTION POTENTIAL SM2580B-18TH ED

Analyst: S. ASKEW | Analysis Date: 14-MAY-97 | Instrument: FIELD | Test: G604.7.0

Parameter	Result	Det. Limit	Units
OXIDATION/REDUCTION POTENTIAL	-19		mV

FIELD SPECIFIC CONDUCTANCE SW846-9050

Analyst: S. ASKEW | Analysis Date: 14-MAY-97 | Instrument: FIELD | Test: G604.0.0

Parameter	Result	Det. Limit	Units
CONDUCTIVITY	741	1.0	umHOS/cm

AMMONIA DISTILLATION EPA 350.2

Analyst: K. BAX | Analysis Date: 16-MAY-97 18:00 | Instrument: PREP | Test: P203.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	200		mL
FINAL VOLUME	250		mL

 (continued on next page)

HERITAGE ENVIRONMENTAL SERVICES, INC.

Sample ID: A407959 MW 13R

AMMONIA NITROGEN EPA 350.3

Analyst: K. BUNCH Analysis Date: 19-MAY-97 10:30 Test: G203.4.0
Prep: AMMONIA DISTILLATION EPA 350.2 P203.4.0

Parameter	Result	Det. Limit	Units
NITROGEN, AMMONIA	BDL	0.12	mg/L

CHLORIDE BY ION CHROMATOGRAPHY SW846-9056

Analyst: M. ADKINS Analysis Date: 16-MAY-97 18:17 Instrument: IC Test: G310.2.0

Parameter	Result	Det. Limit	Units
CHLORIDE	5.9	0.25	mg/L

FIELD FILTRATION SAS

Analyst: . Analysis Date: Instrument: FIELD Test: P110.0.0

FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A

Analyst: B. GRAVES Analysis Date: 16-MAY-97 12:30 Instrument: PREP Test: P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

ARSENIC TRACE ICP SW846-6010A

Analyst: A. ROBERTSON Analysis Date: 22-MAY-97 14:19 Instrument: TRACE ICP Test: M103.0.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
ARSENIC	BDL	0.0050	mg/L

SODIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 20-MAY-97 22:14 Instrument: ICP Test: M131.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
SODIUM	46.	0.20	mg/L

CADMIUM TRACE ICP SW846-6010A

Analyst: A. ROBERTSON Analysis Date: 22-MAY-97 14:19 Instrument: TRACE ICP Test: M108.0.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
CADMIUM	BDL	0.0010	mg/L

CHROMIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 20-MAY-97 22:14 Instrument: ICP Test: M110.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
CHROMIUM	BDL	0.010	mg/L

COPPER ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 20-MAY-97 22:14 Instrument: ICP Test: M112.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
COPPER	BDL	0.020	mg/L

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ZINC ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 20-MAY-97 22:14 Instrument: ICP Test: M139.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
ZINC	BDL	0.020	mg/L

IRON ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 20-MAY-97 22:14 Instrument: ICP Test: M115.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
IRON	0.35	0.025	mg/L

MAGNESIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 20-MAY-97 22:14 Instrument: ICP Test: M118.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
MAGNESIUM	35.	0.20	mg/L

MANGANESE ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 20-MAY-97 22:14 Instrument: ICP Test: M119.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
MANGANESE	1.1	0.010	mg/L

POTASSIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 20-MAY-97 22:14 Instrument: ICP Test: M126.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
POTASSIUM	0.46	0.20	mg/L

DISSOLVED SOLIDS EPA 160.1

Analyst: K. SULLIVAN Analysis Date: 20-MAY-97 16:00 Test: G402.7.0

Parameter	Result	Det. Limit	Units
SOLIDS	420	10	mg/L

TOTAL SUSPENDED SOLIDS EPA 160.2

Analyst: K. SULLIVAN Analysis Date: 20-MAY-97 14:00 Test: G403.7.0

Parameter	Result	Det. Limit	Units
SUSPENDED SOLIDS	8	1.0	mg/L

ALKALINITY TOTAL EPA 310.1

Analyst: K. WHITFIELD Analysis Date: 16-MAY-97 12:30 Test: G605.2.0

Parameter	Result	Det. Limit	Units
ALKALINITY	390	1.0	mg/L

ALKALINITY (BICARBONATE) EPA 310.1

Analyst: K. WHITFIELD Analysis Date: 16-MAY-97 12:30 Test: G610.2.0

Parameter	Result	Det. Limit	Units
ALKALINITY	390	1.0	mg/L

 (continued on next page)

ALKALINITY (CARBONATE) EPA 310.1

Analyst: K. WHITFIELD Analysis Date: 16-MAY-97 12:30 Test: G611.2.0

Parameter	Result	Det. Limit	Units
ALKALINITY	BDL	1.0	mg/L

FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A

Analyst: B. GRAVES Analysis Date: 16-MAY-97 12:30 Instrument: PREP Test: P130.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

ARSENIC TRACE ICP SW846-6010A

Analyst: A. ROBERTSON Analysis Date: 22-MAY-97 13:34 Instrument: TRACE ICP Test: M103.0.0

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
ARSENIC	BDL	0.0050	mg/L

CALCIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 20-MAY-97 23:07 Instrument: ICP Test: M109.3.0

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
CALCIUM	78.	0.20	mg/L

SULFATE BY ION CHROMATOGRAPHY SW846-9056

Analyst: M. ADKINS Analysis Date: 16-MAY-97 18:17 Instrument: IC Test: G310.7.0

Parameter	Result	Det. Limit	Units
SULFATE	7.8	0.25	mg/L

VOLATILE ORGANICS (CAPILLARY COLUMN) SW846-8260A

Analyst: H. WILLIAMS Analysis Date: 21-MAY-97 13:57 Instrument: GC/MS VOA Test: O510.6.0

Parameter	Result	Det. Limit	Units
BENZENE	BDL	5.0	ug/L
CIS-1,3-DICHLOROPROPENE	BDL	5.0	ug/L
TRANS-1,3-DICHLOROPROPENE	BDL	5.0	ug/L
ETHYL BENZENE	BDL	5.0	ug/L
BROMOMETHANE	BDL	5.0	ug/L
CARBON TETRACHLORIDE	BDL	5.0	ug/L
CHLOROBENZENE	BDL	5.0	ug/L
CHLOROETHANE	BDL	5.0	ug/L
CHLOROFORM	BDL	5.0	ug/L
CHLOROMETHANE	BDL	5.0	ug/L
1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	BDL	5.0	ug/L
1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	BDL	5.0	ug/L
1,1-DICHLOROETHANE	BDL	5.0	ug/L
CIS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
TRANS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
1,1-DICHLOROETHENE	BDL	5.0	ug/L
1,2-DICHLOROETHANE	BDL	5.0	ug/L
1,2-DICHLOROPROPANE	BDL	5.0	ug/L
DICHLOROMETHANE (METHYLENE CHLORIDE)	BDL	5.0	ug/L
STYRENE	BDL	5.0	ug/L
1,1,1,2-TETRACHLOROETHANE	BDL	5.0	ug/L
1,1,2,2-TETRACHLOROETHANE	BDL	5.0	ug/L
TETRACHLOROETHENE	BDL	5.0	ug/L
TOLUENE	BDL	5.0	ug/L
1,1,1-TRICHLOROETHANE	BDL	5.0	ug/L
1,1,2-TRICHLOROETHANE	BDL	5.0	ug/L
TRICHLOROETHENE	BDL	5.0	ug/L

 (continued on next page)

HERITAGE ENVIRONMENTAL SERVICES, INC. Sample ID: A407959 MW 13R

Parameter	Result	Det. Limit	Units
TRICHLOROFLUOROMETHANE	BDL	5.0	ug/L
VINYL CHLORIDE	BDL	2.0	ug/L
XYLENES (O/M/P-XYLENE)	BDL	5.0	ug/L
...			
SURROGATE RECOVERY			

DICHLOROETHANE-D4	112		% Rec
TOLUENE-D8	100		% Rec
4-BROMOFLUOROBENZENE	89		% Rec

Sample Comments

BDL Below Detection Limit

Sample chain of custody number 64130.

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Approved : P.K. Spence

CERTIFICATE OF ANALYSIS

Service Location	Received	Project	Lab ID
HERITAGE ENVIRONMENTAL SERVICES, INC. COMMERCIAL LABORATORY OPERATIONS 7901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8304	14-MAY-97	4315	A407859
	Complete: 04-JUN-97	PO Number: IN21405J0025	
	Printed: 26-JUN-97	Sampled: 13-MAY-97 12:55	

Report To	Bill To
JEFF JENKINS BFI WASTE SYSTEMS 2020 LAUBSCHER ROAD EVANSVILLE, IN 47720	ALISHA CLARK BFI WASTE SYSTEMS 2020 LAUBSCHER ROAD EVANSVILLE, IN 47720

Sample Description

CLIENT ID: MW 13D

FIELD TURBIDITY EPA 180.1

Analyst: S. ASKEW | Analysis Date: 13-MAY-97 | Instrument: FIELD | Test: G602.0.0

Parameter	Result	Det. Limit	Units
TURBIDITY	1.4	0.1	ntu

FIELD TEMPERATURE EPA 170.1

Analyst: S. ASKEW | Analysis Date: 13-MAY-97 | Instrument: FIELD | Test: G603.0.0

Parameter	Result	Det. Limit	Units
TEMPERATURE	14.5		Degrees C

FIELD PH (AQUEOUS) SW846-9040A

Analyst: S. ASKEW | Analysis Date: 13-MAY-97 | Instrument: FIELD | Test: G607.0.0

Parameter	Result	Det. Limit	Units
PH	7.3	0.1	Std. Units

FIELD DISSOLVED OXYGEN SAS

Analyst: S. ASKEW | Analysis Date: 13-MAY-97 | Instrument: FIELD | Test: G600.1.0

Parameter	Result	Det. Limit	Units
DISSOLVED OXYGEN	0.4		mg/L

FIELD OXIDATION-REDUCTION POTENTIAL SM2580B-18TH ED

Analyst: S. ASKEW | Analysis Date: 13-MAY-97 | Instrument: FIELD | Test: G604.7.0

Parameter	Result	Det. Limit	Units
OXIDATION/REDUCTION POTENTIAL	-2		mV

FIELD SPECIFIC CONDUCTANCE SW846-9050

Analyst: S. ASKEW | Analysis Date: 13-MAY-97 | Instrument: FIELD | Test: G604.0.0

Parameter	Result	Det. Limit	Units
CONDUCTIVITY	689	1.0	umHOS/cm

AMMONIA DISTILLATION EPA 350.2

Analyst: K. BAX | Analysis Date: 15-MAY-97 17:56 | Instrument: PREP | Test: P203.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	200		mL
FINAL VOLUME	250		mL

 (continued on next page)

HERITAGE ENVIRONMENTAL SERVICES, INC.

Sample ID: A407859 MW 13D

AMMONIA NITROGEN EPA 350.3

Analyst: K. BUNCH Analysis Date: 16-MAY-97 13:00 Test: G203.4.0
Prep: AMMONIA DISTILLATION EPA 350.2 P203.4.0

Parameter	Result	Det. Limit	Units
NITROGEN, AMMONIA	1.3	0.12	mg/L

BROMIDE BY ION CHROMATOGRAPHY SW846-9056

Analyst: M. ADKINS Analysis Date: 15-MAY-97 22:07 Instrument: IC Test: G310.4.0

Parameter	Result	Det. Limit	Units
BROMIDE	0.18	0.05	mg/L

CHLORIDE BY ION CHROMATOGRAPHY SW846-9056

Analyst: M. ADKINS Analysis Date: 15-MAY-97 22:24 Instrument: IC Test: G310.2.0

Parameter	Result	Det. Limit	Units
CHLORIDE	26	1.3	mg/L
1:5 DILUTION			

FIELD FILTRATION SAS

Analyst: . Analysis Date: Instrument: FIELD Test: P110.0.0

FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A

Analyst: R. DALAL Analysis Date: 15-MAY-97 11:00 Instrument: PREP Test: P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A

Analyst: B. GRAVES Analysis Date: 20-MAY-97 14:30 Instrument: PREP Test: P132.4.1
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

ARSENIC TRACE ICP SW846-6010A

Analyst: A. ROBERTSON Analysis Date: 20-MAY-97 08:15 Instrument: TRACE ICP Test: M103.0.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
ARSENIC	0.021	0.0050	mg/L

SODIUM ICP SW846-6010A

Analyst: A. HILSCHER Analysis Date: 16-MAY-97 18:24 Instrument: ICP Test: M131.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
SODIUM	92	0.20	mg/L

SODIUM ICP SW846-6010A

Analyst: A. HILSCHER Analysis Date: 16-MAY-97 18:27 Instrument: ICP Test: M131.3.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
SODIUM	99	0.20	mg/L

 (continued on next page)

HERITAGE ENVIRONMENTAL SERVICES, INC.

Sample ID: A407859 MW 13D

CADMIUM TRACE ICP SW846-6010A

Analyst: A. ROBERTSON Analysis Date: 20-MAY-97 08:15 Instrument: TRACE ICP Test: M108.0.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
CADMIUM	BDL	0.0010	mg/L

CHROMIUM ICP SW846-6010A

Analyst: A. HILSCHER Analysis Date: 16-MAY-97 18:24 Instrument: ICP Test: M110.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
CHROMIUM	BDL	0.010	mg/L

COPPER ICP SW846-6010A

Analyst: A. HILSCHER Analysis Date: 16-MAY-97 18:24 Instrument: ICP Test: M112.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
COPPER	BDL	0.020	mg/L

ZINC ICP SW846-6010A

Analyst: A. HILSCHER Analysis Date: 16-MAY-97 18:24 Instrument: ICP Test: M139.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
ZINC	BDL	0.020	mg/L

IRON ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 22-MAY-97 01:04 Instrument: ICP Test: M115.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.1
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
IRON	4.0	0.025	mg/L

MAGNESIUM ICP SW846-6010A

Analyst: A. HILSCHER Analysis Date: 16-MAY-97 18:24 Instrument: ICP Test: M118.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
MAGNESIUM	15	0.20	mg/L

MANGANESE ICP SW846-6010A

Analyst: A. HILSCHER Analysis Date: 16-MAY-97 18:24 Instrument: ICP Test: M119.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
MANGANESE	0.072	0.010	mg/L

POTASSIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 04-JUN-97 01:10 Instrument: ICP Test: M126.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
TASSIUM	0.72	0.20	mg/L

HERITAGE ENVIRONMENTAL SERVICES, INC.

Sample ID: A407859 MW 13D

DISSOLVED SOLIDS EPA 160.1

Analyst: K. SULLIVAN Analysis Date: 19-MAY-97 15:00 Test: G402.7.0

Parameter	Result	Det. Limit	Units
SOLIDS	370	10	mg/L

TOTAL SUSPENDED SOLIDS EPA 160.2

Analyst: K. SULLIVAN Analysis Date: 16-MAY-97 14:00 Test: G403.7.0

Parameter	Result	Det. Limit	Units
SUSPENDED SOLIDS	7	1	mg/L

ALKALINITY TOTAL EPA 310.1

Analyst: K. WHITFIELD Analysis Date: 16-MAY-97 12:30 Test: G605.2.0

Parameter	Result	Det. Limit	Units
ALKALINITY	320	1.0	mg/L

ALKALINITY (BICARBONATE) EPA 310.1

Analyst: K. WHITFIELD Analysis Date: 16-MAY-97 12:30 Test: G610.2.0

Parameter	Result	Det. Limit	Units
ALKALINITY	320	1.0	mg/L

ALKALINITY (CARBONATE) EPA 310.1

Analyst: K. WHITFIELD Analysis Date: 16-MAY-97 12:30 Test: G611.2.0

Parameter	Result	Det. Limit	Units
ALKALINITY	BDL	1.0	mg/L

FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A

Analyst: R. DALAL Analysis Date: 15-MAY-97 11:00 Instrument: PREP Test: P130.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

ARSENIC TRACE ICP SW846-6010A

Analyst: A. ROBERTSON Analysis Date: 20-MAY-97 12:38 Instrument: TRACE ICP Test: M103.0.0

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
ARSENIC	0.018	0.0050	mg/L

CALCIUM ICP SW846-6010A

Analyst: A. HILSCHER Analysis Date: 16-MAY-97 18:27 Instrument: ICP Test: M109.3.0

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
CALCIUM	37.	0.20	mg/L

SULFATE BY ION CHROMATOGRAPHY SW846-9056

Analyst: M. ADKINS Analysis Date: 15-MAY-97 22:07 Instrument: IC Test: G310.7.0

Parameter	Result	Det. Limit	Units
SULFATE	BDL	0.25	mg/L

VOLATILE ORGANICS (CAPILLARY COLUMN) SW846-8260A

Analyst: H. WILLIAMS Analysis Date: 22-MAY-97 06:32 Instrument: GC/MS VOA Test: O510.6.0

Parameter	Result	Det. Limit	Units
BENZENE	BDL	5.0	ug/L
CIS-1,3-DICHLOROPROPENE	BDL	5.0	ug/L
TRANS-1,3-DICHLOROPROPENE	BDL	5.0	ug/L
YL BENZENE	BDL	5.0	ug/L
BROMOMETHANE	BDL	5.0	ug/L
CARBON TETRACHLORIDE	BDL	5.0	ug/L
CHLOROBENZENE	BDL	5.0	ug/L

 (continued on next page)

HERITAGE ENVIRONMENTAL SERVICES, INC.

Sample ID: A407859 MW 13D

Parameter	Result	Det. Limit	Units
CHLOROETHANE	BDL	5.0	ug/L
CHLOROFORM	BDL	5.0	ug/L
CHLOROMETHANE	BDL	5.0	ug/L
1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	BDL	5.0	ug/L
1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	BDL	5.0	ug/L
1,1-DICHLOROETHANE	BDL	5.0	ug/L
CIS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
TRANS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
1,1-DICHLOROETHENE	BDL	5.0	ug/L
1,2-DICHLOROETHANE	BDL	5.0	ug/L
1,2-DICHLOROPROPANE	BDL	5.0	ug/L
DICHLOROMETHANE (METHYLENE CHLORIDE)	BDL	5.0	ug/L
STYRENE	BDL	5.0	ug/L
1,1,1,2-TETRACHLOROETHANE	BDL	5.0	ug/L
1,1,2,2-TETRACHLOROETHANE	BDL	5.0	ug/L
TETRACHLOROETHENE	BDL	5.0	ug/L
TOLUENE	BDL	5.0	ug/L
1,1,1-TRICHLOROETHANE	BDL	5.0	ug/L
1,1,2-TRICHLOROETHANE	BDL	5.0	ug/L
TRICHLOROETHENE	BDL	5.0	ug/L
TRICHLOROFLUOROMETHANE	BDL	5.0	ug/L
VINYL CHLORIDE	BDL	2.0	ug/L
XYLENES (O/M/P-XYLENE)	BDL	5.0	ug/L
SURROGATE RECOVERY			
DICHLOROETHANE-D4	113		% Rec
TOLUENE-D8	96		% Rec
4-BROMOFLUOROBENZENE	97		% Rec

BORON ICP SW846-6010A
Analyst: A. HILSCHER Analysis Date: 16-MAY-97 18:27 Instrument: ICP Test: M107.3.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
BORON	0.097	0.050	mg/L

BORON ICP SW846-6010A
Analyst: A. STOCKBURGER Analysis Date: 22-MAY-97 01:04 Instrument: ICP Test: M107.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.1
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
BORON	0.12	0.050	mg/L

BARIUM ICP SW846-6010A
Analyst: A. HILSCHER Analysis Date: 16-MAY-97 18:27 Instrument: ICP Test: M104.3.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
BARIUM	0.22	0.010	mg/L

BARIUM ICP SW846-6010A
Analyst: A. HILSCHER Analysis Date: 16-MAY-97 18:24 Instrument: ICP Test: M104.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
BARIUM	0.20	0.010	mg/L

 (continued on next page)

Sample Comments

BDL Below Detection Limit

Sample chain of custody number 64139.

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Approved : P.K. Spence

CERTIFICATE OF ANALYSIS

Service Location	Received	Project	Lab ID
HERITAGE ENVIRONMENTAL SERVICES, INC. COMMERCIAL LABORATORY OPERATIONS 7901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8304	15-MAY-97	4315	A407958
	Complete	PO Number	
	02-JUN-97	IN21405J0025	
	Printed	Sampled	
	26-JUN-97	14-MAY-97 08:30	

Report To	Bill To
JEFF JENKINS BFI WASTE SYSTEMS 2020 LAUBSCHER ROAD EVANSVILLE, IN 47720	ALISHA CLARK BFI WASTE SYSTEMS 2020 LAUBSCHER ROAD EVANSVILLE, IN 47720

Sample Description

CLIENT ID: MW 14R
DESCRIPTION: GROUNDWATER

FIELD TURBIDITY EPA 180.1

Analyst: S. ASKEW Analysis Date: 14-MAY-97 Instrument: FIELD Test: G602.0.0

Parameter	Result	Det. Limit	Units
TURBIDITY	18.5	0.1	ntu

FIELD TEMPERATURE EPA 170.1

Analyst: S. ASKEW Analysis Date: 14-MAY-97 Instrument: FIELD Test: G603.0.0

Parameter	Result	Det. Limit	Units
TEMPERATURE	14.3		Degrees C

FIELD PH (AQUEOUS) SW846-9040A

Analyst: S. ASKEW Analysis Date: 14-MAY-97 Instrument: FIELD Test: G607.0.0

Parameter	Result	Det. Limit	Units
PH	7.1	0.1	Std. Units

FIELD DISSOLVED OXYGEN SAS

Analyst: S. ASKEW Analysis Date: 14-MAY-97 Instrument: FIELD Test: G600.1.0

Parameter	Result	Det. Limit	Units
DISSOLVED OXYGEN	12.5	1	mg/L

FIELD OXIDATION-REDUCTION POTENTIAL SM2580B-18TH ED

Analyst: S. ASKEW Analysis Date: 14-MAY-97 Instrument: FIELD Test: G604.7.0

Parameter	Result	Det. Limit	Units
OXIDATION/REDUCTION POTENTIAL	-9		mV

FIELD SPECIFIC CONDUCTANCE SW846-9050

Analyst: S. ASKEW Analysis Date: 14-MAY-97 Instrument: FIELD Test: G604.0.0

Parameter	Result	Det. Limit	Units
CONDUCTIVITY	807	1.0	umHOS/cm

AMMONIA DISTILLATION EPA 350.2

Analyst: K. BAX Analysis Date: 15-MAY-97 17:56 Instrument: PREP Test: P203.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	200		mL
FINAL VOLUME	250		mL

AMMONIA NITROGEN EPA 350.3

Analyst: K. BUNCH Analysis Date: 16-MAY-97 13:00 Test: G203.4.0
Prep: AMMONIA DISTILLATION EPA 350.2 P203.4.0

Parameter	Result	Det. Limit	Units
NITROGEN, AMMONIA	3.0	0.12	mg/L

CHLORIDE BY ION CHROMATOGRAPHY SW846-9056

Analyst: M. ADKINS Analysis Date: 16-MAY-97 18:17 Instrument: IC Test: G310.2.0

Parameter	Result	Det. Limit	Units
CHLORIDE	9.3	0.25	mg/L

FIELD FILTRATION SAS

Analyst: . Analysis Date: Instrument: FIELD Test: P110.0.0

FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A

Analyst: B. GRAVES Analysis Date: 16-MAY-97 12:30 Instrument: PREP Test: P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

ARSENIC TRACE ICP SW846-6010A

Analyst: A. ROBERTSON Analysis Date: 22-MAY-97 14:16 Instrument: TRACE ICP Test: M103.0.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
ARSENIC	BDL	0.0050	mg/L

SODIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 20-MAY-97 22:11 Instrument: ICP Test: M131.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
SODIUM	64.	0.20	mg/L

CADMIUM TRACE ICP SW846-6010A

Analyst: A. ROBERTSON Analysis Date: 22-MAY-97 14:16 Instrument: TRACE ICP Test: M108.0.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
CADMIUM	BDL	0.0010	mg/L

CHROMIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 20-MAY-97 22:11 Instrument: ICP Test: M110.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
CHROMIUM	BDL	0.010	mg/L

COPPER ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 20-MAY-97 22:11 Instrument: ICP Test: M112.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
COPPER	BDL	0.020	mg/L

ZINC ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 20-MAY-97 22:11 Instrument: ICP Test: M139.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
ZINC	BDL	0.020	mg/L

IRON ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 20-MAY-97 22:11 Instrument: ICP Test: M115.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
IRON	1.8	0.025	mg/L

MAGNESIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 20-MAY-97 22:11 Instrument: ICP Test: M118.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
MAGNESIUM	28.	0.20	mg/L

MANGANESE ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 20-MAY-97 22:11 Instrument: ICP Test: M119.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
MANGANESE	0.72	0.010	mg/L

POTASSIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 20-MAY-97 22:11 Instrument: ICP Test: M126.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
POTASSIUM	0.91	0.20	mg/L

DISSOLVED SOLIDS EPA 160.1

Analyst: K. SULLIVAN Analysis Date: 20-MAY-97 16:00 Test: G402.7.0

Parameter	Result	Det. Limit	Units
SOLIDS	460	10	mg/L

TOTAL SUSPENDED SOLIDS EPA 160.2

Analyst: K. SULLIVAN Analysis Date: 20-MAY-97 14:00 Test: G403.7.0

Parameter	Result	Det. Limit	Units
SUSPENDED SOLIDS	18	1.0	mg/L

ALKALINITY TOTAL EPA 310.1

Analyst: K. WHITFIELD Analysis Date: 16-MAY-97 12:30 Test: G605.2.0

Parameter	Result	Det. Limit	Units
ALKALINITY	400	1.0	mg/L

ALKALINITY (BICARBONATE) EPA 310.1

Analyst: K. WHITFIELD Analysis Date: 16-MAY-97 12:30 Test: G610.2.0

Parameter	Result	Det. Limit	Units
ALKALINITY	400	1.0	mg/L

HERITAGE ENVIRONMENTAL SERVICES, INC. Sample ID: A407958 MW 14R

ALKALINITY (CARBONATE) EPA 310.1

Analyst: K. WHITFIELD Analysis Date: 16-MAY-97 12:30 Test: G611.2.0

Parameter	Result	Det. Limit	Units
ALKALINITY	BDL	1.0	mg/L

FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A

Analyst: B. GRAVES Analysis Date: 16-MAY-97 12:30 Instrument: PREP Test: P130.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

ARSENIC TRACE ICP SW846-6010A

Analyst: A. ROBERTSON Analysis Date: 22-MAY-97 13:31 Instrument: TRACE ICP Test: M103.0.0

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
ARSENIC	0.0076	0.0050	mg/L

CALCIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 20-MAY-97 23:04 Instrument: ICP Test: M109.3.0

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
CALCIUM	75.	0.20	mg/L

SULFATE BY ION CHROMATOGRAPHY SW846-9056

Analyst: M. ADKINS Analysis Date: 16-MAY-97 18:17 Instrument: IC Test: G310.7.0

Parameter	Result	Det. Limit	Units
SULFATE	18	0.25	mg/L

VOLATILE ORGANICS (CAPILLARY COLUMN) SW846-8260A

Analyst: H. WILLIAMS Analysis Date: 21-MAY-97 13:21 Instrument: GC/MS VOA Test: O510.6.0

Parameter	Result	Det. Limit	Units
BENZENE	BDL	5.0	ug/L
CIS-1,3-DICHLOROPROPENE	BDL	5.0	ug/L
TRANS-1,3-DICHLOROPROPENE	BDL	5.0	ug/L
ETHYL BENZENE	BDL	5.0	ug/L
BROMOMETHANE	BDL	5.0	ug/L
CARBON TETRACHLORIDE	BDL	5.0	ug/L
CHLOROBENZENE	BDL	5.0	ug/L
CHLOROETHANE	BDL	5.0	ug/L
CHLOROFORM	BDL	5.0	ug/L
CHLOROMETHANE	BDL	5.0	ug/L
1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	BDL	5.0	ug/L
1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	BDL	5.0	ug/L
1,1-DICHLOROETHANE	BDL	5.0	ug/L
CIS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
TRANS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
1,1-DICHLOROETHENE	BDL	5.0	ug/L
1,2-DICHLOROETHANE	BDL	5.0	ug/L
1,2-DICHLOROPROPANE	BDL	5.0	ug/L
DICHLOROMETHANE (METHYLENE CHLORIDE)	BDL	5.0	ug/L
STYRENE	BDL	5.0	ug/L
1,1,1,2-TETRACHLOROETHANE	BDL	5.0	ug/L
1,1,2,2-TETRACHLOROETHANE	BDL	5.0	ug/L
TETRACHLOROETHENE	BDL	5.0	ug/L
TOLUENE	BDL	5.0	ug/L
1,1,1-TRICHLOROETHANE	BDL	5.0	ug/L
1,1,2-TRICHLOROETHANE	BDL	5.0	ug/L
TRICHLOROETHENE	BDL	5.0	ug/L

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HERITAGE ENVIRONMENTAL SERVICES, INC. **Sample ID: A407958 MW 14R**

Parameter	Result	Det. Limit	Units
TRICHLOROFLUOROMETHANE	BDL	5.0	ug/L
VINYL CHLORIDE	BDL	2.0	ug/L
XYLENES (O/M/P-XYLENE)	BDL	5.0	ug/L
SURROGATE RECOVERY			
DICHLOROETHANE-D4	116		% Rec
TOLUENE-D8	91		% Rec
4-BROMOFLUOROBENZENE	101		% Rec

Sample Comments

BDL Below Detection Limit

Sample chain of custody number 64130.

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Approved : P.K. Spence

CERTIFICATE OF ANALYSIS

Service Location	Received	Project	Lab ID
HERITAGE ENVIRONMENTAL SERVICES, INC. COMMERCIAL LABORATORY OPERATIONS 7901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8304	14-MAY-97	4315	A407830
	Complete	PO Number	
	04-JUN-97	IN21405J0025	
	Printed	Sampled	
	26-JUN-97	13-MAY-97 11:05	

Report To	Bill To
JEFF JENKINS BFI WASTE SYSTEMS 2020 LAUBSCHER ROAD EVANSVILLE, IN 47720	ALISHA CLARK BFI WASTE SYSTEMS 2020 LAUBSCHER ROAD EVANSVILLE, IN 47720

Sample Description

CLIENT ID: MW 14D

FIELD TURBIDITY EPA 180.1

Analyst: S. ASKEW Analysis Date: 13-MAY-97 Instrument: FIELD Test: G602.0.0

Parameter	Result	Det. Limit	Units
TURBIDITY	4.2	0.1	ntu

FIELD TEMPERATURE EPA 170.1

Analyst: S. ASKEW Analysis Date: 13-MAY-97 Instrument: FIELD Test: G603.0.0

Parameter	Result	Det. Limit	Units
TEMPERATURE	14.5		Degrees C

FIELD PH (AQUEOUS) SW846-9040A

Analyst: S. ASKEW Analysis Date: 13-MAY-97 Instrument: FIELD Test: G607.0.0

Parameter	Result	Det. Limit	Units
PH	6.8	0.1	Std. Units

FIELD DISSOLVED OXYGEN SAS

Analyst: S. ASKEW Analysis Date: 13-MAY-97 Instrument: FIELD Test: G600.1.0

Parameter	Result	Det. Limit	Units
DISSOLVED OXYGEN	0.1		mg/L

FIELD OXIDATION-REDUCTION POTENTIAL SM2580B-18TH ED

Analyst: S. ASKEW Analysis Date: 13-MAY-97 Instrument: FIELD Test: G604.7.0

Parameter	Result	Det. Limit	Units
OXIDATION/REDUCTION POTENTIAL	2		mV

FIELD SPECIFIC CONDUCTANCE SW846-9050

Analyst: S. ASKEW Analysis Date: 13-MAY-97 Instrument: FIELD Test: G604.0.0

Parameter	Result	Det. Limit	Units
CONDUCTIVITY	859	1.0	umHOS/cm

AMMONIA DISTILLATION EPA 350.2

Analyst: K. BAX Analysis Date: 15-MAY-97 17:56 Instrument: PREP Test: P203.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	200		mL
FINAL VOLUME	250		mL

16 JUN 97 11 05 AM
OFFICE OF SOLID AND HAZARDOUS WASTE MGMT DEM

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AMMONIA NITROGEN EPA 350.3

Analyst: K. BUNCH Analysis Date: 16-MAY-97 13:00 Test: G203.4.0
Prep: AMMONIA DISTILLATION EPA 350.2 P203.4.0

Parameter	Result	Det. Limit	Units
NITROGEN, AMMONIA	8.8	0.24	mg/L

1:2 dilution

CHLORIDE BY ION CHROMATOGRAPHY SW846-9056

Analyst: M. ADKINS Analysis Date: 14-MAY-97 19:52 Instrument: IC Test: G310.2.0

Parameter	Result	Det. Limit	Units
CHLORIDE	17	0.25	mg/L

FIELD FILTRATION SAS

Analyst: . Analysis Date: Instrument: FIELD Test: P110.0.0

FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A

Analyst: R. DALAL Analysis Date: 15-MAY-97 11:00 Instrument: PREP Test: P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A

Analyst: B. GRAVES Analysis Date: 20-MAY-97 14:30 Instrument: PREP Test: P132.4.1
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

ARSENIC TRACE ICP SW846-6010A

Analyst: A. ROBERTSON Analysis Date: 20-MAY-97 11:57 Instrument: TRACE ICP Test: M103.0.1

Parameter	Result	Det. Limit	Units
ARSENIC	0.0085	0.0050	mg/L

SODIUM ICP SW846-6010A

Analyst: A. HILSCHER Analysis Date: 16-MAY-97 18:14 Instrument: ICP Test: M131.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
SODIUM	58.	0.20	mg/L

CADMIUM TRACE ICP SW846-6010A

Analyst: A. ROBERTSON Analysis Date: 20-MAY-97 11:57 Instrument: TRACE ICP Test: M108.0.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
CADMIUM	BDL	0.0010	mg/L

CHROMIUM ICP SW846-6010A

Analyst: A. HILSCHER Analysis Date: 16-MAY-97 18:14 Instrument: ICP Test: M110.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
CHROMIUM	BDL	0.010	mg/L

COPPER ICP SW846-6010A

Analyst: A. HILSCHER Analysis Date: 16-MAY-97 18:14 Instrument: ICP Test: M112.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
COPPER	BDL	0.020	mg/L

ZINC ICP SW846-6010A

Analyst: A. HILSCHER Analysis Date: 16-MAY-97 18:14 Instrument: ICP Test: M139.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
ZINC	BDL	0.020	mg/L

IRON ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 22-MAY-97 01:01 Instrument: ICP Test: M115.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.1
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
IRON	9.8	0.025	mg/L

MAGNESIUM ICP SW846-6010A

Analyst: A. HILSCHER Analysis Date: 16-MAY-97 18:14 Instrument: ICP Test: M118.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
MAGNESIUM	22.	0.20	mg/L

MANGANESE ICP SW846-6010A

Analyst: A. HILSCHER Analysis Date: 16-MAY-97 18:14 Instrument: ICP Test: M119.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
MANGANESE	0.21	0.010	mg/L

POTASSIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 04-JUN-97 00:56 Instrument: ICP Test: M126.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
POTASSIUM	1.5	0.20	mg/L

DISSOLVED SOLIDS EPA 160.1

Analyst: K. SULLIVAN Analysis Date: 15-MAY-97 12:30 Test: G402.7.0

Parameter	Result	Det. Limit	Units
SOLIDS	460	10	mg/L

TOTAL SUSPENDED SOLIDS EPA 160.2

Analyst: K. SULLIVAN Analysis Date: 16-MAY-97 14:00 Test: G403.7.0

Parameter	Result	Det. Limit	Units
SUSPENDED SOLIDS	23	1	mg/L

HERITAGE ENVIRONMENTAL SERVICES, INC. Sample ID: A407830 MW 14D

ALKALINITY TOTAL EPA 310.1

Analyst: K. WHITFIELD Analysis Date: 16-MAY-97 12:30 Test: G605.2.0

Parameter	Result	Det. Limit	Units
ALKALINITY	430	1.0	mg/L

ALKALINITY (BICARBONATE) EPA 310.1

Analyst: K. WHITFIELD Analysis Date: 16-MAY-97 12:30 Test: G610.2.0

Parameter	Result	Det. Limit	Units
ALKALINITY	430	1.0	mg/L

ALKALINITY (CARBONATE) EPA 310.1

Analyst: K. WHITFIELD Analysis Date: 16-MAY-97 12:30 Test: G611.2.0

Parameter	Result	Det. Limit	Units
ALKALINITY	BDL	1.0	mg/L

FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A

Analyst: R. DALAL Analysis Date: 15-MAY-97 11:00 Instrument: PREP Test: P130.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

ARSENIC TRACE ICP SW846-6010A

Analyst: A. ROBERTSON Analysis Date: 20-MAY-97 12:34 Instrument: TRACE ICP Test: M103.0.0

Parameter	Result	Det. Limit	Units
ARSENIC	0.0073	0.0050	mg/L

CALCIUM ICP SW846-6010A

Analyst: A. HILSCHER Analysis Date: 16-MAY-97 23:57 Instrument: ICP Test: M109.3.0

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
CALCIUM	74.	0.20	mg/L

SULFATE BY ION CHROMATOGRAPHY SW846-9056

Analyst: M. ADKINS Analysis Date: 14-MAY-97 19:52 Instrument: IC Test: G310.7.0

Parameter	Result	Det. Limit	Units
SULFATE	BDL	0.25	mg/L

VOLATILE ORGANICS (CAPILLARY COLUMN) SW846-8260A

Analyst: H. WILLIAMS Analysis Date: 21-MAY-97 08:28 Instrument: GC/MS VOA Test: O510.6.0

Parameter	Result	Det. Limit	Units
BENZENE	BDL	5.0	ug/L
CIS-1,3-DICHLOROPROPENE	BDL	5.0	ug/L
TRANS-1,3-DICHLOROPROPENE	BDL	5.0	ug/L
ETHYL BENZENE	BDL	5.0	ug/L
BROMOMETHANE	BDL	5.0	ug/L
CARBON TETRACHLORIDE	BDL	5.0	ug/L
CHLOROBENZENE	BDL	5.0	ug/L
CHLOROETHANE	BDL	5.0	ug/L
CHLOROFORM	BDL	5.0	ug/L
CHLOROMETHANE	BDL	5.0	ug/L
1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	BDL	5.0	ug/L
1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	BDL	5.0	ug/L
1,1-DICHLOROETHANE	BDL	5.0	ug/L
CIS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
TRANS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
1,1-DICHLOROETHENE	BDL	5.0	ug/L
1,2-DICHLOROETHANE	BDL	5.0	ug/L
1,2-DICHLOROPROPANE	BDL	5.0	ug/L

 (continued on next page)

HERITAGE ENVIRONMENTAL SERVICES, INC.

Sample ID: A407830 MW 14D

Parameter	Result	Det. Limit	Units
DICHLOROMETHANE (METHYLENE CHLORIDE)	BDL	5.0	ug/L
STYRENE	BDL	5.0	ug/L
1,1,1,2-TETRACHLOROETHANE	BDL	5.0	ug/L
1,1,2,2-TETRACHLOROETHANE	BDL	5.0	ug/L
TETRACHLOROETHENE	BDL	5.0	ug/L
TOLUENE	BDL	5.0	ug/L
1,1,1-TRICHLOROETHANE	BDL	5.0	ug/L
1,1,2-TRICHLOROETHANE	BDL	5.0	ug/L
TRICHLOROETHENE	BDL	5.0	ug/L
TRICHLOROFLUOROMETHANE	BDL	5.0	ug/L
VINYL CHLORIDE	BDL	5.0	ug/L
XYLENES (O/M/P-XYLENE)	BDL	2.0	ug/L
...			
SURROGATE RECOVERY		5.0	ug/L

DICHLOROETHANE-D4	108		% Rec
TOLUENE-D8	97		% Rec
4-BROMOFLUOROBENZENE	96		% Rec

Sample Comments

BDL Below Detection Limit

Sample chain of custody number 64139.

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Approved : P.K. Spence

CERTIFICATE OF ANALYSIS

Service Location	Received	Project	Lab ID
HERITAGE ENVIRONMENTAL SERVICES, INC. COMMERCIAL LABORATORY OPERATIONS 7901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8304	14-MAY-97	4315	A407862
	Complete	PO Number	
	04-JUN-97	IN21405J0025	
	Printed	Sampled	
	26-JUN-97	13-MAY-97 11:05	

Report To	Bill To
JEFF JENKINS BFI WASTE SYSTEMS 2020 LAUBSCHER ROAD EVANSVILLE, IN 47720	ALISHA CLARK BFI WASTE SYSTEMS 2020 LAUBSCHER ROAD EVANSVILLE, IN 47720

Sample Description

CLIENT ID: MW 14D DUP

AMMONIA DISTILLATION EPA 350.2

Analyst: K. BAX Analysis Date: 15-MAY-97 17:56 Instrument: PREP Test: P203.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	200		mL
FINAL VOLUME	250		mL

AMMONIA NITROGEN EPA 350.3

Analyst: K. BUNCH Analysis Date: 16-MAY-97 13:00 Test: G203.4.0

Prep: AMMONIA DISTILLATION EPA 350.2 P203.4.0

Parameter	Result	Det. Limit	Units
NITROGEN, AMMONIA	8.1	0.24	mg/L

1:2 dilution

CHLORIDE BY ION CHROMATOGRAPHY SW846-9056

Analyst: M. ADKINS Analysis Date: 15-MAY-97 23:53 Instrument: IC Test: G310.2.0

Parameter	Result	Det. Limit	Units
CHLORIDE	17	0.25	mg/L

FIELD FILTRATION SAS

Analyst: . Analysis Date: Instrument: FIELD Test: P110.0.0

FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A

Analyst: R. DALAL Analysis Date: 15-MAY-97 11:00 Instrument: PREP Test: P132.4.0

Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A

Analyst: B. GRAVES Analysis Date: 20-MAY-97 14:30 Instrument: PREP Test: P132.4.1

Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

ARSENIC TRACE ICP SW846-6010A

Analyst: A. ROBERTSON Analysis Date: 20-MAY-97 12:04 Instrument: TRACE ICP Test: M103.0.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
ARSENIC	0.0083	0.0050	mg/L

SODIUM ICP SW846-6010A

Analyst: A. HILSCHER Analysis Date: 16-MAY-97 18:21 Instrument: ICP Test: M131.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
SODIUM	55.	0.20	mg/L

CADMIUM TRACE ICP SW846-6010A

Analyst: A. ROBERTSON Analysis Date: 20-MAY-97 12:04 Instrument: TRACE ICP Test: M108.0.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
CADMIUM	BDL	0.0010	mg/L

CHROMIUM ICP SW846-6010A

Analyst: A. HILSCHER Analysis Date: 16-MAY-97 18:21 Instrument: ICP Test: M110.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
CHROMIUM	BDL	0.010	mg/L

COPPER ICP SW846-6010A

Analyst: A. HILSCHER Analysis Date: 16-MAY-97 18:21 Instrument: ICP Test: M112.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
COPPER	BDL	0.020	mg/L

ZINC ICP SW846-6010A

Analyst: A. HILSCHER Analysis Date: 16-MAY-97 18:21 Instrument: ICP Test: M139.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
ZINC	BDL	0.020	mg/L

IRON ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 22-MAY-97 01:10 Instrument: ICP Test: M115.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.1
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
IRON	9.8	0.025	mg/L

MAGNESIUM ICP SW846-6010A

Analyst: A. HILSCHER Analysis Date: 16-MAY-97 18:21 Instrument: ICP Test: M118.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
MAGNESIUM	22.	0.20	mg/L

MANGANESE ICP SW846-6010A

Analyst: A. HILSCHER Analysis Date: 16-MAY-97 18:21 Instrument: ICP Test: M119.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
MANGANESE	0.21	0.010	mg/L

POTASSIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 04-JUN-97 01:03 Instrument: ICP Test: M126.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
POTASSIUM	1.4	0.20	mg/L

DISSOLVED SOLIDS EPA 160.1

Analyst: K. SULLIVAN Analysis Date: 19-MAY-97 15:00 Test: G402.7.0

Parameter	Result	Det. Limit	Units
SOLIDS	460	10	mg/L

TOTAL SUSPENDED SOLIDS EPA 160.2

Analyst: K. SULLIVAN Analysis Date: 16-MAY-97 14:00 Test: G403.7.0

Parameter	Result	Det. Limit	Units
SUSPENDED SOLIDS	24	1	mg/L

ALKALINITY TOTAL EPA 310.1

Analyst: K. WHITFIELD Analysis Date: 16-MAY-97 12:30 Test: G605.2.0

Parameter	Result	Det. Limit	Units
ALKALINITY	440	1.0	mg/L

ALKALINITY (BICARBONATE) EPA 310.1

Analyst: K. WHITFIELD Analysis Date: 16-MAY-97 12:30 Test: G610.2.0

Parameter	Result	Det. Limit	Units
ALKALINITY	440	1.0	mg/L

ALKALINITY (CARBONATE) EPA 310.1

Analyst: K. WHITFIELD Analysis Date: 16-MAY-97 12:30 Test: G611.2.0

Parameter	Result	Det. Limit	Units
ALKALINITY	BDL	1.0	mg/L

FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A

Analyst: R. DALAL Analysis Date: 15-MAY-97 11:00 Instrument: PREP Test: P130.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

ARSENIC TRACE ICP SW846-6010A

Analyst: A. ROBERTSON Analysis Date: 20-MAY-97 12:41 Instrument: TRACE ICP Test: M103.0.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
ARSENIC	0.0084	0.0050	mg/L

CALCIUM ICP SW846-6010A

Analyst: A. HILSCHER Analysis Date: 17-MAY-97 00:04 Instrument: ICP Test: M109.3.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
CALCIUM	73.	0.20	mg/L

HERITAGE ENVIRONMENTAL SERVICES, INC. Sample ID: A407862 MW 14D DUP

SULFATE BY ION CHROMATOGRAPHY SW846-9056

Analyst: M. ADKINS Analysis Date: 15-MAY-97 23:53 Instrument: IC Test: G310.7.0

Parameter	Result	Det. Limit	Units
SULFATE	BDL	0.25	mg/L

VOLATILE ORGANICS (CAPILLARY COLUMN) SW846-8260A

Analyst: H. WILLIAMS Analysis Date: 21-MAY-97 10:19 Instrument: GC/MS VOA Test: 0510.6.0

Parameter	Result	Det. Limit	Units
BENZENE	BDL	5.0	ug/L
CIS-1,3-DICHLOROPROPENE	BDL	5.0	ug/L
TRANS-1,3-DICHLOROPROPENE	BDL	5.0	ug/L
ETHYL BENZENE	BDL	5.0	ug/L
BROMOMETHANE	BDL	5.0	ug/L
CARBON TETRACHLORIDE	BDL	5.0	ug/L
CHLOROBENZENE	BDL	5.0	ug/L
CHLOROETHANE	BDL	5.0	ug/L
CHLOROFORM	BDL	5.0	ug/L
CHLOROMETHANE	BDL	5.0	ug/L
1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	BDL	5.0	ug/L
1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	BDL	5.0	ug/L
1,1-DICHLOROETHANE	BDL	5.0	ug/L
CIS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
TRANS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
1,1-DICHLOROETHENE	BDL	5.0	ug/L
1,2-DICHLOROETHANE	BDL	5.0	ug/L
1,2-DICHLOROPROPANE	BDL	5.0	ug/L
DICHLOROMETHANE (METHYLENE CHLORIDE)	BDL	5.0	ug/L
STYRENE	BDL	5.0	ug/L
1,1,1,2-TETRACHLOROETHANE	BDL	5.0	ug/L
1,1,2,2-TETRACHLOROETHANE	BDL	5.0	ug/L
TETRACHLOROETHENE	BDL	5.0	ug/L
TOLUENE	BDL	5.0	ug/L
1,1,1-TRICHLOROETHANE	BDL	5.0	ug/L
1,1,2-TRICHLOROETHANE	BDL	5.0	ug/L
TRICHLOROETHENE	BDL	5.0	ug/L
TRICHLOROFLUOROMETHANE	BDL	5.0	ug/L
VINYL CHLORIDE	BDL	2.0	ug/L
XYLENES (O/M/P-XYLENE)	BDL	5.0	ug/L
...			
SURROGATE RECOVERY			

DICHLOROETHANE-D4	106		% Rec
TOLUENE-D8	100		% Rec
4-BROMOFLUOROBENZENE	102		% Rec

Sample Comments

BDL Below Detection Limit

Sample chain of custody number 64139.

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Approved : P.K. Spence

CERTIFICATE OF ANALYSIS

Service Location	Received	Project	Lab ID
HERITAGE ENVIRONMENTAL SERVICES, INC. COMMERCIAL LABORATORY OPERATIONS 7901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8304	15-MAY-97	4315	A407962
	Complete	PO Number	
	02-JUN-97	IN21405J0025	
	Printed	Sampled	
	27-JUN-97	14-MAY-97 15:09	

Report To	Bill To
JEFF JENKINS BFI WASTE SYSTEMS 2020 LAUBSCHER ROAD EVANSVILLE, IN 47720	ALISHA CLARK BFI WASTE SYSTEMS 2020 LAUBSCHER ROAD EVANSVILLE, IN 47720

Sample Description

CLIENT ID: MW 15D
DESCRIPTION: GROUNDWATER

FIELD TURBIDITY EPA 180.1

Analyst: S. ASKEW Analysis Date: 14-MAY-97 Instrument: FIELD Test: G602.0.0

Parameter	Result	Det. Limit	Units
TURBIDITY	4.0	0.1	ntu

FIELD TEMPERATURE EPA 170.1

Analyst: S. ASKEW Analysis Date: 14-MAY-97 Instrument: FIELD Test: G603.0.0

Parameter	Result	Det. Limit	Units
TEMPERATURE	14.5		Degrees C

FIELD PH (AQUEOUS) SW846-9040A

Analyst: S. ASKEW Analysis Date: 14-MAY-97 Instrument: FIELD Test: G607.0.0

Parameter	Result	Det. Limit	Units
PH	7.2	0.1	Std. Units

FIELD DISSOLVED OXYGEN SAS

Analyst: S. ASKEW Analysis Date: 14-MAY-97 Instrument: FIELD Test: G600.1.0

Parameter	Result	Det. Limit	Units
DISSOLVED OXYGEN	0.07		mg/L

FIELD OXIDATION-REDUCTION POTENTIAL SM2580B-18TH ED

Analyst: S. ASKEW Analysis Date: 14-MAY-97 Instrument: FIELD Test: G604.7.0

Parameter	Result	Det. Limit	Units
OXIDATION/REDUCTION POTENTIAL	-17		mV

FIELD SPECIFIC CONDUCTANCE SW846-9050

Analyst: S. ASKEW Analysis Date: 14-MAY-97 Instrument: FIELD Test: G604.0.0

Parameter	Result	Det. Limit	Units
CONDUCTIVITY	887	1.0	umHOS/cm

AMMONIA DISTILLATION EPA 350.2

Analyst: K. BAX Analysis Date: 16-MAY-97 18:00 Instrument: PREP Test: P203.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	200		mL
FINAL VOLUME	250		mL

 (continued on next page)

AMMONIA NITROGEN EPA 350.3

Analyst: K. BUNCH Analysis Date: 19-MAY-97 10:30 Test: G203.4.0
Prep: AMMONIA DISTILLATION EPA 350.2 P203.4.0

Parameter	Result	Det. Limit	Units
NITROGEN, AMMONIA	1.2	0.12	mg/L

CHLORIDE BY ION CHROMATOGRAPHY SW846-9056

Analyst: M. ADKINS Analysis Date: 16-MAY-97 18:17 Instrument: IC Test: G310.2.0

Parameter	Result	Det. Limit	Units
CHLORIDE	25	0.25	mg/L

FIELD FILTRATION SAS

Analyst: . Analysis Date: Instrument: FIELD Test: P110.0.0

FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A

Analyst: B. GRAVES Analysis Date: 16-MAY-97 12:30 Instrument: PREP Test: P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

SODIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 20-MAY-97 22:21 Instrument: ICP Test: M131.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
SODIUM	81.	0.20	mg/L

CADMIUM TRACE ICP SW846-6010A

Analyst: A. ROBERTSON Analysis Date: 22-MAY-97 14:33 Instrument: TRACE ICP Test: M108.0.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
CADMIUM	BDL	0.0010	mg/L

CHROMIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 20-MAY-97 22:21 Instrument: ICP Test: M110.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
CHROMIUM	BDL	0.010	mg/L

COPPER ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 20-MAY-97 22:21 Instrument: ICP Test: M112.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
COPPER	BDL	0.020	mg/L

ZINC ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 20-MAY-97 22:21 Instrument: ICP Test: M139.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
ZINC	BDL	0.020	mg/L

IRON ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 20-MAY-97 22:21 Instrument: ICP Test: M115.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
IRON	10.	0.025	mg/L

MAGNESIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 20-MAY-97 22:21 Instrument: ICP Test: M118.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
MAGNESIUM	36.	0.20	mg/L

MANGANESE ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 20-MAY-97 22:21 Instrument: ICP Test: M119.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
MANGANESE	0.30	0.010	mg/L

POTASSIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 20-MAY-97 22:21 Instrument: ICP Test: M126.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
POTASSIUM	0.82	0.20	mg/L

DISSOLVED SOLIDS EPA 160.1

Analyst: K. SULLIVAN Analysis Date: 20-MAY-97 16:00 Test: G402.7.0

Parameter	Result	Det. Limit	Units
SOLIDS	500	10	mg/L

TOTAL SUSPENDED SOLIDS EPA 160.2

Analyst: K. SULLIVAN Analysis Date: 20-MAY-97 14:00 Test: G403.7.0

Parameter	Result	Det. Limit	Units
SUSPENDED SOLIDS	22	1.0	mg/L

ALKALINITY TOTAL EPA 310.1

Analyst: K. WHITFIELD Analysis Date: 16-MAY-97 12:30 Test: G605.2.0

Parameter	Result	Det. Limit	Units
ALKALINITY	450	1.0	mg/L

ALKALINITY (BICARBONATE) EPA 310.1

Analyst: K. WHITFIELD Analysis Date: 16-MAY-97 12:30 Test: G610.2.0

Parameter	Result	Det. Limit	Units
ALKALINITY	450	1.0	mg/L

ALKALINITY (CARBONATE) EPA 310.1

Analyst: K. WHITFIELD Analysis Date: 16-MAY-97 12:30 Test: G611.2.0

Parameter	Result	Det. Limit	Units
ALKALINITY	BDL	1.0	mg/L

 (continued on next page)

FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A

Analyst: B. GRAVES Analysis Date: 16-MAY-97 12:30 Instrument: PREP Test: P130.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

CALCIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 20-MAY-97 23:14 Instrument: ICP Test: M109.3.0

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
CALCIUM	86.	0.20	mg/L

SULFATE BY ION CHROMATOGRAPHY SW846-9056

Analyst: M. ADKINS Analysis Date: 16-MAY-97 18:17 Instrument: IC Test: G310.7.0

Parameter	Result	Det. Limit	Units
SULFATE	BDL	0.25	mg/L

VOLATILE ORGANICS (CAPILLARY COLUMN) SW846-8260A

Analyst: B. MAZUR Analysis Date: 27-MAY-97 19:40 Instrument: GC/MS VOA Test: O510.6.0

Parameter	Result	Det. Limit	Units
BENZENE	BDL	5.0	ug/L
CIS-1,3-DICHLOROPROPENE	BDL	5.0	ug/L
TRANS-1,3-DICHLOROPROPENE	BDL	5.0	ug/L
ETHYL BENZENE	BDL	5.0	ug/L
BROMOMETHANE	BDL	5.0	ug/L
CARBON TETRACHLORIDE	BDL	5.0	ug/L
CHLOROBENZENE	BDL	5.0	ug/L
CHLOROETHANE	BDL	5.0	ug/L
CHLOROFORM	BDL	5.0	ug/L
CHLOROMETHANE	BDL	5.0	ug/L
1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	BDL	5.0	ug/L
1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	BDL	5.0	ug/L
1,1-DICHLOROETHANE	BDL	5.0	ug/L
CIS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
TRANS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
1,1-DICHLOROETHENE	BDL	5.0	ug/L
1,2-DICHLOROETHANE	BDL	5.0	ug/L
1,2-DICHLOROPROPANE	BDL	5.0	ug/L
DICHLOROMETHANE (METHYLENE CHLORIDE)	BDL	5.0	ug/L
STYRENE	BDL	5.0	ug/L
1,1,1,2-TETRACHLOROETHANE	BDL	5.0	ug/L
1,1,2,2-TETRACHLOROETHANE	BDL	5.0	ug/L
TETRACHLOROETHENE	BDL	5.0	ug/L
TOLUENE	BDL	5.0	ug/L
1,1,1-TRICHLOROETHANE	BDL	5.0	ug/L
1,1,2-TRICHLOROETHANE	BDL	5.0	ug/L
TRICHLOROETHENE	BDL	5.0	ug/L
TRICHLOROFLUOROMETHANE	BDL	5.0	ug/L
VINYL CHLORIDE	BDL	2.0	ug/L
XYLENES (O/M/P-XYLENE)	BDL	5.0	ug/L
...			
SURROGATE RECOVERY			

DICHLOROETHANE-D4	113		% Rec
TOLUENE-D8	97		% Rec
4-BROMOFLUOROBENZENE	94		% Rec

 (continued on next page)

Sample Comments

BDL Below Detection Limit

Sample chain of custody number 64130.

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Approved : P.K. Spence

CERTIFICATE OF ANALYSIS

Service Location	Received	Project	Lab ID
HERITAGE ENVIRONMENTAL SERVICES, INC. COMMERCIAL LABORATORY OPERATIONS 7901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8304	16-MAY-97	4315	A408106
	Complete	PO Number	
	03-JUN-97	IN21405J0025	
	Printed	Sampled	
	27-JUN-97	15-MAY-97 09:36	

Report To	Bill To
JEFF JENKINS BFI WASTE SYSTEMS 2020 LAUBSCHER ROAD EVANSVILLE, IN 47720	ALISHA CLARK BFI WASTE SYSTEMS 2020 LAUBSCHER ROAD EVANSVILLE, IN 47720

Sample Description

CLIENT ID: MW336

FIELD TURBIDITY EPA 180.1

Analyst: S. ASKEW Analysis Date: 15-MAY-97 Instrument: FIELD Test: G602.0.0

Parameter	Result	Det. Limit	Units
TURBIDITY	7.85	0.1	ntu

FIELD TEMPERATURE EPA 170.1

Analyst: S. ASKEW Analysis Date: 15-MAY-97 Instrument: FIELD Test: G603.0.0

Parameter	Result	Det. Limit	Units
TEMPERATURE	14.9		Degrees C

FIELD PH (AQUEOUS) SW846-9040A

Analyst: S. ASKEW Analysis Date: 15-MAY-97 Instrument: FIELD Test: G607.0.0

Parameter	Result	Det. Limit	Units
PH	6.9	0.1	Std. Units

FIELD DISSOLVED OXYGEN SAS

Analyst: S. ASKEW Analysis Date: 15-MAY-97 Instrument: FIELD Test: G600.1.0

Parameter	Result	Det. Limit	Units
DISSOLVED OXYGEN	0.84		mg/L

FIELD OXIDATION-REDUCTION POTENTIAL SM2580B-18TH ED

Analyst: S. ASKEW Analysis Date: 15-MAY-97 Instrument: FIELD Test: G604.7.0

Parameter	Result	Det. Limit	Units
OXIDATION/REDUCTION POTENTIAL	7		mV

FIELD SPECIFIC CONDUCTANCE SW846-9050

Analyst: S. ASKEW Analysis Date: 15-MAY-97 Instrument: FIELD Test: G604.0.0

Parameter	Result	Det. Limit	Units
CONDUCTIVITY	877	1.0	umHOS/cm

AMMONIA DISTILLATION EPA 350.2

Analyst: C. PEREGRINE Analysis Date: 22-MAY-97 08:00 Instrument: PREP Test: P203.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	200		mL
FINAL VOLUME	250		mL

 (continued on next page)

AMMONIA NITROGEN EPA 350.3

Analyst: K. BUNCH Analysis Date: 23-MAY-97 09:30 Test: G203.4.0
Prep: AMMONIA DISTILLATION EPA 350.2 P203.4.0

Parameter	Result	Det. Limit	Units
NITROGEN, AMMONIA	BDL	0.12	mg/L

CHLORIDE BY ION CHROMATOGRAPHY SW846-9056

Analyst: M. ADKINS Analysis Date: 16-MAY-97 18:17 Instrument: IC Test: G310.2.0

Parameter	Result	Det. Limit	Units
CHLORIDE	41	0.5	mg/L
1:2 DILUTION			

FIELD FILTRATION SAS

Analyst: . Analysis Date: Instrument: FIELD Test: P110.0.0

FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A

Analyst: B. GRAVES Analysis Date: 19-MAY-97 14:00 Instrument: PREP Test: P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

SODIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:18 Instrument: ICP Test: M131.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
SODIUM	100	0.20	mg/L

CADMIUM TRACE ICP SW846-6010A

Analyst: A. ROBERTSON Analysis Date: 28-MAY-97 10:13 Instrument: TRACE ICP Test: M108.0.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
CADMIUM	BDL	0.0010	mg/L

CHROMIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:18 Instrument: ICP Test: M110.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
CHROMIUM	BDL	0.010	mg/L

COPPER ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:18 Instrument: ICP Test: M112.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
COPPER	BDL	0.020	mg/L

ZINC ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:18 Instrument: ICP Test: M139.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
ZINC	BDL	0.020	mg/L

IRON ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:18 Instrument: ICP Test: M115.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
IRON	3.6	0.025	mg/L

MAGNESIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:18 Instrument: ICP Test: M118.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
MAGNESIUM	21.	0.20	mg/L

MANGANESE ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:18 Instrument: ICP Test: M119.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
MANGANESE	0.98	0.010	mg/L

POTASSIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:18 Instrument: ICP Test: M126.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
POTASSIUM	0.60	0.20	mg/L

DISSOLVED SOLIDS EPA 160.1

Analyst: K. SULLIVAN Analysis Date: 20-MAY-97 16:00 Test: G402.7.0

Parameter	Result	Det. Limit	Units
SOLIDS	490	10	mg/L

TOTAL SUSPENDED SOLIDS EPA 160.2

Analyst: K. SULLIVAN Analysis Date: 20-MAY-97 14:00 Test: G403.7.0

Parameter	Result	Det. Limit	Units
SUSPENDED SOLIDS	10	1.0	mg/L

ALKALINITY TOTAL EPA 310.1

Analyst: C. ROBISON Analysis Date: 19-MAY-97 19:00 Test: G605.2.0

Parameter	Result	Det. Limit	Units
ALKALINITY	440	1.0	mg/L

ALKALINITY (BICARBONATE) EPA 310.1

Analyst: C. ROBISON Analysis Date: 19-MAY-97 19:00 Test: G610.2.0

Parameter	Result	Det. Limit	Units
ALKALINITY	440	1.0	mg/L

ALKALINITY (CARBONATE) EPA 310.1

Analyst: C. ROBISON Analysis Date: 19-MAY-97 19:00 Test: G611.2.0

Parameter	Result	Det. Limit	Units
ALKALINITY	BDL	1.0	mg/L

FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A

Analyst: N. CARR Analysis Date: 19-MAY-97 09:30 Instrument: PREP Test: P130.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

CALCIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 22:28 Instrument: ICP Test: M109.3.0

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
CALCIUM	66.	0.20	mg/L

SULFATE BY ION CHROMATOGRAPHY SW846-9056

Analyst: M. ADKINS Analysis Date: 16-MAY-97 18:17 Instrument: IC Test: G310.7.0

Parameter	Result	Det. Limit	Units
SULFATE	BDL	0.25	mg/L

VOLATILE ORGANICS (CAPILLARY COLUMN) SW846-8260A

Analyst: B. MAZUR Analysis Date: 21-MAY-97 19:16 Instrument: GC/MS VOA Test: O510.6.0

Parameter	Result	Det. Limit	Units
BENZENE	BDL	5.0	ug/L
CIS-1,3-DICHLOROPROPENE	BDL	5.0	ug/L
TRANS-1,3-DICHLOROPROPENE	BDL	5.0	ug/L
ETHYL BENZENE	BDL	5.0	ug/L
BROMOMETHANE	BDL	5.0	ug/L
CARBON TETRACHLORIDE	BDL	5.0	ug/L
CHLOROBENZENE	BDL	5.0	ug/L
CHLOROETHANE	BDL	5.0	ug/L
CHLOROFORM	BDL	5.0	ug/L
CHLOROMETHANE	BDL	5.0	ug/L
1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	BDL	5.0	ug/L
1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	BDL	5.0	ug/L
1,1-DICHLOROETHANE	BDL	5.0	ug/L
CIS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
TRANS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
1,1-DICHLOROETHENE	BDL	5.0	ug/L
1,2-DICHLOROETHANE	BDL	5.0	ug/L
1,2-DICHLOROPROPANE	BDL	5.0	ug/L
DICHLOROMETHANE (METHYLENE CHLORIDE)	BDL	5.0	ug/L
STYRENE	BDL	5.0	ug/L
1,1,1,2-TETRACHLOROETHANE	BDL	5.0	ug/L
1,1,2,2-TETRACHLOROETHANE	BDL	5.0	ug/L
TETRACHLOROETHENE	BDL	5.0	ug/L
TOLUENE	BDL	5.0	ug/L
1,1,1-TRICHLOROETHANE	BDL	5.0	ug/L
1,1,2-TRICHLOROETHANE	BDL	5.0	ug/L
TRICHLOROETHENE	BDL	5.0	ug/L
TRICHLOROFLUOROMETHANE	BDL	5.0	ug/L
VINYL CHLORIDE	BDL	2.0	ug/L
XYLENES (O/M/P-XYLENE)	BDL	5.0	ug/L
...			
SURROGATE RECOVERY			

DICHLOROETHANE-D4	114		% Rec
TOLUENE-D8	97		% Rec
4-BROMOFLUOROBENZENE	90		% Rec

 (continued on next page)

Sample Comments

BDL Below Detection Limit

Sample chain of custody number 64131.

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Approved : P.K. Spence

CERTIFICATE OF ANALYSIS

Service Location	Received	Project	Lab ID
HERITAGE ENVIRONMENTAL SERVICES, INC. COMMERCIAL LABORATORY OPERATIONS 7901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8304	16-MAY-97	4315	A408109
	Complete	PO Number	
	02-JUN-97	IN21405J0025	
	Printed	Sampled	
	27-JUN-97	15-MAY-97 11:30	

Report To	Bill To
JEFF JENKINS BFI WASTE SYSTEMS 2020 LAUBSCHER ROAD EVANSVILLE, IN 47720	ALISHA CLARK BFI WASTE SYSTEMS 2020 LAUBSCHER ROAD EVANSVILLE, IN 47720

Sample Description

CLIENT ID: MW337

FIELD TURBIDITY EPA 180.1

Analyst: S. ASKEW Analysis Date: 15-MAY-97 Instrument: FIELD Test: G602.0.0

Parameter	Result	Det. Limit	Units
TURBIDITY	13.8	0.1	ntu

FIELD TEMPERATURE EPA 170.1

Analyst: S. ASKEW Analysis Date: 15-MAY-97 Instrument: FIELD Test: G603.0.0

Parameter	Result	Det. Limit	Units
TEMPERATURE	14.6		Degrees C

FIELD PH (AQUEOUS) SW846-9040A

Analyst: S. ASKEW Analysis Date: 15-MAY-97 Instrument: FIELD Test: G607.0.0

Parameter	Result	Det. Limit	Units
PH	6.81	0.1	Std. Units

FIELD DISSOLVED OXYGEN SAS

Analyst: S. ASKEW Analysis Date: 15-MAY-97 Instrument: FIELD Test: G600.1.0

Parameter	Result	Det. Limit	Units
DISSOLVED OXYGEN	2.83	1	mg/L

FIELD OXIDATION-REDUCTION POTENTIAL SM2580B-18TH ED

Analyst: S. ASKEW Analysis Date: 15-MAY-97 Instrument: FIELD Test: G604.7.0

Parameter	Result	Det. Limit	Units
OXIDATION/REDUCTION POTENTIAL	13		mV

FIELD SPECIFIC CONDUCTANCE SW846-9050

Analyst: S. ASKEW Analysis Date: 15-MAY-97 Instrument: FIELD Test: G604.0.0

Parameter	Result	Det. Limit	Units
CONDUCTIVITY	721	1.0	umHOS/cm

AMMONIA DISTILLATION EPA 350.2

Analyst: K. BAX Analysis Date: 16-MAY-97 18:00 Instrument: PREP Test: P203.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	200		mL
FINAL VOLUME	250		mL

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AMMONIA NITROGEN EPA 350.3

Analyst: K. BUNCH Analysis Date: 19-MAY-97 10:30 Test: G203.4.0
Prep: AMMONIA DISTILLATION EPA 350.2 P203.4.0

Parameter	Result	Det. Limit	Units
NITROGEN, AMMONIA	0.76	0.12	mg/L

CHLORIDE BY ION CHROMATOGRAPHY SW846-9056

Analyst: M. ADKINS Analysis Date: 16-MAY-97 18:17 Instrument: IC Test: G310.2.0

Parameter	Result	Det. Limit	Units
CHLORIDE	24	0.25	mg/L

FIELD FILTRATION SAS

Analyst: . Analysis Date: Instrument: FIELD Test: P110.0.0

FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A

Analyst: B. GRAVES Analysis Date: 19-MAY-97 14:00 Instrument: PREP Test: P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

SODIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:28 Instrument: ICP Test: M131.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
SODIUM	86.	0.20	mg/L

CADMIUM TRACE ICP SW846-6010A

Analyst: A. ROBERTSON Analysis Date: 28-MAY-97 10:23 Instrument: TRACE ICP Test: M108.0.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
CADMIUM	BDL	0.0010	mg/L

CHROMIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:28 Instrument: ICP Test: M110.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
CHROMIUM	BDL	0.010	mg/L

COPPER ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:28 Instrument: ICP Test: M112.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
COPPER	BDL	0.020	mg/L

ZINC ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:28 Instrument: ICP Test: M139.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
ZINC	BDL	0.020	mg/L

IRON ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:28 Instrument: ICP Test: M115.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
IRON	2.0	0.025	mg/L

MAGNESIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:28 Instrument: ICP Test: M118.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
MAGNESIUM	21.	0.20	mg/L

MANGANESE ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:28 Instrument: ICP Test: M119.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
MANGANESE	0.48	0.010	mg/L

POTASSIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:28 Instrument: ICP Test: M126.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
POTASSIUM	1.0	0.20	mg/L

DISSOLVED SOLIDS EPA 160.1

Analyst: K. SULLIVAN Analysis Date: 20-MAY-97 16:00 Test: G402.7.0

Parameter	Result	Det. Limit	Units
SOLIDS	420	10	mg/L

TOTAL SUSPENDED SOLIDS EPA 160.2

Analyst: K. SULLIVAN Analysis Date: 20-MAY-97 14:00 Test: G403.7.0

Parameter	Result	Det. Limit	Units
SUSPENDED SOLIDS	9	1.0	mg/L

ALKALINITY TOTAL EPA 310.1

Analyst: C. ROBISON Analysis Date: 19-MAY-97 19:00 Test: G605.2.0

Parameter	Result	Det. Limit	Units
ALKALINITY	370	1.0	mg/L

ALKALINITY (BICARBONATE) EPA 310.1

Analyst: C. ROBISON Analysis Date: 19-MAY-97 19:00 Test: G610.2.0

Parameter	Result	Det. Limit	Units
ALKALINITY	370	1.0	mg/L

ALKALINITY (CARBONATE) EPA 310.1

Analyst: C. ROBISON Analysis Date: 19-MAY-97 19:00 Test: G611.2.0

Parameter	Result	Det. Limit	Units
ALKALINITY	BDL	1.0	mg/L

FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A

Analyst: N. CARR Analysis Date: 19-MAY-97 09:30 Instrument: PREP Test: P130.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

CALCIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 23:05 Instrument: ICP Test: M109.3.0

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
CALCIUM	49.	0.20	mg/L

SULFATE BY ION CHROMATOGRAPHY SW846-9056

Analyst: M. ADKINS Analysis Date: 16-MAY-97 18:17 Instrument: IC Test: G310.7.0

Parameter	Result	Det. Limit	Units
SULFATE	BDL	0.25	mg/L

VOLATILE ORGANICS (CAPILLARY COLUMN) SW846-8260A

Analyst: B. MAZUR Analysis Date: 27-MAY-97 16:00 Instrument: GC/MS VOA Test: O510.6.0

Parameter	Result	Det. Limit	Units
BENZENE	BDL	5.0	ug/L
CIS-1,3-DICHLOROPROPENE	BDL	5.0	ug/L
TRANS-1,3-DICHLOROPROPENE	BDL	5.0	ug/L
ETHYL BENZENE	BDL	5.0	ug/L
BROMOMETHANE	BDL	5.0	ug/L
CARBON TETRACHLORIDE	BDL	5.0	ug/L
CHLOROBENZENE	BDL	5.0	ug/L
CHLOROETHANE	BDL	5.0	ug/L
CHLOROFORM	BDL	5.0	ug/L
CHLOROMETHANE	BDL	5.0	ug/L
1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	BDL	5.0	ug/L
1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	BDL	5.0	ug/L
1,1-DICHLOROETHANE	BDL	5.0	ug/L
CIS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
TRANS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
1,1-DICHLOROETHENE	BDL	5.0	ug/L
1,2-DICHLOROETHANE	BDL	5.0	ug/L
1,2-DICHLOROPROPANE	BDL	5.0	ug/L
DICHLOROMETHANE (METHYLENE CHLORIDE)	BDL	5.0	ug/L
STYRENE	BDL	5.0	ug/L
1,1,1,2-TETRACHLOROETHANE	BDL	5.0	ug/L
1,1,2,2-TETRACHLOROETHANE	BDL	5.0	ug/L
TETRACHLOROETHENE	BDL	5.0	ug/L
TOLUENE	BDL	5.0	ug/L
1,1,1-TRICHLOROETHANE	BDL	5.0	ug/L
1,1,2-TRICHLOROETHANE	BDL	5.0	ug/L
TRICHLOROETHENE	BDL	5.0	ug/L
TRICHLOROFLUOROMETHANE	BDL	5.0	ug/L
VINYL CHLORIDE	BDL	2.0	ug/L
XYLENES (O/M/P-XYLENE)	BDL	5.0	ug/L
...			
SURROGATE RECOVERY			

DICHLOROETHANE-D4	110		% Rec
TOLUENE-D8	99		% Rec
4-BROMOFLUOROBENZENE	94		% Rec

Sample Comments

BDL Below Detection Limit

Sample chain of custody number 64131.

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Approved : P.K. Spence

CERTIFICATE OF ANALYSIS

Service Location	Received	Project	Lab ID
HERITAGE ENVIRONMENTAL SERVICES, INC. COMMERCIAL LABORATORY OPERATIONS 7901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8304	16-MAY-97	4315	A408115
	Complete	PO Number	
	02-JUN-97	IN21405J0025	
	Printed	Sampled	
	27-JUN-97	15-MAY-97 10:10	

Report To	Bill To
JEFF JENKINS BFI WASTE SYSTEMS 2020 LAUBSCHER ROAD EVANSVILLE, IN 47720	ALISHA CLARK BFI WASTE SYSTEMS 2020 LAUBSCHER ROAD EVANSVILLE, IN 47720

Sample Description

CLIENT ID: MW3R1

FIELD TURBIDITY EPA 180.1

Analyst: S. ASKEW Analysis Date: 15-MAY-97 Instrument: FIELD Test: G602.0.0

Parameter	Result	Det. Limit	Units
TURBIDITY	4.21	0.1	ntu

FIELD PH (AQUEOUS) SW846-9040A

Analyst: S. ASKEW Analysis Date: 15-MAY-97 Instrument: FIELD Test: G607.0.0

Parameter	Result	Det. Limit	Units
PH	6.94	0.1	Std. Units

FIELD TEMPERATURE EPA 170.1

Analyst: S. ASKEW Analysis Date: 15-MAY-97 Instrument: FIELD Test: G603.0.0

Parameter	Result	Det. Limit	Units
TEMPERATURE	14.9		Degrees C

FIELD DISSOLVED OXYGEN SAS

Analyst: S. ASKEW Analysis Date: 15-MAY-97 Instrument: FIELD Test: G600.1.0

Parameter	Result	Det. Limit	Units
DISSOLVED OXYGEN	2.29	1	mg/L

FIELD OXIDATION-REDUCTION POTENTIAL SM2580B-18TH ED

Analyst: S. ASKEW Analysis Date: 15-MAY-97 Instrument: FIELD Test: G604.7.0

Parameter	Result	Det. Limit	Units
OXIDATION/REDUCTION POTENTIAL	9		mV

FIELD SPECIFIC CONDUCTANCE SW846-9050

Analyst: S. ASKEW Analysis Date: 15-MAY-97 Instrument: FIELD Test: G604.0.0

Parameter	Result	Det. Limit	Units
CONDUCTIVITY	1005	1.0	umHOS/cm

AMMONIA DISTILLATION EPA 350.2

Analyst: C. PEREGRINE Analysis Date: 22-MAY-97 08:00 Instrument: PREP Test: P203.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	200		mL
FINAL VOLUME	250		mL

AMMONIA NITROGEN EPA 350.3

Analyst: K. BUNCH Analysis Date: 23-MAY-97 09:30 Test: G203.4.0
Prep: AMMONIA DISTILLATION EPA 350.2 P203.4.0

Parameter	Result	Det. Limit	Units
NITROGEN, AMMONIA	BDL	0.12	mg/L

CHEMICAL OXYGEN DEMAND (COLORIMETRIC) EPA 410.4

Analyst: A. CLEMONS Analysis Date: 21-MAY-97 09:15 Test: G301.1.0

Parameter	Result	Det. Limit	Units
CHEMICAL OXYGEN DEMAND	BDL	10	mg/L

CHLORIDE BY ION CHROMATOGRAPHY SW846-9056

Analyst: M. ADKINS Analysis Date: 20-MAY-97 19:24 Instrument: IC Test: G310.2.0

Parameter	Result	Det. Limit	Units
CHLORIDE	52	1.3	mg/L
1:5 DILUTION			

DISSOLVED SOLIDS EPA 160.1

Analyst: K. SULLIVAN Analysis Date: 21-MAY-97 16:00 Test: G402.7.0

Parameter	Result	Det. Limit	Units
SOLIDS	740	10	mg/L

FIELD FILTRATION SAS

Analyst: . Analysis Date: Instrument: FIELD Test: P110.0.0

FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A

Analyst: B. GRAVES Analysis Date: 19-MAY-97 14:00 Instrument: PREP Test: P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

IRON ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 18:19 Instrument: ICP Test: M115.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
IRON	0.034	0.025	mg/L

FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A

Analyst: R. DALAL Analysis Date: 20-MAY-97 10:00 Instrument: PREP Test: P130.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

VOLATILE ORGANICS (CAPILLARY COLUMN) SW846-8260A

Analyst: H. WILLIAMS Analysis Date: 23-MAY-97 08:04 Instrument: GC/MS VOA Test: O510.6.0

Parameter	Result	Det. Limit	Units
BENZENE	BDL	5.0	ug/L
1,1-DICHLOROETHANE	BDL	5.0	ug/L
CIS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
TRANS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
DICHLOROMETHANE (METHYLENE CHLORIDE)	BDL	5.0	ug/L
TETRACHLOROETHENE	BDL	5.0	ug/L
TRICHLOROETHENE	BDL	5.0	ug/L
...			
SURROGATE RECOVERY			

 (continued on next page)

HERITAGE ENVIRONMENTAL SERVICES, INC. Sample ID: A408115 MW3R1

Parameter	Result	Det. Limit	Units
DICHLOROETHANE-D4	110		% Rec
TOLUENE-D8	102		% Rec
4-BROMOFLUOROBENZENE	108		% Rec
1:5 DILUTION			

Sample Comments

BDL Below Detection Limit

Sample chain of custody number 64131.

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Approved : P.K. Spence

CERTIFICATE OF ANALYSIS

Service Location	Received	Project	Lab ID
HERITAGE ENVIRONMENTAL SERVICES, INC. COMMERCIAL LABORATORY OPERATIONS 7901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8304	16-MAY-97	4315	A408114
	Complete	PO Number	
	02-JUN-97	IN21405J0025	
	Printed	Sampled	
	27-JUN-97	15-MAY-97 09:57	

Report To	Bill To
JEFF JENKINS BFI WASTE SYSTEMS 2020 LAUBSCHER ROAD EVANSVILLE, IN 47720	ALISHA CLARK BFI WASTE SYSTEMS 2020 LAUBSCHER ROAD EVANSVILLE, IN 47720

Sample Description

CLIENT ID: MW3R2

FIELD TURBIDITY EPA 180.1

Analyst: S. ASKEW Analysis Date: 15-MAY-97 Instrument: FIELD Test: G602.0.0

Parameter	Result	Det. Limit	Units
TURBIDITY	6.89	0.1	ntu

FIELD PH (AQUEOUS) SW846-9040A

Analyst: S. ASKEW Analysis Date: 15-MAY-97 Instrument: FIELD Test: G607.0.0

Parameter	Result	Det. Limit	Units
PH	6.9	0.1	Std. Units

FIELD TEMPERATURE EPA 170.1

Analyst: S. ASKEW Analysis Date: 15-MAY-97 Instrument: FIELD Test: G603.0.0

Parameter	Result	Det. Limit	Units
TEMPERATURE	14.1		Degrees C

FIELD DISSOLVED OXYGEN SAS

Analyst: S. ASKEW Analysis Date: 15-MAY-97 Instrument: FIELD Test: G600.1.0

Parameter	Result	Det. Limit	Units
DISSOLVED OXYGEN	1.16	1	mg/L

FIELD OXIDATION-REDUCTION POTENTIAL SM2580B-18TH ED

Analyst: S. ASKEW Analysis Date: 15-MAY-97 Instrument: FIELD Test: G604.7.0

Parameter	Result	Det. Limit	Units
OXIDATION/REDUCTION POTENTIAL	7		mV

FIELD SPECIFIC CONDUCTANCE SW846-9050

Analyst: S. ASKEW Analysis Date: 15-MAY-97 Instrument: FIELD Test: G604.0.0

Parameter	Result	Det. Limit	Units
CONDUCTIVITY	1226	1.0	umHOS/cm

AMMONIA DISTILLATION EPA 350.2

Analyst: K. BAX Analysis Date: 16-MAY-97 18:00 Instrument: PREP Test: P203.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	200		mL
FINAL VOLUME	250		mL

 (continued on next page)

AMMONIA NITROGEN EPA 350.3

Analyst: K. BUNCH Analysis Date: 19-MAY-97 10:30 Test: G203.4.0
Prep: AMMONIA DISTILLATION EPA 350.2 P203.4.0

Parameter	Result	Det. Limit	Units
NITROGEN, AMMONIA	0.26	0.12	mg/L

CHEMICAL OXYGEN DEMAND (COLORIMETRIC) EPA 410.4

Analyst: A. CLEMONS Analysis Date: 21-MAY-97 09:15 Test: G301.1.0

Parameter	Result	Det. Limit	Units
CHEMICAL OXYGEN DEMAND	BDL	10	mg/L

CHLORIDE BY ION CHROMATOGRAPHY SW846-9056

Analyst: M. ADKINS Analysis Date: 20-MAY-97 19:06 Instrument: IC Test: G310.2.0

Parameter	Result	Det. Limit	Units
CHLORIDE	51	1.3	mg/L
1:5 DILUTION			

DISSOLVED SOLIDS EPA 160.1

Analyst: K. SULLIVAN Analysis Date: 21-MAY-97 16:00 Test: G402.7.0

Parameter	Result	Det. Limit	Units
SOLIDS	750	10	mg/L

FIELD FILTRATION SAS

Analyst: . Analysis Date: [illegible] Instrument: FIELD Test: P110.0.0

FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A

Analyst: B. GRAVES Analysis Date: 19-MAY-97 14:00 Instrument: PREP Test: P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

IRON ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 18:55 Instrument: ICP Test: M115.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
IRON	0.037	0.025	mg/L

FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A

Analyst: R. DALAL Analysis Date: 20-MAY-97 10:00 Instrument: PREP Test: P130.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

VOLATILE ORGANICS (CAPILLARY COLUMN) SW846-8260A

Analyst: H. WILLIAMS Analysis Date: 23-MAY-97 07:28 Instrument: GC/MS VOA Test: O510.6.0

Parameter	Result	Det. Limit	Units
BENZENE	BDL	5.0	ug/L
1,1-DICHLOROETHANE	BDL	5.0	ug/L
CIS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
TRANS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
DICHLOROMETHANE (METHYLENE CHLORIDE)	BDL	5.0	ug/L
TETRACHLOROETHENE	BDL	5.0	ug/L
TRICHLOROETHENE	BDL	5.0	ug/L
...			
SURROGATE RECOVERY			

 (continued on next page)

HERITAGE ENVIRONMENTAL SERVICES, INC.

Sample ID: A408114 MW3R2

Parameter	Result	Det. Limit	Units
DICHLOROETHANE-D4	120		% Rec
TOLUENE-D8	103		% Rec
4-BROMOFLUOROBENZENE	98		% Rec
1:5 DILUTION			

Sample Comments

BDL Below Detection Limit

Sample chain of custody number 64131.

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Approved : P.K. Spence

CERTIFICATE OF ANALYSIS

Service Location	Received	Project	Lab ID
HERITAGE ENVIRONMENTAL SERVICES, INC. COMMERCIAL LABORATORY OPERATIONS 7901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8304	16-MAY-97	4315	A408116
	Complete: 02-JUN-97	PO Number: IN21405J0025	
	Printed: 27-JUN-97	Sampled: 15-MAY-97 11:00	

Report To	Bill To
JEFF JENKINS BFI WASTE SYSTEMS 2020 LAUBSCHER ROAD EVANSVILLE, IN 47720	ALISHA CLARK BFI WASTE SYSTEMS 2020 LAUBSCHER ROAD EVANSVILLE, IN 47720

Sample Description

CLIENT ID: MW5R1

FIELD TURBIDITY EPA 180.1

Analyst: S. ASKEW | Analysis Date: 15-MAY-97 | Instrument: FIELD | Test: G602.0.0

Parameter	Result	Det. Limit	Units
TURBIDITY	6.39	0.1	ntu

FIELD PH (AQUEOUS) SW846-9040A

Analyst: S. ASKEW | Analysis Date: 15-MAY-97 | Instrument: FIELD | Test: G607.0.0

Parameter	Result	Det. Limit	Units
PH	6.84	0.1	Std. Units

FIELD TEMPERATURE EPA 170.1

Analyst: S. ASKEW | Analysis Date: 15-MAY-97 | Instrument: FIELD | Test: G603.0.0

Parameter	Result	Det. Limit	Units
TEMPERATURE	14.0		Degrees C

FIELD DISSOLVED OXYGEN SAS

Analyst: S. ASKEW | Analysis Date: 15-MAY-97 | Instrument: FIELD | Test: G600.1.0

Parameter	Result	Det. Limit	Units
DISSOLVED OXYGEN	3.36	1	mg/L

FIELD OXIDATION-REDUCTION POTENTIAL SM2580B-18TH ED

Analyst: S. ASKEW | Analysis Date: 15-MAY-97 | Instrument: FIELD | Test: G604.7.0

Parameter	Result	Det. Limit	Units
OXIDATION/REDUCTION POTENTIAL	11		mV

FIELD SPECIFIC CONDUCTANCE SW846-9050

Analyst: S. ASKEW | Analysis Date: 15-MAY-97 | Instrument: FIELD | Test: G604.0.0

Parameter	Result	Det. Limit	Units
CONDUCTIVITY	1134	1.0	umHOS/cm

AMMONIA DISTILLATION EPA 350.2

Analyst: C. PEREGRINE | Analysis Date: 22-MAY-97 08:00 | Instrument: PREP | Test: P203.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	200		mL
FINAL VOLUME	250		mL

 (continued on next page)

HERITAGE ENVIRONMENTAL SERVICES, INC. Sample ID: A408116 MW5R1

AMMONIA NITROGEN EPA 350.3

Analyst: K. BUNCH Analysis Date: 23-MAY-97 09:30 Test: G203.4.0
Prep: AMMONIA DISTILLATION EPA 350.2 P203.4.0

Parameter	Result	Det. Limit	Units
NITROGEN, AMMONIA	BDL	0.12	mg/L

CHEMICAL OXYGEN DEMAND (COLORIMETRIC) EPA 410.4

Analyst: A. CLEMONS Analysis Date: 21-MAY-97 09:15 Test: G301.1.0

Parameter	Result	Det. Limit	Units
CHEMICAL OXYGEN DEMAND	BDL	10	mg/L

CHLORIDE BY ION CHROMATOGRAPHY SW846-9056

Analyst: M. ADKINS Analysis Date: 16-MAY-97 18:17 Instrument: IC Test: G310.2.0

Parameter	Result	Det. Limit	Units
CHLORIDE	50	0.5	mg/L

DISSOLVED SOLIDS EPA 160.1

Analyst: K. SULLIVAN Analysis Date: 21-MAY-97 16:00 Test: G402.7.0

Parameter	Result	Det. Limit	Units
SOLIDS	720	10	mg/L

FIELD FILTRATION SAS

Analyst: . Analysis Date: Instrument: FIELD Test: P110.0.0

FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A

Analyst: B. GRAVES Analysis Date: 19-MAY-97 14:00 Instrument: PREP Test: P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

IRON ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 18:22 Instrument: ICP Test: M115.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
IRON	0.035	0.025	mg/L

FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A

Analyst: R. DALAL Analysis Date: 20-MAY-97 10:00 Instrument: PREP Test: P130.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

VOLATILE ORGANICS (CAPILLARY COLUMN) SW846-8260A

Analyst: H. WILLIAMS Analysis Date: 23-MAY-97 08:41 Instrument: GC/MS VOA Test: O510.6.0

Parameter	Result	Det. Limit	Units
BENZENE	BDL	5.0	ug/L
1,1-DICHLOROETHANE	BDL	5.0	ug/L
CIS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
TRANS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
DICHLOROMETHANE (METHYLENE CHLORIDE)	BDL	5.0	ug/L
TETRACHLOROETHENE	BDL	5.0	ug/L
TRICHLOROETHENE	BDL	5.0	ug/L
...			
SURROGATE RECOVERY			

DICHLOROETHANE-D4	109		% Rec

 (continued on next page)

HERITAGE ENVIRONMENTAL SERVICES, INC. **Sample ID: A408116 MW5R1**

Parameter	Result	Det. Limit	Units
TOLUENE-D8	100		% Rec
4-BROMOFLUOROBENZENE	105		% Rec
1:5 DILUTION			

Sample Comments

BDL Below Detection Limit

Sample chain of custody number 64131.

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Approved : P.K. Spence

CERTIFICATE OF ANALYSIS

Service Location	Received	Project	Lab ID
HERITAGE ENVIRONMENTAL SERVICES, INC. COMMERCIAL LABORATORY OPERATIONS 7901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8304	16-MAY-97	4315	A408117
	Complete: 02-JUN-97	PO Number: IN21405J0025	
	Printed: 27-JUN-97	Sampled: 15-MAY-97 11:11	

Report To	Bill To
JEFF JENKINS BFI WASTE SYSTEMS 2020 LAUBSCHER ROAD EVANSVILLE, IN 47720	ALISHA CLARK BFI WASTE SYSTEMS 2020 LAUBSCHER ROAD EVANSVILLE, IN 47720

Sample Description

CLIENT ID: MW5R2

FIELD TURBIDITY EPA 180.1

Analyst: S. ASKEW Analysis Date: 15-MAY-97 Instrument: FIELD Test: G602.0.0

Parameter	Result	Det. Limit	Units
TURBIDITY	3.76	0.1	ntu

FIELD PH (AQUEOUS) SW846-9040A

Analyst: S. ASKEW Analysis Date: 15-MAY-97 Instrument: FIELD Test: G607.0.0

Parameter	Result	Det. Limit	Units
PH	6.84	0.1	Std. Units

FIELD TEMPERATURE EPA 170.1

Analyst: S. ASKEW Analysis Date: 15-MAY-97 Instrument: FIELD Test: G603.0.0

Parameter	Result	Det. Limit	Units
TEMPERATURE	13.5		Degrees C

FIELD DISSOLVED OXYGEN SAS

Analyst: S. ASKEW Analysis Date: 15-MAY-97 Instrument: FIELD Test: G600.1.0

Parameter	Result	Det. Limit	Units
DISSOLVED OXYGEN	2.28	1	mg/L

FIELD OXIDATION-REDUCTION POTENTIAL SM2580B-18TH ED

Analyst: S. ASKEW Analysis Date: 15-MAY-97 Instrument: FIELD Test: G604.7.0

Parameter	Result	Det. Limit	Units
OXIDATION/REDUCTION POTENTIAL	11		mV

FIELD SPECIFIC CONDUCTANCE SW846-9050

Analyst: S. ASKEW Analysis Date: 15-MAY-97 Instrument: FIELD Test: G604.0.0

Parameter	Result	Det. Limit	Units
CONDUCTIVITY	1421	1.0	umHOS/cm

AMMONIA DISTILLATION EPA 350.2

Analyst: C. PEREGRINE Analysis Date: 22-MAY-97 08:00 Instrument: PREP Test: P203.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	200		mL
FINAL VOLUME	250		mL

 (continued on next page)

HERITAGE ENVIRONMENTAL SERVICES, INC. Sample ID: A408117 MW5R2

AMMONIA NITROGEN EPA 350.3

Analyst: K. BUNCH Analysis Date: 23-MAY-97 09:30 Test: G203.4.0
Prep: AMMONIA DISTILLATION EPA 350.2 P203.4.0

Parameter	Result	Det. Limit	Units
NITROGEN, AMMONIA	BDL	0.12	mg/L

CHEMICAL OXYGEN DEMAND (COLORIMETRIC) EPA 410.4

Analyst: A. CLEMONS Analysis Date: 21-MAY-97 09:15 Test: G301.1.0

Parameter	Result	Det. Limit	Units
CHEMICAL OXYGEN DEMAND	BDL	10	mg/L

CHLORIDE BY ION CHROMATOGRAPHY SW846-9056

Analyst: M. ADKINS Analysis Date: 16-MAY-97 18:17 Instrument: IC Test: G310.2.0

Parameter	Result	Det. Limit	Units
CHLORIDE	50	0.25	mg/L

DISSOLVED SOLIDS EPA 160.1

Analyst: K. SULLIVAN Analysis Date: 21-MAY-97 16:00 Test: G402.7.0

Parameter	Result	Det. Limit	Units
SOLIDS	950	10	mg/L

FIELD FILTRATION SAS

Analyst: . Analysis Date: Instrument: FIELD Test: P110.0.0

FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A

Analyst: B. GRAVES Analysis Date: 19-MAY-97 14:00 Instrument: PREP Test: P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

IRON ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 18:29 Instrument: ICP Test: M115.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
IRON	0.043	0.025	mg/L

FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A

Analyst: R. DALAL Analysis Date: 20-MAY-97 10:00 Instrument: PREP Test: P130.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

VOLATILE ORGANICS (CAPILLARY COLUMN) SW846-8260A

Analyst: H. WILLIAMS Analysis Date: 27-MAY-97 07:23 Instrument: GC/MS VOA Test: O510.6.0

Parameter	Result	Det. Limit	Units
BENZENE	BDL	5.0	ug/L
1,1-DICHLOROETHANE	BDL	5.0	ug/L
CIS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
TRANS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
DICHLOROMETHANE (METHYLENE CHLORIDE)	BDL	5.0	ug/L
TETRACHLOROETHENE	BDL	5.0	ug/L
TRICHLOROETHENE	BDL	5.0	ug/L
...			
SURROGATE RECOVERY			

DICHLOROETHANE-D4	122		% Rec

 (continued on next page)

HERITAGE ENVIRONMENTAL SERVICES, INC. Sample ID: A408117 MW5R2

Parameter	Result	Det. Limit	Units
TOLUENE-D8	87		% Rec
4-BROMOFLUOROBENZENE	112		% Rec

Sample reanalyzed with no improvement in internal standard areas.
Sample reanalyzed with no improvement in surrogate recovery.
1:5 dilution

Sample Comments

BDL Below Detection Limit

Sample chain of custody number 64131.

This Certificate shall not be reproduced, except in full, without the written approval of the lab.

Approved : P.K. Spence

CERTIFICATE OF ANALYSIS

Service Location	Received	Project	Lab ID
HERITAGE ENVIRONMENTAL SERVICES, INC. COMMERCIAL LABORATORY OPERATIONS 7901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8304	14-MAY-97	4315	A407863
	Complete	PO Number	
	02-JUN-97	IN21405J0025	
	Printed	Sampled	
	27-JUN-97	13-MAY-97 14:40	

Report To	Bill To
JEFF JENKINS BFI WASTE SYSTEMS 2020 LAUBSCHER ROAD EVANSVILLE, IN 47720	ALISHA CLARK BFI WASTE SYSTEMS 2020 LAUBSCHER ROAD EVANSVILLE, IN 47720

Entered as equipment blank JS 7/3/98

Sample Description

CLIENT ID: FIELD BLANK

AMMONIA DISTILLATION EPA 350.2

Analyst: K. BAX Analysis Date: 15-MAY-97 17:56 Instrument: PREP Test: P203.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	200		mL
FINAL VOLUME	250		mL

AMMONIA NITROGEN EPA 350.3

Analyst: K. BUNCH Analysis Date: 16-MAY-97 13:00 Test: G203.4.0

Prep: AMMONIA DISTILLATION EPA 350.2 P203.4.0

Parameter	Result	Det. Limit	Units
NITROGEN, AMMONIA	0.13	0.12	mg/L

CHLORIDE BY ION CHROMATOGRAPHY SW846-9056

Analyst: M. ADKINS Analysis Date: 16-MAY-97 00:11 Instrument: IC Test: G310.2.0

Parameter	Result	Det. Limit	Units
CHLORIDE	BDL	0.25	mg/L

DISSOLVED SOLIDS EPA 160.1

Analyst: K. SULLIVAN Analysis Date: 20-MAY-97 16:00 Test: G402.7.0

Parameter	Result	Det. Limit	Units
SOLIDS	BDL	10	mg/L

TOTAL SUSPENDED SOLIDS EPA 160.2

Analyst: K. SULLIVAN Analysis Date: 16-MAY-97 14:00 Test: G403.7.0

Parameter	Result	Det. Limit	Units
SUSPENDED SOLIDS	BDL	1	mg/L

ALKALINITY TOTAL EPA 310.1

Analyst: K. WHITFIELD Analysis Date: 16-MAY-97 12:30 Test: G605.2.0

Parameter	Result	Det. Limit	Units
ALKALINITY	BDL	1.0	mg/L

 (continued on next page)

HERITAGE ENVIRONMENTAL SERVICES, INC. Sample ID: A407863 FIELD BLANK

ALKALINITY (BICARBONATE) EPA 310.1

Analyst: K. WHITFIELD Analysis Date: 16-MAY-97 12:30 Test: G610.2.0

Parameter	Result	Det. Limit	Units
ALKALINITY	BDL	1.0	mg/L

ALKALINITY (CARBONATE) EPA 310.1

Analyst: K. WHITFIELD Analysis Date: 16-MAY-97 12:30 Test: G611.2.0

Parameter	Result	Det. Limit	Units
ALKALINITY	BDL	1.0	mg/L

FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A

Analyst: R. DALAL Analysis Date: 15-MAY-97 11:00 Instrument: PREP Test: P130.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

CALCIUM ICP SW846-6010A

Analyst: A. HILSCHER Analysis Date: 17-MAY-97 00:07 Instrument: ICP Test: M109.3.0

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
CALCIUM	0.62	0.20	mg/L

prep blank was 0.80 mg/l

SULFATE BY ION CHROMATOGRAPHY SW846-9056

Analyst: M. ADKINS Analysis Date: 16-MAY-97 00:11 Instrument: IC Test: G310.7.0

Parameter	Result	Det. Limit	Units
SULFATE	BDL	0.25	mg/L

VOLATILE ORGANICS (CAPILLARY COLUMN) SW846-8260A

Analyst: H. WILLIAMS Analysis Date: 21-MAY-97 10:55 Instrument: GC/MS VOA Test: O510.6.0

Parameter	Result	Det. Limit	Units
BENZENE	BDL	5.0	ug/L
CIS-1,3-DICHLOROPROPENE	BDL	5.0	ug/L
TRANS-1,3-DICHLOROPROPENE	BDL	5.0	ug/L
ETHYL BENZENE	BDL	5.0	ug/L
BROMOMETHANE	BDL	5.0	ug/L
CARBON TETRACHLORIDE	BDL	5.0	ug/L
CHLOROBENZENE	BDL	5.0	ug/L
CHLOROETHANE	BDL	5.0	ug/L
CHLOROFORM	BDL	5.0	ug/L
CHLOROMETHANE	BDL	5.0	ug/L
1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	BDL	5.0	ug/L
1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	BDL	5.0	ug/L
1,1-DICHLOROETHANE	BDL	5.0	ug/L
CIS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
TRANS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
1,1-DICHLOROETHENE	BDL	5.0	ug/L
1,2-DICHLOROETHANE	BDL	5.0	ug/L
1,2-DICHLOROPROPANE	BDL	5.0	ug/L
DICHLOROMETHANE (METHYLENE CHLORIDE)	5.3	5.0	ug/L
STYRENE	BDL	5.0	ug/L
1,1,1,2-TETRACHLOROETHANE	BDL	5.0	ug/L
1,1,2,2-TETRACHLOROETHANE	BDL	5.0	ug/L
TETRACHLOROETHENE	BDL	5.0	ug/L
TOLUENE	6.5	5.0	ug/L
1,1,1-TRICHLOROETHANE	BDL	5.0	ug/L
1,1,2-TRICHLOROETHANE	BDL	5.0	ug/L

 (continued on next page)

HERITAGE ENVIRONMENTAL SERVICES, INC. Sample ID: A407863 FIELD BLANK

Parameter	Result	Det. Limit	Units
TRICHLOROETHENE	BDL	5.0	ug/L
TRICHLOROFLUOROMETHANE	BDL	5.0	ug/L
VINYL CHLORIDE	BDL	2.0	ug/L
XYLENES (O/M/P-XYLENE)	BDL	5.0	ug/L
...			
SURROGATE RECOVERY			

DICHLOROETHANE-D4	115		% Rec
TOLUENE-D8	91		% Rec
4-BROMOFLUOROBENZENE	99		% Rec

It was confirmed that there was no possible carryover.

Sample Comments

BDL Below Detection Limit

Sample chain of custody number 64139.

This Certificate shall not be reproduced, except in full, without the written approval of the lab.

Approved : P.K. Spence

CERTIFICATE OF ANALYSIS

Service Location	Received	Project	Lab ID
HERITAGE ENVIRONMENTAL SERVICES, INC. COMMERCIAL LABORATORY OPERATIONS 7901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8304	16-MAY-97	4315	A408118
	Complete	PO Number	
	02-JUN-97	IN21405J0025	
	Printed	Sampled	
	27-JUN-97	12-MAY-97	

Report To	Bill To
JEFF JENKINS BFI WASTE SYSTEMS 2020 LAUBSCHER ROAD EVANSVILLE, IN 47720	ALISHA CLARK BFI WASTE SYSTEMS 2020 LAUBSCHER ROAD EVANSVILLE, IN 47720

Sample Description

CLIENT ID: TRIP BLANK

AMMONIA DISTILLATION EPA 350.2

Analyst: C. PEREGRINE Analysis Date: 22-MAY-97 08:00 Instrument: PREP Test: P203.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	200		mL
FINAL VOLUME	250		mL

AMMONIA NITROGEN EPA 350.3

Analyst: K. BUNCH Analysis Date: 23-MAY-97 09:30 Test: G203.4.0

Prep: AMMONIA DISTILLATION EPA 350.2 P203.4.0

Parameter	Result	Det. Limit	Units
NITROGEN, AMMONIA	BDL	0.12	mg/L

CHLORIDE BY ION CHROMATOGRAPHY SW846-9056

Analyst: M. ADKINS Analysis Date: 16-MAY-97 18:17 Instrument: IC Test: G310.2.0

Parameter	Result	Det. Limit	Units
CHLORIDE	BDL	0.25	mg/L

FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A

Analyst: R. DALAL Analysis Date: 20-MAY-97 10:00 Instrument: PREP Test: P130.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

CALCIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 22-MAY-97 02:10 Instrument: ICP Test: M109.3.0

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
CALCIUM	0.24	0.20	mg/L

prep blank was 0.24 mg/l

SODIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 22-MAY-97 02:10 Instrument: ICP Test: M131.3.0

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
SODIUM	0.22	0.20	mg/L

 (continued on next page)

CADMIUM TRACE ICP SW846-6010A

Analyst: A. ROBERTSON Analysis Date: 30-MAY-97 13:49 Instrument: TRACE ICP Test: M108.0.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
CADMIUM	BDL	0.0010	mg/L

CHROMIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 22-MAY-97 02:10 Instrument: ICP Test: M110.3.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
CHROMIUM	BDL	0.010	mg/L

COPPER ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 22-MAY-97 02:10 Instrument: ICP Test: M112.3.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
COPPER	BDL	0.020	mg/L

ZINC ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 22-MAY-97 02:10 Instrument: ICP Test: M139.3.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
ZINC	BDL	0.020	mg/L

IRON ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 22-MAY-97 02:10 Instrument: ICP Test: M115.3.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
IRON	0.030	0.025	mg/L

MAGNESIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 22-MAY-97 02:10 Instrument: ICP Test: M118.3.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
MAGNESIUM	BDL	0.20	mg/L

MANGANESE ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 22-MAY-97 02:10 Instrument: ICP Test: M119.3.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
MANGANESE	BDL	0.010	mg/L

POTASSIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 22-MAY-97 02:10 Instrument: ICP Test: M126.3.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
POTASSIUM	BDL	0.20	mg/L

DISSOLVED SOLIDS EPA 160.1

Analyst: K. SULLIVAN Analysis Date: 19-MAY-97 15:00 Test: G402.7.0

Parameter	Result	Det. Limit	Units
SOLIDS	BDL	10	mg/L

TOTAL SUSPENDED SOLIDS EPA 160.2

Analyst: K. SULLIVAN Analysis Date: 19-MAY-97 19:00 Test: G403.7.0

Parameter	Result	Det. Limit	Units
SUSPENDED SOLIDS	BDL	1	mg/L

ALKALINITY TOTAL EPA 310.1

Analyst: C. ROBISON Analysis Date: 19-MAY-97 19:00 Test: G605.2.0

Parameter	Result	Det. Limit	Units
ALKALINITY	BDL	1.0	mg/L

ALKALINITY (BICARBONATE) EPA 310.1

Analyst: C. ROBISON Analysis Date: 19-MAY-97 19:00 Test: G610.2.0

Parameter	Result	Det. Limit	Units
ALKALINITY	BDL	1.0	mg/L

ALKALINITY (CARBONATE) EPA 310.1

Analyst: C. ROBISON Analysis Date: 19-MAY-97 19:00 Test: G611.2.0

Parameter	Result	Det. Limit	Units
ALKALINITY	BDL	1.0	mg/L

SULFATE BY ION CHROMATOGRAPHY SW846-9056

Analyst: M. ADKINS Analysis Date: 16-MAY-97 18:17 Instrument: IC Test: G310.7.0

Parameter	Result	Det. Limit	Units
SULFATE	BDL	0.25	mg/L

VOLATILE ORGANICS (CAPILLARY COLUMN) SW846-8260A

Analyst: H. WILLIAMS Analysis Date: 23-MAY-97 09:55 Instrument: GC/MS VOA Test: O510.6.0

Parameter	Result	Det. Limit	Units
BENZENE	BDL	5.0	ug/L
CIS-1,3-DICHLOROPROPENE	BDL	5.0	ug/L
TRANS-1,3-DICHLOROPROPENE	BDL	5.0	ug/L
ETHYL BENZENE	BDL	5.0	ug/L
BROMOMETHANE	BDL	5.0	ug/L
CARBON TETRACHLORIDE	BDL	5.0	ug/L
CHLOROBENZENE	BDL	5.0	ug/L
CHLOROETHANE	BDL	5.0	ug/L
CHLOROFORM	BDL	5.0	ug/L
CHLOROMETHANE	BDL	5.0	ug/L
1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	BDL	5.0	ug/L
1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	BDL	5.0	ug/L
1,1-DICHLOROETHANE	BDL	5.0	ug/L
CIS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
TRANS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
1,1-DICHLOROETHENE	BDL	5.0	ug/L
1,2-DICHLOROETHANE	BDL	5.0	ug/L
1,2-DICHLOROPROPANE	BDL	5.0	ug/L
DICHLOROMETHANE (METHYLENE CHLORIDE)	BDL	5.0	ug/L
STYRENE	BDL	5.0	ug/L
1,1,1,2-TETRACHLOROETHANE	BDL	5.0	ug/L
1,1,2,2-TETRACHLOROETHANE	BDL	5.0	ug/L
TETRACHLOROETHENE	BDL	5.0	ug/L
TOLUENE	BDL	5.0	ug/L
1,1,1-TRICHLOROETHANE	BDL	5.0	ug/L
1,1,2-TRICHLOROETHANE	BDL	5.0	ug/L
TRICHLOROETHENE	BDL	5.0	ug/L
TRICHLOROFLUOROMETHANE	BDL	5.0	ug/L
VINYL CHLORIDE	BDL	2.0	ug/L
XYLENES (O/M/P-XYLENE)	BDL	5.0	ug/L

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HERITAGE ENVIRONMENTAL SERVICES, INC. Sample ID: A408118 TRIP BLANK

Parameter	Result	Det. Limit	Units
...			
SURROGATE RECOVERY			

DICHLOROETHANE-D4	118		% Rec
TOLUENE-D8	92		% Rec
4-BROMOFLUOROBENZENE	92		% Rec
1:5 DILUTION			

Sample Comments

BDL Below Detection Limit

Sample chain of custody number 64142.

This Certificate shall not be reproduced, except in full, without the written approval of the lab.

Approved : P.K Spence

CERTIFICATE OF ANALYSIS

Service Location	Received	Project	Lab ID
HERITAGE ENVIRONMENTAL SERVICES, INC. COMMERCIAL LABORATORY OPERATIONS 7901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8304	16-MAY-97	4315	A408104
	Complete	PO Number	
	02-JUN-97	IN21405J0025	
	Printed	Sampled	
	27-JUN-97	15-MAY-97 08:45	

Report To	Bill To
JEFF JENKINS BFI WASTE SYSTEMS 2020 LAUBSCHER ROAD EVANSVILLE, IN 47720	ALISHA CLARK BFI WASTE SYSTEMS 2020 LAUBSCHER ROAD EVANSVILLE, IN 47720

Sample Description

CLIENT ID: MANHOLE 4

AMMONIA DISTILLATION EPA 350.2

Analyst: K. BAX Analysis Date: 16-MAY-97 18:00 Instrument: PREP Test: P203.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	200		mL
FINAL VOLUME	250		mL

AMMONIA NITROGEN EPA 350.3

Analyst: K. BUNCH Analysis Date: 19-MAY-97 10:30 Test: G203.4.0

Prep: AMMONIA DISTILLATION EPA 350.2 P203.4.0

Parameter	Result	Det. Limit	Units
NITROGEN, AMMONIA	45	6.0	mg/L

1:50 DILUTION

CHLORIDE BY ION CHROMATOGRAPHY SW846-9056

Analyst: M. ADKINS Analysis Date: 16-MAY-97 18:17 Instrument: IC Test: G310.2.0

Parameter	Result	Det. Limit	Units
CHLORIDE	240	2.5	mg/L

1:10 DILUTION

BROMIDE BY ION CHROMATOGRAPHY SW846-9056

Analyst: M. ADKINS Analysis Date: 16-MAY-97 18:17 Instrument: IC Test: G310.4.0

Parameter	Result	Det. Limit	Units
BROMIDE	0.94	0.5	mg/L

1:10 DILUTION

FIELD FILTRATION SAS

Analyst: . Analysis Date: Instrument: FIELD Test: P110.0.0

FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A

Analyst: B. GRAVES Analysis Date: 19-MAY-97 14:00 Instrument: PREP Test: P132.4.0

Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

SODIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:12 Instrument: ICP Test: M131.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
SODIUM	180	0.20	mg/L

CADMIUM TRACE ICP SW846-6010A

Analyst: A. ROBERTSON Analysis Date: 28-MAY-97 10:00 Instrument: TRACE ICP Test: M108.0.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
CADMIUM	BDL	0.0010	mg/L

CHROMIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:12 Instrument: ICP Test: M110.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
CHROMIUM	BDL	0.010	mg/L

COPPER ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:12 Instrument: ICP Test: M112.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
COPPER	BDL	0.020	mg/L

ZINC ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:12 Instrument: ICP Test: M139.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
ZINC	BDL	0.020	mg/L

IRON ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:12 Instrument: ICP Test: M115.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
IRON	13.	0.025	mg/L

MAGNESIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:12 Instrument: ICP Test: M118.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
MAGNESIUM	70.	0.20	mg/L

MANGANESE ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:12 Instrument: ICP Test: M119.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
MANGANESE	3.3	0.010	mg/L

POTASSIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:12 Instrument: ICP Test: M126.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
POTASSIUM	42.	0.20	mg/L

DISSOLVED SOLIDS EPA 160.1

Analyst: K. SULLIVAN Analysis Date: 20-MAY-97 16:00 Test: G402.7.0

Parameter	Result	Det. Limit	Units
SOLIDS	1100	10	mg/L

TOTAL SUSPENDED SOLIDS EPA 160.2

Analyst: K. SULLIVAN Analysis Date: 20-MAY-97 14:00 Test: G403.7.0

Parameter	Result	Det. Limit	Units
SUSPENDED SOLIDS	120	1.0	mg/L

Filtered less sample due to sample matrix.

ALKALINITY TOTAL EPA 310.1

Analyst: C. ROBISON Analysis Date: 19-MAY-97 19:00 Test: G605.2.0

Parameter	Result	Det. Limit	Units
ALKALINITY	740	1.0	mg/L

ALKALINITY (BICARBONATE) EPA 310.1

Analyst: C. ROBISON Analysis Date: 19-MAY-97 19:00 Test: G610.2.0

Parameter	Result	Det. Limit	Units
ALKALINITY	740	1.0	mg/L

ALKALINITY (CARBONATE) EPA 310.1

Analyst: C. ROBISON Analysis Date: 19-MAY-97 19:00 Test: G611.2.0

Parameter	Result	Det. Limit	Units
ALKALINITY	BDL	1.0	mg/L

FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A

Analyst: N. CARR Analysis Date: 19-MAY-97 09:30 Instrument: PREP Test: P130.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

CALCIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 22:51 Instrument: ICP Test: M109.3.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
CALCIUM	130	0.20	mg/L

SULFATE BY ION CHROMATOGRAPHY SW846-9056

Analyst: M. ADKINS Analysis Date: 16-MAY-97 18:17 Instrument: IC Test: G310.7.0

Parameter	Result	Det. Limit	Units
SULFATE	73	2.5	mg/L

1:10 DILUTION

VOLATILE ORGANICS (CAPILLARY COLUMN) SW846-8260A

Analyst: B. MAZUR Analysis Date: 27-MAY-97 20:34 Instrument: GC/MS VOA Test: 0510.6.0

Parameter	Result	Det. Limit	Units
BENZENE	BDL	5.0	ug/L
CIS-1,3-DICHLOROPROPENE	BDL	5.0	ug/L
TRANS-1,3-DICHLOROPROPENE	BDL	5.0	ug/L
ETHYL BENZENE	BDL	5.0	ug/L
BROMOMETHANE	BDL	5.0	ug/L
CARBON TETRACHLORIDE	BDL	5.0	ug/L
CHLOROBENZENE	BDL	5.0	ug/L
CHLOROETHANE	BDL	5.0	ug/L
CHLOROFORM	BDL	5.0	ug/L
CHLOROMETHANE	BDL	5.0	ug/L
1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	BDL	5.0	ug/L
1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	BDL	5.0	ug/L
1,1-DICHLOROETHANE	BDL	5.0	ug/L
CIS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
TRANS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
1,1-DICHLOROETHENE	BDL	5.0	ug/L
1,2-DICHLOROETHANE	BDL	5.0	ug/L
1,2-DICHLOROPROPANE	BDL	5.0	ug/L
DICHLOROMETHANE (METHYLENE CHLORIDE)	BDL	5.0	ug/L
STYRENE	BDL	5.0	ug/L
1,1,1,2-TETRACHLOROETHANE	BDL	5.0	ug/L
1,1,2,2-TETRACHLOROETHANE	BDL	5.0	ug/L
TETRACHLOROETHENE	BDL	5.0	ug/L
TOLUENE	BDL	5.0	ug/L
1,1,1-TRICHLOROETHANE	BDL	5.0	ug/L
1,1,2-TRICHLOROETHANE	BDL	5.0	ug/L
TRICHLOROETHENE	BDL	5.0	ug/L
TRICHLOROFLUOROMETHANE	BDL	5.0	ug/L
VINYL CHLORIDE	BDL	2.0	ug/L
XYLENES (O/M/P-XYLENE)	8	5.0	ug/L
...			
SURROGATE RECOVERY			

DICHLOROETHANE-D4	109		% Rec
TOLUENE-D8	97		% Rec
4-BROMOFLUOROBENZENE	97		% Rec

BORON ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 22:51 Instrument: ICP Test: M107.3.0

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
BORON	1.8	0.050	mg/L

BORON ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:12 Instrument: ICP Test: M107.3.1

Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0

Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
BORON	1.8	0.050	mg/L

HERITAGE ENVIRONMENTAL SERVICES, INC. **Sample ID: A408104 MANHOLE 4**

BARIUM ICP SW846-6010A
Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 22:51 Instrument: ICP Test: M104.3.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
BARIUM	0.73	0.010	mg/L

BARIUM ICP SW846-6010A
Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:12 Instrument: ICP Test: M104.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
BARIUM	0.31	0.010	mg/L

Sample Comments

BDL Below Detection Limit

Sample chain of custody number 64142.

This Certificate shall not be reproduced, except in full, without the written approval of the lab.

Approved : P.K. Spence

CERTIFICATE OF ANALYSIS

Service Location	Received	Project	Lab ID
HERITAGE ENVIRONMENTAL SERVICES, INC. COMMERCIAL LABORATORY OPERATIONS 7901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8304	16-MAY-97	4315	A408105
	Complete	PO Number	
	03-JUN-97	IN21405J0025	
	Printed	Sampled	
	27-JUN-97	15-MAY-97 09:15	

Report To	Bill To
JEFF JENKINS BFI WASTE SYSTEMS 2020 LAUBSCHER ROAD EVANSVILLE, IN 47720	ALISHA CLARK BFI WASTE SYSTEMS 2020 LAUBSCHER ROAD EVANSVILLE, IN 47720

Sample Description

CLIENT ID: BRINE

AMMONIA DISTILLATION EPA 350.2

Analyst: C. PEREGRINE Analysis Date: 22-MAY-97 08:00 Instrument: PREP Test: P203.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	200		mL
FINAL VOLUME	250		mL

AMMONIA NITROGEN EPA 350.3

Analyst: K. BUNCH Analysis Date: 23-MAY-97 09:30 Test: G203.4.0

Prep: AMMONIA DISTILLATION EPA 350.2 P203.4.0

Parameter	Result	Det. Limit	Units
NITROGEN, AMMONIA	5.2	0.24	mg/L

1:2 DILUTION

CHLORIDE BY ION CHROMATOGRAPHY SW846-9056

Analyst: M. ADKINS Analysis Date: 20-MAY-97 18:30 Instrument: IC Test: G310.2.0

Parameter	Result	Det. Limit	Units
CHLORIDE	17000	250	mg/L

1:1000 DILUTION

BROMIDE BY ION CHROMATOGRAPHY SW846-9056

Analyst: M. ADKINS Analysis Date: 16-MAY-97 18:17 Instrument: IC Test: G310.4.0

Parameter	Result	Det. Limit	Units
BROMIDE	29	0.5	mg/L

1:10 DILUTION

FIELD FILTRATION SAS

Analyst: . Analysis Date: Instrument: FIELD Test: P110.0.0

FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A

Analyst: B. GRAVES Analysis Date: 19-MAY-97 14:00 Instrument: PREP Test: P132.4.0

Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

SODIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 30-MAY-97 03:00 Instrument: ICP Test: M131.3.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
SODIUM	9100	20.	mg/L

DILUTION 1:100

SODIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 23-MAY-97 04:33 Instrument: ICP Test: M131.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
SODIUM	9400	20.	mg/L

DILUTION 1:100

CADMIUM TRACE ICP SW846-6010A

Analyst: A. ROBERTSON Analysis Date: 28-MAY-97 10:10 Instrument: TRACE ICP Test: M108.0.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
CADMIUM	BDL	0.0010	mg/L

CHROMIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:15 Instrument: ICP Test: M110.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
CHROMIUM	BDL	0.010	mg/L

COPPER ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:15 Instrument: ICP Test: M112.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
COPPER	BDL	0.020	mg/L

ZINC ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:15 Instrument: ICP Test: M139.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
ZINC	BDL	0.020	mg/L

IRON ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:15 Instrument: ICP Test: M115.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
IRON	0.098	0.025	mg/L

MAGNESIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:15 Instrument: ICP Test: M118.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
MAGNESIUM	190	0.20	mg/L

MANGANESE ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:15 Instrument: ICP Test: M119.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
MANGANESE	0.23	0.010	mg/L

POTASSIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:15 Instrument: ICP Test: M126.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
POTASSIUM	28.	0.20	mg/L

DISSOLVED SOLIDS EPA 160.1

Analyst: K. SULLIVAN Analysis Date: 20-MAY-97 16:00 Test: G402.7.0

Parameter	Result	Det. Limit	Units
SOLIDS	26000	10	mg/L

TOTAL SUSPENDED SOLIDS EPA 160.2

Analyst: K. SULLIVAN Analysis Date: 20-MAY-97 14:00 Test: G403.7.0

Parameter	Result	Det. Limit	Units
SUSPENDED SOLIDS	13	1.0	mg/L

ALKALINITY TOTAL EPA 310.1

Analyst: C. ROBISON Analysis Date: 19-MAY-97 19:00 Test: G605.2.0

Parameter	Result	Det. Limit	Units
ALKALINITY	1100	1.0	mg/L

ALKALINITY (BICARBONATE) EPA 310.1

Analyst: C. ROBISON Analysis Date: 19-MAY-97 19:00 Test: G610.2.0

Parameter	Result	Det. Limit	Units
ALKALINITY	1100	1.0	mg/L

ALKALINITY (CARBONATE) EPA 310.1

Analyst: C. ROBISON Analysis Date: 19-MAY-97 19:00 Test: G611.2.0

Parameter	Result	Det. Limit	Units
ALKALINITY	BDL	1.0	mg/L

FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A

Analyst: N. CARR Analysis Date: 19-MAY-97 09:30 Instrument: PREP Test: P130.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

CALCIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 22:55 Instrument: ICP Test: M109.3.0

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
CALCIUM	320	0.20	mg/L

SULFATE BY ION CHROMATOGRAPHY SW846-9056

Analyst: M. ADKINS Analysis Date: 16-MAY-97 18:17 Instrument: IC Test: G310.7.0

Parameter	Result	Det. Limit	Units
SULFATE	85	2.5	mg/L

1:10 DILUTION

VOLATILE ORGANICS (CAPILLARY COLUMN) SW846-8260A

Analyst: B. MAZUR Analysis Date: 29-MAY-97 11:00 Instrument: GC/MS VOA Test: O510.6.0

Parameter	Result	Det. Limit	Units
BENZENE	22	5.0	ug/L
CIS-1,3-DICHLOROPROPENE	BDL	5.0	ug/L
TRANS-1,3-DICHLOROPROPENE	BDL	5.0	ug/L
ETHYL BENZENE	46	5.0	ug/L
BROMOMETHANE	BDL	5.0	ug/L
CARBON TETRACHLORIDE	BDL	5.0	ug/L
CHLOROBENZENE	BDL	5.0	ug/L
CHLOROETHANE	BDL	5.0	ug/L
CHLOROFORM	BDL	5.0	ug/L
CHLOROMETHANE	BDL	5.0	ug/L
1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	BDL	5.0	ug/L
1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	BDL	5.0	ug/L
1,1-DICHLOROETHANE	BDL	5.0	ug/L
CIS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
TRANS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
1,1-DICHLOROETHENE	BDL	5.0	ug/L
1,2-DICHLOROETHANE	BDL	5.0	ug/L
1,2-DICHLOROPROPANE	BDL	5.0	ug/L
DICHLOROMETHANE (METHYLENE CHLORIDE)	BDL	5.0	ug/L
STYRENE	BDL	5.0	ug/L
1,1,1,2-TETRACHLOROETHANE	BDL	5.0	ug/L
1,1,2,2-TETRACHLOROETHANE	BDL	5.0	ug/L
TETRACHLOROETHENE	BDL	5.0	ug/L
TOLUENE	40	5.0	ug/L
1,1,1-TRICHLOROETHANE	BDL	5.0	ug/L
1,1,2-TRICHLOROETHANE	BDL	5.0	ug/L
TRICHLOROETHENE	BDL	5.0	ug/L
TRICHLOROFLUOROMETHANE	BDL	5.0	ug/L
VINYL CHLORIDE	BDL	2.0	ug/L
XYLENES (O/M/P-XYLENE)	100	5.0	ug/L
...			
SURROGATE RECOVERY			

DICHLOROETHANE-D4	116		% Rec
TOLUENE-D8	99		% Rec
4-BROMOFLUOROBENZENE	95		% Rec

BORON ICP SW846-6010A
Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 22:55 Instrument: ICP Test: M107.3.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
BORON	1.8	0.050	mg/L

BORON ICP SW846-6010A
Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:15 Instrument: ICP Test: M107.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
BORON	1.8	0.050	mg/L

BARIUM ICP SW846-6010A
Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 22:55 Instrument: ICP Test: M104.3.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
BARIUM	2.9	0.010	mg/L

Undigested result = 1.2 mg/L

BARIUM ICP SW846-6010A
Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:15 Instrument: ICP Test: M104.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
BARIUM	20.	0.010	mg/L

Undigested result = 12 mg/L

Sample Comments

BDL Below Detection Limit

Sample chain of custody number 64142.

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Approved : P.K. Spence

CASE NARRATIVE
SHIPPING & RECEIVING

The samples A407830, 859, 861-863, 957-962, A408104-110, 112-118 were intact at the time of receipt (see chain of custody for dates received). The samples were logged in and distributed to the appropriate groups for the requested testing.

Teresa A. Miller
Document Control

TO ENSURE PROPER HANDLING OF SAMPLES PLEASE COMPLETE THIS ENTIRE FORM

HERITAGE ENVIRONMENTAL SERVICES

COMMERCIAL LABORATORY OPERATIONS

7901 West Morris Street
Indianapolis, Indiana 46231 (317) 243-0811 Fax (317) 486-5095

I-64139

Co. Name: BFI Laubscher Meadows
Project Name:
Quote No.: PO No.:

ENVIRONMENTAL PROGRAM:
CWA NPDES _____ IWP _____ SLUDGE _____
RCRA MW _____ SW _____ DISPOSAL _____
SDWA _____ CERCLA/SUPERFUND _____ OTHER _____

Sampled by: Steve Wilson

Analyses Requested (Note special detection limits or methods)

Report To:
Co: BFI- Evansville
Add:
Attn: Jeff Jenkins
Phone:
Accelerated Turnaround Requested _____ (Subject to Additional Charge)
Result Request by: ___/___/___ Mo. Day Yr
(Date must be Accepted and Approved by Lab)

Client ID:	Date:	Time:	Comp	Grab	Sample Description	Sample Type (Matrix): DW, GW, WW, Soil, Oil, Sludge, Other	No. of Containers	VOH	Diss Metals	T. Metals	NH3	Gen. Chem					Remarks:	LAB Sample No.
	5-13-97	11:05 AM/PM			MW 14D		6	✓	✓	✓	✓	✓						A407830
		12:55 AM/PM			MW 13D		6	✓	✓	✓	✓	✓						859
		14:06 AM/PM			MW 11R		6	✓	✓	✓	✓	✓						861
		14:40 AM/PM			Field Blank		5	✓	✓	✓	✓	✓						863
		11:05 AM/PM			MW 14D DUP		6	✓	✓	✓	✓	✓						862
		AM/PM																
		AM/PM																
		AM/PM																
		AM/PM																
		AM/PM																
		AM/PM																
		AM/PM																

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time	Received by: (Signature)
[signature]	/			/	
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time	Received by: (Signature)
	/			/	
Relinquished by: (Signature)	Date/Time	Received for Lab by: (Signature)	Date/Time	Remarks	
	/	[signature]	5/14/97/11:05		

Properly Preserved _____
Broken Bottles _____

Distribution: White original and Yellow copy to accompany sample to laboratory.
Pink copy to be retained by client.

Rev. 6/95

TO ENSURE PROPER HANDLING OF SA[illegible]ES PLEASE COMPLETE THIS ENTIRE FORM

HERITAGE ENVIR[illegible]MENTAL SERVICES

COMMERCIAL LABORATORY OPERATIONS

7901 West Morris Street
Indianapolis, Indiana 46231 (317) 243-0811 Fax (317) 486-5095

I-64130

Co. Name: BFI

Project Name: [illegible]

Quote No.: 2126591 PO No.:

ENVIRONMENTAL PROGRAM:

CWA NPDES _____ IWP _____ SLUDGE _____

RCRA MW _____ SW _____ DISPOSAL _____

SDWA _____ CERCLA/SUPERFUND _____ OTHER _____

Sampled by: Steve [illegible]

Analyses Requested (Note special detection limits or methods)

Report To:
Co: [illegible]
Add: [illegible]
Attn: [illegible]
Phone:

Accelerated Turnaround Requested _____ (Subject to Additional Charge)

Result Request by: ___ / ___ / ___ (Mo / Day / Yr)

(Date must be Accepted and Approved by Lab)

Client ID:	Date:	Time:	Comp	Grab	Sample Description	Sample Type (Matrix): DW, GW, WW, Soil, Oil, Sludge, Other	No. of Containers	VOC	[illegible]	[illegible]	[illegible]	[illegible]					Remarks:	LAB Sample No.
	5-14-97	9:00 AM PM			MW 10 R	GW	1	✓										957
	5-14-97	8:30 AM PM			MW 14 R		1											958
	5-14-97	9:20 AM PM			MW 13 R		1											959
	5-14-97	10:50 AM PM			MW 2 R		1	✓	✓	✓	✓	✓						960
	5-14-97	1019 AM PM			MW 12 I		1	✓	✓	✓	✓	✓						961
	5-14-97	1509 AM PM			MW 15 D		1	✓	✓	✓	✓	✓						962
		AM PM																
		AM PM																
		AM PM																
		AM PM																
		AM PM																
		AM PM																

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Steve [illegible]	5/14/97 1630			/	
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time	Received by: (Signature)
	/			/	
Relinquished by: (Signature)	Date/Time	Received for Lab by: (Signature)	Date/Time	Remarks	
	/	[illegible]	5/15/97 11:30		

Properly Preserved _____

Broken Bottles _____

Distribution: White original and Yellow copy to accompany sample to laboratory.
Pink copy to be retained by client.

Rev. 6/95

TO ENSURE PROPER HANDLING OF S/ ES PLEASE COMPLETE THIS ENTIRE FORM

HERITAGE ENVIR MENTAL SERVICES

COMMERCIAL LABORATORY OPERATIONS

7901 West Morris Street

Indianapolis, Indiana 46231 (317) 243-0811 Fax (317) 486-5095

I-64142

Co. Name: BFI

Project Name: [illegible]

Quote No.: 2126591 PO No.:

ENVIRONMENTAL PROGRAM:

CWA NPDES _____ IWP _____ SLUDGE _____

RCRA MW _____ SW _____ DISPOSAL _____

SDWA _____ CERCLA/SUPERFUND _____ OTHER _____

Sampled by:

Analyses Requested (Note special detection limits or methods)

Report To:

Co:

Add: Jeff Jenkins

Evansville IN [illegible]

Attn:

Phone:

Accelerated Turnaround Requested _____ (Subject to Additional Charge)

Result Request by: ___ / ___ / ___ Mo Day Yr

(Date must be Accepted and Approved by Lab)

Client ID:	Date:	Time:	Comp	Grab	Sample Description	Sample Type (Matrix): DW, GW, WW, Soil, Oil, Sludge, Other	No. of Containers	2126591 + Exemp List	For T + Diss Metals								Remarks:	LAB Sample No.
	5-15-97	8:45 AM PM		✓	Manhole 4		6	✓									[illegible]	A408104
	5-15-97	9:15 AM PM		✓	Brine		6	✓										A408105
	5-12-97	AM PM			Trip		5	✓										A408118
		AM PM																
		AM PM																
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		AM PM																
		AM PM																
		AM PM																
		AM PM																
		AM PM																
		AM PM																
		AM PM																

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time	Received by: (Signature)
[signature]	5/16/97 7:00pm			/	
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time	Received by: (Signature)
	/			/	
Relinquished by: (Signature)	Date/Time	Received for Lab by: (Signature)	Date/Time	Remarks	
	/	[signature]	5/16/97 8:50		

Properly Preserved _____

Broken Bottles _____

Distribution: White original and Yellow copy to accompany sample to laboratory.
Pink copy to be retained by client.

Rev. 6/95

TO ENSURE PROPER HANDLING OF S[illegible]LES PLEASE COMPLETE THIS ENTIRE FORM

HERITAGE ENVIR[illegible]NMENTAL SERVICES

COMMERCIAL LABORATORY OPERATIONS

7901 West Morris Street
Indianapolis, Indiana 46231 (317) 243-0811 Fax (317) 486-5095

I-64131

Co. Name: BFI

Project Name: Laubscher Meadows

Quote No.: Z176597 / Z176591 PO No.:

ENVIRONMENTAL PROGRAM:

CWA NPDES _____ IWP _____ SLUDGE _____

RCRA MW _____ SW _____ DISPOSAL _____

SDWA _____ CERCLA/SUPERFUND _____ OTHER _____

Sampled by:

Analyses Requested (Note special detection limits or methods)

Report To:
Co: Jeff Jenkins
Add: BFI
Attn: Evansville, IN 47720
Phone:

Accelerated Turnaround Requested _____ (Subject to Additional Charge)

Result Request by: ___ / ___ / ___ (Mo Day Yr)

(Date must be Accepted and Approved by Lab)

Client ID:	Date:	Time:	Comp	Grab	Sample Description	Sample Type (Matrix): DW, GW, WW, Soil, Oil, Sludge, Other	No. of Containers	Z176597	Z176591	Remarks:	LAB Sample No.
	5/15/97	9:26 AM PM			MW 336		6		✓		A408106
		9:57 AM PM		✓	MW 3R2		6	✓			114
		10:10 AM PM		✓	MW 3R1		6	✓			115
		10:20 AM PM		✓	MW 3R		6		✓		107
		10:45 AM PM		✓	MW 5R		6		✓		108
		11:00 AM PM		✓	MW 5R1		6	✓			116
		11:11 AM PM		✓	MW 5R2		6	✓			117
		11:30 AM PM		✓	MW 337		6		✓		109
		11:45 AM PM		✓	MW 4R		6		✓		110
		11:45 AM PM		✓	MW 4R Dup		6		✓		112
		12:59 AM PM		✓	MW 4D		6		✓		113
		AM PM									

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time	Received by: (Signature)
[signature]	5/15/97 7:00pm			/	
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time	Received by: (Signature)
	/			/	
Relinquished by: (Signature)	Date/Time	Received for Lab by: (Signature)	Date/Time	Remarks	
	/	Victor Hunter	5/16/97 8:50		

Properly Preserved _____

Broken Bottles _____

Distribution: White original and Yellow copy to accompany sample to laboratory.
Pink copy to be retained by client.

Rev. 6/95

QUALITY ASSURANCE REPORT

Service Location
ERITAGE ENVIRONMENTAL SERVICES, INC.
COMMERCIAL LABORATORY OPERATIONS
7901 W. MORRIS ST.
INDIANAPOLIS, IN 46231
(317)243-8304

Report Date
26-JUN-97

Submitter
BFI WASTE SYSTEMS
JEFF JENKINS
2020 LAUBSCHER ROAD
EVANSVILLE, IN 47720

Client ID	Lab ID	Date-Time Sampled	Date Received	Date Complete	Description
MW 14D	A407830	13-MAY-97 11:05	14-MAY-97	04-JUN-97	
MW 13D	A407859	13-MAY-97 12:55	14-MAY-97	04-JUN-97	
MW 11R	A407861	13-MAY-97 14:06	14-MAY-97	04-JUN-97	
MW 14D DUP	A407862	13-MAY-97 11:05	14-MAY-97	04-JUN-97	
FIELD BLANK	A407863	13-MAY-97 14:40	14-MAY-97	02-JUN-97	
MW 10R	A407957	14-MAY-97 08:00	15-MAY-97	02-JUN-97	DESCRIPTION: GROUNDWATER
MW 14R	A407958	14-MAY-97 08:30	15-MAY-97	02-JUN-97	DESCRIPTION: GROUNDWATER
MW 13R	A407959	14-MAY-97 09:00	15-MAY-97	02-JUN-97	DESCRIPTION: GROUNDWATER
MW 2R	A407960	14-MAY-97 10:50	15-MAY-97	02-JUN-97	DESCRIPTION: GROUNDWATER
MW 12I	A407961	14-MAY-97 10:19	15-MAY-97	02-JUN-97	DESCRIPTION: GROUNDWATER
15D	A407962	14-MAY-97 15:09	15-MAY-97	02-JUN-97	DESCRIPTION: GROUNDWATER
ANHOLE 4	A408104	15-MAY-97 08:45	16-MAY-97	02-JUN-97	DESCRIPTION: GROUNDWATER
BRINE	A408105	15-MAY-97 09:15	16-MAY-97	03-JUN-97	DESCRIPTION: GROUNDWATER
MW336	A408106	15-MAY-97 09:36	16-MAY-97	03-JUN-97	DESCRIPTION: GROUNDWATER
MW3R	A408107	15-MAY-97 10:20	16-MAY-97	02-JUN-97	DESCRIPTION: GROUNDWATER
MW5R	A408108	15-MAY-97 10:45	16-MAY-97	02-JUN-97	DESCRIPTION: GROUNDWATER
MW337	A408109	15-MAY-97 11:30	16-MAY-97	02-JUN-97	DESCRIPTION: GROUNDWATER
MW4R	A408110	15-MAY-97 11:45	16-MAY-97	02-JUN-97	DESCRIPTION: GROUNDWATER
MW4RDUP	A408112	15-MAY-97 11:45	16-MAY-97	02-JUN-97	DESCRIPTION: GROUNDWATER
MW4D	A408113	15-MAY-97 12:59	16-MAY-97	02-JUN-97	DESCRIPTION: GROUNDWATER
MW3R2	A408114	15-MAY-97 09:57	16-MAY-97	02-JUN-97	DESCRIPTION: GROUNDWATER
MW3R1	A408115	15-MAY-97 10:10	16-MAY-97	02-JUN-97	DESCRIPTION: GROUNDWATER
MW5R1	A408116	15-MAY-97 11:00	16-MAY-97	02-JUN-97	DESCRIPTION: GROUNDWATER
MW5R2	A408117	15-MAY-97 11:11	16-MAY-97	02-JUN-97	DESCRIPTION: GROUNDWATER
TRIP BLANK	A408118	12-MAY-97	16-MAY-97	02-JUN-97	DESCRIPTION: GROUNDWATER

JUL 3 11 05 AM '97
OFFICE OF SOLID
AND HAZARDOUS
WASTE MGMT
DEM

HERITAGE ENVIRONMENTAL SERVICES, INC.

AMMONIA NITROGEN EPA 350.3 G203.4

Prep: AMMONIA DISTILLATION EPA 350.2

Run: R322467 Analyst.: K BAX Run Date...: 15-MAY-97
PREP Reviewer: K FULLMER Review Date: 19-MAY-97

QC Type	Lab ID	Source	Anal Run
BLA02	Q687481		R322471
LFB02	Q687482		R322471
SAMPLE	A407859	Rep: 0	R322471
SPI02	Q687483	A407859	R322471
DPS02	Q687484	A407859	R322471
SAMPLE	A407862	Rep: 0	R322471
DUP02	Q687487	A407862	R322471
SAMPLE	A407863	Rep: 0	R322471
SAMPLE	A407861	Rep: 0	R322471
SAMPLE	A407830	Rep: 0	R322471
SAMPLE	A407958	Rep: 0	R322471
SAMPLE	A407957	Rep: 0	R322471

Run: R322632 Analyst.: K BAX Run Date...: 16-MAY-97
PREP Reviewer: B SHRAKE Review Date: 20-MAY-97

BLA02	Q688378		R322606
LFB02	Q688379		R322606
SAMPLE	A408114	Rep: 0	R322606
SPI02	Q688380	A408114	R322606
DPS02	Q688381	A408114	R322606
DUP02	Q688382	A407413	R322606
BLA02	Q688383		R322606
LFB02	Q688384		R322606
[illegible]02	Q688387	C185668	R322606
[illegible]MPLE	A407959	Rep: 0	R322606
SAMPLE	A407960	Rep: 0	R322606
SAMPLE	A407961	Rep: 0	R322606
SAMPLE	A407962	Rep: 0	R322606
SAMPLE	A408109	Rep: 0	R322606
SAMPLE	A408104	Rep: 0	R322606

Run: R323078 Analyst.: C PEREGRINE Run Date...: 22-MAY-97
PREP Reviewer: K FULLMER Review Date: 27-MAY-97

BLA02	Q689999		R323018
LFB02	Q690000		R323018
SPI02	Q690001	A407736	R323018
DPS02	Q690002	A407736	R323018
SAMPLE	A408105	Rep: 0	R323018
DUP02	Q690005	A408105	R323018
SAMPLE	A408106	Rep: 0	R323018
SAMPLE	A408107	Rep: 0	R323018
SAMPLE	A408108	Rep: 0	R323018
SAMPLE	A408110	Rep: 0	R323018
SAMPLE	A408112	Rep: 0	R323018
SAMPLE	A408113	Rep: 0	R323018
SAMPLE	A408115	Rep: 0	R323018
SAMPLE	A408116	Rep: 0	R323018
SAMPLE	A408117	Rep: 0	R323018
SAMPLE	A408118	Rep: 0	R323018
BLA02	Q690010		R323018
[illegible]02	Q690011		R323018

HERITAGE ENVIRONMENTAL SERVICES, INC.

Run: R322471 Analyst.: K BUNCH Run Date...: 16-MAY-97
ANALYTICAL Reviewer: K FULLMER Review Date: 19-MAY-97

Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
BLA01	Q687478		NITROGEN, AMMONIA			0.0578	mg/L		
ICV01	Q687479		NITROGEN, AMMONIA	0.838		0.784	mg/L	93.6	
CDL01	Q687480		NITROGEN, AMMONIA	0.1		0.109	mg/L	109	
BLA02	Q687481		NITROGEN, AMMONIA			0.0722	mg/L		
LFB02	Q687482		NITROGEN, AMMONIA	5		4.4	mg/L	88	
SAMPLE	A407859		See Cert. of Analysis, Rep: 0						
SPI02	Q687483	A407859	NITROGEN, AMMONIA	0.65	2.5	2.96	mg/L	92.4	
DPS02	Q687484	A407859	NITROGEN, AMMONIA	0.65	2.5	2.96	mg/L	92.4	0
BLA01	Q687485		NITROGEN, AMMONIA			0.0555	mg/L		
CCV	Q687486		NITROGEN, AMMONIA	1		0.883	mg/L	88.3	
SAMPLE	A407862		See Cert. of Analysis, Rep: 0						
DUP02	Q687487	A407862	NITROGEN, AMMONIA	8.1		7.8	mg/L		3.8
SAMPLE	A407863		See Cert. of Analysis, Rep: 0						
SAMPLE	A407861		See Cert. of Analysis, Rep: 0						
SAMPLE	A407830		See Cert. of Analysis, Rep: 0						
SAMPLE	A407958		See Cert. of Analysis, Rep: 0						
BLA01	Q687488		NITROGEN, AMMONIA			0.0534	mg/L		
CCV	Q687489		NITROGEN, AMMONIA	1		0.955	mg/L	95.5	
SAMPLE	A407957		See Cert. of Analysis, Rep: 0						
BLA01	Q687490		NITROGEN, AMMONIA			0.0456	mg/L		
CCV	Q687491		NITROGEN, AMMONIA	1		0.883	mg/L	88.3	

Run: R322606 Analyst.: K BUNCH Run Date...: 19-MAY-97
ANALYTICAL Reviewer: B SHRAKE Review Date: 20-MAY-97

BLA01	Q688388		NITROGEN, AMMONIA			0.0486	mg/L		
ICV01	Q688389		NITROGEN, AMMONIA	0.838		0.808	mg/L	96.4	
CDL01	Q688390		NITROGEN, AMMONIA	0.1		0.112	mg/L	112	
BLA02	Q688378		NITROGEN, AMMONIA			0.0976	mg/L		
LFB02	Q688379		NITROGEN, AMMONIA	5		4.55	mg/L	91	
SAMPLE	A408114		See Cert. of Analysis, Rep: 0						
SPI02	Q688380	A408114	NITROGEN, AMMONIA	0.13	2.5	2.23	mg/L	84	
DPS02	Q688381	A408114	NITROGEN, AMMONIA	0.13	2.5	2.23	mg/L	84	0
BLA01	Q688391		NITROGEN, AMMONIA			0.0467	mg/L		
CCV	Q688392		NITROGEN, AMMONIA	1		1.03	mg/L	103	
DUP02	Q688382	A407413	NITROGEN, AMMONIA	13000		12000	mg/L		8
BLA02	Q688383		NITROGEN, AMMONIA			0.0863	mg/L		
LFB02	Q688384		NITROGEN, AMMONIA	5		4.31	mg/L	86.2	
DUP02	Q688387	C185668	NITROGEN, AMMONIA	0		BDL	mg/L		
SAMPLE	A407959		See Cert. of Analysis, Rep: 0						
SAMPLE	A407960		See Cert. of Analysis, Rep: 0						
SAMPLE	A407961		See Cert. of Analysis, Rep: 0						
SAMPLE	A407962		See Cert. of Analysis, Rep: 0						
BLA01	Q688399		NITROGEN, AMMONIA			0.0268	mg/L		
CCV	Q688400		NITROGEN, AMMONIA	1		0.923	mg/L	92.3	
SAMPLE	A408109		See Cert. of Analysis, Rep: 0						
SAMPLE	A408104		See Cert. of Analysis, Rep: 0						
BLA01	Q688401		NITROGEN, AMMONIA			0.0586	mg/L		
CCV	Q688402		NITROGEN, AMMONIA	1		0.962	mg/L	96.2	

Run: R323018 Analyst.: K BUNCH Run Date...: 23-MAY-97
ANALYTICAL Reviewer: K FULLMER Review Date: 27-MAY-97

BLA01	Q689996		NITROGEN, AMMONIA			0.0604	mg/L		
ICV01	Q689997		NITROGEN, AMMONIA	0.838		0.88	mg/L	105	
CDL01	Q689998		NITROGEN, AMMONIA	0.1		0.104	mg/L	104	

HERITAGE ENVIRONMENTAL SERVICES, INC.

QC Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
BLA02	Q689999		NITROGEN, AMMONIA			0.0953	mg/L		
[illegible]902	Q690000		NITROGEN, AMMONIA	5		4.28	mg/L	85.6	
[illegible]102	Q690001	A407736	NITROGEN, AMMONIA	0	2.5	2.39	mg/L	95.6	
DPS02	Q690002	A407736	NITROGEN, AMMONIA	0	2.5	2.3	mg/L	92	3.8
CCV	Q690004		NITROGEN, AMMONIA	1		1.03	mg/L	103	
SAMPLE	A408105		See Cert. of Analysis, Rep: 0						
DUP02	Q690005	A408105	NITROGEN, AMMONIA	5.2		5.8	mg/L		10.9
SAMPLE	A408106		See Cert. of Analysis, Rep: 0						
SAMPLE	A408107		See Cert. of Analysis, Rep: 0						
SAMPLE	A408108		See Cert. of Analysis, Rep: 0						
SAMPLE	A408110		See Cert. of Analysis, Rep: 0						
SAMPLE	A408112		See Cert. of Analysis, Rep: 0						
SAMPLE	A408113		See Cert. of Analysis, Rep: 0						
BLA01	Q690006		NITROGEN, AMMONIA			0.0479	mg/L		
CCV	Q690007		NITROGEN, AMMONIA	1		0.989	mg/L	98.9	
SAMPLE	A408115		See Cert. of Analysis, Rep: 0						
SAMPLE	A408116		See Cert. of Analysis, Rep: 0						
SAMPLE	A408117		See Cert. of Analysis, Rep: 0						
SAMPLE	A408118		See Cert. of Analysis, Rep: 0						
BLA01	Q690008		NITROGEN, AMMONIA			0.0379	mg/L		
CCV	Q690009		NITROGEN, AMMONIA	1		0.952	mg/L	95.2	
BLA02	Q690010		NITROGEN, AMMONIA			0.0394	mg/L		
LFB02	Q690011		NITROGEN, AMMONIA	5		4.81	mg/L	96.2	

CHEMICAL OXYGEN DEMAND (COLORIMETRIC) EPA 410.4 G301.1

Run: R322776 Analyst.: A CLEMONS Run Date...: 21-MAY-97
ANALYTICAL Reviewer: K FULLMER Review Date: 22-MAY-97

QC Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
BLA01	Q689000		CHEMICAL OXYGEN DEMAND			-2.33	mg/L		
CDL01	Q689001		CHEMICAL OXYGEN DEMAND	30		28	mg/L	93.3	
ICV01	Q689002		CHEMICAL OXYGEN DEMAND	84.4		78.4	mg/L	92.9	
SAMPLE	A408114		See Cert. of Analysis, Rep: 0						
DUP01	Q689003	A408114	CHEMICAL OXYGEN DEMAND	0		BDL	mg/L		
SAMPLE	A408115		See Cert. of Analysis, Rep: 0						
SPI01	Q689004	A408115	CHEMICAL OXYGEN DEMAND	0	50	59.6	mg/L	119.2	
BLA01	Q689005		CHEMICAL OXYGEN DEMAND			-.028	mg/L		
CCV	Q689006		CHEMICAL OXYGEN DEMAND	100		107.7	mg/L	107.7	
SAMPLE	A408116		See Cert. of Analysis, Rep: 0						
DUP01	Q689007	A408116	CHEMICAL OXYGEN DEMAND	0		BDL	mg/L		
SAMPLE	A408117		See Cert. of Analysis, Rep: 0						
SPI01	Q689008	A408117	CHEMICAL OXYGEN DEMAND	0	50	51.4	mg/L	102.8	
BLA01	Q689009		CHEMICAL OXYGEN DEMAND			1.29	mg/L		
CCV	Q689010		CHEMICAL OXYGEN DEMAND	100		99.8	mg/L	99.8	

CHLORIDE BY ION CHROMATOGRAPHY SW846-9056 G310.2

Run: R322240 Analyst.: M ADKINS Run Date...: 14-MAY-97 Instrument: IC
ANALYTICAL Reviewer: S BROTHERTON Review Date: 15-MAY-97

QC Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
BLA01	Q686312		CHLORIDE			< 0.1	mg/L		
[illegible]VL	Q686313		CHLORIDE	1.25		1.27	mg/L	101.6	

HERITAGE ENVIRONMENTAL SERVICES, INC.

QC Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
CCVH	Q686314		CHLORIDE	12.5		11.5	mg/L	92	
LB01	Q686315		CHLORIDE	2.5		2.41	mg/L	96.4	
MPLE	A407830		See Cert. of Analysis, Rep: 0						
CCVL	Q686316		CHLORIDE	1.25		1.28	mg/L	102.4	
CCVH	Q686317		CHLORIDE	12.5		11.6	mg/L	92.8	
BLA01	Q686318		CHLORIDE			< 0.1	mg/L		
SPI01	Q686319	A407838	CHLORIDE	57.1	12.5	71	mg/L	111.2	
DPS01	Q686320	A407838	CHLORIDE	57.1	12.5	70.9	mg/L	110.4	.7

Run: R322447 Analyst.: M ADKINS Run Date...: 15-MAY-97 Instrument: IC
ANALYTICAL Reviewer: S BROTHERTON Review Date: 19-MAY-97

BLA01	Q687313		CHLORIDE			< 0.1	mg/L		
CCVL	Q687314		CHLORIDE	1.25		1.27	mg/L	101.6	
CCVH	Q687315		CHLORIDE	12.5		11.5	mg/L	92	
LFB01	Q687316		CHLORIDE	2.5		2.36	mg/L	94.4	
SAMPLE	A407859		See Cert. of Analysis, Rep: 0						
SPI01	Q687326	A407859	CHLORIDE	23.5	12.5	35.4	mg/L	95.2	
DPS01	Q687327	A407859	CHLORIDE	23.5	12.5	35.5	mg/L	96	.8
SAMPLE	A407861		See Cert. of Analysis, Rep: 0						
SAMPLE	A407862		See Cert. of Analysis, Rep: 0						
SAMPLE	A407863		See Cert. of Analysis, Rep: 0						
SAMPLE	A407957		See Cert. of Analysis, Rep: 0						
CCVL	Q687328		CHLORIDE	1.25		1.31	mg/L	104.8	
CCVH	Q687329		CHLORIDE	12.5		11.6	mg/L	92.8	
BLA01	Q687330		CHLORIDE			< 0.1	mg/L		

Run: R322534 Analyst.: M ADKINS Run Date...: 16-MAY-97 Instrument: IC
ANALYTICAL Reviewer: S BROTHERTON Review Date: 20-MAY-97

BLA01	Q687666		CHLORIDE			< 0.1	mg/L		
VL	Q687667		CHLORIDE	1.25		1.23	mg/L	98.4	
VH	Q687668		CHLORIDE	12.5		11.4	mg/L	91.2	
LFB01	Q687669		CHLORIDE	2.5		2.399	mg/L	96	
SAMPLE	A407958		See Cert. of Analysis, Rep: 0						
SAMPLE	A407959		See Cert. of Analysis, Rep: 0						
SPI01	Q687670	A407959	CHLORIDE	5.31	2.5	7.92	mg/L	104.4	
DPS01	Q687671	A407959	CHLORIDE	5.31	2.5	7.96	mg/L	106	1.5
SAMPLE	A407960		See Cert. of Analysis, Rep: 0						
SAMPLE	A407961		See Cert. of Analysis, Rep: 0						
SAMPLE	A407962		See Cert. of Analysis, Rep: 0						
CCVL	Q687672		CHLORIDE	1.25		1.26	mg/L	100.8	
CCVH	Q687673		CHLORIDE	12.5		11.5	mg/L	92	
BLA01	Q687674		CHLORIDE			< 0.1	mg/L		
SAMPLE	A408104		See Cert. of Analysis, Rep: 0						
SAMPLE	A408106		See Cert. of Analysis, Rep: 0						
SPI01	Q687675	A408106	CHLORIDE	37	5	42.2	mg/L	104	
DPS01	Q687676	A408106	CHLORIDE	37	5	41.8	mg/L	96	8
SAMPLE	A408107		See Cert. of Analysis, Rep: 0						
SAMPLE	A408109		See Cert. of Analysis, Rep: 0						
CCVL	Q687677		CHLORIDE	1.25		1.29	mg/L	103.2	
CCVH	Q687678		CHLORIDE	12.5		11.5	mg/L	92	
BLA01	Q687679		CHLORIDE			< 0.1	mg/L		
SAMPLE	A408110		See Cert. of Analysis, Rep: 0						
SAMPLE	A408112		See Cert. of Analysis, Rep: 0						
SAMPLE	A408113		See Cert. of Analysis, Rep: 0						
SPI01	Q687682	A408113	CHLORIDE	5.16	2.5	7.34	mg/L	87.2	
S01	Q687683	A408113	CHLORIDE	5.16	2.5	7.41	mg/L	90	3.2

HERITAGE ENVIRONMENTAL SERVICES, INC.

QC Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
SAMPLE	A408116		See Cert. of Analysis, Rep: 0						
SAMPLE	A408117		See Cert. of Analysis, Rep: 0						
SAMPLE	A408118		See Cert. of Analysis, Rep: 0						
CCVL	Q687691		CHLORIDE	1.25		1.31	mg/L	104.8	
CCVH	Q687692		CHLORIDE	12.5		11.6	mg/L	92.8	
BLA01	Q687693		CHLORIDE			< 0.1	mg/L		
Run: R322770 ANALYTICAL	Analyst.: M ADKINS Reviewer: S BROTHERTON		Run Date...: 20-MAY-97 Review Date: 22-MAY-97	Instrument: IC					
BLA01	Q688842		CHLORIDE			< 0.1	mg/L		
CCVL	Q688843		CHLORIDE	1.25		1.29	mg/L	103.2	
CCVH	Q688844		CHLORIDE	12.5		12.8	mg/L	102.4	
LFB01	Q688845		CHLORIDE	2.5		2.71	mg/L	108.4	
SPI01	Q688848	A408192	CHLORIDE	78.4	12.5	91.9	mg/L	108	
DPS01	Q688850	A408192	CHLORIDE	78.4	12.5	92.4	mg/L	112	3.6
SAMPLE	A408105		See Cert. of Analysis, Rep: 0						
SAMPLE	A408108		See Cert. of Analysis, Rep: 0						
SAMPLE	A408114		See Cert. of Analysis, Rep: 0						
SAMPLE	A408115		See Cert. of Analysis, Rep: 0						
CCVL	Q688857		CHLORIDE	1.25		1.27	mg/L	101.6	
CCVH	Q688860		CHLORIDE	12.5		12.8	mg/L	102.4	
BLA01	Q688862		CHLORIDE			< 0.1	mg/L		

BROMIDE BY ION CHROMATOGRAPHY SW846-9056 G310.4

Run: R322447 ANALYTICAL — Analyst.: M ADKINS, Reviewer: S BROTHERTON — Run Date...: 15-MAY-97, Review Date: 19-MAY-97 — Instrument: IC

Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
LFB01	Q687316		BROMIDE	1		1	mg/L	100	
CCVL	Q687323		BROMIDE	0.5		0.519	mg/L	103.8	
CCVH	Q687324		BROMIDE	5		4.72	mg/L	94.4	
BLA01	Q687325		BROMIDE			< 0.02	mg/L		
SAMPLE	A407859		See Cert. of Analysis, Rep: 0						
SPI01	Q687326	A407859	BROMIDE	0	5	5.22	mg/L	104.4	
DPS01	Q687327	A407859	BROMIDE	0	5	5.11	mg/L	102.2	2.1
SAMPLE	A407861		See Cert. of Analysis, Rep: 0						
CCVL	Q687328		BROMIDE	0.5		0.538	mg/L	107.6	
CCVH	Q687329		BROMIDE	5		4.67	mg/L	93.4	
BLA01	Q687330		BROMIDE			< 0.02	mg/L		
Run: R322534 ANALYTICAL	Analyst.: M ADKINS Reviewer: S BROTHERTON		Run Date...: 16-MAY-97 Review Date: 20-MAY-97	Instrument: IC					
LFB01	Q687669		BROMIDE	1		0.971	mg/L	97.1	
CCVL	Q687672		BROMIDE	0.5		0.527	mg/L	105.4	
CCVH	Q687673		BROMIDE	5		4.56	mg/L	91.2	
BLA01	Q687674		BROMIDE			< 0.02	mg/L		
SAMPLE	A408104		See Cert. of Analysis, Rep: 0						
SAMPLE	A408105		See Cert. of Analysis, Rep: 0						
SPI01	Q687675	A408106	BROMIDE	0.183	2	2.13	mg/L	97.4	
DPS01	Q687676	A408106	BROMIDE	0.183	2	2.12	mg/L	96.9	.5
SAMPLE	A408108		See Cert. of Analysis, Rep: 0						
CCVL	Q687677		BROMIDE	0.5		0.497	mg/L	99.4	
CCVH	Q687678		BROMIDE	5		4.54	mg/L	90.8	
BLA01	Q687679		BROMIDE			< 0.002	mg/L		
SAMPLE	A408110		See Cert. of Analysis, Rep: 0						

HERITAGE ENVIRONMENTAL SERVICES, INC.

QC Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
SAMPLE	A408112		See Cert. of Analysis, Rep: 0						
MPLE	A408113		See Cert. of Analysis, Rep: 0						
I01	Q687682	A408113	BROMIDE	0.061	1	1	mg/L	93.9	
DPS01	Q687683	A408113	BROMIDE	0.061	1	1.03	mg/L	96.9	3.1
CCVL	Q687691		BROMIDE	0.5		0.498	mg/L	99.6	
CCVH	Q687692		BROMIDE	5		4.51	mg/L	90.2	
BLA01	Q687693		BROMIDE			< 0.02	mg/L		

SULFATE BY ION CHROMATOGRAPHY SW846-9056 G310.7

Run: R322240 Analyst.: M ADKINS Run Date...: 14-MAY-97 Instrument: IC
ANALYTICAL Reviewer: S BROTHERTON Review Date: 15-MAY-97

QC Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
BLA01	Q686312		SULFATE			< 0.1	mg/L		
CCVL	Q686313		SULFATE	2.5		2.55	mg/L	102	
CCVH	Q686314		SULFATE	25		23.3	mg/L	93.2	
LFB01	Q686315		SULFATE	5		4.86	mg/L	97.2	
SAMPLE	A407830		See Cert. of Analysis, Rep: 0						
CCVL	Q686316		SULFATE	2.5		2.53	mg/L	101.2	
CCVH	Q686317		SULFATE	25		23.4	mg/L	93.6	
BLA01	Q686318		SULFATE			< 0.1	mg/L		
SPI01	Q686319	A407838	SULFATE	124	25	152	mg/L	112	
DPS01	Q686320	A407838	SULFATE	124	25	152	mg/L	112	0

Run: R322447 Analyst.: M ADKINS Run Date...: 15-MAY-97 Instrument: IC
ANALYTICAL Reviewer: S BROTHERTON Review Date: 19-MAY-97

QC Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
BLA01	Q687313		SULFATE			< 0.1	mg/L		
VL	Q687314		SULFATE	2.5		2.49	mg/L	99.6	
VH	Q687315		SULFATE	25		23.2	mg/L	92.8	
LFB01	Q687316		SULFATE	5		4.91	mg/L	98.2	
SAMPLE	A407859		See Cert. of Analysis, Rep: 0						
SPI01	Q687326	A407859	SULFATE	0	25	24.6	mg/L	98.4	
DPS01	Q687327	A407859	SULFATE	0	25	24.7	mg/L	98.8	.4
SAMPLE	A407861		See Cert. of Analysis, Rep: 0						
SAMPLE	A407862		See Cert. of Analysis, Rep: 0						
SAMPLE	A407863		See Cert. of Analysis, Rep: 0						
SAMPLE	A407957		See Cert. of Analysis, Rep: 0						
CCVL	Q687328		SULFATE	2.5		2.47	mg/L	98.8	
CCVH	Q687329		SULFATE	25		23.2	mg/L	92.8	
BLA01	Q687330		SULFATE			< 0.1	mg/L		

Run: R322534 Analyst.: M ADKINS Run Date...: 16-MAY-97 Instrument: IC
ANALYTICAL Reviewer: S BROTHERTON Review Date: 20-MAY-97

QC Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
BLA01	Q687666		SULFATE			< 0.1	mg/L		
CCVL	Q687667		SULFATE	2.5		2.47	mg/L	98.8	
CCVH	Q687668		SULFATE	25		23.1	mg/L	92.4	
LFB01	Q687669		SULFATE	5		4.9	mg/L	98	
SAMPLE	A407958		See Cert. of Analysis, Rep: 0						
SAMPLE	A407959		See Cert. of Analysis, Rep: 0						
SPI01	Q687670	A407959	SULFATE	7	5	12.3	mg/L	106	
DPS01	Q687671	A407959	SULFATE	7	5	12.4	mg/L	108	1.9
SAMPLE	A407960		See Cert. of Analysis, Rep: 0						
SAMPLE	A407961		See Cert. of Analysis, Rep: 0						
SAMPLE	A407962		See Cert. of Analysis, Rep: 0						
L	Q687672		SULFATE	2.5		2.44	mg/L	97.6	

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QC Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
CCVH	Q687673		SULFATE	25		23.2	mg/L	92.8	
\01	Q687674		SULFATE			< 0.1	mg/L		
MPLE	A408104		See Cert. of Analysis, Rep: 0						
SAMPLE	A408105		See Cert. of Analysis, Rep: 0						
SAMPLE	A408106		See Cert. of Analysis, Rep: 0						
SPI01	Q687675	A408106	SULFATE	0	10	11.6	mg/L	116	
DPS01	Q687676	A408106	SULFATE	0	10	11.6	mg/L	116	0
SAMPLE	A408107		See Cert. of Analysis, Rep: 0						
SAMPLE	A408108		See Cert. of Analysis, Rep: 0						
SAMPLE	A408109		See Cert. of Analysis, Rep: 0						
CCVL	Q687677		SULFATE	2.5		2.44	mg/L	97.6	
CCVH	Q687678		SULFATE	25		22.9	mg/L	91.6	
BLA01	Q687679		SULFATE			< 0.1	mg/L		
SAMPLE	A408110		See Cert. of Analysis, Rep: 0						
SAMPLE	A408112		See Cert. of Analysis, Rep: 0						
SAMPLE	A408113		See Cert. of Analysis, Rep: 0						
SPI01	Q687682	A408113	SULFATE	0.08	5	5.79	mg/L	114.2	
DPS01	Q687683	A408113	SULFATE	0.08	5	5.86	mg/L	115.6	1.2
SAMPLE	A408118		See Cert. of Analysis, Rep: 0						
CCVL	Q687691		SULFATE	2.5		2.47	mg/L	98.8	
CCVH	Q687692		SULFATE	25		22.9	mg/L	91.6	
BLA01	Q687693		SULFATE			< 0.1	mg/L		

DISSOLVED SOLIDS EPA 160.1 G402.7

Run: R322576 Analyst.: K SULLIVAN Run Date...: 15-MAY-97
ALYTICAL Reviewer: K FULLMER Review Date: 20-MAY-97

Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
BLA01	Q687959		SOLIDS			1	mg/L		
LCS01	Q687960		SOLIDS	1390		1420	mg/L	102.2	
DUP01	Q687961	A407790	SOLIDS	1200		1200	mg/L		0
SPI01	Q687962	A407838	SOLIDS	310	250	548	mg/L	95.2	
DPS01	Q687963	A407838	SOLIDS	310	250	542	mg/L	92.8	2.6
SAMPLE	A407830		See Cert. of Analysis, Rep: 0						
LCS01	Q687964		SOLIDS	1390		1390	mg/L	100	
BLA01	Q687965		SOLIDS			-5	mg/L		

Run: R322771 Analyst.: K SULLIVAN Run Date...: 19-MAY-97
ANALYTICAL Reviewer: B SHRAKE Review Date: 21-MAY-97

BLA01	Q688895		SOLIDS			-21	mg/L		
LCS01	Q688896		SOLIDS	786		772	mg/L	98.2	
SPI01	Q688897	A407846	SOLIDS	155	250	389	mg/L	93.6	
DPS01	Q688898	A407846	SOLIDS	155	250	388	mg/L	93.2	.4
DUP01	Q688900	A407852	SOLIDS	650		660.	mg/L		1.5
SAMPLE	A407859		See Cert. of Analysis, Rep: 0						
SAMPLE	A407861		See Cert. of Analysis, Rep: 0						
SAMPLE	A407862		See Cert. of Analysis, Rep: 0						
SAMPLE	A408118		See Cert. of Analysis, Rep: 0						
LCS01	Q688905		SOLIDS	786		767	mg/L	97.6	
BLA01	Q688906		SOLIDS			-6	mg/L		

Run: R322827 Analyst.: K SULLIVAN Run Date...: 20-MAY-97
ANALYTICAL Reviewer: K FULLMER Review Date: 22-MAY-97

BLA01	Q689256		SOLIDS			-7	mg/L		
01	Q689257		SOLIDS	786		789	mg/L	100.4	

HERITAGE ENVIRONMENTAL SERVICES, INC.

QC Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
SAMPLE	A407863		See Cert. of Analysis, Rep: 0						
SAMPLE	A407957		See Cert. of Analysis, Rep: 0						
DUP01	Q689258	A407957	SOLIDS	440		440	mg/L		0
SAMPLE	A407958		See Cert. of Analysis, Rep: 0						
SAMPLE	A407959		See Cert. of Analysis, Rep: 0						
SAMPLE	A407960		See Cert. of Analysis, Rep: 0						
DUP01	Q689259	A407960	SOLIDS	470		470	mg/L		0
SAMPLE	A407961		See Cert. of Analysis, Rep: 0						
SAMPLE	A407962		See Cert. of Analysis, Rep: 0						
SPI01	Q689260	A408168	SOLIDS	285	250	536	mg/L	100.4	
SAMPLE	A408104		See Cert. of Analysis, Rep: 0						
SAMPLE	A408105		See Cert. of Analysis, Rep: 0						
SAMPLE	A408106		See Cert. of Analysis, Rep: 0						
SAMPLE	A408107		See Cert. of Analysis, Rep: 0						
SAMPLE	A408109		See Cert. of Analysis, Rep: 0						
SAMPLE	A408108		See Cert. of Analysis, Rep: 0						
SAMPLE	A408110		See Cert. of Analysis, Rep: 0						
LCS01	Q689262		SOLIDS	786		770	mg/L	98	
BLA01	Q689263		SOLIDS			-13	mg/L		

Run: R323125 Analyst.: K SULLIVAN Run Date...: 21-MAY-97
ANALYTICAL Reviewer: B SHRAKE Review Date: 27-MAY-97

SAMPLE	A408112		See Cert. of Analysis, Rep: 0						
SAMPLE	A408113		See Cert. of Analysis, Rep: 0						
SPI01	Q690329	A408172	SOLIDS	250	250	513	mg/L	105.2	
DPS01	Q690330	A408172	SOLIDS	250	250	523	mg/L	109.2	3.7
SAMPLE	A408114		See Cert. of Analysis, Rep: 0						
SAMPLE	A408115		See Cert. of Analysis, Rep: 0						
SAMPLE	A408116		See Cert. of Analysis, Rep: 0						
SAMPLE	A408117		See Cert. of Analysis, Rep: 0						
LCS01	Q690332		SOLIDS	1230		1260	mg/L	102.4	
BLA01	Q690334		SOLIDS			8	mg/L		

TOTAL SUSPENDED SOLIDS EPA 160.2 G403.7

Run: R322574 Analyst.: K SULLIVAN Run Date...: 16-MAY-97
ANALYTICAL Reviewer: B SHRAKE Review Date: 20-MAY-97

QC Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
BLA01	Q687943		SUSPENDED SOLIDS			0	mg/L		
LCS01	Q687944		SUSPENDED SOLIDS	144		147	mg/L	102.1	
SPI01	Q687950	A407820	SUSPENDED SOLIDS	4	72	75	mg/L	98.6	
SAMPLE	A407830		See Cert. of Analysis, Rep: 0						
SAMPLE	A407859		See Cert. of Analysis, Rep: 0						
SAMPLE	A407861		See Cert. of Analysis, Rep: 0						
SAMPLE	A407862		See Cert. of Analysis, Rep: 0						
DUP01	Q687954	A407497	SUSPENDED SOLIDS	11		14	mg/L		24
SAMPLE	A407863		See Cert. of Analysis, Rep: 0						
LCS01	Q687955		SUSPENDED SOLIDS	144		150	mg/L	104.2	
BLA01	Q687956		SUSPENDED SOLIDS			0	mg/L		
SPI01	Q687957	A407718	SUSPENDED SOLIDS	380	72	440	mg/L	83.3	
DPS01	Q687958	A407718	SUSPENDED SOLIDS	380	72	448	mg/L	94.4	12.5

HERITAGE ENVIRONMENTAL SERVICES, INC.

Run: R322579 Analyst.: K SULLIVAN Run Date...: 19-MAY-97
ANALYTICAL Reviewer: K FULLMER Review Date: 20-MAY-97

Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
BLA01	Q687989		SUSPENDED SOLIDS			-1	mg/L		
LCS01	Q687990		SUSPENDED SOLIDS	207		199	mg/L	96.1	
DUP01	Q687991	A408022	SUSPENDED SOLIDS	11		10	mg/L		9.5
SAMPLE	A408118		See Cert. of Analysis, Rep: 0						
SPI01	Q687992	A408118	SUSPENDED SOLIDS	0	104	99	mg/L	95.2	
LCS01	Q687993		SUSPENDED SOLIDS	207		200	mg/L	96.6	
BLA01	Q687994		SUSPENDED SOLIDS			0	mg/L		

Run: R322772 Analyst.: K SULLIVAN Run Date...: 20-MAY-97
ANALYTICAL Reviewer: B SHRAKE Review Date: 21-MAY-97

BLA01	Q688931		SUSPENDED SOLIDS			0	mg/L		
LCS01	Q688932		SUSPENDED SOLIDS	207		199	mg/L	96.1	
SAMPLE	A407957		See Cert. of Analysis, Rep: 0						
DUP01	Q688935	A407957	SUSPENDED SOLIDS	25		27	mg/L		7.7
SAMPLE	A407958		See Cert. of Analysis, Rep: 0						
SAMPLE	A407959		See Cert. of Analysis, Rep: 0						
SAMPLE	A407960		See Cert. of Analysis, Rep: 0						
SAMPLE	A407961		See Cert. of Analysis, Rep: 0						
SPI01	Q688936	A408062	SUSPENDED SOLIDS	1	104	101	mg/L	96.2	
SAMPLE	A407962		See Cert. of Analysis, Rep: 0						
SPI01	Q688939	A407944	SUSPENDED SOLIDS	1	104	89	mg/L	84.6	
SAMPLE	A408104		See Cert. of Analysis, Rep: 0						
SAMPLE	A408106		See Cert. of Analysis, Rep: 0						
SAMPLE	A408107		See Cert. of Analysis, Rep: 0						
SAMPLE	A408109		See Cert. of Analysis, Rep: 0						
SAMPLE	A408110		See Cert. of Analysis, Rep: 0						
SAMPLE	A408112		See Cert. of Analysis, Rep: 0						
SAMPLE	A408113		See Cert. of Analysis, Rep: 0						
SAMPLE	A408105		See Cert. of Analysis, Rep: 0						
SAMPLE	A408108		See Cert. of Analysis, Rep: 0						
LCS01	Q688942		SUSPENDED SOLIDS	207		192	mg/L	92.8	
BLA01	Q688943		SUSPENDED SOLIDS			-1	mg/L		

Comments

Q687954 Sample exhibits poor replicability. Sample and duplicate analyzed twice.

FIELD TURBIDITY EPA 180.1 G602.0

Run: R322326 Analyst.: S ASKEW Run Date...: 13-MAY-97 Instrument: FIELD
ANALYTICAL Reviewer: D EDWARDS Review Date: 16-MAY-97

QC Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
SAMPLE	A407830		See Cert. of Analysis, Rep: 0						
SAMPLE	A407859		See Cert. of Analysis, Rep: 0						
SAMPLE	A407861		See Cert. of Analysis, Rep: 0						
SAMPLE	A407957		See Cert. of Analysis, Rep: 0						
SAMPLE	A407958		See Cert. of Analysis, Rep: 0						
SAMPLE	A407959		See Cert. of Analysis, Rep: 0						
SAMPLE	A407961		See Cert. of Analysis, Rep: 0						
SAMPLE	A407960		See Cert. of Analysis, Rep: 0						
SAMPLE	A407962		See Cert. of Analysis, Rep: 0						
SAMPLE	A408106		See Cert. of Analysis, Rep: 0						
SAMPLE	A408114		See Cert. of Analysis, Rep: 0						

HERITAGE ENVIRONMENTAL SERVICES, INC.

QC Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
SAMPLE	A408115		See Cert. of Analysis, Rep: 0						
SAMPLE	A408107		See Cert. of Analysis, Rep: 0						
SAMPLE	A408108		See Cert. of Analysis, Rep: 0						
SAMPLE	A408116		See Cert. of Analysis, Rep: 0						
SAMPLE	A408117		See Cert. of Analysis, Rep: 0						
SAMPLE	A408109		See Cert. of Analysis, Rep: 0						
SAMPLE	A408110		See Cert. of Analysis, Rep: 0						
SAMPLE	A408113		See Cert. of Analysis, Rep: 0						

FIELD TEMPERATURE EPA 170.1 G603.0

Run: R322326 Analyst.: S ASKEW Run Date...: 13-MAY-97 Instrument: FIELD
ANALYTICAL Reviewer: D EDWARDS Review Date: 16-MAY-97

QC Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
SAMPLE	A407830		See Cert. of Analysis, Rep: 0						
SAMPLE	A407859		See Cert. of Analysis, Rep: 0						
SAMPLE	A407861		See Cert. of Analysis, Rep: 0						
SAMPLE	A407957		See Cert. of Analysis, Rep: 0						
SAMPLE	A407958		See Cert. of Analysis, Rep: 0						
SAMPLE	A407959		See Cert. of Analysis, Rep: 0						
SAMPLE	A407961		See Cert. of Analysis, Rep: 0						
SAMPLE	A407960		See Cert. of Analysis, Rep: 0						
SAMPLE	A407962		See Cert. of Analysis, Rep: 0						
SAMPLE	A408106		See Cert. of Analysis, Rep: 0						
SAMPLE	A408114		See Cert. of Analysis, Rep: 0						
SAMPLE	A408115		See Cert. of Analysis, Rep: 0						
SAMPLE	A408107		See Cert. of Analysis, Rep: 0						
SAMPLE	A408108		See Cert. of Analysis, Rep: 0						
SAMPLE	A408116		See Cert. of Analysis, Rep: 0						
SAMPLE	A408117		See Cert. of Analysis, Rep: 0						
SAMPLE	A408109		See Cert. of Analysis, Rep: 0						
SAMPLE	A408110		See Cert. of Analysis, Rep: 0						
SAMPLE	A408113		See Cert. of Analysis, Rep: 0						

FIELD SPECIFIC CONDUCTANCE SW846-9050 G604.0

Run: R322326 Analyst.: S ASKEW Run Date...: 13-MAY-97 Instrument: FIELD
ANALYTICAL Reviewer: D EDWARDS Review Date: 16-MAY-97

QC Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
SAMPLE	A407830		See Cert. of Analysis, Rep: 0						
SAMPLE	A407859		See Cert. of Analysis, Rep: 0						
SAMPLE	A407861		See Cert. of Analysis, Rep: 0						
SAMPLE	A407957		See Cert. of Analysis, Rep: 0						
SAMPLE	A407958		See Cert. of Analysis, Rep: 0						
SAMPLE	A407959		See Cert. of Analysis, Rep: 0						
SAMPLE	A407961		See Cert. of Analysis, Rep: 0						
SAMPLE	A407960		See Cert. of Analysis, Rep: 0						
SAMPLE	A407962		See Cert. of Analysis, Rep: 0						
SAMPLE	A408106		See Cert. of Analysis, Rep: 0						
SAMPLE	A408114		See Cert. of Analysis, Rep: 0						
SAMPLE	A408115		See Cert. of Analysis, Rep: 0						
SAMPLE	A408107		See Cert. of Analysis, Rep: 0						

HERITAGE ENVIRONMENTAL SERVICES, INC.

QC Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
SAMPLE	A408108		See Cert. of Analysis, Rep: 0						
IPLE	A408116		See Cert. of Analysis, Rep: 0						
MPLE	A408117		See Cert. of Analysis, Rep: 0						
SAMPLE	A408109		See Cert. of Analysis, Rep: 0						
SAMPLE	A408110		See Cert. of Analysis, Rep: 0						
SAMPLE	A408113		See Cert. of Analysis, Rep: 0						

FIELD OXIDATION-REDUCTION POTENTIAL SM2580B-18TH ED G604.7

Run: R322326 Analyst.: S ASKEW Run Date...: 13-MAY-97 Instrument: FIELD
ANALYTICAL Reviewer: D EDWARDS Review Date: 16-MAY-97

QC Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
SAMPLE	A407830		See Cert. of Analysis, Rep: 0						
SAMPLE	A407859		See Cert. of Analysis, Rep: 0						
SAMPLE	A407861		See Cert. of Analysis, Rep: 0						
SAMPLE	A407957		See Cert. of Analysis, Rep: 0						
SAMPLE	A407958		See Cert. of Analysis, Rep: 0						
SAMPLE	A407959		See Cert. of Analysis, Rep: 0						
SAMPLE	A407961		See Cert. of Analysis, Rep: 0						
SAMPLE	A407960		See Cert. of Analysis, Rep: 0						
SAMPLE	A407962		See Cert. of Analysis, Rep: 0						
SAMPLE	A408106		See Cert. of Analysis, Rep: 0						
SAMPLE	A408114		See Cert. of Analysis, Rep: 0						
SAMPLE	A408115		See Cert. of Analysis, Rep: 0						
SAMPLE	A408107		See Cert. of Analysis, Rep: 0						
SAMPLE	A408108		See Cert. of Analysis, Rep: 0						
IPLE	A408116		See Cert. of Analysis, Rep: 0						
MPLE	A408117		See Cert. of Analysis, Rep: 0						
SAMPLE	A408109		See Cert. of Analysis, Rep: 0						
SAMPLE	A408110		See Cert. of Analysis, Rep: 0						
SAMPLE	A408113		See Cert. of Analysis, Rep: 0						

ALKALINITY TOTAL EPA 310.1 G605.2

Run: R322474 Analyst.: K WHITFIELD Run Date...: 16-MAY-97
ANALYTICAL Reviewer: K FULLMER Review Date: 19-MAY-97

QC Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
LFB01	Q687496		ALKALINITY	49.2		48	mg/L	97.6	
SAMPLE	A407830		See Cert. of Analysis, Rep: 0						
SAMPLE	A407859		See Cert. of Analysis, Rep: 0						
SAMPLE	A407861		See Cert. of Analysis, Rep: 0						
SAMPLE	A407862		See Cert. of Analysis, Rep: 0						
SAMPLE	A407863		See Cert. of Analysis, Rep: 0						
SAMPLE	A407957		See Cert. of Analysis, Rep: 0						
SAMPLE	A407958		See Cert. of Analysis, Rep: 0						
DUP01	Q687497	A407958	ALKALINITY	400		400	mg/L		0
SAMPLE	A407959		See Cert. of Analysis, Rep: 0						
SAMPLE	A407960		See Cert. of Analysis, Rep: 0						
CCV	Q687498		ALKALINITY	125		110	mg/L	88	
SAMPLE	A407961		See Cert. of Analysis, Rep: 0						
DUP01	Q687499	A407961	ALKALINITY	340		340	mg/L		0
IPLE	A407962		See Cert. of Analysis, Rep: 0						

HERITAGE ENVIRONMENTAL SERVICES, INC.

QC Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
CCV	Q687500		ALKALINITY	125		120	mg/L	96	

In: R322535 Analyst.: C ROBISON Run Date...: 19-MAY-97
ANALYTICAL Reviewer: B SHRAKE Review Date: 20-MAY-97

LFB01	Q687684		ALKALINITY	49.2		47	mg/L	95.5	
SAMPLE	A408118		See Cert. of Analysis, Rep: 0						
SAMPLE	A408104		See Cert. of Analysis, Rep: 0						
SAMPLE	A408106		See Cert. of Analysis, Rep: 0						
CCV	Q687685		ALKALINITY	125		115	mg/L	92	
SAMPLE	A408107		See Cert. of Analysis, Rep: 0						
DUP01	Q687686	A408107	ALKALINITY	450		450	mg/L		0
SAMPLE	A408109		See Cert. of Analysis, Rep: 0						
DUP01	Q687687	A408109	ALKALINITY	370		360	mg/L		2.7
SAMPLE	A408110		See Cert. of Analysis, Rep: 0						
SAMPLE	A408112		See Cert. of Analysis, Rep: 0						
SAMPLE	A408113		See Cert. of Analysis, Rep: 0						
CCV	Q687689		ALKALINITY	125		120	mg/L	96	
SAMPLE	A408105		See Cert. of Analysis, Rep: 0						
SAMPLE	A408108		See Cert. of Analysis, Rep: 0						
CCV	Q687699		ALKALINITY	125		120	mg/L	96	
DUP01	Q687700	A408107	ALKALINITY	450		450	mg/L		0

FIELD PH (AQUEOUS) SW846-9040A G607.0

Run: R322326 Analyst.: S ASKEW Run Date...: 13-MAY-97 Instrument: FIELD
ANALYTICAL Reviewer: D EDWARDS Review Date: 16-MAY-97

QC Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
SAMPLE	A407830		See Cert. of Analysis, Rep: 0						
SAMPLE	A407859		See Cert. of Analysis, Rep: 0						
SAMPLE	A407861		See Cert. of Analysis, Rep: 0						
SAMPLE	A407957		See Cert. of Analysis, Rep: 0						
SAMPLE	A407958		See Cert. of Analysis, Rep: 0						
SAMPLE	A407959		See Cert. of Analysis, Rep: 0						
SAMPLE	A407961		See Cert. of Analysis, Rep: 0						
SAMPLE	A407960		See Cert. of Analysis, Rep: 0						
SAMPLE	A407962		See Cert. of Analysis, Rep: 0						
SAMPLE	A408106		See Cert. of Analysis, Rep: 0						
SAMPLE	A408114		See Cert. of Analysis, Rep: 0						
SAMPLE	A408115		See Cert. of Analysis, Rep: 0						
SAMPLE	A408107		See Cert. of Analysis, Rep: 0						
SAMPLE	A408108		See Cert. of Analysis, Rep: 0						
SAMPLE	A408116		See Cert. of Analysis, Rep: 0						
SAMPLE	A408117		See Cert. of Analysis, Rep: 0						
SAMPLE	A408109		See Cert. of Analysis, Rep: 0						
SAMPLE	A408110		See Cert. of Analysis, Rep: 0						
SAMPLE	A408113		See Cert. of Analysis, Rep: 0						

ALKALINITY (BICARBONATE) EPA 310.1 G610.2

Run: R322474 Analyst.: K WHITFIELD Run Date...: 16-MAY-97
ANALYTICAL Reviewer: K FULLMER Review Date: 19-MAY-97

QC Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
LFB01	Q687496		ALKALINITY	49.2		48	mg/L	97.6	

HERITAGE ENVIRONMENTAL SERVICES, INC.

QC Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
CCV	Q687498		ALKALINITY	125		110	mg/L	88	
'P01	Q687499	A407961	ALKALINITY	340		340	mg/L		0
.MPLE	A407830		See Cert. of Analysis, Rep: 0						
SAMPLE	A407859		See Cert. of Analysis, Rep: 0						
SAMPLE	A407861		See Cert. of Analysis, Rep: 0						
SAMPLE	A407862		See Cert. of Analysis, Rep: 0						
SAMPLE	A407863		See Cert. of Analysis, Rep: 0						
SAMPLE	A407957		See Cert. of Analysis, Rep: 0						
SAMPLE	A407958		See Cert. of Analysis, Rep: 0						
DUP01	Q687501	A407958	ALKALINITY	400		400	mg/L		0
SAMPLE	A407959		See Cert. of Analysis, Rep: 0						
SAMPLE	A407960		See Cert. of Analysis, Rep: 0						
SAMPLE	A407961		See Cert. of Analysis, Rep: 0						
DUP01	Q687502	A407961	ALKALINITY	340		340	mg/L		0
SAMPLE	A407962		See Cert. of Analysis, Rep: 0						

Run: R322535 Analyst.: C ROBISON Run Date...: 19-MAY-97
ANALYTICAL Reviewer: B SHRAKE Review Date: 20-MAY-97

LFB01	Q687684		ALKALINITY	49.2		47	mg/L	95.5	
CCV	Q687685		ALKALINITY	125		115	mg/L	92	
SAMPLE	A408118		See Cert. of Analysis, Rep: 0						
SAMPLE	A408104		See Cert. of Analysis, Rep: 0						
SAMPLE	A408106		See Cert. of Analysis, Rep: 0						
SAMPLE	A408107		See Cert. of Analysis, Rep: 0						
DUP01	Q687700	A408107	ALKALINITY	450		450	mg/L		0
SAMPLE	A408109		See Cert. of Analysis, Rep: 0						
DUP01	Q687701	A408109	ALKALINITY	370		360	mg/L		2.7
SAMPLE	A408110		See Cert. of Analysis, Rep: 0						
.MPLE	A408112		See Cert. of Analysis, Rep: 0						
.MPLE	A408113		See Cert. of Analysis, Rep: 0						
SAMPLE	A408105		See Cert. of Analysis, Rep: 0						
SAMPLE	A408108		See Cert. of Analysis, Rep: 0						

ALKALINITY (CARBONATE) EPA 310.1 G611.2

Run: R322474 Analyst.: K WHITFIELD Run Date...: 16-MAY-97
ANALYTICAL Reviewer: K FULLMER Review Date: 19-MAY-97

QC Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
LFB01	Q687496		ALKALINITY	49.2		48	mg/L	97.6	
CCV	Q687498		ALKALINITY	125		110	mg/L	88	
DUP01	Q687502	A407961	ALKALINITY	340		340	mg/L		0
SAMPLE	A407830		See Cert. of Analysis, Rep: 0						
SAMPLE	A407859		See Cert. of Analysis, Rep: 0						
SAMPLE	A407861		See Cert. of Analysis, Rep: 0						
SAMPLE	A407862		See Cert. of Analysis, Rep: 0						
SAMPLE	A407863		See Cert. of Analysis, Rep: 0						
SAMPLE	A407957		See Cert. of Analysis, Rep: 0						
SAMPLE	A407958		See Cert. of Analysis, Rep: 0						
DUP01	Q687503	A407958	ALKALINITY	0		BDL	mg/L		
SAMPLE	A407959		See Cert. of Analysis, Rep: 0						
SAMPLE	A407960		See Cert. of Analysis, Rep: 0						
SAMPLE	A407961		See Cert. of Analysis, Rep: 0						
DUP01	Q687504	A407961	ALKALINITY	0		BDL	mg/L		
.MPLE	A407962		See Cert. of Analysis, Rep: 0						

HERITAGE ENVIRONMENTAL SERVICES, INC.

Run: R322535 Analyst.: C ROBISON Run Date...: 19-MAY-97
ANALYTICAL Reviewer: B SHRAKE Review Date: 20-MAY-97

QC Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
FB01	Q687684		ALKALINITY	49.2		47	mg/L	95.5	
CCV	Q687685		ALKALINITY	125		115	mg/L	92	
SAMPLE	A408118		See Cert. of Analysis, Rep: 0						
SAMPLE	A408104		See Cert. of Analysis, Rep: 0						
SAMPLE	A408106		See Cert. of Analysis, Rep: 0						
SAMPLE	A408107		See Cert. of Analysis, Rep: 0						
DUP01	Q687712	A408107	ALKALINITY	0		BDL	mg/L		
SAMPLE	A408109		See Cert. of Analysis, Rep: 0						
DUP01	Q687713	A408109	ALKALINITY	0		BDL	mg/L		
SAMPLE	A408110		See Cert. of Analysis, Rep: 0						
SAMPLE	A408112		See Cert. of Analysis, Rep: 0						
SAMPLE	A408113		See Cert. of Analysis, Rep: 0						
SAMPLE	A408105		See Cert. of Analysis, Rep: 0						
SAMPLE	A408108		See Cert. of Analysis, Rep: 0						

ARSENIC TRACE ICP SW846-6010A M103.0

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A

Run: R322212 Analyst.: R DALAL Run Date...: 15-MAY-97
PREP Reviewer: W WATNESS Review Date: 15-MAY-97

QC Type	Lab ID	Source	Anal Run
SAMPLE	A407859	Rep: 0	R322657
SAMPLE	A407861	Rep: 0	R322657
SAMPLE	A407862	Rep: 0	R322657
LCS	Q685872	INORGAN	R322657
BLA02	Q685873	NA	R322657
SPI02	Q685874	A407861	R322657
DPS02	Q685875	A407861	R322657

Run: R322309 Analyst.: B GRAVES Run Date...: 16-MAY-97
PREP Reviewer: W WATNESS Review Date: 16-MAY-97

SAMPLE	A407957	Rep: 0	R322833
SAMPLE	A407958	Rep: 0	R322833
SAMPLE	A407959	Rep: 0	R322833
SAMPLE	A407961	Rep: 0	R322833
LCS	Q686501	INORGAN	R322833
BLA02	Q686502	NA	R322833
SPI02	Q686503	A407961	R322833
DPS02	Q686504	A407961	R322833

Run: R322430 Analyst.: N CARR Run Date...: 19-MAY-97
PREP Reviewer: W WATNESS Review Date: 19-MAY-97

SAMPLE	A408107	Rep: 0	R323652
LCS	Q687234	INORGAN	R323652
BLA02	Q687235	NA	R323652
SPI02	Q687236	A408106	R323652
DPS02	Q687237	A408106	R323652

Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOU SW846-3005A

Run: R322211 Analyst.: R DALAL Run Date...: 15-MAY-97
PREP Reviewer: W WATNESS Review Date: 15-MAY-97

SAMPLE	A407859	Rep: 1	R322657
SAMPLE	A407861	Rep: 1	R322657

HERITAGE ENVIRONMENTAL SERVICES, INC.

QC Type	Lab ID	Source	Anal Run
SAMPLE	A407862	Rep: 1	R322657
S	Q685863	INORGAN	R322657
BLA02	Q685864		R322657
SPI02	Q685865	A407859	R322657
DPS02	Q685866	A407859	R322657

Run: R322308 Analyst.: B GRAVES Run Date...: 16-MAY-97
PREP Reviewer: W WATNESS Review Date: 16-MAY-97

SAMPLE	A407957	Rep: 1	R322833
SAMPLE	A407958	Rep: 1	R322833
SAMPLE	A407959	Rep: 1	R322833
SAMPLE	A407961	Rep: 1	R322833
LCS	Q686492	INORGAN	R322833
BLA02	Q686493	NA	R322833
SPI02	Q686494	A407961	R322833
DPS02	Q686495	A407961	R322833

Run: R322441 Analyst.: B GRAVES Run Date...: 19-MAY-97
PREP Reviewer: W WATNESS Review Date: 20-MAY-97

SAMPLE	A408107	Rep: 1	R323652
LCS	Q687284	INORGAN	R323652
BLA02	Q687285	NA	R323652
SPI02	Q687286	A408114	R323652
DPS02	Q687287	A408114	R323652

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A

Run: R322657 Analyst.: A ROBERTSON Run Date...: 20-MAY-97 Instrument: TRACE ICP
ANALYTICAL Reviewer: S O'NEAL Review Date: 21-MAY-97

QC Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
CCV01	Q688326	PERKIN-	ARSENIC	0.05		0.0506	mg/L	101	
BLA01	Q688328	NA	ARSENIC			< 0.00200	mg/L		
CDL01	Q688329	PERKIN-	ARSENIC	0.02		0.0190	mg/L	95	
ICS-A	Q688338	PERKIN	ARSENIC	0.1		0.100	mg/L	100	
CCV	Q688339	INORGAN	ARSENIC	0.1		0.0979	mg/L	98	
LCS	Q685872	INORGAN	ARSENIC	0.5		0.447	mg/L	89	
BLA02	Q685873	NA	ARSENIC			< 0.00200	mg/L		
SAMPLE	A407861		See Cert. of Analysis, Rep: 0						
SPI02	Q685874	A407861	ARSENIC	0.0473	2	2.12	mg/L	104	
DPS02	Q685875	A407861	ARSENIC	0.0473	2	2.09	mg/L	102.1	1.8
SAMPLE	A407859		See Cert. of Analysis, Rep: 0						
SAMPLE	A407862		See Cert. of Analysis, Rep: 0						
CCV	Q688354	INORGAN	ARSENIC	0.1		0.0995	mg/L	100	
BLA01	Q688360	NA	ARSENIC			< 0.00200	mg/L		
CDL01	Q688367	PERKIN-	ARSENIC	0.02		0.0212	mg/L	106	
ICS-A	Q688369	PERKIN	ARSENIC	0.1		0.0958	mg/L	96	

Run: R322833 Analyst.: A ROBERTSON Run Date...: 22-MAY-97 Instrument: TRACE ICP
ANALYTICAL Reviewer: S O'NEAL Review Date: 23-MAY-97

CCV	Q689336	INORGAN	ARSENIC	0.1		0.0986	mg/L	99	
BLA01	Q689337	NA	ARSENIC			< 0.00200	mg/L		
ICV01	Q689338	PERKIN-	ARSENIC	0.05		0.0500	mg/L	100	
CDL01	Q689341	PERKIN-	ARSENIC	0.02		0.0197	mg/L	99	
ICS-A	Q689344	PERKIN	ARSENIC	0.1		0.0972	mg/L	97	
LCS	Q686501	INORGAN	ARSENIC	0.5		0.490	mg/L	98	
BLA02	Q686502	NA	ARSENIC			< 0.00200	mg/L		
SAMPLE	A407961		See Cert. of Analysis, Rep: 0						
SPI02	Q686503	A407961	ARSENIC	0.0287	2	2.02	mg/L	100	

HERITAGE ENVIRONMENTAL SERVICES, INC.

QC Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
DPS02	Q686504	A407961	ARSENIC	0.0287	2	2	mg/L	98.6	.4
MPLE	A407957		See Cert. of Analysis, Rep: 0						
SAMPLE	A407958		See Cert. of Analysis, Rep: 0						
SAMPLE	A407959		See Cert. of Analysis, Rep: 0						
CCV	Q689355	INORGAN	ARSENIC	0.1		0.0999	mg/L	100	
BLA01	Q689356	NA	ARSENIC			< 0.00200	mg/L		
CDL01	Q689363	PERKIN-	ARSENIC	0.02		0.0209	mg/L	105	
ICS-A	Q689365	PERKIN	ARSENIC	0.1		0.0995	mg/L	100	

Run: R323652 Analyst.: A ROBERTSON Run Date...: 28-MAY-97 Instrument: TRACE ICP
ANALYTICAL Reviewer: S O'NEAL Review Date: 02-JUN-97

CCV	Q692576	INORGAN	ARSENIC	0.1		0.0983	mg/L	98	
BLA01	Q692577	NA	ARSENIC			< 0.00200	mg/L		
ICV01	Q692578	PERKIN-	ARSENIC	0.05		0.0506	mg/L	101	
CDL01	Q692581	PERKIN-	ARSENIC	0.02		0.0211	mg/L	106	
ICS-A	Q692584	PERKIN	ARSENIC	0.1		0.102	mg/L	102	
LCS	Q687234	INORGAN	ARSENIC	0.5		0.472	mg/L	94	
BLA02	Q687235	NA	ARSENIC			< 0.00200	mg/L		
SPI02	Q687236	A408106	ARSENIC	0.0498	2	2.31	mg/L	113	
DPS02	Q687237	A408106	ARSENIC	0.0498	2	2.26	mg/L	111	2
SAMPLE	A408107		See Cert. of Analysis, Rep: 0						
CCV	Q692589	INORGAN	ARSENIC	0.1		0.103	mg/L	103	
BLA01	Q692590	NA	ARSENIC			< 0.00200	mg/L		
CDL01	Q692595	PERKIN-	ARSENIC	0.02		0.0211	mg/L	106	
ICS-A	Q692597	PERKIN	ARSENIC	0.1		0.106	mg/L	106	

Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOU SW846-3005A

Run: R322657 Analyst.: A ROBERTSON Run Date...: 20-MAY-97 Instrument: TRACE ICP
NALYTICAL Reviewer: S O'NEAL Review Date: 21-MAY-97

ICV01	Q688326	PERKIN-	ARSENIC	0.05		0.0506	mg/L	101	
BLA01	Q688328	NA	ARSENIC			< 0.00200	mg/L		
CDL01	Q688329	PERKIN-	ARSENIC	0.02		0.0190	mg/L	95	
ICS-A	Q688338	PERKIN	ARSENIC	0.1		0.100	mg/L	100	
CCV	Q688339	INORGAN	ARSENIC	0.1		0.0979	mg/L	98	
LCS	Q685863	INORGAN	ARSENIC	0.5		0.431	mg/L	86	
BLA02	Q685864		ARSENIC			< 0.002			
SAMPLE	A407859		See Cert. of Analysis, Rep: 1						
SPI02	Q685865	A407859	ARSENIC	0.021	2	1.97		97.5	
DPS02	Q685866	A407859	ARSENIC	0.021	2	2.06		102	4.5
SAMPLE	A407861		See Cert. of Analysis, Rep: 1						
SAMPLE	A407862		See Cert. of Analysis, Rep: 1						
CCV	Q688352	INORGAN	ARSENIC	0.1		0.0992	mg/L	99	
BLA01	Q688353	NA	ARSENIC			< 0.00200	mg/L		
CDL01	Q688367	PERKIN-	ARSENIC	0.02		0.0212	mg/L	106	
ICS-A	Q688369	PERKIN	ARSENIC	0.1		0.0958	mg/L	96	

Run: R322833 Analyst.: A ROBERTSON Run Date...: 22-MAY-97 Instrument: TRACE ICP
ANALYTICAL Reviewer: S O'NEAL Review Date: 23-MAY-97

CCV	Q689336	INORGAN	ARSENIC	0.1		0.0986	mg/L	99	
BLA01	Q689337	NA	ARSENIC			< 0.00200	mg/L		
ICV01	Q689338	PERKIN-	ARSENIC	0.05		0.0500	mg/L	100	
CDL01	Q689341	PERKIN-	ARSENIC	0.02		0.0197	mg/L	99	
ICS-A	Q689344	PERKIN	ARSENIC	0.1		0.0972	mg/L	97	
LCS	Q686492	INORGAN	ARSENIC	0.5		0.461	mg/L	92	
LA02	Q686493	NA	ARSENIC			< 0.00200	mg/L		
MPLE	A407961		See Cert. of Analysis, Rep: 1						

HERITAGE ENVIRONMENTAL SERVICES, INC.

QC Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
SPI02	Q686494	A407961	ARSENIC	0.0287	2	2.00	mg/L	99	
S02	Q686495	A407961	ARSENIC	0.0287	2	2.08	mg/L	103	4
SAMPLE	A407957		See Cert. of Analysis, Rep: 1						
SAMPLE	A407958		See Cert. of Analysis, Rep: 1						
SAMPLE	A407959		See Cert. of Analysis, Rep: 1						
CCV	Q689357	INORGAN	ARSENIC	0.1		0.0967	mg/L	97	
BLA01	Q689358	NA	ARSENIC			< 0.00200	mg/L		
CDL01	Q689363	PERKIN-	ARSENIC	0.02		0.0209	mg/L	105	
ICS-A	Q689365	PERKIN	ARSENIC	0.1		0.0995	mg/L	100	

Run: R323652 Analyst.: A ROBERTSON Run Date...: 28-MAY-97 Instrument: TRACE ICP
ANALYTICAL Reviewer: S O'NEAL Review Date: 02-JUN-97

CCV	Q692576	INORGAN	ARSENIC	0.1		0.0983	mg/L	98	
BLA01	Q692577	NA	ARSENIC			< 0.00200	mg/L		
ICV01	Q692578	PERKIN-	ARSENIC	0.05		0.0506	mg/L	101	
CDL01	Q692581	PERKIN-	ARSENIC	0.02		0.0211	mg/L	106	
ICS-A	Q692584	PERKIN	ARSENIC	0.1		0.102	mg/L	102	
LCS	Q687284	INORGAN	ARSENIC	0.5		0.474	mg/L	95	
BLA02	Q687285	NA	ARSENIC			0.00204	mg/L		
SPI02	Q687286	A408114	ARSENIC	0	2	2.14	mg/L	107	
DPS02	Q687287	A408114	ARSENIC	0	2	2.18	mg/L	109	2
SAMPLE	A408107		See Cert. of Analysis, Rep: 1						
CCV	Q692593	INORGAN	ARSENIC	0.1		0.0991	mg/L	99	
BLA01	Q692594	NA	ARSENIC			< 0.00200	mg/L		
CDL01	Q692595	PERKIN-	ARSENIC	0.02		0.0211	mg/L	106	
ICS-A	Q692597	PERKIN	ARSENIC	0.1		0.106	mg/L	106	

Run: R322657 Analyst.: A ROBERTSON Run Date...: 20-MAY-97 Instrument: TRACE ICP
ANALYTICAL Reviewer: S O'NEAL Review Date: 21-MAY-97

ICV01	Q688326	PERKIN-	ARSENIC	0.05		0.0506	mg/L	101	
BLA01	Q688328	NA	ARSENIC			< 0.00200	mg/L		
CDL01	Q688329	PERKIN-	ARSENIC	0.02		0.0190	mg/L	95	
ICS-A	Q688338	PERKIN	ARSENIC	0.1		0.100	mg/L	100	
CCV	Q688339	INORGAN	ARSENIC	0.1		0.0979	mg/L	98	
DUP01	Q688342	A406428	ARSENIC	0		BDL	mg/L		
SPI02	Q685865	A407859	ARSENIC	0.021	2	1.97		97.5	
DPS02	Q685866	A407859	ARSENIC	0.021	2	2.06		102	4.5
SAMPLE	A407830		See Cert. of Analysis, Rep: 1						
CCV	Q688352	INORGAN	ARSENIC	0.1		0.0992	mg/L	99	
BLA01	Q688353	NA	ARSENIC			< 0.00200	mg/L		
SPI02	Q685874	A407861	ARSENIC	0.0473	2	2.12	mg/L	104	
DPS02	Q685875	A407861	ARSENIC	0.0473	2	2.09	mg/L	102.1	1.8
SAMPLE	A407830		See Cert. of Analysis, Rep: 0						
CCV	Q688354	INORGAN	ARSENIC	0.1		0.0995	mg/L	100	
BLA01	Q688360	NA	ARSENIC			< 0.00200	mg/L		
CDL01	Q688367	PERKIN-	ARSENIC	0.02		0.0212	mg/L	106	
ICS-A	Q688369	PERKIN	ARSENIC	0.1		0.0958	mg/L	96	

BARIUM ICP SW846-6010A M104.3

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A

Run: R322212 Analyst.: R DALAL Run Date...: 15-MAY-97
PREP Reviewer: W WATNESS Review Date: 15-MAY-97

QC Type	Lab ID	Source	Anal Run
[illegible]	Q685867	SPEX	R322424

HERITAGE ENVIRONMENTAL SERVICES, INC.

QC Type	Lab ID	Source	Anal Run
BLA02	Q685868	NA	R322424
SPI02	Q685869	A407861	R322424
DPS02	Q685870	A407861	R322424
SAMPLE	A407859	Rep: 0	R322424
SAMPLE	A407861	Rep: 0	R322424

Run: R322430 Analyst.: N CARR Run Date...: 19-MAY-97
PREP Reviewer: W WATNESS Review Date: 19-MAY-97

LCS	Q687229	SPEX	R322769
BLA02	Q687230	NA	R322769
SPI02	Q687231	A408106	R322769
DPS02	Q687232	A408106	R322769
SAMPLE	A408104	Rep: 0	R322769
SAMPLE	A408105	Rep: 0	R322769
SAMPLE	A408107	Rep: 0	R322769
SAMPLE	A408108	Rep: 0	R322769
SAMPLE	A408110	Rep: 0	R322769

Run: R322536 Analyst.: R DALAL Run Date...: 20-MAY-97
PREP Reviewer: W WATNESS Review Date: 20-MAY-97

LCS	Q687707	SPEX	R322769
BLA02	Q687708	NA	R322769
SPI02	Q687709	A408117	R322769
DPS02	Q687710	A408117	R322769
SAMPLE	A408112	Rep: 0	R322769
SAMPLE	A408113	Rep: 0	R322769

Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOU SW846-3005A

Run: R322211 Analyst.: R DALAL Run Date...: 15-MAY-97
PREP Reviewer: W WATNESS Review Date: 15-MAY-97

LCS	Q685858	SPEX	R322424
BLA02	Q685859	NA	R322424
SPI02	Q685860	A407859	R322424
DPS02	Q685861	A407859	R322424
SAMPLE	A407859	Rep: 1	R322424
SAMPLE	A407861	Rep: 1	R322424

Run: R322441 Analyst.: B GRAVES Run Date...: 19-MAY-97
PREP Reviewer: W WATNESS Review Date: 20-MAY-97

LCS	Q687279	SPEX	R322769
BLA02	Q687280	NA	R322769
SPI02	Q687281	A408114	R322769
DPS02	Q687282	A408114	R322769
SAMPLE	A408104	Rep: 1	R322769
SAMPLE	A408105	Rep: 1	R322769
SAMPLE	A408107	Rep: 1	R322769
SAMPLE	A408108	Rep: 1	R322769
SAMPLE	A408110	Rep: 1	R322769
SAMPLE	A408112	Rep: 1	R322769
SAMPLE	A408113	Rep: 1	R322769

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A

Run: R322424 Analyst.: A HILSCHER Run Date...: 16-MAY-97 Instrument: ICP
ANALYTICAL Reviewer: S ENDERSON Review Date: 19-MAY-97

QC Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
CCV	Q687119	INORGAN	BARIUM	5.00		5.10	mg/L	102	
BA01	Q687120	NA	BARIUM			< 0.00400	mg/L		

HERITAGE ENVIRONMENTAL SERVICES, INC.

QC Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q687122	PERKIN	BARIUM	1		1.02	mg/L	102	
L01	Q687126	INORGAN	BARIUM	10		10.2	mg/L	102	
..S-A	Q687128	PERKIN	BARIUM	0.500		0.483	mg/L	97	
BLA02	Q685868	NA	BARIUM			< 0.00400	mg/L		
LCS	Q685867	SPEX	BARIUM	20.0		20.3	mg/L	102	
SAMPLE	A407861		See Cert. of Analysis, Rep: 0						
SPI02	Q685869	A407861	BARIUM	0.236	2.00	2.32	mg/L	104	
DPS02	Q685870	A407861	BARIUM	0.236	2.00	2.25	mg/L	101	3
CCV	Q687196	INORGAN	BARIUM	5.00		5.36	mg/L	107	
BLA01	Q687197	NA	BARIUM			< 0.00400	mg/L		
SAMPLE	A407859		See Cert. of Analysis, Rep: 0						
CCV	Q687198	INORGAN	BARIUM	5.00		5.44	mg/L	109	
BLA01	Q687199	NA	BARIUM			< 0.00400	mg/L		
ICS-A	Q687212	PERKIN	BARIUM	0.500		0.527	mg/L	105	

Run: R322769 Analyst.: A STOCKBURGER Run Date...: 21-MAY-97 Instrument: ICP
ANALYTICAL Reviewer: S ENDERSON Review Date: 22-MAY-97

CCV	Q688846	INORGAN	BARIUM	5.00		4.93	mg/L	99	
BLA01	Q688847	NA	BARIUM			< 0.00400	mg/L		
ICV01	Q688851	PERKIN	BARIUM	1		1.01	mg/L	101	
CDL01	Q688856	INORGAN	BARIUM	10		9.98	mg/L	100	
ICS-A	Q688859	PERKIN	BARIUM	0.500		0.478	mg/L	96	
BLA02	Q687230	NA	BARIUM			< 0.00400	mg/L		
LCS	Q687229	SPEX	BARIUM	20.0		19.8	mg/L	99	
SPI02	Q687231	A408106	BARIUM	0.252	2.00	2.41	mg/L	108	
DPS02	Q687232	A408106	BARIUM	0.252	2.00	2.37	mg/L	106	2
SAMPLE	A408104		See Cert. of Analysis, Rep: 0						
SAMPLE	A408105		See Cert. of Analysis, Rep: 0						
..MPLE	A408107		See Cert. of Analysis, Rep: 0						
..AMPLE	A408108		See Cert. of Analysis, Rep: 0						
SAMPLE	A408110		See Cert. of Analysis, Rep: 0						
CCV	Q688901	INORGAN	BARIUM	5.00		5.17	mg/L	103	
BLA01	Q688902	NA	BARIUM			< 0.00400	mg/L		
BLA02	Q687708	NA	BARIUM			< 0.00400	mg/L		
LCS	Q687707	SPEX	BARIUM	20.0		19.0	mg/L	95	
SPI02	Q687709	A408117	BARIUM	0.0605	2.00	2.07	mg/L	101	
DPS02	Q687710	A408117	BARIUM	0.0605	2.00	2.08	mg/L	101	0
SAMPLE	A408112		See Cert. of Analysis, Rep: 0						
SAMPLE	A408113		See Cert. of Analysis, Rep: 0						
CCV	Q688915	INORGAN	BARIUM	5.00		5.29	mg/L	106	
BLA01	Q688916	NA	BARIUM			< 0.00400	mg/L		
ICS-A	Q688966	PERKIN	BARIUM	0.500		0.513	mg/L	103	

Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOU SW846-3005A

Run: R322424 Analyst.: A HILSCHER Run Date...: 16-MAY-97 Instrument: ICP
ANALYTICAL Reviewer: S ENDERSON Review Date: 19-MAY-97

CCV	Q687119	INORGAN	BARIUM	5.00		5.10	mg/L	102	
BLA01	Q687120	NA	BARIUM			< 0.00400	mg/L		
ICV01	Q687122	PERKIN	BARIUM	1		1.02	mg/L	102	
CDL01	Q687126	INORGAN	BARIUM	10		10.2	mg/L	102	
ICS-A	Q687128	PERKIN	BARIUM	0.500		0.483	mg/L	97	
BLA02	Q685859	NA	BARIUM			< 0.00400	mg/L		
LCS	Q685858	SPEX	BARIUM	20.0		18.2	mg/L	91	
SAMPLE	A407861		See Cert. of Analysis, Rep: 1						
..MPLE	A407859		See Cert. of Analysis, Rep: 1						

HERITAGE ENVIRONMENTAL SERVICES, INC.

QC Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
SPI02	Q685860	A407859	BARIUM	0.202	2	1.99	mg/L	89	
CV	Q687152	INORGAN	BARIUM	5.00		5.08	mg/L	102	
BLA01	Q687153	NA	BARIUM			< 0.00400	mg/L		
DPS02	Q685861	A407859	BARIUM	0.202	2	2.15	mg/L	97	9
ICS-A	Q687212	PERKIN	BARIUM	0.500		0.527	mg/L	105	

Run: R322769 Analyst.: A STOCKBURGER Run Date...: 21-MAY-97 Instrument: ICP
ANALYTICAL Reviewer: S ENDERSON Review Date: 22-MAY-97

CCV	Q688846	INORGAN	BARIUM	5.00		4.93	mg/L	99	
BLA01	Q688847	NA	BARIUM			< 0.00400	mg/L		
ICV01	Q688851	PERKIN	BARIUM	1		1.01	mg/L	101	
CDL01	Q688856	INORGAN	BARIUM	10		9.98	mg/L	100	
ICS-A	Q688859	PERKIN	BARIUM	0.500		0.478	mg/L	96	
BLA02	Q687280	NA	BARIUM			< 0.00400	mg/L		
LCS	Q687279	SPEX	BARIUM	20.0		19.4	mg/L	97	
SPI02	Q687281	A408114	BARIUM	0.108	2	2.04	mg/L	97	
DPS02	Q687282	A408114	BARIUM	0.108	2	2.06	mg/L	98	1
SAMPLE	A408104		See Cert. of Analysis, Rep: 1						
SAMPLE	A408105		See Cert. of Analysis, Rep: 1						
SAMPLE	A408107		See Cert. of Analysis, Rep: 1						
SAMPLE	A408108		See Cert. of Analysis, Rep: 1						
SAMPLE	A408110		See Cert. of Analysis, Rep: 1						
SAMPLE	A408112		See Cert. of Analysis, Rep: 1						
SAMPLE	A408113		See Cert. of Analysis, Rep: 1						
CCV	Q688878	INORGAN	BARIUM	5.00		5.10	mg/L	102	
BLA01	Q688882	NA	BARIUM			< 0.00400	mg/L		
ICS-A	Q688966	PERKIN	BARIUM	0.500		0.513	mg/L	103	

BORON ICP SW846-6010A M107.3

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A

Run: R322212 Analyst.: R DALAL Run Date...: 15-MAY-97
PREP Reviewer: W WATNESS Review Date: 15-MAY-97

QC Type	Lab ID	Source	Anal Run
LCS	Q685867	SPEX	R322424
BLA02	Q685868	NA	R322424
SPI02	Q685869	A407861	R322424
DPS02	Q685870	A407861	R322424
SAMPLE	A407859	Rep: 0	R322424
SAMPLE	A407861	Rep: 0	R322424

Run: R322430 Analyst.: N CARR Run Date...: 19-MAY-97
PREP Reviewer: W WATNESS Review Date: 19-MAY-97

LCS	Q687229	SPEX	R322769
BLA02	Q687230	NA	R322769
SPI02	Q687231	A408106	R322769
DPS02	Q687232	A408106	R322769
SAMPLE	A408104	Rep: 0	R322769
SAMPLE	A408105	Rep: 0	R322769
SAMPLE	A408108	Rep: 0	R322769
SAMPLE	A408110	Rep: 0	R322769

Run: R322536 Analyst.: R DALAL Run Date...: 20-MAY-97
PREP Reviewer: W WATNESS Review Date: 20-MAY-97

LCS	Q687707	SPEX	R322769
02	Q687708	NA	R322769

HERITAGE ENVIRONMENTAL SERVICES, INC.

QC Type	Lab ID	Source	Anal Run
SPI02	Q687709	A408117	R322769
SS02	Q687710	A408117	R322769
SAMPLE	A408112	Rep: 0	R322769
SAMPLE	A408113	Rep: 0	R322769

Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOU SW846-3005A

Run: R322441 Analyst.: B GRAVES Run Date...: 19-MAY-97
PREP Reviewer: W WATNESS Review Date: 20-MAY-97

LCS	Q687279	SPEX	R322769
BLA02	Q687280	NA	R322769
SPI02	Q687281	A408114	R322769
DPS02	Q687282	A408114	R322769
SAMPLE	A408104	Rep: 1	R322769
SAMPLE	A408105	Rep: 1	R322769
SAMPLE	A408108	Rep: 1	R322769
SAMPLE	A408110	Rep: 1	R322769
SAMPLE	A408112	Rep: 1	R322769
SAMPLE	A408113	Rep: 1	R322769

Run: R322553 Analyst.: B GRAVES Run Date...: 20-MAY-97
PREP Reviewer: W WATNESS Review Date: 21-MAY-97

SAMPLE	A407859	Rep: 1	R322769
SAMPLE	A407861	Rep: 1	R322769
LCS	Q687858	SPEX	R322769
BLA02	Q687859	NA	R322769
SPI02	Q687860	A406538	R322769
DPS02	Q687861	A406538	R322769

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A

Run: R322424 Analyst.: A HILSCHER Run Date...: 16-MAY-97 Instrument: ICP
ANALYTICAL Reviewer: S ENDERSON Review Date: 19-MAY-97

QC Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
CCV	Q687119	INORGAN	BORON	5.00		5.10	mg/L	102	
BLA01	Q687120	NA	BORON			< 0.0200	mg/L		
ICV01	Q687122	PERKIN	BORON	1		1.04	mg/L	104	
CDL01	Q687126	INORGAN	BORON	10		10.2	mg/L	102	
BLA02	Q685868	NA	BORON			< 0.0200	mg/L		
LCS	Q685867	SPEX	BORON	1.00		0.974	mg/L	97	
SAMPLE	A407861		See Cert. of Analysis, Rep: 0						
SPI02	Q685869	A407861	BORON	0.0667	1	1.08	mg/L	101	
DPS02	Q685870	A407861	BORON	0.0667	1.00	1.05	mg/L	98	3
CCV	Q687196	INORGAN	BORON	5.00		5.16	mg/L	103	
BLA01	Q687197	NA	BORON			< 0.0200	mg/L		
SAMPLE	A407859		See Cert. of Analysis, Rep: 0						
CCV	Q687198	INORGAN	BORON	5.00		5.22	mg/L	104	
BLA01	Q687199	NA	BORON			< 0.0200	mg/L		

Run: R322769 Analyst.: A STOCKBURGER Run Date...: 21-MAY-97 Instrument: ICP
ANALYTICAL Reviewer: S ENDERSON Review Date: 22-MAY-97

CCV	Q688846	INORGAN	BORON	5.00		4.95	mg/L	99	
BLA01	Q688847	NA	BORON			< 0.0200	mg/L		
ICV01	Q688851	PERKIN	BORON	1		1.04	mg/L	104	
CDL01	Q688856	INORGAN	BORON	10		9.85	mg/L	99	
BLA02	Q687230	NA	BORON			0.0248	mg/L		
LCS	Q687229	SPEX	BORON	1.00		1.01	mg/L	101	
)2	Q687231	A408106	BORON	0.136	1	1.18	mg/L	104	

HERITAGE ENVIRONMENTAL SERVICES, INC.

QC Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
DPS02	Q687232	A408106	BORON	0.136	1.00	1.19	mg/L	105	1
MPLE	A408104		See Cert. of Analysis, Rep: 0						
AMPLE	A408105		See Cert. of Analysis, Rep: 0						
SAMPLE	A408108		See Cert. of Analysis, Rep: 0						
SAMPLE	A408110		See Cert. of Analysis, Rep: 0						
CCV	Q688901	INORGAN	BORON	5.00		5.13	mg/L	103	
BLA01	Q688902	NA	BORON			< 0.0200	mg/L		
BLA02	Q687708	NA	BORON			< 0.0200	mg/L		
LCS	Q687707	SPEX	BORON	1.00		0.941	mg/L	94	
SPI02	Q687709	A408117	BORON	0	1	1.01	mg/L	101	
DPS02	Q687710	A408117	BORON	0	1.00	1.01	mg/L	101	0
SAMPLE	A408112		See Cert. of Analysis, Rep: 0						
SAMPLE	A408113		See Cert. of Analysis, Rep: 0						
CCV	Q688915	INORGAN	BORON	5.00		5.13	mg/L	103	
BLA01	Q688916	NA	BORON			< 0.0200	mg/L		

Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOU SW846-3005A

Run: R322769 Analyst.: A STOCKBURGER Run Date...: 21-MAY-97 Instrument: ICP
ANALYTICAL Reviewer: S ENDERSON Review Date: 22-MAY-97

CCV	Q688846	INORGAN	BORON	5.00		4.95	mg/L	99	
BLA01	Q688847	NA	BORON			< 0.0200	mg/L		
ICV01	Q688851	PERKIN	BORON	1		1.04	mg/L	104	
CDL01	Q688856	INORGAN	BORON	10		9.85	mg/L	99	
BLA02	Q687280	NA	BORON			< 0.0200	mg/L		
LCS	Q687279	SPEX	BORON	1.00		0.987	mg/L	99	
SPI02	Q687281	A408114	BORON	0	1	1.02	mg/L	102	
DPS02	Q687282	A408114	BORON	0	1.00	1.04	mg/L	104	2
MPLE	A408104		See Cert. of Analysis, Rep: 1						
AMPLE	A408105		See Cert. of Analysis, Rep: 1						
SAMPLE	A408108		See Cert. of Analysis, Rep: 1						
SAMPLE	A408110		See Cert. of Analysis, Rep: 1						
SAMPLE	A408112		See Cert. of Analysis, Rep: 1						
SAMPLE	A408113		See Cert. of Analysis, Rep: 1						
CCV	Q688878	INORGAN	BORON	5.00		5.15	mg/L	103	
BLA01	Q688882	NA	BORON			< 0.0200	mg/L		
BLA02	Q687859	NA	BORON			0.0292	mg/L		
LCS	Q687858	SPEX	BORON	1.00		1.01	mg/L	101	
SPI02	Q687860	A406538	BORON	0.109	1	1.08	mg/L	97	
DPS02	Q687861	A406538	BORON	0.109	1.00	1.07	mg/L	96	1
SAMPLE	A407859		See Cert. of Analysis, Rep: 1						
SAMPLE	A407861		See Cert. of Analysis, Rep: 1						
CCV	Q688911	INORGAN	BORON	5.00		5.22	mg/L	104	
BLA01	Q688912	NA	BORON			< 0.0200	mg/L		

CADMIUM TRACE ICP SW846-6010A M108.0

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A

Run: R322536 Analyst.: R DALAL Run Date...: 20-MAY-97
PREP Reviewer: W WATNESS Review Date: 20-MAY-97

QC Type	Lab ID	Source	Anal Run
SAMPLE	A408118	Rep: 0	R323678
LCS	Q687714	INORGAN	R323678
02	Q687715	NA	R323678

HERITAGE ENVIRONMENTAL SERVICES, INC.

QC Type	Lab ID	Source	Anal Run
SPI02	Q687716	A408117	R323678
102	Q687717	A408117	R323678

Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOU SW846-3005A

Run: R322211 Analyst.: R DALAL Run Date...: 15-MAY-97
PREP Reviewer: W WATNESS Review Date: 15-MAY-97

SAMPLE	A407830	Rep: 1	R322657
SAMPLE	A407859	Rep: 1	R322657
SAMPLE	A407861	Rep: 1	R322657
SAMPLE	A407862	Rep: 1	R322657
LCS	Q685863	INORGAN	R322657
BLA02	Q685864		R322657
SPI02	Q685865	A407859	R322657
DPS02	Q685866	A407859	R322657

Run: R322308 Analyst.: B GRAVES Run Date...: 16-MAY-97
PREP Reviewer: W WATNESS Review Date: 16-MAY-97

SAMPLE	A407957	Rep: 1	R322833
SAMPLE	A407958	Rep: 1	R322833
SAMPLE	A407959	Rep: 1	R322833
SAMPLE	A407960	Rep: 1	R322833
SAMPLE	A407961	Rep: 1	R322833
SAMPLE	A407962	Rep: 1	R322833
LCS	Q686492	INORGAN	R322833
BLA02	Q686493	NA	R322833
SPI02	Q686494	A407961	R322833
DPS02	Q686495	A407961	R322833

Run: R322441 Analyst.: B GRAVES Run Date...: 19-MAY-97
REP Reviewer: W WATNESS Review Date: 20-MAY-97

SAMPLE	A408104	Rep: 1	R323652
SAMPLE	A408105	Rep: 1	R323652
SAMPLE	A408106	Rep: 1	R323652
SAMPLE	A408107	Rep: 1	R323652
SAMPLE	A408108	Rep: 1	R323652
SAMPLE	A408109	Rep: 1	R323652
SAMPLE	A408110	Rep: 1	R323652
SAMPLE	A408112	Rep: 1	R323652
SAMPLE	A408113	Rep: 1	R323652
LCS	Q687284	INORGAN	R323652
BLA02	Q687285	NA	R323652
SPI02	Q687286	A408114	R323652
DPS02	Q687287	A408114	R323652

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A

Run: R323678 Analyst.: A ROBERTSON Run Date...: 30-MAY-97 Instrument: TRACE ICP
ANALYTICAL Reviewer: S O'NEAL Review Date: 02-JUN-97

QC Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
BLA01	Q692762	NA	CADMIUM			< 0.000400	mg/L		
CCV	Q692763	INORGAN	CADMIUM	0.1		0.101	mg/L	101	
ICV01	Q692765	PERKIN-	CADMIUM	0.05		0.0516	mg/L	103	
CDL01	Q692768	PERKIN-	CADMIUM	0.01		0.0107	mg/L	107	
ICS-A	Q692771	PERKIN	CADMIUM	1		1.02	mg/L	102	
LCS	Q687714	INORGAN	CADMIUM	0.5		0.457	mg/L	91	
BLA02	Q687715	NA	CADMIUM			0.000660	mg/L		
102	Q687716	A408117	CADMIUM	0	0.05	0.0511	mg/L	102	

HERITAGE ENVIRONMENTAL SERVICES, INC.

QC Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
DPS02	Q687717	A408117	CADMIUM	0	0.05	0.0512	mg/L	102.4	.4
MPLE	A408118		See Cert. of Analysis, Rep: 0						
CCV	Q692776	INORGAN	CADMIUM	0.1		0.100	mg/L	100	
BLA01	Q692777	NA	CADMIUM			< 0.000400	mg/L		
CDL01	Q692788	PERKIN-	CADMIUM	0.01		0.0105	mg/L	105	
ICS-A	Q692790	PERKIN	CADMIUM	1		0.970	mg/L	97	

Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOU SW846-3005A

Run: R322657 Analyst.: A ROBERTSON Run Date...: 20-MAY-97 Instrument: TRACE ICP
ANALYTICAL Reviewer: S O'NEAL Review Date: 21-MAY-97

ICV01	Q688326	PERKIN-	CADMIUM	0.05		0.0508	mg/L	102	
BLA01	Q688328	NA	CADMIUM			< 0.000400	mg/L		
CDL01	Q688329	PERKIN-	CADMIUM	0.01		0.0103	mg/L	103	
ICS-A	Q688338	PERKIN	CADMIUM	1		0.952	mg/L	95	
CCV	Q688339	INORGAN	CADMIUM	0.1		0.101	mg/L	101	
LCS	Q685863	INORGAN	CADMIUM	0.5		0.440	mg/L	88	
BLA02	Q685864		CADMIUM			< 0.0004			
SAMPLE	A407859		See Cert. of Analysis, Rep: 1						
SPI02	Q685865	A407859	CADMIUM	0	0.05	0.0465		93	
DPS02	Q685866	A407859	CADMIUM	0	0.05	0.0489		97.8	5
SAMPLE	A407830		See Cert. of Analysis, Rep: 1						
SAMPLE	A407861		See Cert. of Analysis, Rep: 1						
SAMPLE	A407862		See Cert. of Analysis, Rep: 1						
CCV	Q688352	INORGAN	CADMIUM	0.1		0.102	mg/L	102	
BLA01	Q688353	NA	CADMIUM			< 0.000400	mg/L		
CDL01	Q688367	PERKIN-	CADMIUM	0.01		0.0103	mg/L	103	
ICS-A	Q688369	PERKIN	CADMIUM	1		0.941	mg/L	94	

un: R322833 Analyst.: A ROBERTSON Run Date...: 22-MAY-97 Instrument: TRACE ICP
ANALYTICAL Reviewer: S O'NEAL Review Date: 23-MAY-97

CCV	Q689336	INORGAN	CADMIUM	0.1		0.101	mg/L	101	
BLA01	Q689337	NA	CADMIUM			< 0.000400	mg/L		
ICV01	Q689338	PERKIN-	CADMIUM	0.05		0.0504	mg/L	101	
CDL01	Q689341	PERKIN-	CADMIUM	0.01		0.0101	mg/L	101	
ICS-A	Q689344	PERKIN	CADMIUM	1		0.950	mg/L	95	
LCS	Q686492	INORGAN	CADMIUM	0.5		0.470	mg/L	94	
BLA02	Q686493	NA	CADMIUM			< 0.000400	mg/L		
SAMPLE	A407961		See Cert. of Analysis, Rep: 1						
SPI02	Q686494	A407961	CADMIUM	0	0.05	0.0467	mg/L	93	
DPS02	Q686495	A407961	CADMIUM	0	0.05	0.0488	mg/L	98	5
SAMPLE	A407957		See Cert. of Analysis, Rep: 1						
SAMPLE	A407958		See Cert. of Analysis, Rep: 1						
SAMPLE	A407959		See Cert. of Analysis, Rep: 1						
CCV	Q689357	INORGAN	CADMIUM	0.1		0.101	mg/L	101	
BLA01	Q689358	NA	CADMIUM			< 0.000400	mg/L		
SAMPLE	A407960		See Cert. of Analysis, Rep: 1						
SAMPLE	A407962		See Cert. of Analysis, Rep: 1						
CCV	Q689359	INORGAN	CADMIUM	0.1		0.100	mg/L	100	
BLA01	Q689360	NA	CADMIUM			< 0.000400	mg/L		
CDL01	Q689363	PERKIN-	CADMIUM	0.01		0.0101	mg/L	101	
ICS-A	Q689365	PERKIN	CADMIUM	1		0.946	mg/L	95	

Run: R323652 Analyst.: A ROBERTSON Run Date...: 28-MAY-97 Instrument: TRACE ICP
ANALYTICAL Reviewer: S O'NEAL Review Date: 02-JUN-97

CCV	Q692576	INORGAN	CADMIUM	0.1		0.101	mg/L	101	
LA01	Q692577	NA	CADMIUM			< 0.000400	mg/L		

HERITAGE ENVIRONMENTAL SERVICES, INC.

QC Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q692578	PERKIN-	CADMIUM	0.05		0.0504	mg/L	101	
L01	Q692581	PERKIN-	CADMIUM	0.01		0.0102	mg/L	102	
CS-A	Q692584	PERKIN	CADMIUM	1		0.953	mg/L	95	
LCS	Q687284	INORGAN	CADMIUM	0.5		0.485	mg/L	97	
BLA02	Q687285	NA	CADMIUM			< 0.000400	mg/L		
SPI02	Q687286	A408114	CADMIUM	0	0.05	0.0506	mg/L	101	
DPS02	Q687287	A408114	CADMIUM	0	0.05	0.0512	mg/L	102	1
SAMPLE	A408104		See Cert. of Analysis, Rep: 1						
CCV	Q692591	INORGAN	CADMIUM	0.1		0.102	mg/L	102	
BLA01	Q692592	NA	CADMIUM			< 0.000400	mg/L		
SAMPLE	A408105		See Cert. of Analysis, Rep: 1						
SAMPLE	A408106		See Cert. of Analysis, Rep: 1						
SAMPLE	A408107		See Cert. of Analysis, Rep: 1						
SAMPLE	A408108		See Cert. of Analysis, Rep: 1						
SAMPLE	A408109		See Cert. of Analysis, Rep: 1						
SAMPLE	A408110		See Cert. of Analysis, Rep: 1						
SAMPLE	A408112		See Cert. of Analysis, Rep: 1						
SAMPLE	A408113		See Cert. of Analysis, Rep: 1						
CCV	Q692593	INORGAN	CADMIUM	0.1		0.104	mg/L	104	
BLA01	Q692594	NA	CADMIUM			< 0.000400	mg/L		
CDL01	Q692595	PERKIN-	CADMIUM	0.01		0.0103	mg/L	103	
ICS-A	Q692597	PERKIN	CADMIUM	1		1.03	mg/L	103	

CALCIUM ICP SW846-6010A M109.3

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A

un: R322212 Analyst.: R DALAL Run Date...: 15-MAY-97
PREP Reviewer: W WATNESS Review Date: 15-MAY-97

QC Type	Lab ID	Source	Anal Run
LCS	Q685867	SPEX	R322424
BLA02	Q685868	NA	R322424
SPI02	Q685869	A407861	R322424
DPS02	Q685870	A407861	R322424
SAMPLE	A407830	Rep: 0	R322424
SAMPLE	A407859	Rep: 0	R322424
SAMPLE	A407861	Rep: 0	R322424
SAMPLE	A407862	Rep: 0	R322424
SAMPLE	A407863	Rep: 0	R322424

Run: R322309 Analyst.: B GRAVES Run Date...: 16-MAY-97
PREP Reviewer: W WATNESS Review Date: 16-MAY-97

LCS	Q686496	SPEX	R322648
BLA02	Q686497	NA	R322648
SPI02	Q686498	A407961	R322648
DPS02	Q686499	A407961	R322648
SAMPLE	A407957	Rep: 0	R322648
SAMPLE	A407958	Rep: 0	R322648
SAMPLE	A407959	Rep: 0	R322648
SAMPLE	A407960	Rep: 0	R322648
SAMPLE	A407961	Rep: 0	R322648
SAMPLE	A407962	Rep: 0	R322648

Run: R322430 Analyst.: N CARR Run Date...: 19-MAY-97
PREP Reviewer: W WATNESS Review Date: 19-MAY-97

S	Q687229	SPEX	R322769

HERITAGE ENVIRONMENTAL SERVICES, INC.

QC Type	Lab ID	Source	Anal Run
BLA02	Q687230	NA	R322769
I02	Q687231	A408106	R322769
DPS02	Q687232	A408106	R322769
SAMPLE	A408104	Rep: 0	R322769
SAMPLE	A408105	Rep: 0	R322769
SAMPLE	A408106	Rep: 0	R322769
SAMPLE	A408107	Rep: 0	R322769
SAMPLE	A408108	Rep: 0	R322769
SAMPLE	A408109	Rep: 0	R322769
SAMPLE	A408110	Rep: 0	R322769

Run: R322536 Analyst.: R DALAL Run Date...: 20-MAY-97
PREP Reviewer: W WATNESS Review Date: 20-MAY-97

LCS	Q687707	SPEX	R322769
BLA02	Q687708	NA	R322769
SPI02	Q687709	A408117	R322769
DPS02	Q687710	A408117	R322769
SAMPLE	A408112	Rep: 0	R322769
SAMPLE	A408113	Rep: 0	R322769
SAMPLE	A408118	Rep: 0	R322769

Run: R322424 Analyst.: A HILSCHER Run Date...: 16-MAY-97 Instrument: ICP
ANALYTICAL Reviewer: S ENDERSON Review Date: 19-MAY-97

QC Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
CCV	Q687119	INORGAN	CALCIUM	50.0		49.8	mg/L	100	
BLA01	Q687120	NA	CALCIUM			< 0.0800	mg/L		
ICV01	Q687123	SPEX	CALCIUM	20		20.3	mg/L	102	
ICS-A	Q687127	PERKIN-	CALCIUM	500		468.	mg/L	94	
BLA02	Q685868	NA	CALCIUM			0.799	mg/L		
LCS	Q685867	SPEX	CALCIUM	100		99.6	mg/L	100	
SAMPLE	A407861		See Cert. of Analysis, Rep: 0						
SPI02	Q685869	A407861	CALCIUM	42.4	100	146.	mg/L	104	
DPS02	Q685870	A407861	CALCIUM	42.4	100	141.	mg/L	99	5
CCV	Q687196	INORGAN	CALCIUM	50.0		53.1	mg/L	106	
BLA01	Q687197	NA	CALCIUM			< 0.0800	mg/L		
SAMPLE	A407830		See Cert. of Analysis, Rep: 0						
SAMPLE	A407859		See Cert. of Analysis, Rep: 0						
SAMPLE	A407862		See Cert. of Analysis, Rep: 0						
SAMPLE	A407863		See Cert. of Analysis, Rep: 0						
CCV	Q687198	INORGAN	CALCIUM	50.0		53.9	mg/L	108	
BLA01	Q687199	NA	CALCIUM			< 0.0800	mg/L		
ICS-A	Q687211	PERKIN-	CALCIUM	500		509.	mg/L	102	

Run: R322648 Analyst.: A STOCKBURGER Run Date...: 20-MAY-97 Instrument: ICP
ANALYTICAL Reviewer: S ENDERSON Review Date: 21-MAY-97

CCV	Q688232	INORGAN	CALCIUM	50.0		48.9	mg/L	98	
BLA01	Q688233	NA	CALCIUM			< 0.0800	mg/L		
ICV01	Q688237	SPEX	CALCIUM	20		20.5	mg/L	103	
ICS-A	Q688243	PERKIN-	CALCIUM	500		466.	mg/L	93	
BLA02	Q686497	NA	CALCIUM			< 0.0800	mg/L		
LCS	Q686496	SPEX	CALCIUM	100		103.	mg/L	103	
SAMPLE	A407961		See Cert. of Analysis, Rep: 0						
SPI02	Q686498	A407961	CALCIUM	75.7	100	173.	mg/L	97	
DPS02	Q686499	A407961	CALCIUM	75.7	100	163.	mg/L	87	11
CCV	Q688251	INORGAN	CALCIUM	50.0		52.0	mg/L	104	
BLA01	Q688252	NA	CALCIUM			< 0.0800	mg/L		
SAMPLE	A407957		See Cert. of Analysis, Rep: 0						

HERITAGE ENVIRONMENTAL SERVICES, INC.

QC Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
SAMPLE	A407958		See Cert. of Analysis, Rep: 0						
IPLE	A407959		See Cert. of Analysis, Rep: 0						
AMPLE	A407960		See Cert. of Analysis, Rep: 0						
SAMPLE	A407962		See Cert. of Analysis, Rep: 0						
CCV	Q688253	INORGAN	CALCIUM	50.0		51.4	mg/L	103	
BLA01	Q688254	NA	CALCIUM			< 0.0800	mg/L		
ICS-A	Q688265	PERKIN-	CALCIUM	500		503.	mg/L	101	

Run: R322769 Analyst.: A STOCKBURGER Run Date...: 21-MAY-97 Instrument: ICP
ANALYTICAL Reviewer: S ENDERSON Review Date: 22-MAY-97

CCV	Q688846	INORGAN	CALCIUM	50.0		48.2	mg/L	96	
BLA01	Q688847	NA	CALCIUM			< 0.0800	mg/L		
ICV01	Q688853	SPEX	CALCIUM	20		20.1	mg/L	101	
ICS-A	Q688858	PERKIN-	CALCIUM	500		461.	mg/L	92	
BLA02	Q687230	NA	CALCIUM			< 0.0800	mg/L		
LCS	Q687229	SPEX	CALCIUM	100		95.3	mg/L	95	
SAMPLE	A408106		See Cert. of Analysis, Rep: 0						
SPI02	Q687231	A408106	CALCIUM	65.5	100	164.	mg/L	99	
DPS02	Q687232	A408106	CALCIUM	65.5	100	164.	mg/L	99	1
CCV	Q688893	INORGAN	CALCIUM	50.0		49.4	mg/L	99	
BLA01	Q688894	NA	CALCIUM			< 0.0800	mg/L		
SAMPLE	A408104		See Cert. of Analysis, Rep: 0						
SAMPLE	A408105		See Cert. of Analysis, Rep: 0						
SAMPLE	A408107		See Cert. of Analysis, Rep: 0						
SAMPLE	A408108		See Cert. of Analysis, Rep: 0						
SAMPLE	A408109		See Cert. of Analysis, Rep: 0						
SAMPLE	A408110		See Cert. of Analysis, Rep: 0						
CCV	Q688901	INORGAN	CALCIUM	50.0		49.9	mg/L	100	
01	Q688902	NA	CALCIUM			< 0.0800	mg/L		
LA02	Q687708	NA	CALCIUM			0.237	mg/L		
LCS	Q687707	SPEX	CALCIUM	100		90.7	mg/L	91	
SPI02	Q687709	A408117	CALCIUM	44.3	100	138.	mg/L	94	
DPS02	Q687710	A408117	CALCIUM	44.3	100	139.	mg/L	95	1
SAMPLE	A408112		See Cert. of Analysis, Rep: 0						
SAMPLE	A408113		See Cert. of Analysis, Rep: 0						
SAMPLE	A408118		See Cert. of Analysis, Rep: 0						
CCV	Q688915	INORGAN	CALCIUM	50.0		49.8	mg/L	100	
BLA01	Q688916	NA	CALCIUM			< 0.0800	mg/L		
ICS-A	Q688962	PERKIN-	CALCIUM	500		476.	mg/L	95	

Comments

*Q686499 * Spike is NA; Sample concentration is greater than four times the spike concentration. (Fe)*

CHROMIUM ICP SW846-6010A M110.3

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A

Run: R322536 Analyst.: R DALAL Run Date...: 20-MAY-97
PREP Reviewer: W WATNESS Review Date: 20-MAY-97

QC Type	Lab ID	Source	Anal Run
LCS	Q687707	SPEX	R322769
BLA02	Q687708	NA	R322769
SPI02	Q687709	A408117	R322769
S02	Q687710	A408117	R322769

HERITAGE ENVIRONMENTAL SERVICES, INC.

QC Type	Lab ID	Source	Anal Run
SAMPLE	A408118	Rep: 0	R322769

rep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOU SW846-3005A

Run: R322211 Analyst.: R DALAL Run Date...: 15-MAY-97
PREP Reviewer: W WATNESS Review Date: 15-MAY-97

LCS	Q685858	SPEX	R322424
BLA02	Q685859	NA	R322424
SPI02	Q685860	A407859	R322424
DPS02	Q685861	A407859	R322424
SAMPLE	A407830	Rep: 1	R322424
SAMPLE	A407859	Rep: 1	R322424
SAMPLE	A407861	Rep: 1	R322424
SAMPLE	A407862	Rep: 1	R322424

Run: R322308 Analyst.: B GRAVES Run Date...: 16-MAY-97
PREP Reviewer: W WATNESS Review Date: 16-MAY-97

LCS	Q686487	SPEX	R322648
BLA02	Q686488	NA	R322648
SPI02	Q686489	A407961	R322648
DPS02	Q686490	A407961	R322648
SAMPLE	A407957	Rep: 1	R322648
SAMPLE	A407958	Rep: 1	R322648
SAMPLE	A407959	Rep: 1	R322648
SAMPLE	A407960	Rep: 1	R322648
SAMPLE	A407961	Rep: 1	R322648
SAMPLE	A407962	Rep: 1	R322648

Run: R322441 Analyst.: B GRAVES Run Date...: 19-MAY-97
PREP Reviewer: W WATNESS Review Date: 20-MAY-97

S	Q687279	SPEX	R322769
A02	Q687280	NA	R322769
SPI02	Q687281	A408114	R322769
DPS02	Q687282	A408114	R322769
SAMPLE	A408104	Rep: 1	R322769
SAMPLE	A408105	Rep: 1	R322769
SAMPLE	A408106	Rep: 1	R322769
SAMPLE	A408107	Rep: 1	R322769
SAMPLE	A408108	Rep: 1	R322769
SAMPLE	A408109	Rep: 1	R322769
SAMPLE	A408110	Rep: 1	R322769
SAMPLE	A408112	Rep: 1	R322769
SAMPLE	A408113	Rep: 1	R322769

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A

Run: R322769 Analyst.: A STOCKBURGER Run Date...: 21-MAY-97 Instrument: ICP
ANALYTICAL Reviewer: S ENDERSON Review Date: 22-MAY-97

QC Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
CCV	Q688846	INORGAN	CHROMIUM	5.00		4.89	mg/L	98	
BLA01	Q688847	NA	CHROMIUM			< 0.00400	mg/L		
ICV01	Q688849	PERKIN	CHROMIUM	1		1.03	mg/L	103	
CDL01	Q688855	PERKIN	CHROMIUM	0.020		0.0212	mg/L	106	
ICS-A	Q688859	PERKIN	CHROMIUM	0.500		0.456	mg/L	91	
BLA02	Q687708	NA	CHROMIUM			< 0.00400	mg/L		
LCS	Q687707	SPEX	CHROMIUM	2.00		1.82	mg/L	91	
SPI02	Q687709	A408117	CHROMIUM	0	0.200	0.195	mg/L	98	
02	Q687710	A408117	CHROMIUM	0	0.200	0.197	mg/L	99	1

HERITAGE ENVIRONMENTAL SERVICES, INC.

QC Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
SAMPLE	A408118		See Cert. of Analysis, Rep: 0						
CCV	Q688915	INORGAN	CHROMIUM	5.00		5.07	mg/L	101	
BLA01	Q688916	NA	CHROMIUM			< 0.00400	mg/L		
CDL01	Q688955	PERKIN	CHROMIUM	0.020		0.0218	mg/L	109	
ICS-A	Q688966	PERKIN	CHROMIUM	0.500		0.469	mg/L	94	

Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOU SW846-3005A

Run: R322424 Analyst.: A HILSCHER Run Date...: 16-MAY-97 Instrument: ICP
ANALYTICAL Reviewer: S ENDERSON Review Date: 19-MAY-97

QC Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
CCV	Q687119	INORGAN	CHROMIUM	5.00		5.05	mg/L	101	
BLA01	Q687120	NA	CHROMIUM			< 0.00400	mg/L		
ICV01	Q687121	PERKIN	CHROMIUM	1		1.04	mg/L	104	
CDL01	Q687125	PERKIN	CHROMIUM	0.020		0.0207	mg/L	104	
ICS-A	Q687128	PERKIN	CHROMIUM	0.500		0.465	mg/L	93	
BLA02	Q685859	NA	CHROMIUM			< 0.00400	mg/L		
LCS	Q685858	SPEX	CHROMIUM	2.00		1.77	mg/L	89	
SAMPLE	A407830		See Cert. of Analysis, Rep: 1						
SAMPLE	A407861		See Cert. of Analysis, Rep: 1						
SAMPLE	A407862		See Cert. of Analysis, Rep: 1						
SAMPLE	A407859		See Cert. of Analysis, Rep: 1						
SPI02	Q685860	A407859	CHROMIUM	0	0.2	0.177	mg/L	88	
CCV	Q687152	INORGAN	CHROMIUM	5.00		4.98	mg/L	100	
BLA01	Q687153	NA	CHROMIUM			< 0.00400	mg/L		
DPS02	Q685861	A407859	CHROMIUM	0	0.2	0.189	mg/L	94	7
CDL01	Q687210	PERKIN	CHROMIUM	0.020		0.0220	mg/L	110	
ICS-A	Q687212	PERKIN	CHROMIUM	0.500		0.510	mg/L	102	

Run: R322648 Analyst.: A STOCKBURGER Run Date...: 20-MAY-97 Instrument: ICP
ANALYTICAL Reviewer: S ENDERSON Review Date: 21-MAY-97

QC Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
CCV	Q688232	INORGAN	CHROMIUM	5.00		5.01	mg/L	100	
BLA01	Q688233	NA	CHROMIUM			< 0.00400	mg/L		
ICV01	Q688234	PERKIN	CHROMIUM	1		1.04	mg/L	104	
CDL01	Q688239	PERKIN	CHROMIUM	0.020		0.0196	mg/L	98	
ICS-A	Q688244	PERKIN	CHROMIUM	0.500		0.471	mg/L	94	
BLA02	Q686488	NA	CHROMIUM			< 0.00400	mg/L		
LCS	Q686487	SPEX	CHROMIUM	2.00		2.11	mg/L	106	
SAMPLE	A407961		See Cert. of Analysis, Rep: 1						
SPI02	Q686489	A407961	CHROMIUM	0	0.200	0.192	mg/L	96	
DPS02	Q686490	A407961	CHROMIUM	0	0.200	0.201	mg/L	101	5
CCV	Q688247	INORGAN	CHROMIUM	5.00		5.19	mg/L	104	
BLA01	Q688248	NA	CHROMIUM			< 0.00400	mg/L		
SAMPLE	A407957		See Cert. of Analysis, Rep: 1						
SAMPLE	A407958		See Cert. of Analysis, Rep: 1						
SAMPLE	A407959		See Cert. of Analysis, Rep: 1						
SAMPLE	A407960		See Cert. of Analysis, Rep: 1						
SAMPLE	A407962		See Cert. of Analysis, Rep: 1						
CCV	Q688249	INORGAN	CHROMIUM	5.00		5.18	mg/L	104	
BLA01	Q688250	NA	CHROMIUM			< 0.00400	mg/L		
CDL01	Q688264	PERKIN	CHROMIUM	0.020		0.0186	mg/L	93	
ICS-A	Q688266	PERKIN	CHROMIUM	0.500		0.506	mg/L	101	

Run: R322769 Analyst.: A STOCKBURGER Run Date...: 21-MAY-97 Instrument: ICP
ANALYTICAL Reviewer: S ENDERSON Review Date: 22-MAY-97

QC Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
CCV	Q688846	INORGAN	CHROMIUM	5.00		4.89	mg/L	98	
BLA01	Q688847	NA	CHROMIUM			< 0.00400	mg/L		
ICV01	Q688849	PERKIN	CHROMIUM	1		1.03	mg/L	103	

HERITAGE ENVIRONMENTAL SERVICES, INC.

QC Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
CDL01	Q688855	PERKIN	CHROMIUM	0.020		0.0212	mg/L	106	
ICS-A	Q688859	PERKIN	CHROMIUM	0.500		0.456	mg/L	91	
BLA02	Q687280	NA	CHROMIUM			< 0.00400	mg/L		
LCS	Q687279	SPEX	CHROMIUM	2.00		1.88	mg/L	94	
SPI02	Q687281	A408114	CHROMIUM	0	0.200	0.187	mg/L	94	
DPS02	Q687282	A408114	CHROMIUM	0	0.200	0.187	mg/L	94	1
SAMPLE	A408104		See Cert. of Analysis, Rep: 1						
SAMPLE	A408105		See Cert. of Analysis, Rep: 1						
SAMPLE	A408106		See Cert. of Analysis, Rep: 1						
SAMPLE	A408107		See Cert. of Analysis, Rep: 1						
SAMPLE	A408108		See Cert. of Analysis, Rep: 1						
SAMPLE	A408109		See Cert. of Analysis, Rep: 1						
SAMPLE	A408110		See Cert. of Analysis, Rep: 1						
SAMPLE	A408112		See Cert. of Analysis, Rep: 1						
SAMPLE	A408113		See Cert. of Analysis, Rep: 1						
CCV	Q688878	INORGAN	CHROMIUM	5.00		5.02	mg/L	100	
BLA01	Q688882	NA	CHROMIUM			< 0.00400	mg/L		
CDL01	Q688955	PERKIN	CHROMIUM	0.020		0.0218	mg/L	109	
ICS-A	Q688966	PERKIN	CHROMIUM	0.500		0.469	mg/L	94	

Comments

*Q686489 * Spike is NA; Sample concentration is greater than four times the spike concentration. (Fe)*

*Q686490 * Spike is NA; Sample concentration is greater than four times the spike concentration. (Fe)*

COPPER ICP SW846-6010A M112.3

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A

Run: R322536 Analyst.: R DALAL Run Date...: 20-MAY-97
PREP Reviewer: W WATNESS Review Date: 20-MAY-97

QC Type	Lab ID	Source	Anal Run
LCS	Q687707	SPEX	R322769
BLA02	Q687708	NA	R322769
SPI02	Q687709	A408117	R322769
DPS02	Q687710	A408117	R322769
SAMPLE	A408118	Rep: 0	R322769

Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOU SW846-3005A

Run: R322211 Analyst.: R DALAL Run Date...: 15-MAY-97
PREP Reviewer: W WATNESS Review Date: 15-MAY-97

LCS	Q685858	SPEX	R322424
BLA02	Q685859	NA	R322424
SPI02	Q685860	A407859	R322424
DPS02	Q685861	A407859	R322424
SAMPLE	A407830	Rep: 1	R322424
SAMPLE	A407859	Rep: 1	R322424
SAMPLE	A407861	Rep: 1	R322424
SAMPLE	A407862	Rep: 1	R322424

Run: R322308 Analyst.: B GRAVES Run Date...: 16-MAY-97
PREP Reviewer: W WATNESS Review Date: 16-MAY-97

LCS	Q686487	SPEX	R322648
BLA02	Q686488	NA	R322648

HERITAGE ENVIRONMENTAL SERVICES, INC.

QC Type	Lab ID	Source	Anal Run
SPI02	Q686489	A407961	R322648
302	Q686490	A407961	R322648
MPLE	A407957	Rep: 1	R322648
SAMPLE	A407958	Rep: 1	R322648
SAMPLE	A407959	Rep: 1	R322648
SAMPLE	A407960	Rep: 1	R322648
SAMPLE	A407961	Rep: 1	R322648
SAMPLE	A407962	Rep: 1	R322648

Run: R322441 Analyst.: B GRAVES Run Date...: 19-MAY-97
PREP Reviewer: W WATNESS Review Date: 20-MAY-97

LCS	Q687279	SPEX	R322769
BLA02	Q687280	NA	R322769
SPI02	Q687281	A408114	R322769
DPS02	Q687282	A408114	R322769
SAMPLE	A408104	Rep: 1	R322769
SAMPLE	A408105	Rep: 1	R322769
SAMPLE	A408106	Rep: 1	R322769
SAMPLE	A408107	Rep: 1	R322769
SAMPLE	A408108	Rep: 1	R322769
SAMPLE	A408109	Rep: 1	R322769
SAMPLE	A408110	Rep: 1	R322769
SAMPLE	A408112	Rep: 1	R322769
SAMPLE	A408113	Rep: 1	R322769

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A

Run: R322769 Analyst.: A STOCKBURGER Run Date...: 21-MAY-97 Instrument: ICP
ANALYTICAL Reviewer: S ENDERSON Review Date: 22-MAY-97

Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
CV	Q688846	INORGAN	COPPER	5.00		4.98	mg/L	100	
BLA01	Q688847	NA	COPPER			0.0117	mg/L		
ICV01	Q688849	PERKIN	COPPER	1		1.02	mg/L	102	
CDL01	Q688855	PERKIN	COPPER	0.050		0.0459	mg/L	92	
ICS-A	Q688859	PERKIN	COPPER	0.500		0.458	mg/L	92	
BLA02	Q687708	NA	COPPER			< 0.00800	mg/L		
LCS	Q687707	SPEX	COPPER	2.50		2.36	mg/L	94	
SPI02	Q687709	A408117	COPPER	0	0.250	0.248	mg/L	99	
DPS02	Q687710	A408117	COPPER	0	0.250	0.250	mg/L	100	1
SAMPLE	A408118		See Cert. of Analysis, Rep: 0						
CCV	Q688915	INORGAN	COPPER	5.00		5.21	mg/L	104	
BLA01	Q688916	NA	COPPER			0.0144	mg/L		
CDL01	Q688955	PERKIN	COPPER	0.050		0.0477	mg/L	95	
ICS-A	Q688966	PERKIN	COPPER	0.500		0.474	mg/L	95	

Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOU SW846-3005A

Run: R322424 Analyst.: A HILSCHER Run Date...: 16-MAY-97 Instrument: ICP
ANALYTICAL Reviewer: S ENDERSON Review Date: 19-MAY-97

CCV	Q687119	INORGAN	COPPER	5.00		5.13	mg/L	103	
BLA01	Q687120	NA	COPPER			< 0.00800	mg/L		
ICV01	Q687121	PERKIN	COPPER	1		1.03	mg/L	103	
CDL01	Q687125	PERKIN	COPPER	0.050		0.0430	mg/L	86	
ICS-A	Q687128	PERKIN	COPPER	0.500		0.470	mg/L	94	
BLA02	Q685859	NA	COPPER			< 0.00800	mg/L		
LCS	Q685858	SPEX	COPPER	2.50		2.27	mg/L	91	
MPLE	A407830		See Cert. of Analysis, Rep: 1						

HERITAGE ENVIRONMENTAL SERVICES, INC.

QC Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
SAMPLE	A407861		See Cert. of Analysis, Rep: 1						
MPLE	A407862		See Cert. of Analysis, Rep: 1						
MPLE	A407859		See Cert. of Analysis, Rep: 1						
SPI02	Q685860	A407859	COPPER	0	0.25	0.22	mg/L	88	
CCV	Q687152	INORGAN	COPPER	5.00		5.06	mg/L	101	
BLA01	Q687153	NA	COPPER			0.0132	mg/L		
DPS02	Q685861	A407859	COPPER	0	0.25	0.239	mg/L	96	8
CDL01	Q687210	PERKIN	COPPER	0.050		0.0553	mg/L	111	
ICS-A	Q687212	PERKIN	COPPER	0.500		0.505	mg/L	101	

Run: R322648 Analyst.: A STOCKBURGER Run Date...: 20-MAY-97 Instrument: ICP
ANALYTICAL Reviewer: S ENDERSON Review Date: 21-MAY-97

CCV	Q688232	INORGAN	COPPER	5.00		5.09	mg/L	102	
BLA01	Q688233	NA	COPPER			0.0140	mg/L		
ICV01	Q688234	PERKIN	COPPER	1		1.03	mg/L	103	
CDL01	Q688239	PERKIN	COPPER	0.050		0.0472	mg/L	94	
ICS-A	Q688244	PERKIN	COPPER	0.500		0.478	mg/L	96	
BLA02	Q686488	NA	COPPER			< 0.00800	mg/L		
LCS	Q686487	SPEX	COPPER	2.50		2.70	mg/L	108	
SAMPLE	A407961		See Cert. of Analysis, Rep: 1						
SPI02	Q686489	A407961	COPPER	0	0.250	0.244	mg/L	98	
DPS02	Q686490	A407961	COPPER	0	0.250	0.257	mg/L	103	5
CCV	Q688247	INORGAN	COPPER	5.00		5.21	mg/L	104	
BLA01	Q688248	NA	COPPER			0.0104	mg/L		
SAMPLE	A407957		See Cert. of Analysis, Rep: 1						
SAMPLE	A407958		See Cert. of Analysis, Rep: 1						
SAMPLE	A407959		See Cert. of Analysis, Rep: 1						
SAMPLE	A407960		See Cert. of Analysis, Rep: 1						
MPLE	A407962		See Cert. of Analysis, Rep: 1						
V	Q688249	INORGAN	COPPER	5.00		5.18	mg/L	104	
BLA01	Q688250	NA	COPPER			0.00863	mg/L		
CDL01	Q688264	PERKIN	COPPER	0.050		0.0467	mg/L	93	
ICS-A	Q688266	PERKIN	COPPER	0.500		0.480	mg/L	96	

Run: R322769 Analyst.: A STOCKBURGER Run Date...: 21-MAY-97 Instrument: ICP
ANALYTICAL Reviewer: S ENDERSON Review Date: 22-MAY-97

CCV	Q688846	INORGAN	COPPER	5.00		4.98	mg/L	100	
BLA01	Q688847	NA	COPPER			0.0117	mg/L		
ICV01	Q688849	PERKIN	COPPER	1		1.02	mg/L	102	
CDL01	Q688855	PERKIN	COPPER	0.050		0.0459	mg/L	92	
ICS-A	Q688859	PERKIN	COPPER	0.500		0.458	mg/L	92	
BLA02	Q687280	NA	COPPER			< 0.00800	mg/L		
LCS	Q687279	SPEX	COPPER	2.50		2.45	mg/L	98	
SPI02	Q687281	A408114	COPPER	0	0.250	0.241	mg/L	96	
DPS02	Q687282	A408114	COPPER	0	0.250	0.242	mg/L	97	1
SAMPLE	A408104		See Cert. of Analysis, Rep: 1						
SAMPLE	A408105		See Cert. of Analysis, Rep: 1						
SAMPLE	A408106		See Cert. of Analysis, Rep: 1						
SAMPLE	A408107		See Cert. of Analysis, Rep: 1						
SAMPLE	A408108		See Cert. of Analysis, Rep: 1						
SAMPLE	A408109		See Cert. of Analysis, Rep: 1						
SAMPLE	A408110		See Cert. of Analysis, Rep: 1						
SAMPLE	A408112		See Cert. of Analysis, Rep: 1						
SAMPLE	A408113		See Cert. of Analysis, Rep: 1						
CCV	Q688878	INORGAN	COPPER	5.00		5.13	mg/L	103	
01	Q688882	NA	COPPER			0.00820	mg/L		

HERITAGE ENVIRONMENTAL SERVICES, INC.

QC Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
CDL01	Q688955	PERKIN	COPPER	0.050		0.0477	mg/L	95	
S-A	Q688966	PERKIN	COPPER	0.500		0.474	mg/L	95	

Comments

*Q686489 * Spike is NA; Sample concentration is greater than four times the spike concentration. (Fe)*

*Q686490 * Spike is NA; Sample concentration is greater than four times the spike concentration. (Fe)*

IRON ICP SW846-6010A M115.3

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A

Run: R322536 Analyst.: R DALAL Run Date...: 20-MAY-97
PREP Reviewer: W WATNESS Review Date: 20-MAY-97

QC Type	Lab ID	Source	Anal Run
LCS	Q687707	SPEX	R322769
BLA02	Q687708	NA	R322769
SPI02	Q687709	A408117	R322769
DPS02	Q687710	A408117	R322769
SAMPLE	A408118	Rep: 0	R322769

Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOU SW846-3005A

Run: R322308 Analyst.: B GRAVES Run Date...: 16-MAY-97
PREP Reviewer: W WATNESS Review Date: 16-MAY-97

LCS	Q686487	SPEX	R322648
BLA02	Q686488	NA	R322648
I02	Q686489	A407961	R322648
DPS02	Q686490	A407961	R322648
SAMPLE	A407957	Rep: 1	R322648
SAMPLE	A407958	Rep: 1	R322648
SAMPLE	A407959	Rep: 1	R322648
SAMPLE	A407960	Rep: 1	R322648
SAMPLE	A407961	Rep: 1	R322648
SAMPLE	A407962	Rep: 1	R322648

Run: R322441 Analyst.: B GRAVES Run Date...: 19-MAY-97
PREP Reviewer: W WATNESS Review Date: 20-MAY-97

LCS	Q687279	SPEX	R322769
BLA02	Q687280	NA	R322769
SPI02	Q687281	A408114	R322769
DPS02	Q687282	A408114	R322769
SAMPLE	A408104	Rep: 1	R322769
SAMPLE	A408105	Rep: 1	R322769
SAMPLE	A408106	Rep: 1	R322769
SAMPLE	A408107	Rep: 1	R322769
SAMPLE	A408108	Rep: 1	R322769
SAMPLE	A408109	Rep: 1	R322769
SAMPLE	A408110	Rep: 1	R322769
SAMPLE	A408112	Rep: 1	R322769
SAMPLE	A408113	Rep: 1	R322769
SAMPLE	A408114	Rep: 1	R322769

Run: R322442 Analyst.: B GRAVES Run Date...: 19-MAY-97
PREP Reviewer: W WATNESS Review Date: 20-MAY-97

S	Q687288	SPEX	R322769

HERITAGE ENVIRONMENTAL SERVICES, INC.

QC Type	Lab ID	Source	Anal Run
BLA02	Q687289	NA	R322769
`I02	Q687290	A408117	R322769
.S02	Q687291	A408117	R322769
SAMPLE	A408115	Rep: 1	R322769
SAMPLE	A408116	Rep: 1	R322769
SAMPLE	A408117	Rep: 1	R322769

Run: R322553 Analyst.: B GRAVES Run Date...: 20-MAY-97
PREP Reviewer: W WATNESS Review Date: 21-MAY-97

SAMPLE	A407830	Rep: 1	R322769
SAMPLE	A407859	Rep: 1	R322769
SAMPLE	A407861	Rep: 1	R322769
SAMPLE	A407862	Rep: 1	R322769
LCS	Q687858	SPEX	R322769
BLA02	Q687859	NA	R322769
SPI02	Q687860	A406538	R322769
DPS02	Q687861	A406538	R322769

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A

Run: R322769 Analyst.: A STOCKBURGER Run Date...: 21-MAY-97 Instrument: ICP
ANALYTICAL Reviewer: S ENDERSON Review Date: 22-MAY-97

QC Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
CCV	Q688846	INORGAN	IRON	5.00		4.95	mg/L	99	
BLA01	Q688847	NA	IRON			< 0.0100	mg/L		
ICV01	Q688849	PERKIN	IRON	1		1.03	mg/L	103	
CDL01	Q688856	INORGAN	IRON	10		10.1	mg/L	101	
ICS-A	Q688858	PERKIN-	IRON	200		182.	mg/L	91	
BLA02	Q687708	NA	IRON			0.0152	mg/L		
`S	Q687707	SPEX	IRON	10.0		9.21	mg/L	92	
.I02	Q687709	A408117	IRON	0.0343	1.00	1.02	mg/L	99	
DPS02	Q687710	A408117	IRON	0.0343	1.00	1.03	mg/L	100	1
SAMPLE	A408118		See Cert. of Analysis, Rep: 0						
CCV	Q688915	INORGAN	IRON	5.00		5.07	mg/L	101	
BLA01	Q688916	NA	IRON			< 0.0100	mg/L		
ICS-A	Q688962	PERKIN-	IRON	200		183.	mg/L	92	

Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOU SW846-3005A

Run: R322648 Analyst.: A STOCKBURGER Run Date...: 20-MAY-97 Instrument: ICP
ANALYTICAL Reviewer: S ENDERSON Review Date: 21-MAY-97

CCV	Q688232	INORGAN	IRON	5.00		5.04	mg/L	101	
BLA01	Q688233	NA	IRON			< 0.0100	mg/L		
ICV01	Q688234	PERKIN	IRON	1		1.03	mg/L	103	
CDL01	Q688242	INORGAN	IRON	10		10.2	mg/L	102	
ICS-A	Q688243	PERKIN-	IRON	200		183.	mg/L	92	
BLA02	Q686488	NA	IRON			0.0314	mg/L		
LCS	Q686487	SPEX	IRON	10.0		10.7	mg/L	107	
SAMPLE	A407961		See Cert. of Analysis, Rep: 1						
SPI02	Q686489	A407961	IRON	13.4	1	*	mg/L		
DPS02	Q686490	A407961	IRON	13.4	1	*	mg/L		
CCV	Q688247	INORGAN	IRON	5.00		5.25	mg/L	105	
BLA01	Q688248	NA	IRON			< 0.0100	mg/L		
SAMPLE	A407957		See Cert. of Analysis, Rep: 1						
SAMPLE	A407958		See Cert. of Analysis, Rep: 1						
SAMPLE	A407959		See Cert. of Analysis, Rep: 1						
PLE	A407960		See Cert. of Analysis, Rep: 1						

HERITAGE ENVIRONMENTAL SERVICES, INC.

QC Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
SAMPLE	A407962		See Cert. of Analysis, Rep: 1						
CCV	Q688249	INORGAN	IRON	5.00		5.21	mg/L	104	
BLA01	Q688250	NA	IRON			< 0.0100	mg/L		
ICS-A	Q688265	PERKIN-	IRON	200		197.	mg/L	99	

Run: R322769 Analyst.: A STOCKBURGER Run Date...: 21-MAY-97 Instrument: ICP
ANALYTICAL Reviewer: S ENDERSON Review Date: 22-MAY-97

CCV	Q688846	INORGAN	IRON	5.00		4.95	mg/L	99	
BLA01	Q688847	NA	IRON			< 0.0100	mg/L		
ICV01	Q688849	PERKIN	IRON	1		1.03	mg/L	103	
CDL01	Q688856	INORGAN	IRON	10		10.1	mg/L	101	
ICS-A	Q688858	PERKIN-	IRON	200		182.	mg/L	91	
BLA02	Q687289	NA	IRON			0.0164	mg/L		
LCS	Q687288	SPEX	IRON	10.0		10.6	mg/L	106	
SAMPLE	A408115		See Cert. of Analysis, Rep: 1						
SAMPLE	A408116		See Cert. of Analysis, Rep: 1						
SAMPLE	A408117		See Cert. of Analysis, Rep: 1						
SPI02	Q687290	A408117	IRON	0.0428	1	0.983	mg/L	94	
DPS02	Q687291	A408117	IRON	0.0428	1	0.967	mg/L	92	2
CCV	Q688866	INORGAN	IRON	5.00		5.07	mg/L	101	
BLA01	Q688870	NA	IRON			< 0.0100	mg/L		
BLA02	Q687280	NA	IRON			0.0164	mg/L		
LCS	Q687279	SPEX	IRON	10.0		9.72	mg/L	97	
SAMPLE	A408114		See Cert. of Analysis, Rep: 1						
SPI02	Q687281	A408114	IRON	0.0368	1	1.01	mg/L	97	
DPS02	Q687282	A408114	IRON	0.0368	1	1	mg/L	96	1
CCV	Q688872	INORGAN	IRON	5.00		5.02	mg/L	100	
BLA01	Q688874	NA	IRON			< 0.0100	mg/L		
SAMPLE	A408104		See Cert. of Analysis, Rep: 1						
SAMPLE	A408105		See Cert. of Analysis, Rep: 1						
SAMPLE	A408106		See Cert. of Analysis, Rep: 1						
SAMPLE	A408107		See Cert. of Analysis, Rep: 1						
SAMPLE	A408108		See Cert. of Analysis, Rep: 1						
SAMPLE	A408109		See Cert. of Analysis, Rep: 1						
SAMPLE	A408110		See Cert. of Analysis, Rep: 1						
SAMPLE	A408112		See Cert. of Analysis, Rep: 1						
SAMPLE	A408113		See Cert. of Analysis, Rep: 1						
CCV	Q688878	INORGAN	IRON	5.00		5.10	mg/L	102	
BLA01	Q688882	NA	IRON			< 0.0100	mg/L		
BLA02	Q687859	NA	IRON			0.0121	mg/L		
LCS	Q687858	SPEX	IRON	10.0		9.72	mg/L	97	
SPI02	Q687860	A406538	IRON	0.375	1.00	1.35	mg/L	98	
DPS02	Q687861	A406538	IRON	0.375	1.00	1.35	mg/L	98	1
SAMPLE	A407830		See Cert. of Analysis, Rep: 1						
SAMPLE	A407859		See Cert. of Analysis, Rep: 1						
SAMPLE	A407861		See Cert. of Analysis, Rep: 1						
SAMPLE	A407862		See Cert. of Analysis, Rep: 1						
CCV	Q688911	INORGAN	IRON	5.00		5.07	mg/L	101	
BLA01	Q688912	NA	IRON			< 0.0100	mg/L		
ICS-A	Q688962	PERKIN-	IRON	200		183.	mg/L	92	

Comments

*Q686489 * Spike is NA; Sample concentration is greater than four times the spike concentration. (Fe)*
*36490 * Spike is NA; Sample concentration is greater than four times the spike*

Comments

concentration. (Fe)

MAGNESIUM ICP SW846-6010A M118.3

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A

Run: R322536 Analyst.: R DALAL Run Date...: 20-MAY-97
PREP Reviewer: W WATNESS Review Date: 20-MAY-97

QC Type	Lab ID	Source	Anal Run
LCS	Q687707	SPEX	R322769
BLA02	Q687708	NA	R322769
SPI02	Q687709	A408117	R322769
DPS02	Q687710	A408117	R322769
SAMPLE	A408118	Rep: 0	R322769

Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOU SW846-3005A

Run: R322211 Analyst.: R DALAL Run Date...: 15-MAY-97
PREP Reviewer: W WATNESS Review Date: 15-MAY-97

LCS	Q685858	SPEX	R322424
BLA02	Q685859	NA	R322424
SPI02	Q685860	A407859	R322424
DPS02	Q685861	A407859	R322424
SAMPLE	A407830	Rep: 1	R322424
SAMPLE	A407859	Rep: 1	R322424
SAMPLE	A407861	Rep: 1	R322424
SAMPLE	A407862	Rep: 1	R322424

Run: R322308 Analyst.: B GRAVES Run Date...: 16-MAY-97
PREP Reviewer: W WATNESS Review Date: 16-MAY-97

LCS	Q686487	SPEX	R322648
BLA02	Q686488	NA	R322648
SPI02	Q686489	A407961	R322648
DPS02	Q686490	A407961	R322648
SAMPLE	A407957	Rep: 1	R322648
SAMPLE	A407958	Rep: 1	R322648
SAMPLE	A407959	Rep: 1	R322648
SAMPLE	A407960	Rep: 1	R322648
SAMPLE	A407961	Rep: 1	R322648
SAMPLE	A407962	Rep: 1	R322648

Run: R322441 Analyst.: B GRAVES Run Date...: 19-MAY-97
PREP Reviewer: W WATNESS Review Date: 20-MAY-97

LCS	Q687279	SPEX	R322769
BLA02	Q687280	NA	R322769
SPI02	Q687281	A408114	R322769
DPS02	Q687282	A408114	R322769
SAMPLE	A408104	Rep: 1	R322769
SAMPLE	A408105	Rep: 1	R322769
SAMPLE	A408106	Rep: 1	R322769
SAMPLE	A408107	Rep: 1	R322769
SAMPLE	A408108	Rep: 1	R322769
SAMPLE	A408109	Rep: 1	R322769
SAMPLE	A408110	Rep: 1	R322769
SAMPLE	A408112	Rep: 1	R322769
SAMPLE	A408113	Rep: 1	R322769

HERITAGE ENVIRONMENTAL SERVICES, INC.

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A

un: R322769 Analyst.: A STOCKBURGER Run Date...: 21-MAY-97 Instrument: ICP
ANALYTICAL Reviewer: S ENDERSON Review Date: 22-MAY-97

QC Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
CCV	Q688846	INORGAN	MAGNESIUM	50.0		48.8	mg/L	98	
BLA01	Q688847	NA	MAGNESIUM			< 0.0800	mg/L		
ICV01	Q688853	SPEX	MAGNESIUM	20		20.2	mg/L	101	
ICS-A	Q688858	PERKIN-	MAGNESIUM	500		484.	mg/L	97	
BLA02	Q687708	NA	MAGNESIUM			< 0.0800	mg/L		
LCS	Q687707	SPEX	MAGNESIUM	100		93.8	mg/L	94	
SPI02	Q687709	A408117	MAGNESIUM	27.2	100	126.	mg/L	99	
DPS02	Q687710	A408117	MAGNESIUM	27.2	100	127.	mg/L	100	1
SAMPLE	A408118		See Cert. of Analysis, Rep: 0						
CCV	Q688915	INORGAN	MAGNESIUM	50.0		51.2	mg/L	102	
BLA01	Q688916	NA	MAGNESIUM			< 0.0800	mg/L		
ICS-A	Q688962	PERKIN-	MAGNESIUM	500		515.	mg/L	103	

Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOU SW846-3005A

Run: R322424 Analyst.: A HILSCHER Run Date...: 16-MAY-97 Instrument: ICP
ANALYTICAL Reviewer: S ENDERSON Review Date: 19-MAY-97

CCV	Q687119	INORGAN	MAGNESIUM	50.0		50.0	mg/L	100	
BLA01	Q687120	NA	MAGNESIUM			< 0.0800	mg/L		
ICV01	Q687123	SPEX	MAGNESIUM	20		20.2	mg/L	101	
ICS-A	Q687127	PERKIN-	MAGNESIUM	500		486.	mg/L	97	
BLA02	Q685859	NA	MAGNESIUM			< 0.0800	mg/L		
LCS	Q685858	SPEX	MAGNESIUM	100		88.7	mg/L	89	
SAMPLE	A407830		See Cert. of Analysis, Rep: 1						
MPLE	A407861		See Cert. of Analysis, Rep: 1						
SAMPLE	A407862		See Cert. of Analysis, Rep: 1						
SAMPLE	A407859		See Cert. of Analysis, Rep: 1						
SPI02	Q685860	A407859	MAGNESIUM	14.7	100	104	mg/L	89	
CCV	Q687152	INORGAN	MAGNESIUM	50.0		49.6	mg/L	99	
BLA01	Q687153	NA	MAGNESIUM			< 0.0800	mg/L		
DPS02	Q685861	A407859	MAGNESIUM	14.6	100	111	mg/L	96	8
ICS-A	Q687211	PERKIN-	MAGNESIUM	500		518.	mg/L	104	

Run: R322648 Analyst.: A STOCKBURGER Run Date...: 20-MAY-97 Instrument: ICP
ANALYTICAL Reviewer: S ENDERSON Review Date: 21-MAY-97

CCV	Q688232	INORGAN	MAGNESIUM	50.0		49.7	mg/L	99	
BLA01	Q688233	NA	MAGNESIUM			< 0.0800	mg/L		
ICV01	Q688237	SPEX	MAGNESIUM	20		20.5	mg/L	103	
ICS-A	Q688243	PERKIN-	MAGNESIUM	500		486.	mg/L	97	
BLA02	Q686488	NA	MAGNESIUM			0.191	mg/L		
LCS	Q686487	SPEX	MAGNESIUM	100		105.	mg/L	105	
SAMPLE	A407961		See Cert. of Analysis, Rep: 1						
SPI02	Q686489	A407961	MAGNESIUM	19	100	117	mg/L	98	
DPS02	Q686490	A407961	MAGNESIUM	19	100	118	mg/L	99	1
CCV	Q688247	INORGAN	MAGNESIUM	50.0		50.9	mg/L	102	
BLA01	Q688248	NA	MAGNESIUM			0.156	mg/L		
SAMPLE	A407957		See Cert. of Analysis, Rep: 1						
SAMPLE	A407958		See Cert. of Analysis, Rep: 1						
SAMPLE	A407959		See Cert. of Analysis, Rep: 1						
SAMPLE	A407960		See Cert. of Analysis, Rep: 1						
SAMPLE	A407962		See Cert. of Analysis, Rep: 1						
V	Q688249	INORGAN	MAGNESIUM	50.0		50.5	mg/L	101	

HERITAGE ENVIRONMENTAL SERVICES, INC.

QC Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
BLA01	Q688250	NA	MAGNESIUM			0.110	mg/L		
S-A	Q688265	PERKIN-	MAGNESIUM	500		502.	mg/L	100	

Run: R322769 Analyst.: A STOCKBURGER Run Date...: 21-MAY-97 Instrument: ICP
ANALYTICAL Reviewer: S ENDERSON Review Date: 22-MAY-97

CCV	Q688846	INORGAN	MAGNESIUM	50.0		48.8	mg/L	98	
BLA01	Q688847	NA	MAGNESIUM			< 0.0800	mg/L		
ICV01	Q688853	SPEX	MAGNESIUM	20		20.2	mg/L	101	
ICS-A	Q688858	PERKIN-	MAGNESIUM	500		484.	mg/L	97	
BLA02	Q687280	NA	MAGNESIUM			0.0996	mg/L		
LCS	Q687279	SPEX	MAGNESIUM	100		96.8	mg/L	97	
SPI02	Q687281	A408114	MAGNESIUM	47.1	100	148	mg/L	101	
DPS02	Q687282	A408114	MAGNESIUM	47.1	100	147	mg/L	100	1
SAMPLE	A408104		See Cert. of Analysis, Rep: 1						
SAMPLE	A408105		See Cert. of Analysis, Rep: 1						
SAMPLE	A408106		See Cert. of Analysis, Rep: 1						
SAMPLE	A408107		See Cert. of Analysis, Rep: 1						
SAMPLE	A408108		See Cert. of Analysis, Rep: 1						
SAMPLE	A408109		See Cert. of Analysis, Rep: 1						
SAMPLE	A408110		See Cert. of Analysis, Rep: 1						
SAMPLE	A408112		See Cert. of Analysis, Rep: 1						
SAMPLE	A408113		See Cert. of Analysis, Rep: 1						
CCV	Q688878	INORGAN	MAGNESIUM	50.0		50.1	mg/L	100	
BLA01	Q688882	NA	MAGNESIUM			< 0.0800	mg/L		
ICS-A	Q688962	PERKIN-	MAGNESIUM	500		515.	mg/L	103	

Comments

*Q686489 * Spike is NA; Sample concentration is greater than Four times the spike concentration. (Fe)*
*Q686490 * Spike is NA; Sample concentration is greater than Four times the spike concentration. (Fe)*

MANGANESE ICP SW846-6010A M119.3

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A

Run: R322536 Analyst.: R DALAL Run Date...: 20-MAY-97
PREP Reviewer: W WATNESS Review Date: 20-MAY-97

QC Type	Lab ID	Source	Anal Run
LCS	Q687707	SPEX	R322769
BLA02	Q687708	NA	R322769
SPI02	Q687709	A408117	R322769
DPS02	Q687710	A408117	R322769
SAMPLE	A408118	Rep: 0	R322769

Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOU SW846-3005A

Run: R322211 Analyst.: R DALAL Run Date...: 15-MAY-97
PREP Reviewer: W WATNESS Review Date: 15-MAY-97

LCS	Q685858	SPEX	R322424
BLA02	Q685859	NA	R322424
SPI02	Q685860	A407859	R322424
DPS02	Q685861	A407859	R322424
SAMPLE	A407830	Rep: 1	R322424
SAMPLE	A407859	Rep: 1	R322424
SAMPLE	A407861	Rep: 1	R322424

HERITAGE ENVIRONMENTAL SERVICES, INC.

QC Type	Lab ID	Source	Anal Run
SAMPLE	A407862	Rep: 1	R322424

un: R322308 Analyst.: B GRAVES Run Date...: 16-MAY-97
/REP Reviewer: W WATNESS Review Date: 16-MAY-97

LCS	Q686487	SPEX	R322648
BLA02	Q686488	NA	R322648
SPI02	Q686489	A407961	R322648
DPS02	Q686490	A407961	R322648
SAMPLE	A407957	Rep: 1	R322648
SAMPLE	A407958	Rep: 1	R322648
SAMPLE	A407959	Rep: 1	R322648
SAMPLE	A407960	Rep: 1	R322648
SAMPLE	A407961	Rep: 1	R322648
SAMPLE	A407962	Rep: 1	R322648

Run: R322441 Analyst.: B GRAVES Run Date...: 19-MAY-97
PREP Reviewer: W WATNESS Review Date: 20-MAY-97

LCS	Q687279	SPEX	R322769
BLA02	Q687280	NA	R322769
SPI02	Q687281	A408114	R322769
DPS02	Q687282	A408114	R322769
SAMPLE	A408104	Rep: 1	R322769
SAMPLE	A408105	Rep: 1	R322769
SAMPLE	A408106	Rep: 1	R322769
SAMPLE	A408107	Rep: 1	R322769
SAMPLE	A408108	Rep: 1	R322769
SAMPLE	A408109	Rep: 1	R322769
SAMPLE	A408110	Rep: 1	R322769
SAMPLE	A408112	Rep: 1	R322769
MPLE	A408113	Rep: 1	R322769

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A

Run: R322769 Analyst.: A STOCKBURGER Run Date...: 21-MAY-97 Instrument: ICP
ANALYTICAL Reviewer: S ENDERSON Review Date: 22-MAY-97

QC Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
CCV	Q688846	INORGAN	MANGANESE	5.00		4.88	mg/L	98	
BLA01	Q688847	NA	MANGANESE			< 0.00400	mg/L		
ICV01	Q688849	PERKIN	MANGANESE	1		1.02	mg/L	102	
CDL01	Q688855	PERKIN	MANGANESE	0.030		0.0297	mg/L	99	
ICS-A	Q688859	PERKIN	MANGANESE	0.500		0.446	mg/L	89	
BLA02	Q687708	NA	MANGANESE			< 0.00400	mg/L		
LCS	Q687707	SPEX	MANGANESE	5.00		4.61	mg/L	92	
SPI02	Q687709	A408117	MANGANESE	0	0.500	0.491	mg/L	98	
DPS02	Q687710	A408117	MANGANESE	0	0.500	0.494	mg/L	99	1
SAMPLE	A408118		See Cert. of Analysis, Rep: 0						
CCV	Q688915	INORGAN	MANGANESE	5.00		5.13	mg/L	103	
BLA01	Q688916	NA	MANGANESE			< 0.00400	mg/L		
CDL01	Q688955	PERKIN	MANGANESE	0.030		0.0308	mg/L	103	
ICS-A	Q688966	PERKIN	MANGANESE	0.500		0.468	mg/L	94	

Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOU SW846-3005A

Run: R322424 Analyst.: A HILSCHER Run Date...: 16-MAY-97 Instrument: ICP
ANALYTICAL Reviewer: S ENDERSON Review Date: 19-MAY-97

CCV	Q687119	INORGAN	MANGANESE	5.00		5.04	mg/L	101	
BLA01	Q687120	NA	MANGANESE			< 0.00400	mg/L		
V01	Q687121	PERKIN	MANGANESE	1		1.04	mg/L	104	

HERITAGE ENVIRONMENTAL SERVICES, INC.

QC Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
CDL01	Q687125	PERKIN	MANGANESE	0.030		0.0296	mg/L	99	
ICS-A	Q687128	PERKIN	MANGANESE	0.500		0.454	mg/L	91	
BLA02	Q685859	NA	MANGANESE			< 0.00400	mg/L		
LCS	Q685858	SPEX	MANGANESE	5.00		4.48	mg/L	90	
SAMPLE	A407830		See Cert. of Analysis, Rep: 1						
SAMPLE	A407861		See Cert. of Analysis, Rep: 1						
SAMPLE	A407862		See Cert. of Analysis, Rep: 1						
SAMPLE	A407859		See Cert. of Analysis, Rep: 1						
SPI02	Q685860	A407859	MANGANESE	0.0724	0.5	0.512	mg/L	88	
CCV	Q687152	INORGAN	MANGANESE	5.00		5.01	mg/L	100	
BLA01	Q687153	NA	MANGANESE			< 0.00400	mg/L		
DPS02	Q685861	A407859	MANGANESE	0.0724	0.5	0.548	mg/L	95	8
CDL01	Q687210	PERKIN	MANGANESE	0.030		0.0328	mg/L	109	
ICS-A	Q687212	PERKIN	MANGANESE	0.500		0.495	mg/L	99	

Run: R322648 Analyst.: A STOCKBURGER Run Date...: 20-MAY-97 Instrument: ICP
ANALYTICAL Reviewer: S ENDERSON Review Date: 21-MAY-97

CCV	Q688232	INORGAN	MANGANESE	5.00		5.00	mg/L	100	
BLA01	Q688233	NA	MANGANESE			< 0.00400	mg/L		
ICV01	Q688234	PERKIN	MANGANESE	1		1.03	mg/L	103	
CDL01	Q688239	PERKIN	MANGANESE	0.030		0.0308	mg/L	103	
ICS-A	Q688244	PERKIN	MANGANESE	0.500		0.460	mg/L	92	
BLA02	Q686488	NA	MANGANESE			< 0.00400	mg/L		
LCS	Q686487	SPEX	MANGANESE	5.00		5.28	mg/L	106	
SAMPLE	A407961		See Cert. of Analysis, Rep: 1						
SPI02	Q686489	A407961	MANGANESE	0.142	0.5	0.619	mg/L	95	
DPS02	Q686490	A407961	MANGANESE	0.142	0.5	0.645	mg/L	101	6
CCV	Q688247	INORGAN	MANGANESE	5.00		5.16	mg/L	103	
BLA01	Q688248	NA	MANGANESE			< 0.00400	mg/L		
SAMPLE	A407957		See Cert. of Analysis, Rep: 1						
SAMPLE	A407958		See Cert. of Analysis, Rep: 1						
SAMPLE	A407959		See Cert. of Analysis, Rep: 1						
SAMPLE	A407960		See Cert. of Analysis, Rep: 1						
SAMPLE	A407962		See Cert. of Analysis, Rep: 1						
CCV	Q688249	INORGAN	MANGANESE	5.00		5.14	mg/L	103	
BLA01	Q688250	NA	MANGANESE			< 0.00400	mg/L		
CDL01	Q688264	PERKIN	MANGANESE	0.030		0.0337	mg/L	112	
ICS-A	Q688266	PERKIN	MANGANESE	0.500		0.476	mg/L	95	

Run: R322769 Analyst.: A STOCKBURGER Run Date...: 21-MAY-97 Instrument: ICP
ANALYTICAL Reviewer: S ENDERSON Review Date: 22-MAY-97

CCV	Q688846	INORGAN	MANGANESE	5.00		4.88	mg/L	98	
BLA01	Q688847	NA	MANGANESE			< 0.00400	mg/L		
ICV01	Q688849	PERKIN	MANGANESE	1		1.02	mg/L	102	
CDL01	Q688855	PERKIN	MANGANESE	0.030		0.0297	mg/L	99	
ICS-A	Q688859	PERKIN	MANGANESE	0.500		0.446	mg/L	89	
BLA02	Q687280	NA	MANGANESE			< 0.00400	mg/L		
LCS	Q687279	SPEX	MANGANESE	5.00		4.73	mg/L	95	
SPI02	Q687281	A408114	MANGANESE	0.2	0.5	0.671	mg/L	94	
DPS02	Q687282	A408114	MANGANESE	0.2	0.5	0.68	mg/L	96	2
SAMPLE	A408104		See Cert. of Analysis, Rep: 1						
SAMPLE	A408105		See Cert. of Analysis, Rep: 1						
SAMPLE	A408106		See Cert. of Analysis, Rep: 1						
SAMPLE	A408107		See Cert. of Analysis, Rep: 1						
SAMPLE	A408108		See Cert. of Analysis, Rep: 1						
SAMPLE	A408109		See Cert. of Analysis, Rep: 1						

HERITAGE ENVIRONMENTAL SERVICES, INC.

QC Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
SAMPLE	A408110		See Cert. of Analysis, Rep: 1						
MPLE	A408112		See Cert. of Analysis, Rep: 1						
AMPLE	A408113		See Cert. of Analysis, Rep: 1						
CCV	Q688878	INORGAN	MANGANESE	5.00		5.02	mg/L	100	
BLA01	Q688882	NA	MANGANESE			< 0.00400	mg/L		
CDL01	Q688955	PERKIN	MANGANESE	0.030		0.0308	mg/L	103	
ICS-A	Q688966	PERKIN	MANGANESE	0.500		0.468	mg/L	94	

Comments

*Q686489 * Spike is NA; Sample concentration is greater than four times the spike concentration. (Fe)*
*Q686490 * Spike is NA; Sample concentration is greater than four times the spike concentration. (Fe)*

POTASSIUM ICP SW846-6010A M126.3

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A

Run: R322536 Analyst.: R DALAL Run Date...: 20-MAY-97
PREP Reviewer: W WATNESS Review Date: 20-MAY-97

QC Type	Lab ID	Source	Anal Run
LCS	Q687707	SPEX	R322769
BLA02	Q687708	NA	R322769
SPI02	Q687709	A408117	R322769
DPS02	Q687710	A408117	R322769
SAMPLE	A408118	Rep: 0	R322769

Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOU SW846-3005A

Run: R322211 Analyst.: R DALAL Run Date...: 15-MAY-97
PREP Reviewer: W WATNESS Review Date: 15-MAY-97

LCS	Q685858	SPEX	R323985
BLA02	Q685859	NA	R323985
SPI02	Q685860	A407859	R323985
DPS02	Q685861	A407859	R323985
SAMPLE	A407830	Rep: 1	R323985
SAMPLE	A407859	Rep: 1	R323985
SAMPLE	A407861	Rep: 1	R323985
SAMPLE	A407862	Rep: 1	R323985

Run: R322308 Analyst.: B GRAVES Run Date...: 16-MAY-97
PREP Reviewer: W WATNESS Review Date: 16-MAY-97

LCS	Q686487	SPEX	R322648
BLA02	Q686488	NA	R322648
SPI02	Q686489	A407961	R322648
DPS02	Q686490	A407961	R322648
SAMPLE	A407957	Rep: 1	R322648
SAMPLE	A407958	Rep: 1	R322648
SAMPLE	A407959	Rep: 1	R322648
SAMPLE	A407960	Rep: 1	R322648
SAMPLE	A407961	Rep: 1	R322648
SAMPLE	A407962	Rep: 1	R322648

Run: R322441 Analyst.: B GRAVES Run Date...: 19-MAY-97
PREP Reviewer: W WATNESS Review Date: 20-MAY-97

LCS	Q687279	SPEX	R322769
A02	Q687280	NA	R322769

HERITAGE ENVIRONMENTAL SERVICES, INC.

QC Type	Lab ID	Source	Anal Run
SPI02	Q687281	A408114	R322769
SO2	Q687282	A408114	R322769
SAMPLE	A408104	Rep: 1	R322769
SAMPLE	A408105	Rep: 1	R322769
SAMPLE	A408106	Rep: 1	R322769
SAMPLE	A408107	Rep: 1	R322769
SAMPLE	A408108	Rep: 1	R322769
SAMPLE	A408109	Rep: 1	R322769
SAMPLE	A408110	Rep: 1	R322769
SAMPLE	A408112	Rep: 1	R322769
SAMPLE	A408113	Rep: 1	R322769

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A

Run: R322769 Analyst.: A STOCKBURGER Run Date...: 21-MAY-97 Instrument: ICP
ANALYTICAL Reviewer: S ENDERSON Review Date: 22-MAY-97

QC Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
CCV	Q688846	INORGAN	POTASSIUM	50		49.1	mg/L	98	
BLA01	Q688847	NA	POTASSIUM			0.137	mg/L		
ICV01	Q688851	PERKIN	POTASSIUM	10		10.0	mg/L	100	
ICV01	Q688853	SPEX	POTASSIUM	20		20.4	mg/L	102	
BLA02	Q687708	NA	POTASSIUM			< 0.0800	mg/L		
LCS	Q687707	SPEX	POTASSIUM	100		97.2	mg/L	97	
SPI02	Q687709	A408117	POTASSIUM	0.281	100	104.	mg/L	104	
DPS02	Q687710	A408117	POTASSIUM	0.281	100	105.	mg/L	105	1
SAMPLE	A408118		See Cert. of Analysis, Rep: 0						
CCV	Q688915	INORGAN	POTASSIUM	50		53.4	mg/L	107	
BLA01	Q688916	NA	POTASSIUM			< 0.0800	mg/L		

Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOU SW846-3005A

Run: R322648 Analyst.: A STOCKBURGER Run Date...: 20-MAY-97 Instrument: ICP
ANALYTICAL Reviewer: S ENDERSON Review Date: 21-MAY-97

CCV	Q688232	INORGAN	POTASSIUM	50		50.8	mg/L	102	
BLA01	Q688233	NA	POTASSIUM			< 0.0800	mg/L		
ICV01	Q688235	PERKIN	POTASSIUM	10		10.3	mg/L	103	
ICV01	Q688237	SPEX	POTASSIUM	20		20.6	mg/L	103	
BLA02	Q686488	NA	POTASSIUM			< 0.0800	mg/L		
LCS	Q686487	SPEX	POTASSIUM	100		106.	mg/L	106	
SAMPLE	A407961		See Cert. of Analysis, Rep: 1						
SPI02	Q686489	A407961	POTASSIUM	1.43	100	101	mg/L	100	
DPS02	Q686490	A407961	POTASSIUM	1.43	100	102	mg/L	101	1
CCV	Q688247	INORGAN	POTASSIUM	50		51.2	mg/L	102	
BLA01	Q688248	NA	POTASSIUM			< 0.0800	mg/L		
SAMPLE	A407957		See Cert. of Analysis, Rep: 1						
SAMPLE	A407958		See Cert. of Analysis, Rep: 1						
SAMPLE	A407959		See Cert. of Analysis, Rep: 1						
SAMPLE	A407960		See Cert. of Analysis, Rep: 1						
SAMPLE	A407962		See Cert. of Analysis, Rep: 1						
CCV	Q688249	INORGAN	POTASSIUM	50		50.9	mg/L	102	
BLA01	Q688250	NA	POTASSIUM			< 0.0800	mg/L		

Run: R322769 Analyst.: A STOCKBURGER Run Date...: 21-MAY-97 Instrument: ICP
ANALYTICAL Reviewer: S ENDERSON Review Date: 22-MAY-97

CCV	Q688846	INORGAN	POTASSIUM	50		49.1	mg/L	98	
BLA01	Q688847	NA	POTASSIUM			0.137	mg/L		
ICV01	Q688851	PERKIN	POTASSIUM	10		10.0	mg/L	100	

HERITAGE ENVIRONMENTAL SERVICES, INC.

QC Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q688853	SPEX	POTASSIUM	20		20.4	mg/L	102	
\02	Q687280	NA	POTASSIUM			< 0.0800	mg/L		
..CS	Q687279	SPEX	POTASSIUM	100		99.1	mg/L	99	
SPI02	Q687281	A408114	POTASSIUM	2.91	100	105	mg/L	102	
DPS02	Q687282	A408114	POTASSIUM	2.91	100	103	mg/L	100	2
SAMPLE	A408104		See Cert. of Analysis, Rep: 1						
SAMPLE	A408105		See Cert. of Analysis, Rep: 1						
SAMPLE	A408106		See Cert. of Analysis, Rep: 1						
SAMPLE	A408107		See Cert. of Analysis, Rep: 1						
SAMPLE	A408108		See Cert. of Analysis, Rep: 1						
SAMPLE	A408109		See Cert. of Analysis, Rep: 1						
SAMPLE	A408110		See Cert. of Analysis, Rep: 1						
SAMPLE	A408112		See Cert. of Analysis, Rep: 1						
SAMPLE	A408113		See Cert. of Analysis, Rep: 1						
CCV	Q688878	INORGAN	POTASSIUM	50		51.4	mg/L	103	
BLA01	Q688882	NA	POTASSIUM			< 0.0800	mg/L		

Run: R323985 Analyst.: A STOCKBURGER Run Date...: 03-JUN-97 Instrument: ICP
ANALYTICAL Reviewer: S ENDERSON Review Date: 04-JUN-97

CCV	Q694017	INORGAN	POTASSIUM	50		48.8	mg/L	98	
BLA01	Q694018	NA	POTASSIUM			< 0.0800	mg/L		
ICV01	Q694020	PERKIN	POTASSIUM	10		10.0	mg/L	100	
ICV01	Q694021	SPEX	POTASSIUM	20		19.9	mg/L	100	
BLA02	Q685859	NA	POTASSIUM			< 0.0800	mg/L		
LCS	Q685858	SPEX	POTASSIUM	100		85.7	mg/L	86	
SAMPLE	A407830		See Cert. of Analysis, Rep: 1						
SAMPLE	A407861		See Cert. of Analysis, Rep: 1						
SAMPLE	A407862		See Cert. of Analysis, Rep: 1						
MPLE	A407859		See Cert. of Analysis, Rep: 1						
SPI02	Q685860	A407859	POTASSIUM	0.717	100	91.8	mg/L	91	
DPS02	Q685861	A407859	POTASSIUM	0.717	100	95.4	mg/L	95	4
CCV	Q694040	INORGAN	POTASSIUM	50		48.3	mg/L	97	
BLA01	Q694041	NA	POTASSIUM			< 0.0800	mg/L		

Comments

*Q686489 * Spike is NA; Sample concentration is greater than four times the spike concentration. (Fe)*

*Q686490 * Spike is NA; Sample concentration is greater than four times the spike concentration. (Fe)*

SODIUM ICP SW846-6010A M131.3

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A

Run: R322212 Analyst.: R DALAL Run Date...: 15-MAY-97
PREP Reviewer: W WATNESS Review Date: 15-MAY-97

QC Type	Lab ID	Source	Anal Run
LCS	Q685867	SPEX	R322424
BLA02	Q685868	NA	R322424
SPI02	Q685869	A407861	R322424
DPS02	Q685870	A407861	R322424
SAMPLE	A407859	Rep: 0	R322424
SAMPLE	A407861	Rep: 0	R322424

HERITAGE ENVIRONMENTAL SERVICES, INC.

Run: R322430 Analyst.: N CARR Run Date...: 19-MAY-97
PREP Reviewer: W WATNESS Review Date: 19-MAY-97

Type	Lab ID	Source	Anal Run
LCS	Q687229	SPEX	R322769
BLA02	Q687230	NA	R322769
SPI02	Q687231	A408106	R322769
DPS02	Q687232	A408106	R322769
SAMPLE	A408105	Rep: 0	R323482
SAMPLE	A408108	Rep: 0	R322769
SAMPLE	A408110	Rep: 0	R322769

Run: R322536 Analyst.: R DALAL Run Date...: 20-MAY-97
PREP Reviewer: W WATNESS Review Date: 20-MAY-97

LCS	Q687707	SPEX	R322769
BLA02	Q687708	NA	R322769
SPI02	Q687709	A408117	R322769
DPS02	Q687710	A408117	R322769
SAMPLE	A408112	Rep: 0	R322769
SAMPLE	A408113	Rep: 0	R322769
SAMPLE	A408118	Rep: 0	R322769

Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOU SW846-3005A

Run: R322211 Analyst.: R DALAL Run Date...: 15-MAY-97
PREP Reviewer: W WATNESS Review Date: 15-MAY-97

LCS	Q685858	SPEX	R322424
BLA02	Q685859	NA	R322424
SPI02	Q685860	A407859	R322424
DPS02	Q685861	A407859	R322424
SAMPLE	A407830	Rep: 1	R322424
SAMPLE	A407859	Rep: 1	R322424
SAMPLE	A407861	Rep: 1	R322424
SAMPLE	A407862	Rep: 1	R322424

Run: R322308 Analyst.: B GRAVES Run Date...: 16-MAY-97
PREP Reviewer: W WATNESS Review Date: 16-MAY-97

LCS	Q686487	SPEX	R322648
BLA02	Q686488	NA	R322648
SPI02	Q686489	A407961	R322648
DPS02	Q686490	A407961	R322648
SAMPLE	A407957	Rep: 1	R322648
SAMPLE	A407958	Rep: 1	R322648
SAMPLE	A407959	Rep: 1	R322648
SAMPLE	A407960	Rep: 1	R322648
SAMPLE	A407961	Rep: 1	R322648
SAMPLE	A407962	Rep: 1	R322648

Run: R322441 Analyst.: B GRAVES Run Date...: 19-MAY-97
PREP Reviewer: W WATNESS Review Date: 20-MAY-97

LCS	Q687279	SPEX	R322769
BLA02	Q687280	NA	R322769
SPI02	Q687281	A408114	R322769
DPS02	Q687282	A408114	R322769
SAMPLE	A408104	Rep: 1	R322769
SAMPLE	A408105	Rep: 1	R322888
SAMPLE	A408106	Rep: 1	R322769
SAMPLE	A408107	Rep: 1	R322769
SAMPLE	A408108	Rep: 1	R322769
SAMPLE	A408109	Rep: 1	R322769

HERITAGE ENVIRONMENTAL SERVICES, INC.

QC Type	Lab ID	Source	Anal Run
SAMPLE	A408110	Rep: 1	R322769
[illegible]MPLE	A408112	Rep: 1	R322769
[illegible]AMPLE	A408113	Rep: 1	R322769

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A

Run: R322424 Analyst.: A HILSCHER Run Date...: 16-MAY-97 Instrument: ICP
ANALYTICAL Reviewer: S ENDERSON Review Date: 19-MAY-97

QC Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
CCV	Q687119	INORGAN	SODIUM	50		50.7	mg/L	101	
BLA01	Q687120	NA	SODIUM			< 0.0800	mg/L		
ICV01	Q687122	PERKIN	SODIUM	1		1.00	mg/L	100	
ICV01	Q687123	SPEX	SODIUM	20		20.3	mg/L	102	
BLA02	Q685868	NA	SODIUM			0.137	mg/L		
LCS	Q685867	SPEX	SODIUM	100		100.	mg/L	100	
SAMPLE	A407861		See Cert. of Analysis, Rep: 0						
SPI02	Q685869	A407861	SODIUM	107.	100	213.	mg/L	106	
DPS02	Q685870	A407861	SODIUM	107.	100	206.	mg/L	99	7
CCV	Q687196	INORGAN	SODIUM	50		52.9	mg/L	106	
BLA01	Q687197	NA	SODIUM			< 0.0800	mg/L		
SAMPLE	A407859		See Cert. of Analysis, Rep: 0						
CCV	Q687198	INORGAN	SODIUM	50		53.9	mg/L	108	
BLA01	Q687199	NA	SODIUM			< 0.0800	mg/L		

Run: R322769 Analyst.: A STOCKBURGER Run Date...: 21-MAY-97 Instrument: ICP
ANALYTICAL Reviewer: S ENDERSON Review Date: 22-MAY-97

CCV	Q688846	INORGAN	SODIUM	50		49.0	mg/L	98	
BLA01	Q688847	NA	SODIUM			< 0.0800	mg/L		
ICV01	Q688851	PERKIN	SODIUM	1		1.02	mg/L	102	
[illegible]V01	Q688853	SPEX	SODIUM	20		20.2	mg/L	101	
[illegible]LA02	Q687230	NA	SODIUM			< 0.0800	mg/L		
LCS	Q687229	SPEX	SODIUM	100		97.3	mg/L	97	
SPI02	Q687231	A408106	SODIUM	103.	100	207.	mg/L	104	
DPS02	Q687232	A408106	SODIUM	103.	100	206.	mg/L	103	1
SAMPLE	A408108		See Cert. of Analysis, Rep: 0						
SAMPLE	A408110		See Cert. of Analysis, Rep: 0						
CCV	Q688901	INORGAN	SODIUM	50		50.1	mg/L	100	
BLA01	Q688902	NA	SODIUM			< 0.0800	mg/L		
BLA02	Q687708	NA	SODIUM			0.152	mg/L		
LCS	Q687707	SPEX	SODIUM	100		93.6	mg/L	94	
SPI02	Q687709	A408117	SODIUM	258.	100	356.	mg/L	98	
DPS02	Q687710	A408117	SODIUM	258.	100	357.	mg/L	99	1
SAMPLE	A408112		See Cert. of Analysis, Rep: 0						
SAMPLE	A408113		See Cert. of Analysis, Rep: 0						
SAMPLE	A408118		See Cert. of Analysis, Rep: 0						
CCV	Q688915	INORGAN	SODIUM	50		51.5	mg/L	103	
BLA01	Q688916	NA	SODIUM			0.145	mg/L		

Run: R323482 Analyst.: A STOCKBURGER Run Date...: 29-MAY-97 Instrument: ICP
ANALYTICAL Reviewer: S ENDERSON Review Date: 30-MAY-97

CCV	Q691995	INORGAN	SODIUM	50		49.5	mg/L	99	
BLA01	Q691996	NA	SODIUM			< 0.0800	mg/L		
ICV01	Q691998	PERKIN	SODIUM	1		1.04	mg/L	104	
ICV01	Q692001	SPEX	SODIUM	20		20.1	mg/L	101	
SAMPLE	A408105		See Cert. of Analysis, Rep: 0						
[illegible]CV	Q692029	INORGAN	SODIUM	50		48.9	mg/L	98	
[illegible]A01	Q692030	NA	SODIUM			< 0.0800	mg/L		

HERITAGE ENVIRONMENTAL SERVICES, INC.

Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOU SW846-3005A

Run: R322424 Analyst.: A HILSCHER Run Date...: 16-MAY-97 Instrument: ICP
ANALYTICAL Reviewer: S ENDERSON Review Date: 19-MAY-97

QC Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
CCV	Q687119	INORGAN	SODIUM	50		50.7	mg/L	101	
BLA01	Q687120	NA	SODIUM			< 0.0800	mg/L		
ICV01	Q687122	PERKIN	SODIUM	1		1.00	mg/L	100	
ICV01	Q687123	SPEX	SODIUM	20		20.3	mg/L	102	
BLA02	Q685859	NA	SODIUM			0.0983	mg/L		
LCS	Q685858	SPEX	SODIUM	100		90.7	mg/L	91	
SAMPLE	A407830		See Cert. of Analysis, Rep: 1						
SAMPLE	A407861		See Cert. of Analysis, Rep: 1						
SAMPLE	A407862		See Cert. of Analysis, Rep: 1						
SAMPLE	A407859		See Cert. of Analysis, Rep: 1						
SPI02	Q685860	A407859	SODIUM	92.4	100	179	mg/L	87	
CCV	Q687152	INORGAN	SODIUM	50		50.6	mg/L	101	
BLA01	Q687153	NA	SODIUM			< 0.0800	mg/L		
DPS02	Q685861	A407859	SODIUM	92.4	100	193	mg/L	101	14

Run: R322648 Analyst.: A STOCKBURGER Run Date...: 20-MAY-97 Instrument: ICP
ANALYTICAL Reviewer: S ENDERSON Review Date: 21-MAY-97

CCV	Q688232	INORGAN	SODIUM	50		50.4	mg/L	101	
BLA01	Q688233	NA	SODIUM			< 0.0800	mg/L		
ICV01	Q688235	PERKIN	SODIUM	1		1.03	mg/L	103	
ICV01	Q688237	SPEX	SODIUM	20		20.7	mg/L	104	
BLA02	Q686488	NA	SODIUM			0.219	mg/L		
LCS	Q686487	SPEX	SODIUM	100		108.	mg/L	108	
SAMPLE	A407961		See Cert. of Analysis, Rep: 1						
I02	Q686489	A407961	SODIUM	31.1	100	133	mg/L	102	
DPS02	Q686490	A407961	SODIUM	31.1	100	135	mg/L	104	2
CCV	Q688247	INORGAN	SODIUM	50		52.3	mg/L	105	
BLA01	Q688248	NA	SODIUM			< 0.0800	mg/L		
SAMPLE	A407957		See Cert. of Analysis, Rep: 1						
SAMPLE	A407958		See Cert. of Analysis, Rep: 1						
SAMPLE	A407959		See Cert. of Analysis, Rep: 1						
SAMPLE	A407960		See Cert. of Analysis, Rep: 1						
SAMPLE	A407962		See Cert. of Analysis, Rep: 1						
CCV	Q688249	INORGAN	SODIUM	50		52.3	mg/L	105	
BLA01	Q688250	NA	SODIUM			< 0.0800	mg/L		

Run: R322769 Analyst.: A STOCKBURGER Run Date...: 21-MAY-97 Instrument: ICP
ANALYTICAL Reviewer: S ENDERSON Review Date: 22-MAY-97

CCV	Q688846	INORGAN	SODIUM	50		49.0	mg/L	98	
BLA01	Q688847	NA	SODIUM			< 0.0800	mg/L		
ICV01	Q688851	PERKIN	SODIUM	1		1.02	mg/L	102	
ICV01	Q688853	SPEX	SODIUM	20		20.2	mg/L	101	
BLA02	Q687280	NA	SODIUM			0.0898	mg/L		
LCS	Q687279	SPEX	SODIUM	100		96.2	mg/L	96	
SPI02	Q687281	A408114	SODIUM	43.4	100	145	mg/L	102	
DPS02	Q687282	A408114	SODIUM	43.4	100	143	mg/L	100	2
SAMPLE	A408104		See Cert. of Analysis, Rep: 1						
SAMPLE	A408106		See Cert. of Analysis, Rep: 1						
SAMPLE	A408107		See Cert. of Analysis, Rep: 1						
SAMPLE	A408108		See Cert. of Analysis, Rep: 1						
SAMPLE	A408109		See Cert. of Analysis, Rep: 1						
SAMPLE	A408110		See Cert. of Analysis, Rep: 1						

HERITAGE ENVIRONMENTAL SERVICES, INC.

QC Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
SAMPLE	A408112		See Cert. of Analysis, Rep: 1						
MPLE	A408113		See Cert. of Analysis, Rep: 1						
V	Q688878	INORGAN	SODIUM	50		49.6	mg/L	99	
BLA01	Q688882	NA	SODIUM			< 0.0800	mg/L		

Run: R322888 Analyst.: A STOCKBURGER Run Date...: 23-MAY-97 Instrument: ICP
ANALYTICAL Reviewer: S ENDERSON Review Date: 23-MAY-97

CCV	Q689571	INORGAN	SODIUM	50		49.2	mg/L	98	
ICV01	Q689574	PERKIN	SODIUM	1		1.04	mg/L	104	
ICV01	Q689575	SPEX	SODIUM	20		19.7	mg/L	99	
BLA01	Q689576	NA	SODIUM			< 0.0800	mg/L		
SAMPLE	A408105		See Cert. of Analysis, Rep: 1						
CCV	Q689593	INORGAN	SODIUM	50		49.5	mg/L	99	
BLA01	Q689594	NA	SODIUM			< 0.0800	mg/L		

Comments

*Q686489 * Spike is NA; Sample concentration is greater than four times the spike concentration. (Fe)*
*Q686490 * Spike is NA; Sample concentration is greater than four times the spike concentration. (Fe)*

ZINC ICP SW846-6010A M139.3

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A

Run: R322536 Analyst.: R DALAL Run Date...: 20-MAY-97
PREP Reviewer: W WATNESS Review Date: 20-MAY-97

QC Type	Lab ID	Source	Anal Run
	Q687707	SPEX	R322769
A02	Q687708	NA	R322769
SPI02	Q687709	A408117	R322769
DPS02	Q687710	A408117	R322769
SAMPLE	A408118	Rep: 0	R322769

Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOU SW846-3005A

Run: R322211 Analyst.: R DALAL Run Date...: 15-MAY-97
PREP Reviewer: W WATNESS Review Date: 15-MAY-97

LCS	Q685858	SPEX	R322424
BLA02	Q685859	NA	R322424
SPI02	Q685860	A407859	R322424
DPS02	Q685861	A407859	R322424
SAMPLE	A407830	Rep: 1	R322424
SAMPLE	A407859	Rep: 1	R322424
SAMPLE	A407861	Rep: 1	R322424
SAMPLE	A407862	Rep: 1	R322424

Run: R322308 Analyst.: B GRAVES Run Date...: 16-MAY-97
PREP Reviewer: W WATNESS Review Date: 16-MAY-97

LCS	Q686487	SPEX	R322648
BLA02	Q686488	NA	R322648
SPI02	Q686489	A407961	R322648
DPS02	Q686490	A407961	R322648
SAMPLE	A407957	Rep: 1	R322648
SAMPLE	A407958	Rep: 1	R322648
SAMPLE	A407959	Rep: 1	R322648
PLE	A407960	Rep: 1	R322648

HERITAGE ENVIRONMENTAL SERVICES, INC.

QC Type	Lab ID	Source	Anal Run
SAMPLE	A407961	Rep: 1	R322648
PLE	A407962	Rep: 1	R322648

Run: R322441 Analyst.: B GRAVES Run Date...: 19-MAY-97
PREP Reviewer: W WATNESS Review Date: 20-MAY-97

LCS	Q687279	SPEX	R322769
BLA02	Q687280	NA	R322769
SPI02	Q687281	A408114	R322769
DPS02	Q687282	A408114	R322769
SAMPLE	A408104	Rep: 1	R322769
SAMPLE	A408105	Rep: 1	R322769
SAMPLE	A408106	Rep: 1	R322769
SAMPLE	A408107	Rep: 1	R322769
SAMPLE	A408108	Rep: 1	R322769
SAMPLE	A408109	Rep: 1	R322769
SAMPLE	A408110	Rep: 1	R322769
SAMPLE	A408112	Rep: 1	R322769
SAMPLE	A408113	Rep: 1	R322769

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A

Run: R322769 Analyst.: A STOCKBURGER Run Date...: 21-MAY-97 Instrument: ICP
ANALYTICAL Reviewer: S ENDERSON Review Date: 22-MAY-97

QC Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
CCV	Q688846	INORGAN	ZINC	5.00		4.95	mg/L	99	
BLA01	Q688847	NA	ZINC			< 0.00800	mg/L		
ICV01	Q688849	PERKIN	ZINC	1		1.03	mg/L	103	
CDL01	Q688855	PERKIN	ZINC	0.040		0.0393	mg/L	98	
ICS-A	Q688859	PERKIN	ZINC	1.00		0.935	mg/L	94	
A02	Q687708	NA	ZINC			0.00876	mg/L		
LCS	Q687707	SPEX	ZINC	5.00		4.68	mg/L	94	
SPI02	Q687709	A408117	ZINC	0	0.500	0.520	mg/L	104	
DPS02	Q687710	A408117	ZINC	0	0.500	0.526	mg/L	105	1
SAMPLE	A408118		See Cert. of Analysis, Rep: 0						
CCV	Q688915	INORGAN	ZINC	5.00		5.14	mg/L	103	
BLA01	Q688916	NA	ZINC			< 0.00800	mg/L		
CDL01	Q688955	PERKIN	ZINC	0.040		0.0411	mg/L	103	
ICS-A	Q688966	PERKIN	ZINC	1.00		0.962	mg/L	96	

Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOU SW846-3005A

Run: R322424 Analyst.: A HILSCHER Run Date...: 16-MAY-97 Instrument: ICP
ANALYTICAL Reviewer: S ENDERSON Review Date: 19-MAY-97

CCV	Q687119	INORGAN	ZINC	5.00		5.07	mg/L	101	
BLA01	Q687120	NA	ZINC			< 0.00800	mg/L		
ICV01	Q687121	PERKIN	ZINC	1		1.03	mg/L	103	
CDL01	Q687125	PERKIN	ZINC	0.040		0.0399	mg/L	100	
ICS-A	Q687128	PERKIN	ZINC	1.00		0.939	mg/L	94	
BLA02	Q685859	NA	ZINC			< 0.00800	mg/L		
LCS	Q685858	SPEX	ZINC	5.00		4.51	mg/L	90	
SAMPLE	A407830		See Cert. of Analysis, Rep: 1						
SAMPLE	A407861		See Cert. of Analysis, Rep: 1						
SAMPLE	A407862		See Cert. of Analysis, Rep: 1						
SAMPLE	A407859		See Cert. of Analysis, Rep: 1						
SPI02	Q685860	A407859	ZINC	0	0.5	0.467	mg/L	93	
CCV	Q687152	INORGAN	ZINC	5.00		5.02	mg/L	100	
A01	Q687153	NA	ZINC			0.00856	mg/L		

HERITAGE ENVIRONMENTAL SERVICES, INC.

QC Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
DPS02	Q685861	A407859	ZINC	0	0.5	0.491	mg/L	98	5
.01	Q687210	PERKIN	ZINC	0.040		0.0475	mg/L	119	
ICS-A	Q687212	PERKIN	ZINC	1.00		1.03	mg/L	103	
Run: R322648 ANALYTICAL	Analyst.: A STOCKBURGER Reviewer: S ENDERSON	Run Date...: 20-MAY-97 Review Date: 21-MAY-97	Instrument: ICP						
CCV	Q688232	INORGAN	ZINC	5.00		5.04	mg/L	101	
BLA01	Q688233	NA	ZINC			< 0.00800	mg/L		
ICV01	Q688234	PERKIN	ZINC	1		1.03	mg/L	103	
CDL01	Q688239	PERKIN	ZINC	0.040		0.0416	mg/L	104	
ICS-A	Q688244	PERKIN	ZINC	1.00		0.964	mg/L	96	
BLA02	Q686488	NA	ZINC			0.0104	mg/L		
LCS	Q686487	SPEX	ZINC	5.00		5.38	mg/L	108	
SAMPLE	A407961		See Cert. of Analysis, Rep: 1						
SPI02	Q686489	A407961	ZINC	0	0.5	0.511	mg/L	102	
DPS02	Q686490	A407961	ZINC	0	0.5	0.536	mg/L	107	5
CCV	Q688247	INORGAN	ZINC	5.00		5.15	mg/L	103	
BLA01	Q688248	NA	ZINC			< 0.00800	mg/L		
SAMPLE	A407957		See Cert. of Analysis, Rep: 1						
SAMPLE	A407958		See Cert. of Analysis, Rep: 1						
SAMPLE	A407959		See Cert. of Analysis, Rep: 1						
SAMPLE	A407960		See Cert. of Analysis, Rep: 1						
SAMPLE	A407962		See Cert. of Analysis, Rep: 1						
CCV	Q688249	INORGAN	ZINC	5.00		5.12	mg/L	102	
BLA01	Q688250	NA	ZINC			< 0.00800	mg/L		
CDL01	Q688264	PERKIN	ZINC	0.040		0.0478	mg/L	120	
ICS-A	Q688266	PERKIN	ZINC	1.00		0.994	mg/L	99	
Run: R322769 NALYTICAL	Analyst.: A STOCKBURGER Reviewer: S ENDERSON	Run Date...: 21-MAY-97 Review Date: 22-MAY-97	Instrument: ICP						
CCV	Q688846	INORGAN	ZINC	5.00		4.95	mg/L	99	
BLA01	Q688847	NA	ZINC			< 0.00800	mg/L		
ICV01	Q688849	PERKIN	ZINC	1		1.03	mg/L	103	
CDL01	Q688855	PERKIN	ZINC	0.040		0.0393	mg/L	98	
ICS-A	Q688859	PERKIN	ZINC	1.00		0.935	mg/L	94	
BLA02	Q687280	NA	ZINC			0.00968	mg/L		
LCS	Q687279	SPEX	ZINC	5.00		4.86	mg/L	97	
SPI02	Q687281	A408114	ZINC	0	0.500	0.510	mg/L	102	
DPS02	Q687282	A408114	ZINC	0	0.500	0.514	mg/L	103	1
SAMPLE	A408104		See Cert. of Analysis, Rep: 1						
SAMPLE	A408105		See Cert. of Analysis, Rep: 1						
SAMPLE	A408106		See Cert. of Analysis, Rep: 1						
SAMPLE	A408107		See Cert. of Analysis, Rep: 1						
SAMPLE	A408108		See Cert. of Analysis, Rep: 1						
SAMPLE	A408109		See Cert. of Analysis, Rep: 1						
SAMPLE	A408110		See Cert. of Analysis, Rep: 1						
SAMPLE	A408112		See Cert. of Analysis, Rep: 1						
SAMPLE	A408113		See Cert. of Analysis, Rep: 1						
CCV	Q688878	INORGAN	ZINC	5.00		5.10	mg/L	102	
BLA01	Q688882	NA	ZINC			< 0.00800	mg/L		
CDL01	Q688955	PERKIN	ZINC	0.040		0.0411	mg/L	103	
ICS-A	Q688966	PERKIN	ZINC	1.00		0.962	mg/L	96	

Comments

*0686489 * Spike is NA; Sample concentration is greater than four times the spike concentration. (Fe)*

HERITAGE ENVIRONMENTAL SERVICES, INC.

Comments

*Q686490 * Spike is NA; Sample concentration is greater than four times the spike concentration. (Fe)*

VOLATILE ORGANICS (CAPILLARY COLUMN) SW846-8260A 0510.6

Run: R322889 Analyst.: H WILLIAMS Run Date...: 22-MAY-97 Instrument: GC/MS VOA
ANALYTICAL Reviewer: A BRADBURN Review Date: 23-MAY-97

QC Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
CCV	Q689583		See Attached Report: g1440r.ind						
BLA01	Q689584		See Attached Report: x1441r.ind						
LCS01	Q689586		TRICHLOROETHENE	10		10.1	ug/L	101	
LCS01	Q689586		TETRACHLOROETHENE	10		9.23	ug/L	92.3	
SAMPLE	A407859		See Cert. of Analysis, Rep: 0						
SPI01	Q689591	A408259	BENZENE	0	10	11.2	ug/L	112	
SPI01	Q689591	A408259	CARBON TETRACHLORIDE	0	10	11.9	ug/L	119	
SPI01	Q689591	A408259	1,4-DICHLOROBENZENE (P-DICHLOROBENZE	0	10	10.5	ug/L	105	
SPI01	Q689591	A408259	1,2-DICHLOROETHANE	0	10	12.7	ug/L	127	
SPI01	Q689591	A408259	1,1-DICHLOROETHENE	27	10	36.2	ug/L	92	
SPI01	Q689591	A408259	1,1,1-TRICHLOROETHANE	84	10	95.1	ug/L	111	
SPI01	Q689591	A408259	TRICHLOROETHENE	1000	10	!* 926	ug/L		
SPI01	Q689591	A408259	VINYL CHLORIDE	0	10	12.3	ug/L	123	
SPI01	Q689591	A408259	BROMOMETHANE	0	10	11.9	ug/L	119	
SPI01	Q689591	A408259	CHLOROBENZENE	0	10	10.7	ug/L	107	
SPI01	Q689591	A408259	CHLOROETHANE	0	10	13.5	ug/L	135	
SPI01	Q689591	A408259	CHLOROFORM	1.3	10	11.8	ug/L	105	
SPI01	Q689591	A408259	CHLOROMETHANE	0	10	10.3	ug/L	103	
[illegible]I01	Q689591	A408259	1,2-DICHLOROBENZENE (O-DICHLOROBENZE	0	10	10.3	ug/L	103	
[illegible]I01	Q689591	A408259	TRANS-1,2-DICHLOROETHENE	0	10	10.4	ug/L	104	
SPI01	Q689591	A408259	CIS-1,2-DICHLOROETHENE	40	10	50.6	ug/L	106	
SPI01	Q689591	A408259	DICHLOROMETHANE (METHYLENE CHLORIDE)	1.4	10	13	ug/L	116	
SPI01	Q689591	A408259	1,1-DICHLOROETHANE	4.8	10	15.9	ug/L	111	
SPI01	Q689591	A408259	1,2-DICHLOROPROPANE	0	10	9.94	ug/L	99.4	
SPI01	Q689591	A408259	CIS-1,3-DICHLOROPROPENE	0	10	9.79	ug/L	97.9	
SPI01	Q689591	A408259	TRANS-1,3-DICHLOROPROPENE	0	10	10.1	ug/L	101	
SPI01	Q689591	A408259	ETHYL BENZENE	0	10	11.5	ug/L	115	
SPI01	Q689591	A408259	STYRENE	0	10	10.5	ug/L	105	
SPI01	Q689591	A408259	1,1,2-TRICHLOROETHANE	0	10	9.47	ug/L	94.7	
SPI01	Q689591	A408259	1,1,1,2-TETRACHLOROETHANE	0	10	11.3	ug/L	113	
SPI01	Q689591	A408259	1,1,2,2-TETRACHLOROETHANE	0	10	9.97	ug/L	99.7	
SPI01	Q689591	A408259	TETRACHLOROETHENE	480	10	!* 445	ug/L		
SPI01	Q689591	A408259	TOLUENE	0	10	9.07	ug/L	90.7	
SPI01	Q689591	A408259	TRICHLOROFLUOROMETHANE	0	10	13	ug/L	130	
DPS01	Q689592	A408259	BENZENE	0	10	11.5	ug/L	115	2.6
DPS01	Q689592	A408259	CARBON TETRACHLORIDE	0	10	11.6	ug/L	116	2.6
DPS01	Q689592	A408259	1,4-DICHLOROBENZENE (P-DICHLOROBENZE	0	10	11.6	ug/L	116	10
DPS01	Q689592	A408259	1,2-DICHLOROETHANE	0	10	13.2	ug/L	132	3.9
DPS01	Q689592	A408259	1,1-DICHLOROETHENE	27	10	36	ug/L	90	2.2
DPS01	Q689592	A408259	1,1,1-TRICHLOROETHANE	84	10	91.5	ug/L	75	38.7
DPS01	Q689592	A408259	TRICHLOROETHENE	1000	10	!* 930	ug/L		
DPS01	Q689592	A408259	VINYL CHLORIDE	0	10	12.8	ug/L	128	4
DPS01	Q689592	A408259	BROMOMETHANE	0	10	12.2	ug/L	122	2.5
DPS01	Q689592	A408259	CHLOROBENZENE	0	10	11.1	ug/L	111	3.7
[illegible]01	Q689592	A408259	CHLOROETHANE	0	10	13.4	ug/L	134	.7

HERITAGE ENVIRONMENTAL SERVICES, INC.

QC Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
DPS01	Q689592	A408259	CHLOROFORM	1.3	10	11.9	ug/L	106	.9
'S01	Q689592	A408259	CHLOROMETHANE	0	10	11.5	ug/L	115	11
/S01	Q689592	A408259	1,2-DICHLOROBENZENE (O-DICHLOROBENZE	0	10	11.4	ug/L	114	10.1
DPS01	Q689592	A408259	TRANS-1,2-DICHLOROETHENE	0	10	10.6	ug/L	106	1.9
DPS01	Q689592	A408259	CIS-1,2-DICHLOROETHENE	40	10	50.4	ug/L	104	1.9
DPS01	Q689592	A408259	DICHLOROMETHANE (METHYLENE CHLORIDE)	1.4	10	13	ug/L	116	0
DPS01	Q689592	A408259	1,1-DICHLOROETHANE	4.8	10	16.3	ug/L	115	3.5
DPS01	Q689592	A408259	1,2-DICHLOROPROPANE	0	10	10.6	ug/L	106	6.4
DPS01	Q689592	A408259	CIS-1,3-DICHLOROPROPENE	0	10	10.7	ug/L	107	8.9
DPS01	Q689592	A408259	TRANS-1,3-DICHLOROPROPENE	0	10	11.6	ug/L	116	13.8
DPS01	Q689592	A408259	ETHYL BENZENE	0	10	11.7	ug/L	117	1.7
DPS01	Q689592	A408259	STYRENE	0	10	11.1	ug/L	111	5.6
DPS01	Q689592	A408259	1,1,2-TRICHLOROETHANE	0	10	9.94	ug/L	99.4	4.8
DPS01	Q689592	A408259	1,1,1,2-TETRACHLOROETHANE	0	10	11.5	ug/L	115	1.8
DPS01	Q689592	A408259	1,1,2,2-TETRACHLOROETHANE	0	10	11.6	ug/L	116	15.1
DPS01	Q689592	A408259	TETRACHLOROETHENE	480	10	I* 434	ug/L		
DPS01	Q689592	A408259	TOLUENE	0	10	9.91	ug/L	99.1	8.9
DPS01	Q689592	A408259	TRICHLOROFLUOROMETHANE	0	10	12.5	ug/L	125	3.9

Run: R322895 Analyst.: H WILLIAMS Run Date...: 21-MAY-97 Instrument: GC/MS VOA
ANALYTICAL Reviewer: A BRADBURN Review Date: 22-MAY-97

CCV	Q689655		See Attached Report: g1420r.ind						
BLA01	Q689656		See Attached Report: g1421r.ind						
LCS01	Q689657		CHLOROETHANE	10		13	ug/L	130	
SAMPLE	A407830		See Cert. of Analysis, Rep: 0						
SAMPLE	A407861		See Cert. of Analysis, Rep: 0						
SAMPLE	A407862		See Cert. of Analysis, Rep: 0						
SAMPLE	A407863		See Cert. of Analysis, Rep: 0						
'MPLE	A407957		See Cert. of Analysis, Rep: 0						
AMPLE	A407958		See Cert. of Analysis, Rep: 0						
SAMPLE	A407959		See Cert. of Analysis, Rep: 0						
SPI01	Q689658	A407959	BENZENE	0	10	10.9	ug/L	109	
SPI01	Q689658	A407959	CARBON TETRACHLORIDE	0	10	11.5	ug/L	115	
SPI01	Q689658	A407959	1,4-DICHLOROBENZENE (P-DICHLOROBENZE	0	10	7.84	ug/L	78.4	
SPI01	Q689658	A407959	1,2-DICHLOROETHANE	0	10	12.7	ug/L	127	
SPI01	Q689658	A407959	1,1-DICHLOROETHENE	0	10	10.1	ug/L	101	
SPI01	Q689658	A407959	1,1,1-TRICHLOROETHANE	0	10	10.9	ug/L	109	
SPI01	Q689658	A407959	TRICHLOROETHENE	0	10	11	ug/L	110	
SPI01	Q689658	A407959	VINYL CHLORIDE	0	10	10.9	ug/L	109	
SPI01	Q689658	A407959	BROMOMETHANE	0	10	10.4	ug/L	104	
SPI01	Q689658	A407959	CHLOROBENZENE	0	10	10.1	ug/L	101	
SPI01	Q689658	A407959	CHLOROETHANE	0	10	12.2	ug/L	122	
SPI01	Q689658	A407959	CHLOROFORM	0	10	9.85	ug/L	98.5	
SPI01	Q689658	A407959	CHLOROMETHANE	0	10	10.4	ug/L	104	
SPI01	Q689658	A407959	1,2-DICHLOROBENZENE (O-DICHLOROBENZE	0	10	7.38	ug/L	73.8	
SPI01	Q689658	A407959	TRANS-1,2-DICHLOROETHENE	0	10	10.4	ug/L	104	
SPI01	Q689658	A407959	CIS-1,2-DICHLOROETHENE	0	10	10.1	ug/L	101	
SPI01	Q689658	A407959	DICHLOROMETHANE (METHYLENE CHLORIDE)	1.5	10	12.4	ug/L	109	
SPI01	Q689658	A407959	1,1-DICHLOROETHANE	0	10	10.8	ug/L	108	
SPI01	Q689658	A407959	1,2-DICHLOROPROPANE	0	10	11.1	ug/L	111	
SPI01	Q689658	A407959	CIS-1,3-DICHLOROPROPENE	0	10	10.4	ug/L	104	
SPI01	Q689658	A407959	TRANS-1,3-DICHLOROPROPENE	0	10	10.7	ug/L	107	
SPI01	Q689658	A407959	ETHYL BENZENE	0	10	10.4	ug/L	104	
SPI01	Q689658	A407959	STYRENE	0	10	9.77	ug/L	97.7	
I01	Q689658	A407959	1,1,2-TRICHLOROETHANE	0	10	10.6	ug/L	106	

HERITAGE ENVIRONMENTAL SERVICES, INC.

QC Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
SPI01	Q689658	A407959	1,1,1,2-TETRACHLOROETHANE	0	10	10.5	ug/L	105	
SPI01	Q689658	A407959	1,1,2,2-TETRACHLOROETHANE	0	10	9.52	ug/L	95.2	
SPI01	Q689658	A407959	TETRACHLOROETHENE	0	10	10.5	ug/L	105	
SPI01	Q689658	A407959	TOLUENE	0	10	10.2	ug/L	102	
SPI01	Q689658	A407959	TRICHLOROFLUOROMETHANE	0	10	12.2	ug/L	122	
DPS01	Q689659	A407959	BENZENE	0	10	11.4	ug/L	114	4.5
DPS01	Q689659	A407959	CARBON TETRACHLORIDE	0	10	10.9	ug/L	109	5.4
DPS01	Q689659	A407959	1,4-DICHLOROBENZENE (P-DICHLOROBENZE	0	10	10.1	ug/L	101	25.2
DPS01	Q689659	A407959	1,2-DICHLOROETHANE	0	10	13.9	ug/L	139	9
DPS01	Q689659	A407959	1,1-DICHLOROETHENE	0	10	11.1	ug/L	111	9.4
DPS01	Q689659	A407959	1,1,1-TRICHLOROETHANE	0	10	11.5	ug/L	115	5.4
DPS01	Q689659	A407959	TRICHLOROETHENE	0	10	11.1	ug/L	111	.9
DPS01	Q689659	A407959	VINYL CHLORIDE	0	10	13.4	ug/L	134	20.6
DPS01	Q689659	A407959	BROMOMETHANE	0	10	11.1	ug/L	111	6.5
DPS01	Q689659	A407959	CHLOROBENZENE	0	10	10.8	ug/L	108	6.7
DPS01	Q689659	A407959	CHLOROETHANE	0	10	I 14.5	ug/L	145	17.2
DPS01	Q689659	A407959	CHLOROFORM	0	10	11.2	ug/L	112	12.8
DPS01	Q689659	A407959	CHLOROMETHANE	0	10	11.9	ug/L	119	13.5
DPS01	Q689659	A407959	1,2-DICHLOROBENZENE (O-DICHLOROBENZE	0	10	10.9	ug/L	109	38.5
DPS01	Q689659	A407959	TRANS-1,2-DICHLOROETHENE	0	10	11.3	ug/L	113	8.3
DPS01	Q689659	A407959	CIS-1,2-DICHLOROETHENE	0	10	11	ug/L	110	8.5
DPS01	Q689659	A407959	DICHLOROMETHANE (METHYLENE CHLORIDE)	1.5	10	14.2	ug/L	127	15.3
DPS01	Q689659	A407959	1,1-DICHLOROETHANE	0	10	11.7	ug/L	117	8
DPS01	Q689659	A407959	1,2-DICHLOROPROPANE	0	10	12	ug/L	120	7.8
DPS01	Q689659	A407959	CIS-1,3-DICHLOROPROPENE	0	10	11.2	ug/L	112	7.4
DPS01	Q689659	A407959	TRANS-1,3-DICHLOROPROPENE	0	10	11.9	ug/L	119	10.6
DPS01	Q689659	A407959	ETHYL BENZENE	0	10	11	ug/L	110	5.6
DPS01	Q689659	A407959	STYRENE	0	10	11.6	ug/L	116	17.1
DPS01	Q689659	A407959	1,1,2-TRICHLOROETHANE	0	10	11.4	ug/L	114	7.3
DPS01	Q689659	A407959	1,1,1,2-TETRACHLOROETHANE	0	10	11.5	ug/L	115	9.1
DPS01	Q689659	A407959	1,1,2,2-TETRACHLOROETHANE	0	10	9.54	ug/L	95.4	.2
DPS01	Q689659	A407959	TETRACHLOROETHENE	0	10	11.2	ug/L	112	6.5
DPS01	Q689659	A407959	TOLUENE	0	10	10.9	ug/L	109	6.6
DPS01	Q689659	A407959	TRICHLOROFLUOROMETHANE	0	10	12.6	ug/L	126	3.2

Run: R323361 Analyst.: H WILLIAMS Run Date...: 23-MAY-97 Instrument: GC/MS VOA
ANALYTICAL Reviewer: B MAZUR Review Date: 27-MAY-97

CCV	Q691269		See Attached Report: g1460r.ind						
BLA01	Q691270		See Attached Report: g1461r.ind						
LCS01	Q691271		1,4-DICHLOROBENZENE (P-DICHLOROBENZE	10		11.2	ug/L	112	
LCS01	Q691271		1,2-DICHLOROBENZENE (O-DICHLOROBENZE	10		11.7	ug/L	117	
SAMPLE	A408110		See Cert. of Analysis, Rep: 0						
SAMPLE	A408112		See Cert. of Analysis, Rep: 0						
SAMPLE	A408113		See Cert. of Analysis, Rep: 0						
SAMPLE	A408114		See Cert. of Analysis, Rep: 0						
SAMPLE	A408115		See Cert. of Analysis, Rep: 0						
SAMPLE	A408116		See Cert. of Analysis, Rep: 0						
SAMPLE	A408118		See Cert. of Analysis, Rep: 0						
SPI01	Q691272	A407117	BENZENE	0	10	11	ug/L	110	
SPI01	Q691272	A407117	CARBON TETRACHLORIDE	0	10	11.5	ug/L	115	
SPI01	Q691272	A407117	1,4-DICHLOROBENZENE (P-DICHLOROBENZE	0	10	I 5.58	ug/L	55.8	
SPI01	Q691272	A407117	1,2-DICHLOROETHANE	0	10	12.6	ug/L	126	
SPI01	Q691272	A407117	1,1-DICHLOROETHENE	0	10	11.2	ug/L	112	
SPI01	Q691272	A407117	1,1,1-TRICHLOROETHANE	0	10	11.4	ug/L	114	
SPI01	Q691272	A407117	TRICHLOROETHENE	0	10	11.1	ug/L	111	

HERITAGE ENVIRONMENTAL SERVICES, INC.

QC Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
SPI01	Q691272	A407117	VINYL CHLORIDE	0	10	12.7	ug/L	127	
SPI01	Q691272	A407117	BROMOMETHANE	0	10	12.4	ug/L	124	
SPI01	Q691272	A407117	CHLOROBENZENE	0	10	9.95	ug/L	99.5	
SPI01	Q691272	A407117	CHLOROETHANE	0	10	14.4	ug/L	144	
SPI01	Q691272	A407117	CHLOROFORM	0	10	10.5	ug/L	105	
SPI01	Q691272	A407117	CHLOROMETHANE	0	10	10.6	ug/L	106	
SPI01	Q691272	A407117	1,2-DICHLOROBENZENE (O-DICHLOROBENZE	0	10	5.33	ug/L	53.3	
SPI01	Q691272	A407117	TRANS-1,2-DICHLOROETHENE	0	10	10.9	ug/L	109	
SPI01	Q691272	A407117	CIS-1,2-DICHLOROETHENE	0	10	10.1	ug/L	101	
SPI01	Q691272	A407117	DICHLOROMETHANE (METHYLENE CHLORIDE)	0.84	10	12.9	ug/L	120.6	
SPI01	Q691272	A407117	1,1-DICHLOROETHANE	0	10	11.4	ug/L	114	
SPI01	Q691272	A407117	1,2-DICHLOROPROPANE	0	10	11.1	ug/L	111	
SPI01	Q691272	A407117	CIS-1,3-DICHLOROPROPENE	0	10	10.2	ug/L	102	
SPI01	Q691272	A407117	TRANS-1,3-DICHLOROPROPENE	0	10	10.9	ug/L	109	
SPI01	Q691272	A407117	ETHYL BENZENE	0	10	9.73	ug/L	97.3	
SPI01	Q691272	A407117	STYRENE	0	10	8.87	ug/L	88.7	
SPI01	Q691272	A407117	1,1,2-TRICHLOROETHANE	0	10	10.9	ug/L	109	
SPI01	Q691272	A407117	1,1,1,2-TETRACHLOROETHANE	0	10	10.8	ug/L	108	
SPI01	Q691272	A407117	1,1,2,2-TETRACHLOROETHANE	0	10	11.1	ug/L	111	
SPI01	Q691272	A407117	TETRACHLOROETHENE	0	10	10.9	ug/L	109	
SPI01	Q691272	A407117	TOLUENE	0	10	9.98	ug/L	99.8	
SPI01	Q691272	A407117	TRICHLOROFLUOROMETHANE	0	10	13.7	ug/L	137	
DPS01	Q691273	A407117	BENZENE	0	10	10.7	ug/L	107	2.8
DPS01	Q691273	A407117	CARBON TETRACHLORIDE	0	10	10.5	ug/L	105	9.1
DPS01	Q691273	A407117	1,4-DICHLOROBENZENE (P-DICHLOROBENZE	0	10	9.8	ug/L	98	54.9
DPS01	Q691273	A407117	1,2-DICHLOROETHANE	0	10	13.1	ug/L	131	3.9
DPS01	Q691273	A407117	1,1-DICHLOROETHENE	0	10	10.4	ug/L	104	7.4
DPS01	Q691273	A407117	1,1,1-TRICHLOROETHANE	0	10	11.5	ug/L	115	.9
DPS01	Q691273	A407117	TRICHLOROETHENE	0	10	10.7	ug/L	107	3.7
DPS01	Q691273	A407117	VINYL CHLORIDE	0	10	11	ug/L	110	14.3
DPS01	Q691273	A407117	BROMOMETHANE	0	10	10.3	ug/L	103	18.5
DPS01	Q691273	A407117	CHLOROBENZENE	0	10	10.4	ug/L	104	4.4
DPS01	Q691273	A407117	CHLOROETHANE	0	10	12.2	ug/L	122	16.5
DPS01	Q691273	A407117	CHLOROFORM	0	10	10.9	ug/L	109	3.7
DPS01	Q691273	A407117	CHLOROMETHANE	0	10	10.4	ug/L	104	1.9
DPS01	Q691273	A407117	1,2-DICHLOROBENZENE (O-DICHLOROBENZE	0	10	10.3	ug/L	103	63.6
DPS01	Q691273	A407117	TRANS-1,2-DICHLOROETHENE	0	10	10.2	ug/L	102	6.6
DPS01	Q691273	A407117	CIS-1,2-DICHLOROETHENE	0	10	10.7	ug/L	107	5.8
DPS01	Q691273	A407117	DICHLOROMETHANE (METHYLENE CHLORIDE)	0.84	10	13.1	ug/L	122.6	1.6
DPS01	Q691273	A407117	1,1-DICHLOROETHANE	0	10	10.9	ug/L	109	4.5
DPS01	Q691273	A407117	1,2-DICHLOROPROPANE	0	10	11.4	ug/L	114	2.7
DPS01	Q691273	A407117	CIS-1,3-DICHLOROPROPENE	0	10	10.5	ug/L	105	2.9
DPS01	Q691273	A407117	TRANS-1,3-DICHLOROPROPENE	0	10	10.9	ug/L	109	0
DPS01	Q691273	A407117	ETHYL BENZENE	0	10	10.5	ug/L	105	7.6
DPS01	Q691273	A407117	STYRENE	0	10	11.1	ug/L	111	22.3
DPS01	Q691273	A407117	1,1,2-TRICHLOROETHANE	0	10	10.4	ug/L	104	4.7
DPS01	Q691273	A407117	1,1,1,2-TETRACHLOROETHANE	0	10	11.3	ug/L	113	4.5
DPS01	Q691273	A407117	1,1,2,2-TETRACHLOROETHANE	0	10	9.36	ug/L	93.6	17
DPS01	Q691273	A407117	TETRACHLOROETHENE	0	10	9.94	ug/L	99.4	9.2
DPS01	Q691273	A407117	TOLUENE	0	10	9.75	ug/L	97.5	2.3
DPS01	Q691273	A407117	TRICHLOROFLUOROMETHANE	0	10	11.8	ug/L	118	14.9

HERITAGE ENVIRONMENTAL SERVICES, INC.

Run: R323365 Analyst.: B MAZUR Run Date...: 27-MAY-97 Instrument: GC/MS VOA
ANALYTICAL Reviewer: A BRADBURN Review Date: 28-MAY-97

Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
CCV	Q691301		See Attached Report: g0000l.ind						
BLA01	Q691302		See Attached Report: g0001l.ind						
LCS01	Q691303		1,1,2,2-TETRACHLOROETHANE	20		21.8	ug/L	109	
SAMPLE	A408108		See Cert. of Analysis, Rep: 0						
SPI01	Q691304	A408108	BENZENE	0	50	52.1	ug/L	104.2	
SPI01	Q691304	A408108	CARBON TETRACHLORIDE	0	50	54.3	ug/L	108.6	
SPI01	Q691304	A408108	1,4-DICHLOROBENZENE (P-DICHLOROBENZE	0	50	48.5	ug/L	97	
SPI01	Q691304	A408108	1,2-DICHLOROETHANE	0	50	57.6	ug/L	115.2	
SPI01	Q691304	A408108	1,1-DICHLOROETHENE	0	50	47.9	ug/L	95.8	
SPI01	Q691304	A408108	1,1,1-TRICHLOROETHANE	0	50	51.8	ug/L	103.6	
SPI01	Q691304	A408108	TRICHLOROETHENE	0	50	51.8	ug/L	103.6	
SPI01	Q691304	A408108	VINYL CHLORIDE	0	50	45.2	ug/L	90.4	
SPI01	Q691304	A408108	BROMOMETHANE	0	50	52.7	ug/L	105.4	
SPI01	Q691304	A408108	CHLOROBENZENE	0	50	50.7	ug/L	101.4	
SPI01	Q691304	A408108	CHLOROETHANE	0	50	45.3	ug/L	90.6	
SPI01	Q691304	A408108	CHLOROFORM	0	50	51.7	ug/L	103.4	
SPI01	Q691304	A408108	CHLOROMETHANE	0	50	44.9	ug/L	89.8	
SPI01	Q691304	A408108	1,2-DICHLOROBENZENE (O-DICHLOROBENZE	0	50	57.2	ug/L	114.4	
SPI01	Q691304	A408108	TRANS-1,2-DICHLOROETHENE	0	50	53.1	ug/L	106.2	
SPI01	Q691304	A408108	CIS-1,2-DICHLOROETHENE	0	50	51.7	ug/L	103.4	
SPI01	Q691304	A408108	DICHLOROMETHANE (METHYLENE CHLORIDE)	0	50	52.7	ug/L	105.4	
SPI01	Q691304	A408108	1,1-DICHLOROETHANE	0	50	52.4	ug/L	104.8	
SPI01	Q691304	A408108	1,2-DICHLOROPROPANE	0	50	53.2	ug/L	106.4	
SPI01	Q691304	A408108	CIS-1,3-DICHLOROPROPENE	0	50	53.6	ug/L	107.2	
SPI01	Q691304	A408108	TRANS-1,3-DICHLOROPROPENE	0	50	53.5	ug/L	107	
I01	Q691304	A408108	ETHYL BENZENE	0	50	53.3	ug/L	106.6	
SPI01	Q691304	A408108	STYRENE	0	50	43.4	ug/L	86.8	
SPI01	Q691304	A408108	1,1,2-TRICHLOROETHANE	0	50	53.2	ug/L	106.4	
SPI01	Q691304	A408108	1,1,1,2-TETRACHLOROETHANE	0	50	52.5	ug/L	105	
SPI01	Q691304	A408108	1,1,2,2-TETRACHLOROETHANE	0	50	1 69.7	ug/L	139.4	
SPI01	Q691304	A408108	TETRACHLOROETHENE	0	50	52.2	ug/L	104.4	
SPI01	Q691304	A408108	TOLUENE	0	50	51	ug/L	102	
SPI01	Q691304	A408108	TRICHLOROFLUOROMETHANE	0	50	47.8	ug/L	95.6	
DPS01	Q691305	A408108	BENZENE	0	50	51.5	ug/L	103	1.2
DPS01	Q691305	A408108	CARBON TETRACHLORIDE	0	50	53.7	ug/L	107.4	1.1
DPS01	Q691305	A408108	1,4-DICHLOROBENZENE (P-DICHLOROBENZE	0	50	49.2	ug/L	98.4	1.4
DPS01	Q691305	A408108	1,2-DICHLOROETHANE	0	50	56.2	ug/L	112.4	2.5
DPS01	Q691305	A408108	1,1-DICHLOROETHENE	0	50	49.5	ug/L	99	3.3
DPS01	Q691305	A408108	1,1,1-TRICHLOROETHANE	0	50	52.7	ug/L	105.4	1.7
DPS01	Q691305	A408108	TRICHLOROETHENE	0	50	51.1	ug/L	102.2	1.4
DPS01	Q691305	A408108	VINYL CHLORIDE	0	50	46.8	ug/L	93.6	3.5
DPS01	Q691305	A408108	BROMOMETHANE	0	50	59.7	ug/L	119.4	12.5
DPS01	Q691305	A408108	CHLOROBENZENE	0	50	50.4	ug/L	100.8	.6
DPS01	Q691305	A408108	CHLOROETHANE	0	50	46.9	ug/L	93.8	3.5
DPS01	Q691305	A408108	CHLOROFORM	0	50	52.3	ug/L	104.6	1.2
DPS01	Q691305	A408108	CHLOROMETHANE	0	50	44.7	ug/L	89.4	.4
DPS01	Q691305	A408108	1,2-DICHLOROBENZENE (O-DICHLOROBENZE	0	50	48.1	ug/L	96.2	17.3
DPS01	Q691305	A408108	TRANS-1,2-DICHLOROETHENE	0	50	54.9	ug/L	109.8	3.3
DPS01	Q691305	A408108	CIS-1,2-DICHLOROETHENE	0	50	51.6	ug/L	103.2	.2
DPS01	Q691305	A408108	DICHLOROMETHANE (METHYLENE CHLORIDE)	0	50	51.5	ug/L	103	2.3
DPS01	Q691305	A408108	1,1-DICHLOROETHANE	0	50	52.4	ug/L	104.8	0
S01	Q691305	A408108	1,2-DICHLOROPROPANE	0	50	52.2	ug/L	104.4	1.9

HERITAGE ENVIRONMENTAL SERVICES, INC.

QC Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
DPS01	Q691305	A408108	CIS-1,3-DICHLOROPROPENE	0	50	51.2	ug/L	102.4	4.6
DPS01	Q691305	A408108	TRANS-1,3-DICHLOROPROPENE	0	50	51.1	ug/L	102.2	4.6
DPS01	Q691305	A408108	ETHYL BENZENE	0	50	52.6	ug/L	105.2	1.3
DPS01	Q691305	A408108	STYRENE	0	50	52.2	ug/L	104.4	18.4
DPS01	Q691305	A408108	1,1,2-TRICHLOROETHANE	0	50	50.1	ug/L	100.2	6
DPS01	Q691305	A408108	1,1,1,2-TETRACHLOROETHANE	0	50	51.7	ug/L	103.4	1.5
DPS01	Q691305	A408108	1,1,2,2-TETRACHLOROETHANE	0	50	47.7	ug/L	95.4	37.5
DPS01	Q691305	A408108	TETRACHLOROETHENE	0	50	51.3	ug/L	102.6	1.7
DPS01	Q691305	A408108	TOLUENE	0	50	50.1	ug/L	100.2	1.8
DPS01	Q691305	A408108	TRICHLOROFLUOROMETHANE	0	50	48.3	ug/L	96.6	1
SAMPLE	A408109		See Cert. of Analysis, Rep: 0						
SAMPLE	A408107		See Cert. of Analysis, Rep: 0						
SAMPLE	A407960		See Cert. of Analysis, Rep: 0						
SAMPLE	A407961		See Cert. of Analysis, Rep: 0						
SAMPLE	A407962		See Cert. of Analysis, Rep: 0						
SAMPLE	A408104		See Cert. of Analysis, Rep: 0						

Run: R323480 Analyst.: H WILLIAMS Run Date...: 27-MAY-97 Instrument: GC/MS VOA
ANALYTICAL Reviewer: A BRADBURN Review Date: 29-MAY-97

CCV	Q691990		See Attached Report: g1481r.ind						
BLA01	Q691991		See Attached Report: g1482r.ind						
SAMPLE	A408117		See Cert. of Analysis, Rep: 0						
SPI01	Q691993	A408527	BENZENE	0	10	10.8	ug/L	108	
SPI01	Q691993	A408527	TRICHLOROETHENE	0	10	10.4	ug/L	104	
SPI01	Q691993	A408527	TRANS-1,2-DICHLOROETHENE	0	10	10.4	ug/L	104	
SPI01	Q691993	A408527	CIS-1,2-DICHLOROETHENE	0	10	10.7	ug/L	107	
SPI01	Q691993	A408527	DICHLOROMETHANE (METHYLENE CHLORIDE)	0.57	10	13.2	ug/L	126.3	
SPI01	Q691993	A408527	1,1-DICHLOROETHANE	0	10	11.7	ug/L	117	
SPI01	Q691993	A408527	TETRACHLOROETHENE	0	10	9.44	ug/L	94.4	
DPS01	Q691994	A408527	BENZENE	0	10	11.5	ug/L	115	6.3
DPS01	Q691994	A408527	TRICHLOROETHENE	0	10	11.1	ug/L	111	6.5
DPS01	Q691994	A408527	TRANS-1,2-DICHLOROETHENE	0	10	11.3	ug/L	113	8.3
DPS01	Q691994	A408527	CIS-1,2-DICHLOROETHENE	0	10	10.9	ug/L	109	1.9
DPS01	Q691994	A408527	DICHLOROMETHANE (METHYLENE CHLORIDE)	0.57	10	13.2	ug/L	126.3	0
DPS01	Q691994	A408527	1,1-DICHLOROETHANE	0	10	12	ug/L	120	2.5
DPS01	Q691994	A408527	TETRACHLOROETHENE	0	10	9.8	ug/L	98	3.7

Run: R323764 Analyst.: B MAZUR Run Date...: 29-MAY-97 Instrument: GC/MS VOA
ANALYTICAL Reviewer: A BRADBURN Review Date: 30-MAY-97

CCV	Q693273		See Attached Report: g0040l.ind						
BLA01	Q693274		See Attached Report: g0041l.ind						
SAMPLE	A408105		See Cert. of Analysis, Rep: 0						
LCS01	Q693275		BENZENE	20		22.7	ug/L	113.5	
LCS01	Q693275		CARBON TETRACHLORIDE	20		23.6	ug/L	118	
LCS01	Q693275		1,4-DICHLOROBENZENE (P-DICHLOROBENZE	20		18.8	ug/L	94	
LCS01	Q693275		1,2-DICHLOROETHANE	20		24.7	ug/L	123.5	
LCS01	Q693275		1,1-DICHLOROETHENE	20		24.5	ug/L	122.5	
LCS01	Q693275		1,1,1-TRICHLOROETHANE	20		22.7	ug/L	113.5	
LCS01	Q693275		TRICHLOROETHENE	20		22.6	ug/L	113	
LCS01	Q693275		VINYL CHLORIDE	20		26.2	ug/L	131	
LCS01	Q693275		BROMOMETHANE	20		24.8	ug/L	124	
LCS01	Q693275		CHLOROBENZENE	20		19.8	ug/L	99	
LCS01	Q693275		CHLOROETHANE	20		25	ug/L	125	
LCS01	Q693275		CHLOROFORM	20		23	ug/L	115	
LCS01	Q693275		CHLOROMETHANE	20		16.9	ug/L	84.5	
LCS01	Q693275		1,2-DICHLOROBENZENE (O-DICHLOROBENZE	20		19.2	ug/L	96	

HERITAGE ENVIRONMENTAL SERVICES, INC.

QC Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
LCS01	Q693275		TRANS-1,2-DICHLOROETHENE	20		24.9	ug/L	124.5	
S01	Q693275		CIS-1,2-DICHLOROETHENE	20		23.4	ug/L	117	
LCS01	Q693275		DICHLOROMETHANE (METHYLENE CHLORIDE)	20		22.8	ug/L	114	
LCS01	Q693275		1,1-DICHLOROETHANE	20		22.7	ug/L	113.5	
LCS01	Q693275		1,2-DICHLOROPROPANE	20		23.6	ug/L	118	
LCS01	Q693275		CIS-1,3-DICHLOROPROPENE	20		18.7	ug/L	93.5	
LCS01	Q693275		TRANS-1,3-DICHLOROPROPENE	20		20.2	ug/L	101	
LCS01	Q693275		ETHYL BENZENE	20		22.2	ug/L	111	
LCS01	Q693275		STYRENE	20		19.6	ug/L	98	
LCS01	Q693275		1,1,2-TRICHLOROETHANE	20		21.8	ug/L	109	
LCS01	Q693275		1,1,1,2-TETRACHLOROETHANE	20		21.7	ug/L	108.5	
LCS01	Q693275		1,1,2,2-TETRACHLOROETHANE	20		22	ug/L	110	
LCS01	Q693275		TETRACHLOROETHENE	20		22.2	ug/L	111	
LCS01	Q693275		TOLUENE	20		21.9	ug/L	109.5	
LCS01	Q693275		TRICHLOROFLUOROMETHANE	20		24	ug/L	120	

Run: R323785 Analyst.: B MAZUR Run Date...: 21-MAY-97 Instrument: GC/MS VOA
ANALYTICAL Reviewer: A BRADBURN Review Date: 30-MAY-97

CCV	Q693297		See Attached Report: g9960l.ind						
BLA01	Q693298		See Attached Report: g9961l.ind						
LCS01	Q693299		BROMOMETHANE	20		12.7	ug/L	63.5	
SPI01	Q693300	A407960	BENZENE	0	50	46.5	ug/L	93	
SPI01	Q693300	A407960	CARBON TETRACHLORIDE	0	50	46.5	ug/L	93	
SPI01	Q693300	A407960	1,4-DICHLOROBENZENE (P-DICHLOROBENZE	0	50	48.9	ug/L	97.8	
SPI01	Q693300	A407960	1,2-DICHLOROETHANE	0	50	47.8	ug/L	95.6	
SPI01	Q693300	A407960	1,1-DICHLOROETHENE	0	50	42.8	ug/L	85.6	
SPI01	Q693300	A407960	1,1,1-TRICHLOROETHANE	0	50	51.4	ug/L	102.8	
SPI01	Q693300	A407960	TRICHLOROETHENE	0	50	47.1	ug/L	94.2	
SPI01	Q693300	A407960	VINYL CHLORIDE	0	50	43.8	ug/L	87.6	
SPI01	Q693300	A407960	BROMOMETHANE	0	50	23	ug/L	46	
SPI01	Q693300	A407960	CHLOROBENZENE	0	50	46.5	ug/L	93	
SPI01	Q693300	A407960	CHLOROETHANE	0	50	48.5	ug/L	97	
SPI01	Q693300	A407960	CHLOROFORM	0	50	49.8	ug/L	99.6	
SPI01	Q693300	A407960	CHLOROMETHANE	0	50	59.4	ug/L	118.8	
SPI01	Q693300	A407960	1,2-DICHLOROBENZENE (O-DICHLOROBENZE	0	50	50	ug/L	100	
SPI01	Q693300	A407960	TRANS-1,2-DICHLOROETHENE	0	50	42.6	ug/L	85.2	
SPI01	Q693300	A407960	CIS-1,2-DICHLOROETHENE	0	50	47.1	ug/L	94.2	
SPI01	Q693300	A407960	DICHLOROMETHANE (METHYLENE CHLORIDE)	0	50	43.9	ug/L	87.8	
SPI01	Q693300	A407960	1,1-DICHLOROETHANE	0	50	50.6	ug/L	101.2	
SPI01	Q693300	A407960	1,2-DICHLOROPROPANE	0	50	47.7	ug/L	95.4	
SPI01	Q693300	A407960	CIS-1,3-DICHLOROPROPENE	0	50	46.9	ug/L	93.8	
SPI01	Q693300	A407960	TRANS-1,3-DICHLOROPROPENE	0	50	46.5	ug/L	93	
SPI01	Q693300	A407960	ETHYL BENZENE	0	50	47.6	ug/L	95.2	
SPI01	Q693300	A407960	STYRENE	0	50	43.5	ug/L	87	
SPI01	Q693300	A407960	1,1,2-TRICHLOROETHANE	0	50	51.6	ug/L	103.2	
SPI01	Q693300	A407960	1,1,1,2-TETRACHLOROETHANE	0	50	46.4	ug/L	92.8	
SPI01	Q693300	A407960	1,1,2,2-TETRACHLOROETHANE	0	50	63.7	ug/L	127.4	
SPI01	Q693300	A407960	TETRACHLOROETHENE	0	50	47.9	ug/L	95.8	
SPI01	Q693300	A407960	TOLUENE	0	50	46.4	ug/L	92.8	
SPI01	Q693300	A407960	TRICHLOROFLUOROMETHANE	0	50	48.1	ug/L	96.2	
DPS01	Q693301	A407960	BENZENE	0	50	48.6	ug/L	97.2	4.4
DPS01	Q693301	A407960	CARBON TETRACHLORIDE	0	50	48	ug/L	96	3.2
DPS01	Q693301	A407960	1,4-DICHLOROBENZENE (P-DICHLOROBENZE	0	50	51.1	ug/L	102.2	4.4
DPS01	Q693301	A407960	1,2-DICHLOROETHANE	0	50	49.2	ug/L	98.4	2.9
DPS01	Q693301	A407960	1,1-DICHLOROETHENE	0	50	46.5	ug/L	93	8.3

HERITAGE ENVIRONMENTAL SERVICES, INC.

QC Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
DPS01	Q693301	A407960	1,1,1-TRICHLOROETHANE	0	50	54.2	ug/L	108.4	5.3
DPS01	Q693301	A407960	TRICHLOROETHENE	0	50	48.5	ug/L	97	2.9
DPS01	Q693301	A407960	VINYL CHLORIDE	0	50	47.9	ug/L	95.8	8.9
DPS01	Q693301	A407960	BROMOMETHANE	0	50	! 29.4	ug/L	58.8	24.4
DPS01	Q693301	A407960	CHLOROBENZENE	0	50	48.1	ug/L	96.2	3.4
DPS01	Q693301	A407960	CHLOROETHANE	0	50	52.6	ug/L	105.2	8.1
DPS01	Q693301	A407960	CHLOROFORM	0	50	52.2	ug/L	104.4	4.7
DPS01	Q693301	A407960	CHLOROMETHANE	0	50	62.3	ug/L	124.6	4.8
DPS01	Q693301	A407960	1,2-DICHLOROBENZENE (O-DICHLOROBENZE	0	50	51.8	ug/L	103.6	3.5
DPS01	Q693301	A407960	TRANS-1,2-DICHLOROETHENE	0	50	46.1	ug/L	92.2	7.9
DPS01	Q693301	A407960	CIS-1,2-DICHLOROETHENE	0	50	49.8	ug/L	99.6	5.6
DPS01	Q693301	A407960	DICHLOROMETHANE (METHYLENE CHLORIDE)	0	50	46.7	ug/L	93.4	6.2
DPS01	Q693301	A407960	1,1-DICHLOROETHANE	0	50	53.3	ug/L	106.6	5.2
DPS01	Q693301	A407960	1,2-DICHLOROPROPANE	0	50	49.4	ug/L	98.8	3.5
DPS01	Q693301	A407960	CIS-1,3-DICHLOROPROPENE	0	50	46.8	ug/L	93.6	.2
DPS01	Q693301	A407960	TRANS-1,3-DICHLOROPROPENE	0	50	47.2	ug/L	94.4	1.5
DPS01	Q693301	A407960	ETHYL BENZENE	0	50	41.5	ug/L	83	13.7
DPS01	Q693301	A407960	STYRENE	0	50	47.1	ug/L	94.2	7.9
DPS01	Q693301	A407960	1,1,2-TRICHLOROETHANE	0	50	49.6	ug/L	99.2	4
DPS01	Q693301	A407960	1,1,1,2-TETRACHLOROETHANE	0	50	48.7	ug/L	97.4	4.8
DPS01	Q693301	A407960	1,1,2,2-TETRACHLOROETHANE	0	50	57.8	ug/L	115.6	9.7
DPS01	Q693301	A407960	TETRACHLOROETHENE	0	50	49.9	ug/L	99.8	4.1
DPS01	Q693301	A407960	TOLUENE	0	50	47.5	ug/L	95	2.3
DPS01	Q693301	A407960	TRICHLOROFLUOROMETHANE	0	50	52.6	ug/L	105.2	8.9
SAMPLE	A408106		See Cert. of Analysis, Rep: 0						

Comments

Q689591 ! Advisory limits from laboratory generated data.
** Concentration in sample exceeds linear range.*
Q689592 ! Advisory limits from laboratory generated data.
** Concentration in sample exceeds linear range.*
Q689658 ! Advisory limits from laboratory generated data.
Q689659 ! Advisory limits from laboratory generated data.
Q691272 ! Advisory limits from laboratory generated data.
Q691273 ! Advisory limits from laboratory generated data.
Q691304 ! Advisory limits from laboratory generated data.
Q691994 ! Advisory limits from laboratory generated data.
Q693275 LCS IS THE WATER QC FOR THIS ANALYTICAL RUN.
QC PASSES FOR TARGETS.
Q693300 ! Advisory limits from laboratory generated data.
Q693301 ! Advisory limits from laboratory generated data.

Approved by: P.K. Spence

Continuing Calibration Report

Data File : C:\HPCHEM\L052797\0000L.D
Acq On : 27 May 97 9:08
Sample : VSTD050 8260
Misc :
MS Integration Params: rteint.p

Vial: 1
Operator: bethm
Inst : GC/MS #11
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260L.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Fri Apr 25 10:23:26 1997
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

cal 10 = 9993L.D cal 20 = 9994L.D cal 50 = 9995L.D
cal100 = 9996L.D cal200 = 9997L.D

		Compound	AvgRF	CCRF	%Dev
1	I	PENTAFLUOROBENZENE	1.00000	1.00000	0.0
2		Dichlorodifluoromethane	0.29062	0.22395	22.9#
3	P	Chloromethane	0.32669	0.32167	1.5
4	C	VINYL CHLORIDE	0.19141	0.17369	9.3
5		Bromomethane	0.08054	0.08062	0.1
6		Chloroethane	0.16443	0.15749	4.2
7		Trichlorofluoromethane	0.61279	0.58371	4.7
8		Acrolein	0.00948	0.01135	19.7
9		Diethyl Ether	0.18433	0.18387	0.2
10		Acetone	0.09859	0.18612	88.8#
11	CM	1,1-DICHLOROETHENE	0.28560	0.29043	1.7
12		Methylene Chloride	0.34544	0.35771	3.6
13		Acrylonitrile	0.02912	0.04124	41.6#
14		Carbon Disulfide	0.76024	0.78454	3.2
15		Vinyl Acetate	0.15394	0.15454	0.4
16		trans-1,2-Dichloroethene	0.31484	0.28922	8.1
17	P	1,1-Dichloroethane	0.65089	0.66880	2.8
18		Methyl-t-butyl Ether	0.83738	0.88489	5.7
19		Diispropyl Ether	1.08779	1.12507	3.4
20		2-Butanone	0.17777	0.26840	51.0#
21		cis-1,2-Dichloroethene	0.35776	0.37631	5.2
22	C	CHLOROFORM	0.76410	0.77049	0.8
23		Bromochloromethane	0.26553	0.27455	3.4
24		2,2-Dichloropropane	0.52913	0.56248	6.3
25		Tetrahyrofuran	0.06307	0.07783	23.4#
26		1,1,1-Trichloroethane	0.61028	0.61779	1.2
27		Iodomethane	0.03614	0.02575	28.7#
28	I	1,4-DIFLUOROBENZENE	1.00000	1.00000	0.0
29		1,1-Dichloropropene	0.47347	0.50546	6.8
30	S	1,2-Dichloroethane-d4	0.42718	0.44442	4.0
31		Carbon Tetrachloride	0.48190	0.53721	11.5
32		1,2-Dichloroethane	0.47468	0.53084	11.8
33	M	Benzene	0.84667	0.86978	2.7
	M	Trichloroethene	0.43785	0.47906	9.4
35	C	1,2-DICHLOROPROPANE	0.39342	0.40891	3.9
36		Bromodichloromethane	0.72242	0.78193	8.2
37		Dibromomethane	0.41554	0.45213	8.8
38		4-Methyl-2-Pentanone	0.43518	0.62231	43.0#
39		2-Chloroethylvinylether	0.15971	0.22508	40.9#

Continuing Calibration Report

Data File : C:\HPCHEM\L052797\0000L.D
Acq On : 27 May 97 9:08
Sample : VSTD050 8260
Misc :
MS Integration Params: rteint.p

Vial: 1
Operator: bethm
Inst : GC/MS #11
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260L.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Fri Apr 25 10:23:26 1997
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

cal 10 = 9993L.D cal 20 = 9994L.D cal 50 = 9995L.D
cal100 = 9996L.D cal200 = 9997L.D

		Compound	AvgRF	CCRF	%Dev
40		cis-1,3-Dichloropropene	0.43060	0.49576	15.1
41	S	Toluene-d8	0.99270	0.97984	1.3
42	CM	TOLUENE	0.97134	1.00623	3.6
43		trans-1,3-Dichloropropene	0.51319	0.55786	8.7
44		1,1,2-Trichloroethane	0.38778	0.43823	13.0
45		1,2-Dibromoethane	0.60240	0.68633	13.9
46	I	CHLOROBENZENE-d5	1.00000	1.00000	0.0
47	S	4-Bromofluorobenzene	0.76769	0.79401	3.4
[illegible]		2-Hexanone	0.37588	0.57551	53.1#
49		1,3-Dichloropropane	0.70427	0.77530	10.1
50		Tetrachloroethene	0.64088	0.69321	8.2
51		Dibromochloromethane	0.79028	0.88524	12.0
52	PM	Chlorobenzene	1.01711	1.07510	5.7
53		1,1,1,2-Tetrachloroethane	0.52275	0.58176	11.3
54	C	ETHYL BENZENE	0.41654	0.45296	8.7
55		m,p-Xylene	0.56249	0.56298	0.1
56		o-Xylene	0.60072	0.59777	0.5
57		Styrene	0.78485	0.84234	7.3
58	P	Bromoform	0.64095	0.75446	17.7
59	I	1,4-Dichlorobenzene-d4	1.00000	1.00000	0.0
60		Isopropylbenzene	3.15607	3.16427	0.3
61		trans-1,4-Dichloro-2-butene	0.26916	0.37146	38.0#
62	P	1,1,2,2-Tetrachloroethane	1.90224	2.12712	11.8
63		Bromobenzene	2.00559	1.97405	1.6
64		1,2,3-Trichloropropane	0.48400	0.56159	16.0
65		n-Propylbenzene	0.46479	0.46216	0.6
66		1,3,5-Trimethylbenzene	2.53955	2.54198	0.1
67		2-Chlorotoluene	0.90904	0.86828	4.5
68		4-Chlorotoluene	0.76483	0.80135	4.8
69		t-Butylbenzene	2.97429	2.88556	3.0
70		1,2,4-Trimethylbenzene	2.32509	2.34828	1.0
71		sec-Butylbenzene	3.62530	3.76054	3.7
[illegible]		p-Isopropyltoluene	2.59061	2.63753	1.8
73		1,3-Dichlorobenzene	1.78461	1.84689	3.5
74		1,4-Dichlorobenzene	1.61342	1.61859	0.3
75		n-Butylbenzene	1.37650	1.32823	3.5
76		1,2-Dichlorobenzene	1.79611	1.80128	0.3
77		1,2-Dibromo-3-chloropropane	0.51381	0.61855	20.4#
78		1,2,4-Trichlorobenzene	1.29794	1.26553	2.5

Continuing Calibration Report

Data File : C:\HPCHEM\L052797\0000L.D
Acq On : 27 May 97 9:08
Sample : VSTD050 8260
Misc :
MS Integration Params: rteint.p

Vial: 1
Operator: bethm
Inst : GC/MS #11
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260L.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Fri Apr 25 10:23:26 1997
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

cal 10 = 9993L.D cal 20 = 9994L.D cal 50 = 9995L.D
cal100 = 9996L.D cal200 = 9997L.D

	Compound	AvgRF	CCRF	%Dev
79	Naphthalene	2.05672	1.99389	3.1
80	Hexachlorobutadiene	0.98745	1.03162	4.5
81	1,2,3-Trichlorobenzene	1.28410	1.27701	0.6

(#) = Out of Range SPCC's out = 0 CCC's out = 0

8503J.D 8260L.M Wed May 28 09:31:50 1997 GCMS11

Heritage
Volatile Analysis - Water Method Blank
Analysis Method: SW846-8260

GC/MS VOA Data File: 0001L
Analysis Date/Time: 5/27/97 10:30

Analyte List	Result	DL	Units
Benzene	BDL	5	uG/L
Bromobenzene	BDL	5	uG/L
Bromochloromethane	BDL	5	uG/L
Bromodichloromethane	BDL	5	uG/L
Bromoform	BDL	5	uG/L
Bromomethane	BDL	5	uG/L
n-Butylbenzene	BDL	5	uG/L
tert-Butylbenzene	BDL	5	uG/L
Carbon tetrachloride	BDL	5	uG/L
Chlorobenzene	BDL	5	uG/L
Chloroethane	BDL	5	uG/L
Chloroform	BDL	5	uG/L
Chloromethane	BDL	5	uG/L
2-Chlorotoluene	BDL	5	uG/L
4-Chlorotoluene	BDL	5	uG/L
Dibromochloromethane	BDL	5	uG/L
1,2-Dibromo-3-Chloropropane	BDL	5	uG/L
1,2-Dibromoethane	BDL	5	uG/L
Dibromomethane	BDL	5	uG/L
1,2-Dichlorobenzene	BDL	5	uG/L
1,3-Dichlorobenzene	BDL	5	uG/L
1,4-Dichlorobenzene	BDL	5	uG/L
Dichlorodifluoromethane	BDL	5	uG/L
1,1-Dichloroethane	BDL	5	uG/L
1,2-Dichloroethane	BDL	5	uG/L
1,1-Dichloroethene	BDL	5	uG/L
cis-1,2-Dichloroethene	BDL	5	uG/L
trans-1,2-Dichloroethene	BDL	5	uG/L
1,2-Dichloropropane	BDL	5	uG/L
1,3-Dichloropropane	BDL	5	uG/L
2,2-Dichloropropane	BDL	5	uG/L
1,1-Dichloropropene	BDL	5	uG/L
cis-1,3-Dichloropropene	BDL	5	uG/L
trans-1,3-Dichloropropene	BDL	5	uG/L
Ethyl Benzene	BDL	5	uG/L
Hexachlorobutadiene	BDL	5	uG/L
Isopropylbenzene	BDL	5	uG/L
Dichloromethane	BDL	5	uG/L
Naphthalene	BDL	5	uG/L
N-Propylbenzene	BDL	5	uG/L
Styrene	BDL	5	uG/L
1,1,1,2-Tetrachloroethane	BDL	5	uG/L
1,1,2,2-Tetrachloroethane	BDL	5	uG/L
Tetrachloroethane	BDL	5	uG/L
Toluene	BDL	5	uG/L
1,2,3-Trichloropropane	BDL	5	uG/L
1,2,4-Trichlorobenzene	BDL	5	uG/L

Heritage
Volatile Analysis - Water Method Blank
Analysis Method: SW846-8260

GC/MS VOA Data File: 0001L
Analysis Date/Time: 5/27/97 10:30

Analyte List	Result	DL	Units
1,1,1-Trichloroethane.....	BDL	5	uG/L
1,1,2-Trichloroethane.....	BDL	5	uG/L
Trichloroethene.....	BDL	5	uG/L
Trichlorofluoromethane.....	BDL	5	uG/L
1,2,3-Trichloropropane.....	BDL	5	uG/L
1,2,4-Trimethylbenzene.....	BDL	5	uG/L
1,3,5-Trimethylbenzene.....	BDL	5	uG/L
Vinyl Chloride.....	BDL	5	uG/L
Xylenes (o/m/p-xylene).....	BDL	5	uG/L
Hexane.....	BDL	10	uG/L
Methyl-t-butyl benzene.....	BDL	5	uG/L
Methyl-2-Pentanone.....	BDL	10	uG/L

Surrogate Recovery		
Dichloroethane-d4.....	108	% Recovery
Toluene-d8.....	98	% Recovery
4-Bromofluorobenzene.....	93	% Recovery

Continuing Calibration Report

Data File : C:\HPCHEM\L052997\0040L.D
Acq On : 29 May 97 8:54
Sample : VSTD050 8260
Misc :
MS Integration Params: rteint.p

Vial: 1
Operator: bethm
Inst : GC/MS #11
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260L.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Fri Apr 25 10:23:26 1997
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

cal 10 = 9993L.D cal 20 = 9994L.D cal 50 = 9995L.D
cal100 = 9996L.D cal200 = 9997L.D

		Compound	AvgRF	CCRF	%Dev
1	I	PENTAFLUOROBENZENE	1.00000	1.00000	0.0
2		Dichlorodifluoromethane	0.29062	0.17853	38.6#
3	P	Chloromethane	0.32669	0.23996	26.5#
4	C	VINYL CHLORIDE	0.19141	0.17318	9.5
5		Bromomethane	0.08054	0.08467	5.1
6		Chloroethane	0.16443	0.15805	3.9
7		Trichlorofluoromethane	0.61279	0.64189	4.7
8		Acrolein	0.00948	0.00731	22.9#
[illegible]		Diethyl Ether	0.18433	0.20029	8.7
[illegible]		Acetone	0.09859	0.15549	57.7#
11	CM	1,1-DICHLOROETHENE	0.28560	0.30890	8.2
12		Methylene Chloride	0.34544	0.37929	9.8
13		Acrylonitrile	0.02912	0.03007	3.3
14		Carbon Disulfide	0.76024	0.83372	9.7
15		Vinyl Acetate	0.15394	0.17557	14.1
16		trans-1,2-Dichloroethene	0.31484	0.37968	20.6#
17	P	1,1-Dichloroethane	0.65089	0.74532	14.5
18		Methyl-t-butyl Ether	0.83738	0.97772	16.8
19		Diispropyl Ether	1.08779	1.24122	14.1
20		2-Butanone	0.17777	0.27026	52.0#
21		cis-1,2-Dichloroethene	0.35776	0.40823	14.1
22	C	CHLOROFORM	0.76410	0.86635	13.4
23		Bromochloromethane	0.26553	0.30257	13.9
24		2,2-Dichloropropane	0.52913	0.61230	15.7
25		Tetrahyrofuran	0.06307	0.08016	27.1#
26		1,1,1-Trichloroethane	0.61028	0.68941	13.0
27		Iodomethane	0.03614	0.05350	48.0#
28	I	1,4-DIFLUOROBENZENE	1.00000	1.00000	0.0
29		1,1-Dichloropropene	0.47347	0.56478	19.3
30	S	1,2-Dichloroethane-d4	0.42718	0.46964	9.9
31		Carbon Tetrachloride	0.48190	0.56762	17.8
32		1,2-Dichloroethane	0.47468	0.60334	27.1#
33	M	Benzene	0.84667	0.95447	12.7
[illegible]	M	Trichloroethene	0.43785	0.49856	13.9
[illegible]	C	1,2-DICHLOROPROPANE	0.39342	0.45286	15.1
36		Bromodichloromethane	0.72242	0.86690	20.0
37		Dibromomethane	0.41554	0.02439	94.1#
38		4-Methyl-2-Pentanone	0.43518	0.68038	56.3#
39		2-Chloroethylvinylether	0.15971	0.21413	34.1#

Continuing Calibration Report

Data File : C:\HPCHEM\L052997\0040L.D
Acq On : 29 May 97 8:54
Sample : VSTD050 8260
Misc :
MS Integration Params: rteint.p

Vial: 1
Operator: bethm
Inst : GC/MS #11
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260L.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Fri Apr 25 10:23:26 1997
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

cal 10 = 9993L.D cal 20 = 9994L.D cal 50 = 9995L.D
cal100 = 9996L.D cal200 = 9997L.D

		Compound	AvgRF	CCRF	%Dev
40		cis-1,3-Dichloropropene	0.43060	0.49608	15.2
41	S	Toluene-d8	0.99270	0.97501	1.8
42	CM	TOLUENE	0.97134	1.05134	8.2
43		trans-1,3-Dichloropropene	0.51319	0.59058	15.1
44		1,1,2-Trichloroethane	0.38778	0.45883	18.3
45		1,2-Dibromoethane	0.60240	0.72445	20.3#
46	I	CHLOROBENZENE-d5	1.00000	1.00000	0.0
47	S	4-Bromofluorobenzene	0.76769	0.75268	2.0
[illegible]		2-Hexanone	0.37588	0.59229	57.6#
49		1,3-Dichloropropane	0.70427	0.82613	17.3
50		Tetrachloroethene	0.64088	0.72890	13.7
51		Dibromochloromethane	0.79028	0.94252	19.3
52	PM	Chlorobenzene	1.01711	1.11714	9.8
53		1,1,1,2-Tetrachloroethane	0.52275	0.61782	18.2
54	C	ETHYL BENZENE	0.41654	0.47654	14.4
55		m,p-Xylene	0.56249	0.59669	6.1
56		o-Xylene	0.60072	0.63822	6.2
57		Styrene	0.78485	0.84285	7.4
58	P	Bromoform	0.64095	0.77211	20.5#
59	I	1,4-Dichlorobenzene-d4	1.00000	1.00000	0.0
60		Isopropylbenzene	3.15607	3.66527	16.1
61		trans-1,4-Dichloro-2-butene	0.26916	0.38654	43.6#
62	P	1,1,2,2-Tetrachloroethane	1.90224	2.46025	29.3#
63		Bromobenzene	2.00559	2.20791	10.1
64		1,2,3-Trichloropropane	0.48400	0.64103	32.4#
65		n-Propylbenzene	0.46479	0.52758	13.5
66		1,3,5-Trimethylbenzene	2.53955	2.93094	15.4
67		2-Chlorotoluene	0.90904	0.99784	9.8
68		4-Chlorotoluene	0.76483	0.86696	13.4
69		t-Butylbenzene	2.97429	3.30281	11.0
70		1,2,4-Trimethylbenzene	2.32509	2.69474	15.9
71		sec-Butylbenzene	3.62530	4.29326	18.4
[illegible]		p-Isopropyltoluene	2.59061	3.01529	16.4
73		1,3-Dichlorobenzene	1.78461	1.99260	11.7
74		1,4-Dichlorobenzene	1.61342	1.72992	7.2
75		n-Butylbenzene	1.37650	1.48489	7.9
76		1,2-Dichlorobenzene	1.79611	2.00696	11.7
77		1,2-Dibromo-3-chloropropane	0.51381	0.67867	32.1#
78		1,2,4-Trichlorobenzene	1.29794	1.34896	3.9

Continuing Calibration Report

Data File : C:\HPCHEM\L052997\0040L.D
Acq On : 29 May 97 8:54
Sample : VSTD050 8260
Misc :
MS Integration Params: rteint.p

Vial: 1
Operator: bethm
Inst : GC/MS #11
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260L.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Fri Apr 25 10:23:26 1997
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

cal 10 = 9993L.D cal 20 = 9994L.D cal 50 = 9995L.D
cal100 = 9996L.D cal200 = 9997L.D

	Compound	AvgRF	CCRF	%Dev
79	Naphthalene	2.05672	2.15936	5.0
80	Hexachlorobutadiene	0.98745	1.12198	13.6
81	1,2,3-Trichlorobenzene	1.28410	1.41567	10.2

(#) = Out of Range SPCC's out = 0 CCC's out = 0

8503J.D 8260L.M Fri May 30 11:57:53 1997 GCMS11

Heritage
Volatile Analysis - Water Method Blank
Analysis Method: SW846-8260

GC/MS VOA Data File: 0041L
Analysis Date/Time: 5/29/97 10:05

Analyte List	Result	DL	Units
Benzene	BDL	5	uG/L
Bromobenzene	BDL	5	uG/L
Bromochloromethane	BDL	5	uG/L
Bromodichloromethane	BDL	5	uG/L
Bromoform	BDL	5	uG/L
Bromomethane	BDL	5	uG/L
n-Butylbenzene	BDL	5	uG/L
tert-Butylbenzene	BDL	5	uG/L
Carbon tetrachloride	BDL	5	uG/L
Chlorobenzene	BDL	5	uG/L
Chloroethane	BDL	5	uG/L
Chloroform	BDL	5	uG/L
Chloromethane	BDL	5	uG/L
2-Chlorotoluene	BDL	5	uG/L
4-Chlorotoluene	BDL	5	uG/L
Dibromochloromethane	BDL	5	uG/L
1,2-Dibromo-3-Chloropropane	BDL	5	uG/L
1,2-Dibromoethane	BDL	5	uG/L
Dibromomethane	BDL	5	uG/L
1,2-Dichlorobenzene	BDL	5	uG/L
1,3-Dichlorobenzene	BDL	5	uG/L
1,4-Dichlorobenzene	BDL	5	uG/L
Dichlorodifluoromethane	BDL	5	uG/L
1,1-Dichloroethane	BDL	5	uG/L
1,2-Dichloroethane	BDL	5	uG/L
1,1-Dichloroethene	BDL	5	uG/L
cis-1,2-Dichloroethene	BDL	5	uG/L
trans-1,2-Dichloroethene	BDL	5	uG/L
1,2-Dichloropropane	BDL	5	uG/L
1,3-Dichloropropane	BDL	5	uG/L
2,2-Dichloropropane	BDL	5	uG/L
1,1-Dichloropropene	BDL	5	uG/L
cis-1,3-Dichloropropene	BDL	5	uG/L
trans-1,3-Dichloropropene	BDL	5	uG/L
Ethyl Benzene	BDL	5	uG/L
Hexachlorobutadiene	BDL	5	uG/L
Isopropylbenzene	BDL	5	uG/L
Dichloromethane	BDL	5	uG/L
Naphthalene	BDL	5	uG/L
N-Propylbenzene	BDL	5	uG/L
Styrene	BDL	5	uG/L
1,1,1,2-Tetrachloroethane	BDL	5	uG/L
1,1,2,2-Tetrachloroethane	BDL	5	uG/L
Tetrachloroethane	BDL	5	uG/L
Toluene	BDL	5	uG/L
1,2,3-Trichloropropane	BDL	5	uG/L
1,2,4-Trichlorobenzene	BDL	5	uG/L

Heritage
Volatile Analysis - Water Method Blank
Analysis Method: SW846-8260

GC/MS VOA Data File: 0041L
Analysis Date/Time: 5/29/97 10:05

Analyte List	Result	DL	Units
1,1,1-Trichloroethane.....	BDL	5	uG/L
1,1,2-Trichloroethane.....	BDL	5	uG/L
Trichloroethene.....	BDL	5	uG/L
Trichlorofluoromethane.....	BDL	5	uG/L
1,2,3-Trichloropropane.....	BDL	5	uG/L
1,2,4-Trimethylbenzene.....	BDL	5	uG/L
1,3,5-Trimethylbenzene.....	BDL	5	uG/L
Vinyl Chloride.....	BDL	5	uG/L
Xylenes (o/m/p-xylene).....	BDL	5	uG/L
Hexane.....	BDL	10	uG/L
Methyl-t-butyl benzene.....	BDL	5	uG/L
Methyl-2-Pentanone.....	BDL	10	uG/L

Surrogate Recovery		
Dichloroethane-d4.....	106	% Recovery
Toluene-d8.....	95	% Recovery
4-Bromofluorobenzene.....	88	% Recovery

Continuing Calibration Report

Data File : C:\R052197\1420R.D
Acq On : 21 May 97 4:45
Sample : VSTD010
Misc : CALIBRATION CHECK 5/21/97

Vial: 16
Operator: HAROLD
Inst : INST-122
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\BFI8260.M
Title : SW-846 Method 8260 25mL water
Last Update : Wed May 14 04:28:41 1997
Response via : Multiple Level Calibration

Min. RRF : 0.100 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

cal 2 = 1320R.D cal 10 = 1332R.D cal 25 = 1312R.D
cal 50 = 1311R.D cal100 = 1310R.D

		Compound	AvgRF	CCRF	%Dev
1	I	PENTAFLUOROBENZENE	1.00000	1.00000	0.0
2	T	dichlorodifluoromethane	0.36904	0.47881	29.7#
3	P	chloromethane	0.37698	0.45648	21.1#
4	C	VINYL CHLORIDE	0.34873	0.41373	18.6
5	T	bromomethane	0.26701	0.33797	26.6#
6	T	chloroethane	0.22205	0.29525	33.0#
7	T	trichlorofluoromethane	0.78289	0.92588	18.3
8	T	acrolein	0.00305	0.00183	40.0#
9	C	1,1-DICHLOROETHENE	0.39946	0.44940	12.5
10	T	acetone	0.02899	0.04415	52.3#
[illegible]	T	iodomethane	0.38868	0.61415	58.0#
12	T	carbon disulfide	1.08346	1.22191	12.8
13	T	allyl chloride	0.68866	0.79853	16.0
14	T	methylene chloride	0.33359	0.39061	17.1
15	T	trans-1,2-dichloroethene	0.44683	0.47894	7.2
16	T	acrylonitrile	0.02070	0.01791	13.5
17	T	MTBE	0.38023	0.43149	13.5
18	P	1,1-dichloroethane	0.88207	0.92895	5.3
19	T	vinyl acetate	0.62848	0.67286	7.1
20	T	chloroprene	0.00095	0.00000	100.0#
21	T	2,2-dichloropropane	0.72269	0.77624	7.4
22	T	cis-1,2-dichloroethene	0.41962	0.43820	4.4
23	T	2-butanone	0.04743	0.05509	16.2
24	T	ethyl acetate	0.03275	0.03401	3.8
25	T	propionitrile	0.00755	0.00919	21.7#
26	T	bromochloromethane	0.17149	0.19086	11.3
27	T	methacrylonitrile	0.05920	0.06918	16.9
28	T	tetrahydrofuran	0.02605	0.03083	18.3
29	C	CHLOROFORM	0.99296	0.99125	0.2
30	T	1,1,1-trichloroethane	0.80455	0.86161	7.1
31	I	1,4-DIFLUOROBENZENE	1.00000	1.00000	0.0
32	T	carbon tetrachloride	0.53247	0.57684	8.3
33	T	1,1-dichloropropene	0.50864	0.57085	12.2
34	S	1,2-Dichloroethane-d4	0.25319	0.26927	6.4
[illegible]	T	benzene	0.94591	1.03530	9.5
[illegible]	[illegible]	1,2-dichloroethane	0.26507	0.31046	17.1
37	T	isobutanol	0.00621	0.01025	65.1#
38	T	trichloroethene	0.46696	0.51555	10.4
39	T	n-butanol	0.00222	0.00362	63.1#

(#) = Out of Range (Advisory for non CCC, SPCC)

Continuing Calibration Report

Data File : C:\R052197\1420R.D
Acq On : 21 May 97 4:45
Sample : VSTD010
Misc : CALIBRATION CHECK 5/21/97

Vial: 16
Operator: HAROLD
Inst : INST-122
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\BFI8260.M
Title : SW-846 Method 8260 25mL water
Last Update : Wed May 14 04:28:41 1997
Response via : Multiple Level Calibration

Min. RRF : 0.100 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

cal414 = 1320R.D cal1035 = 1332R.D cal2587 = 1312R.D
cal5175 = 1311R.D cal10350 = 1310R.D

		Compound	AvgRF	CCRF	%Dev
40	C	1,2-DICHLOROPROPANE	0.37868	0.40875	7.9
41	T	dibromomethane	0.18782	0.21628	15.2
42	T	1,4-dioxane	0.00058	0.00091	56.9#
43	T	methyl methacrylate	0.10487	0.13282	26.7#
44	T	bromodichloromethane	0.53018	0.59431	12.1
45	T	2-chloroethylvinylether	0.07123	0.07321	2.8
46	T	cis-1,3-dichloropropene	0.37950	0.40411	6.5
47	T	4-methyl-2-pentanone	0.08979	0.09552	6.4
48	S	toluene-d8	0.97932	0.88410	9.7
49	C	TOLUENE	0.59841	0.60781	1.6
	T	trans-1,3-dichloropropene	0.24995	0.27505	10.0
51	T	1,1,2-trichloroethane	0.15764	0.16693	5.9
52	I	CHLOROBENZENE-D5	1.00000	1.00000	0.0
53	T	ethyl methacrylate	0.21550	0.26664	23.7#
54	T	tetrachloroethene	0.69983	0.77513	10.8
55	T	1,3-dichloropropane	0.38997	0.51782	32.8#
56	T	2-hexanone	0.13119	0.11599	11.6
57	T	dibromochloromethane	0.43885	0.56094	27.8#
58	T	1,2-dibromoethane	0.30837	0.38965	26.4#
59	P	chlorobenzene	0.99391	1.03577	4.2
60	T	1,1,1,2-tetrachloroethane	0.43864	0.47819	9.0
61	C	ETHYL BENZENE	1.77643	1.80877	1.8
62	T	m,p-xylene	0.64703	0.65230	0.8
63	T	o-xylene	0.55863	0.56037	0.3
64	T	styrene	0.81740	0.83701	2.4
65	P	bromoform	0.19421	0.25293	30.2#
66	I	1,4-DICHLOROBENZENE-D4	1.00000	1.00000	0.0
67	T	isopropylbenzene	5.34560	3.61973	32.3#
68	S	4-bromofluorobenzene	1.81479	1.36727	24.7#
69	P	1,1,2,2-tetrachloroethane	0.68003	0.47275	30.5#
70	T	bromobenzene	1.03461	0.50395	51.3#
71	T	1,2,3-trichloropropane	0.28606	0.71737	150.8#
72	T	trans-1,4-dichloro-2-butene	0.08953	0.09211	2.9
[illegible]	T	n-propylbenzene	6.12761	4.35751	28.9#
[illegible]	T	2-chlorotoluene	3.78834	2.90775	23.2#
75	T	1,3,5-trimethylbenzene	3.38089	2.41284	28.6#
76	T	4-chlorotoluene	3.77001	3.20288	15.0
77	T	t-Butylbenzene	2.85147	2.01364	29.4#
78	T	1,2,4-trimethylbenzene	2.91543	2.08622	28.4#

Continuing Calibration Report

Data File : C:\R052197\1420R.D
Acq On : 21 May 97 4:45
Sample : VSTD010
Misc : CALIBRATION CHECK 5/21/97

Vial: 16
Operator: HAROLD
Inst : INST-122
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\BFI8260.M
Title : SW-846 Method 8260 25mL water
Last Update : Wed May 14 04:28:41 1997
Response via : Multiple Level Calibration

Min. RRF : 0.100 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

cal 2 = 1320R.D cal 10 = 1332R.D cal 25 = 1312R.D
cal 50 = 1311R.D cal100 = 1310R.D

	Compound	AvgRF	CCRF	%Dev
79 T	sec-butylbenzene	5.26102	3.60597	31.5#
80 T	1,3-dichlorobenzene	1.57937	1.24863	20.9#
81 T	p-Isopropyltoluene	3.38340	2.37472	29.8#
82 T	1,4-dichlorobenzene	1.65420	1.26690	23.4#
83 T	n-butylbenzene	3.58506	2.64888	26.1#
84 T	1,2-dichlorobenzene	1.15635	0.94663	18.1
85 T	1,2-dibromo-3-chloropropane	0.10585	0.11406	7.8
86 T	1,2,4-trichlorobenzene	0.54185	0.59307	9.5
87 T	hexachlorobutadiene	0.59948	0.47850	20.2#
[illegible] T	naphthalene	0.47239	0.51300	8.6
[illegible] T	1,2,3-trichlorobenzene	0.39693	0.44653	12.5

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Heritage
Volatile Analysis - Water Method Blank
Analysis Method: SW846-8260

GC/MS VOA Data File: >1421R
Analysis Date/Time: 5/21/97 5:35

Analyte List	Result	DL	Units
Benzene	BDL	5	uG/L
Bromobenzene	BDL	5	uG/L
Bromochloromethane	BDL	5	uG/L
Bromodichloromethane	BDL	5	uG/L
Bromoform	BDL	5	uG/L
Bromomethane	BDL	5	uG/L
n-Butylbenzene	BDL	5	uG/L
tert-Butylbenzene	BDL	5	uG/L
Carbon tetrachloride	BDL	5	uG/L
Chlorobenzene	BDL	5	uG/L
Chloroethane	BDL	5	uG/L
Chloroform	BDL	5	uG/L
Chloromethane	BDL	5	uG/L
2-Chlorotoluene	BDL	5	uG/L
4-Chlorotoluene	BDL	5	uG/L
Dibromochloromethane	BDL	5	uG/L
1,2-Dibromo-3-Chloropropane	BDL	5	uG/L
1,2-Dibromoethane	BDL	5	uG/L
Dibromomethane	BDL	5	uG/L
1,2-Dichlorobenzene	BDL	5	uG/L
1,3-Dichlorobenzene	BDL	5	uG/L
1,4-Dichlorobenzene	BDL	5	uG/L
Dichlorodifluoromethane	BDL	5	uG/L
1,1-Dichloroethane	BDL	5	uG/L
1,2-Dichloroethane	BDL	5	uG/L
1,1-Dichloroethene	BDL	5	uG/L
cis-1,2-Dichloroethene	BDL	5	uG/L
trans-1,2-Dichloroethene	BDL	5	uG/L
1,2-Dichloropropane	BDL	5	uG/L
1,3-Dichloropropane	BDL	5	uG/L
2,2-Dichloropropane	BDL	5	uG/L
1,1-Dichloropropene	BDL	5	uG/L
cis-1,3-Dichloropropene	BDL	5	uG/L
trans-1,3-Dichloropropene	BDL	5	uG/L
Ethyl Benzene	BDL	5	uG/L
Hexachlorobutadiene	BDL	5	uG/L
Isopropylbenzene	BDL	5	uG/L
Dichloromethane	BDL	5	uG/L
Naphthalene	BDL	5	uG/L
N-Propylbenzene	BDL	5	uG/L
Styrene	BDL	5	uG/L
1,1,1,2-Tetrachloroethane	BDL	5	uG/L
1,1,2,2-Tetrachloroethane	BDL	5	uG/L
Tetrachloroethane	BDL	5	uG/L
Toluene	BDL	5	uG/L
1,2,3-Trichloropropane	BDL	5	uG/L
1,2,4-Trichlorobenzene	BDL	5	uG/L

Heritage
Volatile Analysis - Water Method Blank
Analysis Method: SW846-8260

GC/MS VOA Data File: >1421R
Analysis Date/Time: 5/21/97 5:35

Analyte List	Result	DL	Units
1,1,1-Trichloroethane.....	BDL	5	uG/L
1,1,2-Trichloroethane.....	BDL	5	uG/L
Trichloroethene.....	BDL	5	uG/L
Trichlorofluoromethane.....	BDL	5	uG/L
1,2,3-Trichloropropane.....	BDL	5	uG/L
1,2,4-Trimethylbenzene.....	BDL	5	uG/L
1,3,5-Trimethylbenzene.....	BDL	5	uG/L
Vinyl Chloride.....	BDL	5	uG/L
Xylenes (o/m/p-xylene).....	BDL	5	uG/L
Hexane.....	BDL	10	uG/L
Methyl-t-butyl benzene.....	BDL	5	uG/L
Methyl-2-Pentanone.....	BDL	10	uG/L

Surrogate Recovery

Dichloroethane-d4.....	107	% Recovery
Toluene-d8.....	98	% Recovery
4-Bromofluorobenzene.....	90	% Recovery

Continuing Calibration Report

Data File : C:\R052297\1440R.D
Acq On : 22 May 97 3:23
Sample : VSTD010 #051597
Misc : CALIBRATION CHECK 5/22/97

Vial: 15
Operator: HAROLD
Inst : INST-122
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\BFI8260.M
Title : SW-846 Method 8260 25mL water
Last Update : Wed May 14 04:28:41 1997
Response via : Multiple Level Calibration

Min. RRF : 0.100 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

cal 2 = 1320R.D cal 10 = 1332R.D cal 25 = 1312R.D
cal 50 = 1311R.D cal100 = 1310R.D

		Compound	AvgRF	CCRF	%Dev
1	I	PENTAFLUOROBENZENE	1.00000	1.00000	0.0
2	T	dichlorodifluoromethane	0.36904	0.41390	12.2
3	P	chloromethane	0.37698	0.40332	7.0
4	C	VINYL CHLORIDE	0.34873	0.40776	16.9
5	T	bromomethane	0.26701	0.28401	6.4
6	T	chloroethane	0.22205	0.26837	20.9#
7	T	trichlorofluoromethane	0.78289	0.90173	15.2
8	T	acrolein	0.00305	0.00193	36.7#
9	C	1,1-DICHLOROETHENE	0.39946	0.40260	0.8
10	T	acetone	0.02899	0.04863	67.7#
[illegible]	T	iodomethane	0.38868	0.62677	61.3#
12	T	carbon disulfide	1.08346	1.13948	5.2
13	T	allyl chloride	0.68866	0.78775	14.4
14	T	methylene chloride	0.33359	0.37780	13.3
15	T	trans-1,2-dichloroethene	0.44683	0.46785	4.7
16	T	acrylonitrile	0.02070	0.01623	21.6#
17	T	MTBE	0.38023	0.42813	12.6
18	P	1,1-dichloroethane	0.88207	0.95123	7.8
19	T	vinyl acetate	0.62848	0.72314	15.1
20	T	chloroprene	0.00095	0.00000	100.0#
21	T	2,2-dichloropropane	0.72269	0.79332	9.8
22	T	cis-1,2-dichloroethene	0.41962	0.44081	5.0
23	T	2-butanone	0.04743	0.04664	1.7
24	T	ethyl acetate	0.03275	0.03879	18.4
25	T	propionitrile	0.00755	0.00862	14.2
26	T	bromochloromethane	0.17149	0.19379	13.0
27	T	methacrylonitrile	0.05920	0.07048	19.1
28	T	tetrahydrofuran	0.02605	0.02588	0.7
29	C	CHLOROFORM	0.99296	0.95906	3.4
30	T	1,1,1-trichloroethane	0.80455	0.88887	10.5
31	I	1,4-DIFLUOROBENZENE	1.00000	1.00000	0.0
32	T	carbon tetrachloride	0.53247	0.58557	10.0
33	T	1,1-dichloropropene	0.50864	0.55987	10.1
34	S	1,2-Dichloroethane-d4	0.25319	0.28645	13.1
35	T	benzene	0.94591	1.02983	8.9
36	[illegible]	1,2-dichloroethane	0.26507	0.33102	24.9#
37	T	isobutanol	0.00621	0.00911	46.7#
38	T	trichloroethene	0.46696	0.51439	10.2
39	T	n-butanol	0.00222	0.00306	37.8#

(#) = Out of Range (Advisory for non CCC, SPCC)

Continuing Calibration Report

Data File : C:\R052297\1440R.D
Acq On : 22 May 97 3:23
Sample : VSTD010 #051597
Misc : CALIBRATION CHECK 5/22/97

Vial: 15
Operator: HAROLD
Inst : INST-122
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\BFI8260.M
Title : SW-846 Method 8260 25mL water
Last Update : Wed May 14 04:28:41 1997
Response via : Multiple Level Calibration

Min. RRF : 0.100 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

cal414 = 1320R.D cal1035 = 1332R.D cal2587 = 1312R.D
cal5175 = 1311R.D cal10350 = 1310R.D

		Compound	AvgRF	CCRF	%Dev
40	C	1,2-DICHLOROPROPANE	0.37868	0.42075	11.1
41	T	dibromomethane	0.18782	0.21239	13.1
42	T	1,4-dioxane	0.00058	0.00068	17.2
43	T	methyl methacrylate	0.10487	0.12674	20.9#
44	T	bromodichloromethane	0.53018	0.61723	16.4
45	T	2-chloroethylvinylether	0.07123	0.04997	29.8#
46	T	cis-1,3-dichloropropene	0.37950	0.43843	15.5
47	T	4-methyl-2-pentanone	0.08979	0.10841	20.7#
48	S	toluene-d8	0.97932	0.96607	1.4
[illegible]	C	TOLUENE	0.59841	0.65028	8.7
[illegible]	T	trans-1,3-dichloropropene	0.24995	0.28345	13.4
51	T	1,1,2-trichloroethane	0.15764	0.16425	4.2
52	I	CHLOROBENZENE-D5	1.00000	1.00000	0.0
53	T	ethyl methacrylate	0.21550	0.24570	14.0
54	T	tetrachloroethene	0.69983	0.72923	4.2
55	T	1,3-dichloropropane	0.38997	0.44770	14.8
56	T	2-hexanone	0.13119	0.12865	1.9
57	T	dibromochloromethane	0.43885	0.50926	16.0
58	T	1,2-dibromoethane	0.30837	0.33359	8.2
59	P	chlorobenzene	0.99391	1.06166	6.8
60	T	1,1,1,2-tetrachloroethane	0.43864	0.51224	16.8
61	C	ETHYL BENZENE	1.77643	1.92797	8.5
62	T	m,p-xylene	0.64703	0.68769	6.3
63	T	o-xylene	0.55863	0.62156	11.3
64	T	styrene	0.81740	0.92026	12.6
65	P	bromoform	0.19421	0.23701	22.0#
66	I	1,4-DICHLOROBENZENE-D4	1.00000	1.00000	0.0
67	T	isopropylbenzene	5.34560	4.36652	18.3
68	S	4-bromofluorobenzene	1.81479	1.50964	16.8
69	P	1,1,2,2-tetrachloroethane	0.68003	0.67192	1.2
70	T	bromobenzene	1.03461	0.92801	10.3
71	T	1,2,3-trichloropropane	0.28606	0.15020	47.5#
72	T	trans-1,4-dichloro-2-butene	0.08953	0.09243	3.2
[illegible]	T	n-propylbenzene	6.12761	5.02971	17.9
74	T	2-chlorotoluene	3.78834	3.31090	12.6
75	T	1,3,5-trimethylbenzene	3.38089	3.06061	9.5
76	T	4-chlorotoluene	3.77001	3.60421	4.4
77	T	t-Butylbenzene	2.85147	2.78186	2.4
78	T	1,2,4-trimethylbenzene	2.91543	2.86006	1.9

Continuing Calibration Report

Data File : C:\R052297\1440R.D
Acq On : 22 May 97 3:23
Sample : VSTD010 #051597
Misc : CALIBRATION CHECK 5/22/97

Vial: 15
Operator: HAROLD
Inst : INST-122
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\BFI8260.M
Title : SW-846 Method 8260 25mL water
Last Update : Wed May 14 04:28:41 1997
Response via : Multiple Level Calibration

Min. RRF : 0.100 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

cal 2 = 1320R.D cal 10 = 1332R.D cal 25 = 1312R.D
cal 50 = 1311R.D cal100 = 1310R.D

		Compound	AvgRF	CCRF	%Dev
79	T	sec-butylbenzene	5.26102	4.86512	7.5
80	T	1,3-dichlorobenzene	1.57937	1.61264	2.1
81	T	p-Isopropyltoluene	3.38340	3.40047	0.5
82	T	1,4-dichlorobenzene	1.65420	1.68047	1.6
83	T	n-butylbenzene	3.58506	3.94783	10.1
84	T	1,2-dichlorobenzene	1.15635	1.28410	11.0
85	T	1,2-dibromo-3-chloropropane	0.10585	0.12027	13.6
86	T	1,2,4-trichlorobenzene	0.54185	0.67343	24.3#
87	T	hexachlorobutadiene	0.59948	0.80969	35.1#
88	T	naphthalene	0.47239	0.55708	17.9
	T	1,2,3-trichlorobenzene	0.39693	0.48779	22.9#

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Continuing Calibration Report

Data File : C:\R052397\1460R.D
Acq On : 23 May 97 2:25
Sample : VSTD010 #051597
Misc : CALIBRATION CHECK 5/23/97

Vial: 4
Operator: HAROLD
Inst : INST-122
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\BFI8260.M
Title : SW-846 Method 8260 25mL water
Last Update : Wed May 14 04:28:41 1997
Response via : Multiple Level Calibration

Min. RRF : 0.100 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

cal 2 = 1320R.D cal 10 = 1332R.D cal 25 = 1312R.D
cal 50 = 1311R.D cal100 = 1310R.D

		Compound	AvgRF	CCRF	%Dev
1	I	PENTAFLUOROBENZENE	1.00000	1.00000	0.0
2	T	dichlorodifluoromethane	0.36904	0.41524	12.5
3	P	chloromethane	0.37698	0.43359	15.0
4	C	VINYL CHLORIDE	0.34873	0.38167	9.4
5	T	bromomethane	0.26701	0.30067	12.6
6	T	chloroethane	0.22205	0.29790	34.2#
7	T	trichlorofluoromethane	0.78289	0.99130	26.6#
8	T	acrolein	0.00305	0.00207	32.1#
9	C	1,1-DICHLOROETHENE	0.39946	0.42686	6.9
	T	acetone	0.02899	0.04641	60.1#
11	T	iodomethane	0.38868	0.52995	36.3#
12	T	carbon disulfide	1.08346	1.25318	15.7
13	T	allyl chloride	0.68866	0.79672	15.7
14	T	methylene chloride	0.33359	0.43368	30.0#
15	T	trans-1,2-dichloroethene	0.44683	0.45490	1.8
16	T	acrylonitrile	0.02070	0.01382	33.2#
17	T	MTBE	0.38023	0.41878	10.1
18	P	1,1-dichloroethane	0.88207	0.97129	10.1
19	T	vinyl acetate	0.62848	0.75319	19.8
20	T	chloroprene	0.00095	0.00000	100.0#
21	T	2,2-dichloropropane	0.72269	0.84583	17.0
22	T	cis-1,2-dichloroethene	0.41962	0.43175	2.9
23	T	2-butanone	0.04743	0.06704	41.3#
24	T	ethyl acetate	0.03275	0.04146	26.6#
25	T	propionitrile	0.00755	0.00983	30.2#
26	T	bromochloromethane	0.17149	0.19986	16.5
27	T	methacrylonitrile	0.05920	0.07034	18.8
28	T	tetrahydrofuran	0.02605	0.02981	14.4
29	C	CHLOROFORM	0.99296	1.01935	2.7
30	T	1,1,1-trichloroethane	0.80455	0.92901	15.5
31	I	1,4-DIFLUOROBENZENE	1.00000	1.00000	0.0
32	T	carbon tetrachloride	0.53247	0.59430	11.6
33	T	1,1-dichloropropene	0.50864	0.56532	11.1
	S	1,2-Dichloroethane-d4	0.25319	0.29074	14.8
	T	benzene	0.94591	1.05030	11.0
36	T	1,2-dichloroethane	0.26507	0.32596	23.0#
37	T	isobutanol	0.00621	0.01087	75.0#
38	T	trichloroethene	0.46696	0.52161	11.7
39	T	n-butanol	0.00222	0.00400	80.2#

Continuing Calibration Report

Data File : C:\R052397\1460R.D
Acq On : 23 May 97 2:25
Sample : VSTD010 #051597
Misc : CALIBRATION CHECK 5/23/97

Vial: 4
Operator: HAROLD
Inst : INST-122
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\BFI8260.M
Title : SW-846 Method 8260 25mL water
Last Update : Wed May 14 04:28:41 1997
Response via : Multiple Level Calibration

Min. RRF : 0.100 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

cal414 = 1320R.D cal1035 = 1332R.D cal2587 = 1312R.D
cal5175 = 1311R.D cal10350 = 1310R.D

		Compound	AvgRF	CCRF	%Dev
40	C	1,2-DICHLOROPROPANE	0.37868	0.42596	12.5
41	T	dibromomethane	0.18782	0.21305	13.4
42	T	1,4-dioxane	0.00058	0.00097	67.2#
43	T	methyl methacrylate	0.10487	0.13846	32.0#
44	T	bromodichloromethane	0.53018	0.63581	19.9
45	T	2-chloroethylvinylether	0.07123	0.05213	26.8#
46	T	cis-1,3-dichloropropene	0.37950	0.42432	11.8
47	T	4-methyl-2-pentanone	0.08979	0.10231	13.9
48	S	toluene-d8	0.97932	1.04438	6.6
49	C	TOLUENE	0.59841	0.68601	14.6
	T	trans-1,3-dichloropropene	0.24995	0.30811	23.3#
51	T	1,1,2-trichloroethane	0.15764	0.17668	12.1
52	I	CHLOROBENZENE-D5	1.00000	1.00000	0.0
53	T	ethyl methacrylate	0.21550	0.23463	8.9
54	T	tetrachloroethene	0.69983	0.68589	2.0
55	T	1,3-dichloropropane	0.38997	0.43241	10.9
56	T	2-hexanone	0.13119	0.09571	27.0#
57	T	dibromochloromethane	0.43885	0.48022	9.4
58	T	1,2-dibromoethane	0.30837	0.32801	6.4
59	P	chlorobenzene	0.99391	1.05389	6.0
60	T	1,1,1,2-tetrachloroethane	0.43864	0.49018	11.7
61	C	ETHYL BENZENE	1.77643	1.95209	9.9
62	T	m,p-xylene	0.64703	0.69522	7.4
63	T	o-xylene	0.55863	0.63475	13.6
64	T	styrene	0.81740	0.94949	16.2
65	P	bromoform	0.19421	0.24241	24.8#
66	I	1,4-DICHLOROBENZENE-D4	1.00000	1.00000	0.0
67	T	isopropylbenzene	5.34560	4.32604	19.1
68	S	4-bromofluorobenzene	1.81479	1.52114	16.2
69	P	1,1,2,2-tetrachloroethane	0.68003	0.71021	4.4
70	T	bromobenzene	1.03461	0.95120	8.1
71	T	1,2,3-trichloropropane	0.28606	0.14544	49.2#
72	T	trans-1,4-dichloro-2-butene	0.08953	0.09350	4.4
73	T	n-propylbenzene	6.12761	5.16939	15.6
74	T	2-chlorotoluene	3.78834	3.52200	7.0
75	T	1,3,5-trimethylbenzene	3.38089	3.20655	5.2
76	T	4-chlorotoluene	3.77001	3.68329	2.3
77	T	t-Butylbenzene	2.85147	2.82373	1.0
78	T	1,2,4-trimethylbenzene	2.91543	2.92954	0.5

Continuing Calibration Report

Data File : C:\R052397\1460R.D
Acq On : 23 May 97 2:25
ample : VSTD010 #051597
Misc : CALIBRATION CHECK 5/23/97

Vial: 4
Operator: HAROLD
Inst : INST-122
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\BFI8260.M
Title : SW-846 Method 8260 25mL water
Last Update : Wed May 14 04:28:41 1997
Response via : Multiple Level Calibration

Min. RRF : 0.100 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

cal 2 = 1320R.D cal 10 = 1332R.D cal 25 = 1312R.D
cal 50 = 1311R.D cal100 = 1310R.D

		Compound	AvgRF	CCRF	%Dev
79	T	sec-butylbenzene	5.26102	4.96290	5.7
80	T	1,3-dichlorobenzene	1.57937	1.61050	2.0
81	T	p-Isopropyltoluene	3.38340	3.44821	1.9
82	T	1,4-dichlorobenzene	1.65420	1.71229	3.5
83	T	n-butylbenzene	3.58506	3.97512	10.9
84	T	1,2-dichlorobenzene	1.15635	1.27764	10.5
85	T	1,2-dibromo-3-chloropropane	0.10585	0.11838	11.8
86	T	1,2,4-trichlorobenzene	0.54185	0.69508	28.3#
87	T	hexachlorobutadiene	0.59948	0.80656	34.5#
88	T	naphthalene	0.47239	0.53351	12.9
	T	1,2,3-trichlorobenzene	0.39693	0.47447	19.5

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Heritage
Volatile Analysis - Water Method Blank
Analysis Method: SW846-8260

GC/MS VOA Data File: >1461R
Analysis Date/Time: 5/23/97 3:18

Analyte List	Result	DL	Units
Benzene	BDL	5	uG/L
Bromobenzene	BDL	5	uG/L
Bromochloromethane	BDL	5	uG/L
Bromodichloromethane	BDL	5	uG/L
Bromoform	BDL	5	uG/L
Bromomethane	BDL	5	uG/L
n-Butylbenzene	BDL	5	uG/L
tert-Butylbenzene	BDL	5	uG/L
Carbon tetrachloride	BDL	5	uG/L
Chlorobenzene	BDL	5	uG/L
Chloroethane	BDL	5	uG/L
Chloroform	BDL	5	uG/L
Chloromethane	BDL	5	uG/L
2-Chlorotoluene	BDL	5	uG/L
4-Chlorotoluene	BDL	5	uG/L
Dibromochloromethane	BDL	5	uG/L
1,2-Dibromo-3-Chloropropane	BDL	5	uG/L
1,2-Dibromoethane	BDL	5	uG/L
Dibromomethane	BDL	5	uG/L
1,2-Dichlorobenzene	BDL	5	uG/L
1,3-Dichlorobenzene	BDL	5	uG/L
1,4-Dichlorobenzene	BDL	5	uG/L
Dichlorodifluoromethane	BDL	5	uG/L
1,1-Dichloroethane	BDL	5	uG/L
1,2-Dichloroethane	BDL	5	uG/L
1,1-Dichloroethene	BDL	5	uG/L
cis-1,2-Dichloroethene	BDL	5	uG/L
trans-1,2-Dichloroethene	BDL	5	uG/L
1,2-Dichloropropane	BDL	5	uG/L
1,3-Dichloropropane	BDL	5	uG/L
2,2-Dichloropropane	BDL	5	uG/L
1,1-Dichloropropene	BDL	5	uG/L
cis-1,3-Dichloropropene	BDL	5	uG/L
trans-1,3-Dichloropropene	BDL	5	uG/L
Ethyl Benzene	BDL	5	uG/L
Hexachlorobutadiene	BDL	5	uG/L
Isopropylbenzene	BDL	5	uG/L
Dichloromethane	BDL	5	uG/L
Naphthalene	BDL	5	uG/L
N-Propylbenzene	BDL	5	uG/L
Styrene	BDL	5	uG/L
1,1,1,2-Tetrachloroethane	BDL	5	uG/L
1,1,2,2-Tetrachloroethane	BDL	5	uG/L
Tetrachloroethane	BDL	5	uG/L
Toluene	BDL	5	uG/L
1,2,3-Trichloropropane	BDL	5	uG/L
1,2,4-Trichlorobenzene	BDL	5	uG/L

Heritage
Volatile Analysis - Water Method Blank
Analysis Method: SW846-8260

GC/MS VOA Data File: >1461R
Analysis Date/Time: 5/23/97 3:18

Analyte List	Result	DL	Units
1,1,1-Trichloroethane.....	BDL	5	uG/L
1,1,2-Trichloroethane.....	BDL	5	uG/L
Trichloroethene.....	BDL	5	uG/L
Trichlorofluoromethane.....	BDL	5	uG/L
1,2,3-Trichloropropane.....	BDL	5	uG/L
1,2,4-Trimethylbenzene.....	BDL	5	uG/L
1,3,5-Trimethylbenzene.....	BDL	5	uG/L
Vinyl Chloride.....	BDL	5	uG/L
Xylenes (o/m/p-xylene).....	BDL	5	uG/L
Hexane.....	BDL	10	uG/L
Methyl-t-butyl benzene.....	BDL	5	uG/L
Methyl-2-Pentanone.....	BDL	10	uG/L

Surrogate Recovery

Dichloroethane-d4.....	111	% Recovery
Toluene-d8.....	102	% Recovery
4-Bromofluorobenzene.....	90	% Recovery

Continuing Calibration Report

Data File : C:\R052797\1481R.D
Acq On : 27 May 97 4:21
Sample : VSTD010
Misc : CALIBRATION CHECK 5/27/97

Vial: 4
Operator: HAROLD
Inst : INST-122
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\BFI8260.M
Title : SW-846 Method 8260 25mL water
Last Update : Wed May 14 04:28:41 1997
Response via : Multiple Level Calibration

Min. RRF : 0.100 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

cal 2 = 1320R.D cal 10 = 1332R.D cal 25 = 1312R.D
cal 50 = 1311R.D cal100 = 1310R.D

		Compound	AvgRF	CCRF	%Dev
1	I	PENTAFLUOROBENZENE	1.00000	1.00000	0.0
2	T	dichlorodifluoromethane	0.36904	0.52206	41.5#
3	P	chloromethane	0.37698	0.52867	40.2#
4	C	VINYL CHLORIDE	0.34873	0.41988	20.4#
5	T	bromomethane	0.26701	0.31812	19.1
6	T	chloroethane	0.22205	0.33851	52.4#
7	T	trichlorofluoromethane	0.78289	1.00542	28.4#
8	T	acrolein	0.00305	0.00904	196.4#
9	C	1,1-DICHLOROETHENE	0.39946	0.45425	13.7
	T	acetone	0.02899	0.04901	69.1#
11	T	iodomethane	0.38868	0.60234	55.0#
12	T	carbon disulfide	1.08346	1.38702	28.0#
13	T	allyl chloride	0.68866	0.89062	29.3#
14	T	methylene chloride	0.33359	0.46571	39.6#
15	T	trans-1,2-dichloroethene	0.44683	0.48382	8.3
16	T	acrylonitrile	0.02070	0.03633	75.5#
17	T	MTBE	0.38023	0.40422	6.3
18	P	1,1-dichloroethane	0.88207	0.94609	7.3
19	T	vinyl acetate	0.62848	0.67957	8.1
20	T	chloroprene	0.00095	0.00000	100.0#
21	T	2,2-dichloropropane	0.72269	0.82048	13.5
22	T	cis-1,2-dichloroethene	0.41962	0.41137	2.0
23	T	2-butanone	0.04743	0.03328	29.8#
24	T	ethyl acetate	0.03275	0.03027	7.6
25	T	propionitrile	0.00755	0.00856	13.4
26	T	bromochloromethane	0.17149	0.17779	3.7
27	T	methacrylonitrile	0.05920	0.06187	4.5
28	T	tetrahydrofuran	0.02605	0.02386	8.4
29	C	CHLOROFORM	0.99296	0.94610	4.7
30	T	1,1,1-trichloroethane	0.80455	0.88833	10.4
31	I	1,4-DIFLUOROBENZENE	1.00000	1.00000	0.0
32	T	carbon tetrachloride	0.53247	0.56951	7.0
33	T	1,1-dichloropropene	0.50864	0.54330	6.8
34	S	1,2-Dichloroethane-d4	0.25319	0.25849	2.1
	T	benzene	0.94591	1.04214	10.2
36	T	1,2-dichloroethane	0.26507	0.29943	13.0
37	T	isobutanol	0.00621	0.00961	54.8#
38	T	trichloroethene	0.46696	0.51179	9.6
39	T	n-butanol	0.00222	0.00352	58.6#

(#) = Out of Range (Advisory for non CCC, SPCC)

Continuing Calibration Report

Data File : C:\R052797\1481R.D
Acq On : 27 May 97 4:21
Sample : VSTD010
Misc : CALIBRATION CHECK 5/27/97

Vial: 4
Operator: HAROLD
Inst : INST-122
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\BFI8260.M
Title : SW-846 Method 8260 25mL water
Last Update : Wed May 14 04:28:41 1997
Response via : Multiple Level Calibration

Min. RRF : 0.100 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

cal414 = 1320R.D cal1035 = 1332R.D cal2587 = 1312R.D
cal5175 = 1311R.D cal10350 = 1310R.D

		Compound	AvgRF	CCRF	%Dev
40	C	1,2-DICHLOROPROPANE	0.37868	0.41759	10.3
41	T	dibromomethane	0.18782	0.19972	6.3
42	T	1,4-dioxane	0.00058	0.00087	50.0#
43	T	methyl methacrylate	0.10487	0.11265	7.4
44	T	bromodichloromethane	0.53018	0.58364	10.1
45	T	2-chloroethylvinylether	0.07123	0.06352	10.8
46	T	cis-1,3-dichloropropene	0.37950	0.40457	6.6
47	T	4-methyl-2-pentanone	0.08979	0.09208	2.6
48	S	toluene-d8	0.97932	1.07765	10.0
49	C	TOLUENE	0.59841	0.68605	14.6
[illegible]	T	trans-1,3-dichloropropene	0.24995	0.27914	11.7
51	T	1,1,2-trichloroethane	0.15764	0.16943	7.5
52	I	CHLOROBENZENE-D5	1.00000	1.00000	0.0
53	T	ethyl methacrylate	0.21550	0.20852	3.2
54	T	tetrachloroethene	0.69983	0.70356	0.5
55	T	1,3-dichloropropane	0.38997	0.39282	0.7
56	T	2-hexanone	0.13119	0.01842	86.0#
57	T	dibromochloromethane	0.43885	0.45135	2.8
58	T	1,2-dibromoethane	0.30837	0.30502	1.1
59	P	chlorobenzene	0.99391	1.02740	3.4
60	T	1,1,1,2-tetrachloroethane	0.43864	0.44343	1.1
61	C	ETHYL BENZENE	1.77643	1.94367	9.4
62	T	m,p-xylene	0.64703	0.70122	8.4
63	T	o-xylene	0.55863	0.64443	15.4
64	T	styrene	0.81740	0.93940	14.9
65	P	bromoform	0.19421	0.20922	7.7
66	I	1,4-DICHLOROBENZENE-D4	1.00000	1.00000	0.0
67	T	isopropylbenzene	5.34560	4.52038	15.4
68	S	4-bromofluorobenzene	1.81479	1.53638	15.3
69	P	1,1,2,2-tetrachloroethane	0.68003	0.59991	11.8
70	T	bromobenzene	1.03461	0.86464	16.4
71	T	1,2,3-trichloropropane	0.28606	0.24121	15.7
72	T	trans-1,4-dichloro-2-butene	0.08953	0.07720	13.8
[illegible]	T	n-propylbenzene	6.12761	5.46194	10.9
[illegible]	T	2-chlorotoluene	3.78834	3.60483	4.8
75	T	1,3,5-trimethylbenzene	3.38089	3.24522	4.0
76	T	4-chlorotoluene	3.77001	3.71728	1.4
77	T	t-Butylbenzene	2.85147	2.95062	3.5
78	T	1,2,4-trimethylbenzene	2.91543	2.99610	2.8

Continuing Calibration Report

Data File : C:\R052797\1481R.D
Acq On : 27 May 97 4:21
Sample : VSTD010
Misc : CALIBRATION CHECK 5/27/97

Vial: 4
Operator: HAROLD
Inst : INST-122
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\BFI8260.M
Title : SW-846 Method 8260 25mL water
Last Update : Wed May 14 04:28:41 1997
Response via : Multiple Level Calibration

Min. RRF : 0.100 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

cal 2 = 1320R.D cal 10 = 1332R.D cal 25 = 1312R.D
cal 50 = 1311R.D cal100 = 1310R.D

	Compound	AvgRF	CCRF	%Dev
79 T	sec-butylbenzene	5.26102	5.24988	0.2
80 T	1,3-dichlorobenzene	1.57937	1.55853	1.3
81 T	p-Isopropyltoluene	3.38340	3.55477	5.1
82 T	1,4-dichlorobenzene	1.65420	1.70565	3.1
83 T	n-butylbenzene	3.58506	4.09296	14.2
84 T	1,2-dichlorobenzene	1.15635	1.21613	5.2
85 T	1,2-dibromo-3-chloropropane	0.10585	0.10876	2.7
86 T	1,2,4-trichlorobenzene	0.54185	0.66078	21.9#
87 T	hexachlorobutadiene	0.59948	0.67154	12.0
[illegible] T	naphthalene	0.47239	0.55900	18.3
[illegible] T	1,2,3-trichlorobenzene	0.39693	0.44440	12.0

(#) = Out of Range SPCC's out = 0 CCC's out = 1

Heritage
Volatile Analysis - Water Method Blank
Analysis Method: SW846-8260

GC/MS VOA Data File: >1482R
Analysis Date/Time: 5/27/97 5:13

Analyte List	Result	DL	Units
Benzene	BDL	1	uG/L
Bromobenzene	BDL	1	uG/L
Bromochloromethane	BDL	1	uG/L
Bromodichloromethane	BDL	1	uG/L
Bromoform	BDL	1	uG/L
Bromomethane	BDL	5	uG/L
n-Butylbenzene	BDL	1	uG/L
tert-Butylbenzene	BDL	1	uG/L
Carbon tetrachloride	BDL	1	uG/L
Chlorobenzene	BDL	1	uG/L
Chloroethane	BDL	5	uG/L
Chloroform	BDL	1	uG/L
Chloromethane	BDL	5	uG/L
2-Chlorotoluene	BDL	1	uG/L
4-Chlorotoluene	BDL	1	uG/L
Dibromochloromethane	BDL	1	uG/L
1,2-Dibromo-3-Chloropropane	BDL	1	uG/L
1,2-Dibromoethane	BDL	1	uG/L
Dibromomethane	BDL	1	uG/L
1,2-Dichlorobenzene	BDL	1	uG/L
1,3-Dichlorobenzene	BDL	1	uG/L
1,4-Dichlorobenzene	BDL	1	uG/L
Dichlorodifluoromethane	BDL	1	uG/L
1,1-Dichloroethane	BDL	1	uG/L
1,2-Dichloroethane	BDL	1	uG/L
1,1-Dichloroethene	BDL	1	uG/L
cis-1,2-Dichloroethene	BDL	1	uG/L
trans-1,2-Dichloroethene	BDL	1	uG/L
1,2-Dichloropropane	BDL	1	uG/L
1,3-Dichloropropane	BDL	1	uG/L
2,2-Dichloropropane	BDL	1	uG/L
1,1-Dichloropropene	BDL	1	uG/L
cis-1,3-Dichloropropene	BDL	1	uG/L
trans-1,3-Dichloropropene	BDL	1	uG/L
Ethyl Benzene	BDL	1	uG/L
Hexachlorobutadiene	BDL	1	uG/L
Isopropylbenzene	BDL	1	uG/L
Dichloromethane	BDL	5	uG/L
Naphthalene	BDL	1	uG/L
N-Propylbenzene	BDL	1	uG/L
Styrene	BDL	1	uG/L
1,1,1,2-Tetrachloroethane	BDL	1	uG/L
1,1,2,2-Tetrachloroethane	BDL	1	uG/L
Tetrachloroethane	BDL	1	uG/L
Toluene	BDL	1	uG/L
1,2,3-Trichloropropane	BDL	1	uG/L
1,2,4-Trichlorobenzene	BDL	1	uG/L

Heritage
Volatile Analysis - Water Method Blank
Analysis Method: SW846-8260

GC/MS VOA Data File: >1482R
Analysis Date/Time: 5/27/97 5:13

Analyte List	Result	DL	Units
1,1,1-Trichloroethane.....	BDL	1	uG/L
1,1,2-Trichloroethane.....	BDL	1	uG/L
Trichloroethene.....	BDL	1	uG/L
Trichlorofluoromethane.....	BDL	1	uG/L
1,2,3-Trichloropropane.....	BDL	1	uG/L
1,2,4-Trimethylbenzene.....	BDL	1	uG/L
1,3,5-Trimethylbenzene.....	BDL	1	uG/L
Vinyl Chloride.....	BDL	5	uG/L
Xylenes (o/m/p-xylene).....	BDL	1	uG/L
Methyl-2-Pentanone.....	BDL	5	uG/L
Acetone.....	BDL	25	uG/L
2-Butanone.....	BDL	5	uG/L
Acrylonitrile.....	BDL	5	uG/L
1,2-Dibromo-3-chloropropane...	BDL	5	uG/L
1,2-Dibromomethane.....	BDL	1	uG/L
trans-1,4-Dichloro-2-butene...	BDL	1	uG/L
2-Hexanone.....	BDL	5	uG/L
Vinyl Acetate.....	BDL	1	uG/L
Carbon Disulfide.....	BDL	5	uG/L
Iodomethane.....	BDL	1	uG/L

Surrogate Recovery		
Dichloroethane-d4.....	118	% Recovery
Toluene-d8.....	99	% Recovery
4-Bromofluorobenzene.....	88	% Recovery

Continuing Calibration Report

Data File : C:\L052197\9960L.D
Acq On : 21 May 97 9:19
Sample : VSTD050 8260
Misc :
MS Integration Params: rteint.p

Vial: 1
Operator: bethm
Inst : GC/MS #11
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\82601L.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Fri Apr 25 10:23:26 1997
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

cal 10 = 9683L.D cal 20 = 9684L.D cal 50 = 9685L.D
cal100 = 9686L.D cal200 = 9687L.D

		Compound	AvgRF	CCRF	%Dev
1	I	PENTAFLUOROBENZENE	1.00000	1.00000	0.0
2		Dichlorodifluoromethane	0.34034	0.34091	0.2
3	P	Chloromethane	0.27964	0.35773	27.9#
4	C	VINYL CHLORIDE	0.22558	0.20172	10.6
5		Bromomethane	0.15562	0.06589	57.7#
6		Chloroethane	0.16046	0.16935	5.5
7		Trichlorofluoromethane	0.64380	0.67780	5.3
8		Acrolein	0.01032	0.00446	56.8#
[illegible]		Diethyl Ether	0.18136	0.18342	1.1
[illegible]		Acetone	0.08256	0.14336	73.6#
11	CM	1,1-DICHLOROETHENE	0.33046	0.30049	9.1
12		Methylene Chloride	0.39976	0.35304	11.7
13		Acrylonitrile	0.02576	0.01819	29.4#
14		Carbon Disulfide	0.84452	0.79601	5.7
15		Vinyl Acetate	0.14523	0.14944	2.9
16		trans-1,2-Dichloroethene	0.37395	0.31914	14.7
17	P	1,1-Dichloroethane	0.65978	0.66389	0.6
18		Methyl-t-butyl Ether	0.81735	0.85813	5.0
19		Diispropyl Ether	1.12483	1.07453	4.5
20		2-Butanone	0.13842	0.22798	64.7#
21		cis-1,2-Dichloroethene	0.38878	0.37076	4.6
22	C	CHLOROFORM	0.79302	0.79999	0.9
23		Bromochloromethane	0.27858	0.28068	0.8
24		2,2-Dichloropropane	0.55577	0.58289	4.9
25		Tetrahyrofuran	0.05078	0.06689	31.7#
26		1,1,1-Trichloroethane	0.62299	0.65571	5.3
27		Iodomethane	0.28717	0.04127	85.6#
28	I	1,4-DIFLUOROBENZENE	1.00000	1.00000	0.0
29		1,1-Dichloropropene	0.54958	0.52413	4.6
30	S	1,2-Dichloroethane-d4	0.43765	0.45183	3.2
31		Carbon Tetrachloride	0.56970	0.57732	1.3
32		1,2-Dichloroethane	0.54073	0.54076	0.0
33	M	Benzene	0.92188	0.90571	1.8
[illegible]	M	Trichloroethene	0.48597	0.50105	3.1
35	C	1,2-DICHLOROPROPANE	0.42257	0.41804	1.1
36		Bromodichloromethane	0.79673	0.83347	4.6
37		Dibromomethane	0.45225	0.47047	4.0
38		4-Methyl-2-Pentanone	0.39473	0.57504	45.7#
39		2-Chloroethylvinylether	0.15979	0.23369	46.2#

Continuing Calibration Report

Data File : C:\L052197\9960L.D
Acq On : 21 May 97 9:19
Sample : VSTD050 8260
Misc :
MS Integration Params: rteint.p

Vial: 1
Operator: bethm
Inst : GC/MS #11
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\82601L.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Fri Apr 25 10:23:26 1997
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

cal 10 = 9683L.D cal 20 = 9684L.D cal 50 = 9685L.D
cal100 = 9686L.D cal200 = 9687L.D

		Compound	AvgRF	CCRF	%Dev
40		cis-1,3-Dichloropropene	0.48241	0.49885	3.4
41	S	Toluene-d8	1.01773	0.97962	3.7
42	CM	TOLUENE	1.05439	1.02791	2.5
43		trans-1,3-Dichloropropene	0.56498	0.57901	2.5
44		1,1,2-Trichloroethane	0.39800	0.43875	10.2
45		1,2-Dibromoethane	0.61568	0.69155	12.3
46	S	4-Bromofluorobenzene	0.72037	0.64463	10.5
47	I	CHLOROBENZENE-d5	1.00000	1.00000	0.0
		2-Hexanone	0.32164	0.53644	66.8#
49		1,3-Dichloropropane	0.69257	0.76513	10.5
50		Tetrachloroethene	0.69810	0.72749	4.2
51		Dibromochloromethane	0.83305	0.93872	12.7
52	PM	Chlorobenzene	1.11559	1.11023	0.5
53		1,1,1,2-Tetrachloroethane	0.56820	0.60227	6.0
54	C	ETHYL BENZENE	0.46900	0.44868	4.3
55		m,p-Xylene	0.59689	0.58641	1.8
56		o-Xylene	0.63885	0.63304	0.9
57		Styrene	0.92123	0.84118	8.7
58	P	Bromoform	0.65903	0.82206	24.7#
59	I	1,4-Dichlorobenzene-d4	1.00000	1.00000	0.0
60		Isopropylbenzene	2.94384	3.32002	12.8
61		trans-1,4-Dichloro-2-butene	0.25516	0.36450	42.9#
62	P	1,1,2,2-Tetrachloroethane	1.49390	2.14835	43.8#
63		Bromobenzene	1.76186	2.04970	16.3
64		1,2,3-Trichloropropane	0.36745	0.57904	57.6#
65		n-Propylbenzene	0.44619	0.49417	10.8
66		1,3,5-Trimethylbenzene	2.34626	2.64990	12.9
67		2-Chlorotoluene	0.82046	0.94225	14.8
68		4-Chlorotoluene	0.79945	0.81735	2.2
69		t-Butylbenzene	2.72056	3.15587	16.0
70		1,2,4-Trimethylbenzene	2.23914	2.43633	8.8
71		sec-Butylbenzene	3.64976	4.04045	10.7
		p-Isopropyltoluene	2.57498	2.72266	5.7
73		1,3-Dichlorobenzene	1.82739	1.94536	6.5
74		1,4-Dichlorobenzene	1.68082	1.74425	3.8
75		n-Butylbenzene	1.34123	1.31770	1.8
76		1,2-Dichlorobenzene	1.77038	1.95761	10.6
77		1,2-Dibromo-3-chloropropane	0.39920	0.62630	56.9#
78		1,2,4-Trichlorobenzene	1.26554	1.29017	1.9

Continuing Calibration Report

Data File : C:\L052197\9960L.D
Acq On : 21 May 97 9:19
Sample : VSTD050 8260
Misc :
MS Integration Params: rteint.p

Vial: 1
Operator: bethm
Inst : GC/MS #11
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\82601L.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Fri Apr 25 10:23:26 1997
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

cal 10 = 9683L.D cal 20 = 9684L.D cal 50 = 9685L.D
cal100 = 9686L.D cal200 = 9687L.D

	Compound	AvgRF	CCRF	%Dev
79	Naphthalene	1.53850	1.93534	25.8#
80	Hexachlorobutadiene	1.05586	1.09325	3.5
81	1,2,3-Trichlorobenzene	1.22277	1.28966	5.5

(#) = Out of Range SPCC's out = 0 CCC's out = 0

8503J.D 82601L.M Fri May 30 15:20:03 1997 GCMS#11

Heritage
Volatile Analysis - Water Method Blank
Analysis Method: SW846-8260

GC/MS VOA Data File: 9961L
Analysis Date/Time: 5/21/97 10:44

Analyte List	Result	DL	Units
Benzene	BDL	5	uG/L
Bromobenzene	BDL	5	uG/L
Bromochloromethane	BDL	5	uG/L
Bromodichloromethane	BDL	5	uG/L
Bromoform	BDL	5	uG/L
Bromomethane	BDL	5	uG/L
n-Butylbenzene	BDL	5	uG/L
tert-Butylbenzene	BDL	5	uG/L
Carbon tetrachloride	BDL	5	uG/L
Chlorobenzene	BDL	5	uG/L
Chloroethane	BDL	5	uG/L
Chloroform	BDL	5	uG/L
Chloromethane	BDL	5	uG/L
2-Chlorotoluene	BDL	5	uG/L
4-Chlorotoluene	BDL	5	uG/L
Dibromochloromethane	BDL	5	uG/L
1,2-Dibromo-3-Chloropropane	BDL	5	uG/L
1,2-Dibromoethane	BDL	5	uG/L
Dibromomethane	BDL	5	uG/L
1,2-Dichlorobenzene	BDL	5	uG/L
1,3-Dichlorobenzene	BDL	5	uG/L
1,4-Dichlorobenzene	BDL	5	uG/L
Dichlorodifluoromethane	BDL	5	uG/L
1,1-Dichloroethane	BDL	5	uG/L
1,2-Dichloroethane	BDL	5	uG/L
1,1-Dichloroethene	BDL	5	uG/L
cis-1,2-Dichloroethene	BDL	5	uG/L
trans-1,2-Dichloroethene	BDL	5	uG/L
1,2-Dichloropropane	BDL	5	uG/L
1,3-Dichloropropane	BDL	5	uG/L
2,2-Dichloropropane	BDL	5	uG/L
1,1-Dichloropropene	BDL	5	uG/L
cis-1,3-Dichloropropene	BDL	5	uG/L
trans-1,3-Dichloropropene	BDL	5	uG/L
Ethyl Benzene	BDL	5	uG/L
Hexachlorobutadiene	BDL	5	uG/L
Isopropylbenzene	BDL	5	uG/L
Dichloromethane	BDL	5	uG/L
Naphthalene	BDL	5	uG/L
N-Propylbenzene	BDL	5	uG/L
Styrene	BDL	5	uG/L
1,1,1,2-Tetrachloroethane	BDL	5	uG/L
1,1,2,2-Tetrachloroethane	BDL	5	uG/L
Tetrachloroethane	BDL	5	uG/L
Toluene	BDL	5	uG/L
1,2,3-Trichloropropane	BDL	5	uG/L
1,2,4-Trichlorobenzene	BDL	5	uG/L

Heritage
Volatile Analysis - Water Method Blank
Analysis Method: SW846-8260

GC/MS VOA Data File: 9961L
Analysis Date/Time: 5/21/97 10:44

Analyte List	Result	DL	Units
1,1,1-Trichloroethane.....	BDL	5	uG/L
1,1,2-Trichloroethane.....	BDL	5	uG/L
Trichloroethene.....	BDL	5	uG/L
Trichlorofluoromethane.....	BDL	5	uG/L
1,2,3-Trichloropropane.....	BDL	5	uG/L
1,2,4-Trimethylbenzene.....	BDL	5	uG/L
1,3,5-Trimethylbenzene.....	BDL	5	uG/L
Vinyl Chloride.....	BDL	5	uG/L
Xylenes (o/m/p-xylene).....	BDL	5	uG/L
Hexane.....	BDL	10	uG/L
Methyl-t-butyl benzene.....	BDL	5	uG/L
Methyl-2-Pentanone.....	BDL	10	uG/L

Surrogate Recovery		
Dichloroethane-d4.....	107	% Recovery
Toluene-d8.....	99	% Recovery
4-Bromofluorobenzene.....	86	% Recovery

Heritage
Volatile Analysis - Water Method Blank
Analysis Method: SW846-8260

GC/MS VOA Data File: >1441R
Analysis Date/Time: 5/22/97 4:20

Analyte List	Result	DL	Units
Benzene	BDL	5	uG/L
Bromobenzene	BDL	5	uG/L
Bromochloromethane	BDL	5	uG/L
Bromodichloromethane	BDL	5	uG/L
Bromoform	BDL	5	uG/L
Bromomethane	BDL	5	uG/L
n-Butylbenzene	BDL	5	uG/L
tert-Butylbenzene	BDL	5	uG/L
Carbon tetrachloride	BDL	5	uG/L
Chlorobenzene	BDL	5	uG/L
Chloroethane	BDL	5	uG/L
Chloroform	BDL	5	uG/L
Chloromethane	BDL	5	uG/L
2-Chlorotoluene	BDL	5	uG/L
4-Chlorotoluene	BDL	5	uG/L
Dibromochloromethane	BDL	5	uG/L
1,2-Dibromo-3-Chloropropane	BDL	5	uG/L
1,2-Dibromoethane	BDL	5	uG/L
Dibromomethane	BDL	5	uG/L
1,2-Dichlorobenzene	BDL	5	uG/L
1,3-Dichlorobenzene	BDL	5	uG/L
1,4-Dichlorobenzene	BDL	5	uG/L
Dichlorodifluoromethane	BDL	5	uG/L
1,1-Dichloroethane	BDL	5	uG/L
1,2-Dichloroethane	BDL	5	uG/L
1,1-Dichloroethene	BDL	5	uG/L
cis-1,2-Dichloroethene	BDL	5	uG/L
trans-1,2-Dichloroethene	BDL	5	uG/L
1,2-Dichloropropane	BDL	5	uG/L
1,3-Dichloropropane	BDL	5	uG/L
2,2-Dichloropropane	BDL	5	uG/L
1,1-Dichloropropene	BDL	5	uG/L
cis-1,3-Dichloropropene	BDL	5	uG/L
trans-1,3-Dichloropropene	BDL	5	uG/L
Ethyl Benzene	BDL	5	uG/L
Hexachlorobutadiene	BDL	5	uG/L
Isopropylbenzene	BDL	5	uG/L
Dichloromethane	BDL	5	uG/L
Naphthalene	BDL	5	uG/L
N-Propylbenzene	BDL	5	uG/L
Styrene	BDL	5	uG/L
1,1,1,2-Tetrachloroethane	BDL	5	uG/L
1,1,2,2-Tetrachloroethane	BDL	5	uG/L
Tetrachloroethane	BDL	5	uG/L
Toluene	BDL	5	uG/L
1,2,3-Trichloropropane	BDL	5	uG/L
1,2,4-Trichlorobenzene	BDL	5	uG/L

Heritage
Volatile Analysis - Water Method Blank
Analysis Method: SW846-8260

GC/MS VOA Data File: >1441R
Analysis Date/Time: 5/22/97 4:20

Analyte List	Result	DL	Units
1,1,1-Trichloroethane.....	BDL	5	uG/L
1,1,2-Trichloroethane.....	BDL	5	uG/L
Trichloroethene.....	BDL	5	uG/L
Trichlorofluoromethane.....	BDL	5	uG/L
1,2,3-Trichloropropane.....	BDL	5	uG/L
1,2,4-Trimethylbenzene.....	BDL	5	uG/L
1,3,5-Trimethylbenzene.....	BDL	5	uG/L
Vinyl Chloride.....	BDL	5	uG/L
Xylenes (o/m/p-xylene).....	BDL	5	uG/L
Hexane.....	BDL	10	uG/L
Methyl-t-butyl benzene.....	BDL	5	uG/L
Methyl-2-Pentanone.....	BDL	10	uG/L

Surrogate Recovery

Dichloroethane-d4.....	107	% Recovery
Toluene-d8.....	98	% Recovery
4-Bromofluorobenzene.....	88	% Recovery

Contains Arsenic Data

for all sampled wells.

Submitted w/ STEP of October 2002

JG 1/4/2003

#295

Submitted w/STEP (revised) 10/21/2003
Includes Arsenic Data for all wells.
original Submittal only included for (7/31/1997)
MW-3R, MW-10R, MW-11R, MW-12I, MW-13D, MW-14D
MW-13R, MW-14R
CG 10/21/03

ATTACHMENT B
May 1997 Analytical Data and Field Information Forms

Placed in personal data file

4104 214.04001
GWMD

SMS

HERITAGE ENVIRONMENTAL SERVICES, INC.

7901 West Morris Street
Indianapolis, IN 46231
Phone: 317/243-0811
FAX: 317/486-5095

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JUN 1997
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Groundwater Services

QUALITY ASSURANCE REPORT PACKAGE # 5151
BROWNING-FERRIS INDUSTRIES

SHIRLEY SALES
BROWNING-FERRIS INDUSTRIES
757 NORTH ELDRIDGE
HOUSTON, TX 77079
(713) 870-7602

SAMPLE # **A407830, A407859, A407861-A407863, A407957-A407962, A408104-A408110, A408112-A408118**

LAUBSCHER MEADOWS--EVANSVILLE

PREPARED BY: HERITAGE ENVIRONMENTAL SERVICES, INC.
COMMERCIAL LABORATORY OPERATIONS
7901 WEST MORRIS STREET
INDIANAPOLIS, INDIANA 46231
(317) 243-8304

APPROVED BY: J. Klingla
PROJECT CHEMIST

Recycled Paper

CASE NARRATIVE
SHIPPING & RECEIVING

The samples A407830, 859, 861-863, 957-962, A408104-110, 112-118 were intact at the time of receipt (see chain of custody for dates received). The samples were logged in and distributed to the appropriate groups for the requested testing.

Teresa A. Miller
Document Control

TO ENSURE PROPER HANDLING OF SA[illegible]ES PLEASE COMPLETE THIS ENTIRE FORM

HERITAGE ENVIR[illegible]MENTAL SERVICES

COMMERCIAL LABORATORY OPERATIONS

7901 West Morris Street
Indianapolis, Indiana 46231 (317) 243-0811 Fax (317) 486-5095

I-64139

Co. Name: BFI Laubscher Meadows

Project Name:

Quote No.: PO No.:

ENVIRONMENTAL PROGRAM:

CWA NPDES _____ IWP _____ SLUDGE _____

RCRA MW _____ SW _____ DISPOSAL _____

SDWA _____ CERCLA/SUPERFUND _____ OTHER _____

Sampled by: Steve Allen

Analyses Requested (Note special detection limits or methods)

Report To:
Co: BFI- Evansville
Add:
Attn: Jeff Jenkins
Phone:

Accelerated Turnaround Requested _____ (Subject to Additional Charge)

Result Request by: ___/___/___ Mo. Day Yr
(Date must be Accepted and Approved by Lab)

Client ID:	Date:	Time:	Comp	Grab	Sample Description	Sample Type (Matrix): DW, GW, WW, Soil, Oil, Sludge, Other	No. of Containers	VOH	Diss Metals	T. Metals	NH_3	Gen. Chem						Remarks:	LAB Sample No.
	5-13-97	11:05 AM PM			MW 14D		6	✓	✓	✓	✓	✓							A407830
	↓	12:55 AM PM			MW 13D		6	✓	✓	✓	✓	✓							859
		14:06 AM PM			MW 11R		6	✓	✓	✓	✓	✓							861
		14:40 AM PM			Field Blank		5	✓	✓	✓	✓	✓							863
	↓	11:05 AM PM			MW 14D DUP		6	✓	✓	✓	✓	✓							862
		AM PM																	
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	/	[illegible]	5/14/97/11:05		

Properly Preserved _____

Broken Bottles _____

Distribution: White original and Yellow copy to accompany sample to laboratory.
Pink copy to b[illegible]ned by client.

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HERITAGE ENVIR NMENTAL SERVICES

COMMERCIAL LABORATORY OPERATIONS

7901 West Morris Street
Indianapolis, Indiana 46231 (317) 243-0811 Fax (317) 486-5095

I-64130

Co. Name: B.F.I.
Project Name: [illegible]
Quote No.: 212 6591 PO No.:

ENVIRONMENTAL PROGRAM:

CWA NPDES ____ IWP ____ SLUDGE ____
RCRA MW ____ SW ____ DISPOSAL ____
SDWA ____ CERCLA/SUPERFUND ____ OTHER ____

Sampled by: Steve [illegible]

Analyses Requested (Note special detection limits or methods)

Report To:
Co: B.F.I.
Add: [illegible]
Attn: [illegible]
Phone:

Accelerated Turnaround Requested ____ (Subject to Additional Charge)

Result Request by: ____ / ____ / ____ (Mo Day Yr)
(Date must be Accepted and Approved by Lab)

Client ID:	Date:	Time:	Comp	Grab	Sample Description	Sample Type (Matrix): DW, GW, WW, Soil, Oil, Sludge, Other	No. of Containers									Remarks:	LAB Sample No.
	5-14-97	8:00 AM/PM			MW 10 R	GW	1										957
	5-14-97	8:30 AM/PM			MW 14 R		1										958
	5-14-97	9:00 AM/PM			MW 13 R		1										959
	5-14-97	10:50 AM/PM			MW 7 R		1										960
	5-14-97	1019 AM/PM			MW 12 I		1										961
	5-14-97	1509 AM/PM			MW 15 D		1										962
		AM/PM															
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[illegible]	5-14-97 1630			/	
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Relinquished by: (Signature)	Date/Time	Received for Lab by: (Signature)	Date/Time	Remarks	
	/	[illegible]	5/15/97 11:30		

Properly Preserved ____
Broken Bottles ____

Distribution: White original and Yellow copy to accompany sample to laboratory.
Pink copy to be retained by client.

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TO ENSURE PROPER HANDLING OF S[illegible]LES PLEASE COMPLETE THIS ENTIRE FORM

HERITAGE ENVI[illegible]NMENTAL SERVICES

COMMERCIAL LABORATORY OPERATIONS

7901 West Morris Street

Indianapolis, Indiana 46231 (317) 243-0811 Fax (317) 486-5095

I-64142

Co. Name: BFI

Project Name: [illegible]

Quote No.: 2126591 PO No.:

ENVIRONMENTAL PROGRAM:

CWA NPDES _____ IWP _____ SLUDGE _____

RCRA MW _____ SW _____ DISPOSAL _____

SDWA _____ CERCLA/SUPERFUND _____ OTHER _____

Sampled by:

Analyses Requested (Note special detection limits or methods)

Report To:

Co:

Add: Jeff Jenkins

Evansville IN [illegible]

Attn:

Phone:

Accelerated Turnaround Requested _____ (Subject to Additional Charge)

Result Request by: ___ / ___ / ___ Mo Day Yr

(Date must be Accepted and Approved by Lab)

Client ID:	Date:	Time:	Comp	Grab	Sample Description	Sample Type (Matrix): DW, GW, WW, Soil, Oil, Sludge, Other	No. of Containers	2126591 + Evanp List	For Tt Diss Metals								Remarks:	LAB Sample No.
	5-15-97	8:45 AM PM		✓	Manhole 4		6	✓									[illegible]	A408104
	5-15-97	9:15 AM PM		✓	Brine		6	✓										A408105
	5-12-97	AM PM			Trip		5	✓										A408118
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[signature]	5/[illegible]/97 7:00pm			/	
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Relinquished by: (Signature)	Date/Time	Received for Lab by: (Signature)	Date/Time	Remarks	
	/	Viola Huntie	5/16/97 8:50		

Properly Preserved _____

Broken Bottles _____

Distribution: White original and Yellow copy to accompany sample to laboratory.
Pink copy to be retained by client.

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TO ENSURE PROPER HANDLING OF SAMPLES PLEASE COMPLETE THIS ENTIRE FORM

HERITAGE ENVIRONMENTAL SERVICES

COMMERCIAL LABORATORY OPERATIONS

7901 West Morris Street
Indianapolis, Indiana 46231 (317) 243-0811 Fax (317) 486-5095

I-64131

Co. Name: BFI
Project Name: Laubscher Meadows
Quote No.: 2176597 / 2176591 PO No.:

ENVIRONMENTAL PROGRAM:
CWA NPDES ____ IWP ____ SLUDGE ____
RCRA MW ____ SW ____ DISPOSAL ____
SDWA ____ CERCLA/SUPERFUND ____ OTHER ____
Sampled by:

Analyses Requested (Note special detection limits or methods)

Report To:
Co: Jeff Jenkins
Add: BFI
Attn: Evansville, IN 47720
Phone:
Accelerated Turnaround Requested ____ (Subject to Additional Charge)
Result Request by: ____ Mo / Day / Yr
(Date must be Accepted and Approved by Lab)

Client ID:	Date:	Time:	Comp	Grab	Sample Description	Sample Type (Matrix): DW, GW, WW, Soil, Oil, Sludge, Other	No. of Containers	2176597	2176591	Remarks:	LAB Sample No.
	5/15/97	9:26 AM PM			MW 336		6		✓		A408106
		9:57 AM PM		✓	MW 3R2		6	✓			114
		10:10 AM PM		✓	MW 3R1		6	✓			115
		10:20 AM PM		✓	MW 3R		6		✓		107
		10:45 AM PM		✓	MW 5R		6		✓		108
		11:00 AM PM		✓	MW 5R1		6	✓			116
		11:11 AM PM		✓	MW 5R2		6	✓			117
		11:30 AM PM		✓	MW 337		6		✓		109
		11:45 AM PM		✓	MW 4R		6		✓		110
		11:45 AM PM		✓	MW 4R DUP		6		✓		112
		12:59 AM PM		✓	MW 4D		6		✓		113
		AM PM					✓				

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[signature]	5/13/97 7:00pm			/	
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Relinquished by: (Signature)	Date/Time	Received for Lab by: (Signature)	Date/Time	Remarks	
	/	Victor Hunter	5/16/97 8:50		

Properly Preserved ____
Broken Bottles ____

Distribution: White original and Yellow copy to accompany sample to laboratory.
Pink copy to be retained by client.

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BFI FIELD INFORMATION LOG

Facility: Laubscher Meadows

Sample Point ID: MW 337

Location: Evansville IN

Field Representative: Steve Asken

Sample Matrix: GW

Lab Sample #: A408109

Gascope Calibration: % Gas: 3 % LEL: 60
Gascope Reading: % Gas: 0 % LEL: 0

PURGE INFORMATION:

Method of Well Purge: Grundfos pump

Dedicated: 8.53 Y / N

Date / Time Initiated: 5-14-97 1715

One (1) Casing Volume, Gal: ~~34.64~~

Initial Water Level, Feet: 5.81

Total Volume Purged, Gal: 13

Ground Water Elevation, MSL: 389.35

Was Well Purged To Dryness: yes

Well Total Depth, Feet: 59.10

Water Level After Purge, Feet: NA

Casing Diameter, Inches: ~~4~~ 2

Date / Time Completed: 5/14/97 1735

PURGE DATA:

Time	Purge Rate (gpm/htz)	Cumulative Volume	Temp. (C)	pH (std units)	Conduct. (mhos/cm)	Turb. (NTU)	Other ORP	Other DO
1715	/92	1	15.0	7.5	714	7.3	-35	.9
1730	.53/130	9	15.9	7.4	714	9.66	-25	.39

BFI FIELD INFORMATION LOG (continued)

SAMPLING INFORMATION: Sample Point ID: GW 337

Method of Sampling: Groundofos pump Dedicated: ⊗ 1

Water Level @ Sampling, Feet: 5.99 Well Collection Sequence Number: 17

Parameters: Annual ( ) Semi-Annual (✓) Quarterly ( ) Monthly ( ) Other ( ) ____

SAMPLING DATA:

Date/Time	Sample Rate	Temp. (°C)	pH (Std. Units)	Conduct. (µmhos/cm)	Turb. (NTU)	Other ____ ~~Eh~~	Other ____ DO
5/15/97 11:30	VOA 67 100 mL per min Other 76 1L per min	14.6	6.81	721	13.8	13	2.83

INSTRUMENT CHECK DATA: See 12I

Turbidity Serial #: ____ ____ NTU std. = ____ NTU ____ NTU std. = ____ NTU

pH Serial #: ____ 4.0 std. = ____ 7.0 std. = ____ 10.0 std. = ____

Conductivity Serial #: ____ ____ umhos/cm = ____ ____ umhos/cm = ____

GENERAL INFORMATION:

Weather Conditions @ time of sampling: ~~Sunny~~ / PCloudy 63

Sample Characterisitics: No Color no Oder

ANALYTE COLLECTION ORDER, CONTAINERS, PRESERVATIVES AND TESTS PERFORMED:

Field VOA Dis Metals T. Metals NH3 Gen chem

2-40mL HCL Fit 1L(P) HNO3 1L(P) HNO3 1L(P) H2SO4 1L(P) unp

COMMENTS AND OBSERVATIONS: ____

I certify that sampling procedures were in accordance with all applicable EPA, State and BFI protocols.

Date: 5/15/97 By: Steve Osker Company: HES

BFI FIELD INFORMATION LOG

Facility: Laubscher Meadows

Sample Point ID: MW-336

Location: Evansville, IN

Field Representative: Steve Askew

Sample Matrix: GW

Lab Sample #: A408106

Gascope Calibration: % Gas: 3 % LEL: 60
Gascope Reading: % Gas: 0 % LEL: 0

PURGE INFORMATION:

Method of Well Purge: Grundfos pump Dedicated: Y / N

Date / Time Initiated: 5/15/97 8:08

One (1) Casing Volume, Gal: 8.98

Initial Water Level, Feet: 3.84

Total Volume Purged, Gal: 23

Ground Water Elevation, MSL: 387.28

Was Well Purged To Dryness: yes

Well Total Depth, Feet: 59.94

Water Level After Purge, Feet: NA

Casing Diameter, Inches: 2

Date / Time Completed: 5/15/97 8:50

PURGE DATA:

Time	Purge Rate (gpm/htz)	Cumulative Volume	Temp. (C)	pH (std units)	Conduct. (mhos/cm)	Turb. (NTU)	Other CH( )	Other DO
8:08	/70	1	14.5	7.0	891	23.4	4	.4
8:19	.82/79	9	15.0	7.0	895	3.54	5	.07
8:29	1/106	19	15.0	6.9	790	13.6	6	.42

BFI FIELD INFORMATION LOG (continued)

SAMPLING INFORMATION: Sample Point ID: MW 336

Method of Sampling: Grundfos pump Dedicated: Y / N

Water Level @ Sampling, Feet: 4.55 Well Collection Sequence Number: 10

Parameters: Annual ( ) Semi-Annual (✓) Quarterly ( ) Monthly ( ) Other ( )

SAMPLING DATA:

Date/Time	Sample Rate	Temp. (°C)	pH (Std. Units)	Conduct. (µmhos/cm)	Turb. (NTU)	Other EA DO ( )	
5-15-97 9.36	VOA 55 100mL per min Other 75 1L per min	14.9	6.9	877	7.85	7	.84

INSTRUMENT CHECK DATA:

Turbidity Serial #: 960600010924 0-400 NTU std. = 55.2 NTU 0-10 NTU std. = 5.4 NTU

pH Serial #: 54510625 4.0 std. = 4.0 7.0 std. = 7.0 10.0 std. = ____

Conductivity Serial #: 62234033 141.3 umhos/cm = 1644 12.9 umhos/cm = 10

DO #61376037 S - 1.00

GENERAL INFORMATION:

Weather Conditions @ time of sampling: Sunny 62

Sample Characterisitics: No color, No odor

ANALYTE COLLECTION ORDER, CONTAINERS, PRESERVATIVES AND TESTS PERFORMED:

Field	VOA	Dis Metals	T. Metals	NH3	Gen chem
	2-40mL VOA HCL	F.T 1L(P) HNO3	1 L(P) HNO3	1L(P) H2SO4	1 L(P) Unp

COMMENTS AND OBSERVATIONS: ____

I certify that sampling procedures were in accordance with all applicable EPA, State and BFI protocols.

Date: 5/15/97 By: Steve Allen Company: HES

BFI FIELD INFORMATION LOG

Facility: Laubscher Meadows

Sample Point ID: MW 15D

Location: Evansville, IN

Field Representative: Steve Askew

Sample Matrix: GW

Lab Sample #: A407962

Gascope Calibration: % Gas: 3 % LEL: 60
Gascope Reading: % Gas: 0 % LEL: 0

PURGE INFORMATION:

Method of Well Purge: Grundfos Pump

Dedicated: (Y) / N

Date / Time Initiated: 5/14/97 1335

One (1) Casing Volume, Gal: 46.44

Initial Water Level, Feet: 8.67

Total Volume Purged, Gal: 141

Ground Water Elevation, MSL: 376.81

Was Well Purged To Dryness: No

Well Total Depth, Feet: 80.12

Water Level After Purge, Feet: 31.17

Casing Diameter, Inches: 4

Date / Time Completed: 5/14/97 1509

PURGE DATA:

Time	Purge Rate (gpm/htz)	Cumulative Volume	Temp. (°C)	pH (std units)	DO mg/l	eH (mV)	Turb. (NTU)	Spec Cond umhos/cm
1335	/128	1	14.5	7.5	0.12	-3	14.4	933
1405	1.5/134	47	14.4	7.2	.34	-2	3.79	895
1440	1.37/134	95	14.4	7.2	.05	-18	4.2	865
1500	1.25/134	130	14.5	7.2	.03	-18	4.2	885
1504	1.25/139	135	14.5	7.2	.05	-18	4.5	881
1509	1.2/139	141	14.5	7.2	.07	-17	4.0	887

BFI FIELD INFORMATION LOG (continued)

SAMPLING INFORMATION: **Sample Point ID:** ~~OXW~~ 15D

Method of Sampling: GroundoFos pump Dedicated: (Y) / N

Water Level @ Sampling, Feet: 31.17 Well Collection Sequence Number: 9

Parameters: Annual ( ) Semi-Annual (✓) Quarterly ( ) Monthly ( ) Other ( ) ____

SAMPLING DATA:

Date/Time	Sample Rate	Temp. (°C)	pH (std)	DO (mg/l)	eH (mV)	Turb. (NTU)	Spec Cond umhos/cm
5/14/97 1509	VOA 117 100 mL per min Other 126 1L per min.	14.5	7.2	.07	-17	4.0	887

INSTRUMENT CHECK DATA: See 12 F

Turbidity Serial #: ____ ____ NTU std. = ____ NTU ____ NTU std. = ____ NTU

pH Serial #: ____ 4.0 std. = ____ 7.0 std. = ____ 10.0 std. = ____

Conductivity Serial #: ____ ____ umhos/cm = ____ ____ umhos/cm = ____

GENERAL INFORMATION:

Weather Conditions @ time of sampling: PCloudy - 63

Sample Characteristics: No color No oder

ANALYTE COLLECTION ORDER, CONTAINERS, PRESERVATIVES AND TESTS PERFORMED:

Field	VOA	Dis Metal	Metal	NH3	Gen chem
	2-40mL HCL	FIT. 1L(P) HNO3	1L(P) HNO3	1L(P) H2SO4	1L(P) unp

COMMENTS AND OBSERVATIONS: ____

I certify that sampling procedures were in accordance with all applicable EPA, State and BFI protocols.

Date: 5/14/97 By: [signature] Company: HES

BFI FIELD INFORMATION LOG

Facility: Laubscher Meadows

Sample Point ID: MW 14R

Location: Evansville IN

Field Representative: Steve Askew.

Sample Matrix: GW

Lab Sample #: A407958

Gascope Calibration: % Gas: 3 % LEL: 60
Gascope Reading: % Gas: 0 % LEL: 0

PURGE INFORMATION:

Method of Well Purge: Grundfos pump

Dedicated: (Y) N

Date , Time Initiated: 5-13-97 1435

One (1) Casing Volume, Gal: 20.09

Initial Water Level, Feet: 22.45

Total Volume Purged, Gal: 32

Ground Water Elevation, MSL: 387.19

Was Well Purged To Dryness: yes

Well Total Depth, Feet: 53.36

Water Level After Purge, Feet: NA

Casing Diameter, Inches: 4

Date Time Completed: 5-13-97 1540

PURGE DATA:

Time	Purge Rate (gpm/htz)	Cumulative Volume	Temp. (°C)	pH (std units)	DO mg/l	eH (mV)	Turb. (NTU)	Spec Cond umhos/cm
1435	112	1	14.8	7.0	1.0	-7	9.5	809
1540	0.3 / 154	21	16.2	7.1	1.0	-7	9.5	782

BFI FIELD INFORMATION LOG (continued)

SAMPLING INFORMATION:
Method of Sampling: Grundfos pump

Sample Point ID: MW 14R
Dedicated: (Y)

Water Level @ Sampling, Feet: 48.47 Well Collection Sequence Number: 5

Parameters: Annual ( ) Semi-Annual (✓) Quarterly ( ) Monthly ( ) Other ( ) ____

SAMPLING DATA:

Date/Time	Sample Rate	Temp. (°C)	pH (std)	DO (mg/l)	eH (mV)	Turb. (NTU)	Spec Cond umhos/cm
5/14/97 8:30AM	VOA 159 100mL p/min Other 159 1L per min	14.3	7.1	12.5	-9	18.5	807

INSTRUMENT CHECK DATA: SEE 10R

Turbidity Serial #: ____ ____ NTU std. = ____ NTU ____ NTU std. = ____ NTU

pH Serial #: ____ 4.0 std. = ____ 7.0 std. = ____ 10.0 std. = ____

Conductivity Serial #: ____ ____ umhos/cm = ____ ____ umhos/cm = ____

GENERAL INFORMATION:

Weather Conditions @ time of sampling: P Cloudy 54

Sample Characteristics: No Color, No Oder

ANALYTE COLLECTION ORDER, CONTAINERS, PRESERVATIVES AND TESTS PERFORMED:

Field, VOA	Dis Metals	T. Metals	NH3	Gen chem
2-40mL HCL	Ft. 1L(P) HNO3	1L(P) HNO3	1L(P) H2SO4	1L(P) UNP

COMMENTS AND OBSERVATIONS: ____

I certify that sampling procedures were in accordance with all applicable EPA, State and BFI protocols.

Date: 5 14 '97 By: Steve Osborn Company: HES

BFI FIELD INFORMATION LOG

Facility: Laubscher Meadow

Sample Point ID: 14D

Location: Evansville IN.

Field Representative: Steve Askew.

Sample Matrix: GW

Lab Sample #: A407830

Gascope Calibration: % Gas: 3 % LEL: 60
Gascope Reading: % Gas: 0 % LEL: 0

PURGE INFORMATION:

Method of Well Purge: Grundofos pump

Dedicated: (Y) N

Date, Time Initiated: 5-13-97 0940

One (1) Casing Volume, Gal: 30.22

Initial Water Level, Feet: 14.08

Total Volume Purged, Gal: 95

Ground Water Elevation, MSL: 384.84

Was Well Purged To Dryness: No

Well Total Depth, Feet: 60.57

Water Level After Purge, Feet: 23.18

Casing Diameter, Inches: 4

Date, Time Completed: 5-13-97 1107

PURGE DATA:

Time	Purge Rate (gpm/htz)	Cumulative Volume	Temp. (°C)	pH (std units)	DO mg/l	eH (mV)	Turb. (NTU)	Spec Cond umhos/cm
0940	/119	1	14.5	6.9	0.3	-1	7.8	876
1005	1.2/119	31	14.5	6.8	.09	1	9.1	854
1045	1.0/120	70	14.4	6.8	0.1	2	5.0	862
1055	1.0/120	80	14.5	6.8	0.1	2	4.9	865
1105	/120	93	14.5	6.8	0.1	2	4.2	859

Dup.

BFI FIELD INFORMATION LOG (continued)

SAMPLING INFORMATION: Sample Point ID: MW 14D

Method of Sampling: Grundfos pump Dedicated: (Y)

Water Level @ Sampling, Feet: 23.18 Well Collection Sequence Number: 1

Parameters: Annual ( ) Semi-Annual (✓) Quarterly ( ) Monthly ( ) Other ( ) _____

SAMPLING DATA:

Date/Time	Sample Rate	Temp. (°C)	pH (std)	DO (mg/l)	eH (mV)	Turb. (NTU)	Spec Cond umhos/cm
5-13-97 11:05	VOA 97 100 mL per min Other 100 2L pm	14.5	6.8	0.1	2	4.2	859

INSTRUMENT CHECK DATA: See 10 R

Turbidity Serial #: _____ ___ NTU std. = ___ NTU ___ NTU std. = ___ NTU

pH Serial #: _____ 4.0 std. = ___ 7.0 std. = ___ 10.0 std. = ___

Conductivity Serial #: _____ ___ umhos/cm = ___ ___ umhos/cm = ___

GENERAL INFORMATION:

Weather Conditions @ time of sampling: partly cloudy/sun Temp. 55

Sample Characteristics: No ~~cloud~~ color or odor

ANALYTE COLLECTION ORDER, CONTAINERS, PRESERVATIVES AND TESTS PERFORMED:

	Field VOA	Dis Metals	T. Metals	NH3	Gen chem
X-2	2-40mL HCL	FLRT 1L(P) HNO3	1L(P) HNO3	1L(P) H2SO4	1L(P) unp

COMMENTS AND OBSERVATIONS: well cap Donut Fit well

I certify that sampling procedures were in accordance with all applicable EPA, State and BFI protocols.

Date: 5 13 97 By: Steve Ashen Company: HES.

Rev. 5 095

BFI FIELD INFORMATION LOG

Facility: Laubscher Meadows

Sample Point ID: MW 13R

Location: Evansville IN

Field Representative: Steve Askew

Sample Matrix: GW

Lab Sample #: A407959

Gascope Calibration: % Gas: 3 % LEL: 60

Gascope Reading: % Gas: 0 % LEL: 0

PURGE INFORMATION:

Method of Well Purge: Grundfos pump

Dedicated: (Y) N

Date . Time Initiated: 5-13-97 1609

One (1) Casing Volume, Gal: 15.75

Initial Water Level, Feet: 19.35

Total Volume Purged, Gal: 23gal

Ground Water Elevation, MSL: 386.41

Was Well Purged To Dryness: yes

Well Total Depth, Feet: 43.58

Water Level After Purge, Feet: NA

Casing Diameter, Inches: 4

Date . Time Completed: 5-13-97 1639

PURGE DATA:

Time	Purge Rate (gpm/htz)	Cumulative Volume	Temp. (°C)	pH (std units)	DO mg/l	eH (mV)	Turb. (NTU)	Spec Cond umhos/cm
1609	/105	1	15.2	7.1	2.9	-2	5.0	746
1639	0.5/141	16	15.1	6.9	2.4	-6	1.7	738

BFI FIELD INFORMATION LOG (continued)

SAMPLING INFORMATION:
Method of Sampling: Grundfos pump

Sample Point ID: 13R
Dedicated: (Y)

Water Level @ Sampling, Feet: 35.08

Well Collection Sequence Number: ~~5~~ 6

Parameters: Annual ( ) Semi-Annual (✓) Quarterly ( ) Monthly ( ) Other ( ) _____

SAMPLING DATA:

Date/Time	Sample Rate	Temp. (°C)	pH (std)	DO (mg/l)	eH (mV)	Turb. (NTU)	Spec Cond umhos/cm
5-14-97 9:00AM	VOA 124 100mL per min Other 132 1L per min	14.9	7.3	4.5	-19	12.9	741

INSTRUMENT CHECK DATA: see 10R

Turbidity Serial #: _____ ___ NTU std. = ___ NTU ___ NTU std. = ___ NTU

pH Serial #: _____ 4.0 std. = ___ 7.0 std. = ___ 10.0 std. = _____

Conductivity Serial #: _____ ___ umhos/cm = _____ ___ umhos/cm = _____

GENERAL INFORMATION:

Weather Conditions @ time of sampling: PCloudy 54

Sample Characteristics: no Color no oder

ANALYTE COLLECTION ORDER, CONTAINERS, PRESERVATIVES AND TESTS PERFORMED:

Field ~~Dis Met~~	VOA	Dis Metals	T. Metals	NH3	Gen chem
	2-40mL HCL	~~AT~~ 1L(P) HNO3	1L(P) HNO3	1L(P) H2SO4	1L(P) unp

COMMENTS AND OBSERVATIONS: _____

I certify that sampling procedures were in accordance with all applicable EPA, State and BFI protocols.

Date: 5 14 97 By: [signature] Company: HES

Rev. ... 095

BFI FIELD INFORMATION LOG

Facility: Laubscher Meadow

Sample Point ID: MW13D

Location: Evansville IN

Field Representative: Steve Askew.

Sample Matrix: GW

Lab Sample #: A407859

Gascope Calibration: % Gas: 3 % LEL: 60
Gascope Reading: % Gas: 0 % LEL: 0

PURGE INFORMATION:

Method of Well Purge: Grundofos pump

Dedicated: (Y) N

Date . Time Initiated: 5-13-97 1141

One (1) Casing Volume, Gal: 30.62

Initial Water Level, Feet: 9.83

Total Volume Purged, Gal: 95

Ground Water Elevation, MSL: 387.98

Was Well Purged To Dryness: NO

Well Total Depth, Feet: 56.94

Water Level After Purge, Feet: 31.23

Casing Diameter, Inches: 4

Date . Time Completed: 5-13-97 / 1255

PURGE DATA:

Time	Purge Rate (gpm/htz)	Cumulative Volume	Temp. (°C)	pH (std units)	DO mg/l	eH (mV)	Turb. (NTU)	Spec Cond umhos/cm
1141	/120	1	13.9	7.4	1.1	-3	17.4	693
1200	1.6/126	31	13.3	7.3	0.1	-3	3.6	688
1235	1.1/126	70	14.3	7.3	0.4	-2	1.2	686
1244	1.1/133	80	14.3	7.3	0.4	-2	1.2	689
1255	1.2/133	93	14.5	7.3	0.4	-2	1.4	689

BFI FIELD INFORMATION LOG (continued)

SAMPLING INFORMATION:
Method of Sampling: Grundfos pump

Sample Point ID: MW13D
Dedicated: (Y)

Water Level @ Sampling, Feet: _____ Well Collection Sequence Number: 2

Parameters: Annual ( ) Semi-Annual (✓) Quarterly ( ) Monthly ( ) Other ( ) _____

SAMPLING DATA:

Date/Time	Sample Rate	Temp. (°C)	pH (std)	DO (mg/l)	eH (mV)	Turb. (NTU)	Spec Cond umhos/cm
5-13-97 12:55	VOA 117 100 mL per min Other 117 1L. Min	14.5	7.3	0.4	-2	1.4	689

INSTRUMENT CHECK DATA: See 10R

Turbidity Serial #: _____ ___ NTU std. = ___ NTU ___ NTU std. = ___ NTU

pH Serial #: _____ 4.0 std. = ___ 7.0 std. = ___ 10.0 std. = _____

Conductivity Serial #: _____ ___ umhos/cm = ___ ___ umhos/cm = _____

GENERAL INFORMATION:

Weather Conditions @ time of sampling: Par cloudy 55 Tom

Sample Characteristics: No ~~color~~ cold oder

ANALYTE COLLECTION ORDER, CONTAINERS, PRESERVATIVES AND TESTS PERFORMED:

Field, VOA	Dis Metal	T. Metals	NH3	Gen chem
2-40 mL vom HCL	FIT. 1L(P) HNO3	1L(P) HNO3	1L(P) H2SO4	1L.(P) unp

COMMENTS AND OBSERVATIONS: _____

I certify that sampling procedures were in accordance with all applicable EPA, State and BFI protocols.

Date: 5 13 97 By: Steve Osken Company: HES

Rev. ... 95

BFI FIELD INFORMATION LOG

Facility: Laubscher Meadows

Sample Point ID: MW 12 I

Location: Evansville, IN

Field Representative: Steve Ashen.

Sample Matrix: Gw

Lab Sample #: A407961

Gascope Calibration: % Gas: 3 % LEL: 60
Gascope Reading: % Gas: Ø % LEL: Ø

PURGE INFORMATION:

Method of Well Purge: Grundofos pump

Dedicated: (Y) N

Date . Time Initiated: 5-14/97 9:20

One (1) Casing Volume, Gal: 20.12

Initial Water Level, Feet: 18.53

Total Volume Purged, Gal: 64

Ground Water Elevation, MSL: 383.96

Was Well Purged To Dryness: NO

Well Total Depth, Feet: 49.49

Water Level After Purge, Feet: 35.14

Casing Diameter, Inches: 4

Date . Time Completed: 5-14-97 - 1019

PURGE DATA:

Time	Purge Rate (gpm/htz)	Cumulative Volume	Temp. (°C)	pH (std units)	DO mg/l	eH (mV)	Turb. (NTU)	Spec Cond umhos/cm
9:20	/110	1	14.7	7.1	1.3	-7	13.6	743
9:40	1/115	21	15.1	7.0	.43	-3	6.7	686
1010	.96/140	50	15.0	7.0	.42	-1	12.3	682
1014	1.25/140	55	15.	7.0	.33	-1	12.3	684
1019	.62/128	63	15.1	7.0	.23	-2	9.82	684

BFI FIELD INFORMATION LOG (continued)

SAMPLING INFORMATION: Sample Point ID: MW 12 I

Method of Sampling: Grundfos pump Dedicated: Y

Water Level @ Sampling, Feet: 35.14 Well Collection Sequence Number: 7

Parameters: Annual ( ) Semi-Annual (✓) Quarterly ( ) Monthly ( ) Other ( ) _____

SAMPLING DATA:

Date/Time	Sample Rate	Temp. (°C)	pH (std)	DO (mg/l)	eH (mV)	Turb. (NTU)	Spec Cond umhos/cm
5/14/97 1019	VOA 120 100mL per min Other 124 1L per min	15.1	7.0	.23	-2	9.82	684

INSTRUMENT CHECK DATA:

Turbidity Serial #: 96060010924 0-100 NTU std. = 54.7 NTU 0-10 NTU std. = 5.4 NTU

pH Serial #: 54510025 4.0 std. = 4.0 7.0 std. = 7.0 10.0 std. = 10.0

Conductivity Serial #: 62234033 1413 umhos/cm = 1642 12.9 umhos/cm = 11.0

Dis O2 61376037 5 / 1.0

GENERAL INFORMATION:

Weather Conditions @ time of sampling: PCloudy, 58

Sample Characteristics: no color no odor

ANALYTE COLLECTION ORDER, CONTAINERS, PRESERVATIVES AND TESTS PERFORMED:

Field VOA	Dis Metals	T. Metal	NH3	Gen chem
2-40mL HCL	Fil. 1L(P) HNO3	1L(P) HNO3	1L(P) H2SO4	1L(P) unp

COMMENTS AND OBSERVATIONS: _____

I certify that sampling procedures were in accordance with all applicable EPA, State and BFI protocols.

Date: 5/14/97 By: [signature] Company: HES

BFI FIELD INFORMATION LOG

Facility: Laubscher Meadows

Sample Point ID: MW 11R

Location: Evansville, Ind

Field Representative: Chris Wright

Sample Matrix: Gas

Lab Sample #: A407861

Gascope Calibration: % Gas: 3 % LEL: 60
Gascope Reading: % Gas: Ø % LEL: Ø

PURGE INFORMATION:

Method of Well Purge: Well Grundfos pump

Dedicated: Y / N

Date / Time Initiated: 5-12-97 / 1655

One (1) Casing Volume, Gal: 30.32

Initial Water Level, Feet: 3.77

Total Volume Purged, Gal: 33.5

Ground Water Elevation, MSL: 395.77

Was Well Purged To Dryness: YES

Well Total Depth, Feet: 50.42

Water Level After Purge, Feet: N/A

Casing Diameter, Inches: 4

Date / Time Completed: 5-12-97 / 1804

PURGE DATA:

	Time	Purge Rate (gpm/htz)	Cumulative Volume	Temp. (°C)	pH (std units)	DO mg/l	eH (mV)	Turb. (NTU)	Spec Cond umhos/cm
	1657	1/53	1	13.7	8.1	3.9	-62	7.3	765
	1800	0.5 / 149	31	14.1	7.8	0.4	-43	9.0	771
5-13-97	1406			14.5	7.4	1.3	-3	13.0	760

BFI FIELD INFORMATION LOG (continued)

SAMPLING INFORMATION: **Sample Point ID:** MW11R
Method of Sampling: Grundfos pump Dedicated: (Y)

Water Level @ Sampling, Feet: 25.14 Well Collection Sequence Number: 3

Parameters: Annual ( ) Semi-Annual (✓) Quarterly ( ) Monthly ( ) Other ( ) _____

SAMPLING DATA:

Date/Time	Sample Rate	Temp. (°C)	pH (std)	DO (mg/l)	eH (mV)	Turb. (NTU)	Spec Cond umhos/cm
5-13-97 1406	VOA 101 100mL/pm Other 108 1L/pm	14.5	7.4	1.3	-3	13	760

INSTRUMENT CHECK DATA:

Turbidity Serial #: 96060001024 0.10 NTU std. = 5.4 NTU 0.100 NTU std. = 554 NTU

pH Serial #: 54510025 4.0 std. = 4.0 7.0 std. = 7.0 10.0 std. = 10.0

Conductivity Serial #: 62234033 1413 umhos/cm = 1519 12.9 umhos/cm = 10.9
Diss Or. 61376037 Slope 1.00

GENERAL INFORMATION:

Weather Conditions @ time of sampling: Par cloudy/sunny 57

Sample Characteristics: No color or odor

ANALYTE COLLECTION ORDER, CONTAINERS, PRESERVATIVES AND TESTS PERFORMED:

Field, VOA	Dis Metals	T. Metals	NH3	Gen chem
2-40ml vom HCL	PIT, 1L (P) HNO3	1L (P) HNO3	1L (P) H2SO4	1L (P) unp

COMMENTS AND OBSERVATIONS: _____

I certify that sampling procedures were in accordance with all applicable EPA, State and BFI protocols.

Date: 5/13/97 By: [signature] Company: HES

BFI FIELD INFORMATION LOG

Facility: Laubscher Meadow
Evansville, IN
Location: ~~Evansville~~

Sample Point ID: 10R

Field Representative: Steve Ashew

Sample Matrix: GW

Lab Sample #: A407957

Gascope Calibration: % Gas: 3 % LEL: 60
Gascope Reading: % Gas: Ø % LEL: Ø

PURGE INFORMATION:

Method of Well Purge: Grundofos pump. Dedicated: (Y) N

Date / Time Initiated: 5-13-97 0803

One (1) Casing Volume, Gal: 26.34

Initial Water Level, Feet: 12.16

Total Volume Purged, Gal: 35

Ground Water Elevation, MSL: 387.32

Was Well Purged To Dryness: yes

Well Total Depth, Feet: 52.69

Water Level After Purge, Feet: NA

Casing Diameter, Inches: 4

Date / Time Completed: 5-13-97 0924

PURGE DATA:

Time	Purge Rate (gpm/htz)	Cumulative Volume	Temp. (C)	pH (std units)	Conduct. (mhos/cm)	Turb. (NTU)	Other DO ( )	Other EH
0803	/84	1	14.0	6.9	880	8.2	1.5	-6
0908	0.4/138	27	14.9	7.0	829	10.7	0.1	-9

BFI FIELD INFORMATION LOG (continued)

SAMPLING INFORMATION: Sample Point ID: 10R

Method of Sampling: Grundfos pump Dedicated: Y / N

Water Level @ Sampling, Feet: 12.19 Well Collection Sequence Number: 4

Parameters: Annual ( ) Semi-Annual (✓) Quarterly ( ) Monthly ( ) Other ( ) _____

SAMPLING DATA:

Date/Time	Sample Rate	Temp. (°C)	pH (Std. Units)	Conduct. (µmhos/cm)	Turb. (NTU)	Other ____ (____)	
5-14-97 / 8:00 am	VOA 74 100mL per min Other 81 1L per min	13.8	6.64	863	23.6	EH 15	DO .4

INSTRUMENT CHECK DATA:

Turbidity Serial #: 960600010924 ~~5.4~~ 0.100 NTU std. = ~~5.4~~ 55.1 NTU 0.10 NTU std. = 5.4 NTU

pH Serial #: 54510025 4.0 std. = 4.0 7.0 std. = 7.0 10.0 std. = 10.0

Conductivity Serial #: 62234033 1413 umhos/cm = 1670 12.9 umhos/cm = 11.0

Dis O_2 61376037 5/ 1.0

GENERAL INFORMATION:

Weather Conditions @ time of sampling: PCloudy Temp 53

Sample Characterisitics: No Color No oder

ANALYTE COLLECTION ORDER, CONTAINERS, PRESERVATIVES AND TESTS PERFORMED:

Field, VOA Dis Metals T Metals NH3 Gen chem

2-40mL HCL Filt. L(P) HNO3 L(P) HNO3 L(P) H2SO4 L(P) unp

COMMENTS AND OBSERVATIONS: _____

I certify that sampling procedures were in accordance with all applicable EPA, State and BFI protocols.

Date: 5/14/97 By: Steve Askew Company: HES

BFI FIELD INFORMATION LOG

Facility: Laubscher Meadows

Sample Point ID: MW 5R2

Location: Evansville IN

Field Representative: Steve Asken

Sample Matrix: GW

Lab Sample #: A408117

Gascope Calibration: % Gas: 3 % LEL: 60
Gascope Reading: % Gas: 0 % LEL: 0

PURGE INFORMATION:

Method of Well Purge: Grundfos pump

Dedicated: (Y) / N

Date / Time Initiated: 5/14/97

One (1) Casing Volume, Gal: 7.13

Initial Water Level, Feet: 7.62

Total Volume Purged, Gal: 8 gal

Ground Water Elevation, MSL: 388.69

Was Well Purged To Dryness: yes

Well Total Depth, Feet: 18.59

Water Level After Purge, Feet: NA

Casing Diameter, Inches: 4

Date / Time Completed: 5/14/97 1700

PURGE DATA:

Time	Purge Rate (gpm/htz)	Cumulative Volume	Temp. (°C)	pH (std units)	DO mg/l	eH (mV)	Turb. (NTU)	Spec Cond umhos/cm
1650	178	1	13.2	7.4	4.1	-2	1.41	1480
1658	178	7.5	13.9	7.3	1.4	-2	4.8	1505

BFI FIELD INFORMATION LOG (continued)

SAMPLING INFORMATION: **Sample Point ID:** MW 5R2

Method of Sampling: Grundofos pump Dedicated: (Y) N

Water Level @ Sampling, Feet: 8.11 Well Collection Sequence Number: 16

Parameters: Annual ( ) Semi-Annual (✓) Quarterly ( ) Monthly ( ) Other ( ) _____

SAMPLING DATA:

Date/Time	Sample Rate	Temp. (°C)	pH (std)	DO (mg/l)	eH (mV)	Turb. (NTU)	Spec Cond umhos/cm
5/15/97 1111	VOA 54 100mL per min Other 64 1L per min	13.5	6.84	2.28	11	3.76	1421

INSTRUMENT CHECK DATA: See 12I

Turbidity Serial #: _____ ___ NTU std. = ___ NTU ___ NTU std. = ___ NTU

pH Serial #: _____ 4.0 std. = ___ 7.0 std. = ___ 10.0 std. = ___

Conductivity Serial #: _____ ___ umhos/cm = ___ ___ umhos/cm = ___

GENERAL INFORMATION:

Weather Conditions @ time of sampling: Sunny / Pc loudy 64

Sample Characteristics: No color No ODER

ANALYTE COLLECTION ORDER, CONTAINERS, PRESERVATIVES AND TESTS PERFORMED:

Field VOA	Dis Metals	T. Metals	COD+NH3	Gen chem
2x40mL HCL	FT 1L(P) HNO3	1L(P) HNO3	1L(P) H2SO4	1L(P) Unp

COMMENTS AND OBSERVATIONS: _____

I certify that sampling procedures were in accordance with all applicable EPA, State and BFI protocols.

Date: 5/15/97 By: Steve Osten Company: HES

BFI FIELD INFORMATION LOG

Facility: Laubscher Meadows

Sample Point ID: 5R1

Location: Evansville, IN

Field Representative: Steve Askew

Sample Matrix: GW

Lab Sample #: A408116

Gascope Calibration: % Gas: 3 % LEL: 60
Gascope Reading: % Gas: 0 % LEL: 0

PURGE INFORMATION:

Method of Well Purge: Grundfos pump

Dedicated: (Y) / N

Date / Time Initiated: 5/14/97

One (1) Casing Volume, Gal: 13.12

Initial Water Level, Feet: 7.57

Total Volume Purged, Gal: 15 Gal

Ground Water Elevation, MSL: 388.86

Was Well Purged To Dryness: yes

Well Total Depth, Feet: 27.76

Water Level After Purge, Feet: NA

Casing Diameter, Inches: 4

Date / Time Completed: 5-14-97 1647

PURGE DATA:

Time	Purge Rate (gpm/htz)	Cumulative Volume	Temp. (°C)	pH (std units)	DO mg/l	eH (mV)	Turb. (NTU)	Spec Cond umhos/cm
1630	188	1	13.9	7.3	5.7	-2	5.3	1077
1645	190	14	14.9	7.2	3.08	-16	6.9	1048

BFI FIELD INFORMATION LOG (continued)

SAMPLING INFORMATION: **Sample Point ID:** MW5R1

Method of Sampling: Grundofos Pump Dedicated: (Y) N

Water Level @ Sampling, Feet: 9.86 Well Collection Sequence Number: 15

Parameters: Annual ( ) Semi-Annual (✓) Quarterly ( ) Monthly ( ) Other ( ) _____

SAMPLING DATA:

Date/Time	Sample Rate	Temp. (°C)	pH (std)	DO (mg/l)	eH (mV)	Turb. (NTU)	Spec Cond umhos/cm
5/15/97 11:00	VOA 72 100mL per min Other 78 1L per min	14.0	6.84	3.36	11	6.39	1134

INSTRUMENT CHECK DATA: See 12I

Turbidity Serial #: _____ ____ NTU std. = ____ NTU ____ NTU std. = ____ NTU

pH Serial #: _____ 4.0 std. = ____ 7.0 std. = ____ 10.0 std. = _____

Conductivity Serial #: _____ ____ umhos/cm = ____ ____ umhos/cm = _____

GENERAL INFORMATION:

Weather Conditions @ time of sampling: Sunny/PCloudy 65

Sample Characteristics: No Color No Odor

ANALYTE COLLECTION ORDER, CONTAINERS, PRESERVATIVES AND TESTS PERFORMED:

Field	VOA	Dis Metals	T. Metals	COD NH3	Gen Chem
	2-40mL HCL	F/T, 1L(P) HNO3	1L(P) HNO3	1L(P) H2SO4	1L(P) unp

COMMENTS AND OBSERVATIONS: _____

I certify that sampling procedures were in accordance with all applicable EPA, State and BFI protocols.

Date: 5/15/97 By: Steve Oster Company: HES

BFI FIELD INFORMATION LOG

Facility: Laubscher Meadows

Sample Point ID: MW5R

Location: Evansville IN

Field Representative: Steve Aske

Sample Matrix: GW

Lab Sample #: A408108

Gascope Calibration: % Gas: 3 % LEL: 60
Gascope Reading: % Gas: 0 % LEL: 0

PURGE INFORMATION:

Method of Well Purge: Grundfos pump

Dedicated: Y / N

Date / Time Initiated: 5/14/97

One (1) Casing Volume, Gal: 22.81

Initial Water Level, Feet: 6.98

Total Volume Purged, Gal: 33 gl.

Ground Water Elevation, MSL: 389.33

Was Well Purged To Dryness: yes

Well Total Depth, Feet: 42.08

Water Level After Purge, Feet: NA

Casing Diameter, Inches: 4

Date / Time Completed: 5/14/97 1625

PURGE DATA:

Time	Purge Rate (gpm/htz)	Cumulative Volume	Temp. (°C)	pH (std units)	DO mg/l	eH (mV)	Turb. (NTU)	Spec Cond umhos/cm
1544	/78	1	15.4	7.3	0.85	-2	3.9	893
1614	.73/130	23	15.3	7.1	.30	-9	3.7	937

BFI FIELD INFORMATION LOG (continued)

SAMPLING INFORMATION: **Sample Point ID:** MW 5R

Method of Sampling: Grundofos Pump Dedicated: (Y) / N

Water Level @ Sampling, Feet: 7.71 Well Collection Sequence Number: 14

Parameters: Annual ( ) Semi-Annual (✓) Quarterly ( ) Monthly ( ) Other ( ) _____

SAMPLING DATA:

Date/Time	Sample Rate	Temp. (°C)	pH (std)	DO (mg/l)	eH (mV)	Turb. (NTU)	Spec Cond umhos/cm
5/15/97 1045	VOA 65 100mL per min Other 65 1L per min	15.1	6.86	1.85	10	20.1	~~648~~ 948

INSTRUMENT CHECK DATA: See 12I

Turbidity Serial #: _____ ___ NTU std. = ___ NTU ___ NTU std. = ___ NTU

pH Serial #: _____ 4.0 std. = ___ 7.0 std. = ___ 10.0 std. = ___

Conductivity Serial #: _____ ___ umhos/cm = ___ ___ umhos/cm = ___

GENERAL INFORMATION:

Weather Conditions @ time of sampling: Sunny 65

Sample Characteristics: no color no odor

ANALYTE COLLECTION ORDER, CONTAINERS, PRESERVATIVES AND TESTS PERFORMED:

Field	VOA	Dis Metals	T. Metals	NH3	Gen Chem
	2-40mL HCL	FT 1L (P) HNO3	1L (P) HNO3	1L (P) H2SO4	1L (P) UNP

COMMENTS AND OBSERVATIONS: _____

I certify that sampling procedures were in accordance with all applicable EPA, State and BFI protocols.

Date: 5/15/97 By: Steve Osker Company: HES

BFI FIELD INFORMATION LOG

Facility: Laubscher Meadows

Sample Point ID: MW 4R

Location: Evansville IN

Field Representative: Steve Asken

Sample Matrix: GW

Lab Sample #: A408110

Gascope Calibration: % Gas: 3 % LEL: 60
Gascope Reading: % Gas: ✓ % LEL: ✓

PURGE INFORMATION:

Method of Well Purge: GrundFos Pump Dedicated: (Y) / N

Date / Time Initiated: 5/14/97 1745

One (1) Casing Volume, Gal: 22.80

Initial Water Level, Feet: 5.08

Total Volume Purged, Gal: 51

Ground Water Elevation, MSL: 386.37

Was Well Purged To Dryness: yes

Well Total Depth, Feet: 40.17

Water Level After Purge, Feet: NA

Casing Diameter, Inches: 4

Date / Time Completed: 5/14/97 1820

PURGE DATA:

Time	Purge Rate (gpm/htz)	Cumulative Volume	Temp. (C)	pH (std units)	Conduct. (mhos/cm)	Turb. (NTU)	Other EH ( ) DO
1745	/105	1	14.6	6.60	1116	9.92	20 .26
1805	1.1/115	23	15.0	6.7	1108	1.86	10 .12
1818	1.77/150	46	15.	6.8	1100	14.5	8 .17

BFI FIELD INFORMATION LOG (continued)

Dup

SAMPLING INFORMATION: Sample Point ID: GW 4R

Method of Sampling: Grundfos pump Dedicated: Y / N

Water Level @ Sampling, Feet: 5.32 Well Collection Sequence Number: 18

Parameters: Annual ( ) Semi-Annual (✓) Quarterly ( ) Monthly ( ) Other ( ) _____

SAMPLING DATA:

Date/Time	Sample Rate	Temp. (°C)	pH (Std. Units)	Conduct. (µmhos/cm)	Turb. (NTU)	Other EH ____	Other DO ____
5/15/97 11:45	VOA 57 mL per min Other 68 L per min	14.4	6.77	1073	17.5	15	1.46

INSTRUMENT CHECK DATA: See 12I

Turbidity Serial #: _____ ____ NTU std. = ____ NTU ____ NTU std. = ____ NTU

pH Serial #: _____ 4.0 std. = ____ 7.0 std. = ____ 10.0 std. = ____

Conductivity Serial #: _____ ____ umhos/cm = ____ ____ umhos/cm = ____

GENERAL INFORMATION:

Weather Conditions @ time of sampling: ~~Sunny~~ Cloudy 60

Sample Characterisitics: No color No odor

ANALYTE COLLECTION ORDER, CONTAINERS, PRESERVATIVES AND TESTS PERFORMED:

Field	VOA	Dis Metals	T. Metals	NH3	Gen chem
	2-40 mL HCL	FT 1L (P) HNO3	1L (P) HNO3	1L (P) H2SO4	1L (P) unp

COMMENTS AND OBSERVATIONS: _____

I certify that sampling procedures were in accordance with all applicable EPA, State and BFI protocols.

Date: 5/15/97 By: [signature] Company: HES

BFI FIELD INFORMATION LOG

Facility: Laubscher pump

Sample Point ID: MW 4D

Location: Evansville, IN

Field Representative: Steve Asker

Sample Matrix: Gw

Lab Sample #: A408113

Gascope Calibration: % Gas: 3 % LEL: 60
Gascope Reading: % Gas: ø % LEL: ø

PURGE INFORMATION:

Method of Well Purge: Grundfos pump Dedicated: Y / N

Date / Time Initiated: 5-15-97 1156

One (1) Casing Volume, Gal: 31

Initial Water Level, Feet: 4.58

Total Volume Purged, Gal: 94

Ground Water Elevation, MSL: 387.47

Was Well Purged To Dryness: No

Well Total Depth, Feet: 52.27

Water Level After Purge, Feet: 13.87

Casing Diameter, Inches: 4

Date / Time Completed: 5/15/97 1258

PURGE DATA:

Time	Purge Rate (gpm/htz)	Cumulative Volume	Temp. (C)	pH (std units)	Conduct. (mhos/cm)	Turb. (NTU)	Other EH	Other DO
11:56	/107	1	14.6	6.7	887	6.25	17	.16
12.21	1.24/107	32	15.1	6.7	935	5.80	19	.06
12:48	1.78/116	80	15.1	6.7	951	~~95~~ 1.78	19	.07
12:52	1.25/116	85	15.1	6.7	949	1.33	19	.06
1257	/116	93	15.1	6.7	933	1.17	19	.05

BFI FIELD INFORMATION LOG (continued)

SAMPLING INFORMATION: Sample Point ID: MW 4D

Method of Sampling: Ground Fos pump Dedicated: (Y) / I

Water Level @ Sampling, Feet: 13.87 Well Collection Sequence Number: 19

Parameters: Annual ( ) Semi-Annual (✓) Quarterly ( ) Monthly ( ) Other ( ) ____

SAMPLING DATA:

Date/Time	Sample Rate	Temp. (°C)	pH (Std. Units)	Conduct. (µmhos/cm)	Turb. (NTU)	Other EH ____ (____)	Other DO ____ (____)
5/15/97 1259	VOA 75 100mL Aerain Other ____	15.1	6.7	933	1.17	19	.05

INSTRUMENT CHECK DATA: See MW 336

Turbidity Serial #: ____ ____ NTU std. = ____ NTU ____ NTU std. = ____ NTU

pH Serial #: ____ 4.0 std. = ____ 7.0 std. = ____ 10.0 std. = ____

Conductivity Serial #: ____ ____ umhos/cm = ____ ____ umhos/cm = ____

GENERAL INFORMATION:

Weather Conditions @ time of sampling: ~~Sunny~~ Cloudy

Sample Characterisitics: No color no oder

ANALYTE COLLECTION ORDER, CONTAINERS, PRESERVATIVES AND TESTS PERFORMED:

Field, VOA Dis Metals Metals NH3 Gen chem

2-40mL VOA F.T. 1L(P) HNO3 1L(P) HNO3 1L(P) H2SO4 1L(P) unp

COMMENTS AND OBSERVATIONS: ____

I certify that sampling procedures were in accordance with all applicable EPA, State and BFI protocols.

Date: 5/15/97 By: Steve Oske Company: HES

PAGE 2 OF 2

BFI FIELD INFORMATION LOG

Facility: Larbscher Meadows

Sample Point ID: MW 3R 2

Location: Evansville, IN

Field Representative: Steve Askew

Sample Matrix: GW

Lab Sample #: A408114

Gascope Calibration: % Gas: 3 % LEL: 60
Gascope Reading: % Gas: 0 % LEL: 0

PURGE INFORMATION:

Method of Well Purge: Groundofos pump

Dedicated: Y / N

Date / Time Initiated: 5/14/97 11:05

One (1) Casing Volume, Gal: 5.1

Initial Water Level, Feet: 12.33

Total Volume Purged, Gal: 5.5

Ground Water Elevation, MSL: 384.56

Was Well Purged To Dryness: yes

Well Total Depth, Feet: 20.17

Water Level After Purge, Feet: NA

Casing Diameter, Inches: 4

Date / Time Completed: 5-14-97 11:

PURGE DATA:

Time	Purge Rate (gpm/htz)	Cumulative Volume	Temp. (°C)	pH (std units)	DO mg/l	eH (mV)	Turb. (NTU)	Spec Cond umhos/cm
11:05	181	1	13.7	7.5	7.4	-3	14.3	940
11:20	189	29 ~~5.4~~ 5.4	13.8	7.2	5.0	-1	18.5	936

BFI FIELD INFORMATION LOG (continued)

SAMPLING INFORMATION: **Sample Point ID:** Mw 3R2

Method of Sampling: Grundfos pump Dedicated: ☒ / ☐

Water Level @ Sampling, Feet: 13.73 Well Collection Sequence Number: 11

Parameters: Annual ( ) Semi-Annual (✓) Quarterly ( ) Monthly ( ) Other ( ) _____

SAMPLING DATA:

Date/Time	Sample Rate	Temp. (°C)	pH (std)	DO (mg/l)	eH (mV)	Turb. (NTU)	Spec Cond umhos/cm
5/15/97 957	VOA 75 100mL per min Other 80 1L per min	14.1	6.9	1.16	7	6.89	1226

INSTRUMENT CHECK DATA: see MW 12 I

Turbidity Serial #: _____ ___ NTU std. = ___ NTU ___ NTU std. = ___ NTU

pH Serial #: _____ 4.0 std. = ___ 7.0 std. = ___ 10.0 std. = _____

Conductivity Serial #: _____ ___ umhos/cm = ___ ___ umhos/cm = _____

GENERAL INFORMATION:

Weather Conditions @ time of sampling: Sunny 64

Sample Characteristics: No color No odor

ANALYTE COLLECTION ORDER, CONTAINERS, PRESERVATIVES AND TESTS PERFORMED:

Field	VOA	Dis Metal	T. Metals	NH3-COD	Gen chem
	2-40mL HCL	Fil 1L(P) HNO3	1 L(P) HNO3	1 L(P) H2SO4	1 L(P) Unp

COMMENTS AND OBSERVATIONS: _____

I certify that sampling procedures were in accordance with all applicable EPA, State and BFI protocols.

Date: 5/15/97 By: [signature] Company: HES

BFI FIELD INFORMATION LOG

Facility: Laubscher Meadows

Sample Point ID: MW 3R1

Location: Evansville, IN

Field Representative: Steve Askew

Sample Matrix: GW

Lab Sample #: A408115

Gascope Calibration: % Gas: 3 % LEL: 60
Gascope Reading: % Gas: 0 % LEL: 0

PURGE INFORMATION:

Method of Well Purge: Grundofos pump

Dedicated: Y N

Date . Time Initiated: 5/14/97 11:30

One (1) Casing Volume, Gal: 11.66

Initial Water Level, Feet: 12.22

Total Volume Purged, Gal: 12.1

Ground Water Elevation, MSL: 384.61

Was Well Purged To Dryness: YES

Well Total Depth, Feet: 30.16

Water Level After Purge, Feet: NA

Casing Diameter, Inches: 4

Date . Time Completed: 5-14-97 11:47

PURGE DATA:

Time	Purge Rate (gpm/htz)	Cumulative Volume	Temp. (°C)	pH (std units)	DO mg/l	eH (mV)	Turb. (NTU)	Spec Cond umhos/cm
11:30	/91	1	14.5	7.3	3.1	-2	23.9	928
11:45	.73/112	12	15.2	7.2	1.5	-1	15.7	927

BFI FIELD INFORMATION LOG (continued)

SAMPLING INFORMATION:
Method of Sampling: Groundofos pump

Sample Point ID: MW3R1
Dedicated: (Y)

Water Level @ Sampling, Feet: 14.15

Well Collection Sequence Number: 12

Parameters: Annual ( ) Semi-Annual (✓) Quarterly ( ) Monthly ( ) Other ( ) ____

SAMPLING DATA:

Date/Time	Sample Rate	Temp. (°C)	pH (std)	DO (mg/l)	eH (mV)	Turb. (NTU)	Spec Cond umhos/cm
5/15/97 1010	VOA 81 100mL per min Other 89 1L per min	14.9	6.94	2.29	9	4.21	1005

INSTRUMENT CHECK DATA: See 12I

Turbidity Serial #: ____ ___ NTU std. = ___ NTU ___ NTU std. = ___ NTU

pH Serial #: ____ 4.0 std. = ___ 7.0 std. = ___ 10.0 std. = ___

Conductivity Serial #: ____ ___ umhos/cm = ___ ___ umhos/cm = ___

GENERAL INFORMATION:

Weather Conditions @ time of sampling: Sunny 64

Sample Characteristics: ____

ANALYTE COLLECTION ORDER, CONTAINERS, PRESERVATIVES AND TESTS PERFORMED:

Field	Dis Metals	T. Metal	NH3-COD	Gen chem
	FT 1L(P) HNO3	1L(P) ~~Metals~~ HNO3	1L(P) H2SO4	1L(P) unp

COMMENTS AND OBSERVATIONS: ____

I certify that sampling procedures were in accordance with all applicable EPA, State and BFI protocols.

Date: 5/15/97 By: [signature] Company: HES

BFI FIELD INFORMATION LOG

Facility: Laubscher Meadows

Sample Point ID: MW 3R

Location: Evansville, IN

Field Representative: Steve Askew.

Sample Matrix: GW

Lab Sample #: A408107

Gascope Calibration: % Gas: 3 % LEL: 60
Gascope Reading: % Gas: 0 % LEL: 0

PURGE INFORMATION:

Method of Well Purge: Grundfos pump . Dedicated: (Y) N

Date . Time Initiated: 5/14/97 11:52 One (1) Casing Volume, Gal: 22.04

Initial Water Level, Feet: 10.64 Total Volume Purged, Gal: 46

Ground Water Elevation, MSL: 386.33 Was Well Purged To Dryness: yes

Well Total Depth, Feet: 44.55 Water Level After Purge, Feet: NA

Casing Diameter, Inches: 4 Date . Time Completed: 5/14/97 123

PURGE DATA:

Time	Purge Rate (gpm/htz)	Cumulative Volume	Temp. (°C)	pH (std units)	DO mg/l	eH (mV)	Turb. (NTU)	Spec Cond umhos/cm
11:52	/103	1	15.3	7.3	.44	-2	23.4	817
12:11	1.16/114	23	15.6	7.3	.13	-2	9.18	822
1236	/156	45	15.7	7.3	.58	-2	8.13	822

BFI FIELD INFORMATION LOG (continued)

SAMPLING INFORMATION:
Method of Sampling: Groundofos pump

Sample Point ID: GW 3R
Dedicated: ⊗

Water Level @ Sampling, Feet: 10.98 Well Collection Sequence Number: 13

Parameters: Annual ( ) Semi-Annual (✓) Quarterly ( ) Monthly ( ) Other ( ) ____

SAMPLING DATA:

Date/Time	Sample Rate	Temp. (°C)	pH (std)	DO (mg/l)	eH (mV)	Turb. (NTU)	Spec Cond umhos/cm
5/15/97 10:20	VOA 76 100mL permin Other 79 1L permin	15.0	6.87	.02	10	8.91	7 60

INSTRUMENT CHECK DATA: See 12I

Turbidity Serial #: ____ ___ NTU std. = ___ NTU ___ NTU std. = ___ NTU

pH Serial #: ____ 4.0 std. = ___ 7.0 std. = ___ 10.0 std. = ____

Conductivity Serial #: ____ ___ umhos/cm = ____ ___ umhos/cm = ____

GENERAL INFORMATION:

Weather Conditions @ time of sampling: Sunny 64

Sample Characteristics: no color no oder

ANALYTE COLLECTION ORDER, CONTAINERS, PRESERVATIVES AND TESTS PERFORMED:

Field, VOA	Dis Metal	T. Metals	NH3	Gen chem
2-40ml HCL	FT 1L(P) HNO3	1L(P) HNO3	1L(P) H2SO4	1L(P) unp

COMMENTS AND OBSERVATIONS: ____

I certify that sampling procedures were in accordance with all applicable EPA, State and BFI protocols.

Date: 5 15 97 By: Steve Osborn Company: HeS

Revision 095

BFI FIELD INFORMATION LOG

Facility: Laubscher Meadows

Sample Point ID: MW 2R

Location: Evansville, IN

Field Representative: Steve Askew

Sample Matrix: GW

Lab Sample #: A407960

Gascope Calibration: % Gas: 3 % LEL: 60
Gascope Reading: % Gas: 0 % LEL: 0

PURGE INFORMATION:

Method of Well Purge: Grundfos pump

Dedicated: (Y) / N

Date / Time Initiated: 5-13-97 1700

One (1) Casing Volume, Gal: 26.83

Initial Water Level, Feet: 9.16

Total Volume Purged, Gal: 38

Ground Water Elevation, MSL: 388.96

Was Well Purged To Dryness: Yes

Well Total Depth, Feet: 50.43

Water Level After Purge, Feet: NA

Casing Diameter, Inches: 4

Date / Time Completed: 5-13-97 1713

PURGE DATA:

Time	Purge Rate (gpm/htz)	Cumulative Volume	Temp. (°C)	pH (std units)	DO mg/l	eH (mV)	Turb. (NTU)	Spec Cond umhos/cm
1700	1/150	1	14.2	7.1	0.5	-2	15.3	835
1713	2/151	27	14.1	7.1	0.2	-9	15.3	852

BFI FIELD INFORMATION LOG (continued)

SAMPLING INFORMATION: **Sample Point ID:** MW2R

Method of Sampling: Grundfos pump Dedicated: (Y) / N

Water Level @ Sampling, Feet: 9.92 Well Collection Sequence Number: 8

Parameters: Annual ( ) Semi-Annual (✓) Quarterly ( ) Monthly ( ) Other ( ) _____

SAMPLING DATA:

Date/Time	Sample Rate	Temp. (°C)	pH (std)	DO (mg/l)	eH (mV)	Turb. (NTU)	Spec Cond umhos/cm
5-14-97 10:50	VOA 68 100mL per min Other 74 1L per min	14.5	7.1	0.2	-1	17.1	820

INSTRUMENT CHECK DATA: see 10R

Turbidity Serial #: _____ ___ NTU std. = ___ NTU ___ NTU std. = ___ NTU

pH Serial #: _____ 4.0 std. = ___ 7.0 std. = ___ 10.0 std. = ___

Conductivity Serial #: _____ ___ umhos/cm = ___ ___ umhos/cm = ___

GENERAL INFORMATION:

Weather Conditions @ time of sampling: P Cloudy 59

Sample Characteristics: no color no oder

ANALYTE COLLECTION ORDER, CONTAINERS, PRESERVATIVES AND TESTS PERFORMED:

Field	VOA	Dis metals	T. Metal	NH3	Gen Chem
	2-40mL HCL	Fil 1L(P) HNO3	1L(P) HNO3	1L(P) H2SO4	1L(P) unp

COMMENTS AND OBSERVATIONS: _____

I certify that sampling procedures were in accordance with all applicable EPA, State and BFI protocols.

Date: 5/14/97 By: Steve Oberg Company: HES

CERTIFICATE OF ANALYSIS

Service Location	Received	Project	Lab ID
HERITAGE ENVIRONMENTAL SERVICES, INC. COMMERCIAL LABORATORY OPERATIONS 7901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8304	14-MAY-97	4315	A407830
	Complete	PO Number	
	04-JUN-97	IN21405J0025	
	Printed	Sampled	
	04-JUN-97	13-MAY-97 11:05	

Report To	Bill To
JEFF JENKINS BFI WASTE SYSTEMS 2020 LAUBSCHER ROAD EVANSVILLE, IN 47720	ALISHA CLARK BFI WASTE SYSTEMS 2211 GLENVIEW DRIVE EVANSVILLE, IN 47720

Sample Description

CLIENT ID: MW 14D

FIELD TURBIDITY EPA 180.1

Analyst: S. ASKEW Analysis Date: 13-MAY-97 Instrument: FIELD Test: G602.0.0

Parameter	Result	Det. Limit	Units
TURBIDITY	4.2	0.1	ntu

FIELD TEMPERATURE EPA 170.1

Analyst: S. ASKEW Analysis Date: 13-MAY-97 Instrument: FIELD Test: G603.0.0

Parameter	Result	Det. Limit	Units
TEMPERATURE	14.5		Degrees C

FIELD PH (AQUEOUS) SW846-9040A

Analyst: S. ASKEW Analysis Date: 13-MAY-97 Instrument: FIELD Test: G607.0.0

Parameter	Result	Det. Limit	Units
PH	6.8	0.1	Std. Units

FIELD DISSOLVED OXYGEN SAS

Analyst: S. ASKEW Analysis Date: 13-MAY-97 Instrument: FIELD Test: G600.1.0

Parameter	Result	Det. Limit	Units
DISSOLVED OXYGEN	0.1		mg/L

FIELD OXIDATION-REDUCTION POTENTIAL SM2580B-18TH ED

Analyst: S. ASKEW Analysis Date: 13-MAY-97 Instrument: FIELD Test: G604.7.0

Parameter	Result	Det. Limit	Units
OXIDATION/REDUCTION POTENTIAL	2		mV

FIELD SPECIFIC CONDUCTANCE SW846-9050

Analyst: S. ASKEW Analysis Date: 13-MAY-97 Instrument: FIELD Test: G604.0.0

Parameter	Result	Det. Limit	Units
CONDUCTIVITY	859	1.0	umHOS/cm

AMMONIA DISTILLATION EPA 350.2

Analyst: K. BAX Analysis Date: 15-MAY-97 17:56 Instrument: PREP Test: P203.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	200		mL
FINAL VOLUME	250		mL

 (continued on next page)

HERITAGE ENVIRONMENTAL SERVICES, INC.

Sample ID: A407830 MW 14D

AMMONIA NITROGEN EPA 350.3

Analyst: K. BUNCH Analysis Date: 16-MAY-97 13:00 Test: G203.4.0
Prep: AMMONIA DISTILLATION EPA 350.2 P203.4.0

Parameter	Result	Det. Limit	Units
NITROGEN, AMMONIA	8.8	0.24	mg/L

1:2 dilution

CHLORIDE BY ION CHROMATOGRAPHY SW846-9056

Analyst: M. ADKINS Analysis Date: 14-MAY-97 19:52 Instrument: IC Test: G310.2.0

Parameter	Result	Det. Limit	Units
CHLORIDE	17	0.25	mg/L

FIELD FILTRATION SAS

Analyst: . Analysis Date: Instrument: FIELD Test: P110.0.0

FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A

Analyst: R. DALAL Analysis Date: 15-MAY-97 11:00 Instrument: PREP Test: P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A

Analyst: B. GRAVES Analysis Date: 20-MAY-97 14:30 Instrument: PREP Test: P132.4.1
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

ARSENIC TRACE ICP SW846-6010A

Analyst: A. ROBERTSON Analysis Date: 20-MAY-97 11:57 Instrument: TRACE ICP Test: M103.0.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
ARSENIC	0.0085	0.0050	mg/L

SODIUM ICP SW846-6010A

Analyst: A. HILSCHER Analysis Date: 16-MAY-97 18:14 Instrument: ICP Test: M131.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
SODIUM	58.	0.20	mg/L

CADMIUM TRACE ICP SW846-6010A

Analyst: A. ROBERTSON Analysis Date: 20-MAY-97 11:57 Instrument: TRACE ICP Test: M108.0.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
CADMIUM	BDL	0.0010	mg/L

CHROMIUM ICP SW846-6010A

Analyst: A. HILSCHER Analysis Date: 16-MAY-97 18:14 Instrument: ICP Test: M110.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
CHROMIUM	BDL	0.010	mg/L

HERITAGE ENVIRONMENTAL SERVICES, INC.

Sample ID: A407830 MW 14D

COPPER ICP SW846-6010A

Analyst: A. HILSCHER Analysis Date: 16-MAY-97 18:14 Instrument: ICP Test: M112.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
COPPER	BDL	0.020	mg/L

ZINC ICP SW846-6010A

Analyst: A. HILSCHER Analysis Date: 16-MAY-97 18:14 Instrument: ICP Test: M139.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
ZINC	BDL	0.020	mg/L

IRON ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 22-MAY-97 01:01 Instrument: ICP Test: M115.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.1
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
IRON	9.8	0.025	mg/L

MAGNESIUM ICP SW846-6010A

Analyst: A. HILSCHER Analysis Date: 16-MAY-97 18:14 Instrument: ICP Test: M118.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
MAGNESIUM	22.	0.20	mg/L

MANGANESE ICP SW846-6010A

Analyst: A. HILSCHER Analysis Date: 16-MAY-97 18:14 Instrument: ICP Test: M119.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
MANGANESE	0.21	0.010	mg/L

POTASSIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 04-JUN-97 00:56 Instrument: ICP Test: M126.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
POTASSIUM	1.5	0.20	mg/L

DISSOLVED SOLIDS EPA 160.1

Analyst: K. SULLIVAN Analysis Date: 15-MAY-97 12:30 Test: G402.7.0

Parameter	Result	Det. Limit	Units
SOLIDS	460	10	mg/L

TOTAL SUSPENDED SOLIDS EPA 160.2

Analyst: K. SULLIVAN Analysis Date: 16-MAY-97 14:00 Test: G403.7.0

Parameter	Result	Det. Limit	Units
SUSPENDED SOLIDS	23	1	mg/L

HERITAGE ENVIRONMENTAL SERVICES, INC.

Sample ID: A407830 MW 14D

ALKALINITY TOTAL EPA 310.1

Analyst: K. WHITFIELD Analysis Date: 16-MAY-97 12:30 Test: G605.2.0

Parameter	Result	Det. Limit	Units
ALKALINITY	430	1.0	mg/L

ALKALINITY (BICARBONATE) EPA 310.1

Analyst: K. WHITFIELD Analysis Date: 16-MAY-97 12:30 Test: G610.2.0

Parameter	Result	Det. Limit	Units
ALKALINITY	430	1.0	mg/L

ALKALINITY (CARBONATE) EPA 310.1

Analyst: K. WHITFIELD Analysis Date: 16-MAY-97 12:30 Test: G611.2.0

Parameter	Result	Det. Limit	Units
ALKALINITY	BDL	1.0	mg/L

FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A

Analyst: R. DALAL Analysis Date: 15-MAY-97 11:00 Instrument: PREP Test: P130.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

ARSENIC TRACE ICP SW846-6010A

Analyst: A. ROBERTSON Analysis Date: 20-MAY-97 12:34 Instrument: TRACE ICP Test: M103.0.0

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
ARSENIC	0.0073	0.0050	mg/L

CALCIUM ICP SW846-6010A

Analyst: A. HILSCHER Analysis Date: 16-MAY-97 23:57 Instrument: ICP Test: M109.3.0

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
CALCIUM	74.	0.20	mg/L

SULFATE BY ION CHROMATOGRAPHY SW846-9056

Analyst: M. ADKINS Analysis Date: 14-MAY-97 19:52 Instrument: IC Test: G310.7.0

Parameter	Result	Det. Limit	Units
SULFATE	BDL	0.25	mg/L

VOLATILE ORGANICS (CAPILLARY COLUMN) SW846-8260A

Analyst: H. WILLIAMS Analysis Date: 21-MAY-97 08:28 Instrument: GC/MS VOA Test: O510.6.0

Parameter	Result	Det. Limit	Units
BENZENE	BDL	5.0	ug/L
CIS-1,3-DICHLOROPROPENE	BDL	5.0	ug/L
TRANS-1,3-DICHLOROPROPENE	BDL	5.0	ug/L
ETHYL BENZENE	BDL	5.0	ug/L
BROMOMETHANE	BDL	5.0	ug/L
CARBON TETRACHLORIDE	BDL	5.0	ug/L
CHLOROBENZENE	BDL	5.0	ug/L
CHLOROETHANE	BDL	5.0	ug/L
CHLOROFORM	BDL	5.0	ug/L
CHLOROMETHANE	BDL	5.0	ug/L
1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	BDL	5.0	ug/L
1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	BDL	5.0	ug/L
1,1-DICHLOROETHANE	BDL	5.0	ug/L
CIS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
TRANS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
1,1-DICHLOROETHENE	BDL	5.0	ug/L
1,2-DICHLOROETHANE	BDL	5.0	ug/L

 (continued on next page)

HERITAGE ENVIRONMENTAL SERVICES, INC. Sample ID: A407830 MW 14D

Parameter	Result	Det. Limit	Units
1,2-DICHLOROPROPANE	BDL	5.0	ug/L
DICHLOROMETHANE (METHYLENE CHLORIDE)	BDL	5.0	ug/L
STYRENE	BDL	5.0	ug/L
1,1,1,2-TETRACHLOROETHANE	BDL	5.0	ug/L
1,1,2,2-TETRACHLOROETHANE	BDL	5.0	ug/L
TETRACHLOROETHENE	BDL	5.0	ug/L
TOLUENE	BDL	5.0	ug/L
1,1,1-TRICHLOROETHANE	BDL	5.0	ug/L
1,1,2-TRICHLOROETHANE	BDL	5.0	ug/L
TRICHLOROETHENE	BDL	5.0	ug/L
TRICHLOROFLUOROMETHANE	BDL	5.0	ug/L
VINYL CHLORIDE	BDL	2.0	ug/L
XYLENES (O/M/P-XYLENE)	BDL	5.0	ug/L
...			
SURROGATE RECOVERY			

DICHLOROETHANE-D4	108		% Rec
TOLUENE-D8	97		% Rec
4-BROMOFLUOROBENZENE	96		% Rec

Sample Comments

BDL Below Detection Limit

Sample chain of custody number 64139.

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Approved : P.K. Spence

CERTIFICATE OF ANALYSIS

Service Location	Received	Project	Lab ID
HERITAGE ENVIRONMENTAL SERVICES, INC. COMMERCIAL LABORATORY OPERATIONS 7901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8304	14-MAY-97	4315	A40785
	Complete: 04-JUN-97	PO Number: IN21405J0025	
	Printed: 04-JUN-97	Sampled: 13-MAY-97 12:55	

Report To	Bill To
JEFF JENKINS BFI WASTE SYSTEMS 2020 LAUBSCHER ROAD EVANSVILLE, IN 47720	ALISHA CLARK BFI WASTE SYSTEMS 2211 GLENVIEW DRIVE EVANSVILLE, IN 47720

Sample Description

CLIENT ID: MW 13D

FIELD TURBIDITY EPA 180.1

Analyst: S. ASKEW — Analysis Date: 13-MAY-97 — Instrument: FIELD — Test: G602.0.0

Parameter	Result	Det. Limit	Units
TURBIDITY	1.4	0.1	ntu

FIELD TEMPERATURE EPA 170.1

Analyst: S. ASKEW — Analysis Date: 13-MAY-97 — Instrument: FIELD — Test: G603.0.0

Parameter	Result	Det. Limit	Units
TEMPERATURE	14.5		Degrees C

FIELD PH (AQUEOUS) SW846-9040A

Analyst: S. ASKEW — Analysis Date: 13-MAY-97 — Instrument: FIELD — Test: G607.0.0

Parameter	Result	Det. Limit	Units
PH	7.3	0.1	Std. Units

FIELD DISSOLVED OXYGEN SAS

Analyst: S. ASKEW — Analysis Date: 13-MAY-97 — Instrument: FIELD — Test: G600.1.0

Parameter	Result	Det. Limit	Units
DISSOLVED OXYGEN	0.4		mg/L

FIELD OXIDATION-REDUCTION POTENTIAL SM2580B-18TH ED

Analyst: S. ASKEW — Analysis Date: 13-MAY-97 — Instrument: FIELD — Test: G604.7.0

Parameter	Result	Det. Limit	Units
OXIDATION/REDUCTION POTENTIAL	-2		mV

FIELD SPECIFIC CONDUCTANCE SW846-9050

Analyst: S. ASKEW — Analysis Date: 13-MAY-97 — Instrument: FIELD — Test: G604.0.0

Parameter	Result	Det. Limit	Units
CONDUCTIVITY	689	1.0	umHOS/cm

AMMONIA DISTILLATION EPA 350.2

Analyst: K. BAX — Analysis Date: 15-MAY-97 17:56 — Instrument: PREP — Test: P203.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	200		mL
FINAL VOLUME	250		mL

 (continued on next page)

AMMONIA NITROGEN EPA 350.3

Analyst: K. BUNCH Analysis Date: 16-MAY-97 13:00 Test: G203.4.0
Prep: AMMONIA DISTILLATION EPA 350.2 P203.4.0

Parameter	Result	Det. Limit	Units
NITROGEN, AMMONIA	1.3	0.12	mg/L

BROMIDE BY ION CHROMATOGRAPHY SW846-9056

Analyst: M. ADKINS Analysis Date: 15-MAY-97 22:07 Instrument: IC Test: G310.4.0

Parameter	Result	Det. Limit	Units
BROMIDE	0.18	0.05	mg/L

CHLORIDE BY ION CHROMATOGRAPHY SW846-9056

Analyst: M. ADKINS Analysis Date: 15-MAY-97 22:24 Instrument: IC Test: G310.2.0

Parameter	Result	Det. Limit	Units
CHLORIDE	26	1.3	mg/L
1:5 DILUTION			

FIELD FILTRATION SAS

Analyst: . Analysis Date: Instrument: FIELD Test: P110.0.0

FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A

Analyst: R. DALAL Analysis Date: 15-MAY-97 11:00 Instrument: PREP Test: P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A

Analyst: B. GRAVES Analysis Date: 20-MAY-97 14:30 Instrument: PREP Test: P132.4.1
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

ARSENIC TRACE ICP SW846-6010A

Analyst: A. ROBERTSON Analysis Date: 20-MAY-97 08:15 Instrument: TRACE ICP Test: M103.0.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
ARSENIC	0.021	0.0050	mg/L

SODIUM ICP SW846-6010A

Analyst: A. HILSCHER Analysis Date: 16-MAY-97 18:24 Instrument: ICP Test: M131.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
SODIUM	92	0.20	mg/L

SODIUM ICP SW846-6010A

Analyst: A. HILSCHER Analysis Date: 16-MAY-97 18:27 Instrument: ICP Test: M131.3.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
SODIUM	99	0.20	mg/L

HERITAGE ENVIRONMENTAL SERVICES, INC.

Sample ID: A407859 MW 13D

CADMIUM TRACE ICP SW846-6010A

Analyst: A. ROBERTSON Analysis Date: 20-MAY-97 08:15 Instrument: TRACE ICP Test: M108.0.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
CADMIUM	BDL	0.0010	mg/L

CHROMIUM ICP SW846-6010A

Analyst: A. HILSCHER Analysis Date: 16-MAY-97 18:24 Instrument: ICP Test: M110.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
CHROMIUM	BDL	0.010	mg/L

COPPER ICP SW846-6010A

Analyst: A. HILSCHER Analysis Date: 16-MAY-97 18:24 Instrument: ICP Test: M112.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
COPPER	BDL	0.020	mg/L

ZINC ICP SW846-6010A

Analyst: A. HILSCHER Analysis Date: 16-MAY-97 18:24 Instrument: ICP Test: M139.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
ZINC	BDL	0.020	mg/L

IRON ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 22-MAY-97 01:04 Instrument: ICP Test: M115.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.1
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
IRON	4.0	0.025	mg/L

MAGNESIUM ICP SW846-6010A

Analyst: A. HILSCHER Analysis Date: 16-MAY-97 18:24 Instrument: ICP Test: M118.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
MAGNESIUM	15	0.20	mg/L

MANGANESE ICP SW846-6010A

Analyst: A. HILSCHER Analysis Date: 16-MAY-97 18:24 Instrument: ICP Test: M119.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0.
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
MANGANESE	0.072	0.010	mg/L

POTASSIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 04-JUN-97 01:10 Instrument: ICP Test: M126.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
POTASSIUM	0.72	0.20	mg/L

 (continued on next page)

DISSOLVED SOLIDS EPA 160.1
Analyst: K. SULLIVAN Analysis Date: 19-MAY-97 15:00 Test: G402.7.0

Parameter	Result	Det. Limit	Units
SOLIDS	370	10	mg/L

TOTAL SUSPENDED SOLIDS EPA 160.2
Analyst: K. SULLIVAN Analysis Date: 16-MAY-97 14:00 Test: G403.7.0

Parameter	Result	Det. Limit	Units
SUSPENDED SOLIDS	7.	1	mg/L

ALKALINITY TOTAL EPA 310.1
Analyst: K. WHITFIELD Analysis Date: 16-MAY-97 12:30 Test: G605.2.0

Parameter	Result	Det. Limit	Units
ALKALINITY	320	1.0	mg/L

ALKALINITY (BICARBONATE) EPA 310.1
Analyst: K. WHITFIELD Analysis Date: 16-MAY-97 12:30 Test: G610.2.0

Parameter	Result	Det. Limit	Units
ALKALINITY	320	1.0	mg/L

ALKALINITY (CARBONATE) EPA 310.1
Analyst: K. WHITFIELD Analysis Date: 16-MAY-97 12:30 Test: G611.2.0

Parameter	Result	Det. Limit	Units
ALKALINITY	BDL	1.0	mg/L

FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A
Analyst: R. DALAL Analysis Date: 15-MAY-97 11:00 Instrument: PREP Test: P130.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

ARSENIC TRACE ICP SW846-6010A
Analyst: A. ROBERTSON Analysis Date: 20-MAY-97 12:38 Instrument: TRACE ICP Test: M103.0.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
ARSENIC	0.018	0.0050	mg/L

CALCIUM ICP SW846-6010A
Analyst: A. HILSCHER Analysis Date: 16-MAY-97 18:27 Instrument: ICP Test: M109.3.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
CALCIUM	37.	0.20	mg/L

SULFATE BY ION CHROMATOGRAPHY SW846-9056
Analyst: M. ADKINS Analysis Date: 15-MAY-97 22:07 Instrument: IC Test: G310.7.0

Parameter	Result	Det. Limit	Units
SULFATE	BDL	0.25	mg/L

VOLATILE ORGANICS (CAPILLARY COLUMN) SW846-8260A
Analyst: H. WILLIAMS Analysis Date: 22-MAY-97 06:32 Instrument: GC/MS VOA Test: O510.6.0

Parameter	Result	Det. Limit	Units
BENZENE	BDL	5.0	ug/L
CIS-1,3-DICHLOROPROPENE	BDL	5.0	ug/L
TRANS-1,3-DICHLOROPROPENE	BDL	5.0	ug/L
ETHYL BENZENE	BDL	5.0	ug/L
BROMOMETHANE	BDL	5.0	ug/L
CARBON TETRACHLORIDE	BDL	5.0	ug/L
CHLOROBENZENE	BDL	5.0	ug/L

 (continued on next page)

HERITAGE ENVIRONMENTAL SERVICES, INC.

Sample ID: A407859 MW 13D

Parameter	Result	Det. Limit	Units
CHLOROETHANE	BDL	5.0	ug/L
CHLOROFORM	BDL	5.0	ug/L
CHLOROMETHANE	BDL	5.0	ug/L
1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	BDL	5.0	ug/L
1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	BDL	5.0	ug/L
1,1-DICHLOROETHANE	BDL	5.0	ug/L
CIS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
TRANS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
1,1-DICHLOROETHENE	BDL	5.0	ug/L
1,2-DICHLOROETHANE	BDL	5.0	ug/L
1,2-DICHLOROPROPANE	BDL	5.0	ug/L
DICHLOROMETHANE (METHYLENE CHLORIDE)	BDL	5.0	ug/L
STYRENE	BDL	5.0	ug/L
1,1,1,2-TETRACHLOROETHANE	BDL	5.0	ug/L
1,1,2,2-TETRACHLOROETHANE	BDL	5.0	ug/L
TETRACHLOROETHENE	BDL	5.0	ug/L
TOLUENE	BDL	5.0	ug/L
1,1,1-TRICHLOROETHANE	BDL	5.0	ug/L
1,1,2-TRICHLOROETHANE	BDL	5.0	ug/L
TRICHLOROETHENE	BDL	5.0	ug/L
TRICHLOROFLUOROMETHANE	BDL	5.0	ug/L
VINYL CHLORIDE	BDL	2.0	ug/L
XYLENES (O/M/P-XYLENE)	BDL	5.0	ug/L
SURROGATE RECOVERY			
DICHLOROETHANE-D4	113		% Rec
TOLUENE-D8	96		% Rec
4-BROMOFLUOROBENZENE	97		% Rec

BORON ICP SW846-6010A
Analyst: A. HILSCHER Analysis Date: 16-MAY-97 18:27 Instrument: ICP Test: M107.3.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
BORON	0.097	0.050	mg/L

BORON ICP SW846-6010A
Analyst: A. STOCKBURGER Analysis Date: 22-MAY-97 01:04 Instrument: ICP Test: M107.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.1
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
BORON	0.12	0.050	mg/L

BARIUM ICP SW846-6010A
Analyst: A. HILSCHER Analysis Date: 16-MAY-97 18:27 Instrument: ICP Test: M104.3.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
BARIUM	0.22	0.010	mg/L

BARIUM ICP SW846-6010A
Analyst: A. HILSCHER Analysis Date: 16-MAY-97 18:24 Instrument: ICP Test: M104.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
BARIUM	0.20	0.010	mg/L

 (continued on next page)

Sample Comments

BDL Below Detection Limit

Sample chain of custody number 64139.

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Approved : P.K. Spence

CERTIFICATE OF ANALYSIS

Service Location	Received	Project	Lab ID
HERITAGE ENVIRONMENTAL SERVICES, INC. COMMERCIAL LABORATORY OPERATIONS 7901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8304	14-MAY-97	4315	A407861
	Complete: 04-JUN-97	PO Number: IN21405J0025	
	Printed: 04-JUN-97	Sampled: 13-MAY-97 14:06	

Report To	Bill To
JEFF JENKINS BFI WASTE SYSTEMS 2020 LAUBSCHER ROAD EVANSVILLE, IN 47720	ALISHA CLARK BFI WASTE SYSTEMS 2211 GLENVIEW DRIVE EVANSVILLE, IN 47720

Sample Description

CLIENT ID: MW 11R

FIELD TURBIDITY EPA 180.1

Analyst: S. ASKEW Analysis Date: 13-MAY-97 Instrument: FIELD Test: G602.0.0

Parameter	Result	Det. Limit	Units
TURBIDITY	13	0.1	ntu

FIELD TEMPERATURE EPA 170.1

Analyst: C. WRIN Analysis Date: 13-MAY-97 Instrument: FIELD Test: G603.0.0

Parameter	Result	Det. Limit	Units
TEMPERATURE	14.5		Degrees C

FIELD PH (AQUEOUS) SW846-9040A

Analyst: S. ASKEW Analysis Date: 13-MAY-97 Instrument: FIELD Test: G607.0.0

Parameter	Result	Det. Limit	Units
PH	7.4	0.1	Std. Units

FIELD DISSOLVED OXYGEN SAS

Analyst: C. WRIN Analysis Date: 13-MAY-97 Instrument: FIELD Test: G600.1.0

Parameter	Result	Det. Limit	Units
DISSOLVED OXYGEN	1.3	1	mg/L

FIELD OXIDATION-REDUCTION POTENTIAL SM2580B-18TH ED

Analyst: C. WRIN Analysis Date: 13-MAY-97 Instrument: FIELD Test: G604.7.0

Parameter	Result	Det. Limit	Units
OXIDATION/REDUCTION POTENTIAL	-3		mV

FIELD SPECIFIC CONDUCTANCE SW846-9050

Analyst: C. WRIN Analysis Date: 13-MAY-97 Instrument: FIELD Test: G604.0.0

Parameter	Result	Det. Limit	Units
CONDUCTIVITY	760	1.0	umHOS/cm

AMMONIA DISTILLATION EPA 350.2

Analyst: K. BAX Analysis Date: 15-MAY-97 17:56 Instrument: PREP Test: P203.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	200		mL
FINAL VOLUME	250		mL

 (continued on next page)

HERITAGE ENVIRONMENTAL SERVICES, INC. Sample ID: A407861 MW 11R

AMMONIA NITROGEN EPA 350.3

Analyst: K. BUNCH Analysis Date: 16-MAY-97 13:00 Test: G203.4.0
Prep: AMMONIA DISTILLATION EPA 350.2 P203.4.0

Parameter	Result	Det. Limit	Units
NITROGEN, AMMONIA	2.7	0.12	mg/L

CHLORIDE BY ION CHROMATOGRAPHY SW846-9056

Analyst: M. ADKINS Analysis Date: 15-MAY-97 23:35 Instrument: IC Test: G310.2.0

Parameter	Result	Det. Limit	Units
CHLORIDE	27	1.3	mg/L
1:5 DILUTION			

BROMIDE BY ION CHROMATOGRAPHY SW846-9056

Analyst: M. ADKINS Analysis Date: 15-MAY-97 23:18 Instrument: IC Test: G310.4.0

Parameter	Result	Det. Limit	Units
BROMIDE	0.21	0.05	mg/L

FIELD FILTRATION SAS

Analyst: . Analysis Date: Instrument: FIELD Test: P110.0.0

FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A

Analyst: R. DALAL Analysis Date: 15-MAY-97 11:00 Instrument: PREP Test: P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A

Analyst: B. GRAVES Analysis Date: 20-MAY-97 14:30 Instrument: PREP Test: P132.4.1
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

ARSENIC TRACE ICP SW846-6010A

Analyst: A. ROBERTSON Analysis Date: 20-MAY-97 12:01 Instrument: TRACE ICP Test: M103.0.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
ARSENIC	0.044	0.0050	mg/L

SODIUM ICP SW846-6010A

Analyst: A. HILSCHER Analysis Date: 16-MAY-97 18:18 Instrument: ICP Test: M131.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
SODIUM	92.	0.20	mg/L

SODIUM ICP SW846-6010A

Analyst: A. HILSCHER Analysis Date: 16-MAY-97 23:37 Instrument: ICP Test: M131.3.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
SODIUM	110	0.20	mg/L

HERITAGE ENVIRONMENTAL SERVICES, INC. Sample ID: A407861 MW 11R

CADMIUM TRACE ICP SW846-6010A

Analyst: A. ROBERTSON Analysis Date: 20-MAY-97 12:01 Instrument: TRACE ICP Test: M108.0.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
CADMIUM	BDL	0.0010	mg/L

CHROMIUM ICP SW846-6010A

Analyst: A. HILSCHER Analysis Date: 16-MAY-97 18:18 Instrument: ICP Test: M110.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
CHROMIUM	BDL	0.010	mg/L

COPPER ICP SW846-6010A

Analyst: A. HILSCHER Analysis Date: 16-MAY-97 18:18 Instrument: ICP Test: M112.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
COPPER	BDL	0.020	mg/L

ZINC ICP SW846-6010A

Analyst: A. HILSCHER Analysis Date: 16-MAY-97 18:18 Instrument: ICP Test: M139.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
ZINC	BDL	0.020	mg/L

IRON ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 22-MAY-97 01:07 Instrument: ICP Test: M115.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.1
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
IRON	4.2	0.025	mg/L

MAGNESIUM ICP SW846-6010A

Analyst: A. HILSCHER Analysis Date: 16-MAY-97 18:18 Instrument: ICP Test: M118.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
MAGNESIUM	13.	0.20	mg/L

MANGANESE ICP SW846-6010A

Analyst: A. HILSCHER Analysis Date: 16-MAY-97 18:18 Instrument: ICP Test: M119.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
MANGANESE	0.78	0.010	mg/L

POTASSIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 04-JUN-97 00:59 Instrument: ICP Test: M126.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
POTASSIUM	1.0	0.20	mg/L

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HERITAGE ENVIRONMENTAL SERVICES, INC. Sample ID: A407861 MW 11R

DISSOLVED SOLIDS EPA 160.1
Analyst: K. SULLIVAN Analysis Date: 19-MAY-97 15:00 Test: G402.7.0

Parameter	Result	Det. Limit	Units
SOLIDS	420	10	mg/L

TOTAL SUSPENDED SOLIDS EPA 160.2
Analyst: K. SULLIVAN Analysis Date: 16-MAY-97 14:00 Test: G403.7.0

Parameter	Result	Det. Limit	Units
SUSPENDED SOLIDS	11	1	mg/L

ALKALINITY TOTAL EPA 310.1
Analyst: K. WHITFIELD Analysis Date: 16-MAY-97 12:30 Test: G605.2.0

Parameter	Result	Det. Limit	Units
ALKALINITY	360	1.0	mg/L

ALKALINITY (BICARBONATE) EPA 310.1
Analyst: K. WHITFIELD Analysis Date: 16-MAY-97 12:30 Test: G610.2.0

Parameter	Result	Det. Limit	Units
ALKALINITY	360	1.0	mg/L

ALKALINITY (CARBONATE) EPA 310.1
Analyst: K. WHITFIELD Analysis Date: 16-MAY-97 12:30 Test: G611.2.0

Parameter	Result	Det. Limit	Units
ALKALINITY	BDL	1.0	mg/L

FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A
Analyst: R. DALAL Analysis Date: 15-MAY-97 11:00 Instrument: PREP Test: P130.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

ARSENIC TRACE ICP SW846-6010A
Analyst: A. ROBERTSON Analysis Date: 20-MAY-97 12:21 Instrument: TRACE ICP Test: M103.0.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
ARSENIC	0.047	0.0050	mg/L

CALCIUM ICP SW846-6010A
Analyst: A. HILSCHER Analysis Date: 16-MAY-97 23:37 Instrument: ICP Test: M109.3.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
CALCIUM	42.	0.20	mg/L

SULFATE BY ION CHROMATOGRAPHY SW846-9056
Analyst: M. ADKINS Analysis Date: 15-MAY-97 23:18 Instrument: IC Test: G310.7.0

Parameter	Result	Det. Limit	Units
SULFATE	0.54	0.25	mg/L

VOLATILE ORGANICS (CAPILLARY COLUMN) SW846-8260A
Analyst: H. WILLIAMS Analysis Date: 21-MAY-97 09:41 Instrument: GC/MS VOA Test: O510.6.0

Parameter	Result	Det. Limit	Units
BENZENE	BDL	5.0	ug/L
CIS-1,3-DICHLOROPROPENE	BDL	5.0	ug/L
TRANS-1,3-DICHLOROPROPENE	BDL	5.0	ug/L
ETHYL BENZENE	BDL	5.0	ug/L
BROMOMETHANE	BDL	5.0	ug/L
CARBON TETRACHLORIDE	BDL	5.0	ug/L
CHLOROBENZENE	BDL	5.0	ug/L

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HERITAGE ENVIRONMENTAL SERVICES, INC.

Sample ID: A407861 MW 11R

Parameter	Result	Det. Limit	Units
CHLOROETHANE	BDL	5.0	ug/L
CHLOROFORM	BDL	5.0	ug/L
CHLOROMETHANE	BDL	5.0	ug/L
1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	BDL	5.0	ug/L
1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	BDL	5.0	ug/L
1,1-DICHLOROETHANE	BDL	5.0	ug/L
CIS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
TRANS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
1,1-DICHLOROETHENE	BDL	5.0	ug/L
1,2-DICHLOROETHANE	BDL	5.0	ug/L
1,2-DICHLOROPROPANE	BDL	5.0	ug/L
DICHLOROMETHANE (METHYLENE CHLORIDE)	BDL	5.0	ug/L
STYRENE	BDL	5.0	ug/L
1,1,1,2-TETRACHLOROETHANE	BDL	5.0	ug/L
1,1,2,2-TETRACHLOROETHANE	BDL	5.0	ug/L
TETRACHLOROETHENE	BDL	5.0	ug/L
TOLUENE	BDL	5.0	ug/L
1,1,1-TRICHLOROETHANE	BDL	5.0	ug/L
1,1,2-TRICHLOROETHANE	BDL	5.0	ug/L
TRICHLOROETHENE	BDL	5.0	ug/L
TRICHLOROFLUOROMETHANE	BDL	5.0	ug/L
VINYL CHLORIDE	BDL	2.0	ug/L
XYLENES (O/M/P-XYLENE)	BDL	5.0	ug/L
...			
SURROGATE RECOVERY			

DICHLOROETHANE-D4	116		% Rec
TOLUENE-D8	102		% Rec
4-BROMOFLUOROBENZENE	88		% Rec

BORON ICP SW846-6010A
Analyst: A. HILSCHER Analysis Date: 16-MAY-97 23:37 Instrument: ICP Test: M107.3.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
BORON	0.067	0.050	mg/L

BORON ICP SW846-6010A
Analyst: A. STOCKBURGER Analysis Date: 22-MAY-97 01:07 Instrument: ICP Test: M107.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.1
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
BORON	0.093	0.050	mg/L

BARIUM ICP SW846-6010A
Analyst: A. HILSCHER Analysis Date: 16-MAY-97 23:37 Instrument: ICP Test: M104.3.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
BARIUM	0.24	0.010	mg/L

BARIUM ICP SW846-6010A
Analyst: A. HILSCHER Analysis Date: 16-MAY-97 18:18 Instrument: ICP Test: M104.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
BARIUM	0.20	0.010	mg/L

Sample Comments

BDL Below Detection Limit

Sample chain of custody number 64139.

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Approved : P.K. Spence

CERTIFICATE OF ANALYSIS

Service Location	Received	Project	Lab ID
HERITAGE ENVIRONMENTAL SERVICES, INC. COMMERCIAL LABORATORY OPERATIONS 7901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8304	14-MAY-97	4315	A40786?
	Complete	PO Number	
	04-JUN-97	IN21405J0025	
	Printed	Sampled	
	04-JUN-97	13-MAY-97 11:05	

Report To	Bill To
JEFF JENKINS BFI WASTE SYSTEMS 2020 LAUBSCHER ROAD EVANSVILLE, IN 47720	ALISHA CLARK BFI WASTE SYSTEMS 2211 GLENVIEW DRIVE EVANSVILLE, IN 47720

Sample Description

CLIENT ID: MW 14D DUP

AMMONIA DISTILLATION EPA 350.2

Analyst: K. BAX Analysis Date: 15-MAY-97 17:56 Instrument: PREP Test: P203.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	200		mL
FINAL VOLUME	250		mL

AMMONIA NITROGEN EPA 350.3

Analyst: K. BUNCH Analysis Date: 16-MAY-97 13:00 Test: G203.4.0

Prep: AMMONIA DISTILLATION EPA 350.2 P203.4.0

Parameter	Result	Det. Limit	Units
NITROGEN, AMMONIA	8.1	0.24	mg/L

1:2 dilution

CHLORIDE BY ION CHROMATOGRAPHY SW846-9056

Analyst: M. ADKINS Analysis Date: 15-MAY-97 23:53 Instrument: IC Test: G310.2.0

Parameter	Result	Det. Limit	Units
CHLORIDE	17	0.25	mg/L

FIELD FILTRATION SAS

Analyst: . Analysis Date: Instrument: FIELD Test: P110.0.0

FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A

Analyst: R. DALAL Analysis Date: 15-MAY-97 11:00 Instrument: PREP Test: P132.4.0

Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A

Analyst: B. GRAVES Analysis Date: 20-MAY-97 14:30 Instrument: PREP Test: P132.4.1

Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

 (continued on next page)

ARSENIC TRACE ICP SW846-6010A

Analyst: A. ROBERTSON Analysis Date: 20-MAY-97 12:04 Instrument: TRACE ICP Test: M103.0.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
ARSENIC	0.0083	0.0050	mg/L

SODIUM ICP SW846-6010A

Analyst: A. HILSCHER Analysis Date: 16-MAY-97 18:21 Instrument: ICP Test: M131.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
SODIUM	55.	0.20	mg/L

CADMIUM TRACE ICP SW846-6010A

Analyst: A. ROBERTSON Analysis Date: 20-MAY-97 12:04 Instrument: TRACE ICP Test: M108.0.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
CADMIUM	BDL	0.0010	mg/L

CHROMIUM ICP SW846-6010A

Analyst: A. HILSCHER Analysis Date: 16-MAY-97 18:21 Instrument: ICP Test: M110.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
CHROMIUM	BDL	0.010	mg/L

COPPER ICP SW846-6010A

Analyst: A. HILSCHER Analysis Date: 16-MAY-97 18:21 Instrument: ICP Test: M112.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
COPPER	BDL	0.020	mg/L

ZINC ICP SW846-6010A

Analyst: A. HILSCHER Analysis Date: 16-MAY-97 18:21 Instrument: ICP Test: M139.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
ZINC	BDL	0.020	mg/L

IRON ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 22-MAY-97 01:10 Instrument: ICP Test: M115.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.1
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
IRON	9.8	0.025	mg/L

MAGNESIUM ICP SW846-6010A

Analyst: A. HILSCHER Analysis Date: 16-MAY-97 18:21 Instrument: ICP Test: M118.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
MAGNESIUM	22.	0.20	mg/L

HERITAGE ENVIRONMENTAL SERVICES, INC.

Sample ID: A407862 MW 14D DUP

MANGANESE ICP SW846-6010A

Analyst: A. HILSCHER Analysis Date: 16-MAY-97 18:21 Instrument: ICP Test: M119.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
MANGANESE	0.21	0.010	mg/L

POTASSIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 04-JUN-97 01:03 Instrument: ICP Test: M126.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
POTASSIUM	1.4	0.20	mg/L

DISSOLVED SOLIDS EPA 160.1

Analyst: K. SULLIVAN Analysis Date: 19-MAY-97 15:00 Test: G402.7.0

Parameter	Result	Det. Limit	Units
SOLIDS	460	10	mg/L

TOTAL SUSPENDED SOLIDS EPA 160.2

Analyst: K. SULLIVAN Analysis Date: 16-MAY-97 14:00 Test: G403.7.0

Parameter	Result	Det. Limit	Units
SUSPENDED SOLIDS	24	1	mg/L

ALKALINITY TOTAL EPA 310.1

Analyst: K. WHITFIELD Analysis Date: 16-MAY-97 12:30 Test: G605.2.0

Parameter	Result	Det. Limit	Units
ALKALINITY	440	1.0	mg/L

ALKALINITY (BICARBONATE) EPA 310.1

Analyst: K. WHITFIELD Analysis Date: 16-MAY-97 12:30 Test: G610.2.0

Parameter	Result	Det. Limit	Units
ALKALINITY	440	1.0	mg/L

ALKALINITY (CARBONATE) EPA 310.1

Analyst: K. WHITFIELD Analysis Date: 16-MAY-97 12:30 Test: G611.2.0

Parameter	Result	Det. Limit	Units
ALKALINITY	BDL	1.0	mg/L

FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A

Analyst: R. DALAL Analysis Date: 15-MAY-97 11:00 Instrument: PREP Test: P130.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

ARSENIC TRACE ICP SW846-6010A

Analyst: A. ROBERTSON Analysis Date: 20-MAY-97 12:41 Instrument: TRACE ICP Test: M103.0.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
ARSENIC	0.0084	0.0050	mg/L

CALCIUM ICP SW846-6010A

Analyst: A. HILSCHER Analysis Date: 17-MAY-97 00:04 Instrument: ICP Test: M109.3.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
CALCIUM	73.	0.20	mg/L

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HERITAGE ENVIRONMENTAL SERVICES, INC. Sample ID: A407862 MW 14D DUP

SULFATE BY ION CHROMATOGRAPHY SW846-9056

Analyst: M. ADKINS Analysis Date: 15-MAY-97 23:53 Instrument: IC Test: G310.7.0

Parameter	Result	Det. Limit	Units
SULFATE	BDL	0.25	mg/L

VOLATILE ORGANICS (CAPILLARY COLUMN) SW846-8260A

Analyst: H. WILLIAMS Analysis Date: 21-MAY-97 10:19 Instrument: GC/MS VOA Test: O510.6.0

Parameter	Result	Det. Limit	Units
BENZENE	BDL	5.0	ug/L
CIS-1,3-DICHLOROPROPENE	BDL	5.0	ug/L
TRANS-1,3-DICHLOROPROPENE	BDL	5.0	ug/L
ETHYL BENZENE	BDL	5.0	ug/L
BROMOMETHANE	BDL	5.0	ug/L
CARBON TETRACHLORIDE	BDL	5.0	ug/L
CHLOROBENZENE	BDL	5.0	ug/L
CHLOROETHANE	BDL	5.0	ug/L
CHLOROFORM	BDL	5.0	ug/L
CHLOROMETHANE	BDL	5.0	ug/L
1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	BDL	5.0	ug/L
1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	BDL	5.0	ug/L
1,1-DICHLOROETHANE	BDL	5.0	ug/L
CIS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
TRANS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
1,1-DICHLOROETHENE	BDL	5.0	ug/L
1,2-DICHLOROETHANE	BDL	5.0	ug/L
1,2-DICHLOROPROPANE	BDL	5.0	ug/L
DICHLOROMETHANE (METHYLENE CHLORIDE)	BDL	5.0	ug/L
STYRENE	BDL	5.0	ug/L
1,1,1,2-TETRACHLOROETHANE	BDL	5.0	ug/L
1,1,2,2-TETRACHLOROETHANE	BDL	5.0	ug/L
TETRACHLOROETHENE	BDL	5.0	ug/L
TOLUENE	BDL	5.0	ug/L
1,1,1-TRICHLOROETHANE	BDL	5.0	ug/L
1,1,2-TRICHLOROETHANE	BDL	5.0	ug/L
TRICHLOROETHENE	BDL	5.0	ug/L
TRICHLOROFLUOROMETHANE	BDL	5.0	ug/L
VINYL CHLORIDE	BDL	2.0	ug/L
XYLENES (O/M/P-XYLENE)	BDL	5.0	ug/L
...			
SURROGATE RECOVERY			

DICHLOROETHANE-D4	106		% Rec
TOLUENE-D8	100		% Rec
4-BROMOFLUOROBENZENE	102		% Rec

Sample Comments

BDL Below Detection Limit

Sample chain of custody number 64139.

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Approved : P.K. Spence

CERTIFICATE OF ANALYSIS

Service Location	Received	Project	Lab ID
HERITAGE ENVIRONMENTAL SERVICES, INC. COMMERCIAL LABORATORY OPERATIONS 7901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8304	14-MAY-97	4315	A407863
	Complete	PO Number	
	02-JUN-97	IN21405J0025	
	Printed	Sampled	
	05-JUN-97	13-MAY-97 14:40	

Report To	Bill To
JEFF JENKINS BFI WASTE SYSTEMS 2020 LAUBSCHER ROAD EVANSVILLE, IN 47720	ALISHA CLARK BFI WASTE SYSTEMS 2211 GLENVIEW DRIVE EVANSVILLE, IN 47720

Sample Description

CLIENT ID: FIELD BLANK

AMMONIA DISTILLATION EPA 350.2

Analyst: K. BAX Analysis Date: 15-MAY-97 17:56 Instrument: PREP Test: P203.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	200		mL
FINAL VOLUME	250		mL

AMMONIA NITROGEN EPA 350.3

Analyst: K. BUNCH Analysis Date: 16-MAY-97 13:00 Test: G203.4.0

Prep: AMMONIA DISTILLATION EPA 350.2 P203.4.0

Parameter	Result	Det. Limit	Units
NITROGEN, AMMONIA	0.13	0.12	mg/L

CHLORIDE BY ION CHROMATOGRAPHY SW846-9056

Analyst: M. ADKINS Analysis Date: 16-MAY-97 00:11 Instrument: IC Test: G310.2.0

Parameter	Result	Det. Limit	Units
CHLORIDE	BDL	0.25	mg/L

DISSOLVED SOLIDS EPA 160.1

Analyst: K. SULLIVAN Analysis Date: 20-MAY-97 16:00 Test: G402.7.0

Parameter	Result	Det. Limit	Units
SOLIDS	BDL	10	mg/L

TOTAL SUSPENDED SOLIDS EPA 160.2

Analyst: K. SULLIVAN Analysis Date: 16-MAY-97 14:00 Test: G403.7.0

Parameter	Result	Det. Limit	Units
SUSPENDED SOLIDS	BDL	1	mg/L

ALKALINITY TOTAL EPA 310.1

Analyst: K. WHITFIELD Analysis Date: 16-MAY-97 12:30 Test: G605.2.0

Parameter	Result	Det. Limit	Units
ALKALINITY	BDL	1.0	mg/L

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HERITAGE ENVIRONMENTAL SERVICES, INC. Sample ID: A407863 FIELD BLANK

ALKALINITY (BICARBONATE) EPA 310.1

Analyst: K. WHITFIELD Analysis Date: 16-MAY-97 12:30 Test: G610.2.0

Parameter	Result	Det. Limit	Units
ALKALINITY	BDL	1.0	mg/L

ALKALINITY (CARBONATE) EPA 310.1

Analyst: K. WHITFIELD Analysis Date: 16-MAY-97 12:30 Test: G611.2.0

Parameter	Result	Det. Limit	Units
ALKALINITY	BDL	1.0	mg/L

FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A

Analyst: R. DALAL Analysis Date: 15-MAY-97 11:00 Instrument: PREP Test: P130.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

ARSENIC TRACE ICP SW846-6010A

Analyst: A. ROBERTSON Analysis Date: 20-MAY-97 12:44 Instrument: TRACE ICP Test: M103.0.0

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
ARSENIC	BDL	0.0050	mg/L

CALCIUM ICP SW846-6010A

Analyst: A. HILSCHER Analysis Date: 17-MAY-97 00:07 Instrument: ICP Test: M109.3.0

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
CALCIUM	0.62	0.20	mg/L

prep blank was 0.80 mg/l

SULFATE BY ION CHROMATOGRAPHY SW846-9056

Analyst: M. ADKINS Analysis Date: 16-MAY-97 00:11 Instrument: IC Test: G310.7.0

Parameter	Result	Det. Limit	Units
SULFATE	BDL	0.25	mg/L

VOLATILE ORGANICS (CAPILLARY COLUMN) SW846-8260A

Analyst: H. WILLIAMS Analysis Date: 21-MAY-97 10:55 Instrument: GC/MS VOA Test: O510.6.0

Parameter	Result	Det. Limit	Units
BENZENE	BDL	5.0	ug/L
CIS-1,3-DICHLOROPROPENE	BDL	5.0	ug/L
TRANS-1,3-DICHLOROPROPENE	BDL	5.0	ug/L
ETHYL BENZENE	BDL	5.0	ug/L
BROMOMETHANE	BDL	5.0	ug/L
CARBON TETRACHLORIDE	BDL	5.0	ug/L
CHLOROBENZENE	BDL	5.0	ug/L
CHLOROETHANE	BDL	5.0	ug/L
CHLOROFORM	BDL	5.0	ug/L
CHLOROMETHANE	BDL	5.0	ug/L
1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	BDL	5.0	ug/L
1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	BDL	5.0	ug/L
1,1-DICHLOROETHANE	BDL	5.0	ug/L
CIS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
TRANS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
1,1-DICHLOROETHENE	BDL	5.0	ug/L
1,2-DICHLOROETHANE	BDL	5.0	ug/L
1,2-DICHLOROPROPANE	BDL	5.0	ug/L
DICHLOROMETHANE (METHYLENE CHLORIDE)	5.3	5.0	ug/L
STYRENE	BDL	5.0	ug/L

 (continued on next page)

HERITAGE ENVIRONMENTAL SERVICES, INC.

Sample ID: A407863 FIELD BLANK

Parameter	Result	Det. Limit	Units
1,1,1,2-TETRACHLOROETHANE	BDL	5.0	ug/L
1,1,2,2-TETRACHLOROETHANE	BDL	5.0	ug/L
TETRACHLOROETHENE	BDL	5.0	ug/L
TOLUENE	6.5	5.0	ug/L
1,1,1-TRICHLOROETHANE	BDL	5.0	ug/L
1,1,2-TRICHLOROETHANE	BDL	5.0	ug/L
TRICHLOROETHENE	BDL	5.0	ug/L
TRICHLOROFLUOROMETHANE	BDL	5.0	ug/L
VINYL CHLORIDE	BDL	2.0	ug/L
XYLENES (O/M/P-XYLENE)	BDL	5.0	ug/L
...			
SURROGATE RECOVERY			

DICHLOROETHANE-D4	115		% Rec
TOLUENE-D8	91		% Rec
4-BROMOFLUOROBENZENE	99		% Rec

It was confirmed that there was no possible carryover.

Sample Comments

BDL Below Detection Limit

Sample chain of custody number 64139.

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Approved : P.K. Spence

CERTIFICATE OF ANALYSIS

Service Location	Received	Project	Lab ID
HERITAGE ENVIRONMENTAL SERVICES, INC. COMMERCIAL LABORATORY OPERATIONS 7901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8304	15-MAY-97	4315	A407957
	Complete	PO Number	
	02-JUN-97	IN21405J0025	
	Printed	Sampled	
	03-JUN-97	14-MAY-97 08:00	

Report To	Bill To
JEFF JENKINS BFI WASTE SYSTEMS 2020 LAUBSCHER ROAD EVANSVILLE, IN 47720	ALISHA CLARK BFI WASTE SYSTEMS 2211 GLENVIEW DRIVE EVANSVILLE, IN 47720

Sample Description

CLIENT ID: MW 10R
DESCRIPTION: GROUNDWATER

FIELD TURBIDITY EPA 180.1

Analyst: S. ASKEW Analysis Date: 14-MAY-97 Instrument: FIELD Test: G602.0.0

Parameter	Result	Det. Limit	Units
TURBIDITY	23.6	0.1	ntu

FIELD TEMPERATURE EPA 170.1

Analyst: S. ASKEW Analysis Date: 14-MAY-97 Instrument: FIELD Test: G603.0.0

Parameter	Result	Det. Limit	Units
TEMPERATURE	13.8		Degrees C

FIELD PH (AQUEOUS) SW846-9040A

Analyst: S. ASKEW Analysis Date: 14-MAY-97 Instrument: FIELD Test: G607.0.0

Parameter	Result	Det. Limit	Units
PH	6.64	0.1	Std. Units

FIELD DISSOLVED OXYGEN SAS

Analyst: S. ASKEW Analysis Date: 14-MAY-97 Instrument: FIELD Test: G600.1.0

Parameter	Result	Det. Limit	Units
DISSOLVED OXYGEN	0.4		mg/L

FIELD OXIDATION-REDUCTION POTENTIAL SM2580B-18TH ED

Analyst: S. ASKEW Analysis Date: 14-MAY-97 Instrument: FIELD Test: G604.7.0

Parameter	Result	Det. Limit	Units
OXIDATION/REDUCTION POTENTIAL	15		mV

FIELD SPECIFIC CONDUCTANCE SW846-9050

Analyst: S. ASKEW Analysis Date: 14-MAY-97 Instrument: FIELD Test: G604.0.0

Parameter	Result	Det. Limit	Units
CONDUCTIVITY	863	1.0	umHOS/cm

AMMONIA DISTILLATION EPA 350.2

Analyst: K. BAX Analysis Date: 15-MAY-97 17:56 Instrument: PREP Test: P203.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	200		mL
FINAL VOLUME	250		mL

HERITAGE ENVIRONMENTAL SERVICES, INC.

Sample ID: A407957 MW 10R

AMMONIA NITROGEN EPA 350.3

Analyst: K. BUNCH Analysis Date: 16-MAY-97 13:00 Test: G203.4.0
Prep: AMMONIA DISTILLATION EPA 350.2 P203.4.0

Parameter	Result	Det. Limit	Units
NITROGEN, AMMONIA	9.1	0.24	mg/L
1:2 dilution			

CHLORIDE BY ION CHROMATOGRAPHY SW846-9056

Analyst: M. ADKINS Analysis Date: 16-MAY-97 01:34 Instrument: IC Test: G310.2.0

Parameter	Result	Det. Limit	Units
CHLORIDE	16	0.25	mg/L

FIELD FILTRATION SAS

Analyst: Analysis Date: Instrument: FIELD Test: P110.0.0

FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A

Analyst: B. GRAVES Analysis Date: 16-MAY-97 12:30 Instrument: PREP Test: P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

ARSENIC TRACE ICP SW846-6010A

Analyst: A. ROBERTSON Analysis Date: 22-MAY-97 14:12 Instrument: TRACE ICP Test: M103.0.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
ARSENIC	0.011	0.0050	mg/L

SODIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 20-MAY-97 22:08 Instrument: ICP Test: M131.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
SODIUM	66.	0.20	mg/L

CADMIUM TRACE ICP SW846-6010A

Analyst: A. ROBERTSON Analysis Date: 22-MAY-97 14:12 Instrument: TRACE ICP Test: M108.0.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
CADMIUM	BDL	0.0010	mg/L

CHROMIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 20-MAY-97 22:08 Instrument: ICP Test: M110.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
CHROMIUM	BDL	0.010	mg/L

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HERITAGE ENVIRONMENTAL SERVICES, INC. Sample ID: A407957 MW 10R

COPPER ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 20-MAY-97 22:08 Instrument: ICP Test: M112.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
COPPER	BDL	0.020	mg/L

ZINC ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 20-MAY-97 22:08 Instrument: ICP Test: M139.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
ZINC	BDL	0.020	mg/L

IRON ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 20-MAY-97 22:08 Instrument: ICP Test: M115.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
IRON	13.	0.025	mg/L

MAGNESIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 20-MAY-97 22:08 Instrument: ICP Test: M118.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
MAGNESIUM	25.	0.20	mg/L

MANGANESE ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 20-MAY-97 22:08 Instrument: ICP Test: M119.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
MANGANESE	0.47	0.010	mg/L

POTASSIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 20-MAY-97 22:08 Instrument: ICP Test: M126.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
POTASSIUM	1.6	0.20	mg/L

DISSOLVED SOLIDS EPA 160.1

Analyst: K. SULLIVAN Analysis Date: 20-MAY-97 16:00 Test: G402.7.0

Parameter	Result	Det. Limit	Units
SOLIDS	440	10	mg/L

TOTAL SUSPENDED SOLIDS EPA 160.2

Analyst: K. SULLIVAN Analysis Date: 20-MAY-97 14:00 Test: G403.7.0

Parameter	Result	Det. Limit	Units
SUSPENDED SOLIDS	25	1.0	mg/L

HERITAGE ENVIRONMENTAL SERVICES, INC.

Sample ID: A407957 MW 10R

ALKALINITY TOTAL EPA 310.1

Analyst: K. WHITFIELD Analysis Date: 16-MAY-97 12:30 Test: G605.2.0

Parameter	Result	Det. Limit	Units
ALKALINITY	430	1.0	mg/L

ALKALINITY (BICARBONATE) EPA 310.1

Analyst: K. WHITFIELD Analysis Date: 16-MAY-97 12:30 Test: G610.2.0

Parameter	Result	Det. Limit	Units
ALKALINITY	430	1.0	mg/L

ALKALINITY (CARBONATE) EPA 310.1

Analyst: K. WHITFIELD Analysis Date: 16-MAY-97 12:30 Test: G611.2.0

Parameter	Result	Det. Limit	Units
ALKALINITY	BDL	1.0	mg/L

FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A

Analyst: B. GRAVES Analysis Date: 16-MAY-97 12:30 Instrument: PREP Test: P130.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

ARSENIC TRACE ICP SW846-6010A

Analyst: A. ROBERTSON Analysis Date: 22-MAY-97 13:27 Instrument: TRACE ICP Test: M103.0.0

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
ARSENIC	0.011	0.0050	mg/L

CALCIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 20-MAY-97 23:00 Instrument: ICP Test: M109.3.0

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
CALCIUM	72.	0.20	mg/L

SULFATE BY ION CHROMATOGRAPHY SW846-9056

Analyst: M. ADKINS Analysis Date: 16-MAY-97 01:34 Instrument: IC Test: G310.7.0

Parameter	Result	Det. Limit	Units
SULFATE	BDL	0.25	mg/L

VOLATILE ORGANICS (CAPILLARY COLUMN) SW846-8260A

Analyst: H. WILLIAMS Analysis Date: 21-MAY-97 12:45 Instrument: GC/MS VOA Test: O510.6.0

Parameter	Result	Det. Limit	Units
BENZENE	BDL	5.0	ug/L
CIS-1,3-DICHLOROPROPENE	BDL	5.0	ug/L
TRANS-1,3-DICHLOROPROPENE	BDL	5.0	ug/L
ETHYL BENZENE	BDL	5.0	ug/L
BROMOMETHANE	BDL	5.0	ug/L
CARBON TETRACHLORIDE	BDL	5.0	ug/L
CHLOROBENZENE	BDL	5.0	ug/L
CHLOROETHANE	BDL	5.0	ug/L
CHLOROFORM	BDL	5.0	ug/L
CHLOROMETHANE	BDL	5.0	ug/L
1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	BDL	5.0	ug/L
1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	BDL	5.0	ug/L
1,1-DICHLOROETHANE	BDL	5.0	ug/L
CIS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
TRANS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
1,1-DICHLOROETHENE	BDL	5.0	ug/L
1,2-DICHLOROETHANE	BDL	5.0	ug/L

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HERITAGE ENVIRONMENTAL SERVICES, INC. Sample ID: A407957 MW 10R

Parameter	Result	Det. Limit	Units
1,2-DICHLOROPROPANE	BDL	5.0	ug/L
DICHLOROMETHANE (METHYLENE CHLORIDE)	BDL	5.0	ug/L
STYRENE	BDL	5.0	ug/L
1,1,1,2-TETRACHLOROETHANE	BDL	5.0	ug/L
1,1,2,2-TETRACHLOROETHANE	BDL	5.0	ug/L
TETRACHLOROETHENE	BDL	5.0	ug/L
TOLUENE	BDL	5.0	ug/L
1,1,1-TRICHLOROETHANE	BDL	5.0	ug/L
1,1,2-TRICHLOROETHANE	BDL	5.0	ug/L
TRICHLOROETHENE	BDL	5.0	ug/L
TRICHLOROFLUOROMETHANE	BDL	5.0	ug/L
VINYL CHLORIDE	BDL	2.0	ug/L
XYLENES (O/M/P-XYLENE)	BDL	5.0	ug/L
....			
SURROGATE RECOVERY			

DICHLOROETHANE-D4	112		% Rec
TOLUENE-D8	95		% Rec
4-BROMOFLUOROBENZENE	107		% Rec

Sample Comments

BDL Below Detection Limit

Sample chain of custody number 64130.

This Certificate shall not be reproduced, except in full, without the written approval of the lab.

Approved : P.K. Spence

CERTIFICATE OF ANALYSIS

Service Location	Received	Project	Lab ID
HERITAGE ENVIRONMENTAL SERVICES, INC. COMMERCIAL LABORATORY OPERATIONS 7901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8304	15-MAY-97	4315	A40795°
	Complete	PO Number	
	02-JUN-97	IN21405J0025	
	Printed	Sampled	
	03-JUN-97	14-MAY-97 08:30	

Report To	Bill To
JEFF JENKINS BFI WASTE SYSTEMS 2020 LAUBSCHER ROAD EVANSVILLE, IN 47720	ALISHA CLARK BFI WASTE SYSTEMS 2211 GLENVIEW DRIVE EVANSVILLE, IN 47720

Sample Description

CLIENT ID: MW 14R
DESCRIPTION: GROUNDWATER

FIELD TURBIDITY EPA 180.1

Analyst: S. ASKEW Analysis Date: 14-MAY-97 Instrument: FIELD Test: G602.0.0

Parameter	Result	Det. Limit	Units
TURBIDITY	18.5	0.1	ntu

FIELD TEMPERATURE EPA 170.1

Analyst: S. ASKEW Analysis Date: 14-MAY-97 Instrument: FIELD Test: G603.0.0

Parameter	Result	Det. Limit	Units
TEMPERATURE	14.3		Degrees C

FIELD PH (AQUEOUS) SW846-9040A

Analyst: S. ASKEW Analysis Date: 14-MAY-97 Instrument: FIELD Test: G607.0.0

Parameter	Result	Det. Limit	Units
PH	7.1	0.1	Std. Units

FIELD DISSOLVED OXYGEN SAS

Analyst: S. ASKEW Analysis Date: 14-MAY-97 Instrument: FIELD Test: G600.1.0

Parameter	Result	Det. Limit	Units
DISSOLVED OXYGEN	12.5	1	mg/L

FIELD OXIDATION-REDUCTION POTENTIAL SM2580B-18TH ED

Analyst: S. ASKEW Analysis Date: 14-MAY-97 Instrument: FIELD Test: G604.7.0

Parameter	Result	Det. Limit	Units
OXIDATION/REDUCTION POTENTIAL	-9		mV

FIELD SPECIFIC CONDUCTANCE SW846-9050

Analyst: S. ASKEW Analysis Date: 14-MAY-97 Instrument: FIELD Test: G604.0.0

Parameter	Result	Det. Limit	Units
CONDUCTIVITY	807	1.0	umHOS/cm

AMMONIA DISTILLATION EPA 350.2

Analyst: K. BAX Analysis Date: 15-MAY-97 17:56 Instrument: PREP Test: P203.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	200		mL
FINAL VOLUME	250		mL

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AMMONIA NITROGEN EPA 350.3

Analyst: K. BUNCH Analysis Date: 16-MAY-97 13:00 Test: G203.4.0
Prep: AMMONIA DISTILLATION EPA 350.2 P203.4.0

Parameter	Result	Det. Limit	Units
NITROGEN, AMMONIA	3.0	0.12	mg/L

CHLORIDE BY ION CHROMATOGRAPHY SW846-9056

Analyst: M. ADKINS Analysis Date: 16-MAY-97 18:17 Instrument: IC Test: G310.2.0

Parameter	Result	Det. Limit	Units
CHLORIDE	9.3	0.25	mg/L

FIELD FILTRATION SAS

Analyst: . Analysis Date: Instrument: FIELD Test: P110.0.0

FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A

Analyst: B. GRAVES Analysis Date: 16-MAY-97 12:30 Instrument: PREP Test: P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

ARSENIC TRACE ICP SW846-6010A

Analyst: A. ROBERTSON Analysis Date: 22-MAY-97 14:16 Instrument: TRACE ICP Test: M103.0.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
ARSENIC	BDL	0.0050	mg/L

SODIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 20-MAY-97 22:11 Instrument: ICP Test: M131.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
SODIUM	64.	0.20	mg/L

CADMIUM TRACE ICP SW846-6010A

Analyst: A. ROBERTSON Analysis Date: 22-MAY-97 14:16 Instrument: TRACE ICP Test: M108.0.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
CADMIUM	BDL	0.0010	mg/L

CHROMIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 20-MAY-97 22:11 Instrument: ICP Test: M110.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
CHROMIUM	BDL	0.010	mg/L

COPPER ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 20-MAY-97 22:11 Instrument: ICP Test: M112.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
COPPER	BDL	0.020	mg/L

HERITAGE ENVIRONMENTAL SERVICES, INC.

Sample ID: A407958 MW 14R

ZINC ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 20-MAY-97 22:11 Instrument: ICP Test: M139.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
ZINC	BDL	0.020	mg/L

IRON ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 20-MAY-97 22:11 Instrument: ICP Test: M115.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
IRON	1.8	0.025	mg/L

MAGNESIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 20-MAY-97 22:11 Instrument: ICP Test: M118.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
MAGNESIUM	28.	0.20	mg/L

MANGANESE ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 20-MAY-97 22:11 Instrument: ICP Test: M119.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
MANGANESE	0.72	0.010	mg/L

POTASSIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 20-MAY-97 22:11 Instrument: ICP Test: M126.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
POTASSIUM	0.91	0.20	mg/L

DISSOLVED SOLIDS EPA 160.1

Analyst: K. SULLIVAN Analysis Date: 20-MAY-97 16:00 Test: G402.7.0

Parameter	Result	Det. Limit	Units
SOLIDS	460	10	mg/L

TOTAL SUSPENDED SOLIDS EPA 160.2

Analyst: K. SULLIVAN Analysis Date: 20-MAY-97 14:00 Test: G403.7.0

Parameter	Result	Det. Limit	Units
SUSPENDED SOLIDS	18	1.0	mg/L

ALKALINITY TOTAL EPA 310.1

Analyst: K. WHITFIELD Analysis Date: 16-MAY-97 12:30 Test: G605.2.0

Parameter	Result	Det. Limit	Units
ALKALINITY	400	1.0	mg/L

ALKALINITY (BICARBONATE) EPA 310.1

Analyst: K. WHITFIELD Analysis Date: 16-MAY-97 12:30 Test: G610.2.0

Parameter	Result	Det. Limit	Units
ALKALINITY	400	1.0	mg/L

HERITAGE ENVIRONMENTAL SERVICES, INC. Sample ID: A407958 MW 14R

ALKALINITY (CARBONATE) EPA 310.1

Analyst: K. WHITFIELD Analysis Date: 16-MAY-97 12:30 Test: G611.2.0

Parameter	Result	Det. Limit	Units
ALKALINITY	BDL	1.0	mg/L

FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A

Analyst: B. GRAVES Analysis Date: 16-MAY-97 12:30 Instrument: PREP Test: P130.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

ARSENIC TRACE ICP SW846-6010A

Analyst: A. ROBERTSON Analysis Date: 22-MAY-97 13:31 Instrument: TRACE ICP Test: M103.0.0

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
ARSENIC	0.0076	0.0050	mg/L

CALCIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 20-MAY-97 23:04 Instrument: ICP Test: M109.3.0

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
CALCIUM	75.	0.20	mg/L

SULFATE BY ION CHROMATOGRAPHY SW846-9056

Analyst: M. ADKINS Analysis Date: 16-MAY-97 18:17 Instrument: IC Test: G310.7.0

Parameter	Result	Det. Limit	Units
SULFATE	18	0.25	mg/L

VOLATILE ORGANICS (CAPILLARY COLUMN) SW846-8260A

Analyst: H. WILLIAMS Analysis Date: 21-MAY-97 13:21 Instrument: GC/MS VOA Test: O510.6.0

Parameter	Result	Det. Limit	Units
BENZENE	BDL	5.0	ug/L
CIS-1,3-DICHLOROPROPENE	BDL	5.0	ug/L
TRANS-1,3-DICHLOROPROPENE	BDL	5.0	ug/L
ETHYL BENZENE	BDL	5.0	ug/L
BROMOMETHANE	BDL	5.0	ug/L
CARBON TETRACHLORIDE	BDL	5.0	ug/L
CHLOROBENZENE	BDL	5.0	ug/L
CHLOROETHANE	BDL	5.0	ug/L
CHLOROFORM	BDL	5.0	ug/L
CHLOROMETHANE	BDL	5.0	ug/L
1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	BDL	5.0	ug/L
1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	BDL	5.0	ug/L
1,1-DICHLOROETHANE	BDL	5.0	ug/L
CIS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
TRANS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
1,1-DICHLOROETHENE	BDL	5.0	ug/L
1,2-DICHLOROETHANE	BDL	5.0	ug/L
1,2-DICHLOROPROPANE	BDL	5.0	ug/L
DICHLOROMETHANE (METHYLENE CHLORIDE)	BDL	5.0	ug/L
STYRENE	BDL	5.0	ug/L
1,1,1,2-TETRACHLOROETHANE	BDL	5.0	ug/L
1,1,2,2-TETRACHLOROETHANE	BDL	5.0	ug/L
TETRACHLOROETHENE	BDL	5.0	ug/L
TOLUENE	BDL	5.0	ug/L
1,1,1-TRICHLOROETHANE	BDL	5.0	ug/L
1,1,2-TRICHLOROETHANE	BDL	5.0	ug/L
TRICHLOROETHENE	BDL	5.0	ug/L

 (continued on next page)

HERITAGE ENVIRONMENTAL SERVICES, INC.

Sample ID: A407958 MW 14R

Parameter	Result	Det. Limit	Units
TRICHLOROFLUOROMETHANE	BDL	5.0	ug/L
VINYL CHLORIDE	BDL	2.0	ug/L
XYLENES (O/M/P-XYLENE)	BDL	5.0	ug/L
SURROGATE RECOVERY			
DICHLOROETHANE-D4	116		% Rec
TOLUENE-D8	91		% Rec
4-BROMOFLUOROBENZENE	101		% Rec

Sample Comments

BDL Below Detection Limit

Sample chain of custody number 64130.

This Certificate shall not be reproduced, except in full, without the written approval of the lab.

Approved : P.K. Spence

CERTIFICATE OF ANALYSIS

Service Location	Received	Project	Lab ID
HERITAGE ENVIRONMENTAL SERVICES, INC. COMMERCIAL LABORATORY OPERATIONS 7901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8304	15-MAY-97	4315	A407959
	Complete	PO Number	
	02-JUN-97	IN21405J0025	
	Printed	Sampled	
	03-JUN-97	14-MAY-97 09:00	

Report To	Bill To
JEFF JENKINS BFI WASTE SYSTEMS 2020 LAUBSCHER ROAD EVANSVILLE, IN 47720	ALISHA CLARK BFI WASTE SYSTEMS 2211 GLENVIEW DRIVE EVANSVILLE, IN 47720

Sample Description

CLIENT ID: MW 13R
DESCRIPTION: GROUNDWATER

FIELD TURBIDITY EPA 180.1

Analyst: S. ASKEW Analysis Date: 14-MAY-97 Instrument: FIELD Test: G602.0.0

Parameter	Result	Det. Limit	Units
TURBIDITY	12.9	0.1	ntu

FIELD TEMPERATURE EPA 170.1

Analyst: S. ASKEW Analysis Date: 14-MAY-97 Instrument: FIELD Test: G603.0.0

Parameter	Result	Det. Limit	Units
TEMPERATURE	14.9		Degrees C

FIELD PH (AQUEOUS) SW846-9040A

Analyst: S. ASKEW Analysis Date: 14-MAY-97 Instrument: FIELD Test: G607.0.0

Parameter	Result	Det. Limit	Units
PH	7.3	0.1	Std. Units

FIELD DISSOLVED OXYGEN SAS

Analyst: S. ASKEW Analysis Date: 14-MAY-97 Instrument: FIELD Test: G600.1.0

Parameter	Result	Det. Limit	Units
DISSOLVED OXYGEN	4.5	1	mg/L

FIELD OXIDATION-REDUCTION POTENTIAL SM2580B-18TH ED

Analyst: S. ASKEW Analysis Date: 14-MAY-97 Instrument: FIELD Test: G604.7.0

Parameter	Result	Det. Limit	Units
OXIDATION/REDUCTION POTENTIAL	-19		mV

FIELD SPECIFIC CONDUCTANCE SW846-9050

Analyst: S. ASKEW Analysis Date: 14-MAY-97 Instrument: FIELD Test: G604.0.0

Parameter	Result	Det. Limit	Units
CONDUCTIVITY	741	1.0	umHOS/cm

AMMONIA DISTILLATION EPA 350.2

Analyst: K. BAX Analysis Date: 16-MAY-97 18:00 Instrument: PREP Test: P203.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	200		mL
FINAL VOLUME	250		mL

 (continued on next page)

HERITAGE ENVIRONMENTAL SERVICES, INC.

Sample ID: A407959 MW 13R

AMMONIA NITROGEN EPA 350.3

Analyst: K. BUNCH Analysis Date: 19-MAY-97 10:30 Test: G203.4.0
Prep: AMMONIA DISTILLATION EPA 350.2 P203.4.0

Parameter	Result	Det. Limit	Units
NITROGEN, AMMONIA	BDL	0.12	mg/L

CHLORIDE BY ION CHROMATOGRAPHY SW846-9056

Analyst: M. ADKINS Analysis Date: 16-MAY-97 18:17 Instrument: IC Test: G310.2.0

Parameter	Result	Det. Limit	Units
CHLORIDE	5.9	0.25	mg/L

FIELD FILTRATION SAS

Analyst: . Analysis Date: Instrument: FIELD Test: P110.0.0

FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A

Analyst: B. GRAVES Analysis Date: 16-MAY-97 12:30 Instrument: PREP Test: P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

ARSENIC TRACE ICP SW846-6010A

Analyst: A. ROBERTSON Analysis Date: 22-MAY-97 14:19 Instrument: TRACE ICP Test: M103.0.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
ARSENIC	BDL	0.0050	mg/L

SODIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 20-MAY-97 22:14 Instrument: ICP Test: M131.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
SODIUM	46.	0.20	mg/L

CADMIUM TRACE ICP SW846-6010A

Analyst: A. ROBERTSON Analysis Date: 22-MAY-97 14:19 Instrument: TRACE ICP Test: M108.0.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
CADMIUM	BDL	0.0010	mg/L

CHROMIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 20-MAY-97 22:14 Instrument: ICP Test: M110.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
CHROMIUM	BDL	0.010	mg/L

COPPER ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 20-MAY-97 22:14 Instrument: ICP Test: M112.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
COPPER	BDL	0.020	mg/L

ZINC ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 20-MAY-97 22:14 Instrument: ICP Test: M139.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
ZINC	BDL	0.020	mg/L

IRON ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 20-MAY-97 22:14 Instrument: ICP Test: M115.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
IRON	0.35	0.025	mg/L

MAGNESIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 20-MAY-97 22:14 Instrument: ICP Test: M118.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
MAGNESIUM	35.	0.20	mg/L

MANGANESE ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 20-MAY-97 22:14 Instrument: ICP Test: M119.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
MANGANESE	1.1	0.010	mg/L

POTASSIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 20-MAY-97 22:14 Instrument: ICP Test: M126.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
POTASSIUM	0.46	0.20	mg/L

DISSOLVED SOLIDS EPA 160.1

Analyst: K. SULLIVAN Analysis Date: 20-MAY-97 16:00 Test: G402.7.0

Parameter	Result	Det. Limit	Units
SOLIDS	420	10	mg/L

TOTAL SUSPENDED SOLIDS EPA 160.2

Analyst: K. SULLIVAN Analysis Date: 20-MAY-97 14:00 Test: G403.7.0

Parameter	Result	Det. Limit	Units
SUSPENDED SOLIDS	8	1.0	mg/L

ALKALINITY TOTAL EPA 310.1

Analyst: K. WHITFIELD Analysis Date: 16-MAY-97 12:30 Test: G605.2.0

Parameter	Result	Det. Limit	Units
ALKALINITY	390	1.0	mg/L

ALKALINITY (BICARBONATE) EPA 310.1

Analyst: K. WHITFIELD Analysis Date: 16-MAY-97 12:30 Test: G610.2.0

Parameter	Result	Det. Limit	Units
ALKALINITY	390	1.0	mg/L

HERITAGE ENVIRONMENTAL SERVICES, INC.

Sample ID: A407959 MW 13R

ALKALINITY (CARBONATE) EPA 310.1

Analyst: K. WHITFIELD Analysis Date: 16-MAY-97 12:30 Test: G611.2.0

Parameter	Result	Det. Limit	Units
ALKALINITY	BDL	1.0	mg/L

FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A

Analyst: B. GRAVES Analysis Date: 16-MAY-97 12:30 Instrument: PREP Test: P130.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

ARSENIC TRACE ICP SW846-6010A

Analyst: A. ROBERTSON Analysis Date: 22-MAY-97 13:34 Instrument: TRACE ICP Test: M103.0.0

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
ARSENIC	BDL	0.0050	mg/L

CALCIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 20-MAY-97 23:07 Instrument: ICP Test: M109.3.0

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
CALCIUM	78.	0.20	mg/L

SULFATE BY ION CHROMATOGRAPHY SW846-9056

Analyst: M. ADKINS Analysis Date: 16-MAY-97 18:17 Instrument: IC Test: G310.7.0

Parameter	Result	Det. Limit	Units
SULFATE	7.8	0.25	mg/L

VOLATILE ORGANICS (CAPILLARY COLUMN) SW846-8260A

Analyst: H. WILLIAMS Analysis Date: 21-MAY-97 13:57 Instrument: GC/MS VOA Test: O510.6.0

Parameter	Result	Det. Limit	Units
BENZENE	BDL	5.0	ug/L
CIS-1,3-DICHLOROPROPENE	BDL	5.0	ug/L
TRANS-1,3-DICHLOROPROPENE	BDL	5.0	ug/L
ETHYL BENZENE	BDL	5.0	ug/L
BROMOMETHANE	BDL	5.0	ug/L
CARBON TETRACHLORIDE	BDL	5.0	ug/L
CHLOROBENZENE	BDL	5.0	ug/L
CHLOROETHANE	BDL	5.0	ug/L
CHLOROFORM	BDL	5.0	ug/L
CHLOROMETHANE	BDL	5.0	ug/L
1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	BDL	5.0	ug/L
1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	BDL	5.0	ug/L
1,1-DICHLOROETHANE	BDL	5.0	ug/L
CIS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
TRANS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
1,1-DICHLOROETHENE	BDL	5.0	ug/L
1,2-DICHLOROETHANE	BDL	5.0	ug/L
1,2-DICHLOROPROPANE	BDL	5.0	ug/L
DICHLOROMETHANE (METHYLENE CHLORIDE)	BDL	5.0	ug/L
STYRENE	BDL	5.0	ug/L
1,1,1,2-TETRACHLOROETHANE	BDL	5.0	ug/L
1,1,2,2-TETRACHLOROETHANE	BDL	5.0	ug/L
TETRACHLOROETHENE	BDL	5.0	ug/L
TOLUENE	BDL	5.0	ug/L
1,1,1-TRICHLOROETHANE	BDL	5.0	ug/L
1,1,2-TRICHLOROETHANE	BDL	5.0	ug/L
TRICHLOROETHENE	BDL	5.0	ug/L

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HERITAGE ENVIRONMENTAL SERVICES, INC.

Sample ID: A407959 MW 13R

Parameter	Result	Det. Limit	Units
TRICHLOROFLUOROMETHANE	BDL	5.0	ug/L
VINYL CHLORIDE	BDL	2.0	ug/L
XYLENES (O/M/P-XYLENE)	BDL	5.0	ug/L
...			
SURROGATE RECOVERY			

DICHLOROETHANE-D4	112		% Rec
TOLUENE-D8	100		% Rec
4-BROMOFLUOROBENZENE	89		% Rec

Sample Comments

BDL Below Detection Limit

Sample chain of custody number 64130.

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Approved : P.K. Spence

CERTIFICATE OF ANALYSIS

Service Location	Received	Project	Lab ID
HERITAGE ENVIRONMENTAL SERVICES, INC. COMMERCIAL LABORATORY OPERATIONS 7901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8304	15-MAY-97	4315	A407962
	Complete: 02-JUN-97	PO Number: IN21405J0025	
	Printed: 03-JUN-97	Sampled: 14-MAY-97 15:09	

Report To

JEFF JENKINS
BFI WASTE SYSTEMS
2020 LAUBSCHER ROAD
EVANSVILLE, IN 47720

Bill To

ALISHA CLARK
BFI WASTE SYSTEMS
2211 GLENVIEW DRIVE
EVANSVILLE, IN 47720

Sample Description

CLIENT ID: MW 15D
DESCRIPTION: GROUNDWATER

FIELD TURBIDITY EPA 180.1

Analyst: S. ASKEW | Analysis Date: 14-MAY-97 | Instrument: FIELD | Test: G602.0.0

Parameter	Result	Det. Limit	Units
TURBIDITY	4.0	0.1	ntu

FIELD TEMPERATURE EPA 170.1

Analyst: S. ASKEW | Analysis Date: 14-MAY-97 | Instrument: FIELD | Test: G603.0.0

Parameter	Result	Det. Limit	Units
TEMPERATURE	14.5		Degrees C

FIELD PH (AQUEOUS) SW846-9040A

Analyst: S. ASKEW | Analysis Date: 14-MAY-97 | Instrument: FIELD | Test: G607.0.0

Parameter	Result	Det. Limit	Units
PH	7.2	0.1	Std. Units

FIELD DISSOLVED OXYGEN SAS

Analyst: S. ASKEW | Analysis Date: 14-MAY-97 | Instrument: FIELD | Test: G600.1.0

Parameter	Result	Det. Limit	Units
DISSOLVED OXYGEN	0.07		mg/L

FIELD OXIDATION-REDUCTION POTENTIAL SM2580B-18TH ED

Analyst: S. ASKEW | Analysis Date: 14-MAY-97 | Instrument: FIELD | Test: G604.7.0

Parameter	Result	Det. Limit	Units
OXIDATION/REDUCTION POTENTIAL	-17		mV

FIELD SPECIFIC CONDUCTANCE SW846-9050

Analyst: S. ASKEW | Analysis Date: 14-MAY-97 | Instrument: FIELD | Test: G604.0.0

Parameter	Result	Det. Limit	Units
CONDUCTIVITY	887	1.0	umHOS/cm

AMMONIA DISTILLATION EPA 350.2

Analyst: K. BAX | Analysis Date: 16-MAY-97 18:00 | Instrument: PREP | Test: P203.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	200		mL
FINAL VOLUME	250		mL

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AMMONIA NITROGEN EPA 350.3

Analyst: K. BUNCH Analysis Date: 19-MAY-97 10:30 Test: G203.4.0
Prep: AMMONIA DISTILLATION EPA 350.2 P203.4.0

Parameter	Result	Det. Limit	Units
NITROGEN, AMMONIA	1.2	0.12	mg/L

CHLORIDE BY ION CHROMATOGRAPHY SW846-9056

Analyst: M. ADKINS Analysis Date: 16-MAY-97 18:17 Instrument: IC Test: G310.2.0

Parameter	Result	Det. Limit	Units
CHLORIDE	25	0.25	mg/L

FIELD FILTRATION SAS

Analyst: . Analysis Date: Instrument: FIELD Test: P110.0.0

FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A

Analyst: B. GRAVES Analysis Date: 16-MAY-97 12:30 Instrument: PREP Test: P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

ARSENIC TRACE ICP SW846-6010A

Analyst: A. ROBERTSON Analysis Date: 22-MAY-97 14:33 Instrument: TRACE ICP Test: M103.0.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
ARSENIC	0.058	0.0050	mg/L

SODIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 20-MAY-97 22:21 Instrument: ICP Test: M131.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
SODIUM	81.	0.20	mg/L

CADMIUM TRACE ICP SW846-6010A

Analyst: A. ROBERTSON Analysis Date: 22-MAY-97 14:33 Instrument: TRACE ICP Test: M108.0.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
CADMIUM	BDL	0.0010	mg/L

CHROMIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 20-MAY-97 22:21 Instrument: ICP Test: M110.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
CHROMIUM	BDL	0.010	mg/L

COPPER ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 20-MAY-97 22:21 Instrument: ICP Test: M112.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
COPPER	BDL	0.020	mg/L

HERITAGE ENVIRONMENTAL SERVICES, INC.

Sample ID: A407962 MW 15D

ZINC ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 20-MAY-97 22:21 Instrument: ICP Test: M139.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
ZINC	BDL	0.020	mg/L

IRON ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 20-MAY-97 22:21 Instrument: ICP Test: M115.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
IRON	10.	0.025	mg/L

MAGNESIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 20-MAY-97 22:21 Instrument: ICP Test: M118.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
MAGNESIUM	36.	0.20	mg/L

MANGANESE ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 20-MAY-97 22:21 Instrument: ICP Test: M119.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
MANGANESE	0.30	0.010	mg/L

POTASSIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 20-MAY-97 22:21 Instrument: ICP Test: M126.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
POTASSIUM	0.82	0.20	mg/L

DISSOLVED SOLIDS EPA 160.1

Analyst: K. SULLIVAN Analysis Date: 20-MAY-97 16:00 Test: G402.7.0

Parameter	Result	Det. Limit	Units
SOLIDS	500	10	mg/L

TOTAL SUSPENDED SOLIDS EPA 160.2

Analyst: K. SULLIVAN Analysis Date: 20-MAY-97 14:00 Test: G403.7.0

Parameter	Result	Det. Limit	Units
SUSPENDED SOLIDS	22	1.0	mg/L

ALKALINITY TOTAL EPA 310.1

Analyst: K. WHITFIELD Analysis Date: 16-MAY-97 12:30 Test: G605.2.0

Parameter	Result	Det. Limit	Units
ALKALINITY	450	1.0	mg/L

ALKALINITY (BICARBONATE) EPA 310.1

Analyst: K. WHITFIELD Analysis Date: 16-MAY-97 12:30 Test: G610.2.0

Parameter	Result	Det. Limit	Units
ALKALINITY	450	1.0	mg/L

HERITAGE ENVIRONMENTAL SERVICES, INC. Sample ID: A407962 MW 15D

ALKALINITY (CARBONATE) EPA 310.1

Analyst: K. WHITFIELD Analysis Date: 16-MAY-97 12:30 Test: G611.2.0

Parameter	Result	Det. Limit	Units
ALKALINITY	BDL	1.0	mg/L

FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A

Analyst: B. GRAVES Analysis Date: 16-MAY-97 12:30 Instrument: PREP Test: P130.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

ARSENIC TRACE ICP SW846-6010A

Analyst: A. ROBERTSON Analysis Date: 22-MAY-97 13:48 Instrument: TRACE ICP Test: M103.0.0

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
ARSENIC	0.059	0.0050	mg/L

CALCIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 20-MAY-97 23:14 Instrument: ICP Test: M109.3.0

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
CALCIUM	86.	0.20	mg/L

SULFATE BY ION CHROMATOGRAPHY SW846-9056

Analyst: M. ADKINS Analysis Date: 16-MAY-97 18:17 Instrument: IC Test: G310.7.0

Parameter	Result	Det. Limit	Units
SULFATE	BDL	0.25	mg/L

VOLATILE ORGANICS (CAPILLARY COLUMN) SW846-8260A

Analyst: B. MAZUR Analysis Date: 27-MAY-97 19:40 Instrument: GC/MS VOA Test: O510.6.0

Parameter	Result	Det. Limit	Units
BENZENE	BDL	5.0	ug/L
CIS-1,3-DICHLOROPROPENE	BDL	5.0	ug/L
TRANS-1,3-DICHLOROPROPENE	BDL	5.0	ug/L
ETHYL BENZENE	BDL	5.0	ug/L
BROMOMETHANE	BDL	5.0	ug/L
CARBON TETRACHLORIDE	BDL	5.0	ug/L
CHLOROBENZENE	BDL	5.0	ug/L
CHLOROETHANE	BDL	5.0	ug/L
CHLOROFORM	BDL	5.0	ug/L
CHLOROMETHANE	BDL	5.0	ug/L
1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	BDL	5.0	ug/L
1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	BDL	5.0	ug/L
1,1-DICHLOROETHANE	BDL	5.0	ug/L
CIS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
TRANS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
1,1-DICHLOROETHENE	BDL	5.0	ug/L
1,2-DICHLOROETHANE	BDL	5.0	ug/L
1,2-DICHLOROPROPANE	BDL	5.0	ug/L
DICHLOROMETHANE (METHYLENE CHLORIDE)	BDL	5.0	ug/L
STYRENE	BDL	5.0	ug/L
1,1,1,2-TETRACHLOROETHANE	BDL	5.0	ug/L
1,1,2,2-TETRACHLOROETHANE	BDL	5.0	ug/L
TETRACHLOROETHENE	BDL	5.0	ug/L
TOLUENE	BDL	5.0	ug/L
1,1,1-TRICHLOROETHANE	BDL	5.0	ug/L
1,1,2-TRICHLOROETHANE	BDL	5.0	ug/L
TRICHLOROETHENE	BDL	5.0	ug/L

 (continued on next page)

HERITAGE ENVIRONMENTAL SERVICES, INC.

Sample ID: A407962 MW 15D

Parameter	Result	Det. Limit	Units
TRICHLOROFLUOROMETHANE	BDL	5.0	ug/L
VINYL CHLORIDE	BDL	2.0	ug/L
XYLENES (O/M/P-XYLENE)	BDL	5.0	ug/L
...			
SURROGATE RECOVERY			

DICHLOROETHANE-D4	113		% Rec
TOLUENE-D8	97		% Rec
4-BROMOFLUOROBENZENE	94		% Rec

Sample Comments

BDL Below Detection Limit

Sample chain of custody number 64130.

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Approved : P.K. Spence

CERTIFICATE OF ANALYSIS

Service Location	Received	Project	Lab ID
HERITAGE ENVIRONMENTAL SERVICES, INC. COMMERCIAL LABORATORY OPERATIONS 7901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8304	15-MAY-97	4315	A407960
	Complete	PO Number	
	02-JUN-97	IN21405J0025	
	Printed	Sampled	
	03-JUN-97	14-MAY-97 10:50	

Report To	Bill To
JEFF JENKINS BFI WASTE SYSTEMS 2020 LAUBSCHER ROAD EVANSVILLE, IN 47720	ALISHA CLARK BFI WASTE SYSTEMS 2211 GLENVIEW DRIVE EVANSVILLE, IN 47720

Sample Description

CLIENT ID: MW 2R
DESCRIPTION: GROUNDWATER

FIELD TURBIDITY EPA 180.1

Analyst: S. ASKEW | Analysis Date: 14-MAY-97 | Instrument: FIELD | Test: G602.0.0

Parameter	Result	Det. Limit	Units
TURBIDITY	17.1	0.1	ntu

FIELD TEMPERATURE EPA 170.1

Analyst: S. ASKEW | Analysis Date: 14-MAY-97 | Instrument: FIELD | Test: G603.0.0

Parameter	Result	Det. Limit	Units
TEMPERATURE	14.5		Degrees C

FIELD PH (AQUEOUS) SW846-9040A

Analyst: S. ASKEW | Analysis Date: 14-MAY-97 | Instrument: FIELD | Test: G607.0.0

Parameter	Result	Det. Limit	Units
PH	7.1	0.1	Std. Units

FIELD DISSOLVED OXYGEN SAS

Analyst: S. ASKEW | Analysis Date: 14-MAY-97 | Instrument: FIELD | Test: G600.1.0

Parameter	Result	Det. Limit	Units
DISSOLVED OXYGEN	0.2		mg/L

FIELD OXIDATION-REDUCTION POTENTIAL SM2580B-18TH ED

Analyst: S. ASKEW | Analysis Date: 14-MAY-97 | Instrument: FIELD | Test: G604.7.0

Parameter	Result	Det. Limit	Units
OXIDATION/REDUCTION POTENTIAL	-1		mV

FIELD SPECIFIC CONDUCTANCE SW846-9050

Analyst: S. ASKEW | Analysis Date: 14-MAY-97 | Instrument: FIELD | Test: G604.0.0

Parameter	Result	Det. Limit	Units
CONDUCTIVITY	820	1.0	umHOS/cm

AMMONIA DISTILLATION EPA 350.2

Analyst: K. BAX | Analysis Date: 16-MAY-97 18:00 | Instrument: PREP | Test: P203.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	200		mL
FINAL VOLUME	250		mL

 (continued on next page)

HERITAGE ENVIRONMENTAL SERVICES, INC.

Sample ID: A407960 MW 2R

AMMONIA NITROGEN EPA 350.3

Analyst: K. BUNCH Analysis Date: 19-MAY-97 10:30 Test: G203.4.0
Prep: AMMONIA DISTILLATION EPA 350.2 P203.4.0

Parameter	Result	Det. Limit	Units
NITROGEN, AMMONIA	4.9	0.12	mg/L

CHLORIDE BY ION CHROMATOGRAPHY SW846-9056

Analyst: M. ADKINS Analysis Date: 16-MAY-97 18:17 Instrument: IC Test: G310.2.0

Parameter	Result	Det. Limit	Units
CHLORIDE	17	0.25	mg/L

FIELD FILTRATION SAS

Analyst: Analysis Date: Instrument: FIELD Test: P110.0.0

FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A

Analyst: B. GRAVES Analysis Date: 16-MAY-97 12:30 Instrument: PREP Test: P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

ARSENIC TRACE ICP SW846-6010A

Analyst: A. ROBERTSON Analysis Date: 22-MAY-97 14:29 Instrument: TRACE ICP Test: M103.0.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
ARSENIC	0.033	0.0050	mg/L

SODIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 20-MAY-97 22:18 Instrument: ICP Test: M131.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
SODIUM	77.	0.20	mg/L

CADMIUM TRACE ICP SW846-6010A

Analyst: A. ROBERTSON Analysis Date: 22-MAY-97 14:29 Instrument: TRACE ICP Test: M108.0.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
CADMIUM	BDL	0.0010	mg/L

CHROMIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 20-MAY-97 22:18 Instrument: ICP Test: M110.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
CHROMIUM	BDL	0.010	mg/L

COPPER ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 20-MAY-97 22:18 Instrument: ICP Test: M112.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
COPPER	BDL	0.020	mg/L

 (continued on next page)

ZINC ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 20-MAY-97 22:18 Instrument: ICP Test: M139.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
ZINC	BDL	0.020	mg/L

IRON ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 20-MAY-97 22:18 Instrument: ICP Test: M115.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
IRON	6.9	0.025	mg/L

MAGNESIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 20-MAY-97 22:18 Instrument: ICP Test: M118.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
MAGNESIUM	29.	0.20	mg/L

MANGANESE ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 20-MAY-97 22:18 Instrument: ICP Test: M119.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
MANGANESE	0.23	0.010	mg/L

POTASSIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 20-MAY-97 22:18 Instrument: ICP Test: M126.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
POTASSIUM	1.2	0.20	mg/L

DISSOLVED SOLIDS EPA 160.1

Analyst: K. SULLIVAN Analysis Date: 20-MAY-97 16:00 Test: G402.7.0

Parameter	Result	Det. Limit	Units
SOLIDS	470	10	mg/L

TOTAL SUSPENDED SOLIDS EPA 160.2

Analyst: K. SULLIVAN Analysis Date: 20-MAY-97 14:00 Test: G403.7.0

Parameter	Result	Det. Limit	Units
SUSPENDED SOLIDS	17	1.0	mg/L

ALKALINITY TOTAL EPA 310.1

Analyst: K. WHITFIELD Analysis Date: 16-MAY-97 12:30 Test: G605.2.0

Parameter	Result	Det. Limit	Units
ALKALINITY	450	1.0	mg/L

ALKALINITY (BICARBONATE) EPA 310.1

Analyst: K. WHITFIELD Analysis Date: 16-MAY-97 12:30 Test: G610.2.0

Parameter	Result	Det. Limit	Units
ALKALINITY	450	1.0	mg/L

HERITAGE ENVIRONMENTAL SERVICES, INC.

Sample ID: A407960 MW 2R

ALKALINITY (CARBONATE) EPA 310.1

Analyst: K. WHITFIELD Analysis Date: 16-MAY-97 12:30 Test: G611.2.0

Parameter	Result	Det. Limit	Units
ALKALINITY	BDL	1.0	mg/L

FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A

Analyst: B. GRAVES Analysis Date: 16-MAY-97 12:30 Instrument: PREP Test: P130.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

ARSENIC TRACE ICP SW846-6010A

Analyst: A. ROBERTSON Analysis Date: 22-MAY-97 13:38 Instrument: TRACE ICP Test: M103.0.0

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
ARSENIC	0.035	0.0050	mg/L

CALCIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 20-MAY-97 23:10 Instrument: ICP Test: M109.3.0

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
CALCIUM	83.	0.20	mg/L

SULFATE BY ION CHROMATOGRAPHY SW846-9056

Analyst: M. ADKINS Analysis Date: 16-MAY-97 18:17 Instrument: IC Test: G310.7.0

Parameter	Result	Det. Limit	Units
SULFATE	BDL	0.25	mg/L

VOLATILE ORGANICS (CAPILLARY COLUMN) SW846-8260A

Analyst: B. MAZUR Analysis Date: 27-MAY-97 17:50 Instrument: GC/MS VOA Test: G510.6.0

Parameter	Result	Det. Limit	Units
BENZENE	BDL	5.0	ug/L
CIS-1,3-DICHLOROPROPENE	BDL	5.0	ug/L
TRANS-1,3-DICHLOROPROPENE	BDL	5.0	ug/L
ETHYL BENZENE	BDL	5.0	ug/L
BROMOMETHANE	BDL	5.0	ug/L
CARBON TETRACHLORIDE	BDL	5.0	ug/L
CHLOROBENZENE	BDL	5.0	ug/L
CHLOROETHANE	BDL	5.0	ug/L
CHLOROFORM	BDL	5.0	ug/L
CHLOROMETHANE	BDL	5.0	ug/L
1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	BDL	5.0	ug/L
1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	BDL	5.0	ug/L
1,1-DICHLOROETHANE	BDL	5.0	ug/L
CIS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
TRANS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
1,1-DICHLOROETHENE	BDL	5.0	ug/L
1,2-DICHLOROETHANE	BDL	5.0	ug/L
1,2-DICHLOROPROPANE	BDL	5.0	ug/L
DICHLOROMETHANE (METHYLENE CHLORIDE)	BDL	5.0	ug/L
STYRENE	BDL	5.0	ug/L
1,1,1,2-TETRACHLOROETHANE	BDL	5.0	ug/L
1,1,2,2-TETRACHLOROETHANE	BDL	5.0	ug/L
TETRACHLOROETHENE	BDL	5.0	ug/L
TOLUENE	BDL	5.0	ug/L
1,1,1-TRICHLOROETHANE	BDL	5.0	ug/L
1,1,2-TRICHLOROETHANE	BDL	5.0	ug/L
TRICHLOROETHENE	BDL	5.0	ug/L

 (continued on next page)

HERITAGE ENVIRONMENTAL SERVICES, INC. Sample ID: A407960 MW 2R

Parameter	Result	Det. Limit	Units
TRICHLOROFLUOROMETHANE	BDL	5.0	ug/L
VINYL CHLORIDE	BDL	2.0	ug/L
XYLENES (O/M/P-XYLENE)	BDL	5.0	ug/L
SURROGATE RECOVERY			
DICHLOROETHANE-D4	109		% Rec
TOLUENE-D8	99		% Rec
4-BROMOFLUOROBENZENE	97		% Rec

Sample Comments

BDL Below Detection Limit

Sample chain of custody number 64130.

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Approved : P.K. Spence

CERTIFICATE OF ANALYSIS

Service Location	Received	Project	Lab ID
HERITAGE ENVIRONMENTAL SERVICES, INC. COMMERCIAL LABORATORY OPERATIONS 7901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8304	15-MAY-97	4315	A407961
	Complete	PO Number	
	02-JUN-97	IN21405J0025	
	Printed	Sampled	
	03-JUN-97	14-MAY-97 10:19	

Report To	Bill To
JEFF JENKINS BFI WASTE SYSTEMS 2020 LAUBSCHER ROAD EVANSVILLE, IN 47720	ALISHA CLARK BFI WASTE SYSTEMS 2211 GLENVIEW DRIVE EVANSVILLE, IN 47720

Sample Description

CLIENT ID: MW 12I
DESCRIPTION: GROUNDWATER

FIELD TURBIDITY EPA 180.1

Analyst: S. ASKEW | Analysis Date: 14-MAY-97 | Instrument: FIELD | Test: G602.0.0

Parameter	Result	Det. Limit	Units
TURBIDITY	9.82	0.1	ntu

FIELD TEMPERATURE EPA 170.1

Analyst: S. ASKEW | Analysis Date: 14-MAY-97 | Instrument: FIELD | Test: G603.0.0

Parameter	Result	Det. Limit	Units
TEMPERATURE	15.1		Degrees C

FIELD PH (AQUEOUS) SW846-9040A

Analyst: S. ASKEW | Analysis Date: 14-MAY-97 | Instrument: FIELD | Test: G607.0.0

Parameter	Result	Det. Limit	Units
PH	7.0	0.1	Std. Units

FIELD DISSOLVED OXYGEN SAS

Analyst: S. ASKEW | Analysis Date: 14-MAY-97 | Instrument: FIELD | Test: G600.1.0

Parameter	Result	Det. Limit	Units
DISSOLVED OXYGEN	0.23		mg/L

FIELD OXIDATION-REDUCTION POTENTIAL SM2580B-18TH ED

Analyst: S. ASKEW | Analysis Date: 14-MAY-97 | Instrument: FIELD | Test: G604.7.0

Parameter	Result	Det. Limit	Units
OXIDATION/REDUCTION POTENTIAL	-2		mV

FIELD SPECIFIC CONDUCTANCE SW846-9050

Analyst: S. ASKEW | Analysis Date: 14-MAY-97 | Instrument: FIELD | Test: G604.0.0

Parameter	Result	Det. Limit	Units
CONDUCTIVITY	684	1.0	umHOS/cm

AMMONIA DISTILLATION EPA 350.2

Analyst: K. BAX | Analysis Date: 16-MAY-97 18:00 | Instrument: PREP | Test: P203.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	200		mL
FINAL VOLUME	250		mL

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AMMONIA NITROGEN EPA 350.3

Analyst: K. BUNCH Analysis Date: 19-MAY-97 10:30 Test: G203.4.0
Prep: AMMONIA DISTILLATION EPA 350.2 P203.4.0

Parameter	Result	Det. Limit	Units
NITROGEN, AMMONIA	14	0.60	mg/L
1:5 DILUTION			

CHLORIDE BY ION CHROMATOGRAPHY SW846-9056

Analyst: M. ADKINS Analysis Date: 16-MAY-97 18:17 Instrument: IC Test: G310.2.0

Parameter	Result	Det. Limit	Units
CHLORIDE	5	0.25	mg/L

FIELD FILTRATION SAS

Analyst: . Analysis Date: Instrument: FIELD Test: P110.0.0

FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A

Analyst: B. GRAVES Analysis Date: 16-MAY-97 12:30 Instrument: PREP Test: P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

ARSENIC TRACE ICP SW846-6010A

Analyst: A. ROBERTSON Analysis Date: 22-MAY-97 13:58 Instrument: TRACE ICP Test: M103.0.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
ARSENIC	0.029	0.0050	mg/L

SODIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 20-MAY-97 21:51 Instrument: ICP Test: M131.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
SODIUM	31.	0.20	mg/L

CADMIUM TRACE ICP SW846-6010A

Analyst: A. ROBERTSON Analysis Date: 22-MAY-97 13:58 Instrument: TRACE ICP Test: M108.0.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
CADMIUM	BDL	0.0010	mg/L

CHROMIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 20-MAY-97 21:51 Instrument: ICP Test: M110.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
CHROMIUM	BDL	0.010	mg/L

HERITAGE ENVIRONMENTAL SERVICES, INC. Sample ID: A407961 MW 12I

COPPER ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 20-MAY-97 21:51 Instrument: ICP Test: M112.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
COPPER	BDL	0.020	mg/L

ZINC ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 20-MAY-97 21:51 Instrument: ICP Test: M139.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
ZINC	BDL	0.020	mg/L

IRON ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 20-MAY-97 21:51 Instrument: ICP Test: M115.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
IRON	13.	0.025	mg/L

MAGNESIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 20-MAY-97 21:51 Instrument: ICP Test: M118.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
MAGNESIUM	19.	0.20	mg/L

MANGANESE ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 20-MAY-97 21:51 Instrument: ICP Test: M119.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
MANGANESE	0.14	0.010	mg/L

POTASSIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 20-MAY-97 21:51 Instrument: ICP Test: M126.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
POTASSIUM	1.4	0.20	mg/L

DISSOLVED SOLIDS EPA 160.1

Analyst: K. SULLIVAN Analysis Date: 20-MAY-97 16:00 Test: G402.7.0

Parameter	Result	Det. Limit	Units
SOLIDS	330	10	mg/L

TOTAL SUSPENDED SOLIDS EPA 160.2

Analyst: K. SULLIVAN Analysis Date: 20-MAY-97 14:00 Test: G403.7.0

Parameter	Result	Det. Limit	Units
SUSPENDED SOLIDS	35	1.0	mg/L

ALKALINITY TOTAL EPA 310.1
Analyst: K. WHITFIELD Analysis Date: 16-MAY-97 12:30 Test: G605.2.0

Parameter	Result	Det. Limit	Units
ALKALINITY	340	1.0	mg/L

ALKALINITY (BICARBONATE) EPA 310.1
Analyst: K. WHITFIELD Analysis Date: 16-MAY-97 12:30 Test: G610.2.0

Parameter	Result	Det. Limit	Units
ALKALINITY	340	1.0	mg/L

ALKALINITY (CARBONATE) EPA 310.1
Analyst: K. WHITFIELD Analysis Date: 16-MAY-97 12:30 Test: G611.2.0

Parameter	Result	Det. Limit	Units
ALKALINITY	BDL	1.0	mg/L

FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A
Analyst: B. GRAVES Analysis Date: 16-MAY-97 12:30 Instrument: PREP Test: P130.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

ARSENIC TRACE ICP SW846-6010A
Analyst: A. ROBERTSON Analysis Date: 22-MAY-97 13:14 Instrument: TRACE ICP Test: M103.0.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
ARSENIC	0.029	0.0050	mg/L

CALCIUM ICP SW846-6010A
Analyst: A. STOCKBURGER Analysis Date: 20-MAY-97 22:41 Instrument: ICP Test: M109.3.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
CALCIUM	76.	0.20	mg/L

SULFATE BY ION CHROMATOGRAPHY SW846-9056
Analyst: M. ADKINS Analysis Date: 16-MAY-97 18:17 Instrument: IC Test: G310.7.0

Parameter	Result	Det. Limit	Units
SULFATE	BDL	0.25	mg/L

VOLATILE ORGANICS (CAPILLARY COLUMN) SW846-8260A
Analyst: B. MAZUR Analysis Date: 27-MAY-97 18:45 Instrument: GC/MS VOA Test: O510.6.0

Parameter	Result	Det. Limit	Units
BENZENE	BDL	5.0	ug/L
CIS-1,3-DICHLOROPROPENE	BDL	5.0	ug/L
TRANS-1,3-DICHLOROPROPENE	BDL	5.0	ug/L
ETHYL BENZENE	BDL	5.0	ug/L
BROMOMETHANE	BDL	5.0	ug/L
CARBON TETRACHLORIDE	BDL	5.0	ug/L
CHLOROBENZENE	BDL	5.0	ug/L
CHLOROETHANE	BDL	5.0	ug/L
CHLOROFORM	BDL	5.0	ug/L
CHLOROMETHANE	BDL	5.0	ug/L
1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	BDL	5.0	ug/L
1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	BDL	5.0	ug/L
1,1-DICHLOROETHANE	BDL	5.0	ug/L
CIS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
TRANS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
1,1-DICHLOROETHENE	BDL	5.0	ug/L
1,2-DICHLOROETHANE	BDL	5.0	ug/L

 (continued on next page)

HERITAGE ENVIRONMENTAL SERVICES, INC. Sample ID: A407961 MW 12I

Parameter	Result	Det. Limit	Units
1,2-DICHLOROPROPANE	BDL	5.0	ug/L
DICHLOROMETHANE (METHYLENE CHLORIDE)	BDL	5.0	ug/L
STYRENE	BDL	5.0	ug/L
1,1,1,2-TETRACHLOROETHANE	BDL	5.0	ug/L
1,1,2,2-TETRACHLOROETHANE	BDL	5.0	ug/L
TETRACHLOROETHENE	BDL	5.0	ug/L
TOLUENE	BDL	5.0	ug/L
1,1,1-TRICHLOROETHANE	BDL	5.0	ug/L
1,1,2-TRICHLOROETHANE	BDL	5.0	ug/L
TRICHLOROETHENE	BDL	5.0	ug/L
TRICHLOROFLUOROMETHANE	BDL	5.0	ug/L
VINYL CHLORIDE	BDL	2.0	ug/L
XYLENES (O/M/P-XYLENE)	BDL	5.0	ug/L
SURROGATE RECOVERY			
DICHLOROETHANE-D4	107		% Rec
TOLUENE-D8	97		% Rec
4-BROMOFLUOROBENZENE	89		% Rec

Sample Comments

BDL Below Detection Limit

Sample chain of custody number 64130.

This Certificate shall not be reproduced, except in full, without the written approval of the lab.

Approved : P.K. Spence

CERTIFICATE OF ANALYSIS

Service Location	Received	Project	Lab ID
HERITAGE ENVIRONMENTAL SERVICES, INC. COMMERCIAL LABORATORY OPERATIONS 7901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8304	16-MAY-97	4315	A408104
	Complete	PO Number	
	02-JUN-97	IN21405J0025	
	Printed	Sampled	
	03-JUN-97	15-MAY-97 08:45	

Report To	Bill To
JEFF JENKINS BFI WASTE SYSTEMS 2020 LAUBSCHER ROAD EVANSVILLE, IN 47720	ALISHA CLARK BFI WASTE SYSTEMS 2211 GLENVIEW DRIVE EVANSVILLE, IN 47720

Sample Description

CLIENT ID: MANHOLE 4

AMMONIA DISTILLATION EPA 350.2

Analyst: K. BAX Analysis Date: 16-MAY-97 18:00 Instrument: PREP Test: P203.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	200		mL
FINAL VOLUME	250		mL

AMMONIA NITROGEN EPA 350.3

Analyst: K. BUNCH Analysis Date: 19-MAY-97 10:30 Test: G203.4.0

Prep: AMMONIA DISTILLATION EPA 350.2 P203.4.0

Parameter	Result	Det. Limit	Units
NITROGEN, AMMONIA	45	6.0	mg/L
1:50 DILUTION			

CHLORIDE BY ION CHROMATOGRAPHY SW846-9056

Analyst: M. ADKINS Analysis Date: 16-MAY-97 18:17 Instrument: IC Test: G310.2.0

Parameter	Result	Det. Limit	Units
CHLORIDE	240	2.5	mg/L
1:10 DILUTION			

BROMIDE BY ION CHROMATOGRAPHY SW846-9056

Analyst: M. ADKINS Analysis Date: 16-MAY-97 18:17 Instrument: IC Test: G310.4.0

Parameter	Result	Det. Limit	Units
BROMIDE	0.94	0.5	mg/L
1:10 DILUTION			

FIELD FILTRATION SAS

Analyst: . Analysis Date: Instrument: FIELD Test: P110.0.0

FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A

Analyst: B. GRAVES Analysis Date: 19-MAY-97 14:00 Instrument: PREP Test: P132.4.0

Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

ARSENIC TRACE ICP SW846-6010A

Analyst: A. ROBERTSON Analysis Date: 28-MAY-97 10:00 Instrument: TRACE ICP Test: M103.0.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
ARSENIC	0.0092	0.0050	mg/L

SODIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:12 Instrument: ICP Test: M131.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
SODIUM	180	0.20	mg/L

CADMIUM TRACE ICP SW846-6010A

Analyst: A. ROBERTSON Analysis Date: 28-MAY-97 10:00 Instrument: TRACE ICP Test: M108.0.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
CADMIUM	BDL	0.0010	mg/L

CHROMIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:12 Instrument: ICP Test: M110.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
CHROMIUM	BDL	0.010	mg/L

COPPER ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:12 Instrument: ICP Test: M112.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
COPPER	BDL	0.020	mg/L

ZINC ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:12 Instrument: ICP Test: M139.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
ZINC	BDL	0.020	mg/L

IRON ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:12 Instrument: ICP Test: M115.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
IRON	13.	0.025	mg/L

MAGNESIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:12 Instrument: ICP Test: M118.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
MAGNESIUM	70.	0.20	mg/L

 (continued on next page)

MANGANESE ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:12 Instrument: ICP Test: M119.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
MANGANESE	3.3	0.010	mg/L

POTASSIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:12 Instrument: ICP Test: M126.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
POTASSIUM	42.	0.20	mg/L

DISSOLVED SOLIDS EPA 160.1

Analyst: K. SULLIVAN Analysis Date: 20-MAY-97 16:00 Test: G402.7.0

Parameter	Result	Det. Limit	Units
SOLIDS	1100	10	mg/L

TOTAL SUSPENDED SOLIDS EPA 160.2

Analyst: K. SULLIVAN Analysis Date: 20-MAY-97 14:00 Test: G403.7.0

Parameter	Result	Det. Limit	Units
SUSPENDED SOLIDS	120	1.0	mg/L

Filtered less sample due to sample matrix.

ALKALINITY TOTAL EPA 310.1

Analyst: C. ROBISON Analysis Date: 19-MAY-97 19:00 Test: G605.2.0

Parameter	Result	Det. Limit	Units
ALKALINITY	740	1.0	mg/L

ALKALINITY (BICARBONATE) EPA 310.1

Analyst: C. ROBISON Analysis Date: 19-MAY-97 19:00 Test: G610.2.0

Parameter	Result	Det. Limit	Units
ALKALINITY	740	1.0	mg/L

ALKALINITY (CARBONATE) EPA 310.1

Analyst: C. ROBISON Analysis Date: 19-MAY-97 19:00 Test: G611.2.0

Parameter	Result	Det. Limit	Units
ALKALINITY	BDL	1.0	mg/L

FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A

Analyst: N. CARR Analysis Date: 19-MAY-97 09:30 Instrument: PREP Test: P130.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

ARSENIC TRACE ICP SW846-6010A

Analyst: A. ROBERTSON Analysis Date: 28-MAY-97 09:13 Instrument: TRACE ICP Test: M103.0.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
ARSENIC	0.016	0.0050	mg/L

HERITAGE ENVIRONMENTAL SERVICES, INC. Sample ID: A408104 MANHOLE 4

CALCIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 22:51 Instrument: ICP Test: M1D9.3.0

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
CALCIUM	130	0.20	mg/L

SULFATE BY ION CHROMATOGRAPHY SW846-9056

Analyst: M. ADKINS Analysis Date: 16-MAY-97 18:17 Instrument: IC Test: G310.7.0

Parameter	Result	Det. Limit	Units
SULFATE	73	2.5	mg/L
1:10 DILUTION			

VOLATILE ORGANICS (CAPILLARY COLUMN) SW846-8260A

Analyst: B. MAZUR Analysis Date: 27-MAY-97 20:34 Instrument: GC/MS VOA Test: O510.6.0

Parameter	Result	Det. Limit	Units
BENZENE	BDL	5.0	ug/L
CIS-1,3-DICHLOROPROPENE	BDL	5.0	ug/L
TRANS-1,3-DICHLOROPROPENE	BDL	5.0	ug/L
ETHYL BENZENE	BDL	5.0	ug/L
BROMOMETHANE	BDL	5.0	ug/L
CARBON TETRACHLORIDE	BDL	5.0	ug/L
CHLOROBENZENE	BDL	5.0	ug/L
CHLOROETHANE	BDL	5.0	ug/L
CHLOROFORM	BDL	5.0	ug/L
CHLOROMETHANE	BDL	5.0	ug/L
1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	BDL	5.0	ug/L
1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	BDL	5.0	ug/L
1,1-DICHLOROETHANE	BDL	5.0	ug/L
CIS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
TRANS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
1,1-DICHLOROETHENE	BDL	5.0	ug/L
1,2-DICHLOROETHANE	BDL	5.0	ug/L
1,2-DICHLOROPROPANE	BDL	5.0	ug/L
DICHLOROMETHANE (METHYLENE CHLORIDE)	BDL	5.0	ug/L
STYRENE	BDL	5.0	ug/L
1,1,1,2-TETRACHLOROETHANE	BDL	5.0	ug/L
1,1,2,2-TETRACHLOROETHANE	BDL	5.0	ug/L
TETRACHLOROETHENE	BDL	5.0	ug/L
TOLUENE	BDL	5.0	ug/L
1,1,1-TRICHLOROETHANE	BDL	5.0	ug/L
1,1,2-TRICHLOROETHANE	BDL	5.0	ug/L
TRICHLOROETHENE	BDL	5.0	ug/L
TRICHLOROFLUOROMETHANE	BDL	5.0	ug/L
VINYL CHLORIDE	BDL	2.0	ug/L
XYLENES (O/M/P-XYLENE)	8	5.0	ug/L
...			
SURROGATE RECOVERY			

DICHLOROETHANE-D4	109		% Rec
TOLUENE-D8	97		% Rec
4-BROMOFLUOROBENZENE	97		% Rec

BORON ICP SW846-6010A
Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 22:51 Instrument: ICP Test: M107.3.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
BORON	1.8	0.050	mg/L

BORON ICP SW846-6010A
Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:12 Instrument: ICP Test: M107.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
BORON	1.8	0.050	mg/L

BARIUM ICP SW846-6010A
Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 22:51 Instrument: ICP Test: M104.3.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
BARIUM	0.73	0.010	mg/L

BARIUM ICP SW846-6010A
Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:12 Instrument: ICP Test: M104.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
BARIUM	0.31	0.010	mg/L

Sample Comments

BDL Below Detection Limit

Sample chain of custody number 64142.

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Approved : P.K. Spence

CERTIFICATE OF ANALYSIS

Service Location	Received	Project	Lab ID
HERITAGE ENVIRONMENTAL SERVICES, INC. COMMERCIAL LABORATORY OPERATIONS 7901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8304	16-MAY-97	4315	A40810F
	Complete	PO Number	
	03-JUN-97	IN21405J0025	
	Printed	Sampled	
	04-JUN-97	15-MAY-97 09:15	

Report To	Bill To
JEFF JENKINS BFI WASTE SYSTEMS 2020 LAUBSCHER ROAD EVANSVILLE, IN 47720	ALISHA CLARK BFI WASTE SYSTEMS 2211 GLENVIEW DRIVE EVANSVILLE, IN 47720

Sample Description

CLIENT ID: BRINE

AMMONIA DISTILLATION EPA 350.2

Analyst: C. PEREGRINE Analysis Date: 22-MAY-97 08:00 Instrument: PREP Test: P203.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	200		mL
FINAL VOLUME	250		mL

AMMONIA NITROGEN EPA 350.3

Analyst: K. BUNCH Analysis Date: 23-MAY-97 09:30 Test: G203.4.0

Prep: AMMONIA DISTILLATION EPA 350.2 P203.4.0

Parameter	Result	Det. Limit	Units
NITROGEN, AMMONIA	5.2	0.24	mg/L
1:2 DILUTION			

CHLORIDE BY ION CHROMATOGRAPHY SW846-9056

Analyst: M. ADKINS Analysis Date: 20-MAY-97 18:30 Instrument: IC Test: G310.2.0

Parameter	Result	Det. Limit	Units
CHLORIDE	17000	250	mg/L
1:1000 DILUTION			

BROMIDE BY ION CHROMATOGRAPHY SW846-9056

Analyst: M. ADKINS Analysis Date: 16-MAY-97 18:17 Instrument: IC Test: G310.4.0

Parameter	Result	Det. Limit	Units
BROMIDE	29	0.5	mg/L
1:10 DILUTION			

FIELD FILTRATION SAS

Analyst: . Analysis Date: Instrument: FIELD Test: P110.0.0

FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A

Analyst: B. GRAVES Analysis Date: 19-MAY-97 14:00 Instrument: PREP Test: P132.4.0

Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

ARSENIC TRACE ICP SW846-6010A

Analyst: A. ROBERTSON Analysis Date: 28-MAY-97 10:10 Instrument: TRACE ICP Test: M103.0.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
ARSENIC	BDL	0.0050	mg/L

SODIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 23-MAY-97 04:33 Instrument: ICP Test: M131.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
SODIUM	9400	20.	mg/L

DILUTION 1:100

SODIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 30-MAY-97 03:00 Instrument: ICP Test: M131.3.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
SODIUM	9100	20.	mg/L

DILUTION 1:100

CADMIUM TRACE ICP SW846-6010A

Analyst: A. ROBERTSON Analysis Date: 28-MAY-97 10:10 Instrument: TRACE ICP Test: M108.0.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
CADMIUM	BDL	0.0010	mg/L

CHROMIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:15 Instrument: ICP Test: M110.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
CHROMIUM	BDL	0.010	mg/L

COPPER ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:15 Instrument: ICP Test: M112.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
COPPER	BDL	0.020	mg/L

ZINC ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:15 Instrument: ICP Test: M139.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
ZINC	BDL	0.020	mg/L

IRON ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:15 Instrument: ICP Test: M115.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
IRON	0.098	0.025	mg/L

MAGNESIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:15 Instrument: ICP Test: M118.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
MAGNESIUM	190	0.20	mg/L

MANGANESE ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:15 Instrument: ICP Test: M119.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
MANGANESE	0.23	0.010	mg/L

POTASSIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:15 Instrument: ICP Test: M126.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
POTASSIUM	28.	0.20	mg/L

DISSOLVED SOLIDS EPA 160.1

Analyst: K. SULLIVAN Analysis Date: 20-MAY-97 16:00 Test: G402.7.0

Parameter	Result	Det. Limit	Units
SOLIDS	26000	10	mg/L

TOTAL SUSPENDED SOLIDS EPA 160.2

Analyst: K. SULLIVAN Analysis Date: 20-MAY-97 14:00 Test: G403.7.0

Parameter	Result	Det. Limit	Units
SUSPENDED SOLIDS	13	1.0	mg/L

ALKALINITY TOTAL EPA 310.1

Analyst: C. ROBISON Analysis Date: 19-MAY-97 19:00 Test: G605.2.0

Parameter	Result	Det. Limit	Units
ALKALINITY	1100	1.0	mg/L

ALKALINITY (BICARBONATE) EPA 310.1

Analyst: C. ROBISON Analysis Date: 19-MAY-97 19:00 Test: G610.2.0

Parameter	Result	Det. Limit	Units
ALKALINITY	1100	1.0	mg/L

ALKALINITY (CARBONATE) EPA 310.1

Analyst: C. ROBISON Analysis Date: 19-MAY-97 19:00 Test: G611.2.0

Parameter	Result	Det. Limit	Units
ALKALINITY	BDL	1.0	mg/L

HERITAGE ENVIRONMENTAL SERVICES, INC. Sample ID: A408105 BRINE

FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A

Analyst: N. CARR Analysis Date: 19-MAY-97 09:30 Instrument: PREP Test: P130.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

ARSENIC TRACE ICP SW846-6010A

Analyst: A. ROBERTSON Analysis Date: 28-MAY-97 09:16 Instrument: TRACE ICP Test: M103.0.0

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
ARSENIC	BDL	0.0050	mg/L

CALCIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 22:55 Instrument: ICP Test: M109.3.0

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
CALCIUM	320	0.20	mg/L

SULFATE BY ION CHROMATOGRAPHY SW846-9056

Analyst: M. ADKINS Analysis Date: 16-MAY-97 18:17 Instrument: IC Test: G310.7.0

Parameter	Result	Det. Limit	Units
SULFATE	85	2.5	mg/L

1:10 DILUTION

VOLATILE ORGANICS (CAPILLARY COLUMN) SW846-8260A

Analyst: B. MAZUR Analysis Date: 29-MAY-97 11:00 Instrument: GC/MS VOA Test: O510.6.0

Parameter	Result	Det. Limit	Units
BENZENE	22	5.0	ug/L
CIS-1,3-DICHLOROPROPENE	BDL	5.0	ug/L
TRANS-1,3-DICHLOROPROPENE	BDL	5.0	ug/L
ETHYL BENZENE	46	5.0	ug/L
BROMOMETHANE	BDL	5.0	ug/L
CARBON TETRACHLORIDE	BDL	5.0	ug/L
CHLOROBENZENE	BDL	5.0	ug/L
CHLOROETHANE	BDL	5.0	ug/L
CHLOROFORM	BDL	5.0	ug/L
CHLOROMETHANE	BDL	5.0	ug/L
1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	BDL	5.0	ug/L
1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	BDL	5.0	ug/L
1,1-DICHLOROETHANE	BDL	5.0	ug/L
CIS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
TRANS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
1,1-DICHLOROETHENE	BDL	5.0	ug/L
1,2-DICHLOROETHANE	BDL	5.0	ug/L
1,2-DICHLOROPROPANE	BDL	5.0	ug/L
DICHLOROMETHANE (METHYLENE CHLORIDE)	BDL	5.0	ug/L
STYRENE	BDL	5.0	ug/L
1,1,1,2-TETRACHLOROETHANE	BDL	5.0	ug/L
1,1,2,2-TETRACHLOROETHANE	BDL	5.0	ug/L
TETRACHLOROETHENE	BDL	5.0	ug/L
TOLUENE	40	5.0	ug/L
1,1,1-TRICHLOROETHANE	BDL	5.0	ug/L
1,1,2-TRICHLOROETHANE	BDL	5.0	ug/L
TRICHLOROETHENE	BDL	5.0	ug/L
TRICHLOROFLUOROMETHANE	BDL	5.0	ug/L
VINYL CHLORIDE	BDL	2.0	ug/L
XYLENES (O/M/P-XYLENE)	100	5.0	ug/L

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HERITAGE ENVIRONMENTAL SERVICES, INC.

Sample ID: A408105 BRINE

Parameter	Result	Det. Limit	Units
...			
SURROGATE RECOVERY			

DICHLOROETHANE-D4	116		% Rec
TOLUENE-D8	99		% Rec
4-BROMOFLUOROBENZENE	95		% Rec

BORON ICP SW846-6010A
Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 22:55 Instrument: ICP Test: M107.3.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
BORON	1.8	0.050	mg/L

BORON ICP SW846-6010A
Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:15 Instrument: ICP Test: M107.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
BORON	1.8	0.050	mg/L

BARIUM ICP SW846-6010A
Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 22:55 Instrument: ICP Test: M104.3.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
BARIUM	2.9	0.010	mg/L

Undigested result = 1.2 mg/L

BARIUM ICP SW846-6010A
Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:15 Instrument: ICP Test: M104.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
BARIUM	20.	0.010	mg/L

Undigested result = 12 mg/L

Sample Comments

BDL Below Detection Limit

Sample chain of custody number 64142.

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Approved : P.K. Spence

CERTIFICATE OF ANALYSIS

Service Location	Received	Project	Lab ID
HERITAGE ENVIRONMENTAL SERVICES, INC. COMMERCIAL LABORATORY OPERATIONS 7901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8304	16-MAY-97	4315	A408106
	Complete	PO Number	
	03-JUN-97	IN21405J0025	
	Printed	Sampled	
	03-JUN-97	15-MAY-97 09:36	

Report To	Bill To
JEFF JENKINS BFI WASTE SYSTEMS 2020 LAUBSCHER ROAD EVANSVILLE, IN 47720	ALISHA CLARK BFI WASTE SYSTEMS 2211 GLENVIEW DRIVE EVANSVILLE, IN 47720

Sample Description

CLIENT ID: MW336

FIELD TURBIDITY EPA 180.1

Analyst: S. ASKEW Analysis Date: 15-MAY-97 Instrument: FIELD Test: G602.0.0

Parameter	Result	Det. Limit	Units
TURBIDITY	7.85	0.1	ntu

FIELD TEMPERATURE EPA 170.1

Analyst: S. ASKEW Analysis Date: 15-MAY-97 Instrument: FIELD Test: G603.0.0

Parameter	Result	Det. Limit	Units
TEMPERATURE	14.9		Degrees C

FIELD PH (AQUEOUS) SW846-9040A

Analyst: S. ASKEW Analysis Date: 15-MAY-97 Instrument: FIELD Test: G607.0.0

Parameter	Result	Det. Limit	Units
PH	6.9	0.1	Std. Units

FIELD DISSOLVED OXYGEN SAS

Analyst: S. ASKEW Analysis Date: 15-MAY-97 Instrument: FIELD Test: G600.1.0

Parameter	Result	Det. Limit	Units
DISSOLVED OXYGEN	0.84		mg/L

FIELD OXIDATION-REDUCTION POTENTIAL SM2580B-18TH ED

Analyst: S. ASKEW Analysis Date: 15-MAY-97 Instrument: FIELD Test: G604.7.0

Parameter	Result	Det. Limit	Units
OXIDATION/REDUCTION POTENTIAL	7		mV

FIELD SPECIFIC CONDUCTANCE SW846-9050

Analyst: S. ASKEW Analysis Date: 15-MAY-97 Instrument: FIELD Test: G604.0.0

Parameter	Result	Det. Limit	Units
CONDUCTIVITY	877	1.0	umHOS/cm

AMMONIA DISTILLATION EPA 350.2

Analyst: C. PEREGRINE Analysis Date: 22-MAY-97 08:00 Instrument: PREP Test: P203.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	200		mL
FINAL VOLUME	250		mL

 (continued on next page)

HERITAGE ENVIRONMENTAL SERVICES, INC. Sample ID: A408106 MW336

AMMONIA NITROGEN EPA 350.3

Analyst: K. BUNCH Analysis Date: 23-MAY-97 09:30 Test: G203.4.0
Prep: AMMONIA DISTILLATION EPA 350.2 P203.4.0

Parameter	Result	Det. Limit	Units
NITROGEN, AMMONIA	BDL	0.12	mg/L

CHLORIDE BY ION CHROMATOGRAPHY SW846-9056

Analyst: M. ADKINS Analysis Date: 16-MAY-97 18:17 Instrument: IC Test: G310.2.0

Parameter	Result	Det. Limit	Units
CHLORIDE	41	0.5	mg/L
1:2 DILUTION			

FIELD FILTRATION SAS

Analyst: . Analysis Date: Instrument: FIELD Test: P110.0.0

FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A

Analyst: B. GRAVES Analysis Date: 19-MAY-97 14:00 Instrument: PREP Test: P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

ARSENIC TRACE ICP SW846-6010A

Analyst: A. ROBERTSON Analysis Date: 28-MAY-97 10:13 Instrument: TRACE ICP Test: M103.0.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
ARSENIC	0.050	0.0050	mg/L

SODIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:18 Instrument: ICP Test: M131.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
SODIUM	100	0.20	mg/L

CADMIUM TRACE ICP SW846-6010A

Analyst: A. ROBERTSON Analysis Date: 28-MAY-97 10:13 Instrument: TRACE ICP Test: M108.0.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
CADMIUM	BDL	0.0010	mg/L

CHROMIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:18 Instrument: ICP Test: M110.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
CHROMIUM	BDL	0.010	mg/L

COPPER ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:18 Instrument: ICP Test: M112.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
COPPER	BDL	0.020	mg/L

ZINC ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:18 Instrument: ICP Test: M139.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
ZINC	BDL	0.020	mg/L

IRON ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:18 Instrument: ICP Test: M115.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
IRON	3.6	0.025	mg/L

MAGNESIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:18 Instrument: ICP Test: M118.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
MAGNESIUM	21.	0.20	mg/L

MANGANESE ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:18 Instrument: ICP Test: M119.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
MANGANESE	0.98	0.010	mg/L

POTASSIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:18 Instrument: ICP Test: M126.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
POTASSIUM	0.60	0.20	mg/L

DISSOLVED SOLIDS EPA 160.1

Analyst: K. SULLIVAN Analysis Date: 20-MAY-97 16:00 Test: G402.7.0

Parameter	Result	Det. Limit	Units
SOLIDS	490	10	mg/L

TOTAL SUSPENDED SOLIDS EPA 160.2

Analyst: K. SULLIVAN Analysis Date: 20-MAY-97 14:00 Test: G403.7.0

Parameter	Result	Det. Limit	Units
SUSPENDED SOLIDS	10	1.0	mg/L

ALKALINITY TOTAL EPA 310.1

Analyst: C. ROBISON Analysis Date: 19-MAY-97 19:00 Test: G605.2.0

Parameter	Result	Det. Limit	Units
ALKALINITY	440	1.0	mg/L

ALKALINITY (BICARBONATE) EPA 310.1

Analyst: C. ROBISON Analysis Date: 19-MAY-97 19:00 Test: G610.2.0

Parameter	Result	Det. Limit	Units
ALKALINITY	440	1.0	mg/L

HERITAGE ENVIRONMENTAL SERVICES, INC. Sample ID: A408106 MW336

ALKALINITY (CARBONATE) EPA 310.1

Analyst: C. ROBISON Analysis Date: 19-MAY-97 19:00 Test: G611.2.0

Parameter	Result	Det. Limit	Units
ALKALINITY	BDL	1.0	mg/L

FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A

Analyst: N. CARR Analysis Date: 19-MAY-97 09:30 Instrument: PREP Test: P130.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

ARSENIC TRACE ICP SW846-6010A

Analyst: A. ROBERTSON Analysis Date: 28-MAY-97 09:03 Instrument: TRACE ICP Test: M103.0.0

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
ARSENIC	0.044	0.0050	mg/L

CALCIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 22:28 Instrument: ICP Test: M109.3.0

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
CALCIUM	66.	0.20	mg/L

SULFATE BY ION CHROMATOGRAPHY SW846-9056

Analyst: M. ADKINS Analysis Date: 16-MAY-97 18:17 Instrument: IC Test: G310.7.0

Parameter	Result	Det. Limit	Units
SULFATE	BDL	0.25	mg/L

VOLATILE ORGANICS (CAPILLARY COLUMN) SW846-8260A

Analyst: B. MAZUR Analysis Date: 21-MAY-97 19:16 Instrument: GC/MS VOA Test: O510.6.0

Parameter	Result	Det. Limit	Units
BENZENE	BDL	5.0	ug/L
CIS-1,3-DICHLOROPROPENE	BDL	5.0	ug/L
TRANS-1,3-DICHLOROPROPENE	BDL	5.0	ug/L
ETHYL BENZENE	BDL	5.0	ug/L
BROMOMETHANE	BDL	5.0	ug/L
CARBON TETRACHLORIDE	BDL	5.0	ug/L
CHLOROBENZENE	BDL	5.0	ug/L
CHLOROETHANE	BDL	5.0	ug/L
CHLOROFORM	BDL	5.0	ug/L
CHLOROMETHANE	BDL	5.0	ug/L
1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	BDL	5.0	ug/L
1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	BDL	5.0	ug/L
1,1-DICHLOROETHANE	BDL	5.0	ug/L
CIS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
TRANS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
1,1-DICHLOROETHENE	BDL	5.0	ug/L
1,2-DICHLOROETHANE	BDL	5.0	ug/L
1,2-DICHLOROPROPANE	BDL	5.0	ug/L
DICHLOROMETHANE (METHYLENE CHLORIDE)	BDL	5.0	ug/L
STYRENE	BDL	5.0	ug/L
1,1,1,2-TETRACHLOROETHANE	BDL	5.0	ug/L
1,1,2,2-TETRACHLOROETHANE	BDL	5.0	ug/L
TETRACHLOROETHENE	BDL	5.0	ug/L
TOLUENE	BDL	5.0	ug/L
1,1,1-TRICHLOROETHANE	BDL	5.0	ug/L
1,1,2-TRICHLOROETHANE	BDL	5.0	ug/L
TRICHLOROETHENE	BDL	5.0	ug/L

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HERITAGE ENVIRONMENTAL SERVICES, INC.

Sample ID: A408106 MW336

Parameter	Result	Det. Limit	Units
TRICHLOROFLUOROMETHANE	BDL	5.0	ug/L
VINYL CHLORIDE	BDL	2.0	ug/L
XYLENES (O/M/P-XYLENE)	BDL	5.0	ug/L
SURROGATE RECOVERY			
DICHLOROETHANE-D4	114		% Rec
TOLUENE-D8	97		% Rec
4-BROMOFLUOROBENZENE	90		% Rec

Sample Comments

BDL Below Detection Limit

Sample chain of custody number 64131.

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Approved : P.K. Spence

CERTIFICATE OF ANALYSIS

Service Location	Received	Project	Lab ID
HERITAGE ENVIRONMENTAL SERVICES, INC. COMMERCIAL LABORATORY OPERATIONS 7901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8304	16-MAY-97	4315	A408107
	Complete: 02-JUN-97	PO Number: IN21405J0025	
	Printed: 03-JUN-97	Sampled: 15-MAY-97 10:20	

Report To	Bill To
JEFF JENKINS BFI WASTE SYSTEMS 2020 LAUBSCHER ROAD EVANSVILLE, IN 47720	ALISHA CLARK BFI WASTE SYSTEMS 2211 GLENVIEW DRIVE EVANSVILLE, IN 47720

Sample Description

CLIENT ID: MW3R

FIELD TURBIDITY EPA 180.1

Analyst: S. ASKEW Analysis Date: 15-MAY-97 Instrument: FIELD Test: G602.0.0

Parameter	Result	Det. Limit	Units
TURBIDITY	8.91	0.1	ntu

FIELD TEMPERATURE EPA 170.1

Analyst: S. ASKEW Analysis Date: 15-MAY-97 Instrument: FIELD Test: G603.0.0

Parameter	Result	Det. Limit	Units
TEMPERATURE	15.0		Degrees C

FIELD PH (AQUEOUS) SW846-9040A

Analyst: S. ASKEW Analysis Date: 15-MAY-97 Instrument: FIELD Test: G607.0.0

Parameter	Result	Det. Limit	Units
PH	6.87	0.1	Std. Units

FIELD DISSOLVED OXYGEN SAS

Analyst: S. ASKEW Analysis Date: 15-MAY-97 Instrument: FIELD Test: G600.1.0

Parameter	Result	Det. Limit	Units
DISSOLVED OXYGEN	0.02		mg/L

FIELD OXIDATION-REDUCTION POTENTIAL SM2580B-18TH ED

Analyst: S. ASKEW Analysis Date: 15-MAY-97 Instrument: FIELD Test: G604.7.0

Parameter	Result	Det. Limit	Units
OXIDATION/REDUCTION POTENTIAL	10		mV

FIELD SPECIFIC CONDUCTANCE SW846-9050

Analyst: S. ASKEW Analysis Date: 15-MAY-97 Instrument: FIELD Test: G604.0.0

Parameter	Result	Det. Limit	Units
CONDUCTIVITY	760	1.0	umHOS/cm

AMMONIA DISTILLATION EPA 350.2

Analyst: C. PEREGRINE Analysis Date: 22-MAY-97 08:00 Instrument: PREP Test: P203.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	200		mL
FINAL VOLUME	250		mL

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HERITAGE ENVIRONMENTAL SERVICES, INC. Sample ID: A408107 MW3R

AMMONIA NITROGEN EPA 350.3

Analyst: K. BUNCH Analysis Date: 23-MAY-97 09:30 Test: G203.4.0
Prep: AMMONIA DISTILLATION EPA 350.2 P203.4.0

Parameter	Result	Det. Limit	Units
NITROGEN, AMMONIA	1.6	0.12	mg/L

CHLORIDE BY ION CHROMATOGRAPHY SW846-9056

Analyst: M. ADKINS Analysis Date: 16-MAY-97 18:17 Instrument: IC Test: G310.2.0

Parameter	Result	Det. Limit	Units
CHLORIDE	9	0.25	mg/L

FIELD FILTRATION SAS

Analyst: . Analysis Date: Instrument: FIELD Test: P110.0.0

FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A

Analyst: N. CARR Analysis Date: 19-MAY-97 09:30 Instrument: PREP Test: P130.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A

Analyst: B. GRAVES Analysis Date: 19-MAY-97 14:00 Instrument: PREP Test: P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

SODIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:21 Instrument: ICP Test: M131.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
SODIUM	47.	0.20	mg/L

ARSENIC TRACE ICP SW846-6010A

Analyst: A. ROBERTSON Analysis Date: 28-MAY-97 09:19 Instrument: TRACE ICP Test: M103.0.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
ARSENIC	0.040	0.0050	mg/L

ARSENIC TRACE ICP SW846-6010A

Analyst: A. ROBERTSON Analysis Date: 28-MAY-97 10:17 Instrument: TRACE ICP Test: M103.0.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
ARSENIC	0.012	0.0050	mg/L

BARIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 22:58 Instrument: ICP Test: M104.3.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
BARIUM	0.20	0.010	mg/L

HERITAGE ENVIRONMENTAL SERVICES, INC.

Sample ID: A408107 MW3R

BARIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:21 Instrument: ICP Test: M104.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
BARIUM	0.17	0.010	mg/L

CADMIUM TRACE ICP SW846-6010A

Analyst: A. ROBERTSON Analysis Date: 28-MAY-97 10:17 Instrument: TRACE ICP Test: M108.0.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
CADMIUM	BDL	0.0010	mg/L

CHROMIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:21 Instrument: ICP Test: M110.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
CHROMIUM	BDL	0.010	mg/L

COPPER ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:21 Instrument: ICP Test: M112.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
COPPER	BDL	0.020	mg/L

ZINC ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:21 Instrument: ICP Test: M139.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
ZINC	BDL	0.020	mg/L

IRON ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:21 Instrument: ICP Test: M115.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
IRON	1.2	0.025	mg/L

MAGNESIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:21 Instrument: ICP Test: M118.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
MAGNESIUM	33.	0.20	mg/L

MANGANESE ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:21 Instrument: ICP Test: M119.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
MANGANESE	0.91	0.010	mg/L

POTASSIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:21 Instrument: ICP Test: M126.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
POTASSIUM	0.50	0.20	mg/L

DISSOLVED SOLIDS EPA 160.1

Analyst: K. SULLIVAN Analysis Date: 20-MAY-97 16:00 Test: G402.7.0

Parameter	Result	Det. Limit	Units
SOLIDS	440	10	mg/L

TOTAL SUSPENDED SOLIDS EPA 160.2

Analyst: K. SULLIVAN Analysis Date: 20-MAY-97 14:00 Test: G403.7.0

Parameter	Result	Det. Limit	Units
SUSPENDED SOLIDS	11	1.0	mg/L

ALKALINITY TOTAL EPA 310.1

Analyst: C. ROBISON Analysis Date: 19-MAY-97 19:00 Test: G605.2.0

Parameter	Result	Det. Limit	Units
ALKALINITY	450	1.0	mg/L

ALKALINITY (BICARBONATE) EPA 310.1

Analyst: C. ROBISON Analysis Date: 19-MAY-97 19:00 Test: G610.2.0

Parameter	Result	Det. Limit	Units
ALKALINITY	450	1.0	mg/L

ALKALINITY (CARBONATE) EPA 310.1

Analyst: C. ROBISON Analysis Date: 19-MAY-97 19:00 Test: G611.2.0

Parameter	Result	Det. Limit	Units
ALKALINITY	BDL	1.0	mg/L

CALCIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 22:58 Instrument: ICP Test: M109.3.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
CALCIUM	93.	0.20	mg/L

SULFATE BY ION CHROMATOGRAPHY SW846-9056

Analyst: M. ADKINS Analysis Date: 16-MAY-97 18:17 Instrument: IC Test: G310.7.0

Parameter	Result	Det. Limit	Units
SULFATE	BDL	0.25	mg/L

VOLATILE ORGANICS (CAPILLARY COLUMN) SW846-8260A

Analyst: B. MAZUR Analysis Date: 27-MAY-97 16:55 Instrument: GC/MS VOA Test: Q510.6.0

Parameter	Result	Det. Limit	Units
BENZENE	BDL	5.0	ug/L
CIS-1,3-DICHLOROPROPENE	BDL	5.0	ug/L
TRANS-1,3-DICHLOROPROPENE	BDL	5.0	ug/L
ETHYL BENZENE	BDL	5.0	ug/L
BROMOMETHANE	BDL	5.0	ug/L
CARBON TETRACHLORIDE	BDL	5.0	ug/L
CHLOROBENZENE	BDL	5.0	ug/L
CHLOROETHANE	BDL	5.0	ug/L
CHLOROFORM	BDL	5.0	ug/L
CHLOROMETHANE	BDL	5.0	ug/L
1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	BDL	5.0	ug/L
1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	BDL	5.0	ug/L

 (continued on next page)

HERITAGE ENVIRONMENTAL SERVICES, INC.

Sample ID: A408107 MW3R

Parameter	Result	Det. Limit	Units
1,1-DICHLOROETHANE	BDL	5.0	ug/L
CIS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
TRANS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
1,1-DICHLOROETHENE	BDL	5.0	ug/L
1,2-DICHLOROETHANE	BDL	5.0	ug/L
1,2-DICHLOROPROPANE	BDL	5.0	ug/L
DICHLOROMETHANE (METHYLENE CHLORIDE)	BDL	5.0	ug/L
STYRENE	BDL	5.0	ug/L
1,1,1,2-TETRACHLOROETHANE	BDL	5.0	ug/L
1,1,2,2-TETRACHLOROETHANE	BDL	5.0	ug/L
TETRACHLOROETHENE	BDL	5.0	ug/L
TOLUENE	BDL	5.0	ug/L
1,1,1-TRICHLOROETHANE	BDL	5.0	ug/L
1,1,2-TRICHLOROETHANE	BDL	5.0	ug/L
TRICHLOROETHENE	BDL	5.0	ug/L
TRICHLOROFLUOROMETHANE	BDL	5.0	ug/L
VINYL CHLORIDE	BDL	2.0	ug/L
XYLENES (O/M/P-XYLENE)	BDL	5.0	ug/L
...			
SURROGATE RECOVERY			

DICHLOROETHANE-D4	109		% Rec
TOLUENE-D8	99		% Rec
4-BROMOFLUOROBENZENE	100		% Rec

Sample Comments

BDL Below Detection Limit

Sample chain of custody number 64131.

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Approved : P.K. Spence

CERTIFICATE OF ANALYSIS

Service Location	Received	Project	Lab ID
HERITAGE ENVIRONMENTAL SERVICES, INC. COMMERCIAL LABORATORY OPERATIONS 7901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8304	16-MAY-97	4315	A408108
	Complete	PO Number	
	02-JUN-97	IN21405J0025	
	Printed	Sampled	
	03-JUN-97	15-MAY-97 10:45	

Report To	Bill To
JEFF JENKINS BFI WASTE SYSTEMS 2020 LAUBSCHER ROAD EVANSVILLE, IN 47720	ALISHA CLARK BFI WASTE SYSTEMS 2211 GLENVIEW DRIVE EVANSVILLE, IN 47720

Sample Description

CLIENT ID: MW5R

FIELD TURBIDITY EPA 180.1

Analyst: S. ASKEW Analysis Date: 15-MAY-97 Instrument: FIELD Test: G602.0.0

Parameter	Result	Det. Limit	Units
TURBIDITY	20.1	0.1	ntu

FIELD TEMPERATURE EPA 170.1

Analyst: S. ASKEW Analysis Date: 15-MAY-97 Instrument: FIELD Test: G603.0.0

Parameter	Result	Det. Limit	Units
TEMPERATURE	15.1		Degrees C

FIELD PH (AQUEOUS) SW846-9040A

Analyst: S. ASKEW Analysis Date: 15-MAY-97 Instrument: FIELD Test: G607.0.0

Parameter	Result	Det. Limit	Units
PH	6.86	0.1	Std. Units

FIELD DISSOLVED OXYGEN SAS

Analyst: S. ASKEW Analysis Date: 15-MAY-97 Instrument: FIELD Test: G600.1.0

Parameter	Result	Det. Limit	Units
DISSOLVED OXYGEN	1.85	1	mg/L

FIELD OXIDATION-REDUCTION POTENTIAL SM2580B-18TH ED

Analyst: S. ASKEW Analysis Date: 15-MAY-97 Instrument: FIELD Test: G604.7.0

Parameter	Result	Det. Limit	Units
OXIDATION/REDUCTION POTENTIAL	10		mV

FIELD SPECIFIC CONDUCTANCE SW846-9050

Analyst: S. ASKEW Analysis Date: 15-MAY-97 Instrument: FIELD Test: G604.0.0

Parameter	Result	Det. Limit	Units
CONDUCTIVITY	948	1.0	umHOS/cm

AMMONIA DISTILLATION EPA 350.2

Analyst: C. PEREGRINE Analysis Date: 22-MAY-97 08:00 Instrument: PREP Test: P203.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	200		mL
FINAL VOLUME	250		mL

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HERITAGE ENVIRONMENTAL SERVICES, INC.

Sample ID: A408108 MW5R

AMMONIA NITROGEN EPA 350.3

Analyst: K. BUNCH Analysis Date: 23-MAY-97 09:30 Test: G203.4.0
Prep: AMMONIA DISTILLATION EPA 350.2 P203.4.0

Parameter	Result	Det. Limit	Units
NITROGEN, AMMONIA	0.53	0.12	mg/L

CHLORIDE BY ION CHROMATOGRAPHY SW846-9056

Analyst: M. ADKINS Analysis Date: 20-MAY-97 18:49 Instrument: IC Test: G310.2.0

Parameter	Result	Det. Limit	Units
CHLORIDE	57	1.3	mg/L

1:5 DILUTION

BROMIDE BY ION CHROMATOGRAPHY SW846-9056

Analyst: M. ADKINS Analysis Date: 16-MAY-97 18:17 Instrument: IC Test: G310.4.0

Parameter	Result	Det. Limit	Units
BROMIDE	0.42	0.05	mg/L

FIELD FILTRATION SAS

Analyst: . Analysis Date: Instrument: FIELD Test: P110.0.0

FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A

Analyst: B. GRAVES Analysis Date: 19-MAY-97 14:00 Instrument: PREP Test: P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

ARSENIC TRACE ICP SW846-6010A

Analyst: A. ROBERTSON Analysis Date: 28-MAY-97 10:20 Instrument: TRACE ICP Test: M103.0.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
ARSENIC	BDL	0.0050	mg/L

SODIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:25 Instrument: ICP Test: M131.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
SODIUM	110	0.20	mg/L

SODIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 23:01 Instrument: ICP Test: M131.3.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
SODIUM	110	0.20	mg/L

CADMIUM TRACE ICP SW846-6010A

Analyst: A. ROBERTSON Analysis Date: 28-MAY-97 10:20 Instrument: TRACE ICP Test: M108.0.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
CADMIUM	BDL	0.0010	mg/L

 (continued on next page)

CHROMIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:25 Instrument: ICP Test: M110.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
CHROMIUM	BDL	0.010	mg/L

COPPER ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:25 Instrument: ICP Test: M112.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
COPPER	BDL	0.020	mg/L

ZINC ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:25 Instrument: ICP Test: M139.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
ZINC	BDL	0.020	mg/L

IRON ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:25 Instrument: ICP Test: M115.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
IRON	2.2	0.025	mg/L

MAGNESIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:25 Instrument: ICP Test: M118.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
MAGNESIUM	31.	0.20	mg/L

MANGANESE ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:25 Instrument: ICP Test: M119.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
MANGANESE	2.1	0.010	mg/L

POTASSIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:25 Instrument: ICP Test: M126.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
POTASSIUM	0.46	0.20	mg/L

DISSOLVED SOLIDS EPA 160.1

Analyst: K. SULLIVAN Analysis Date: 20-MAY-97 16:00 Test: G402.7.0

Parameter	Result	Det. Limit	Units
SOLIDS	540	10	mg/L

HERITAGE ENVIRONMENTAL SERVICES, INC.

Sample ID: A408108 MW5R

TOTAL SUSPENDED SOLIDS EPA 160.2

Analyst: K. SULLIVAN Analysis Date: 20-MAY-97 14:00 Test: G403.7.0

Parameter	Result	Det. Limit	Units
SUSPENDED SOLIDS	4	1.0	mg/L

ALKALINITY TOTAL EPA 310.1

Analyst: C. ROBISON Analysis Date: 19-MAY-97 19:00 Test: G605.2.0

Parameter	Result	Det. Limit	Units
ALKALINITY	440	1.0	mg/L

ALKALINITY (BICARBONATE) EPA 310.1

Analyst: C. ROBISON Analysis Date: 19-MAY-97 19:00 Test: G610.2.0

Parameter	Result	Det. Limit	Units
ALKALINITY	440	1.0	mg/L

ALKALINITY (CARBONATE) EPA 310.1

Analyst: C. ROBISON Analysis Date: 19-MAY-97 19:00 Test: G611.2.0

Parameter	Result	Det. Limit	Units
ALKALINITY	BDL	1.0	mg/L

FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A

Analyst: N. CARR Analysis Date: 19-MAY-97 09:30 Instrument: PREP Test: P130.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

ARSENIC TRACE ICP SW846-6010A

Analyst: A. ROBERTSON Analysis Date: 28-MAY-97 09:30 Instrument: TRACE ICP Test: M103.0.0

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
ARSENIC	0.0072	0.0050	mg/L

CALCIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 23:01 Instrument: ICP Test: M109.3.0

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
CALCIUM	61.	0.20	mg/L

SULFATE BY ION CHROMATOGRAPHY SW846-9056

Analyst: M. ADKINS Analysis Date: 16-MAY-97 18:17 Instrument: IC Test: G310.7.0

Parameter	Result	Det. Limit	Units
SULFATE	8.2	0.25	mg/L

VOLATILE ORGANICS (CAPILLARY COLUMN) SW846-8260A

Analyst: B. MAZUR Analysis Date: 27-MAY-97 13:16 Instrument: GC/MS VOA Test: G510.6.0

Parameter	Result	Det. Limit	Units
BENZENE	BDL	5.0	ug/L
CIS-1,3-DICHLOROPROPENE	BDL	5.0	ug/L
TRANS-1,3-DICHLOROPROPENE	BDL	5.0	ug/L
ETHYL BENZENE	BDL	5.0	ug/L
BROMOMETHANE	BDL	5.0	ug/L
CARBON TETRACHLORIDE	BDL	5.0	ug/L
CHLOROBENZENE	BDL	5.0	ug/L
CHLOROETHANE	BDL	5.0	ug/L
CHLOROFORM	BDL	5.0	ug/L
CHLOROMETHANE	BDL	5.0	ug/L
1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	BDL	5.0	ug/L
1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	BDL	5.0	ug/L

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Parameter	Result	Det. Limit	Units
1,1-DICHLOROETHANE	BDL	5.0	ug/L
CIS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
TRANS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
1,1-DICHLOROETHENE	BDL	5.0	ug/L
1,2-DICHLOROETHANE	BDL	5.0	ug/L
1,2-DICHLOROPROPANE	BDL	5.0	ug/L
DICHLOROMETHANE (METHYLENE CHLORIDE)	BDL	5.0	ug/L
STYRENE	BDL	5.0	ug/L
1,1,1,2-TETRACHLOROETHANE	BDL	5.0	ug/L
1,1,2,2-TETRACHLOROETHANE	BDL	5.0	ug/L
TETRACHLOROETHENE	BDL	5.0	ug/L
TOLUENE	BDL	5.0	ug/L
1,1,1-TRICHLOROETHANE	BDL	5.0	ug/L
1,1,2-TRICHLOROETHANE	BDL	5.0	ug/L
TRICHLOROETHENE	BDL	5.0	ug/L
TRICHLOROFLUOROMETHANE	BDL	5.0	ug/L
VINYL CHLORIDE	BDL	2.0	ug/L
XYLENES (O/M/P-XYLENE)	BDL	5.0	ug/L
...			
SURROGATE RECOVERY			

DICHLOROETHANE-D4	109		% Rec
TOLUENE-D8	99		% Rec
4-BROMOFLUOROBENZENE	92		% Rec

BORON ICP SW846-6010A
Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 23:01 Instrument: ICP Test: M107.3.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
BORON	0.056	0.050	mg/L

BORON ICP SW846-6010A
Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:25 Instrument: ICP Test: M107.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
BORON	0.057	0.050	mg/L

BARIUM ICP SW846-6010A
Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 23:01 Instrument: ICP Test: M104.3.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
BARIUM	0.15	0.010	mg/L

BARIUM ICP SW846-6010A
Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:25 Instrument: ICP Test: M104.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
BARIUM	0.14	0.010	mg/L

Sample Comments

BDL Below Detection Limit

Sample chain of custody number 64131.

Sample Comments

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Approved : P.K. Spence

CERTIFICATE OF ANALYSIS

Service Location	Received	Project	Lab ID
HERITAGE ENVIRONMENTAL SERVICES, INC. COMMERCIAL LABORATORY OPERATIONS 7901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8304	16-MAY-97	4315	A408109
	Complete	PO Number	
	02-JUN-97	IN21405J0025	
	Printed	Sampled	
	03-JUN-97	15-MAY-97 11:30	

Report To	Bill To
JEFF JENKINS BFI WASTE SYSTEMS 2020 LAUBSCHER ROAD EVANSVILLE, IN 47720	ALISHA CLARK BFI WASTE SYSTEMS 2211 GLENVIEW DRIVE EVANSVILLE, IN 47720

Sample Description

CLIENT ID: MW337

FIELD TURBIDITY EPA 180.1

Analyst: S. ASKEW Analysis Date: 15-MAY-97 Instrument: FIELD Test: G602.0.0

Parameter	Result	Det. Limit	Units
TURBIDITY	13.8	0.1	ntu

FIELD TEMPERATURE EPA 170.1

Analyst: S. ASKEW Analysis Date: 15-MAY-97 Instrument: FIELD Test: G603.0.0

Parameter	Result	Det. Limit	Units
TEMPERATURE	14.6		Degrees C

FIELD PH (AQUEOUS) SW846-9040A

Analyst: S. ASKEW Analysis Date: 15-MAY-97 Instrument: FIELD Test: G607.0.0

Parameter	Result	Det. Limit	Units
PH	6.81	0.1	Std. Units

FIELD DISSOLVED OXYGEN SAS

Analyst: S. ASKEW Analysis Date: 15-MAY-97 Instrument: FIELD Test: G600.1.0

Parameter	Result	Det. Limit	Units
DISSOLVED OXYGEN	2.83	1	mg/L

FIELD OXIDATION-REDUCTION POTENTIAL SM2580B-18TH ED

Analyst: S. ASKEW Analysis Date: 15-MAY-97 Instrument: FIELD Test: G604.7.0

Parameter	Result	Det. Limit	Units
OXIDATION/REDUCTION POTENTIAL	13		mV

FIELD SPECIFIC CONDUCTANCE SW846-9050

Analyst: S. ASKEW Analysis Date: 15-MAY-97 Instrument: FIELD Test: G604.0.0

Parameter	Result	Det. Limit	Units
CONDUCTIVITY	721	1.0	umHOS/cm

AMMONIA DISTILLATION EPA 350.2

Analyst: K. BAX Analysis Date: 16-MAY-97 18:00 Instrument: PREP Test: P203.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	200		mL
FINAL VOLUME	250		mL

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HERITAGE ENVIRONMENTAL SERVICES, INC.

Sample ID: A408109 MW337

AMMONIA NITROGEN EPA 350.3

Analyst: K. BUNCH Analysis Date: 19-MAY-97 10:30 Test: G203.4.0
Prep: AMMONIA DISTILLATION EPA 350.2 P203.4.0

Parameter	Result	Det. Limit	Units
NITROGEN, AMMONIA	0.76	0.12	mg/L

CHLORIDE BY ION CHROMATOGRAPHY SW846-9056

Analyst: M. ADKINS Analysis Date: 16-MAY-97 18:17 Instrument: IC Test: G310.2.0

Parameter	Result	Det. Limit	Units
CHLORIDE	24	0.25	mg/L

FIELD FILTRATION SAS

Analyst: . Analysis Date: Instrument: FIELD Test: P110.0.0

FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A

Analyst: B. GRAVES Analysis Date: 19-MAY-97 14:00 Instrument: PREP Test: P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

ARSENIC TRACE ICP SW846-6010A

Analyst: A. ROBERTSON Analysis Date: 28-MAY-97 10:23 Instrument: TRACE ICP Test: M103.0.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
ARSENIC	0.039	0.0050	mg/L

SODIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:28 Instrument: ICP Test: M131.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
SODIUM	86.	0.20	mg/L

CADMIUM TRACE ICP SW846-6010A

Analyst: A. ROBERTSON Analysis Date: 28-MAY-97 10:23 Instrument: TRACE ICP Test: M108.0.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
CADMIUM	BDL	0.0010	mg/L

CHROMIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:28 Instrument: ICP Test: M110.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
CHROMIUM	BDL	0.010	mg/L

COPPER ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:28 Instrument: ICP Test: M112.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
COPPER	BDL	0.020	mg/L

 (continued on next page)

ZINC ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:28 Instrument: ICP Test: M139.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
ZINC	BDL	0.020	mg/L

IRON ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:28 Instrument: ICP Test: M115.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
IRON	2.0	0.025	mg/L

MAGNESIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:28 Instrument: ICP Test: M118.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
MAGNESIUM	21.	0.20	mg/L

MANGANESE ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:28 Instrument: ICP Test: M119.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
MANGANESE	0.48	0.010	mg/L

POTASSIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:28 Instrument: ICP Test: M126.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
POTASSIUM	1.0	0.20	mg/L

DISSOLVED SOLIDS EPA 160.1

Analyst: K. SULLIVAN Analysis Date: 20-MAY-97 16:00 Test: G402.7.0

Parameter	Result	Det. Limit	Units
SOLIDS	420	10	mg/L

TOTAL SUSPENDED SOLIDS EPA 160.2

Analyst: K. SULLIVAN Analysis Date: 20-MAY-97 14:00 Test: G403.7.0

Parameter	Result	Det. Limit	Units
SUSPENDED SOLIDS	9	1.0	mg/L

ALKALINITY TOTAL EPA 310.1

Analyst: C. ROBISON Analysis Date: 19-MAY-97 19:00 Test: G605.2.0

Parameter	Result	Det. Limit	Units
ALKALINITY	370	1.0	mg/L

ALKALINITY (BICARBONATE) EPA 310.1

Analyst: C. ROBISON Analysis Date: 19-MAY-97 19:00 Test: G610.2.0

Parameter	Result	Det. Limit	Units
ALKALINITY	370	1.0	mg/L

HERITAGE ENVIRONMENTAL SERVICES, INC.

Sample ID: A408109 MW337

ALKALINITY (CARBONATE) EPA 310.1

Analyst: C. ROBISON Analysis Date: 19-MAY-97 19:00 Test: G611.2.0

Parameter	Result	Det. Limit	Units
ALKALINITY	BDL	1.0	mg/L

FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A

Analyst: N. CARR Analysis Date: 19-MAY-97 09:30 Instrument: PREP Test: P130.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

ARSENIC TRACE ICP SW846-6010A

Analyst: A. ROBERTSON Analysis Date: 28-MAY-97 09:33 Instrument: TRACE ICP Test: M103.0.0

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
ARSENIC	0.037	0.0050	mg/L

CALCIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 23:05 Instrument: ICP Test: M109.3.0

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
CALCIUM	49.	0.20	mg/L

SULFATE BY ION CHROMATOGRAPHY SW846-9056

Analyst: M. ADKINS Analysis Date: 16-MAY-97 18:17 Instrument: IC Test: G310.7.0

Parameter	Result	Det. Limit	Units
SULFATE	BDL	0.25	mg/L

VOLATILE ORGANICS (CAPILLARY COLUMN) SW846-8260A

Analyst: B. MAZUR Analysis Date: 27-MAY-97 16:00 Instrument: GC/MS VOA Test: O510.6.0

Parameter	Result	Det. Limit	Units
BENZENE	BDL	5.0	ug/L
CIS-1,3-DICHLOROPROPENE	BDL	5.0	ug/L
TRANS-1,3-DICHLOROPROPENE	BDL	5.0	ug/L
ETHYL BENZENE	BDL	5.0	ug/L
BROMOMETHANE	BDL	5.0	ug/L
CARBON TETRACHLORIDE	BDL	5.0	ug/L
CHLOROBENZENE	BDL	5.0	ug/L
CHLOROETHANE	BDL	5.0	ug/L
CHLOROFORM	BDL	5.0	ug/L
CHLOROMETHANE	BDL	5.0	ug/L
1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	BDL	5.0	ug/L
1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	BDL	5.0	ug/L
1,1-DICHLOROETHANE	BDL	5.0	ug/L
CIS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
TRANS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
1,1-DICHLOROETHENE	BDL	5.0	ug/L
1,2-DICHLOROETHANE	BDL	5.0	ug/L
1,2-DICHLOROPROPANE	BDL	5.0	ug/L
DICHLOROMETHANE (METHYLENE CHLORIDE)	BDL	5.0	ug/L
STYRENE	BDL	5.0	ug/L
1,1,1,2-TETRACHLOROETHANE	BDL	5.0	ug/L
1,1,2,2-TETRACHLOROETHANE	BDL	5.0	ug/L
TETRACHLOROETHENE	BDL	5.0	ug/L
TOLUENE	BDL	5.0	ug/L
1,1,1-TRICHLOROETHANE	BDL	5.0	ug/L
1,1,2-TRICHLOROETHANE	BDL	5.0	ug/L
TRICHLOROETHENE	BDL	5.0	ug/L

 (continued on next page)

HERITAGE ENVIRONMENTAL SERVICES, INC. Sample ID: A408109 MW337

Parameter	Result	Det. Limit	Units
TRICHLOROFLUOROMETHANE	BDL	5.0	ug/L
VINYL CHLORIDE	BDL	2.0	ug/L
XYLENES (O/M/P-XYLENE)	BDL	5.0	ug/L
...			
SURROGATE RECOVERY			

DICHLOROETHANE-D4	110		% Rec
TOLUENE-D8	99		% Rec
4-BROMOFLUOROBENZENE	94		% Rec

Sample Comments

BDL Below Detection Limit

Sample chain of custody number 64131.

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Approved : P.K. Spence

CERTIFICATE OF ANALYSIS

Service Location	Received	Project	Lab ID
HERITAGE ENVIRONMENTAL SERVICES, INC. COMMERCIAL LABORATORY OPERATIONS 7901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8304	16-MAY-97	4315	A40811^
	Complete: 02-JUN-97	PO Number: IN21405J0025	
	Printed: 03-JUN-97	Sampled: 15-MAY-97 11:45	

Report To	Bill To
JEFF JENKINS BFI WASTE SYSTEMS 2020 LAUBSCHER ROAD EVANSVILLE, IN 47720	ALISHA CLARK BFI WASTE SYSTEMS 2211 GLENVIEW DRIVE EVANSVILLE, IN 47720

Sample Description

CLIENT ID: MW4R

FIELD TURBIDITY EPA 180.1

Analyst: S. ASKEW | Analysis Date: 15-MAY-97 | Instrument: FIELD | Test: G602.0.0

Parameter	Result	Det. Limit	Units
TURBIDITY	17.5	0.1	ntu

FIELD TEMPERATURE EPA 170.1

Analyst: S. ASKEW | Analysis Date: 15-MAY-97 | Instrument: FIELD | Test: G603.0.0

Parameter	Result	Det. Limit	Units
TEMPERATURE	14.4		Degrees C

FIELD PH (AQUEOUS) SW846-9040A

Analyst: S. ASKEW | Analysis Date: 15-MAY-97 | Instrument: FIELD | Test: G607.0.0

Parameter	Result	Det. Limit	Units
PH	6.77	0.1	Std. Units

FIELD DISSOLVED OXYGEN SAS

Analyst: S. ASKEW | Analysis Date: 15-MAY-97 | Instrument: FIELD | Test: G600.1.0

Parameter	Result	Det. Limit	Units
DISSOLVED OXYGEN	1.46	1	mg/L

FIELD OXIDATION-REDUCTION POTENTIAL SM2580B-18TH ED

Analyst: S. ASKEW | Analysis Date: 15-MAY-97 | Instrument: FIELD | Test: G604.7.0

Parameter	Result	Det. Limit	Units
OXIDATION/REDUCTION POTENTIAL	15		mV

FIELD SPECIFIC CONDUCTANCE SW846-9050

Analyst: S. ASKEW | Analysis Date: 15-MAY-97 | Instrument: FIELD | Test: G604.0.0

Parameter	Result	Det. Limit	Units
CONDUCTIVITY	1073	1.0	umHOS/cm

AMMONIA DISTILLATION EPA 350.2

Analyst: C. PEREGRINE | Analysis Date: 22-MAY-97 08:00 | Instrument: PREP | Test: P203.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	200		mL
FINAL VOLUME	250		mL

 (continued on next page)

AMMONIA NITROGEN EPA 350.3

Analyst: K. BUNCH Analysis Date: 23-MAY-97 09:30 Test: G203.4.0
Prep: AMMONIA DISTILLATION EPA 350.2 P203.4.0

Parameter	Result	Det. Limit	Units
NITROGEN, AMMONIA	18	0.60	mg/L
1:5 DILUTION			

CHLORIDE BY ION CHROMATOGRAPHY SW846-9056

Analyst: M. ADKINS Analysis Date: 16-MAY-97 18:17 Instrument: IC Test: G310.2.0

Parameter	Result	Det. Limit	Units
CHLORIDE	14	0.25	mg/L

BROMIDE BY ION CHROMATOGRAPHY SW846-9056

Analyst: M. ADKINS Analysis Date: 16-MAY-97 18:17 Instrument: IC Test: G310.4.0

Parameter	Result	Det. Limit	Units
BROMIDE	0.21	0.05	mg/L

FIELD FILTRATION SAS

Analyst: , Analysis Date: Instrument: FIELD Test: P110.0.0

FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A

Analyst: B. GRAVES Analysis Date: 19-MAY-97 14:00 Instrument: PREP Test: P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

ARSENIC TRACE ICP SW846-6010A

Analyst: A. ROBERTSON Analysis Date: 28-MAY-97 10:27 Instrument: TRACE ICP Test: M103.0.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
ARSENIC	0.0084	0.0050	mg/L

SODIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:31 Instrument: ICP Test: M131.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
SODIUM	47.	0.20	mg/L

SODIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 23:08 Instrument: ICP Test: M131.3.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
SODIUM	50	0.20	mg/L

CADMIUM TRACE ICP SW846-6010A

Analyst: A. ROBERTSON Analysis Date: 28-MAY-97 10:27 Instrument: TRACE ICP Test: M108.0.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
CADMIUM	BDL	0.0010	mg/L

HERITAGE ENVIRONMENTAL SERVICES, INC.

Sample ID: A408110 MW4R

CHROMIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:31 Instrument: ICP Test: M110.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
CHROMIUM	BDL	0.010	mg/L

COPPER ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:31 Instrument: ICP Test: M112.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
COPPER	BDL	0.020	mg/L

ZINC ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:31 Instrument: ICP Test: M139.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
ZINC	BDL	0.020	mg/L

IRON ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:31 Instrument: ICP Test: M115.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
IRON	18.	0.025	mg/L

MAGNESIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:31 Instrument: ICP Test: M118.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
MAGNESIUM	29.	0.20	mg/L

MANGANESE ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:31 Instrument: ICP Test: M119.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
MANGANESE	0.40	0.010	mg/L

POTASSIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:31 Instrument: ICP Test: M126.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
POTASSIUM	1.9	0.20	mg/L

DISSOLVED SOLIDS EPA 160.1

Analyst: K. SULLIVAN Analysis Date: 20-MAY-97 16:00 Test: G402.7.0

Parameter	Result	Det. Limit	Units
SOLIDS	540	10	mg/L

 (continued on next page)

TOTAL SUSPENDED SOLIDS EPA 160.2

Analyst: K. SULLIVAN Analysis Date: 20-MAY-97 14:00 Test: G403.7.0

Parameter	Result	Det. Limit	Units
SUSPENDED SOLIDS	51	1.0	mg/L

ALKALINITY TOTAL EPA 310.1

Analyst: C. ROBISON Analysis Date: 19-MAY-97 19:00 Test: G605.2.0

Parameter	Result	Det. Limit	Units
ALKALINITY	570	1.0	mg/L

ALKALINITY (BICARBONATE) EPA 310.1

Analyst: C. ROBISON Analysis Date: 19-MAY-97 19:00 Test: G610.2.0

Parameter	Result	Det. Limit	Units
ALKALINITY	570	1.0	mg/L

ALKALINITY (CARBONATE) EPA 310.1

Analyst: C. ROBISON Analysis Date: 19-MAY-97 19:00 Test: G611.2.0

Parameter	Result	Det. Limit	Units
ALKALINITY	BDL	1.0	mg/L

FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A

Analyst: N. CARR Analysis Date: 19-MAY-97 09:30 Instrument: PREP Test: P130.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

ARSENIC TRACE ICP SW846-6010A

Analyst: A. ROBERTSON Analysis Date: 28-MAY-97 09:36 Instrument: TRACE ICP Test: M103.0.0

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
ARSENIC	0.0054	0.0050	mg/L

CALCIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 23:08 Instrument: ICP Test: M109.3.0

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
CALCIUM	120	0.20	mg/L

SULFATE BY ION CHROMATOGRAPHY SW846-9056

Analyst: M. ADKINS Analysis Date: 16-MAY-97 18:17 Instrument: IC Test: G310.7.0

Parameter	Result	Det. Limit	Units
SULFATE	BDL	0.25	mg/L

VOLATILE ORGANICS (CAPILLARY COLUMN) SW846-8260A

Analyst: H. WILLIAMS Analysis Date: 23-MAY-97 05:37 Instrument: GC/MS VOA Test: O510.6.0

Parameter	Result	Det. Limit	Units
BENZENE	BDL	5.0	ug/L
CIS-1,3-DICHLOROPROPENE	BDL	5.0	ug/L
TRANS-1,3-DICHLOROPROPENE	BDL	5.0	ug/L
ETHYL BENZENE	BDL	5.0	ug/L
BROMOMETHANE	BDL	5.0	ug/L
CARBON TETRACHLORIDE	BDL	5.0	ug/L
CHLOROBENZENE	BDL	5.0	ug/L
CHLOROETHANE	BDL	5.0	ug/L
CHLOROFORM	BDL	5.0	ug/L
CHLOROMETHANE	BDL	5.0	ug/L
1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	BDL	5.0	ug/L
1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	BDL	5.0	ug/L

 (continued on next page)

Parameter	Result	Det. Limit	Units
1,1-DICHLOROETHANE	BDL	5.0	ug/L
CIS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
TRANS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
1,1-DICHLOROETHENE	BDL	5.0	ug/L
1,2-DICHLOROETHANE	BDL	5.0	ug/L
1,2-DICHLOROPROPANE	BDL	5.0	ug/L
DICHLOROMETHANE (METHYLENE CHLORIDE)	BDL	5.0	ug/L
STYRENE	BDL	5.0	ug/L
1,1,1,2-TETRACHLOROETHANE	BDL	5.0	ug/L
1,1,2,2-TETRACHLOROETHANE	BDL	5.0	ug/L
TETRACHLOROETHENE	BDL	5.0	ug/L
TOLUENE	BDL	5.0	ug/L
1,1,1-TRICHLOROETHANE	BDL	5.0	ug/L
1,1,2-TRICHLOROETHANE	BDL	5.0	ug/L
TRICHLOROETHENE	BDL	5.0	ug/L
TRICHLOROFLUOROMETHANE	BDL	5.0	ug/L
VINYL CHLORIDE	BDL	2.0	ug/L
XYLENES (O/M/P-XYLENE)	BDL	5.0	ug/L
...			
SURROGATE RECOVERY			

DICHLOROETHANE-D4	116		% Rec
TOLUENE-D8	110		% Rec
4-BROMOFLUOROBENZENE	102		% Rec

1:5 DILUTION

BORON ICP SW846-6010A
Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 23:08 Instrument: ICP Test: M107.3.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
BORON	0.12	0.050	mg/L

BORON ICP SW846-6010A
Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:31 Instrument: ICP Test: M107.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
BORON	0.12	0.050	mg/L

BARIUM ICP SW846-6010A
Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 23:08 Instrument: ICP Test: M104.3.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
BARIUM	0.23	0.010	mg/L

BARIUM ICP SW846-6010A
Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:31 Instrument: ICP Test: M104.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
BARIUM	0.16	0.010	mg/L

Sample Comments

BDL Below Detection Limit

Sample chain of custody number 64131.

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Approved : P.K. Spence

CERTIFICATE OF ANALYSIS

Service Location	Received	Project	Lab ID
HERITAGE ENVIRONMENTAL SERVICES, INC. COMMERCIAL LABORATORY OPERATIONS 7901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8304	16-MAY-97	4315	A408112
	Complete: 02-JUN-97	PO Number: IN21405J0025	
	Printed: 03-JUN-97	Sampled: 15-MAY-97 11:45	

Report To	Bill To
JEFF JENKINS BFI WASTE SYSTEMS 2020 LAUBSCHER ROAD EVANSVILLE, IN 47720	ALISHA CLARK BFI WASTE SYSTEMS 2211 GLENVIEW DRIVE EVANSVILLE, IN 47720

Sample Description

CLIENT ID: MW4RDUP

AMMONIA DISTILLATION EPA 350.2

Analyst: C. PEREGRINE Analysis Date: 22-MAY-97 08:00 Instrument: PREP Test: P203.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	200		mL
FINAL VOLUME	250		mL

AMMONIA NITROGEN EPA 350.3

Analyst: K. BUNCH Analysis Date: 23-MAY-97 09:30 Test: G203.4.0

Prep: AMMONIA DISTILLATION EPA 350.2 P203.4.0

Parameter	Result	Det. Limit	Units
NITROGEN, AMMONIA	18	0.60	mg/L
1:5 DILUTION			

CHLORIDE BY ION CHROMATOGRAPHY SW846-9056

Analyst: M. ADKINS Analysis Date: 16-MAY-97 18:17 Instrument: IC Test: G310.2.0

Parameter	Result	Det. Limit	Units
CHLORIDE	14	0.25	mg/L

BROMIDE BY ION CHROMATOGRAPHY SW846-9056

Analyst: M. ADKINS Analysis Date: 16-MAY-97 18:17 Instrument: IC Test: G310.4.0

Parameter	Result	Det. Limit	Units
BROMIDE	0.19	0.05	mg/L

FIELD FILTRATION SAS

Analyst: . Analysis Date: Instrument: FIELD Test: P110.0.0

FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A

Analyst: B. GRAVES Analysis Date: 19-MAY-97 14:00 Instrument: PREP Test: P132.4.0

Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

HERITAGE ENVIRONMENTAL SERVICES, INC. Sample ID: A408112 MW4RDUP

ARSENIC TRACE ICP SW846-6010A

Analyst: A. ROBERTSON Analysis Date: 28-MAY-97 10:30 Instrument: TRACE ICP Test: M103.0.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
ARSENIC	0.0069	0.0050	mg/L

SODIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:35 Instrument: ICP Test: M131.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
SODIUM	50.	0.20	mg/L

SODIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 22-MAY-97 01:54 Instrument: ICP Test: M131.3.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
SODIUM	47	0.20	mg/L

CADMIUM TRACE ICP SW846-6010A

Analyst: A. ROBERTSON Analysis Date: 28-MAY-97 10:30 Instrument: TRACE ICP Test: M108.0.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
CADMIUM	BDL	0.0010	mg/L

CHROMIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:35 Instrument: ICP Test: M110.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
CHROMIUM	BDL	0.010	mg/L

COPPER ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:35 Instrument: ICP Test: M112.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
COPPER	BDL	0.020	mg/L

ZINC ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:35 Instrument: ICP Test: M139.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
ZINC	BDL	0.020	mg/L

IRON ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:35 Instrument: ICP Test: M115.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
IRON	18.	0.025	mg/L

MAGNESIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:35 Instrument: ICP Test: M118.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
MAGNESIUM	30.	0.20	mg/L

MANGANESE ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:35 Instrument: ICP Test: M119.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
MANGANESE	0.42	0.010	mg/L

POTASSIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:35 Instrument: ICP Test: M126.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
POTASSIUM	2.1	0.20	mg/L

DISSOLVED SOLIDS EPA 160.1

Analyst: K. SULLIVAN Analysis Date: 21-MAY-97 16:00 Test: G402.7.0

Parameter	Result	Det. Limit	Units
SOLIDS	580	10	mg/L

TOTAL SUSPENDED SOLIDS EPA 160.2

Analyst: K. SULLIVAN Analysis Date: 20-MAY-97 14:00 Test: G403.7.0

Parameter	Result	Det. Limit	Units
SUSPENDED SOLIDS	53	1.0	mg/L

ALKALINITY TOTAL EPA 310.1

Analyst: C. ROBISON Analysis Date: 19-MAY-97 19:00 Test: G605.2.0

Parameter	Result	Det. Limit	Units
ALKALINITY	560	1.0	mg/L

ALKALINITY (BICARBONATE) EPA 310.1

Analyst: C. ROBISON Analysis Date: 19-MAY-97 19:00 Test: G610.2.0

Parameter	Result	Det. Limit	Units
ALKALINITY	560	1.0	mg/L

ALKALINITY (CARBONATE) EPA 310.1

Analyst: C. ROBISON Analysis Date: 19-MAY-97 19:00 Test: G611.2.0

Parameter	Result	Det. Limit	Units
ALKALINITY	BDL	1.0	mg/L

FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A

Analyst: R. DALAL Analysis Date: 20-MAY-97 10:00 Instrument: PREP Test: P130.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

HERITAGE ENVIRONMENTAL SERVICES, INC. Sample ID: A408112 MW4RDUP

ARSENIC TRACE ICP SW846-6010A

Analyst: A. ROBERTSON Analysis Date: 30-MAY-97 13:26 Instrument: TRACE ICP Test: M103.0.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
ARSENIC	0.0089	0.0050	mg/L

CALCIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 22-MAY-97 01:54 Instrument: ICP Test: M109.3.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
CALCIUM	110	0.20	mg/L

SULFATE BY ION CHROMATOGRAPHY SW846-9056

Analyst: M. ADKINS Analysis Date: 16-MAY-97 18:17 Instrument: IC Test: G310.7.0

Parameter	Result	Det. Limit	Units
SULFATE	BDL	0.25	mg/L

VOLATILE ORGANICS (CAPILLARY COLUMN) SW846-8260A

Analyst: H. WILLIAMS Analysis Date: 23-MAY-97 06:13 Instrument: GC/MS VOA Test: O510.6.0

Parameter	Result	Det. Limit	Units
BENZENE	BDL	5.0	ug/L
CIS-1,3-DICHLOROPROPENE	BDL	5.0	ug/L
TRANS-1,3-DICHLOROPROPENE	BDL	5.0	ug/L
ETHYL BENZENE	BDL	5.0	ug/L
BROMOMETHANE	BDL	5.0	ug/L
CARBON TETRACHLORIDE	BDL	5.0	ug/L
CHLOROBENZENE	BDL	5.0	ug/L
CHLOROETHANE	BDL	5.0	ug/L
CHLOROFORM	BDL	5.0	ug/L
CHLOROMETHANE	BDL	5.0	ug/L
1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	BDL	5.0	ug/L
1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	BDL	5.0	ug/L
1,1-DICHLOROETHANE	BDL	5.0	ug/L
CIS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
TRANS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
1,1-DICHLOROETHENE	BDL	5.0	ug/L
1,2-DICHLOROETHANE	BDL	5.0	ug/L
1,2-DICHLOROPROPANE	BDL	5.0	ug/L
DICHLOROMETHANE (METHYLENE CHLORIDE)	BDL	5.0	ug/L
STYRENE	BDL	5.0	ug/L
1,1,1,2-TETRACHLOROETHANE	BDL	5.0	ug/L
1,1,2,2-TETRACHLOROETHANE	BDL	5.0	ug/L
TETRACHLOROETHENE	BDL	5.0	ug/L
TOLUENE	BDL	5.0	ug/L
1,1,1-TRICHLOROETHANE	BDL	5.0	ug/L
1,1,2-TRICHLOROETHANE	BDL	5.0	ug/L
TRICHLOROETHENE	BDL	5.0	ug/L
TRICHLOROFLUOROMETHANE	BDL	5.0	ug/L
VINYL CHLORIDE	BDL	2.0	ug/L
XYLENES (O/M/P-XYLENE)	BDL	5.0	ug/L
...			
SURROGATE RECOVERY			

DICHLOROETHANE-D4	118		% Rec
TOLUENE-D8	99		% Rec
4-BROMOFLUOROBENZENE	103		% Rec

1:5 DILUTION

BORON ICP SW846-6010A
Analyst: A. STOCKBURGER Analysis Date: 22-MAY-97 01:54 Instrument: ICP Test: M107.3.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
BORON	0.11	0.050	mg/L

BORON ICP SW846-6010A
Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:35 Instrument: ICP Test: M107.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
BORON	0.13	0.050	mg/L

BARIUM ICP SW846-6010A
Analyst: A. STOCKBURGER Analysis Date: 22-MAY-97 01:54 Instrument: ICP Test: M104.3.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
BARIUM	0.22	0.010	mg/L

BARIUM ICP SW846-6010A
Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:35 Instrument: ICP Test: M104.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
BARIUM	0.17	0.010	mg/L

Sample Comments

BDL Below Detection Limit

Sample chain of custody number 64131.

This Certificate shall not be reproduced, except in full, without the written approval of the lab.

Approved : P.K. Spence

CERTIFICATE OF ANALYSIS

Service Location	Received	Project	Lab ID
HERITAGE ENVIRONMENTAL SERVICES, INC. COMMERCIAL LABORATORY OPERATIONS 7901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8304	16-MAY-97	4315	A408113
	Complete	PO Number	
	02-JUN-97	IN21405J0025	
	Printed	Sampled	
	03-JUN-97	15-MAY-97 12:59	

Report To	Bill To
JEFF JENKINS BFI WASTE SYSTEMS 2020 LAUBSCHER ROAD EVANSVILLE, IN 47720	ALISHA CLARK BFI WASTE SYSTEMS 2211 GLENVIEW DRIVE EVANSVILLE, IN 47720

Sample Description

CLIENT ID: MW4D

FIELD TURBIDITY EPA 180.1

Analyst: S. ASKEW | Analysis Date: 15-MAY-97 | Instrument: FIELD | Test: G602.0.0

Parameter	Result	Det. Limit	Units
TURBIDITY	1.17	0.1	ntu

FIELD TEMPERATURE EPA 170.1

Analyst: S. ASKEW | Analysis Date: 15-MAY-97 | Instrument: FIELD | Test: G603.0.0

Parameter	Result	Det. Limit	Units
TEMPERATURE	15.1		Degrees C

FIELD PH (AQUEOUS) SW846-9040A

Analyst: S. ASKEW | Analysis Date: 15-MAY-97 | Instrument: FIELD | Test: G607.0.0

Parameter	Result	Det. Limit	Units
PH	6.7	0.1	Std. Units

FIELD DISSOLVED OXYGEN SAS

Analyst: S. ASKEW | Analysis Date: 15-MAY-97 | Instrument: FIELD | Test: G600.1.0

Parameter	Result	Det. Limit	Units
DISSOLVED OXYGEN	0.05		mg/L

FIELD OXIDATION-REDUCTION POTENTIAL SM2580B-18TH ED

Analyst: S. ASKEW | Analysis Date: 15-MAY-97 | Instrument: FIELD | Test: G604.7.0

Parameter	Result	Det. Limit	Units
OXIDATION/REDUCTION POTENTIAL	19		mV

FIELD SPECIFIC CONDUCTANCE SW846-9050

Analyst: S. ASKEW | Analysis Date: 15-MAY-97 | Instrument: FIELD | Test: G604.0.0

Parameter	Result	Det. Limit	Units
CONDUCTIVITY	933	1.0	umHOS/cm

AMMONIA DISTILLATION EPA 350.2

Analyst: C. PEREGRINE | Analysis Date: 22-MAY-97 08:00 | Instrument: PREP | Test: P203.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	200		mL
FINAL VOLUME	250		mL

 (continued on next page)

HERITAGE ENVIRONMENTAL SERVICES, INC. Sample ID: A408113 MW4D

AMMONIA NITROGEN EPA 350.3

Analyst: K. BUNCH Analysis Date: 23-MAY-97 09:30 Test: G203.4.0
Prep: AMMONIA DISTILLATION EPA 350.2 P203.4.0

Parameter	Result	Det. Limit	Units
NITROGEN, AMMONIA	13	0.60	mg/L
1:5 DILUTION			

CHLORIDE BY ION CHROMATOGRAPHY SW846-9056

Analyst: M. ADKINS Analysis Date: 16-MAY-97 18:17 Instrument: IC Test: G310.2.0

Parameter	Result	Det. Limit	Units
CHLORIDE	5.7	0.25	mg/L

BROMIDE BY ION CHROMATOGRAPHY SW846-9056

Analyst: M. ADKINS Analysis Date: 16-MAY-97 18:17 Instrument: IC Test: G310.4.0

Parameter	Result	Det. Limit	Units
BROMIDE	0.068	0.05	mg/L

FIELD FILTRATION SAS

Analyst: , Analysis Date: Instrument: FIELD Test: P110.0.0

FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A

Analyst: B. GRAVES Analysis Date: 19-MAY-97 14:00 Instrument: PREP Test: P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

ARSENIC TRACE ICP SW846-6010A

Analyst: A. ROBERTSON Analysis Date: 28-MAY-97 10:34 Instrument: TRACE ICP Test: M103.0.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
ARSENIC	0.024	0.0050	mg/L

SODIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:38 Instrument: ICP Test: M131.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
SODIUM	42.	0.20	mg/L

SODIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 22-MAY-97 01:57 Instrument: ICP Test: M131.3.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
SODIUM	41	0.20	mg/L

CADMIUM TRACE ICP SW846-6010A

Analyst: A. ROBERTSON Analysis Date: 28-MAY-97 10:34 Instrument: TRACE ICP Test: M108.0.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
CADMIUM	BDL	0.0010	mg/L

CHROMIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:38 Instrument: ICP Test: M110.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
CHROMIUM	BDL	0.010	mg/L

COPPER ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:38 Instrument: ICP Test: M112.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
COPPER	BDL	0.020	mg/L

ZINC ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:38 Instrument: ICP Test: M139.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
ZINC	0.050	0.020	mg/L

IRON ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:38 Instrument: ICP Test: M115.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
IRON	22.	0.025	mg/L

MAGNESIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:38 Instrument: ICP Test: M118.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
MAGNESIUM	28.	0.20	mg/L

MANGANESE ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:38 Instrument: ICP Test: M119.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
MANGANESE	0.21	0.010	mg/L

POTASSIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:38 Instrument: ICP Test: M126.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
POTASSIUM	1.8	0.20	mg/L

DISSOLVED SOLIDS EPA 160.1

Analyst: K. SULLIVAN Analysis Date: 21-MAY-97 16:00 Test: G402.7.0

Parameter	Result	Det. Limit	Units
SOLIDS	500	10	mg/L

TOTAL SUSPENDED SOLIDS EPA 160.2
Analyst: K. SULLIVAN Analysis Date: 20-MAY-97 14:00 Test: G403.7.0

Parameter	Result	Det. Limit	Units
SUSPENDED SOLIDS	57	1.0	mg/L

ALKALINITY TOTAL EPA 310.1
Analyst: C. ROBISON Analysis Date: 19-MAY-97 19:00 Test: G605.2.0

Parameter	Result	Det. Limit	Units
ALKALINITY	490	1.0	mg/L

ALKALINITY (BICARBONATE) EPA 310.1
Analyst: C. ROBISON Analysis Date: 19-MAY-97 19:00 Test: G610.2.0

Parameter	Result	Det. Limit	Units
ALKALINITY	490	1.0	mg/L

ALKALINITY (CARBONATE) EPA 310.1
Analyst: C. ROBISON Analysis Date: 19-MAY-97 19:00 Test: G611.2.0

Parameter	Result	Det. Limit	Units
ALKALINITY	BDL	1.0	mg/L

FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A
Analyst: R. DALAL Analysis Date: 20-MAY-97 10:00 Instrument: PREP Test: P130.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

ARSENIC TRACE ICP SW846-6010A
Analyst: A. ROBERTSON Analysis Date: 30-MAY-97 13:29 Instrument: TRACE ICP Test: M103.0.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
ARSENIC	0.019	0.0050	mg/L

CALCIUM ICP SW846-6010A
Analyst: A. STOCKBURGER Analysis Date: 22-MAY-97 01:57 Instrument: ICP Test: M109.3.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
CALCIUM	97.	0.20	mg/L

SULFATE BY ION CHROMATOGRAPHY SW846-9056
Analyst: M. ADKINS Analysis Date: 16-MAY-97 18:17 Instrument: IC Test: G310.7.0

Parameter	Result	Det. Limit	Units
SULFATE	BDL	0.25	mg/L

VOLATILE ORGANICS (CAPILLARY COLUMN) SW846-8260A
Analyst: H. WILLIAMS Analysis Date: 23-MAY-97 06:51 Instrument: GC/MS VOA Test: O510.6.0

Parameter	Result	Det. Limit	Units
BENZENE	BDL	5.0	ug/L
CIS-1,3-DICHLOROPROPENE	BDL	5.0	ug/L
TRANS-1,3-DICHLOROPROPENE	BDL	5.0	ug/L
ETHYL BENZENE	BDL	5.0	ug/L
BROMOMETHANE	BDL	5.0	ug/L
CARBON TETRACHLORIDE	BDL	5.0	ug/L
CHLOROBENZENE	BDL	5.0	ug/L
CHLOROETHANE	BDL	5.0	ug/L
CHLOROFORM	BDL	5.0	ug/L
CHLOROMETHANE	BDL	5.0	ug/L
1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	BDL	5.0	ug/L
1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	BDL	5.0	ug/L

 (continued on next page)

Parameter	Result	Det. Limit	Units
1,1-DICHLOROETHANE	BDL	5.0	ug/L
CIS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
TRANS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
1,1-DICHLOROETHENE	BDL	5.0	ug/L
1,2-DICHLOROETHANE	BDL	5.0	ug/L
1,2-DICHLOROPROPANE	BDL	5.0	ug/L
DICHLOROMETHANE (METHYLENE CHLORIDE)	BDL	5.0	ug/L
STYRENE	BDL	5.0	ug/L
1,1,1,2-TETRACHLOROETHANE	BDL	5.0	ug/L
1,1,2,2-TETRACHLOROETHANE	BDL	5.0	ug/L
TETRACHLOROETHENE	BDL	5.0	ug/L
TOLUENE	BDL	5.0	ug/L
1,1,1-TRICHLOROETHANE	BDL	5.0	ug/L
1,1,2-TRICHLOROETHANE	BDL	5.0	ug/L
TRICHLOROETHENE	BDL	5.0	ug/L
TRICHLOROFLUOROMETHANE	BDL	5.0	ug/L
VINYL CHLORIDE	BDL	2.0	ug/L
XYLENES (O/M/P-XYLENE)	BDL	5.0	ug/L
...			
SURROGATE RECOVERY			

DICHLOROETHANE-D4	113		% Rec
TOLUENE-D8	102		% Rec
4-BROMOFLUOROBENZENE	110		% Rec

1:5 DILUTION

BORON ICP SW846-6010A
Analyst: A. STOCKBURGER Analysis Date: 22-MAY-97 01:57 Instrument: ICP Test: M107.3.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
BORON	0.10	0.050	mg/L

BORON ICP SW846-6010A
Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:38 Instrument: ICP Test: M107.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
BORON	0.11	0.050	mg/L

BARIUM ICP SW846-6010A
Analyst: A. STOCKBURGER Analysis Date: 22-MAY-97 01:57 Instrument: ICP Test: M104.3.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
BARIUM	0.28	0.010	mg/L

BARIUM ICP SW846-6010A
Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 19:38 Instrument: ICP Test: M104.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
BARIUM	0.29	0.010	mg/L

Sample Comments

BDL Below Detection Limit

Sample chain of custody number 64131.

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Approved : P.K. Spence

CERTIFICATE OF ANALYSIS

Service Location	Received	Project	Lab ID
HERITAGE ENVIRONMENTAL SERVICES, INC. COMMERCIAL LABORATORY OPERATIONS 7901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8304	16-MAY-97	4315	A408114
	Complete	PO Number	
	02-JUN-97	IN21405J0025	
	Printed	Sampled	
	03-JUN-97	15-MAY-97 09:57	

Report To	Bill To
JEFF JENKINS BFI WASTE SYSTEMS 2020 LAUBSCHER ROAD EVANSVILLE, IN 47720	ALISHA CLARK BFI WASTE SYSTEMS 2211 GLENVIEW DRIVE EVANSVILLE, IN 47720

Sample Description

CLIENT ID: MW3R2

FIELD TURBIDITY EPA 180.1

Analyst: S. ASKEW Analysis Date: 15-MAY-97 Instrument: FIELD Test: G602.0.0

Parameter	Result	Det. Limit	Units
TURBIDITY	6.89	0.1	ntu

FIELD PH (AQUEOUS) SW846-9040A

Analyst: S. ASKEW Analysis Date: 15-MAY-97 Instrument: FIELD Test: G607.0.0

Parameter	Result	Det. Limit	Units
PH	6.9	0.1	Std. Units

FIELD TEMPERATURE EPA 170.1

Analyst: S. ASKEW Analysis Date: 15-MAY-97 Instrument: FIELD Test: G603.0.0

Parameter	Result	Det. Limit	Units
TEMPERATURE	14.1		Degrees C

FIELD DISSOLVED OXYGEN SAS

Analyst: S. ASKEW Analysis Date: 15-MAY-97 Instrument: FIELD Test: G600.1.0

Parameter	Result	Det. Limit	Units
DISSOLVED OXYGEN	1.16	1	mg/L

FIELD OXIDATION-REDUCTION POTENTIAL SM2580B-18TH ED

Analyst: S. ASKEW Analysis Date: 15-MAY-97 Instrument: FIELD Test: G604.7.0

Parameter	Result	Det. Limit	Units
OXIDATION/REDUCTION POTENTIAL	7		mV

FIELD SPECIFIC CONDUCTANCE SW846-9050

Analyst: S. ASKEW Analysis Date: 15-MAY-97 Instrument: FIELD Test: G604.0.0

Parameter	Result	Det. Limit	Units
CONDUCTIVITY	1226	1.0	umHOS/cm

AMMONIA DISTILLATION EPA 350.2

Analyst: K. BAX Analysis Date: 16-MAY-97 18:00 Instrument: PREP Test: P203.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	200		mL
FINAL VOLUME	250		mL

 (continued on next page)

AMMONIA NITROGEN EPA 350.3

Analyst: K. BUNCH Analysis Date: 19-MAY-97 10:30 Test: G203.4.0
Prep: AMMONIA DISTILLATION EPA 350.2 P203.4.0

Parameter	Result	Det. Limit	Units
NITROGEN, AMMONIA	0.26	0.12	mg/L

CHEMICAL OXYGEN DEMAND (COLORIMETRIC) EPA 410.4

Analyst: A. CLEMONS Analysis Date: 21-MAY-97 09:15 Test: G301.1.0

Parameter	Result	Det. Limit	Units
CHEMICAL OXYGEN DEMAND	BDL	10	mg/L

CHLORIDE BY ION CHROMATOGRAPHY SW846-9056

Analyst: M. ADKINS Analysis Date: 20-MAY-97 19:06 Instrument: IC Test: G310.2.0

Parameter	Result	Det. Limit	Units
CHLORIDE	51	1.3	mg/L
1:5 DILUTION			

DISSOLVED SOLIDS EPA 160.1

Analyst: K. SULLIVAN Analysis Date: 21-MAY-97 16:00 Test: G402.7.0

Parameter	Result	Det. Limit	Units
SOLIDS	750	10	mg/L

FIELD FILTRATION SAS

Analyst: . Analysis Date: [illegible] Instrument: FIELD Test: P110.0.0

FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A

Analyst: B. GRAVES Analysis Date: 19-MAY-97 14:00 Instrument: PREP Test: P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

IRON ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 18:55 Instrument: ICP Test: M115.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
IRON	0.037	0.025	mg/L

ARSENIC TRACE ICP SW846-6010A

Analyst: A. ROBERTSON Analysis Date: 28-MAY-97 09:46 Instrument: TRACE ICP Test: M103.0.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
ARSENIC	BDL	0.0050	mg/L

FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A

Analyst: R. DALAL Analysis Date: 20-MAY-97 10:00 Instrument: PREP Test: P130.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

HERITAGE ENVIRONMENTAL SERVICES, INC. Sample ID: A408114 MW3R2

ARSENIC TRACE ICP SW846-6010A

Analyst: A. ROBERTSON Analysis Date: 30-MAY-97 13:32 Instrument: TRACE ICP Test: M103.0.0

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
ARSENIC	BDL	0.0050	mg/L

VOLATILE ORGANICS (CAPILLARY COLUMN) SW846-8260A

Analyst: H. WILLIAMS Analysis Date: 23-MAY-97 07:28 Instrument: GC/MS VOA Test: 0510.6.0

Parameter	Result	Det. Limit	Units
BENZENE	BDL	5.0	ug/L
1,1-DICHLOROETHANE	BDL	5.0	ug/L
CIS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
TRANS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
DICHLOROMETHANE (METHYLENE CHLORIDE)	BDL	5.0	ug/L
TETRACHLOROETHENE	BDL	5.0	ug/L
TRICHLOROETHENE	BDL	5.0	ug/L
...			
SURROGATE RECOVERY			

DICHLOROETHANE-D4	120		% Rec
TOLUENE-D8	103		% Rec
4-BROMOFLUOROBENZENE	98		% Rec

1:5 DILUTION

Sample Comments

BDL Below Detection Limit

Sample chain of custody number 64131.

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Approved : P.K. Spence

CERTIFICATE OF ANALYSIS

Service Location	Received	Project	Lab ID
HERITAGE ENVIRONMENTAL SERVICES, INC. COMMERCIAL LABORATORY OPERATIONS 7901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8304	16-MAY-97	4315	A408115
	Complete	PO Number	
	02-JUN-97	IN21405J0025	
	Printed	Sampled	
	03-JUN-97	15-MAY-97 10:10	

Report To	Bill To
JEFF JENKINS BFI WASTE SYSTEMS 2020 LAUBSCHER ROAD EVANSVILLE, IN 47720	ALISHA CLARK BFI WASTE SYSTEMS 2211 GLENVIEW DRIVE EVANSVILLE, IN 47720

Sample Description

CLIENT ID: MW3R1

FIELD TURBIDITY EPA 180.1

Analyst: S. ASKEW Analysis Date: 15-MAY-97 Instrument: FIELD Test: G602.0.0

Parameter	Result	Det. Limit	Units
TURBIDITY	4.21	0.1	ntu

FIELD PH (AQUEOUS) SW846-9040A

Analyst: S. ASKEW Analysis Date: 15-MAY-97 Instrument: FIELD Test: G607.0.0

Parameter	Result	Det. Limit	Units
PH	6.94	0.1	Std. Unit

FIELD TEMPERATURE EPA 170.1

Analyst: S. ASKEW Analysis Date: 15-MAY-97 Instrument: FIELD Test: G603.0.0

Parameter	Result	Det. Limit	Units
TEMPERATURE	14.9		Degrees C

FIELD DISSOLVED OXYGEN SAS

Analyst: S. ASKEW Analysis Date: 15-MAY-97 Instrument: FIELD Test: G600.1.0

Parameter	Result	Det. Limit	Units
DISSOLVED OXYGEN	2.29	1	mg/L

FIELD OXIDATION-REDUCTION POTENTIAL SM2580B-18TH ED

Analyst: S. ASKEW Analysis Date: 15-MAY-97 Instrument: FIELD Test: G604.7.0

Parameter	Result	Det. Limit	Units
OXIDATION/REDUCTION POTENTIAL	9		mV

FIELD SPECIFIC CONDUCTANCE SW846-9050

Analyst: S. ASKEW Analysis Date: 15-MAY-97 Instrument: FIELD Test: G604.0.0

Parameter	Result	Det. Limit	Units
CONDUCTIVITY	1005	1.0	umHOS/cm

AMMONIA DISTILLATION EPA 350.2

Analyst: C. PEREGRINE Analysis Date: 22-MAY-97 08:00 Instrument: PREP Test: P203.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	200		mL
FINAL VOLUME	250		mL

 (continued on next page)

HERITAGE ENVIRONMENTAL SERVICES, INC. Sample ID: A408115 MW3R1

AMMONIA NITROGEN EPA 350.3

Analyst: K. BUNCH Analysis Date: 23-MAY-97 09:30 Test: G203.4.0
Prep: AMMONIA DISTILLATION EPA 350.2 P203.4.0

Parameter	Result	Det. Limit	Units
NITROGEN, AMMONIA	BDL	0.12	mg/L

CHEMICAL OXYGEN DEMAND (COLORIMETRIC) EPA 410.4

Analyst: A. CLEMONS Analysis Date: 21-MAY-97 09:15 Test: G301.1.0

Parameter	Result	Det. Limit	Units
CHEMICAL OXYGEN DEMAND	BDL	10	mg/L

CHLORIDE BY ION CHROMATOGRAPHY SW846-9056

Analyst: M. ADKINS Analysis Date: 20-MAY-97 19:24 Instrument: IC Test: G310.2.0

Parameter	Result	Det. Limit	Units
CHLORIDE	52	1.3	mg/L

1:5 DILUTION

DISSOLVED SOLIDS EPA 160.1

Analyst: K. SULLIVAN Analysis Date: 21-MAY-97 16:00 Test: G402.7.0

Parameter	Result	Det. Limit	Units
SOLIDS	740	10	mg/L

FIELD FILTRATION SAS

Analyst: . Analysis Date: Instrument: FIELD Test: P110.0.0

FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A

Analyst: B. GRAVES Analysis Date: 19-MAY-97 14:00 Instrument: PREP Test: P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

IRON ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 18:19 Instrument: ICP Test: M115.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
IRON	0.034	0.025	mg/L

ARSENIC TRACE ICP SW846-6010A

Analyst: A. ROBERTSON Analysis Date: 30-MAY-97 14:26 Instrument: TRACE ICP Test: M103.0.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
ARSENIC	BDL	0.0050	mg/L

FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A

Analyst: R. DALAL Analysis Date: 20-MAY-97 10:00 Instrument: PREP Test: P130.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

 (continued on next page)

HERITAGE ENVIRONMENTAL SERVICES, INC. Sample ID: A408115 MW3R1

ARSENIC TRACE ICP SW846-6010A

Analyst: A. ROBERTSON Analysis Date: 30-MAY-97 13:36 Instrument: TRACE ICP Test: M103.0.0

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
ARSENIC	BDL	0.0050	mg/L

VOLATILE ORGANICS (CAPILLARY COLUMN) SW846-8260A

Analyst: H. WILLIAMS Analysis Date: 23-MAY-97 08:04 Instrument: GC/MS VOA Test: 0510.6.0

Parameter	Result	Det. Limit	Units
BENZENE	BDL	5.0	ug/L
1,1-DICHLOROETHANE	BDL	5.0	ug/L
CIS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
TRANS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
DICHLOROMETHANE (METHYLENE CHLORIDE)	BDL	5.0	ug/L
TETRACHLOROETHENE	BDL	5.0	ug/L
TRICHLOROETHENE	BDL	5.0	ug/L
...			
SURROGATE RECOVERY			

DICHLOROETHANE-D4	110		% Rec
TOLUENE-D8	102		% Rec
4-BROMOFLUOROBENZENE	108		% Rec

1:5 DILUTION

Sample Comments

BDL Below Detection Limit

Sample chain of custody number 64131.

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Approved : P.K. Spence

CERTIFICATE OF ANALYSIS

Service Location	Received	Project	Lab ID
HERITAGE ENVIRONMENTAL SERVICES, INC. COMMERCIAL LABORATORY OPERATIONS 7901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8304	16-MAY-97	4315	A408116
	Complete	PO Number	
	02-JUN-97	IN21405J0025	
	Printed	Sampled	
	03-JUN-97	15-MAY-97 11:00	

Report To	Bill To
JEFF JENKINS BFI WASTE SYSTEMS 2020 LAUBSCHER ROAD EVANSVILLE, IN 47720	ALISHA CLARK BFI WASTE SYSTEMS 2211 GLENVIEW DRIVE EVANSVILLE, IN 47720

Sample Description

CLIENT ID: MW5R1

FIELD TURBIDITY EPA 180.1

Analyst: S. ASKEW Analysis Date: 15-MAY-97 Instrument: FIELD Test: G602.0.0

Parameter	Result	Det. Limit	Units
TURBIDITY	6.39	0.1	ntu

FIELD PH (AQUEOUS) SW846-9040A

Analyst: S. ASKEW Analysis Date: 15-MAY-97 Instrument: FIELD Test: G607.0.0

Parameter	Result	Det. Limit	Units
PH	6.84	0.1	Std. Units

FIELD TEMPERATURE EPA 170.1

Analyst: S. ASKEW Analysis Date: 15-MAY-97 Instrument: FIELD Test: G603.0.0

Parameter	Result	Det. Limit	Units
TEMPERATURE	14.0		Degrees C

FIELD DISSOLVED OXYGEN SAS

Analyst: S. ASKEW Analysis Date: 15-MAY-97 Instrument: FIELD Test: G600.1.0

Parameter	Result	Det. Limit	Units
DISSOLVED OXYGEN	3.36	1	mg/L

FIELD OXIDATION-REDUCTION POTENTIAL SM2580B-18TH ED

Analyst: S. ASKEW Analysis Date: 15-MAY-97 Instrument: FIELD Test: G604.7.0

Parameter	Result	Det. Limit	Units
OXIDATION/REDUCTION POTENTIAL	11		mV

FIELD SPECIFIC CONDUCTANCE SW846-9050

Analyst: S. ASKEW Analysis Date: 15-MAY-97 Instrument: FIELD Test: G604.0.0

Parameter	Result	Det. Limit	Units
CONDUCTIVITY	1134	1.0	umHOS/cm

AMMONIA DISTILLATION EPA 350.2

Analyst: C. PEREGRINE Analysis Date: 22-MAY-97 08:00 Instrument: PREP Test: P203.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	200		mL
FINAL VOLUME	250		mL

AMMONIA NITROGEN EPA 350.3

Analyst: K. BUNCH Analysis Date: 23-MAY-97 09:30 Test: G203.4.0
Prep: AMMONIA DISTILLATION EPA 350.2 P203.4.0

Parameter	Result	Det. Limit	Units
NITROGEN, AMMONIA	BDL	0.12	mg/L

CHEMICAL OXYGEN DEMAND (COLORIMETRIC) EPA 410.4

Analyst: A. CLEMONS Analysis Date: 21-MAY-97 09:15 Test: G301.1.0

Parameter	Result	Det. Limit	Units
CHEMICAL OXYGEN DEMAND	BDL	10	mg/L

CHLORIDE BY ION CHROMATOGRAPHY SW846-9056

Analyst: M. ADKINS Analysis Date: 16-MAY-97 18:17 Instrument: IC Test: G310.2.0

Parameter	Result	Det. Limit	Units
CHLORIDE	50	0.5	mg/L

DISSOLVED SOLIDS EPA 160.1

Analyst: K. SULLIVAN Analysis Date: 21-MAY-97 16:00 Test: G402.7.0

Parameter	Result	Det. Limit	Units
SOLIDS	720	10	mg/L

FIELD FILTRATION SAS

Analyst: . Analysis Date: Instrument: FIELD Test: P110.0.0

FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A

Analyst: B. GRAVES Analysis Date: 19-MAY-97 14:00 Instrument: PREP Test: P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

IRON ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 18:22 Instrument: ICP Test: M115.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
IRON	0.035	0.025	mg/L

ARSENIC TRACE ICP SW846-6010A

Analyst: A. ROBERTSON Analysis Date: 30-MAY-97 14:30 Instrument: TRACE ICP Test: M103.0.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
ARSENIC	BDL	0.0050	mg/L

FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A

Analyst: R. DALAL Analysis Date: 20-MAY-97 10:00 Instrument: PREP Test: P130.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

ARSENIC TRACE ICP SW846-6010A

Analyst: A. ROBERTSON Analysis Date: 30-MAY-97 13:46 Instrument: TRACE ICP Test: M103.0.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
ARSENIC	BDL	0.0050	mg/L

HERITAGE ENVIRONMENTAL SERVICES, INC. Sample ID: A408116 MW5R1

VOLATILE ORGANICS (CAPILLARY COLUMN) SW846-8260A
Analyst: H. WILLIAMS Analysis Date: 23-MAY-97 08:41 Instrument: GC/MS VOA Test: 0510.6.0

Parameter	Result	Det. Limit	Units
BENZENE	BDL	5.0	ug/L
1,1-DICHLOROETHANE	BDL	5.0	ug/L
CIS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
TRANS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
DICHLOROMETHANE (METHYLENE CHLORIDE)	BDL	5.0	ug/L
TETRACHLOROETHENE	BDL	5.0	ug/L
TRICHLOROETHENE	BDL	5.0	ug/L
SURROGATE RECOVERY			
DICHLOROETHANE-D4	109		% Rec
TOLUENE-D8	100		% Rec
4-BROMOFLUOROBENZENE	105		% Rec

1:5 DILUTION

Sample Comments

BDL Below Detection Limit

Sample chain of custody number 64131.

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Approved : P.K. Spence

CERTIFICATE OF ANALYSIS

Service Location	Received	Project	Lab ID
HERITAGE ENVIRONMENTAL SERVICES, INC. COMMERCIAL LABORATORY OPERATIONS 7901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8304	16-MAY-97	4315	A408117
	Complete	PO Number	
	02-JUN-97	IN21405J0025	
	Printed	Sampled	
	03-JUN-97	15-MAY-97 11:11	

Report To	Bill To
JEFF JENKINS BFI WASTE SYSTEMS 2020 LAUBSCHER ROAD EVANSVILLE, IN 47720	ALISHA CLARK BFI WASTE SYSTEMS 2211 GLENVIEW DRIVE EVANSVILLE, IN 47720

Sample Description

CLIENT ID: MW5R2

FIELD TURBIDITY EPA 180.1

Analyst: S. ASKEW Analysis Date: 15-MAY-97 Instrument: FIELD Test: G602.0.0

Parameter	Result	Det. Limit	Units
TURBIDITY	3.76	0.1	ntu

FIELD PH (AQUEOUS) SW846-9040A

Analyst: S. ASKEW Analysis Date: 15-MAY-97 Instrument: FIELD Test: G607.0.0

Parameter	Result	Det. Limit	Units
PH	6.84	0.1	Std. Unit

FIELD TEMPERATURE EPA 170.1

Analyst: S. ASKEW Analysis Date: 15-MAY-97 Instrument: FIELD Test: G603.0.0

Parameter	Result	Det. Limit	Units
TEMPERATURE	13.5		Degrees C

FIELD DISSOLVED OXYGEN SAS

Analyst: S. ASKEW Analysis Date: 15-MAY-97 Instrument: FIELD Test: G600.1.0

Parameter	Result	Det. Limit	Units
DISSOLVED OXYGEN	2.28	1	mg/L

FIELD OXIDATION-REDUCTION POTENTIAL SM2580B-18TH ED

Analyst: S. ASKEW Analysis Date: 15-MAY-97 Instrument: FIELD Test: G604.7.0

Parameter	Result	Det. Limit	Units
OXIDATION/REDUCTION POTENTIAL	11		mV

FIELD SPECIFIC CONDUCTANCE SW846-9050

Analyst: S. ASKEW Analysis Date: 15-MAY-97 Instrument: FIELD Test: G604.0.0

Parameter	Result	Det. Limit	Units
CONDUCTIVITY	1421	1.0	umHOS/cm

AMMONIA DISTILLATION EPA 350.2

Analyst: C. PEREGRINE Analysis Date: 22-MAY-97 08:00 Instrument: PREP Test: P203.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	200		mL
FINAL VOLUME	250		mL

 (continued on next page)

AMMONIA NITROGEN EPA 350.3

Analyst: K. BUNCH Analysis Date: 23-MAY-97 09:30 Test: G203.4.0
Prep: AMMONIA DISTILLATION EPA 350.2 P203.4.0

Parameter	Result	Det. Limit	Units
NITROGEN, AMMONIA	BDL	0.12	mg/L

CHEMICAL OXYGEN DEMAND (COLORIMETRIC) EPA 410.4

Analyst: A. CLEMONS Analysis Date: 21-MAY-97 09:15 Test: G301.1.0

Parameter	Result	Det. Limit	Units
CHEMICAL OXYGEN DEMAND	BDL	10	mg/L

CHLORIDE BY ION CHROMATOGRAPHY SW846-9056

Analyst: M. ADKINS Analysis Date: 16-MAY-97 18:17 Instrument: IC Test: G310.2.0

Parameter	Result	Det. Limit	Units
CHLORIDE	50	0.25	mg/L

DISSOLVED SOLIDS EPA 160.1

Analyst: K. SULLIVAN Analysis Date: 21-MAY-97 16:00 Test: G402.7.0

Parameter	Result	Det. Limit	Units
SOLIDS	950	10	mg/L

FIELD FILTRATION SAS

Analyst: . Analysis Date: Instrument: FIELD Test: P110.0.0

FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A

Analyst: B. GRAVES Analysis Date: 19-MAY-97 14:00 Instrument: PREP Test: P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

IRON ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 21-MAY-97 18:29 Instrument: ICP Test: M115.3.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
IRON	0.043	0.025	mg/L

ARSENIC TRACE ICP SW846-6010A

Analyst: A. ROBERTSON Analysis Date: 30-MAY-97 14:13 Instrument: TRACE ICP Test: M103.0.1
Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOUS SAMPLES SW846-3005A P132.4.0
Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
ARSENIC	BDL	0.0050	mg/L

FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A

Analyst: R. DALAL Analysis Date: 20-MAY-97 10:00 Instrument: PREP Test: P130.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

ARSENIC TRACE ICP SW846-6010A

Analyst: A. ROBERTSON Analysis Date: 30-MAY-97 13:12 Instrument: TRACE ICP Test: M103.0.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
ARSENIC	BDL	0.0050	mg/L

VOLATILE ORGANICS (CAPILLARY COLUMN) SW846-8260A

Analyst: H. WILLIAMS Analysis Date: 27-MAY-97 07:23 Instrument: GC/MS VOA Test: 0510.6.0

Parameter	Result	Det. Limit	Units
BENZENE	BDL	5.0	ug/L
1,1-DICHLOROETHANE	BDL	5.0	ug/L
CIS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
TRANS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
DICHLOROMETHANE (METHYLENE CHLORIDE)	BDL	5.0	ug/L
TETRACHLOROETHENE	BDL	5.0	ug/L
TRICHLOROETHENE	BDL	5.0	ug/L
SURROGATE RECOVERY			
DICHLOROETHANE-D4	122		% Rec
TOLUENE-D8	87		% Rec
4-BROMOFLUOROBENZENE	112		% Rec

Sample reanalyzed with no improvement in internal standard areas.
Sample reanalyzed with no improvement in surrogate recovery.
1:5 dilution

Sample Comments

BDL Below Detection Limit

Sample chain of custody number 64131.

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Approved : P.K. Spence

CERTIFICATE OF ANALYSIS

Service Location	Received	Project	Lab ID
HERITAGE ENVIRONMENTAL SERVICES, INC. COMMERCIAL LABORATORY OPERATIONS 7901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8304	16-MAY-97	4315	A408118
	Complete	PO Number	
	02-JUN-97	IN21405J0025	
	Printed	Sampled	
	04-JUN-97	12-MAY-97	

Report To	Bill To
JEFF JENKINS BFI WASTE SYSTEMS 2020 LAUBSCHER ROAD EVANSVILLE, IN 47720	ALISHA CLARK BFI WASTE SYSTEMS 2211 GLENVIEW DRIVE EVANSVILLE, IN 47720

Sample Description

CLIENT ID: TRIP BLANK

AMMONIA DISTILLATION EPA 350.2

Analyst: C. PEREGRINE Analysis Date: 22-MAY-97 08:00 Instrument: PREP Test: P203.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	200		mL
FINAL VOLUME	250		mL

AMMONIA NITROGEN EPA 350.3

Analyst: K. BUNCH Analysis Date: 23-MAY-97 09:30 Test: G203.4.0

Prep: AMMONIA DISTILLATION EPA 350.2 P203.4.0

Parameter	Result	Det. Limit	Units
NITROGEN, AMMONIA	BDL	0.12	mg/L

CHLORIDE BY ION CHROMATOGRAPHY SW846-9056

Analyst: M. ADKINS Analysis Date: 16-MAY-97 18:17 Instrument: IC Test: G310.2.0

Parameter	Result	Det. Limit	Units
CHLORIDE	BDL	0.25	mg/L

FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A

Analyst: R. DALAL Analysis Date: 20-MAY-97 10:00 Instrument: PREP Test: P130.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

ARSENIC TRACE ICP SW846-6010A

Analyst: A. ROBERTSON Analysis Date: 30-MAY-97 13:49 Instrument: TRACE ICP Test: M103.0.0

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
ARSENIC	BDL	0.0050	mg/L

CALCIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 22-MAY-97 02:10 Instrument: ICP Test: M109.3.0

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
CALCIUM	0.24	0.20	mg/L

prep blank was 0.24 mg/l

 (continued on next page)

HERITAGE ENVIRONMENTAL SERVICES, INC. Sample ID: A408118 TRIP BLANK

SODIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 22-MAY-97 02:10 Instrument: ICP Test: M131.3.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
SODIUM	0.22	0.20	mg/L

CADMIUM TRACE ICP SW846-6010A

Analyst: A. ROBERTSON Analysis Date: 30-MAY-97 13:49 Instrument: TRACE ICP Test: M108.0.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
CADMIUM	BDL	0.0010	mg/L

CHROMIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 22-MAY-97 02:10 Instrument: ICP Test: M110.3.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
CHROMIUM	BDL	0.010	mg/L

COPPER ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 22-MAY-97 02:10 Instrument: ICP Test: M112.3.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
COPPER	BDL	0.020	mg/L

ZINC ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 22-MAY-97 02:10 Instrument: ICP Test: M139.3.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
ZINC	BDL	0.020	mg/L

IRON ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 22-MAY-97 02:10 Instrument: ICP Test: M115.3.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
IRON	0.030	0.025	mg/L

MAGNESIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 22-MAY-97 02:10 Instrument: ICP Test: M118.3.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
MAGNESIUM	BDL	0.20	mg/L

MANGANESE ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 22-MAY-97 02:10 Instrument: ICP Test: M119.3.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
MANGANESE	BDL	0.010	mg/L

POTASSIUM ICP SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 22-MAY-97 02:10 Instrument: ICP Test: M126.3.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
POTASSIUM	BDL	0.20	mg/L

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HERITAGE ENVIRONMENTAL SERVICES, INC. Sample ID: A408118 TRIP BLANK

DISSOLVED SOLIDS EPA 160.1

Analyst: K. SULLIVAN Analysis Date: 19-MAY-97 15:00 Test: G402.7.0

Parameter	Result	Det. Limit	Units
SOLIDS	BDL	10	mg/L

TOTAL SUSPENDED SOLIDS EPA 160.2

Analyst: K. SULLIVAN Analysis Date: 19-MAY-97 19:00 Test: G403.7.0

Parameter	Result	Det. Limit	Units
SUSPENDED SOLIDS	BDL	1	mg/L

ALKALINITY TOTAL EPA 310.1

Analyst: C. ROBISON Analysis Date: 19-MAY-97 19:00 Test: G605.2.0

Parameter	Result	Det. Limit	Units
ALKALINITY	BDL	1.0	mg/L

ALKALINITY (BICARBONATE) EPA 310.1

Analyst: C. ROBISON Analysis Date: 19-MAY-97 19:00 Test: G610.2.0

Parameter	Result	Det. Limit	Units
ALKALINITY	BDL	1.0	mg/L

ALKALINITY (CARBONATE) EPA 310.1

Analyst: C. ROBISON Analysis Date: 19-MAY-97 19:00 Test: G611.2.0

Parameter	Result	Det. Limit	Units
ALKALINITY	BDL	1.0	mg/L

SULFATE BY ION CHROMATOGRAPHY SW846-9056

Analyst: M. ADKINS Analysis Date: 16-MAY-97 18:17 Instrument: IC Test: G310.7.0

Parameter	Result	Det. Limit	Units
SULFATE	BDL	0.25	mg/L

VOLATILE ORGANICS (CAPILLARY COLUMN) SW846-8260A

Analyst: H. WILLIAMS Analysis Date: 23-MAY-97 09:55 Instrument: GC/MS VOA Test: O510.6.0

Parameter	Result	Det. Limit	Units
BENZENE	BDL	5.0	ug/L
CIS-1,3-DICHLOROPROPENE	BDL	5.0	ug/L
TRANS-1,3-DICHLOROPROPENE	BDL	5.0	ug/L
ETHYL BENZENE	BDL	5.0	ug/L
BROMOMETHANE	BDL	5.0	ug/L
CARBON TETRACHLORIDE	BDL	5.0	ug/L
CHLOROBENZENE	BDL	5.0	ug/L
CHLOROETHANE	BDL	5.0	ug/L
CHLOROFORM	BDL	5.0	ug/L
CHLOROMETHANE	BDL	5.0	ug/L
1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	BDL	5.0	ug/L
1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	BDL	5.0	ug/L
1,1-DICHLOROETHANE	BDL	5.0	ug/L
CIS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
TRANS-1,2-DICHLOROETHENE	BDL	5.0	ug/L
1,1-DICHLOROETHENE	BDL	5.0	ug/L
1,2-DICHLOROETHANE	BDL	5.0	ug/L
1,2-DICHLOROPROPANE	BDL	5.0	ug/L
DICHLOROMETHANE (METHYLENE CHLORIDE)	BDL	5.0	ug/L
STYRENE	BDL	5.0	ug/L
1,1,1,2-TETRACHLOROETHANE	BDL	5.0	ug/L
1,1,2,2-TETRACHLOROETHANE	BDL	5.0	ug/L
TETRACHLOROETHENE	BDL	5.0	ug/L
TOLUENE	BDL	5.0	ug/L
1,1,1-TRICHLOROETHANE	BDL	5.0	ug/L

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HERITAGE ENVIRONMENTAL SERVICES, INC. Sample ID: A408118 TRIP BLANK

Parameter	Result	Det. Limit	Units
1,1,2-TRICHLOROETHANE	BDL	5.0	ug/L
TRICHLOROETHENE	BDL	5.0	ug/L
TRICHLOROFLUOROMETHANE	BDL	5.0	ug/L
VINYL CHLORIDE	BDL	2.0	ug/L
XYLENES (O/M/P-XYLENE)	BDL	5.0	ug/L
SURROGATE RECOVERY			
DICHLOROETHANE-D4	118		% Rec
TOLUENE-D8	92		% Rec
4-BROMOFLUOROBENZENE	92		% Rec

1:5 DILUTION

Sample Comments

BDL Below Detection Limit

Sample chain of custody number 64142.

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Approved : P.K. Spence

QUALITY ASSURANCE REPORT

Service Location
RITAGE ENVIRONMENTAL SERVICES, INC.
COMMERCIAL LABORATORY OPERATIONS
7901 W. MORRIS ST.
INDIANAPOLIS, IN 46231
(317)243-8304

Report Date
04-JUN-97

Submitter
BFI WASTE SYSTEMS
JEFF JENKINS
2020 LAUBSCHER ROAD
EVANSVILLE, IN 47720

Client ID	Lab ID	Date-Time Sampled	Date Received	Date Complete	Description
MW 14D	A407830	13-MAY-97 11:05	14-MAY-97	04-JUN-97	
MW 13D	A407859	13-MAY-97 12:55	14-MAY-97	04-JUN-97	
MW 11R	A407861	13-MAY-97 14:06	14-MAY-97	04-JUN-97	
MW 14D DUP	A407862	13-MAY-97 11:05	14-MAY-97	04-JUN-97	
FIELD BLANK	A407863	13-MAY-97 14:40	14-MAY-97	02-JUN-97	
MW 10R	A407957	14-MAY-97 08:00	15-MAY-97	02-JUN-97	DESCRIPTION: GROUNDWATER
MW 14R	A407958	14-MAY-97 08:30	15-MAY-97	02-JUN-97	DESCRIPTION: GROUNDWATER
MW 13R	A407959	14-MAY-97 09:00	15-MAY-97	02-JUN-97	DESCRIPTION: GROUNDWATER
MW 2R	A407960	14-MAY-97 10:50	15-MAY-97	02-JUN-97	DESCRIPTION: GROUNDWATER
MW 12I	A407961	14-MAY-97 10:19	15-MAY-97	02-JUN-97	DESCRIPTION: GROUNDWATER
15D	A407962	14-MAY-97 15:09	15-MAY-97	02-JUN-97	DESCRIPTION: GROUNDWATER
WHOLE 4	A408104	15-MAY-97 08:45	16-MAY-97	02-JUN-97	DESCRIPTION: GROUNDWATER
BRINE	A408105	15-MAY-97 09:15	16-MAY-97	03-JUN-97	DESCRIPTION: GROUNDWATER
MW336	A408106	15-MAY-97 09:36	16-MAY-97	03-JUN-97	DESCRIPTION: GROUNDWATER
MW3R	A408107	15-MAY-97 10:20	16-MAY-97	02-JUN-97	DESCRIPTION: GROUNDWATER
MW5R	A408108	15-MAY-97 10:45	16-MAY-97	02-JUN-97	DESCRIPTION: GROUNDWATER
MW337	A408109	15-MAY-97 11:30	16-MAY-97	02-JUN-97	DESCRIPTION: GROUNDWATER
MW4R	A408110	15-MAY-97 11:45	16-MAY-97	02-JUN-97	DESCRIPTION: GROUNDWATER
MW4RDUP	A408112	15-MAY-97 11:45	16-MAY-97	02-JUN-97	DESCRIPTION: GROUNDWATER
MW4D	A408113	15-MAY-97 12:59	16-MAY-97	02-JUN-97	DESCRIPTION: GROUNDWATER
MW3R2	A408114	15-MAY-97 09:57	16-MAY-97	02-JUN-97	DESCRIPTION: GROUNDWATER
MW3R1	A408115	15-MAY-97 10:10	16-MAY-97	02-JUN-97	DESCRIPTION: GROUNDWATER
MW5R1	A408116	15-MAY-97 11:00	16-MAY-97	02-JUN-97	DESCRIPTION: GROUNDWATER
MW5R2	A408117	15-MAY-97 11:11	16-MAY-97	02-JUN-97	DESCRIPTION: GROUNDWATER
TRIP BLANK	A408118	12-MAY-97	16-MAY-97	02-JUN-97	DESCRIPTION: GROUNDWATER

HERITAGE ENVIRONMENTAL SERVICES, INC.

AMMONIA NITROGEN EPA 350.3 G203.4

Prep: AMMONIA DISTILLATION EPA 350.2

Run: R322467 Analyst.: K BAX Run Date...: 15-MAY-97
PREP Reviewer: K FULLMER Review Date: 19-MAY-97

QC Type	Lab ID	Source	Anal Run
BLA02	Q687481		R322471
LFB02	Q687482		R322471
SAMPLE	A407859	Rep: 0	R322471
SPI02	Q687483	A407859	R322471
DPS02	Q687484	A407859	R322471
SAMPLE	A407862	Rep: 0	R322471
DUP02	Q687487	A407862	R322471
SAMPLE	A407863	Rep: 0	R322471
SAMPLE	A407861	Rep: 0	R322471
SAMPLE	A407830	Rep: 0	R322471
SAMPLE	A407958	Rep: 0	R322471
SAMPLE	A407957	Rep: 0	R322471

Run: R322632 Analyst.: K BAX Run Date...: 16-MAY-97
PREP Reviewer: B SHRAKE Review Date: 20-MAY-97

BLA02	Q688378		R322606
LFB02	Q688379		R322606
SAMPLE	A408114	Rep: 0	R322606
SPI02	Q688380	A408114	R322606
DPS02	Q688381	A408114	R322606
DUP02	Q688382	A407413	R322606
BLA02	Q688383		R322606
LFB02	Q688384		R322606
[illegible]P02	Q688387	C185668	R322606
SAMPLE	A407959	Rep: 0	R322606
SAMPLE	A407960	Rep: 0	R322606
SAMPLE	A407961	Rep: 0	R322606
SAMPLE	A407962	Rep: 0	R322606
SAMPLE	A408109	Rep: 0	R322606
SAMPLE	A408104	Rep: 0	R322606

Run: R323078 Analyst.: C PEREGRINE Run Date...: 22-MAY-97
PREP Reviewer: K FULLMER Review Date: 27-MAY-97

BLA02	Q689999		R323018
LFB02	Q690000		R323018
SPI02	Q690001	A407736	R323018
DPS02	Q690002	A407736	R323018
SAMPLE	A408105	Rep: 0	R323018
DUP02	Q690005	A408105	R323018
SAMPLE	A408106	Rep: 0	R323018
SAMPLE	A408107	Rep: 0	R323018
SAMPLE	A408108	Rep: 0	R323018
SAMPLE	A408110	Rep: 0	R323018
SAMPLE	A408112	Rep: 0	R323018
SAMPLE	A408113	Rep: 0	R323018
SAMPLE	A408115	Rep: 0	R323018
SAMPLE	A408116	Rep: 0	R323018
SAMPLE	A408117	Rep: 0	R323018
SAMPLE	A408118	Rep: 0	R323018
[illegible]A02	Q690010		R323018
[illegible]FB02	Q690011		R323018

HERITAGE ENVIRONMENTAL SERVICES, INC.

Run: R322471 Analyst.: K BUNCH Run Date...: 16-MAY-97
ANALYTICAL Reviewer: K FULLMER Review Date: 19-MAY-97

Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
[illegible]	Q687478		NITROGEN, AMMONIA			0.0578	mg/L		
ICV01	Q687479		NITROGEN, AMMONIA	0.838		0.784	mg/L	93.6	
CDL01	Q687480		NITROGEN, AMMONIA	0.1		0.109	mg/L	109	
BLA02	Q687481		NITROGEN, AMMONIA			0.0722	mg/L		
LFB02	Q687482		NITROGEN, AMMONIA	5		4.4	mg/L	88	
SAMPLE	A407859		See Cert. of Analysis, Rep: 0						
SPI02	Q687483	A407859	NITROGEN, AMMONIA	0.65	2.5	2.96	mg/L	92.4	
DPS02	Q687484	A407859	NITROGEN, AMMONIA	0.65	2.5	2.96	mg/L	92.4	0
BLA01	Q687485		NITROGEN, AMMONIA			0.0555	mg/L		
CCV	Q687486		NITROGEN, AMMONIA	1		0.883	mg/L	88.3	
SAMPLE	A407862		See Cert. of Analysis, Rep: 0						
DUP02	Q687487	A407862	NITROGEN, AMMONIA	8.1		7.8	mg/L		3.8
SAMPLE	A407863		See Cert. of Analysis, Rep: 0						
SAMPLE	A407861		See Cert. of Analysis, Rep: 0						
SAMPLE	A407830		See Cert. of Analysis, Rep: 0						
SAMPLE	A407958		See Cert. of Analysis, Rep: 0						
BLA01	Q687488		NITROGEN, AMMONIA			0.0534	mg/L		
CCV	Q687489		NITROGEN, AMMONIA	1		0.955	mg/L	95.5	
SAMPLE	A407957		See Cert. of Analysis, Rep: 0						
BLA01	Q687490		NITROGEN, AMMONIA			0.0456	mg/L		
CCV	Q687491		NITROGEN, AMMONIA	1		0.883	mg/L	88.3	

Run: R322606 Analyst.: K BUNCH Run Date...: 19-MAY-97
ANALYTICAL Reviewer: B SHRAKE Review Date: 20-MAY-97

BLA01	Q688388		NITROGEN, AMMONIA			0.0486	mg/L		
ICV01	Q688389		NITROGEN, AMMONIA	0.838		0.808	mg/L	96.4	
[illegible]	Q688390		NITROGEN, AMMONIA	0.1		0.112	mg/L	112	
BLA02	Q688378		NITROGEN, AMMONIA			0.0976	mg/L		
LFB02	Q688379		NITROGEN, AMMONIA	5		4.55	mg/L	91	
SAMPLE	A408114		See Cert. of Analysis, Rep: 0						
SPI02	Q688380	A408114	NITROGEN, AMMONIA	0.13	2.5	2.23	mg/L	84	
DPS02	Q688381	A408114	NITROGEN, AMMONIA	0.13	2.5	2.23	mg/L	84	0
BLA01	Q688391		NITROGEN, AMMONIA			0.0467	mg/L		
CCV	Q688392		NITROGEN, AMMONIA	1		1.03	mg/L	103	
DUP02	Q688382	A407413	NITROGEN, AMMONIA	13000		12000	mg/L		8
BLA02	Q688383		NITROGEN, AMMONIA			0.0863	mg/L		
LFB02	Q688384		NITROGEN, AMMONIA	5		4.31	mg/L	86.2	
DUP02	Q688387	C185668	NITROGEN, AMMONIA	0		BDL	mg/L		
SAMPLE	A407959		See Cert. of Analysis, Rep: 0						
SAMPLE	A407960		See Cert. of Analysis, Rep: 0						
SAMPLE	A407961		See Cert. of Analysis, Rep: 0						
SAMPLE	A407962		See Cert. of Analysis, Rep: 0						
BLA01	Q688399		NITROGEN, AMMONIA			0.0268	mg/L		
CCV	Q688400		NITROGEN, AMMONIA	1		0.923	mg/L	92.3	
SAMPLE	A408109		See Cert. of Analysis, Rep: 0						
SAMPLE	A408104		See Cert. of Analysis, Rep: 0						
BLA01	Q688401		NITROGEN, AMMONIA			0.0586	mg/L		
CCV	Q688402		NITROGEN, AMMONIA	1		0.962	mg/L	96.2	

Run: R323018 Analyst.: K BUNCH Run Date...: 23-MAY-97
ANALYTICAL Reviewer: K FULLMER Review Date: 27-MAY-97

BLA01	Q689996		NITROGEN, AMMONIA			0.0604	mg/L		
[illegible]01	Q689997		NITROGEN, AMMONIA	0.838		0.88	mg/L	105	
[illegible]1	Q689998		NITROGEN, AMMONIA	0.1		0.104	mg/L	104	

HERITAGE ENVIRONMENTAL SERVICES, INC.

QC Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
BLA02	Q689999		NITROGEN, AMMONIA			0.0953	mg/L		
LFB02	Q690000		NITROGEN, AMMONIA	5		4.28	mg/L	85.6	
MS02	Q690001	A407736	NITROGEN, AMMONIA	0	2.5	2.39	mg/L	95.6	
DPS02	Q690002	A407736	NITROGEN, AMMONIA	0	2.5	2.3	mg/L	92	3.8
CCV	Q690004		NITROGEN, AMMONIA	1		1.03	mg/L	103	
SAMPLE	A408105		See Cert. of Analysis, Rep: 0						
DUP02	Q690005	A408105	NITROGEN, AMMONIA	5.2		5.8	mg/L		10.9
SAMPLE	A408106		See Cert. of Analysis, Rep: 0						
SAMPLE	A408107		See Cert. of Analysis, Rep: 0						
SAMPLE	A408108		See Cert. of Analysis, Rep: 0						
SAMPLE	A408110		See Cert. of Analysis, Rep: 0						
SAMPLE	A408112		See Cert. of Analysis, Rep: 0						
SAMPLE	A408113		See Cert. of Analysis, Rep: 0						
BLA01	Q690006		NITROGEN, AMMONIA			0.0479	mg/L		
CCV	Q690007		NITROGEN, AMMONIA	1		0.989	mg/L	98.9	
SAMPLE	A408115		See Cert. of Analysis, Rep: 0						
SAMPLE	A408116		See Cert. of Analysis, Rep: 0						
SAMPLE	A408117		See Cert. of Analysis, Rep: 0						
SAMPLE	A408118		See Cert. of Analysis, Rep: 0						
BLA01	Q690008		NITROGEN, AMMONIA			0.0379	mg/L		
CCV	Q690009		NITROGEN, AMMONIA	1		0.952	mg/L	95.2	
BLA02	Q690010		NITROGEN, AMMONIA			0.0394	mg/L		
LFB02	Q690011		NITROGEN, AMMONIA	5		4.81	mg/L	96.2	

CHEMICAL OXYGEN DEMAND (COLORIMETRIC) EPA 410.4 G301.1

Run: R322776 Analyst.: A CLEMONS Run Date....: 21-MAY-97
ANALYTICAL Reviewer: K FULLMER Review Date: 22-MAY-97

QC Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
BLA01	Q689000		CHEMICAL OXYGEN DEMAND			-2.33	mg/L		
CDL01	Q689001		CHEMICAL OXYGEN DEMAND	30		28	mg/L	93.3	
ICV01	Q689002		CHEMICAL OXYGEN DEMAND	84.4		78.4	mg/L	92.9	
SAMPLE	A408114		See Cert. of Analysis, Rep: 0						
DUP01	Q689003	A408114	CHEMICAL OXYGEN DEMAND	0		BDL	mg/L		
SAMPLE	A408115		See Cert. of Analysis, Rep: 0						
SPI01	Q689004	A408115	CHEMICAL OXYGEN DEMAND	0	50	59.6	mg/L	119.2	
BLA01	Q689005		CHEMICAL OXYGEN DEMAND			-.028	mg/L		
CCV	Q689006		CHEMICAL OXYGEN DEMAND	100		107.7	mg/L	107.7	
SAMPLE	A408116		See Cert. of Analysis, Rep: 0						
DUP01	Q689007	A408116	CHEMICAL OXYGEN DEMAND	0		BDL	mg/L		
SAMPLE	A408117		See Cert. of Analysis, Rep: 0						
SPI01	Q689008	A408117	CHEMICAL OXYGEN DEMAND	0	50	51.4	mg/L	102.8	
BLA01	Q689009		CHEMICAL OXYGEN DEMAND			1.29	mg/L		
CCV	Q689010		CHEMICAL OXYGEN DEMAND	100		99.8	mg/L	99.8	

CHLORIDE BY ION CHROMATOGRAPHY SW846-9056 G310.2

Run: R322240 Analyst.: M ADKINS Run Date...: 14-MAY-97 Instrument: IC
ANALYTICAL Reviewer: S BROTHERTON Review Date: 15-MAY-97

QC Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
BLA01	Q686312		CHLORIDE			< 0.1	mg/L		
CCVL	Q686313		CHLORIDE	1.25		1.27	mg/L	101.6	

HERITAGE ENVIRONMENTAL SERVICES, INC.

QC Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
CCVH	Q686314		CHLORIDE	12.5		11.5	mg/L	92	
[illegible]1	Q686315		CHLORIDE	2.5		2.41	mg/L	96.4	
[illegible]PLE	A407830		See Cert. of Analysis, Rep: 0						
CCVL	Q686316		CHLORIDE	1.25		1.28	mg/L	102.4	
CCVH	Q686317		CHLORIDE	12.5		11.6	mg/L	92.8	
BLA01	Q686318		CHLORIDE			< 0.1	mg/L		
SPI01	Q686319	A407838	CHLORIDE	57.1	12.5	71	mg/L	111.2	
DPS01	Q686320	A407838	CHLORIDE	57.1	12.5	70.9	mg/L	110.4	.7

Run: R322447 Analyst.: M ADKINS Run Date...: 15-MAY-97 Instrument: IC
ANALYTICAL Reviewer: S BROTHERTON Review Date: 19-MAY-97

BLA01	Q687313		CHLORIDE			< 0.1	mg/L		
CCVL	Q687314		CHLORIDE	1.25		1.27	mg/L	101.6	
CCVH	Q687315		CHLORIDE	12.5		11.5	mg/L	92	
LFB01	Q687316		CHLORIDE	2.5		2.36	mg/L	94.4	
SAMPLE	A407859		See Cert. of Analysis, Rep: 0						
SPI01	Q687326	A407859	CHLORIDE	23.5	12.5	35.4	mg/L	95.2	
DPS01	Q687327	A407859	CHLORIDE	23.5	12.5	35.5	mg/L	96	.8
SAMPLE	A407861		See Cert. of Analysis, Rep: 0						
SAMPLE	A407862		See Cert. of Analysis, Rep: 0						
SAMPLE	A407863		See Cert. of Analysis, Rep: 0						
SAMPLE	A407957		See Cert. of Analysis, Rep: 0						
CCVL	Q687328		CHLORIDE	1.25		1.31	mg/L	104.8	
CCVH	Q687329		CHLORIDE	12.5		11.6	mg/L	92.8	
BLA01	Q687330		CHLORIDE			< 0.1	mg/L		

Run: R322534 Analyst.: M ADKINS Run Date...: 16-MAY-97 Instrument: IC
ANALYTICAL Reviewer: S BROTHERTON Review Date: 20-MAY-97

[illegible]LA01	Q687666		CHLORIDE			< 0.1	mg/L		
[illegible]L	Q687667		CHLORIDE	1.25		1.23	mg/L	98.4	
CCVH	Q687668		CHLORIDE	12.5		11.4	mg/L	91.2	
LFB01	Q687669		CHLORIDE	2.5		2.399	mg/L	96	
SAMPLE	A407958		See Cert. of Analysis, Rep: 0						
SAMPLE	A407959		See Cert. of Analysis, Rep: 0						
SPI01	Q687670	A407959	CHLORIDE	5.31	2.5	7.92	mg/L	104.4	
DPS01	Q687671	A407959	CHLORIDE	5.31	2.5	7.96	mg/L	106	1.5
SAMPLE	A407960		See Cert. of Analysis, Rep: 0						
SAMPLE	A407961		See Cert. of Analysis, Rep: 0						
SAMPLE	A407962		See Cert. of Analysis, Rep: 0						
CCVL	Q687672		CHLORIDE	1.25		1.26	mg/L	100.8	
CCVH	Q687673		CHLORIDE	12.5		11.5	mg/L	92	
BLA01	Q687674		CHLORIDE			< 0.1	mg/L		
SAMPLE	A408104		See Cert. of Analysis, Rep: 0						
SAMPLE	A408106		See Cert. of Analysis, Rep: 0						
SPI01	Q687675	A408106	CHLORIDE	37	5	42.2	mg/L	104	
DPS01	Q687676	A408106	CHLORIDE	37	5	41.8	mg/L	96	8
SAMPLE	A408107		See Cert. of Analysis, Rep: 0						
SAMPLE	A408109		See Cert. of Analysis, Rep: 0						
CCVL	Q687677		CHLORIDE	1.25		1.29	mg/L	103.2	
CCVH	Q687678		CHLORIDE	12.5		11.5	mg/L	92	
BLA01	Q687679		CHLORIDE			< 0.1	mg/L		
SAMPLE	A408110		See Cert. of Analysis, Rep: 0						
SAMPLE	A408112		See Cert. of Analysis, Rep: 0						
SAMPLE	A408113		See Cert. of Analysis, Rep: 0						
[illegible]I01	Q687682	A408113	CHLORIDE	5.16	2.5	7.34	mg/L	87.2	
[illegible]S01	Q687683	A408113	CHLORIDE	5.16	2.5	7.41	mg/L	90	3.2

HERITAGE ENVIRONMENTAL SERVICES, INC.

QC Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
SAMPLE	A408116		See Cert. of Analysis, Rep: 0						
MPLE	A408117		See Cert. of Analysis, Rep: 0						
MPLE	A408118		See Cert. of Analysis, Rep: 0						
CCVL	Q687691		CHLORIDE	1.25		1.31	mg/L	104.8	
CCVH	Q687692		CHLORIDE	12.5		11.6	mg/L	92.8	
BLA01	Q687693		CHLORIDE			< 0.1	mg/L		

Run: R322770 Analyst.: M ADKINS Run Date...: 20-MAY-97 Instrument: IC
ANALYTICAL Reviewer: S BROTHERTON Review Date: 22-MAY-97

BLA01	Q688842		CHLORIDE			< 0.1	mg/L		
CCVL	Q688843		CHLORIDE	1.25		1.29	mg/L	103.2	
CCVH	Q688844		CHLORIDE	12.5		12.8	mg/L	102.4	
LFB01	Q688845		CHLORIDE	2.5		2.71	mg/L	108.4	
SPI01	Q688848	A408192	CHLORIDE	78.4	12.5	91.9	mg/L	108	
DPS01	Q688850	A408192	CHLORIDE	78.4	12.5	92.4	mg/L	112	3.6
SAMPLE	A408105		See Cert. of Analysis, Rep: 0						
SAMPLE	A408108		See Cert. of Analysis, Rep: 0						
SAMPLE	A408114		See Cert. of Analysis, Rep: 0						
SAMPLE	A408115		See Cert. of Analysis, Rep: 0						
CCVL	Q688857		CHLORIDE	1.25		1.27	mg/L	101.6	
CCVH	Q688860		CHLORIDE	12.5		12.8	mg/L	102.4	
BLA01	Q688862		CHLORIDE			< 0.1	mg/L		

BROMIDE BY ION CHROMATOGRAPHY SW846-9056 G310.4

Run: R322447 Analyst.: M ADKINS Run Date...: 15-MAY-97 Instrument: IC
ANALYTICAL Reviewer: S BROTHERTON Review Date: 19-MAY-97

Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
LFB01	Q687316		BROMIDE	1		1	mg/L	100	
CCVL	Q687323		BROMIDE	0.5		0.519	mg/L	103.8	
CCVH	Q687324		BROMIDE	5		4.72	mg/L	94.4	
BLA01	Q687325		BROMIDE			< 0.02	mg/L		
SAMPLE	A407859		See Cert. of Analysis, Rep: 0						
SPI01	Q687326	A407859	BROMIDE	0	5	5.22	mg/L	104.4	
DPS01	Q687327	A407859	BROMIDE	0	5	5.11	mg/L	102.2	2.1
SAMPLE	A407861		See Cert. of Analysis, Rep: 0						
CCVL	Q687328		BROMIDE	0.5		0.538	mg/L	107.6	
CCVH	Q687329		BROMIDE	5		4.67	mg/L	93.4	
BLA01	Q687330		BROMIDE			< 0.02	mg/L		

Run: R322534 Analyst.: M ADKINS Run Date...: 16-MAY-97 Instrument: IC
ANALYTICAL Reviewer: S BROTHERTON Review Date: 20-MAY-97

LFB01	Q687669		BROMIDE	1		0.971	mg/L	97.1	
CCVL	Q687672		BROMIDE	0.5		0.527	mg/L	105.4	
CCVH	Q687673		BROMIDE	5		4.56	mg/L	91.2	
BLA01	Q687674		BROMIDE			< 0.02	mg/L		
SAMPLE	A408104		See Cert. of Analysis, Rep: 0						
SAMPLE	A408105		See Cert. of Analysis, Rep: 0						
SPI01	Q687675	A408106	BROMIDE	0.183	2	2.13	mg/L	97.4	
DPS01	Q687676	A408106	BROMIDE	0.183	2	2.12	mg/L	96.9	.5
SAMPLE	A408108		See Cert. of Analysis, Rep: 0						
CCVL	Q687677		BROMIDE	0.5		0.497	mg/L	99.4	
CCVH	Q687678		BROMIDE	5		4.54	mg/L	90.8	
A01	Q687679		BROMIDE			< 0.002	mg/L		
SAMPLE	A408110		See Cert. of Analysis, Rep: 0						

HERITAGE ENVIRONMENTAL SERVICES, INC.

QC Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
SAMPLE	A408112		See Cert. of Analysis, Rep: 0						
[illegible]E	A408113		See Cert. of Analysis, Rep: 0						
[illegible]1	Q687682	A408113	BROMIDE	0.061	1	1	mg/L	93.9	
DPS01	Q687683	A408113	BROMIDE	0.061	1	1.03	mg/L	96.9	3.1
CCVL	Q687691		BROMIDE	0.5		0.498	mg/L	99.6	
CCVH	Q687692		BROMIDE	5		4.51	mg/L	90.2	
BLA01	Q687693		BROMIDE			< 0.02	mg/L		

SULFATE BY ION CHROMATOGRAPHY SW846-9056 G310.7

Run: R322240 Analyst.: M ADKINS Run Date...: 14-MAY-97 Instrument: IC
ANALYTICAL Reviewer: S BROTHERTON Review Date: 15-MAY-97

QC Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
BLA01	Q686312		SULFATE			< 0.1	mg/L		
CCVL	Q686313		SULFATE	2.5		2.55	mg/L	102	
CCVH	Q686314		SULFATE	25		23.3	mg/L	93.2	
LFB01	Q686315		SULFATE	5		4.86	mg/L	97.2	
SAMPLE	A407830		See Cert. of Analysis, Rep: 0						
CCVL	Q686316		SULFATE	2.5		2.53	mg/L	101.2	
CCVH	Q686317		SULFATE	25		23.4	mg/L	93.6	
BLA01	Q686318		SULFATE			< 0.1	mg/L		
SPI01	Q686319	A407838	SULFATE	124	25	152	mg/L	112	
DPS01	Q686320	A407838	SULFATE	124	25	152	mg/L	112	0

Run: R322447 Analyst.: M ADKINS Run Date...: 15-MAY-97 Instrument: IC
ANALYTICAL Reviewer: S BROTHERTON Review Date: 19-MAY-97

[illegible]A01	Q687313		SULFATE			< 0.1	mg/L		
[illegible]	Q687314		SULFATE	2.5		2.49	mg/L	99.6	
CCVH	Q687315		SULFATE	25		23.2	mg/L	92.8	
LFB01	Q687316		SULFATE	5		4.91	mg/L	98.2	
SAMPLE	A407859		See Cert. of Analysis, Rep: 0						
SPI01	Q687326	A407859	SULFATE	0	25	24.6	mg/L	98.4	
DPS01	Q687327	A407859	SULFATE	0	25	24.7	mg/L	98.8	.4
SAMPLE	A407861		See Cert. of Analysis, Rep: 0						
SAMPLE	A407862		See Cert. of Analysis, Rep: 0						
SAMPLE	A407863		See Cert. of Analysis, Rep: 0						
SAMPLE	A407957		See Cert. of Analysis, Rep: 0						
CCVL	Q687328		SULFATE	2.5		2.47	mg/L	98.8	
CCVH	Q687329		SULFATE	25		23.2	mg/L	92.8	
BLA01	Q687330		SULFATE			< 0.1	mg/L		

Run: R322534 Analyst.: M ADKINS Run Date...: 16-MAY-97 Instrument: IC
ANALYTICAL Reviewer: S BROTHERTON Review Date: 20-MAY-97

BLA01	Q687666		SULFATE			< 0.1	mg/L		
CCVL	Q687667		SULFATE	2.5		2.47	mg/L	98.8	
CCVH	Q687668		SULFATE	25		23.1	mg/L	92.4	
LFB01	Q687669		SULFATE	5		4.9	mg/L	98	
SAMPLE	A407958		See Cert. of Analysis, Rep: 0						
SAMPLE	A407959		See Cert. of Analysis, Rep: 0						
SPI01	Q687670	A407959	SULFATE	7	5	12.3	mg/L	106	
DPS01	Q687671	A407959	SULFATE	7	5	12.4	mg/L	108	1.9
SAMPLE	A407960		See Cert. of Analysis, Rep: 0						
SAMPLE	A407961		See Cert. of Analysis, Rep: 0						
[illegible]PLE	A407962		See Cert. of Analysis, Rep: 0						
[illegible]	Q687672		SULFATE	2.5		2.44	mg/L	97.6	

HERITAGE ENVIRONMENTAL SERVICES, INC.

QC Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
CCVH	Q687673		SULFATE	25		23.2	mg/L	92.8	
A01	Q687674		SULFATE			< 0.1	mg/L		
MPLE	A408104		See Cert. of Analysis, Rep: 0						
SAMPLE	A408105		See Cert. of Analysis, Rep: 0						
SAMPLE	A408106		See Cert. of Analysis, Rep: 0						
SPI01	Q687675	A408106	SULFATE	0	10	11.6	mg/L	116	
DPS01	Q687676	A408106	SULFATE	0	10	11.6	mg/L	116	0
SAMPLE	A408107		See Cert. of Analysis, Rep: 0						
SAMPLE	A408108		See Cert. of Analysis, Rep: 0						
SAMPLE	A408109		See Cert. of Analysis, Rep: 0						
CCVL	Q687677		SULFATE	2.5		2.44	mg/L	97.6	
CCVH	Q687678		SULFATE	25		22.9	mg/L	91.6	
BLA01	Q687679		SULFATE			< 0.1	mg/L		
SAMPLE	A408110		See Cert. of Analysis, Rep: 0						
SAMPLE	A408112		See Cert. of Analysis, Rep: 0						
SAMPLE	A408113		See Cert. of Analysis, Rep: 0						
SPI01	Q687682	A408113	SULFATE	0.08	5	5.79	mg/L	114.2	
DPS01	Q687683	A408113	SULFATE	0.08	5	5.86	mg/L	115.6	1.2
SAMPLE	A408118		See Cert. of Analysis, Rep: 0						
CCVL	Q687691		SULFATE	2.5		2.47	mg/L	98.8	
CCVH	Q687692		SULFATE	25		22.9	mg/L	91.6	
BLA01	Q687693		SULFATE			< 0.1	mg/L		

DISSOLVED SOLIDS EPA 160.1 G402.7

Run: R322576 Analyst.: K SULLIVAN Run Date...: 15-MAY-97
ANALYTICAL Reviewer: K FULLMER Review Date: 20-MAY-97

QC Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
BLA01	Q687959		SOLIDS			1	mg/L		
LCS01	Q687960		SOLIDS	1390		1420	mg/L	102.2	
DUP01	Q687961	A407790	SOLIDS	1200		1200	mg/L		0
SPI01	Q687962	A407838	SOLIDS	310	250	548	mg/L	95.2	
DPS01	Q687963	A407838	SOLIDS	310	250	542	mg/L	92.8	2.6
SAMPLE	A407830		See Cert. of Analysis, Rep: 0						
LCS01	Q687964		SOLIDS	1390		1390	mg/L	100	
BLA01	Q687965		SOLIDS			-5	mg/L		

Run: R322771 Analyst.: K SULLIVAN Run Date...: 19-MAY-97
ANALYTICAL Reviewer: B SHRAKE Review Date: 21-MAY-97

BLA01	Q688895		SOLIDS			-21	mg/L		
LCS01	Q688896		SOLIDS	786		772	mg/L	98.2	
SPI01	Q688897	A407846	SOLIDS	155	250	389	mg/L	93.6	
DPS01	Q688898	A407846	SOLIDS	155	250	388	mg/L	93.2	.4
DUP01	Q688900	A407852	SOLIDS	650		660	mg/L		1.5
SAMPLE	A407859		See Cert. of Analysis, Rep: 0						
SAMPLE	A407861		See Cert. of Analysis, Rep: 0						
SAMPLE	A407862		See Cert. of Analysis, Rep: 0						
SAMPLE	A408118		See Cert. of Analysis, Rep: 0						
LCS01	Q688905		SOLIDS	786		767	mg/L	97.6	
BLA01	Q688906		SOLIDS			-6	mg/L		

Run: R322827 Analyst.: K SULLIVAN Run Date...: 20-MAY-97
ANALYTICAL Reviewer: K FULLMER Review Date: 22-MAY-97

A01	Q689256		SOLIDS			-7	mg/L		
LCS01	Q689257		SOLIDS	786		789	mg/L	100.4	

HERITAGE ENVIRONMENTAL SERVICES, INC.

QC Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
SAMPLE	A407863		See Cert. of Analysis, Rep: 0						
SAMPLE	A407957		See Cert. of Analysis, Rep: 0						
[illegible]1	Q689258	A407957	SOLIDS	440		440	mg/L		0
SAMPLE	A407958		See Cert. of Analysis, Rep: 0						
SAMPLE	A407959		See Cert. of Analysis, Rep: 0						
SAMPLE	A407960		See Cert. of Analysis, Rep: 0						
DUP01	Q689259	A407960	SOLIDS	470		470	mg/L		0
SAMPLE	A407961		See Cert. of Analysis, Rep: 0						
SAMPLE	A407962		See Cert. of Analysis, Rep: 0						
SPI01	Q689260	A408168	SOLIDS	285	250	536	mg/L	100.4	
SAMPLE	A408104		See Cert. of Analysis, Rep: 0						
SAMPLE	A408105		See Cert. of Analysis, Rep: 0						
SAMPLE	A408106		See Cert. of Analysis, Rep: 0						
SAMPLE	A408107		See Cert. of Analysis, Rep: 0						
SAMPLE	A408109		See Cert. of Analysis, Rep: 0						
SAMPLE	A408108		See Cert. of Analysis, Rep: 0						
SAMPLE	A408110		See Cert. of Analysis, Rep: 0						
LCS01	Q689262		SOLIDS	786		770	mg/L	98	
BLA01	Q689263		SOLIDS			-13	mg/L		

Run: R323125 Analyst.: K SULLIVAN Run Date...: 21-MAY-97
ANALYTICAL Reviewer: B SHRAKE Review Date: 27-MAY-97

SAMPLE	A408112		See Cert. of Analysis, Rep: 0						
SAMPLE	A408113		See Cert. of Analysis, Rep: 0						
SPI01	Q690329	A408172	SOLIDS	250	250	513	mg/L	105.2	
DPS01	Q690330	A408172	SOLIDS	250	250	523	mg/L	109.2	3.7
SAMPLE	A408114		See Cert. of Analysis, Rep: 0						
SAMPLE	A408115		See Cert. of Analysis, Rep: 0						
[illegible]LE	A408116		See Cert. of Analysis, Rep: 0						
[illegible]LE	A408117		See Cert. of Analysis, Rep: 0						
LCS01	Q690332		SOLIDS	1230		1260	mg/L	102.4	
BLA01	Q690334		SOLIDS			8	mg/L		

TOTAL SUSPENDED SOLIDS EPA 160.2 G403.7

Run: R322574 Analyst.: K SULLIVAN Run Date...: 16-MAY-97
ANALYTICAL Reviewer: B SHRAKE Review Date: 20-MAY-97

QC Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
BLA01	Q687943		SUSPENDED SOLIDS			0	mg/L		
LCS01	Q687944		SUSPENDED SOLIDS	144		147	mg/L	102.1	
SPI01	Q687950	A407820	SUSPENDED SOLIDS	4	72	75	mg/L	98.6	
SAMPLE	A407830		See Cert. of Analysis, Rep: 0						
SAMPLE	A407859		See Cert. of Analysis, Rep: 0						
SAMPLE	A407861		See Cert. of Analysis, Rep: 0						
SAMPLE	A407862		See Cert. of Analysis, Rep: 0						
DUP01	Q687954	A407497	SUSPENDED SOLIDS	11		14	mg/L		24
SAMPLE	A407863		See Cert. of Analysis, Rep: 0						
LCS01	Q687955		SUSPENDED SOLIDS	144		150	mg/L	104.2	
BLA01	Q687956		SUSPENDED SOLIDS			0	mg/L		
SPI01	Q687957	A407718	SUSPENDED SOLIDS	380	72	440	mg/L	83.3	
DPS01	Q687958	A407718	SUSPENDED SOLIDS	380	72	448	mg/L	94.4	12.5

HERITAGE ENVIRONMENTAL SERVICES, INC.

Run: R322579 Analyst.: K SULLIVAN Run Date...: 19-MAY-97
ANALYTICAL Reviewer: K FULLMER Review Date: 20-MAY-97

QC Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
BLA01	Q687989		SUSPENDED SOLIDS			-1	mg/L		
LCS01	Q687990		SUSPENDED SOLIDS	207		199	mg/L	96.1	
DUP01	Q687991	A408022	SUSPENDED SOLIDS	11		10	mg/L		9.5
SAMPLE	A408118		See Cert. of Analysis, Rep: 0						
SPI01	Q687992	A408118	SUSPENDED SOLIDS	0	104	99	mg/L	95.2	
LCS01	Q687993		SUSPENDED SOLIDS	207		200	mg/L	96.6	
BLA01	Q687994		SUSPENDED SOLIDS			0	mg/L		

Run: R322772 Analyst.: K SULLIVAN Run Date...: 20-MAY-97
ANALYTICAL Reviewer: B SHRAKE Review Date: 21-MAY-97

QC Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
BLA01	Q688931		SUSPENDED SOLIDS			0	mg/L		
LCS01	Q688932		SUSPENDED SOLIDS	207		199	mg/L	96.1	
SAMPLE	A407957		See Cert. of Analysis, Rep: 0						
DUP01	Q688935	A407957	SUSPENDED SOLIDS	25		27	mg/L		7.7
SAMPLE	A407958		See Cert. of Analysis, Rep: 0						
SAMPLE	A407959		See Cert. of Analysis, Rep: 0						
SAMPLE	A407960		See Cert. of Analysis, Rep: 0						
SAMPLE	A407961		See Cert. of Analysis, Rep: 0						
SPI01	Q688936	A408062	SUSPENDED SOLIDS	1	104	101	mg/L	96.2	
SAMPLE	A407962		See Cert. of Analysis, Rep: 0						
SPI01	Q688939	A407944	SUSPENDED SOLIDS	1	104	89	mg/L	84.6	
SAMPLE	A408104		See Cert. of Analysis, Rep: 0						
SAMPLE	A408106		See Cert. of Analysis, Rep: 0						
SAMPLE	A408107		See Cert. of Analysis, Rep: 0						
SAMPLE	A408109		See Cert. of Analysis, Rep: 0						
SAMPLE	A408110		See Cert. of Analysis, Rep: 0						
SAMPLE	A408112		See Cert. of Analysis, Rep: 0						
SAMPLE	A408113		See Cert. of Analysis, Rep: 0						
SAMPLE	A408105		See Cert. of Analysis, Rep: 0						
SAMPLE	A408108		See Cert. of Analysis, Rep: 0						
LCS01	Q688942		SUSPENDED SOLIDS	207		192	mg/L	92.8	
BLA01	Q688943		SUSPENDED SOLIDS			-1	mg/L		

Comments

Q687954 Sample exhibits poor replicability. Sample and duplicate analyzed twice.

FIELD TURBIDITY EPA 180.1 G602.0

Run: R322326 Analyst.: S ASKEW Run Date...: 13-MAY-97 Instrument: FIELD
ANALYTICAL Reviewer: D EDWARDS Review Date: 16-MAY-97

QC Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
SAMPLE	A407830		See Cert. of Analysis, Rep: 0						
SAMPLE	A407859		See Cert. of Analysis, Rep: 0						
SAMPLE	A407861		See Cert. of Analysis, Rep: 0						
SAMPLE	A407957		See Cert. of Analysis, Rep: 0						
SAMPLE	A407958		See Cert. of Analysis, Rep: 0						
SAMPLE	A407959		See Cert. of Analysis, Rep: 0						
SAMPLE	A407961		See Cert. of Analysis, Rep: 0						
SAMPLE	A407960		See Cert. of Analysis, Rep: 0						
SAMPLE	A407962		See Cert. of Analysis, Rep: 0						
SAMPLE	A408106		See Cert. of Analysis, Rep: 0						
SAMPLE	A408114		See Cert. of Analysis, Rep: 0						

HERITAGE ENVIRONMENTAL SERVICES, INC.

QC Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
SAMPLE	A408115		See Cert. of Analysis, Rep: 0						
SAMPLE	A408107		See Cert. of Analysis, Rep: 0						
SAMPLE	A408108		See Cert. of Analysis, Rep: 0						
SAMPLE	A408116		See Cert. of Analysis, Rep: 0						
SAMPLE	A408117		See Cert. of Analysis, Rep: 0						
SAMPLE	A408109		See Cert. of Analysis, Rep: 0						
SAMPLE	A408110		See Cert. of Analysis, Rep: 0						
SAMPLE	A408113		See Cert. of Analysis, Rep: 0						

FIELD TEMPERATURE EPA 170.1 G603.0

Run: R322326 Analyst.: S ASKEW Run Date...: 13-MAY-97 Instrument: FIELD
ANALYTICAL Reviewer: D EDWARDS Review Date: 16-MAY-97

QC Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
SAMPLE	A407830		See Cert. of Analysis, Rep: 0						
SAMPLE	A407859		See Cert. of Analysis, Rep: 0						
SAMPLE	A407861		See Cert. of Analysis, Rep: 0						
SAMPLE	A407957		See Cert. of Analysis, Rep: 0						
SAMPLE	A407958		See Cert. of Analysis, Rep: 0						
SAMPLE	A407959		See Cert. of Analysis, Rep: 0						
SAMPLE	A407961		See Cert. of Analysis, Rep: 0						
SAMPLE	A407960		See Cert. of Analysis, Rep: 0						
SAMPLE	A407962		See Cert. of Analysis, Rep: 0						
SAMPLE	A408106		See Cert. of Analysis, Rep: 0						
SAMPLE	A408114		See Cert. of Analysis, Rep: 0						
SAMPLE	A408115		See Cert. of Analysis, Rep: 0						
SAMPLE	A408107		See Cert. of Analysis, Rep: 0						
SAMPLE	A408108		See Cert. of Analysis, Rep: 0						
SAMPLE	A408116		See Cert. of Analysis, Rep: 0						
SAMPLE	A408117		See Cert. of Analysis, Rep: 0						
SAMPLE	A408109		See Cert. of Analysis, Rep: 0						
SAMPLE	A408110		See Cert. of Analysis, Rep: 0						
SAMPLE	A408113		See Cert. of Analysis, Rep: 0						

FIELD SPECIFIC CONDUCTANCE SW846-9050 G604.0

Run: R322326 Analyst.: S ASKEW Run Date...: 13-MAY-97 Instrument: FIELD
ANALYTICAL Reviewer: D EDWARDS Review Date: 16-MAY-97

QC Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
SAMPLE	A407830		See Cert. of Analysis, Rep: 0						
SAMPLE	A407859		See Cert. of Analysis, Rep: 0						
SAMPLE	A407861		See Cert. of Analysis, Rep: 0						
SAMPLE	A407957		See Cert. of Analysis, Rep: 0						
SAMPLE	A407958		See Cert. of Analysis, Rep: 0						
SAMPLE	A407959		See Cert. of Analysis, Rep: 0						
SAMPLE	A407961		See Cert. of Analysis, Rep: 0						
SAMPLE	A407960		See Cert. of Analysis, Rep: 0						
SAMPLE	A407962		See Cert. of Analysis, Rep: 0						
SAMPLE	A408106		See Cert. of Analysis, Rep: 0						
SAMPLE	A408114		See Cert. of Analysis, Rep: 0						
SAMPLE	A408115		See Cert. of Analysis, Rep: 0						
SAMPLE	A408107		See Cert. of Analysis, Rep: 0						

HERITAGE ENVIRONMENTAL SERVICES, INC.

QC Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
SAMPLE	A408108		See Cert. of Analysis, Rep: 0						
MPLE	A408116		See Cert. of Analysis, Rep: 0						
AMPLE	A408117		See Cert. of Analysis, Rep: 0						
SAMPLE	A408109		See Cert. of Analysis, Rep: 0						
SAMPLE	A408110		See Cert. of Analysis, Rep: 0						
SAMPLE	A408113		See Cert. of Analysis, Rep: 0						

FIELD OXIDATION-REDUCTION POTENTIAL SM2580B-18TH ED G604.7

Run: R322326 Analyst.: S ASKEW Run Date...: 13-MAY-97 Instrument: FIELD
ANALYTICAL Reviewer: D EDWARDS Review Date: 16-MAY-97

QC Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
SAMPLE	A407830		See Cert. of Analysis, Rep: 0						
SAMPLE	A407859		See Cert. of Analysis, Rep: 0						
SAMPLE	A407861		See Cert. of Analysis, Rep: 0						
SAMPLE	A407957		See Cert. of Analysis, Rep: 0						
SAMPLE	A407958		See Cert. of Analysis, Rep: 0						
SAMPLE	A407959		See Cert. of Analysis, Rep: 0						
SAMPLE	A407961		See Cert. of Analysis, Rep: 0						
SAMPLE	A407960		See Cert. of Analysis, Rep: 0						
SAMPLE	A407962		See Cert. of Analysis, Rep: 0						
SAMPLE	A408106		See Cert. of Analysis, Rep: 0						
SAMPLE	A408114		See Cert. of Analysis, Rep: 0						
SAMPLE	A408115		See Cert. of Analysis, Rep: 0						
SAMPLE	A408107		See Cert. of Analysis, Rep: 0						
SAMPLE	A408108		See Cert. of Analysis, Rep: 0						
MPLE	A408116		See Cert. of Analysis, Rep: 0						
SAMPLE	A408117		See Cert. of Analysis, Rep: 0						
SAMPLE	A408109		See Cert. of Analysis, Rep: 0						
SAMPLE	A408110		See Cert. of Analysis, Rep: 0						
SAMPLE	A408113		See Cert. of Analysis, Rep: 0						

ALKALINITY TOTAL EPA 310.1 G605.2

Run: R322474 Analyst.: K WHITFIELD Run Date...: 16-MAY-97
ANALYTICAL Reviewer: K FULLMER Review Date: 19-MAY-97

QC Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
LFB01	Q687496		ALKALINITY	49.2		48	mg/L	97.6	
SAMPLE	A407830		See Cert. of Analysis, Rep: 0						
SAMPLE	A407859		See Cert. of Analysis, Rep: 0						
SAMPLE	A407861		See Cert. of Analysis, Rep: 0						
SAMPLE	A407862		See Cert. of Analysis, Rep: 0						
SAMPLE	A407863		See Cert. of Analysis, Rep: 0						
SAMPLE	A407957		See Cert. of Analysis, Rep: 0						
SAMPLE	A407958		See Cert. of Analysis, Rep: 0						
DUP01	Q687497	A407958	ALKALINITY	400		400	mg/L		0
SAMPLE	A407959		See Cert. of Analysis, Rep: 0						
SAMPLE	A407960		See Cert. of Analysis, Rep: 0						
CCV	Q687498		ALKALINITY	125		110	mg/L	88	
SAMPLE	A407961		See Cert. of Analysis, Rep: 0						
UP01	Q687499	A407961	ALKALINITY	340		340	mg/L		0
SAMPLE	A407962		See Cert. of Analysis, Rep: 0						

HERITAGE ENVIRONMENTAL SERVICES, INC.

QC Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
CCV	Q687500		ALKALINITY	125		120	mg/L	96	

: R322535 Analyst.: C ROBISON Run Date...: 19-MAY-97
LYTICAL Reviewer: B SHRAKE Review Date: 20-MAY-97

LFB01	Q687684		ALKALINITY	49.2		47	mg/L	95.5	
SAMPLE	A408118		See Cert. of Analysis, Rep: 0						
SAMPLE	A408104		See Cert. of Analysis, Rep: 0						
SAMPLE	A408106		See Cert. of Analysis, Rep: 0						
CCV	Q687685		ALKALINITY	125		115	mg/L	92	
SAMPLE	A408107		See Cert. of Analysis, Rep: 0						
DUP01	Q687686	A408107	ALKALINITY	450		450	mg/L		0
SAMPLE	A408109		See Cert. of Analysis, Rep: 0						
DUP01	Q687687	A408109	ALKALINITY	370		360	mg/L		2.7
SAMPLE	A408110		See Cert. of Analysis, Rep: 0						
SAMPLE	A408112		See Cert. of Analysis, Rep: 0						
SAMPLE	A408113		See Cert. of Analysis, Rep: 0						
CCV	Q687689		ALKALINITY	125		120	mg/L	96	
SAMPLE	A408105		See Cert. of Analysis, Rep: 0						
SAMPLE	A408108		See Cert. of Analysis, Rep: 0						
CCV	Q687699		ALKALINITY	125		120	mg/L	96	
DUP01	Q687700	A408107	ALKALINITY	450		450	mg/L		0

FIELD PH (AQUEOUS) SW846-9040A G607.0

Run: R322326 Analyst.: S ASKEW Run Date...: 13-MAY-97 Instrument: FIELD
ANALYTICAL Reviewer: D EDWARDS Review Date: 16-MAY-97

QC Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
LE	A407830		See Cert. of Analysis, Rep: 0						
SAMPLE	A407859		See Cert. of Analysis, Rep: 0						
SAMPLE	A407861		See Cert. of Analysis, Rep: 0						
SAMPLE	A407957		See Cert. of Analysis, Rep: 0						
SAMPLE	A407958		See Cert. of Analysis, Rep: 0						
SAMPLE	A407959		See Cert. of Analysis, Rep: 0						
SAMPLE	A407961		See Cert. of Analysis, Rep: 0						
SAMPLE	A407960		See Cert. of Analysis, Rep: 0						
SAMPLE	A407962		See Cert. of Analysis, Rep: 0						
SAMPLE	A408106		See Cert. of Analysis, Rep: 0						
SAMPLE	A408114		See Cert. of Analysis, Rep: 0						
SAMPLE	A408115		See Cert. of Analysis, Rep: 0						
SAMPLE	A408107		See Cert. of Analysis, Rep: 0						
SAMPLE	A408108		See Cert. of Analysis, Rep: 0						
SAMPLE	A408116		See Cert. of Analysis, Rep: 0						
SAMPLE	A408117		See Cert. of Analysis, Rep: 0						
SAMPLE	A408109		See Cert. of Analysis, Rep: 0						
SAMPLE	A408110		See Cert. of Analysis, Rep: 0						
SAMPLE	A408113		See Cert. of Analysis, Rep: 0						

ALKALINITY (BICARBONATE) EPA 310.1 G610.2

Run: R322474 Analyst.: K WHITFIELD Run Date...: 16-MAY-97
ANALYTICAL Reviewer: K FULLMER Review Date: 19-MAY-97

Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
01	Q687496		ALKALINITY	49.2		48	mg/L	97.6	

HERITAGE ENVIRONMENTAL SERVICES, INC.

QC Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
CCV	Q687498		ALKALINITY	125		110	mg/L	88	
DUP01	Q687499	A407961	ALKALINITY	340		340	mg/L		0
SAMPLE	A407830		See Cert. of Analysis, Rep: 0						
SAMPLE	A407859		See Cert. of Analysis, Rep: 0						
SAMPLE	A407861		See Cert. of Analysis, Rep: 0						
SAMPLE	A407862		See Cert. of Analysis, Rep: 0						
SAMPLE	A407863		See Cert. of Analysis, Rep: 0						
SAMPLE	A407957		See Cert. of Analysis, Rep: 0						
SAMPLE	A407958		See Cert. of Analysis, Rep: 0						
DUP01	Q687501	A407958	ALKALINITY	400		400	mg/L		0
SAMPLE	A407959		See Cert. of Analysis, Rep: 0						
SAMPLE	A407960		See Cert. of Analysis, Rep: 0						
SAMPLE	A407961		See Cert. of Analysis, Rep: 0						
DUP01	Q687502	A407961	ALKALINITY	340		340	mg/L		0
SAMPLE	A407962		See Cert. of Analysis, Rep: 0						

Run: R322535 Analyst.: C ROBISON Run Date...: 19-MAY-97
ANALYTICAL Reviewer: B SHRAKE Review Date: 20-MAY-97

LFB01	Q687684		ALKALINITY	49.2		47	mg/L	95.5	
CCV	Q687685		ALKALINITY	125		115	mg/L	92	
SAMPLE	A408118		See Cert. of Analysis, Rep: 0						
SAMPLE	A408104		See Cert. of Analysis, Rep: 0						
SAMPLE	A408106		See Cert. of Analysis, Rep: 0						
SAMPLE	A408107		See Cert. of Analysis, Rep: 0						
DUP01	Q687700	A408107	ALKALINITY	450		450	mg/L		0
SAMPLE	A408109		See Cert. of Analysis, Rep: 0						
DUP01	Q687701	A408109	ALKALINITY	370		360	mg/L		2.7
SAMPLE	A408110		See Cert. of Analysis, Rep: 0						
SAMPLE	A408112		See Cert. of Analysis, Rep: 0						
SAMPLE	A408113		See Cert. of Analysis, Rep: 0						
SAMPLE	A408105		See Cert. of Analysis, Rep: 0						
SAMPLE	A408108		See Cert. of Analysis, Rep: 0						

ALKALINITY (CARBONATE) EPA 310.1 G611.2

Run: R322474 Analyst.: K WHITFIELD Run Date...: 16-MAY-97
ANALYTICAL Reviewer: K FULLMER Review Date: 19-MAY-97

QC Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
LFB01	Q687496		ALKALINITY	49.2		48	mg/L	97.6	
CCV	Q687498		ALKALINITY	125		110	mg/L	88	
DUP01	Q687502	A407961	ALKALINITY	340		340	mg/L		0
SAMPLE	A407830		See Cert. of Analysis, Rep: 0						
SAMPLE	A407859		See Cert. of Analysis, Rep: 0						
SAMPLE	A407861		See Cert. of Analysis, Rep: 0						
SAMPLE	A407862		See Cert. of Analysis, Rep: 0						
SAMPLE	A407863		See Cert. of Analysis, Rep: 0						
SAMPLE	A407957		See Cert. of Analysis, Rep: 0						
SAMPLE	A407958		See Cert. of Analysis, Rep: 0						
DUP01	Q687503	A407958	ALKALINITY	0		BDL	mg/L		
SAMPLE	A407959		See Cert. of Analysis, Rep: 0						
SAMPLE	A407960		See Cert. of Analysis, Rep: 0						
SAMPLE	A407961		See Cert. of Analysis, Rep: 0						
DUP01	Q687504	A407961	ALKALINITY	0		BDL	mg/L		
SAMPLE	A407962		See Cert. of Analysis, Rep: 0						

HERITAGE ENVIRONMENTAL SERVICES, INC.

Run: R322535 Analyst.: C ROBISON Run Date...: 19-MAY-97
ANALYTICAL Reviewer: B SHRAKE Review Date: 20-MAY-97

QC Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
[illegible]1	Q687684		ALKALINITY	49.2		47	mg/L	95.5	
CCV	Q687685		ALKALINITY	125		115	mg/L	92	
SAMPLE	A408118		See Cert. of Analysis, Rep: 0						
SAMPLE	A408104		See Cert. of Analysis, Rep: 0						
SAMPLE	A408106		See Cert. of Analysis, Rep: 0						
SAMPLE	A408107		See Cert. of Analysis, Rep: 0						
DUP01	Q687712	A408107	ALKALINITY	0		BDL	mg/L		
SAMPLE	A408109		See Cert. of Analysis, Rep: 0						
DUP01	Q687713	A408109	ALKALINITY	0		BDL	mg/L		
SAMPLE	A408110		See Cert. of Analysis, Rep: 0						
SAMPLE	A408112		See Cert. of Analysis, Rep: 0						
SAMPLE	A408113		See Cert. of Analysis, Rep: 0						
SAMPLE	A408105		See Cert. of Analysis, Rep: 0						
SAMPLE	A408108		See Cert. of Analysis, Rep: 0						

ARSENIC TRACE ICP SW846-6010A M103.0

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A

Run: R322212 Analyst.: R DALAL Run Date...: 15-MAY-97
PREP Reviewer: W WATNESS Review Date: 15-MAY-97

QC Type	Lab ID	Source	Anal Run
SAMPLE	A407830	Rep: 0	R322657
SAMPLE	A407859	Rep: 0	R322657
SAMPLE	A407861	Rep: 0	R322657
[illegible]PLE	A407862	Rep: 0	R322657
[illegible]LE	A407863	Rep: 0	R322657
LCS	Q685872	INORGAN	R322657
BLA02	Q685873	NA	R322657
SPI02	Q685874	A407861	R322657
DPS02	Q685875	A407861	R322657

Run: R322309 Analyst.: B GRAVES Run Date...: 16-MAY-97
PREP Reviewer: W WATNESS Review Date: 16-MAY-97

SAMPLE	A407957	Rep: 0	R322833
SAMPLE	A407958	Rep: 0	R322833
SAMPLE	A407959	Rep: 0	R322833
SAMPLE	A407960	Rep: 0	R322833
SAMPLE	A407961	Rep: 0	R322833
SAMPLE	A407962	Rep: 0	R322833
LCS	Q686501	INORGAN	R322833
BLA02	Q686502	NA	R322833
SPI02	Q686503	A407961	R322833
DPS02	Q686504	A407961	R322833

Run: R322430 Analyst.: N CARR Run Date...: 19-MAY-97
PREP Reviewer: W WATNESS Review Date: 19-MAY-97

SAMPLE	A408104	Rep: 0	R323652
SAMPLE	A408105	Rep: 0	R323652
SAMPLE	A408106	Rep: 0	R323652
SAMPLE	A408107	Rep: 0	R323652
SAMPLE	A408108	Rep: 0	R323652
[illegible]MPLE	A408109	Rep: 0	R323652
[illegible]LE	A408110	Rep: 0	R323652

HERITAGE ENVIRONMENTAL SERVICES, INC.

QC Type	Lab ID	Source	Anal Run
LCS	Q687234	INORGAN	R323652
BLA02	Q687235	NA	R323652
SPI02	Q687236	A408106	R323652
DPS02	Q687237	A408106	R323652

Run: R322536 Analyst.: R DALAL Run Date...: 20-MAY-97
PREP Reviewer: W WATNESS Review Date: 20-MAY-97

SAMPLE	A408112	Rep: 0	R323678
SAMPLE	A408113	Rep: 0	R323678
SAMPLE	A408114	Rep: 0	R323678
SAMPLE	A408115	Rep: 0	R323678
SAMPLE	A408116	Rep: 0	R323678
SAMPLE	A408117	Rep: 0	R323678
SAMPLE	A408118	Rep: 0	R323678
LCS	Q687714	INORGAN	R323678
BLA02	Q687715	NA	R323678
SPI02	Q687716	A408117	R323678
DPS02	Q687717	A408117	R323678

Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOU SW846-3005A

Run: R322211 Analyst.: R DALAL Run Date...: 15-MAY-97
PREP Reviewer: W WATNESS Review Date: 15-MAY-97

SAMPLE	A407830	Rep: 1	R322657
SAMPLE	A407859	Rep: 1	R322657
SAMPLE	A407861	Rep: 1	R322657
SAMPLE	A407862	Rep: 1	R322657
LCS	Q685863	INORGAN	R322657
BLA02	Q685864		R322657
SPI02	Q685865	A407859	R322657
DPS02	Q685866	A407859	R322657

Run: R322308 Analyst.: B GRAVES Run Date...: 16-MAY-97
PREP Reviewer: W WATNESS Review Date: 16-MAY-97

SAMPLE	A407957	Rep: 1	R322833
SAMPLE	A407958	Rep: 1	R322833
SAMPLE	A407959	Rep: 1	R322833
SAMPLE	A407960	Rep: 1	R322833
SAMPLE	A407961	Rep: 1	R322833
SAMPLE	A407962	Rep: 1	R322833
LCS	Q686492	INORGAN	R322833
BLA02	Q686493	NA	R322833
SPI02	Q686494	A407961	R322833
DPS02	Q686495	A407961	R322833

Run: R322441 Analyst.: B GRAVES Run Date...: 19-MAY-97
PREP Reviewer: W WATNESS Review Date: 20-MAY-97

SAMPLE	A408104	Rep: 1	R323652
SAMPLE	A408105	Rep: 1	R323652
SAMPLE	A408106	Rep: 1	R323652
SAMPLE	A408107	Rep: 1	R323652
SAMPLE	A408108	Rep: 1	R323652
SAMPLE	A408109	Rep: 1	R323652
SAMPLE	A408110	Rep: 1	R323652
SAMPLE	A408112	Rep: 1	R323652
SAMPLE	A408113	Rep: 1	R323652
SAMPLE	A408114	Rep: 1	R323652
LCS	Q687284	INORGAN	R323652

HERITAGE ENVIRONMENTAL SERVICES, INC.

QC Type	Lab ID	Source	Anal Run
BLA02	Q687285	NA	R323652
[illegible]02	Q687286	A408114	R323652
[illegible]2	Q687287	A408114	R323652

Run: R322442 Analyst.: B GRAVES Run Date...: 19-MAY-97
PREP Reviewer: W WATNESS Review Date: 20-MAY-97

SAMPLE	A408115	Rep: 1	R323678
SAMPLE	A408116	Rep: 1	R323678
SAMPLE	A408117	Rep: 1	R323678
LCS	Q687293	INORGAN	R323678
BLA02	Q687294	NA	R323678
SPI02	Q687295	A408117	R323678
DPS02	Q687296	A408117	R323678

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A

Run: R322657 Analyst.: A ROBERTSON Run Date...: 20-MAY-97 Instrument: TRACE ICP
ANALYTICAL Reviewer: S O'NEAL Review Date: 21-MAY-97

QC Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q688326	PERKIN-	ARSENIC	0.05		0.0506	mg/L	101	
BLA01	Q688328	NA	ARSENIC			< 0.00200	mg/L		
CDL01	Q688329	PERKIN-	ARSENIC	0.02		0.0190	mg/L	95	
ICS-A	Q688338	PERKIN	ARSENIC	0.1		0.100	mg/L	100	
CCV	Q688339	INORGAN	ARSENIC	0.1		0.0979	mg/L	98	
LCS	Q685872	INORGAN	ARSENIC	0.5		0.447	mg/L	89	
BLA02	Q685873	NA	ARSENIC			< 0.00200	mg/L		
SAMPLE	A407861		See Cert. of Analysis, Rep: 0						
SPI02	Q685874	A407861	ARSENIC	0.0473	2	2.12	mg/L	104	
DPS02	Q685875	A407861	ARSENIC	0.0473	2	2.09	mg/L	102.1	1.8
[illegible]LE	A407830		See Cert. of Analysis, Rep: 0						
[illegible]PLE	A407859		See Cert. of Analysis, Rep: 0						
SAMPLE	A407862		See Cert. of Analysis, Rep: 0						
SAMPLE	A407863		See Cert. of Analysis, Rep: 0						
CCV	Q688354	INORGAN	ARSENIC	0.1		0.0995	mg/L	100	
BLA01	Q688360	NA	ARSENIC			< 0.00200	mg/L		
CDL01	Q688367	PERKIN-	ARSENIC	0.02		0.0212	mg/L	106	
ICS-A	Q688369	PERKIN	ARSENIC	0.1		0.0958	mg/L	96	

Run: R322833 Analyst.: A ROBERTSON Run Date...: 22-MAY-97 Instrument: TRACE ICP
ANALYTICAL Reviewer: S O'NEAL Review Date: 23-MAY-97

CCV	Q689336	INORGAN	ARSENIC	0.1		0.0986	mg/L	99	
BLA01	Q689337	NA	ARSENIC			< 0.00200	mg/L		
ICV01	Q689338	PERKIN-	ARSENIC	0.05		0.0500	mg/L	100	
CDL01	Q689341	PERKIN-	ARSENIC	0.02		0.0197	mg/L	99	
ICS-A	Q689344	PERKIN	ARSENIC	0.1		0.0972	mg/L	97	
LCS	Q686501	INORGAN	ARSENIC	0.5		0.490	mg/L	98	
BLA02	Q686502	NA	ARSENIC			< 0.00200	mg/L		
SAMPLE	A407961		See Cert. of Analysis, Rep: 0						
SPI02	Q686503	A407961	ARSENIC	0.0287	2	2.02	mg/L	100	
DPS02	Q686504	A407961	ARSENIC	0.0287	2	2	mg/L	98.6	.4
SAMPLE	A407957		See Cert. of Analysis, Rep: 0						
SAMPLE	A407958		See Cert. of Analysis, Rep: 0						
SAMPLE	A407959		See Cert. of Analysis, Rep: 0						
SAMPLE	A407960		See Cert. of Analysis, Rep: 0						
CCV	Q689355	INORGAN	ARSENIC	0.1		0.0999	mg/L	100	
[illegible]A01	Q689356	NA	ARSENIC			< 0.00200	mg/L		
[illegible]PLE	A407962		See Cert. of Analysis, Rep: 0						

HERITAGE ENVIRONMENTAL SERVICES, INC.

QC Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
CCV	Q689357	INORGAN	ARSENIC	0.1		0.0967	mg/L	97	
BLA01	Q689358	NA	ARSENIC			< 0.00200	mg/L		
CDL01	Q689363	PERKIN-	ARSENIC	0.02		0.0209	mg/L	105	
ICS-A	Q689365	PERKIN	ARSENIC	0.1		0.0995	mg/L	100	
Run: R323652 ANALYTICAL		Analyst.: A ROBERTSON Reviewer: S O'NEAL	Run Date...: 28-MAY-97 Review Date: 02-JUN-97		Instrument: TRACE ICP				
CCV	Q692576	INORGAN	ARSENIC	0.1		0.0983	mg/L	98	
BLA01	Q692577	NA	ARSENIC			< 0.00200	mg/L		
ICV01	Q692578	PERKIN-	ARSENIC	0.05		0.0506	mg/L	101	
CDL01	Q692581	PERKIN-	ARSENIC	0.02		0.0211	mg/L	106	
ICS-A	Q692584	PERKIN	ARSENIC	0.1		0.102	mg/L	102	
LCS	Q687234	INORGAN	ARSENIC	0.5		0.472	mg/L	94	
BLA02	Q687235	NA	ARSENIC			< 0.00200	mg/L		
SAMPLE	A408106		See Cert. of Analysis, Rep: 0						
SPI02	Q687236	A408106	ARSENIC	0.0498	2	2.31	mg/L	113	
DPS02	Q687237	A408106	ARSENIC	0.0498	2	2.26	mg/L	111	2
SAMPLE	A408104		See Cert. of Analysis, Rep: 0						
SAMPLE	A408105		See Cert. of Analysis, Rep: 0						
SAMPLE	A408107		See Cert. of Analysis, Rep: 0						
CCV	Q692589	INORGAN	ARSENIC	0.1		0.103	mg/L	103	
BLA01	Q692590	NA	ARSENIC			< 0.00200	mg/L		
SAMPLE	A408108		See Cert. of Analysis, Rep: 0						
SAMPLE	A408109		See Cert. of Analysis, Rep: 0						
SAMPLE	A408110		See Cert. of Analysis, Rep: 0						
CCV	Q692591	INORGAN	ARSENIC	0.1		0.0998	mg/L	100	
BLA01	Q692592	NA	ARSENIC			< 0.00200	mg/L		
CDL01	Q692595	PERKIN-	ARSENIC	0.02		0.0211	mg/L	106	
ICS-A	Q692597	PERKIN	ARSENIC	0.1		0.106	mg/L	106	
Run: R323678 ANALYTICAL		Analyst.: A ROBERTSON Reviewer: S O'NEAL	Run Date...: 30-MAY-97 Review Date: 02-JUN-97		Instrument: TRACE ICP				
BLA01	Q692762	NA	ARSENIC			0.00226	mg/L		
CCV	Q692763	INORGAN	ARSENIC	0.1		0.0993	mg/L	99	
ICV01	Q692765	PERKIN-	ARSENIC	0.05		0.0506	mg/L	101	
CDL01	Q692768	PERKIN-	ARSENIC	0.02		0.0209	mg/L	105	
ICS-A	Q692771	PERKIN	ARSENIC	0.1		0.106	mg/L	106	
LCS	Q687714	INORGAN	ARSENIC	0.5		0.446	mg/L	89	
BLA02	Q687715	NA	ARSENIC			< 0.00200	mg/L		
SAMPLE	A408117		See Cert. of Analysis, Rep: 0						
SPI02	Q687716	A408117	ARSENIC	0	2	2.17	mg/L	109	
DPS02	Q687717	A408117	ARSENIC	0	2	2.18	mg/L	109	0
SAMPLE	A408112		See Cert. of Analysis, Rep: 0						
SAMPLE	A408113		See Cert. of Analysis, Rep: 0						
SAMPLE	A408114		See Cert. of Analysis, Rep: 0						
SAMPLE	A408115		See Cert. of Analysis, Rep: 0						
CCV	Q692774	INORGAN	ARSENIC	0.1		0.0996	mg/L	100	
BLA01	Q692775	NA	ARSENIC			< 0.00200	mg/L		
SAMPLE	A408116		See Cert. of Analysis, Rep: 0						
SAMPLE	A408118		See Cert. of Analysis, Rep: 0						
CCV	Q692776	INORGAN	ARSENIC	0.1		0.100	mg/L	100	
BLA01	Q692777	NA	ARSENIC			< 0.00200	mg/L		
CDL01	Q692788	PERKIN-	ARSENIC	0.02		0.0205	mg/L	103	
ICS-A	Q692790	PERKIN	ARSENIC	0.1		0.103	mg/L	103	

HERITAGE ENVIRONMENTAL SERVICES, INC.

Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOU SW846-3005A

: R322657 Analyst.: A ROBERTSON Run Date...: 20-MAY-97 Instrument: TRACE ICP
.YTICAL Reviewer: S O'NEAL Review Date: 21-MAY-97

QC Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q688326	PERKIN-	ARSENIC	0.05		0.0506	mg/L	101	
BLA01	Q688328	NA	ARSENIC			< 0.00200	mg/L		
CDL01	Q688329	PERKIN-	ARSENIC	0.02		0.0190	mg/L	95	
ICS-A	Q688338	PERKIN	ARSENIC	0.1		0.100	mg/L	100	
CCV	Q688339	INORGAN	ARSENIC	0.1		0.0979	mg/L	98	
LCS	Q685863	INORGAN	ARSENIC	0.5		0.431	mg/L	86	
BLA02	Q685864		ARSENIC			< 0.002			
SAMPLE	A407859		See Cert. of Analysis, Rep: 1						
SPI02	Q685865	A407859	ARSENIC	0.021	2	1.97		97.5	
DPS02	Q685866	A407859	ARSENIC	0.021	2	2.06		102	4.5
SAMPLE	A407830		See Cert. of Analysis, Rep: 1						
SAMPLE	A407861		See Cert. of Analysis, Rep: 1						
SAMPLE	A407862		See Cert. of Analysis, Rep: 1						
CCV	Q688352	INORGAN	ARSENIC	0.1		0.0992	mg/L	99	
BLA01	Q688353	NA	ARSENIC			< 0.00200	mg/L		
CDL01	Q688367	PERKIN-	ARSENIC	0.02		0.0212	mg/L	106	
ICS-A	Q688369	PERKIN	ARSENIC	0.1		0.0958	mg/L	96	

Run: R322833 Analyst.: A ROBERTSON Run Date...: 22-MAY-97 Instrument: TRACE ICP
ANALYTICAL Reviewer: S O'NEAL Review Date: 23-MAY-97

CCV	Q689336	INORGAN	ARSENIC	0.1		0.0986	mg/L	99	
BLA01	Q689337	NA	ARSENIC			< 0.00200	mg/L		
ICV01	Q689338	PERKIN-	ARSENIC	0.05		0.0500	mg/L	100	
CDL01	Q689341	PERKIN-	ARSENIC	0.02		0.0197	mg/L	99	
A	Q689344	PERKIN	ARSENIC	0.1		0.0972	mg/L	97	
L	Q686492	INORGAN	ARSENIC	0.5		0.461	mg/L	92	
BLA02	Q686493	NA	ARSENIC			< 0.00200	mg/L		
SAMPLE	A407961		See Cert. of Analysis, Rep: 1						
SPI02	Q686494	A407961	ARSENIC	0.0287	2	2.00	mg/L	99	
DPS02	Q686495	A407961	ARSENIC	0.0287	2	2.08	mg/L	103	4
SAMPLE	A407957		See Cert. of Analysis, Rep: 1						
SAMPLE	A407958		See Cert. of Analysis, Rep: 1						
SAMPLE	A407959		See Cert. of Analysis, Rep: 1						
CCV	Q689357	INORGAN	ARSENIC	0.1		0.0967	mg/L	97	
BLA01	Q689358	NA	ARSENIC			< 0.00200	mg/L		
SAMPLE	A407960		See Cert. of Analysis, Rep: 1						
SAMPLE	A407962		See Cert. of Analysis, Rep: 1						
CCV	Q689359	INORGAN	ARSENIC	0.1		0.0981	mg/L	98	
BLA01	Q689360	NA	ARSENIC			0.00262	mg/L		
CDL01	Q689363	PERKIN-	ARSENIC	0.02		0.0209	mg/L	105	
ICS-A	Q689365	PERKIN	ARSENIC	0.1		0.0995	mg/L	100	

Run: R323652 Analyst.: A ROBERTSON Run Date...: 28-MAY-97 Instrument: TRACE ICP
ANALYTICAL Reviewer: S O'NEAL Review Date: 02-JUN-97

CCV	Q692576	INORGAN	ARSENIC	0.1		0.0983	mg/L	98	
BLA01	Q692577	NA	ARSENIC			< 0.00200	mg/L		
ICV01	Q692578	PERKIN-	ARSENIC	0.05		0.0506	mg/L	101	
CDL01	Q692581	PERKIN-	ARSENIC	0.02		0.0211	mg/L	106	
ICS-A	Q692584	PERKIN	ARSENIC	0.1		0.102	mg/L	102	
LCS	Q687284	INORGAN	ARSENIC	0.5		0.474	mg/L	95	
A02	Q687285	NA	ARSENIC			0.00204	mg/L		
LE	A408114		See Cert. of Analysis, Rep: 1						

HERITAGE ENVIRONMENTAL SERVICES, INC.

QC Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
SPI02	Q687286	A408114	ARSENIC	0	2	2.14	mg/L	107	
DPS02	Q687287	A408114	ARSENIC	0	2	2.18	mg/L	109	2
SAMPLE	A408104		See Cert. of Analysis, Rep: 1						
CCV	Q692591	INORGAN	ARSENIC	0.1		0.0998	mg/L	100	
BLA01	Q692592	NA	ARSENIC			< 0.00200	mg/L		
SAMPLE	A408105		See Cert. of Analysis, Rep: 1						
SAMPLE	A408106		See Cert. of Analysis, Rep: 1						
SAMPLE	A408107		See Cert. of Analysis, Rep: 1						
SAMPLE	A408108		See Cert. of Analysis, Rep: 1						
SAMPLE	A408109		See Cert. of Analysis, Rep: 1						
SAMPLE	A408110		See Cert. of Analysis, Rep: 1						
SAMPLE	A408112		See Cert. of Analysis, Rep: 1						
SAMPLE	A408113		See Cert. of Analysis, Rep: 1						
CCV	Q692593	INORGAN	ARSENIC	0.1		0.0991	mg/L	99	
BLA01	Q692594	NA	ARSENIC			< 0.00200	mg/L		
CDL01	Q692595	PERKIN-	ARSENIC	0.02		0.0211	mg/L	106	
ICS-A	Q692597	PERKIN	ARSENIC	0.1		0.106	mg/L	106	

Run: R323678 Analyst.: A ROBERTSON Run Date...: 30-MAY-97 Instrument: TRACE ICP
ANALYTICAL Reviewer: S O'NEAL Review Date: 02-JUN-97

BLA01	Q692762	NA	ARSENIC			0.00226	mg/L		
CCV	Q692763	INORGAN	ARSENIC	0.1		0.0993	mg/L	99	
ICV01	Q692765	PERKIN-	ARSENIC	0.05		0.0506	mg/L	101	
CDL01	Q692768	PERKIN-	ARSENIC	0.02		0.0209	mg/L	105	
ICS-A	Q692771	PERKIN	ARSENIC	0.1		0.106	mg/L	106	
BLA02	Q687294	NA	ARSENIC			0.00229	mg/L		
LCS	Q687293	INORGAN	ARSENIC	0.5		0.425	mg/L	85	
SAMPLE	A408117		See Cert. of Analysis, Rep: 1						
SPI02	Q687295	A408117	ARSENIC	0	2	2.15	mg/L	108	
DPS02	Q687296	A408117	ARSENIC	0	2	2.07	mg/L	104	4
SAMPLE	A408115		See Cert. of Analysis, Rep: 1						
SAMPLE	A408116		See Cert. of Analysis, Rep: 1						
CCV	Q692778	INORGAN	ARSENIC	0.1		0.0983	mg/L	98	
BLA01	Q692779	NA	ARSENIC			< 0.00200	mg/L		
CDL01	Q692788	PERKIN-	ARSENIC	0.02		0.0205	mg/L	103	
ICS-A	Q692790	PERKIN	ARSENIC	0.1		0.103	mg/L	103	

BARIUM ICP SW846-6010A M104.3

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A

Run: R322212 Analyst.: R DALAL Run Date...: 15-MAY-97
PREP Reviewer: W WATNESS Review Date: 15-MAY-97

QC Type	Lab ID	Source	Anal Run
LCS	Q685867	SPEX	R322424
BLA02	Q685868	NA	R322424
SPI02	Q685869	A407861	R322424
DPS02	Q685870	A407861	R322424
SAMPLE	A407859	Rep: 0	R322424
SAMPLE	A407861	Rep: 0	R322424

Run: R322430 Analyst.: N CARR Run Date...: 19-MAY-97
PREP Reviewer: W WATNESS Review Date: 19-MAY-97

LCS	Q687229	SPEX	R322769
BLA02	Q687230	NA	R322769
SPI02	Q687231	A408106	R322769

HERITAGE ENVIRONMENTAL SERVICES, INC.

QC Type	Lab ID	Source	Anal Run
DPS02	Q687232	A408106	R322769
SAMPLE	A408104	Rep: 0	R322769
SAMPLE	A408105	Rep: 0	R322769
SAMPLE	A408107	Rep: 0	R322769
SAMPLE	A408108	Rep: 0	R322769
SAMPLE	A408110	Rep: 0	R322769

Run: R322536 Analyst.: R DALAL Run Date...: 20-MAY-97
PREP Reviewer: W WATNESS Review Date: 20-MAY-97

LCS	Q687707	SPEX	R322769
BLA02	Q687708	NA	R322769
SPI02	Q687709	A408117	R322769
DPS02	Q687710	A408117	R322769
SAMPLE	A408112	Rep: 0	R322769
SAMPLE	A408113	Rep: 0	R322769

Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOU SW846-3005A

Run: R322211 Analyst.: R DALAL Run Date...: 15-MAY-97
PREP Reviewer: W WATNESS Review Date: 15-MAY-97

LCS	Q685858	SPEX	R322424
BLA02	Q685859	NA	R322424
SPI02	Q685860	A407859	R322424
DPS02	Q685861	A407859	R322424
SAMPLE	A407859	Rep: 1	R322424
SAMPLE	A407861	Rep: 1	R322424

Run: R322441 Analyst.: B GRAVES Run Date...: 19-MAY-97
PREP Reviewer: W WATNESS Review Date: 20-MAY-97

LCS	Q687279	SPEX	R322769
[illegible]02	Q687280	NA	R322769
[illegible]J2	Q687281	A408114	R322769
DPS02	Q687282	A408114	R322769
SAMPLE	A408104	Rep: 1	R322769
SAMPLE	A408105	Rep: 1	R322769
SAMPLE	A408107	Rep: 1	R322769
SAMPLE	A408108	Rep: 1	R322769
SAMPLE	A408110	Rep: 1	R322769
SAMPLE	A408112	Rep: 1	R322769
SAMPLE	A408113	Rep: 1	R322769

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A

Run: R322424 Analyst.: A HILSCHER Run Date...: 16-MAY-97 Instrument: ICP
ANALYTICAL Reviewer: S ENDERSON Review Date: 19-MAY-97

QC Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
CCV	Q687119	INORGAN	BARIUM	5.00		5.10	mg/L	102	
BLA01	Q687120	NA	BARIUM			< 0.00400	mg/L		
ICV01	Q687122	PERKIN	BARIUM	1		1.02	mg/L	102	
CDL01	Q687126	INORGAN	BARIUM	10		10.2	mg/L	102	
ICS-A	Q687128	PERKIN	BARIUM	0.500		0.483	mg/L	97	
BLA02	Q685868	NA	BARIUM			< 0.00400	mg/L		
LCS	Q685867	SPEX	BARIUM	20.0		20.3	mg/L	102	
SAMPLE	A407861		See Cert. of Analysis, Rep: 0						
SPI02	Q685869	A407861	BARIUM	0.236	2.00	2.32	mg/L	104	
DPS02	Q685870	A407861	BARIUM	0.236	2.00	2.25	mg/L	101	3
[illegible]CV	Q687196	INORGAN	BARIUM	5.00		5.36	mg/L	107	
[illegible]01	Q687197	NA	BARIUM			< 0.00400	mg/L		

HERITAGE ENVIRONMENTAL SERVICES, INC.

QC Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
SAMPLE	A407859		See Cert. of Analysis, Rep: 0						
CCV	Q687198	INORGAN	BARIUM	5.00		5.44	mg/L	109	
BLA01	Q687199	NA	BARIUM			< 0.00400	mg/L		
ICS-A	Q687212	PERKIN	BARIUM	0.500		0.527	mg/L	105	

Run: R322769 Analyst.: A STOCKBURGER Run Date...: 21-MAY-97 Instrument: ICP
ANALYTICAL Reviewer: S ENDERSON Review Date: 22-MAY-97

CCV	Q688846	INORGAN	BARIUM	5.00		4.93	mg/L	99	
BLA01	Q688847	NA	BARIUM			< 0.00400	mg/L		
ICV01	Q688851	PERKIN	BARIUM	1		1.01	mg/L	101	
CDL01	Q688856	INORGAN	BARIUM	10		9.98	mg/L	100	
ICS-A	Q688859	PERKIN	BARIUM	0.500		0.478	mg/L	96	
BLA02	Q687230	NA	BARIUM			< 0.00400	mg/L		
LCS	Q687229	SPEX	BARIUM	20.0		19.8	mg/L	99	
SPI02	Q687231	A408106	BARIUM	0.252	2.00	2.41	mg/L	108	
DPS02	Q687232	A408106	BARIUM	0.252	2.00	2.37	mg/L	106	2
SAMPLE	A408104		See Cert. of Analysis, Rep: 0						
SAMPLE	A408105		See Cert. of Analysis, Rep: 0						
SAMPLE	A408107		See Cert. of Analysis, Rep: 0						
SAMPLE	A408108		See Cert. of Analysis, Rep: 0						
SAMPLE	A408110		See Cert. of Analysis, Rep: 0						
CCV	Q688901	INORGAN	BARIUM	5.00		5.17	mg/L	103	
BLA01	Q688902	NA	BARIUM			< 0.00400	mg/L		
BLA02	Q687708	NA	BARIUM			< 0.00400	mg/L		
LCS	Q687707	SPEX	BARIUM	20.0		19.0	mg/L	95	
SPI02	Q687709	A408117	BARIUM	0.0605	2.00	2.07	mg/L	101	
DPS02	Q687710	A408117	BARIUM	0.0605	2.00	2.08	mg/L	101	0
SAMPLE	A408112		See Cert. of Analysis, Rep: 0						
SAMPLE	A408113		See Cert. of Analysis, Rep: 0						
CCV	Q688915	INORGAN	BARIUM	5.00		5.29	mg/L	106	
BLA01	Q688916	NA	BARIUM			< 0.00400	mg/L		
ICS-A	Q688966	PERKIN	BARIUM	0.500		0.513	mg/L	103	

Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOU SW846-3005A

Run: R322424 Analyst.: A HILSCHER Run Date...: 16-MAY-97 Instrument: ICP
ANALYTICAL Reviewer: S ENDERSON Review Date: 19-MAY-97

CCV	Q687119	INORGAN	BARIUM	5.00		5.10	mg/L	102	
BLA01	Q687120	NA	BARIUM			< 0.00400	mg/L		
ICV01	Q687122	PERKIN	BARIUM	1		1.02	mg/L	102	
CDL01	Q687126	INORGAN	BARIUM	10		10.2	mg/L	102	
ICS-A	Q687128	PERKIN	BARIUM	0.500		0.483	mg/L	97	
BLA02	Q685859	NA	BARIUM			< 0.00400	mg/L		
LCS	Q685858	SPEX	BARIUM	20.0		18.2	mg/L	91	
SAMPLE	A407861		See Cert. of Analysis, Rep: 1						
SAMPLE	A407859		See Cert. of Analysis, Rep: 1						
SPI02	Q685860	A407859	BARIUM	0.202	2	1.99	mg/L	89	
CCV	Q687152	INORGAN	BARIUM	5.00		5.08	mg/L	102	
BLA01	Q687153	NA	BARIUM			< 0.00400	mg/L		
DPS02	Q685861	A407859	BARIUM	0.202	2	2.15	mg/L	97	9
ICS-A	Q687212	PERKIN	BARIUM	0.500		0.527	mg/L	105	

Run: R322769 Analyst.: A STOCKBURGER Run Date...: 21-MAY-97 Instrument: ICP
ANALYTICAL Reviewer: S ENDERSON Review Date: 22-MAY-97

CCV	Q688846	INORGAN	BARIUM	5.00		4.93	mg/L	99	
BLA01	Q688847	NA	BARIUM			< 0.00400	mg/L		
ICV01	Q688851	PERKIN	BARIUM	1		1.01	mg/L	101	

HERITAGE ENVIRONMENTAL SERVICES, INC.

QC Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
CDL01	Q688856	INORGAN	BARIUM	10		9.98	mg/L	100	
[illegible]-A	Q688859	PERKIN	BARIUM	0.500		0.478	mg/L	96	
[illegible]	Q687280	NA	BARIUM			< 0.00400	mg/L		
LCS	Q687279	SPEX	BARIUM	20.0		19.4	mg/L	97	
SPIO2	Q687281	A408114	BARIUM	0.108	2	2.04	mg/L	97	
DPSO2	Q687282	A408114	BARIUM	0.108	2	2.06	mg/L	98	1
SAMPLE	A408104		See Cert. of Analysis, Rep: 1						
SAMPLE	A408105		See Cert. of Analysis, Rep: 1						
SAMPLE	A408107		See Cert. of Analysis, Rep: 1						
SAMPLE	A408108		See Cert. of Analysis, Rep: 1						
SAMPLE	A408110		See Cert. of Analysis, Rep: 1						
SAMPLE	A408112		See Cert. of Analysis, Rep: 1						
SAMPLE	A408113		See Cert. of Analysis, Rep: 1						
CCV	Q688878	INORGAN	BARIUM	5.00		5.10	mg/L	102	
BLA01	Q688882	NA	BARIUM			< 0.00400	mg/L		
ICS-A	Q688966	PERKIN	BARIUM	0.500		0.513	mg/L	103	

BORON ICP SW846-6010A — MI07.3

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A

Run: R322212 Analyst.: R DALAL Run Date...: 15-MAY-97
PREP Reviewer: W WATNESS Review Date: 15-MAY-97

QC Type	Lab ID	Source	Anal Run
LCS	Q685867	SPEX	R322424
BLA02	Q685868	NA	R322424
SPIO2	Q685869	A407861	R322424
[illegible]2	Q685870	A407861	R322424
S[illegible]LE	A407859	Rep: 0	R322424
SAMPLE	A407861	Rep: 0	R322424

Run: R322430 Analyst.: N CARR Run Date...: 19-MAY-97
PREP Reviewer: W WATNESS Review Date: 19-MAY-97

LCS	Q687229	SPEX	R322769
BLA02	Q687230	NA	R322769
SPIO2	Q687231	A408106	R322769
DPSO2	Q687232	A408106	R322769
SAMPLE	A408104	Rep: 0	R322769
SAMPLE	A408105	Rep: 0	R322769
SAMPLE	A408108	Rep: 0	R322769
SAMPLE	A408110	Rep: 0	R322769

Run: R322536 Analyst.: R DALAL Run Date...: 20-MAY-97
PREP Reviewer: W WATNESS Review Date: 20-MAY-97

LCS	Q687707	SPEX	R322769
BLA02	Q687708	NA	R322769
SPIO2	Q687709	A408117	R322769
DPSO2	Q687710	A408117	R322769
SAMPLE	A408112	Rep: 0	R322769
SAMPLE	A408113	Rep: 0	R322769

Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOU SW846-3005A

Run: R322441 Analyst.: B GRAVES Run Date...: 19-MAY-97
PREP Reviewer: W WATNESS Review Date: 20-MAY-97

[illegible]S	Q687279	SPEX	R322769
[illegible]2	Q687280	NA	R322769

HERITAGE ENVIRONMENTAL SERVICES, INC.

QC Type	Lab ID	Source	Anal Run
SPI02	Q687281	A408114	R322769
DPS02	Q687282	A408114	R322769
SAMPLE	A408104	Rep: 1	R322769
SAMPLE	A408105	Rep: 1	R322769
SAMPLE	A408108	Rep: 1	R322769
SAMPLE	A408110	Rep: 1	R322769
SAMPLE	A408112	Rep: 1	R322769
SAMPLE	A408113	Rep: 1	R322769

Run: R322553 Analyst.: B GRAVES Run Date...: 20-MAY-97
PREP Reviewer: W WATNESS Review Date: 21-MAY-97

SAMPLE	A407859	Rep: 1	R322769
SAMPLE	A407861	Rep: 1	R322769
LCS	Q687858	SPEX	R322769
BLA02	Q687859	NA	R322769
SPI02	Q687860	A406538	R322769
DPS02	Q687861	A406538	R322769

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A

Run: R322424 Analyst.: A HILSCHER Run Date...: 16-MAY-97 Instrument: ICP
ANALYTICAL Reviewer: S ENDERSON Review Date: 19-MAY-97

QC Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
CCV	Q687119	INORGAN	BORON	5.00		5.10	mg/L	102	
BLA01	Q687120	NA	BORON			< 0.0200	mg/L		
ICV01	Q687122	PERKIN	BORON	1		1.04	mg/L	104	
CDL01	Q687126	INORGAN	BORON	10		10.2	mg/L	102	
BLA02	Q685868	NA	BORON			< 0.0200	mg/L		
LCS	Q685867	SPEX	BORON	1.00		0.974	mg/L	97	
SAMPLE	A407861		See Cert. of Analysis, Rep: 0						
SPI02	Q685869	A407861	BORON	0.0667	1	1.08	mg/L	101	
DPS02	Q685870	A407861	BORON	0.0667	1.00	1.05	mg/L	98	3
CCV	Q687196	INORGAN	BORON	5.00		5.16	mg/L	103	
BLA01	Q687197	NA	BORON			< 0.0200	mg/L		
SAMPLE	A407859		See Cert. of Analysis, Rep: 0						
CCV	Q687198	INORGAN	BORON	5.00		5.22	mg/L	104	
BLA01	Q687199	NA	BORON			< 0.0200	mg/L		

Run: R322769 Analyst.: A STOCKBURGER Run Date...: 21-MAY-97 Instrument: ICP
ANALYTICAL Reviewer: S ENDERSON Review Date: 22-MAY-97

CCV	Q688846	INORGAN	BORON	5.00		4.95	mg/L	99	
BLA01	Q688847	NA	BORON			< 0.0200	mg/L		
ICV01	Q688851	PERKIN	BORON	1		1.04	mg/L	104	
CDL01	Q688856	INORGAN	BORON	10		9.85	mg/L	99	
BLA02	Q687230	NA	BORON			0.0248	mg/L		
LCS	Q687229	SPEX	BORON	1.00		1.01	mg/L	101	
SPI02	Q687231	A408106	BORON	0.136	1	1.18	mg/L	104	
DPS02	Q687232	A408106	BORON	0.136	1.00	1.19	mg/L	105	1
SAMPLE	A408104		See Cert. of Analysis, Rep: 0						
SAMPLE	A408105		See Cert. of Analysis, Rep: 0						
SAMPLE	A408108		See Cert. of Analysis, Rep: 0						
SAMPLE	A408110		See Cert. of Analysis, Rep: 0						
CCV	Q688901	INORGAN	BORON	5.00		5.13	mg/L	103	
BLA01	Q688902	NA	BORON			< 0.0200	mg/L		
BLA02	Q687708	NA	BORON			< 0.0200	mg/L		
LCS	Q687707	SPEX	BORON	1.00		0.941	mg/L	94	
SPI02	Q687709	A408117	BORON	0	1	1.01	mg/L	101	

HERITAGE ENVIRONMENTAL SERVICES, INC.

QC Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
DPS02	Q687710	A408117	BORON	0	1.00	1.01	mg/L	101	0
SAMPLE	A408112		See Cert. of Analysis, Rep: 0						
SAMPLE	A408113		See Cert. of Analysis, Rep: 0						
CCV	Q688915	INORGAN	BORON	5.00		5.13	mg/L	103	
BLA01	Q688916	NA	BORON			< 0.0200	mg/L		

Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOU SW846-3005A

Run: R322769 Analyst.: A STOCKBURGER Run Date...: 21-MAY-97 Instrument: ICP
ANALYTICAL Reviewer: S ENDERSON Review Date: 22-MAY-97

CCV	Q688846	INORGAN	BORON	5.00		4.95	mg/L	99	
BLA01	Q688847	NA	BORON			< 0.0200	mg/L		
ICV01	Q688851	PERKIN	BORON	1		1.04	mg/L	104	
CDL01	Q688856	INORGAN	BORON	10		9.85	mg/L	99	
BLA02	Q687280	NA	BORON			< 0.0200	mg/L		
LCS	Q687279	SPEX	BORON	1.00		0.987	mg/L	99	
SPI02	Q687281	A408114	BORON	0	1	1.02	mg/L	102	
DPS02	Q687282	A408114	BORON	0	1.00	1.04	mg/L	104	2
SAMPLE	A408104		See Cert. of Analysis, Rep: 1						
SAMPLE	A408105		See Cert. of Analysis, Rep: 1						
SAMPLE	A408108		See Cert. of Analysis, Rep: 1						
SAMPLE	A408110		See Cert. of Analysis, Rep: 1						
SAMPLE	A408112		See Cert. of Analysis, Rep: 1						
SAMPLE	A408113		See Cert. of Analysis, Rep: 1						
CCV	Q688878	INORGAN	BORON	5.00		5.15	mg/L	103	
BLA01	Q688882	NA	BORON			< 0.0200	mg/L		
BLA02	Q687859	NA	BORON			0.0292	mg/L		
LCS	Q687858	SPEX	BORON	1.00		1.01	mg/L	101	
[illegible]2	Q687860	A406538	BORON	0.109	1	1.08	mg/L	97	
[illegible]02	Q687861	A406538	BORON	0.109	1.00	1.07	mg/L	96	1
SAMPLE	A407859		See Cert. of Analysis, Rep: 1						
SAMPLE	A407861		See Cert. of Analysis, Rep: 1						
CCV	Q688911	INORGAN	BORON	5.00		5.22	mg/L	104	
BLA01	Q688912	NA	BORON			< 0.0200	mg/L		

CADMIUM TRACE ICP SW846-6010A M108.0

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A

Run: R322536 Analyst.: R DALAL Run Date...: 20-MAY-97
PREP Reviewer: W WATNESS Review Date: 20-MAY-97

QC Type	Lab ID	Source	Anal Run
SAMPLE	A408118	Rep: 0	R323678
LCS	Q687714	INORGAN	R323678
BLA02	Q687715	NA	R323678
SPI02	Q687716	A408117	R323678
DPS02	Q687717	A408117	R323678

Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOU SW846-3005A

Run: R322211 Analyst.: R DALAL Run Date...: 15-MAY-97
PREP Reviewer: W WATNESS Review Date: 15-MAY-97

SAMPLE	A407830	Rep: 1	R322657
SAMPLE	A407859	Rep: 1	R322657
SAMPLE	A407861	Rep: 1	R322657
SAMPLE	A407862	Rep: 1	R322657

HERITAGE ENVIRONMENTAL SERVICES, INC.

QC Type	Lab ID	Source	Anal Run
LCS	Q685863	INORGAN	R322657
BLA02	Q685864		R322657
SPI02	Q685865	A407859	R322657
DPS02	Q685866	A407859	R322657

Run: R322308 Analyst.: B GRAVES Run Date...: 16-MAY-97
PREP Reviewer: W WATNESS Review Date: 16-MAY-97

SAMPLE	A407957	Rep: 1	R322833
SAMPLE	A407958	Rep: 1	R322833
SAMPLE	A407959	Rep: 1	R322833
SAMPLE	A407960	Rep: 1	R322833
SAMPLE	A407961	Rep: 1	R322833
SAMPLE	A407962	Rep: 1	R322833
LCS	Q686492	INORGAN	R322833
BLA02	Q686493	NA	R322833
SPI02	Q686494	A407961	R322833
DPS02	Q686495	A407961	R322833

Run: R322441 Analyst.: B GRAVES Run Date...: 19-MAY-97
PREP Reviewer: W WATNESS Review Date: 20-MAY-97

SAMPLE	A408104	Rep: 1	R323652
SAMPLE	A408105	Rep: 1	R323652
SAMPLE	A408106	Rep: 1	R323652
SAMPLE	A408107	Rep: 1	R323652
SAMPLE	A408108	Rep: 1	R323652
SAMPLE	A408109	Rep: 1	R323652
SAMPLE	A408110	Rep: 1	R323652
SAMPLE	A408112	Rep: 1	R323652
SAMPLE	A408113	Rep: 1	R323652
LCS	Q687284	INORGAN	R323652
BLA02	Q687285	NA	R323652
SPI02	Q687286	A408114	R323652
DPS02	Q687287	A408114	R323652

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A

Run: R323678 Analyst.: A ROBERTSON Run Date...: 30-MAY-97 Instrument: TRACE ICP
ANALYTICAL Reviewer: S O'NEAL Review Date: 02-JUN-97

QC Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
BLA01	Q692762	NA	CADMIUM			< 0.000400	mg/L		
CCV	Q692763	INORGAN	CADMIUM	0.1		0.101	mg/L	101	
ICV01	Q692765	PERKIN-	CADMIUM	0.05		0.0516	mg/L	103	
CDL01	Q692768	PERKIN-	CADMIUM	0.01		0.0107	mg/L	107	
ICS-A	Q692771	PERKIN	CADMIUM	1		1.02	mg/L	102	
LCS	Q687714	INORGAN	CADMIUM	0.5		0.457	mg/L	91	
BLA02	Q687715	NA	CADMIUM			0.000660	mg/L		
SPI02	Q687716	A408117	CADMIUM	0	0.05	0.0511	mg/L	102	
DPS02	Q687717	A408117	CADMIUM	0	0.05	0.0512	mg/L	102.4	.4
SAMPLE	A408118		See Cert. of Analysis, Rep: 0						
CCV	Q692776	INORGAN	CADMIUM	0.1		0.100	mg/L	100	
BLA01	Q692777	NA	CADMIUM			< 0.000400	mg/L		
CDL01	Q692788	PERKIN-	CADMIUM	0.01		0.0105	mg/L	105	
ICS-A	Q692790	PERKIN	CADMIUM	1		0.970	mg/L	97	

HERITAGE ENVIRONMENTAL SERVICES, INC.

Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOU SW846-3005A

Run: R322657 Analyst.: A ROBERTSON Run Date...: 20-MAY-97 Instrument: TRACE ICP
ANALYTICAL Reviewer: S O'NEAL Review Date: 21-MAY-97

QC Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q688326	PERKIN-	CADMIUM	0.05		0.0508	mg/L	102	
BLA01	Q688328	NA	CADMIUM			< 0.000400	mg/L		
CDL01	Q688329	PERKIN-	CADMIUM	0.01		0.0103	mg/L	103	
ICS-A	Q688338	PERKIN	CADMIUM	1		0.952	mg/L	95	
CCV	Q688339	INORGAN	CADMIUM	0.1		0.101	mg/L	101	
LCS	Q685863	INORGAN	CADMIUM	0.5		0.440	mg/L	88	
BLA02	Q685864		CADMIUM			< 0.0004			
SAMPLE	A407859		See Cert. of Analysis, Rep: 1						
SPI02	Q685865	A407859	CADMIUM	0	0.05	0.0465		93	
DPS02	Q685866	A407859	CADMIUM	0	0.05	0.0489		97.8	5
SAMPLE	A407830		See Cert. of Analysis, Rep: 1						
SAMPLE	A407861		See Cert. of Analysis, Rep: 1						
SAMPLE	A407862		See Cert. of Analysis, Rep: 1						
CCV	Q688352	INORGAN	CADMIUM	0.1		0.102	mg/L	102	
BLA01	Q688353	NA	CADMIUM			< 0.000400	mg/L		
CDL01	Q688367	PERKIN-	CADMIUM	0.01		0.0103	mg/L	103	
ICS-A	Q688369	PERKIN	CADMIUM	1		0.941	mg/L	94	

Run: R322833 Analyst.: A ROBERTSON Run Date...: 22-MAY-97 Instrument: TRACE ICP
ANALYTICAL Reviewer: S O'NEAL Review Date: 23-MAY-97

CCV	Q689336	INORGAN	CADMIUM	0.1		0.101	mg/L	101	
BLA01	Q689337	NA	CADMIUM			< 0.000400	mg/L		
ICV01	Q689338	PERKIN-	CADMIUM	0.05		0.0504	mg/L	101	
CDL01	Q689341	PERKIN-	CADMIUM	0.01		0.0101	mg/L	101	
ICS-A	Q689344	PERKIN	CADMIUM	1		0.950	mg/L	95	
LCS	Q686492	INORGAN	CADMIUM	0.5		0.470	mg/L	94	
BLA02	Q686493	NA	CADMIUM			< 0.000400	mg/L		
SAMPLE	A407961		See Cert. of Analysis, Rep: 1						
SPI02	Q686494	A407961	CADMIUM	0	0.05	0.0467	mg/L	93	
DPS02	Q686495	A407961	CADMIUM	0	0.05	0.0488	mg/L	98	5
SAMPLE	A407957		See Cert. of Analysis, Rep: 1						
SAMPLE	A407958		See Cert. of Analysis, Rep: 1						
SAMPLE	A407959		See Cert. of Analysis, Rep: 1						
CCV	Q689357	INORGAN	CADMIUM	0.1		0.101	mg/L	101	
BLA01	Q689358	NA	CADMIUM			< 0.000400	mg/L		
SAMPLE	A407960		See Cert. of Analysis, Rep: 1						
SAMPLE	A407962		See Cert. of Analysis, Rep: 1						
CCV	Q689359	INORGAN	CADMIUM	0.1		0.100	mg/L	100	
BLA01	Q689360	NA	CADMIUM			< 0.000400	mg/L		
CDL01	Q689363	PERKIN-	CADMIUM	0.01		0.0101	mg/L	101	
ICS-A	Q689365	PERKIN	CADMIUM	1		0.946	mg/L	95	

Run: R323652 Analyst.: A ROBERTSON Run Date...: 28-MAY-97 Instrument: TRACE ICP
ANALYTICAL Reviewer: S O'NEAL Review Date: 02-JUN-97

CCV	Q692576	INORGAN	CADMIUM	0.1		0.101	mg/L	101	
BLA01	Q692577	NA	CADMIUM			< 0.000400	mg/L		
ICV01	Q692578	PERKIN-	CADMIUM	0.05		0.0504	mg/L	101	
CDL01	Q692581	PERKIN-	CADMIUM	0.01		0.0102	mg/L	102	
ICS-A	Q692584	PERKIN	CADMIUM	1		0.953	mg/L	95	
LCS	Q687284	INORGAN	CADMIUM	0.5		0.485	mg/L	97	
BLA02	Q687285	NA	CADMIUM			< 0.000400	mg/L		
SPI02	Q687286	A408114	CADMIUM	0	0.05	0.0506	mg/L	101	

HERITAGE ENVIRONMENTAL SERVICES, INC.

QC Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
DPS02	Q687287	A408114	CADMIUM	0	0.05	0.0512	mg/L	102	1
MPLE	A408104		See Cert. of Analysis, Rep: 1						
V	Q692591	INORGAN	CADMIUM	0.1		0.102	mg/L	102	
BLA01	Q692592	NA	CADMIUM			< 0.000400	mg/L		
SAMPLE	A408105		See Cert. of Analysis, Rep: 1						
SAMPLE	A408106		See Cert. of Analysis, Rep: 1						
SAMPLE	A408107		See Cert. of Analysis, Rep: 1						
SAMPLE	A408108		See Cert. of Analysis, Rep: 1						
SAMPLE	A408109		See Cert. of Analysis, Rep: 1						
SAMPLE	A408110		See Cert. of Analysis, Rep: 1						
SAMPLE	A408112		See Cert. of Analysis, Rep: 1						
SAMPLE	A408113		See Cert. of Analysis, Rep: 1						
CCV	Q692593	INORGAN	CADMIUM	0.1		0.104	mg/L	104	
BLA01	Q692594	NA	CADMIUM			< 0.000400	mg/L		
CCIC01	Q692595	PERKIN-	CADMIUM	0.01		0.0103	mg/L	103	
ICS-A	Q692597	PERKIN	CADMIUM	1		1.03	mg/L	103	

CALCIUM ICP SW846-6010A — MI09.3

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A

Run: R322212 — Analyst.: R DALAL — Run Date...: 15-MAY-97
PREP — Reviewer: W WATNESS — Review Date: 15-MAY-97

QC Type	Lab ID	Source	Anal Run
LCS	Q685867	SPEX	R322424
BLA02	Q685868	NA	R322424
SPI02	Q685869	A407861	R322424
S02	Q685870	A407861	R322424
SAMPLE	A407830	Rep: 0	R322424
SAMPLE	A407859	Rep: 0	R322424
SAMPLE	A407861	Rep: 0	R322424
SAMPLE	A407862	Rep: 0	R322424
SAMPLE	A407863	Rep: 0	R322424

Run: R322309 — Analyst.: B GRAVES — Run Date...: 16-MAY-97
PREP — Reviewer: W WATNESS — Review Date: 16-MAY-97

LCS	Q686496	SPEX	R322648
BLA02	Q686497	NA	R322648
SPI02	Q686498	A407961	R322648
DPS02	Q686499	A407961	R322648
SAMPLE	A407957	Rep: 0	R322648
SAMPLE	A407958	Rep: 0	R322648
SAMPLE	A407959	Rep: 0	R322648
SAMPLE	A407960	Rep: 0	R322648
SAMPLE	A407961	Rep: 0	R322648
SAMPLE	A407962	Rep: 0	R322648

Run: R322430 — Analyst.: N CARR — Run Date...: 19-MAY-97
PREP — Reviewer: W WATNESS — Review Date: 19-MAY-97

LCS	Q687229	SPEX	R322769
BLA02	Q687230	NA	R322769
SPI02	Q687231	A408106	R322769
DPS02	Q687232	A408106	R322769
SAMPLE	A408104	Rep: 0	R322769
MPLE	A408105	Rep: 0	R322769
AMPLE	A408106	Rep: 0	R322769

HERITAGE ENVIRONMENTAL SERVICES, INC.

QC Type	Lab ID	Source	Anal Run
SAMPLE	A408107	Rep: 0	R322769
[illegible]LE	A408108	Rep: 0	R322769
[illegible]LE	A408109	Rep: 0	R322769
SAMPLE	A408110	Rep: 0	R322769

Run: R322536 Analyst.: R DALAL Run Date...: 20-MAY-97
PREP Reviewer: W WATNESS Review Date: 20-MAY-97

LCS	Q687707	SPEX	R322769
BLA02	Q687708	NA	R322769
SPI02	Q687709	A408117	R322769
DPS02	Q687710	A408117	R322769
SAMPLE	A408112	Rep: 0	R322769
SAMPLE	A408113	Rep: 0	R322769
SAMPLE	A408118	Rep: 0	R322769

Run: R322424 Analyst.: A HILSCHER Run Date...: 16-MAY-97 Instrument: ICP
ANALYTICAL Reviewer: S ENDERSON Review Date: 19-MAY-97

QC Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
CCV	Q687119	INORGAN	CALCIUM	50.0		49.8	mg/L	100	
BLA01	Q687120	NA	CALCIUM			< 0.0800	mg/L		
ICV01	Q687123	SPEX	CALCIUM	20		20.3	mg/L	102	
ICS-A	Q687127	PERKIN-	CALCIUM	500		468.	mg/L	94	
BLA02	Q685868	NA	CALCIUM			0.799	mg/L		
LCS	Q685867	SPEX	CALCIUM	100		99.6	mg/L	100	
SAMPLE	A407861		See Cert. of Analysis, Rep: 0						
SPI02	Q685869	A407861	CALCIUM	42.4	100	146.	mg/L	104	
DPS02	Q685870	A407861	CALCIUM	42.4	100	141.	mg/L	99	5
CCV	Q687196	INORGAN	CALCIUM	50.0		53.1	mg/L	106	
BLA01	Q687197	NA	CALCIUM			< 0.0800	mg/L		
[illegible]LE	A407830		See Cert. of Analysis, Rep: 0						
[illegible]PLE	A407859		See Cert. of Analysis, Rep: 0						
SAMPLE	A407862		See Cert. of Analysis, Rep: 0						
SAMPLE	A407863		See Cert. of Analysis, Rep: 0						
CCV	Q687198	INORGAN	CALCIUM	50.0		53.9	mg/L	108	
BLA01	Q687199	NA	CALCIUM			< 0.0800	mg/L		
ICS-A	Q687211	PERKIN-	CALCIUM	500		509.	mg/L	102	

Run: R322648 Analyst.: A STOCKBURGER Run Date...: 20-MAY-97 Instrument: ICP
ANALYTICAL Reviewer: S ENDERSON Review Date: 21-MAY-97

CCV	Q688232	INORGAN	CALCIUM	50.0		48.9	mg/L	98	
BLA01	Q688233	NA	CALCIUM			< 0.0800	mg/L		
ICV01	Q688237	SPEX	CALCIUM	20		20.5	mg/L	103	
ICS-A	Q688243	PERKIN-	CALCIUM	500		466.	mg/L	93	
BLA02	Q686497	NA	CALCIUM			< 0.0800	mg/L		
LCS	Q686496	SPEX	CALCIUM	100		103.	mg/L	103	
SAMPLE	A407961		See Cert. of Analysis, Rep: 0						
SPI02	Q686498	A407961	CALCIUM	75.7	100	173.	mg/L	97	
DPS02	Q686499	A407961	CALCIUM	75.7	100	163.	mg/L	87	11
CCV	Q688251	INORGAN	CALCIUM	50.0		52.0	mg/L	104	
BLA01	Q688252	NA	CALCIUM			< 0.0800	mg/L		
SAMPLE	A407957		See Cert. of Analysis, Rep: 0						
SAMPLE	A407958		See Cert. of Analysis, Rep: 0						
SAMPLE	A407959		See Cert. of Analysis, Rep: 0						
SAMPLE	A407960		See Cert. of Analysis, Rep: 0						
SAMPLE	A407962		See Cert. of Analysis, Rep: 0						
[illegible]V	Q688253	INORGAN	CALCIUM	50.0		51.4	mg/L	103	
[illegible]01	Q688254	NA	CALCIUM			< 0.0800	mg/L		

HERITAGE ENVIRONMENTAL SERVICES, INC.

QC Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICS-A	Q688265	PERKIN-	CALCIUM	500		503.	mg/L	101	

Run: R322769 Analyst.: A STOCKBURGER Run Date...: 21-MAY-97 Instrument: ICP
ANALYTICAL Reviewer: S ENDERSON Review Date: 22-MAY-97

CCV	Q688846	INORGAN	CALCIUM	50.0		48.2	mg/L	96	
BLA01	Q688847	NA	CALCIUM			< 0.0800	mg/L		
ICV01	Q688853	SPEX	CALCIUM	20		20.1	mg/L	101	
ICS-A	Q688858	PERKIN-	CALCIUM	500		461.	mg/L	92	
BLA02	Q687230	NA	CALCIUM			< 0.0800	mg/L		
LCS	Q687229	SPEX	CALCIUM	100		95.3	mg/L	95	
SAMPLE	A408106		See Cert. of Analysis, Rep: 0						
SPI02	Q687231	A408106	CALCIUM	65.5	100	164.	mg/L	99	
DPS02	Q687232	A408106	CALCIUM	65.5	100	164.	mg/L	99	1
CCV	Q688893	INORGAN	CALCIUM	50.0		49.4	mg/L	99	
BLA01	Q688894	NA	CALCIUM			< 0.0800	mg/L		
SAMPLE	A408104		See Cert. of Analysis, Rep: 0						
SAMPLE	A408105		See Cert. of Analysis, Rep: 0						
SAMPLE	A408107		See Cert. of Analysis, Rep: 0						
SAMPLE	A408108		See Cert. of Analysis, Rep: 0						
SAMPLE	A408109		See Cert. of Analysis, Rep: 0						
SAMPLE	A408110		See Cert. of Analysis, Rep: 0						
CCV	Q688901	INORGAN	CALCIUM	50.0		49.9	mg/L	100	
BLA01	Q688902	NA	CALCIUM			< 0.0800	mg/L		
BLA02	Q687708	NA	CALCIUM			0.237	mg/L		
LCS	Q687707	SPEX	CALCIUM	100		90.7	mg/L	91	
SPI02	Q687709	A408117	CALCIUM	44.3	100	138.	mg/L	94	
DPS02	Q687710	A408117	CALCIUM	44.3	100	139.	mg/L	95	1
SAMPLE	A408112		See Cert. of Analysis, Rep: 0						
SAMPLE	A408113		See Cert. of Analysis, Rep: 0						
SAMPLE	A408118		See Cert. of Analysis, Rep: 0						
CCV	Q688915	INORGAN	CALCIUM	50.0		49.8	mg/L	100	
BLA01	Q688916	NA	CALCIUM			< 0.0800	mg/L		
ICS-A	Q688962	PERKIN-	CALCIUM	500		476.	mg/L	95	

Comments

*Q686499 * Spike is NA; Sample concentration is greater than four times the spike concentration. (Fe)*

CHROMIUM ICP SW846-6010A M110.3

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A

Run: R322536 Analyst.: R DALAL Run Date...: 20-MAY-97
PREP Reviewer: W WATNESS Review Date: 20-MAY-97

QC Type	Lab ID	Source	Anal Run
LCS	Q687707	SPEX	R322769
BLA02	Q687708	NA	R322769
SPI02	Q687709	A408117	R322769
DPS02	Q687710	A408117	R322769
SAMPLE	A408118	Rep: 0	R322769

Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOU SW846-3005A

Run: R322211 Analyst.: R DALAL Run Date...: 15-MAY-97
PREP Reviewer: W WATNESS Review Date: 15-MAY-97

LCS	Q685858	SPEX	R322424

HERITAGE ENVIRONMENTAL SERVICES, INC.

QC Type	Lab ID	Source	Anal Run
BLA02	Q685859	NA	R322424
[illegible]	Q685860	A407859	R322424
[illegible]	Q685861	A407859	R322424
SAMPLE	A407830	Rep: 1	R322424
SAMPLE	A407859	Rep: 1	R322424
SAMPLE	A407861	Rep: 1	R322424
SAMPLE	A407862	Rep: 1	R322424

Run: R322308 Analyst.: B GRAVES Run Date...: 16-MAY-97
PREP Reviewer: W WATNESS Review Date: 16-MAY-97

LCS	Q686487	SPEX	R322648
BLA02	Q686488	NA	R322648
SPI02	Q686489	A407961	R322648
DPS02	Q686490	A407961	R322648
SAMPLE	A407957	Rep: 1	R322648
SAMPLE	A407958	Rep: 1	R322648
SAMPLE	A407959	Rep: 1	R322648
SAMPLE	A407960	Rep: 1	R322648
SAMPLE	A407961	Rep: 1	R322648
SAMPLE	A407962	Rep: 1	R322648

Run: R322441 Analyst.: B GRAVES Run Date...: 19-MAY-97
PREP Reviewer: W WATNESS Review Date: 20-MAY-97

LCS	Q687279	SPEX	R322769
BLA02	Q687280	NA	R322769
SPI02	Q687281	A408114	R322769
DPS02	Q687282	A408114	R322769
SAMPLE	A408104	Rep: 1	R322769
SAMPLE	A408105	Rep: 1	R322769
[illegible]LE	A408106	Rep: 1	R322769
SAMPLE	A408107	Rep: 1	R322769
SAMPLE	A408108	Rep: 1	R322769
SAMPLE	A408109	Rep: 1	R322769
SAMPLE	A408110	Rep: 1	R322769
SAMPLE	A408112	Rep: 1	R322769
SAMPLE	A408113	Rep: 1	R322769

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A

Run: R322769 Analyst.: A STOCKBURGER Run Date...: 21-MAY-97 Instrument: ICP
ANALYTICAL Reviewer: S ENDERSON Review Date: 22-MAY-97

QC Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
CCV	Q688846	INORGAN	CHROMIUM	5.00		4.89	mg/L	98	
BLA01	Q688847	NA	CHROMIUM			< 0.00400	mg/L		
ICV01	Q688849	PERKIN	CHROMIUM	1		1.03	mg/L	103	
CDL01	Q688855	PERKIN	CHROMIUM	0.020		0.0212	mg/L	106	
ICS-A	Q688859	PERKIN	CHROMIUM	0.500		0.456	mg/L	91	
BLA02	Q687708	NA	CHROMIUM			< 0.00400	mg/L		
LCS	Q687707	SPEX	CHROMIUM	2.00		1.82	mg/L	91	
SPI02	Q687709	A408117	CHROMIUM	0	0.200	0.195	mg/L	98	
DPS02	Q687710	A408117	CHROMIUM	0	0.200	0.197	mg/L	99	1
SAMPLE	A408118		See Cert. of Analysis, Rep: 0						
CCV	Q688915	INORGAN	CHROMIUM	5.00		5.07	mg/L	101	
BLA01	Q688916	NA	CHROMIUM			< 0.00400	mg/L		
CDL01	Q688955	PERKIN	CHROMIUM	0.020		0.0218	mg/L	109	
[illegible]S-A	Q688966	PERKIN	CHROMIUM	0.500		0.469	mg/L	94	

HERITAGE ENVIRONMENTAL SERVICES, INC.

Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOU SW846-3005A

Run: R322424 Analyst.: A HILSCHER Run Date...: 16-MAY-97 Instrument: ICP
ANALYTICAL Reviewer: S ENDERSON Review Date: 19-MAY-97

QC Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
CCV	Q687119	INORGAN	CHROMIUM	5.00		5.05	mg/L	101	
BLA01	Q687120	NA	CHROMIUM			< 0.00400	mg/L		
ICV01	Q687121	PERKIN	CHROMIUM	1		1.04	mg/L	104	
CDL01	Q687125	PERKIN	CHROMIUM	0.020		0.0207	mg/L	104	
ICS-A	Q687128	PERKIN	CHROMIUM	0.500		0.465	mg/L	93	
BLA02	Q685859	NA	CHROMIUM			< 0.00400	mg/L		
LCS	Q685858	SPEX	CHROMIUM	2.00		1.77	mg/L	89	
SAMPLE	A407830		See Cert. of Analysis, Rep: 1						
SAMPLE	A407861		See Cert. of Analysis, Rep: 1						
SAMPLE	A407862		See Cert. of Analysis, Rep: 1						
SAMPLE	A407859		See Cert. of Analysis, Rep: 1						
SPI02	Q685860	A407859	CHROMIUM	0	0.2	0.177	mg/L	88	
CCV	Q687152	INORGAN	CHROMIUM	5.00		4.98	mg/L	100	
BLA01	Q687153	NA	CHROMIUM			< 0.00400	mg/L		
DPS02	Q685861	A407859	CHROMIUM	0	0.2	0.189	mg/L	94	7
CDL01	Q687210	PERKIN	CHROMIUM	0.020		0.0220	mg/L	110	
ICS-A	Q687212	PERKIN	CHROMIUM	0.500		0.510	mg/L	102	

Run: R322648 Analyst.: A STOCKBURGER Run Date...: 20-MAY-97 Instrument: ICP
ANALYTICAL Reviewer: S ENDERSON Review Date: 21-MAY-97

CCV	Q688232	INORGAN	CHROMIUM	5.00		5.01	mg/L	100	
BLA01	Q688233	NA	CHROMIUM			< 0.00400	mg/L		
ICV01	Q688234	PERKIN	CHROMIUM	1		1.04	mg/L	104	
CDL01	Q688239	PERKIN	CHROMIUM	0.020		0.0196	mg/L	98	
ICS-A	Q688244	PERKIN	CHROMIUM	0.500		0.471	mg/L	94	
BLA02	Q686488	NA	CHROMIUM			< 0.00400	mg/L		
LCS	Q686487	SPEX	CHROMIUM	2.00		2.11	mg/L	106	
SAMPLE	A407961		See Cert. of Analysis, Rep: 1						
SPI02	Q686489	A407961	CHROMIUM	0	0.200	0.192	mg/L	96	
DPS02	Q686490	A407961	CHROMIUM	0	0.200	0.201	mg/L	101	5
CCV	Q688247	INORGAN	CHROMIUM	5.00		5.19	mg/L	104	
BLA01	Q688248	NA	CHROMIUM			< 0.00400	mg/L		
SAMPLE	A407957		See Cert. of Analysis, Rep: 1						
SAMPLE	A407958		See Cert. of Analysis, Rep: 1						
SAMPLE	A407959		See Cert. of Analysis, Rep: 1						
SAMPLE	A407960		See Cert. of Analysis, Rep: 1						
SAMPLE	A407962		See Cert. of Analysis, Rep: 1						
CCV	Q688249	INORGAN	CHROMIUM	5.00		5.18	mg/L	104	
BLA01	Q688250	NA	CHROMIUM			< 0.00400	mg/L		
CDL01	Q688264	PERKIN	CHROMIUM	0.020		0.0186	mg/L	93	
ICS-A	Q688266	PERKIN	CHROMIUM	0.500		0.506	mg/L	101	

Run: R322769 Analyst.: A STOCKBURGER Run Date...: 21-MAY-97 Instrument: ICP
ANALYTICAL Reviewer: S ENDERSON Review Date: 22-MAY-97

CCV	Q688846	INORGAN	CHROMIUM	5.00		4.89	mg/L	98	
BLA01	Q688847	NA	CHROMIUM			< 0.00400	mg/L		
ICV01	Q688849	PERKIN	CHROMIUM	1		1.03	mg/L	103	
CDL01	Q688855	PERKIN	CHROMIUM	0.020		0.0212	mg/L	106	
ICS-A	Q688859	PERKIN	CHROMIUM	0.500		0.456	mg/L	91	
BLA02	Q687280	NA	CHROMIUM			< 0.00400	mg/L		
LCS	Q687279	SPEX	CHROMIUM	2.00		1.88	mg/L	94	
SPI02	Q687281	A408114	CHROMIUM	0	0.200	0.187	mg/L	94	

HERITAGE ENVIRONMENTAL SERVICES, INC.

QC Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
DPS02	Q687282	A408114	CHROMIUM	0	0.200	0.187	mg/L	94	1
SAMPLE	A408104		See Cert. of Analysis, Rep: 1						
SAMPLE	A408105		See Cert. of Analysis, Rep: 1						
SAMPLE	A408106		See Cert. of Analysis, Rep: 1						
SAMPLE	A408107		See Cert. of Analysis, Rep: 1						
SAMPLE	A408108		See Cert. of Analysis, Rep: 1						
SAMPLE	A408109		See Cert. of Analysis, Rep: 1						
SAMPLE	A408110		See Cert. of Analysis, Rep: 1						
SAMPLE	A408112		See Cert. of Analysis, Rep: 1						
SAMPLE	A408113		See Cert. of Analysis, Rep: 1						
CCV	Q688878	INORGAN	CHROMIUM	5.00		5.02	mg/L	100	
BLA01	Q688882	NA	CHROMIUM			< 0.00400	mg/L		
CDL01	Q688955	PERKIN	CHROMIUM	0.020		0.0218	mg/L	109	
ICS-A	Q688966	PERKIN	CHROMIUM	0.500		0.469	mg/L	94	

Comments

*Q686489 * Spike is NA; Sample concentration is greater than four times the spike concentration. (Fe)*

*Q686490 * Spike is NA; Sample concentration is greater than four times the spike concentration. (Fe)*

COPPER ICP SW846-6010A M112.3

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A

Run: R322536 Analyst.: R DALAL Run Date...: 20-MAY-97
PREP Reviewer: W WATNESS Review Date: 20-MAY-97

Type	Lab ID	Source	Anal Run
LCS	Q687707	SPEX	R322769
BLA02	Q687708	NA	R322769
SPI02	Q687709	A408117	R322769
DPS02	Q687710	A408117	R322769
SAMPLE	A408118	Rep: 0	R322769

Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOU SW846-3005A

Run: R322211 Analyst.: R DALAL Run Date...: 15-MAY-97
PREP Reviewer: W WATNESS Review Date: 15-MAY-97

LCS	Q685858	SPEX	R322424
BLA02	Q685859	NA	R322424
SPI02	Q685860	A407859	R322424
DPS02	Q685861	A407859	R322424
SAMPLE	A407830	Rep: 1	R322424
SAMPLE	A407859	Rep: 1	R322424
SAMPLE	A407861	Rep: 1	R322424
SAMPLE	A407862	Rep: 1	R322424

Run: R322308 Analyst.: B GRAVES Run Date...: 16-MAY-97
PREP Reviewer: W WATNESS Review Date: 16-MAY-97

LCS	Q686487	SPEX	R322648
BLA02	Q686488	NA	R322648
SPI02	Q686489	A407961	R322648
DPS02	Q686490	A407961	R322648
SAMPLE	A407957	Rep: 1	R322648
SAMPLE	A407958	Rep: 1	R322648
SAMPLE	A407959	Rep: 1	R322648

HERITAGE ENVIRONMENTAL SERVICES, INC.

QC Type	Lab ID	Source	Anal Run
SAMPLE	A407960	Rep: 1	R322648
SAMPLE	A407961	Rep: 1	R322648
SAMPLE	A407962	Rep: 1	R322648

Run: R322441 Analyst.: B GRAVES Run Date...: 19-MAY-97
PREP Reviewer: W WATNESS Review Date: 20-MAY-97

LCS	Q687279	SPEX	R322769
BLA02	Q687280	NA	R322769
SPI02	Q687281	A408114	R322769
DPS02	Q687282	A408114	R322769
SAMPLE	A408104	Rep: 1	R322769
SAMPLE	A408105	Rep: 1	R322769
SAMPLE	A408106	Rep: 1	R322769
SAMPLE	A408107	Rep: 1	R322769
SAMPLE	A408108	Rep: 1	R322769
SAMPLE	A408109	Rep: 1	R322769
SAMPLE	A408110	Rep: 1	R322769
SAMPLE	A408112	Rep: 1	R322769
SAMPLE	A408113	Rep: 1	R322769

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A

Run: R322769 Analyst.: A STOCKBURGER Run Date...: 21-MAY-97 Instrument: ICP
ANALYTICAL Reviewer: S ENDERSON Review Date: 22-MAY-97

QC Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
CCV	Q688846	INORGAN	COPPER	5.00		4.98	mg/L	100	
BLA01	Q688847	NA	COPPER			0.0117	mg/L		
ICV01	Q688849	PERKIN	COPPER	1		1.02	mg/L	102	
CDL01	Q688855	PERKIN	COPPER	0.050		0.0459	mg/L	92	
ICS-A	Q688859	PERKIN	COPPER	0.500		0.458	mg/L	92	
BLA02	Q687708	NA	COPPER			< 0.00800	mg/L		
LCS	Q687707	SPEX	COPPER	2.50		2.36	mg/L	94	
SPI02	Q687709	A408117	COPPER	0	0.250	0.248	mg/L	99	
DPS02	Q687710	A408117	COPPER	0	0.250	0.250	mg/L	100	1
SAMPLE	A408118		See Cert. of Analysis, Rep: 0						
CCV	Q688915	INORGAN	COPPER	5.00		5.21	mg/L	104	
BLA01	Q688916	NA	COPPER			0.0144	mg/L		
CDL01	Q688955	PERKIN	COPPER	0.050		0.0477	mg/L	95	
ICS-A	Q688966	PERKIN	COPPER	0.500		0.474	mg/L	95	

Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOU SW846-3005A

Run: R322424 Analyst.: A HILSCHER Run Date...: 16-MAY-97 Instrument: ICP
ANALYTICAL Reviewer: S ENDERSON Review Date: 19-MAY-97

CCV	Q687119	INORGAN	COPPER	5.00		5.13	mg/L	103	
BLA01	Q687120	NA	COPPER			< 0.00800	mg/L		
ICV01	Q687121	PERKIN	COPPER	1		1.03	mg/L	103	
CDL01	Q687125	PERKIN	COPPER	0.050		0.0430	mg/L	86	
ICS-A	Q687128	PERKIN	COPPER	0.500		0.470	mg/L	94	
BLA02	Q685859	NA	COPPER			< 0.00800	mg/L		
LCS	Q685858	SPEX	COPPER	2.50		2.27	mg/L	91	
SAMPLE	A407830		See Cert. of Analysis, Rep: 1						
SAMPLE	A407861		See Cert. of Analysis, Rep: 1						
SAMPLE	A407862		See Cert. of Analysis, Rep: 1						
SAMPLE	A407859		See Cert. of Analysis, Rep: 1						
SPI02	Q685860	A407859	COPPER	0	0.25	0.22	mg/L	88	
CCV	Q687152	INORGAN	COPPER	5.00		5.06	mg/L	101	

HERITAGE ENVIRONMENTAL SERVICES, INC.

QC Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
BLA01	Q687153	NA	COPPER			0.0132	mg/L		
DPS02	Q685861	A407859	COPPER	0	0.25	0.239	mg/L	96	8
[illegible]	Q687210	PERKIN	COPPER	0.050		0.0553	mg/L	111	
ICS-A	Q687212	PERKIN	COPPER	0.500		0.505	mg/L	101	
Run: R322648	Analyst.: A STOCKBURGER		Run Date...: 20-MAY-97		Instrument: ICP				
ANALYTICAL	Reviewer: S ENDERSON		Review Date: 21-MAY-97						
CCV	Q688232	INORGAN	COPPER	5.00		5.09	mg/L	102	
BLA01	Q688233	NA	COPPER			0.0140	mg/L		
ICV01	Q688234	PERKIN	COPPER	1		1.03	mg/L	103	
CDL01	Q688239	PERKIN	COPPER	0.050		0.0472	mg/L	94	
ICS-A	Q688244	PERKIN	COPPER	0.500		0.478	mg/L	96	
BLA02	Q686488	NA	COPPER			< 0.00800	mg/L		
LCS	Q686487	SPEX	COPPER	2.50		2.70	mg/L	108	
SAMPLE	A407961		See Cert. of Analysis, Rep: 1						
SPI02	Q686489	A407961	COPPER	0	0.250	0.244	mg/L	98	
DPS02	Q686490	A407961	COPPER	0	0.250	0.257	mg/L	103	5
CCV	Q688247	INORGAN	COPPER	5.00		5.21	mg/L	104	
BLA01	Q688248	NA	COPPER			0.0104	mg/L		
SAMPLE	A407957		See Cert. of Analysis, Rep: 1						
SAMPLE	A407958		See Cert. of Analysis, Rep: 1						
SAMPLE	A407959		See Cert. of Analysis, Rep: 1						
SAMPLE	A407960		See Cert. of Analysis, Rep: 1						
SAMPLE	A407962		See Cert. of Analysis, Rep: 1						
CCV	Q688249	INORGAN	COPPER	5.00		5.18	mg/L	104	
BLA01	Q688250	NA	COPPER			0.00863	mg/L		
CDL01	Q688264	PERKIN	COPPER	0.050		0.0467	mg/L	93	
ICS-A	Q688266	PERKIN	COPPER	0.500		0.480	mg/L	96	
[illegible]: R322769	Analyst.: A STOCKBURGER		Run Date...: 21-MAY-97		Instrument: ICP				
[illegible]YTICAL	Reviewer: S ENDERSON		Review Date: 22-MAY-97						
CCV	Q688846	INORGAN	COPPER	5.00		4.98	mg/L	100	
BLA01	Q688847	NA	COPPER			0.0117	mg/L		
ICV01	Q688849	PERKIN	COPPER	1		1.02	mg/L	102	
CDL01	Q688855	PERKIN	COPPER	0.050		0.0459	mg/L	92	
ICS-A	Q688859	PERKIN	COPPER	0.500		0.458	mg/L	92	
BLA02	Q687280	NA	COPPER			< 0.00800	mg/L		
LCS	Q687279	SPEX	COPPER	2.50		2.45	mg/L	98	
SPI02	Q687281	A408114	COPPER	0	0.250	0.241	mg/L	96	
DPS02	Q687282	A408114	COPPER	0	0.250	0.242	mg/L	97	1
SAMPLE	A408104		See Cert. of Analysis, Rep: 1						
SAMPLE	A408105		See Cert. of Analysis, Rep: 1						
SAMPLE	A408106		See Cert. of Analysis, Rep: 1						
SAMPLE	A408107		See Cert. of Analysis, Rep: 1						
SAMPLE	A408108		See Cert. of Analysis, Rep: 1						
SAMPLE	A408109		See Cert. of Analysis, Rep: 1						
SAMPLE	A408110		See Cert. of Analysis, Rep: 1						
SAMPLE	A408112		See Cert. of Analysis, Rep: 1						
SAMPLE	A408113		See Cert. of Analysis, Rep: 1						
CCV	Q688878	INORGAN	COPPER	5.00		5.13	mg/L	103	
BLA01	Q688882	NA	COPPER			0.00820	mg/L		
CDL01	Q688955	PERKIN	COPPER	0.050		0.0477	mg/L	95	
ICS-A	Q688966	PERKIN	COPPER	0.500		0.474	mg/L	95	

Comments

*[illegible]6489 * Spike is NA; Sample concentration is greater than four times the spike*

HERITAGE ENVIRONMENTAL SERVICES, INC.

Comments

concentration. (Fe)
0686490 * Spike is NA; Sample concentration is greater than four times the spike concentration. (Fe)

IRON ICP SW846-6010A M115.3

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A

Run: R322536 Analyst.: R DALAL Run Date...: 20-MAY-97
PREP Reviewer: W WATNESS Review Date: 20-MAY-97

QC Type	Lab ID	Source	Anal Run
LCS	Q687707	SPEX	R322769
BLA02	Q687708	NA	R322769
SPI02	Q687709	A408117	R322769
DPS02	Q687710	A408117	R322769
SAMPLE	A408118	Rep: 0	R322769

Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOU SW846-3005A

Run: R322308 Analyst.: B GRAVES Run Date...: 16-MAY-97
PREP Reviewer: W WATNESS Review Date: 16-MAY-97

LCS	Q686487	SPEX	R322648
BLA02	Q686488	NA	R322648
SPI02	Q686489	A407961	R322648
DPS02	Q686490	A407961	R322648
SAMPLE	A407957	Rep: 1	R322648
SAMPLE	A407958	Rep: 1	R322648
SAMPLE	A407959	Rep: 1	R322648
SAMPLE	A407960	Rep: 1	R322648
SAMPLE	A407961	Rep: 1	R322648
SAMPLE	A407962	Rep: 1	R322648

Run: R322441 Analyst.: B GRAVES Run Date...: 19-MAY-97
PREP Reviewer: W WATNESS Review Date: 20-MAY-97

LCS	Q687279	SPEX	R322769
BLA02	Q687280	NA	R322769
SPI02	Q687281	A408114	R322769
DPS02	Q687282	A408114	R322769
SAMPLE	A408104	Rep: 1	R322769
SAMPLE	A408105	Rep: 1	R322769
SAMPLE	A408106	Rep: 1	R322769
SAMPLE	A408107	Rep: 1	R322769
SAMPLE	A408108	Rep: 1	R322769
SAMPLE	A408109	Rep: 1	R322769
SAMPLE	A408110	Rep: 1	R322769
SAMPLE	A408112	Rep: 1	R322769
SAMPLE	A408113	Rep: 1	R322769
SAMPLE	A408114	Rep: 1	R322769

Run: R322442 Analyst.: B GRAVES Run Date...: 19-MAY-97
PREP Reviewer: W WATNESS Review Date: 20-MAY-97

LCS	Q687288	SPEX	R322769
BLA02	Q687289	NA	R322769
SPI02	Q687290	A408117	R322769
DPS02	Q687291	A408117	R322769
SAMPLE	A408115	Rep: 1	R322769
SAMPLE	A408116	Rep: 1	R322769

HERITAGE ENVIRONMENTAL SERVICES, INC.

QC Type	Lab ID	Source	Anal Run
SAMPLE	A408117	Rep: 1	R322769

Run: R322553 Analyst.: B GRAVES Run Date...: 20-MAY-97
Reviewer: W WATNESS Review Date: 21-MAY-97

SAMPLE	A407830	Rep: 1	R322769
SAMPLE	A407859	Rep: 1	R322769
SAMPLE	A407861	Rep: 1	R322769
SAMPLE	A407862	Rep: 1	R322769
LCS	Q687858	SPEX	R322769
BLA02	Q687859	NA	R322769
SPI02	Q687860	A406538	R322769
DPS02	Q687861	A406538	R322769

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A

Run: R322769 Analyst.: A STOCKBURGER Run Date...: 21-MAY-97 Instrument: ICP
ANALYTICAL Reviewer: S ENDERSON Review Date: 22-MAY-97

QC Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
CCV	Q688846	INORGAN	IRON	5.00		4.95	mg/L	99	
BLA01	Q688847	NA	IRON			< 0.0100	mg/L		
ICV01	Q688849	PERKIN	IRON	1		1.03	mg/L	103	
CDL01	Q688856	INORGAN	IRON	10		10.1	mg/L	101	
ICS-A	Q688858	PERKIN-	IRON	200		182.	mg/L	91	
BLA02	Q687708	NA	IRON			0.0152	mg/L		
LCS	Q687707	SPEX	IRON	10.0		9.21	mg/L	92	
SPI02	Q687709	A408117	IRON	0.0343	1.00	1.02	mg/L	99	
DPS02	Q687710	A408117	IRON	0.0343	1.00	1.03	mg/L	100	1
SAMPLE	A408118		See Cert. of Analysis, Rep: 0						
CCV	Q688915	INORGAN	IRON	5.00		5.07	mg/L	101	
[illegible]1	Q688916	NA	IRON			< 0.0100	mg/L		
[illegible]A	Q688962	PERKIN-	IRON	200		183.	mg/L	92	

Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOU SW846-3005A

Run: R322648 Analyst.: A STOCKBURGER Run Date...: 20-MAY-97 Instrument: ICP
ANALYTICAL Reviewer: S ENDERSON Review Date: 21-MAY-97

CCV	Q688232	INORGAN	IRON	5.00		5.04	mg/L	101	
BLA01	Q688233	NA	IRON			< 0.0100	mg/L		
ICV01	Q688234	PERKIN	IRON	1		1.03	mg/L	103	
CDL01	Q688242	INORGAN	IRON	10		10.2	mg/L	102	
ICS-A	Q688243	PERKIN-	IRON	200		183.	mg/L	92	
BLA02	Q686488	NA	IRON			0.0314	mg/L		
LCS	Q686487	SPEX	IRON	10.0		10.7	mg/L	107	
SAMPLE	A407961		See Cert. of Analysis, Rep: 1						
SPI02	Q686489	A407961	IRON	13.4	1	*	mg/L		
DPS02	Q686490	A407961	IRON	13.4	1	*	mg/L		
CCV	Q688247	INORGAN	IRON	5.00		5.25	mg/L	105	
BLA01	Q688248	NA	IRON			< 0.0100	mg/L		
SAMPLE	A407957		See Cert. of Analysis, Rep: 1						
SAMPLE	A407958		See Cert. of Analysis, Rep: 1						
SAMPLE	A407959		See Cert. of Analysis, Rep: 1						
SAMPLE	A407960		See Cert. of Analysis, Rep: 1						
SAMPLE	A407962		See Cert. of Analysis, Rep: 1						
CCV	Q688249	INORGAN	IRON	5.00		5.21	mg/L	104	
BLA01	Q688250	NA	IRON			< 0.0100	mg/L		
[illegible]-A	Q688265	PERKIN-	IRON	200		197.	mg/L	99	

HERITAGE ENVIRONMENTAL SERVICES, INC.

Run: R322769 Analyst.: A STOCKBURGER Run Date...: 21-MAY-97 Instrument: ICP
ANALYTICAL Reviewer: S ENDERSON Review Date: 22-MAY-97

Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
CCV	Q688846	INORGAN	IRON	5.00		4.95	mg/L	99	
BLA01	Q688847	NA	IRON			< 0.0100	mg/L		
ICV01	Q688849	PERKIN	IRON	1		1.03	mg/L	103	
CDL01	Q688856	INORGAN	IRON	10		10.1	mg/L	101	
ICS-A	Q688858	PERKIN-	IRON	200		182.	mg/L	91	
BLA02	Q687289	NA	IRON			0.0164	mg/L		
LCS	Q687288	SPEX	IRON	10.0		10.6	mg/L	106	
SAMPLE	A408115		See Cert. of Analysis, Rep: 1						
SAMPLE	A408116		See Cert. of Analysis, Rep: 1						
SAMPLE	A408117		See Cert. of Analysis, Rep: 1						
SPI02	Q687290	A408117	IRON	0.0428	1	0.983	mg/L	94	
DPS02	Q687291	A408117	IRON	0.0428	1	0.967	mg/L	92	2
CCV	Q688866	INORGAN	IRON	5.00		5.07	mg/L	101	
BLA01	Q688870	NA	IRON			< 0.0100	mg/L		
BLA02	Q687280	NA	IRON			0.0164	mg/L		
LCS	Q687279	SPEX	IRON	10.0		9.72	mg/L	97	
SAMPLE	A408114		See Cert. of Analysis, Rep: 1						
SPI02	Q687281	A408114	IRON	0.0368	1	1.01	mg/L	97	
DPS02	Q687282	A408114	IRON	0.0368	1	1	mg/L	96	1
CCV	Q688872	INORGAN	IRON	5.00		5.02	mg/L	100	
BLA01	Q688874	NA	IRON			< 0.0100	mg/L		
SAMPLE	A408104		See Cert. of Analysis, Rep: 1						
SAMPLE	A408105		See Cert. of Analysis, Rep: 1						
SAMPLE	A408106		See Cert. of Analysis, Rep: 1						
SAMPLE	A408107		See Cert. of Analysis, Rep: 1						
SAMPLE	A408108		See Cert. of Analysis, Rep: 1						
SAMPLE	A408109		See Cert. of Analysis, Rep: 1						
SAMPLE	A408110		See Cert. of Analysis, Rep: 1						
SAMPLE	A408112		See Cert. of Analysis, Rep: 1						
SAMPLE	A408113		See Cert. of Analysis, Rep: 1						
CCV	Q688878	INORGAN	IRON	5.00		5.10	mg/L	102	
BLA01	Q688882	NA	IRON			< 0.0100	mg/L		
BLA02	Q687859	NA	IRON			0.0121	mg/L		
LCS	Q687858	SPEX	IRON	10.0		9.72	mg/L	97	
SPI02	Q687860	A406538	IRON	0.375	1.00	1.35	mg/L	98	
DPS02	Q687861	A406538	IRON	0.375	1.00	1.35	mg/L	98	1
SAMPLE	A407830		See Cert. of Analysis, Rep: 1						
SAMPLE	A407859		See Cert. of Analysis, Rep: 1						
SAMPLE	A407861		See Cert. of Analysis, Rep: 1						
SAMPLE	A407862		See Cert. of Analysis, Rep: 1						
CCV	Q688911	INORGAN	IRON	5.00		5.07	mg/L	101	
BLA01	Q688912	NA	IRON			< 0.0100	mg/L		
ICS-A	Q688962	PERKIN-	IRON	200		183.	mg/L	92	

Comments

*Q686489 * Spike is NA; Sample concentration is greater than four times the spike concentration. (Fe)*

*Q686490 * Spike is NA; Sample concentration is greater than four times the spike concentration. (Fe)*

HERITAGE ENVIRONMENTAL SERVICES, INC.

MAGNESIUM ICP SW846-6010A M118.3

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A

: R322536 Analyst.: R DALAL Run Date...: 20-MAY-97
PREP Reviewer: W WATNESS Review Date: 20-MAY-97

QC Type	Lab ID	Source	Anal Run
LCS	Q687707	SPEX	R322769
BLA02	Q687708	NA	R322769
SPI02	Q687709	A408117	R322769
DPS02	Q687710	A408117	R322769
SAMPLE	A408118	Rep: 0	R322769

Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOU SW846-3005A

Run: R322211 Analyst.: R DALAL Run Date...: 15-MAY-97
PREP Reviewer: W WATNESS Review Date: 15-MAY-97

LCS	Q685858	SPEX	R322424
BLA02	Q685859	NA	R322424
SPI02	Q685860	A407859	R322424
DPS02	Q685861	A407859	R322424
SAMPLE	A407830	Rep: 1	R322424
SAMPLE	A407859	Rep: 1	R322424
SAMPLE	A407861	Rep: 1	R322424
SAMPLE	A407862	Rep: 1	R322424

Run: R322308 Analyst.: B GRAVES Run Date...: 16-MAY-97
PREP Reviewer: W WATNESS Review Date: 16-MAY-97

LCS	Q686487	SPEX	R322648
BLA02	Q686488	NA	R322648
SPI02	Q686489	A407961	R322648
[illegible]2	Q686490	A407961	R322648
[illegible]LE	A407957	Rep: 1	R322648
SAMPLE	A407958	Rep: 1	R322648
SAMPLE	A407959	Rep: 1	R322648
SAMPLE	A407960	Rep: 1	R322648
SAMPLE	A407961	Rep: 1	R322648
SAMPLE	A407962	Rep: 1	R322648

Run: R322441 Analyst.: B GRAVES Run Date...: 19-MAY-97
PREP Reviewer: W WATNESS Review Date: 20-MAY-97

LCS	Q687279	SPEX	R322769
BLA02	Q687280	NA	R322769
SPI02	Q687281	A408114	R322769
DPS02	Q687282	A408114	R322769
SAMPLE	A408104	Rep: 1	R322769
SAMPLE	A408105	Rep: 1	R322769
SAMPLE	A408106	Rep: 1	R322769
SAMPLE	A408107	Rep: 1	R322769
SAMPLE	A408108	Rep: 1	R322769
SAMPLE	A408109	Rep: 1	R322769
SAMPLE	A408110	Rep: 1	R322769
SAMPLE	A408112	Rep: 1	R322769
SAMPLE	A408113	Rep: 1	R322769

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A

Run: R322769 Analyst.: A STOCKBURGER Run Date...: 21-MAY-97 Instrument: ICP
ALYTICAL Reviewer: S ENDERSON Review Date: 22-MAY-97

/pe	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
CCV	Q688846	INORGAN	MAGNESIUM	50.0		48.8	mg/L	98	

HERITAGE ENVIRONMENTAL SERVICES, INC.

QC Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
BLA01	Q688847	NA	MAGNESIUM			< 0.0800	mg/L		
ICV01	Q688853	SPEX	MAGNESIUM	20		20.2	mg/L	101	
ICS-A	Q688858	PERKIN-	MAGNESIUM	500		484.	mg/L	97	
BLA02	Q687708	NA	MAGNESIUM			< 0.0800	mg/L		
LCS	Q687707	SPEX	MAGNESIUM	100		93.8	mg/L	94	
SPI02	Q687709	A408117	MAGNESIUM	27.2	100	126.	mg/L	99	
DPS02	Q687710	A408117	MAGNESIUM	27.2	100	127.	mg/L	100	1
SAMPLE	A408118		See Cert. of Analysis, Rep: 0						
CCV	Q688915	INORGAN	MAGNESIUM	50.0		51.2	mg/L	102	
BLA01	Q688916	NA	MAGNESIUM			< 0.0800	mg/L		
ICS-A	Q688962	PERKIN-	MAGNESIUM	500		515.	mg/L	103	

Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOU SW846-3005A

Run: R322424 Analyst.: A HILSCHER Run Date...: 16-MAY-97 Instrument: ICP
ANALYTICAL Reviewer: S ENDERSON Review Date: 19-MAY-97

CCV	Q687119	INORGAN	MAGNESIUM	50.0		50.0	mg/L	100	
BLA01	Q687120	NA	MAGNESIUM			< 0.0800	mg/L		
ICV01	Q687123	SPEX	MAGNESIUM	20		20.2	mg/L	101	
ICS-A	Q687127	PERKIN-	MAGNESIUM	500		486.	mg/L	97	
BLA02	Q685859	NA	MAGNESIUM			< 0.0800	mg/L		
LCS	Q685858	SPEX	MAGNESIUM	100		88.7	mg/L	89	
SAMPLE	A407830		See Cert. of Analysis, Rep: 1						
SAMPLE	A407861		See Cert. of Analysis, Rep: 1						
SAMPLE	A407862		See Cert. of Analysis, Rep: 1						
SAMPLE	A407859		See Cert. of Analysis, Rep: 1						
SPI02	Q685860	A407859	MAGNESIUM	14.7	100	104	mg/L	89	
CCV	Q687152	INORGAN	MAGNESIUM	50.0		49.6	mg/L	99	
BLA01	Q687153	NA	MAGNESIUM			< 0.0800	mg/L		
DPS02	Q685861	A407859	MAGNESIUM	14.6	100	111	mg/L	96	8
ICS-A	Q687211	PERKIN-	MAGNESIUM	500		518.	mg/L	104	

Run: R322648 Analyst.: A STOCKBURGER Run Date...: 20-MAY-97 Instrument: ICP
ANALYTICAL Reviewer: S ENDERSON Review Date: 21-MAY-97

CCV	Q688232	INORGAN	MAGNESIUM	50.0		49.7	mg/L	99	
BLA01	Q688233	NA	MAGNESIUM			< 0.0800	mg/L		
ICV01	Q688237	SPEX	MAGNESIUM	20		20.5	mg/L	103	
ICS-A	Q688243	PERKIN-	MAGNESIUM	500		486.	mg/L	97	
BLA02	Q686488	NA	MAGNESIUM			0.191	mg/L		
LCS	Q686487	SPEX	MAGNESIUM	100		105.	mg/L	105	
SAMPLE	A407961		See Cert. of Analysis, Rep: 1						
SPI02	Q686489	A407961	MAGNESIUM	19	100	117	mg/L	98	
DPS02	Q686490	A407961	MAGNESIUM	19	100	118	mg/L	99	1
CCV	Q688247	INORGAN	MAGNESIUM	50.0		50.9	mg/L	102	
BLA01	Q688248	NA	MAGNESIUM			0.156	mg/L		
SAMPLE	A407957		See Cert. of Analysis, Rep: 1						
SAMPLE	A407958		See Cert. of Analysis, Rep: 1						
SAMPLE	A407959		See Cert. of Analysis, Rep: 1						
SAMPLE	A407960		See Cert. of Analysis, Rep: 1						
SAMPLE	A407962		See Cert. of Analysis, Rep: 1						
CCV	Q688249	INORGAN	MAGNESIUM	50.0		50.5	mg/L	101	
BLA01	Q688250	NA	MAGNESIUM			0.110	mg/L		
ICS-A	Q688265	PERKIN-	MAGNESIUM	500		502.	mg/L	100	

HERITAGE ENVIRONMENTAL SERVICES, INC.

Run: R322769 Analyst.: A STOCKBURGER Run Date...: 21-MAY-97 Instrument: ICP
ANALYTICAL Reviewer: S ENDERSON Review Date: 22-MAY-97

QC Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
	Q688846	INORGAN	MAGNESIUM	50.0		48.8	mg/L	98	
BLA01	Q688847	NA	MAGNESIUM			< 0.0800	mg/L		
ICV01	Q688853	SPEX	MAGNESIUM	20		20.2	mg/L	101	
ICS-A	Q688858	PERKIN-	MAGNESIUM	500		484.	mg/L	97	
BLA02	Q687280	NA	MAGNESIUM			0.0996	mg/L		
LCS	Q687279	SPEX	MAGNESIUM	100		96.8	mg/L	97	
SPI02	Q687281	A408114	MAGNESIUM	47.1	100	148	mg/L	101	
DPS02	Q687282	A408114	MAGNESIUM	47.1	100	147	mg/L	100	1
SAMPLE	A408104		See Cert. of Analysis, Rep: 1						
SAMPLE	A408105		See Cert. of Analysis, Rep: 1						
SAMPLE	A408106		See Cert. of Analysis, Rep: 1						
SAMPLE	A408107		See Cert. of Analysis, Rep: 1						
SAMPLE	A408108		See Cert. of Analysis, Rep: 1						
SAMPLE	A408109		See Cert. of Analysis, Rep: 1						
SAMPLE	A408110		See Cert. of Analysis, Rep: 1						
SAMPLE	A408112		See Cert. of Analysis, Rep: 1						
SAMPLE	A408113		See Cert. of Analysis, Rep: 1						
CCV	Q688878	INORGAN	MAGNESIUM	50.0		50.1	mg/L	100	
BLA01	Q688882	NA	MAGNESIUM			< 0.0800	mg/L		
ICS-A	Q688962	PERKIN-	MAGNESIUM	500		515.	mg/L	103	

Comments

*Q686489 * Spike is NA; Sample concentration is greater than four times the spike concentration. (Fe)*
*Q686490 * Spike is NA; Sample concentration is greater than four times the spike concentration. (Fe)*

MANGANESE ICP SW846-6010A M119.3

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A

Run: R322536 Analyst.: R DALAL Run Date...: 20-MAY-97
PREP Reviewer: W WATNESS Review Date: 20-MAY-97

QC Type	Lab ID	Source	Anal Run
LCS	Q687707	SPEX	R322769
BLA02	Q687708	NA	R322769
SPI02	Q687709	A408117	R322769
DPS02	Q687710	A408117	R322769
SAMPLE	A408118	Rep: 0	R322769

Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOU SW846-3005A

Run: R322211 Analyst.: R DALAL Run Date...: 15-MAY-97
PREP Reviewer: W WATNESS Review Date: 15-MAY-97

LCS	Q685858	SPEX	R322424
BLA02	Q685859	NA	R322424
SPI02	Q685860	A407859	R322424
DPS02	Q685861	A407859	R322424
SAMPLE	A407830	Rep: 1	R322424
SAMPLE	A407859	Rep: 1	R322424
SAMPLE	A407861	Rep: 1	R322424
SAMPLE	A407862	Rep: 1	R322424

HERITAGE ENVIRONMENTAL SERVICES, INC.

Run: R322308 Analyst.: B GRAVES Run Date...: 16-MAY-97
PREP Reviewer: W WATNESS Review Date: 16-MAY-97

QC Type	Lab ID	Source	Anal Run
LCS	Q686487	SPEX	R322648
BLA02	Q686488	NA	R322648
SPI02	Q686489	A407961	R322648
DPS02	Q686490	A407961	R322648
SAMPLE	A407957	Rep: 1	R322648
SAMPLE	A407958	Rep: 1	R322648
SAMPLE	A407959	Rep: 1	R322648
SAMPLE	A407960	Rep: 1	R322648
SAMPLE	A407961	Rep: 1	R322648
SAMPLE	A407962	Rep: 1	R322648

Run: R322441 Analyst.: B GRAVES Run Date...: 19-MAY-97
PREP Reviewer: W WATNESS Review Date: 20-MAY-97

LCS	Q687279	SPEX	R322769
BLA02	Q687280	NA	R322769
SPI02	Q687281	A408114	R322769
DPS02	Q687282	A408114	R322769
SAMPLE	A408104	Rep: 1	R322769
SAMPLE	A408105	Rep: 1	R322769
SAMPLE	A408106	Rep: 1	R322769
SAMPLE	A408107	Rep: 1	R322769
SAMPLE	A408108	Rep: 1	R322769
SAMPLE	A408109	Rep: 1	R322769
SAMPLE	A408110	Rep: 1	R322769
SAMPLE	A408112	Rep: 1	R322769
SAMPLE	A408113	Rep: 1	R322769

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A

Run: R322769 Analyst.: A STOCKSURGER Run Date...: 21-MAY-97 Instrument: ICP
ANALYTICAL Reviewer: S ENDERSON Review Date: 22-MAY-97

QC Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
CCV	Q688846	INORGAN	MANGANESE	5.00		4.88	mg/L	98	
BLA01	Q688847	NA	MANGANESE			< 0.00400	mg/L		
ICV01	Q688849	PERKIN	MANGANESE	1		1.02	mg/L	102	
CDL01	Q688855	PERKIN	MANGANESE	0.030		0.0297	mg/L	99	
ICS-A	Q688859	PERKIN	MANGANESE	0.500		0.446	mg/L	89	
BLA02	Q687708	NA	MANGANESE			< 0.00400	mg/L		
LCS	Q687707	SPEX	MANGANESE	5.00		4.61	mg/L	92	
SPI02	Q687709	A408117	MANGANESE	0	0.500	0.491	mg/L	98	
DPS02	Q687710	A408117	MANGANESE	0	0.500	0.494	mg/L	99	1
SAMPLE	A408118		See Cert. of Analysis, Rep: 0						
CCV	Q688915	INORGAN	MANGANESE	5.00		5.13	mg/L	103	
BLA01	Q688916	NA	MANGANESE			< 0.00400	mg/L		
CDL01	Q688955	PERKIN	MANGANESE	0.030		0.0308	mg/L	103	
ICS-A	Q688966	PERKIN	MANGANESE	0.500		0.468	mg/L	94	

Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOU SW846-3005A

Run: R322424 Analyst.: A HILSCHER Run Date...: 16-MAY-97 Instrument: ICP
ANALYTICAL Reviewer: S ENDERSON Review Date: 19-MAY-97

CCV	Q687119	INORGAN	MANGANESE	5.00		5.04	mg/L	101	
BLA01	Q687120	NA	MANGANESE			< 0.00400	mg/L		
[illegible]01	Q687121	PERKIN	MANGANESE	1		1.04	mg/L	104	
[illegible]01	Q687125	PERKIN	MANGANESE	0.030		0.0296	mg/L	99	

HERITAGE ENVIRONMENTAL SERVICES, INC.

QC Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICS-A	Q687128	PERKIN	MANGANESE	0.500		0.454	mg/L	91	
BLA02	Q685859	NA	MANGANESE			< 0.00400	mg/L		
	Q685858	SPEX	MANGANESE	5.00		4.48	mg/L	90	
SAMPLE	A407830		See Cert. of Analysis, Rep: 1						
SAMPLE	A407861		See Cert. of Analysis, Rep: 1						
SAMPLE	A407862		See Cert. of Analysis, Rep: 1						
SAMPLE	A407859		See Cert. of Analysis, Rep: 1						
SPI02	Q685860	A407859	MANGANESE	0.0724	0.5	0.512	mg/L	88	
CCV	Q687152	INORGAN	MANGANESE	5.00		5.01	mg/L	100	
BLA01	Q687153	NA	MANGANESE			< 0.00400	mg/L		
DPS02	Q685861	A407859	MANGANESE	0.0724	0.5	0.548	mg/L	95	8
CDL01	Q687210	PERKIN	MANGANESE	0.030		0.0328	mg/L	109	
ICS-A	Q687212	PERKIN	MANGANESE	0.500		0.495	mg/L	99	

Run: R322648 Analyst.: A STOCKBURGER Run Date...: 20-MAY-97 Instrument: ICP
ANALYTICAL Reviewer: S ENDERSON Review Date: 21-MAY-97

CCV	Q688232	INORGAN	MANGANESE	5.00		5.00	mg/L	100	
BLA01	Q688233	NA	MANGANESE			< 0.00400	mg/L		
ICV01	Q688234	PERKIN	MANGANESE	1		1.03	mg/L	103	
CDL01	Q688239	PERKIN	MANGANESE	0.030		0.0308	mg/L	103	
ICS-A	Q688244	PERKIN	MANGANESE	0.500		0.460	mg/L	92	
BLA02	Q686488	NA	MANGANESE			< 0.00400	mg/L		
LCS	Q686487	SPEX	MANGANESE	5.00		5.28	mg/L	106	
SAMPLE	A407961		See Cert. of Analysis, Rep: 1						
SPI02	Q686489	A407961	MANGANESE	0.142	0.5	0.619	mg/L	95	
DPS02	Q686490	A407961	MANGANESE	0.142	0.5	0.645	mg/L	101	6
CCV	Q688247	INORGAN	MANGANESE	5.00		5.16	mg/L	103	
BLA01	Q688248	NA	MANGANESE			< 0.00400	mg/L		
SAMPLE	A407957		See Cert. of Analysis, Rep: 1						
SAMPLE	A407958		See Cert. of Analysis, Rep: 1						
SAMPLE	A407959		See Cert. of Analysis, Rep: 1						
SAMPLE	A407960		See Cert. of Analysis, Rep: 1						
SAMPLE	A407962		See Cert. of Analysis, Rep: 1						
CCV	Q688249	INORGAN	MANGANESE	5.00		5.14	mg/L	103	
BLA01	Q688250	NA	MANGANESE			< 0.00400	mg/L		
CDL01	Q688264	PERKIN	MANGANESE	0.030		0.0337	mg/L	112	
ICS-A	Q688266	PERKIN	MANGANESE	0.500		0.476	mg/L	95	

Run: R322769 Analyst.: A STOCKBURGER Run Date...: 21-MAY-97 Instrument: ICP
ANALYTICAL Reviewer: S ENDERSON Review Date: 22-MAY-97

CCV	Q688846	INORGAN	MANGANESE	5.00		4.88	mg/L	98	
BLA01	Q688847	NA	MANGANESE			< 0.00400	mg/L		
ICV01	Q688849	PERKIN	MANGANESE	1		1.02	mg/L	102	
CDL01	Q688855	PERKIN	MANGANESE	0.030		0.0297	mg/L	99	
ICS-A	Q688859	PERKIN	MANGANESE	0.500		0.446	mg/L	89	
BLA02	Q687280	NA	MANGANESE			< 0.00400	mg/L		
LCS	Q687279	SPEX	MANGANESE	5.00		4.73	mg/L	95	
SPI02	Q687281	A408114	MANGANESE	0.2	0.5	0.671	mg/L	94	
DPS02	Q687282	A408114	MANGANESE	0.2	0.5	0.68	mg/L	96	2
SAMPLE	A408104		See Cert. of Analysis, Rep: 1						
SAMPLE	A408105		See Cert. of Analysis, Rep: 1						
SAMPLE	A408106		See Cert. of Analysis, Rep: 1						
SAMPLE	A408107		See Cert. of Analysis, Rep: 1						
SAMPLE	A408108		See Cert. of Analysis, Rep: 1						
SAMPLE	A408109		See Cert. of Analysis, Rep: 1						
SAMPLE	A408110		See Cert. of Analysis, Rep: 1						

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QC Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
SAMPLE	A408112		See Cert. of Analysis, Rep: 1						
MPLE	A408113		See Cert. of Analysis, Rep: 1						
CV	Q688878	INORGAN	MANGANESE	5.00		5.02	mg/L	100	
BLA01	Q688882	NA	MANGANESE			< 0.00400	mg/L		
CDL01	Q688955	PERKIN	MANGANESE	0.030		0.0308	mg/L	103	
ICS-A	Q688966	PERKIN	MANGANESE	0.500		0.468	mg/L	94	

Comments

*0686489 * Spike is NA; Sample concentration is greater than four times the spike concentration. (Fe)*

*0686490 * Spike is NA; Sample concentration is greater than four times the spike concentration. (Fe)*

POTASSIUM ICP SW846-6010A M126.3

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A

Run: R322536 Analyst.: R DALAL Run Date...: 20-MAY-97
PREP Reviewer: W WATNESS Review Date: 20-MAY-97

QC Type	Lab ID	Source	Anal Run
LCS	Q687707	SPEX	R322769
BLA02	Q687708	NA	R322769
SPI02	Q687709	A408117	R322769
DPS02	Q687710	A408117	R322769
SAMPLE	A408118	Rep: 0	R322769

Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOU SW846-3005A

Run: R322211 Analyst.: R DALAL Run Date...: 15-MAY-97
PREP Reviewer: W WATNESS Review Date: 15-MAY-97

LCS	Q685858	SPEX	R323985
BLA02	Q685859	NA	R323985
SPI02	Q685860	A407859	R323985
DPS02	Q685861	A407859	R323985
SAMPLE	A407830	Rep: 1	R323985
SAMPLE	A407859	Rep: 1	R323985
SAMPLE	A407861	Rep: 1	R323985
SAMPLE	A407862	Rep: 1	R323985

Run: R322308 Analyst.: B GRAVES Run Date...: 16-MAY-97
PREP Reviewer: W WATNESS Review Date: 16-MAY-97

LCS	Q686487	SPEX	R322648
BLA02	Q686488	NA	R322648
SPI02	Q686489	A407961	R322648
DPS02	Q686490	A407961	R322648
SAMPLE	A407957	Rep: 1	R322648
SAMPLE	A407958	Rep: 1	R322648
SAMPLE	A407959	Rep: 1	R322648
SAMPLE	A407960	Rep: 1	R322648
SAMPLE	A407961	Rep: 1	R322648
SAMPLE	A407962	Rep: 1	R322648

Run: R322441 Analyst.: B GRAVES Run Date...: 19-MAY-97
PREP Reviewer: W WATNESS Review Date: 20-MAY-97

LCS	Q687279	SPEX	R322769
LA02	Q687280	NA	R322769
SPI02	Q687281	A408114	R322769

HERITAGE ENVIRONMENTAL SERVICES, INC.

QC Type	Lab ID	Source	Anal Run
DPS02	Q687282	A408114	R322769
[illegible]LE	A408104	Rep: 1	R322769
[illegible]LE	A408105	Rep: 1	R322769
SAMPLE	A408106	Rep: 1	R322769
SAMPLE	A408107	Rep: 1	R322769
SAMPLE	A408108	Rep: 1	R322769
SAMPLE	A408109	Rep: 1	R322769
SAMPLE	A408110	Rep: 1	R322769
SAMPLE	A408112	Rep: 1	R322769
SAMPLE	A408113	Rep: 1	R322769

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A

Run: R322769 Analyst.: A STOCKBURGER Run Date...: 21-MAY-97 Instrument: ICP
ANALYTICAL Reviewer: S ENDERSON Review Date: 22-MAY-97

QC Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
CCV	Q688846	INORGAN	POTASSIUM	50		49.1	mg/L	98	
BLA01	Q688847	NA	POTASSIUM			0.137	mg/L		
ICV01	Q688851	PERKIN	POTASSIUM	10		10.0	mg/L	100	
ICV01	Q688853	SPEX	POTASSIUM	20		20.4	mg/L	102	
BLA02	Q687708	NA	POTASSIUM			< 0.0800	mg/L		
LCS	Q687707	SPEX	POTASSIUM	100		97.2	mg/L	97	
SPI02	Q687709	A408117	POTASSIUM	0.281	100	104.	mg/L	104	
DPS02	Q687710	A408117	POTASSIUM	0.281	100	105.	mg/L	105	1
SAMPLE	A408118		See Cert. of Analysis, Rep: 0						
CCV	Q688915	INORGAN	POTASSIUM	50		53.4	mg/L	107	
BLA01	Q688916	NA	POTASSIUM			< 0.0800	mg/L		

Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOU SW846-3005A

Run: R322648 Analyst.: A STOCKBURGER Run Date...: 20-MAY-97 Instrument: ICP
ANALYTICAL Reviewer: S ENDERSON Review Date: 21-MAY-97

CCV	Q688232	INORGAN	POTASSIUM	50		50.8	mg/L	102	
BLA01	Q688233	NA	POTASSIUM			< 0.0800	mg/L		
ICV01	Q688235	PERKIN	POTASSIUM	10		10.3	mg/L	103	
ICV01	Q688237	SPEX	POTASSIUM	20		20.6	mg/L	103	
BLA02	Q686488	NA	POTASSIUM			< 0.0800	mg/L		
LCS	Q686487	SPEX	POTASSIUM	100		106.	mg/L	106	
SAMPLE	A407961		See Cert. of Analysis, Rep: 1						
SPI02	Q686489	A407961	POTASSIUM	1.43	100	101	mg/L	100	
DPS02	Q686490	A407961	POTASSIUM	1.43	100	102	mg/L	101	1
CCV	Q688247	INORGAN	POTASSIUM	50		51.2	mg/L	102	
BLA01	Q688248	NA	POTASSIUM			< 0.0800	mg/L		
SAMPLE	A407957		See Cert. of Analysis, Rep: 1						
SAMPLE	A407958		See Cert. of Analysis, Rep: 1						
SAMPLE	A407959		See Cert. of Analysis, Rep: 1						
SAMPLE	A407960		See Cert. of Analysis, Rep: 1						
SAMPLE	A407962		See Cert. of Analysis, Rep: 1						
CCV	Q688249	INORGAN	POTASSIUM	50		50.9	mg/L	102	
BLA01	Q688250	NA	POTASSIUM			< 0.0800	mg/L		

Run: R322769 Analyst.: A STOCKBURGER Run Date...: 21-MAY-97 Instrument: ICP
ANALYTICAL Reviewer: S ENDERSON Review Date: 22-MAY-97

CCV	Q688846	INORGAN	POTASSIUM	50		49.1	mg/L	98	
BLA01	Q688847	NA	POTASSIUM			0.137	mg/L		
[illegible]V01	Q688851	PERKIN	POTASSIUM	10		10.0	mg/L	100	
[illegible]01	Q688853	SPEX	POTASSIUM	20		20.4	mg/L	102	

HERITAGE ENVIRONMENTAL SERVICES, INC.

QC Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
BLA02	Q687280	NA	POTASSIUM			< 0.0800	mg/L		
LCS	Q687279	SPEX	POTASSIUM	100		99.1	mg/L	99	
SPI02	Q687281	A408114	POTASSIUM	2.91	100	105	mg/L	102	
DPS02	Q687282	A408114	POTASSIUM	2.91	100	103	mg/L	100	2
SAMPLE	A408104		See Cert. of Analysis, Rep: 1						
SAMPLE	A408105		See Cert. of Analysis, Rep: 1						
SAMPLE	A408106		See Cert. of Analysis, Rep: 1						
SAMPLE	A408107		See Cert. of Analysis, Rep: 1						
SAMPLE	A408108		See Cert. of Analysis, Rep: 1						
SAMPLE	A408109		See Cert. of Analysis, Rep: 1						
SAMPLE	A408110		See Cert. of Analysis, Rep: 1						
SAMPLE	A408112		See Cert. of Analysis, Rep: 1						
SAMPLE	A408113		See Cert. of Analysis, Rep: 1						
CCV	Q688878	INORGAN	POTASSIUM	50		51.4	mg/L	103	
BLA01	Q688882	NA	POTASSIUM			< 0.0800	mg/L		

Run: R323985 Analyst.: A STOCKBURGER Run Date...: 03-JUN-97 Instrument: ICP
ANALYTICAL Reviewer: S ENDERSON Review Date: 04-JUN-97

CCV	Q694017	INORGAN	POTASSIUM	50		48.8	mg/L	98	
BLA01	Q694018	NA	POTASSIUM			< 0.0800	mg/L		
ICV01	Q694020	PERKIN	POTASSIUM	10		10.0	mg/L	100	
ICV01	Q694021	SPEX	POTASSIUM	20		19.9	mg/L	100	
BLA02	Q685859	NA	POTASSIUM			< 0.0800	mg/L		
LCS	Q685858	SPEX	POTASSIUM	100		85.7	mg/L	86	
SAMPLE	A407830		See Cert. of Analysis, Rep: 1						
SAMPLE	A407861		See Cert. of Analysis, Rep: 1						
SAMPLE	A407862		See Cert. of Analysis, Rep: 1						
SAMPLE	A407859		See Cert. of Analysis, Rep: 1						
SPI02	Q685860	A407859	POTASSIUM	0.717	100	91.8	mg/L	91	
DPS02	Q685861	A407859	POTASSIUM	0.717	100	95.4	mg/L	95	4
CCV	Q694040	INORGAN	POTASSIUM	50		48.3	mg/L	97	
BLA01	Q694041	NA	POTASSIUM			< 0.0800	mg/L		

Comments

*Q686489 * Spike is NA; Sample concentration is greater than four times the spike concentration. (Fe)*
*Q686490 * Spike is NA; Sample concentration is greater than Four times the spike concentration. (Fe)*

SODIUM ICP SW846-6010A M131.3

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A

Run: R322212 Analyst.: R DALAL Run Date...: 15-MAY-97
PREP Reviewer: W WATNESS Review Date: 15-MAY-97

QC Type	Lab ID	Source	Anal Run
LCS	Q685867	SPEX	R322424
BLA02	Q685868	NA	R322424
SPI02	Q685869	A407861	R322424
DPS02	Q685870	A407861	R322424
SAMPLE	A407859	Rep: 0	R322424
SAMPLE	A407861	Rep: 0	R322424

Run: R322430 Analyst.: N CARR Run Date...: 19-MAY-97
PREP Reviewer: W WATNESS Review Date: 19-MAY-97

LCS	Q687229	SPEX	R322769

QC Type	Lab ID	Source	Anal Run
BLA02	Q687230	NA	R322769
SPI02	Q687231	A408106	R322769
[illegible]2	Q687232	A408106	R322769
SAMPLE	A408105	Rep: 0	R323482
SAMPLE	A408108	Rep: 0	R322769
SAMPLE	A408110	Rep: 0	R322769

Run: R322536 Analyst.: R DALAL Run Date...: 20-MAY-97
PREP Reviewer: W WATNESS Review Date: 20-MAY-97

LCS	Q687707	SPEX	R322769
BLA02	Q687708	NA	R322769
SPI02	Q687709	A408117	R322769
DPS02	Q687710	A408117	R322769
SAMPLE	A408112	Rep: 0	R322769
SAMPLE	A408113	Rep: 0	R322769
SAMPLE	A408118	Rep: 0	R322769

Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOU SW846-3005A

Run: R322211 Analyst.: R DALAL Run Date...: 15-MAY-97
PREP Reviewer: W WATNESS Review Date: 15-MAY-97

LCS	Q685858	SPEX	R322424
BLA02	Q685859	NA	R322424
SPI02	Q685860	A407859	R322424
DPS02	Q685861	A407859	R322424
SAMPLE	A407830	Rep: 1	R322424
SAMPLE	A407859	Rep: 1	R322424
SAMPLE	A407861	Rep: 1	R322424
SAMPLE	A407862	Rep: 1	R322424

[illegible]n: R322308 Analyst.: B GRAVES Run Date...: 16-MAY-97
[illegible]EP Reviewer: W WATNESS Review Date: 16-MAY-97

LCS	Q686487	SPEX	R322648
BLA02	Q686488	NA	R322648
SPI02	Q686489	A407961	R322648
DPS02	Q686490	A407961	R322648
SAMPLE	A407957	Rep: 1	R322648
SAMPLE	A407958	Rep: 1	R322648
SAMPLE	A407959	Rep: 1	R322648
SAMPLE	A407960	Rep: 1	R322648
SAMPLE	A407961	Rep: 1	R322648
SAMPLE	A407962	Rep: 1	R322648

Run: R322441 Analyst.: B GRAVES Run Date...: 19-MAY-97
PREP Reviewer: W WATNESS Review Date: 20-MAY-97

LCS	Q687279	SPEX	R322769
BLA02	Q687280	NA	R322769
SPI02	Q687281	A408114	R322769
DPS02	Q687282	A408114	R322769
SAMPLE	A408104	Rep: 1	R322769
SAMPLE	A408105	Rep: 1	R322888
SAMPLE	A408106	Rep: 1	R322769
SAMPLE	A408107	Rep: 1	R322769
SAMPLE	A408108	Rep: 1	R322769
SAMPLE	A408109	Rep: 1	R322769
SAMPLE	A408110	Rep: 1	R322769
[illegible]MPLE	A408112	Rep: 1	R322769
[illegible]PLE	A408113	Rep: 1	R322769

HERITAGE ENVIRONMENTAL SERVICES, INC.

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A

Run: R322424 Analyst.: A HILSCHER Run Date...: 16-MAY-97 Instrument: ICP
ANALYTICAL Reviewer: S ENDERSON Review Date: 19-MAY-97

QC Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
CCV	Q687119	INORGAN	SODIUM	50		50.7	mg/L	101	
BLA01	Q687120	NA	SODIUM			< 0.0800	mg/L		
ICV01	Q687122	PERKIN	SODIUM	1		1.00	mg/L	100	
ICV01	Q687123	SPEX	SODIUM	20		20.3	mg/L	102	
BLA02	Q685868	NA	SODIUM			0.137	mg/L		
LCS	Q685867	SPEX	SODIUM	100		100.	mg/L	100	
SAMPLE	A407861		See Cert. of Analysis, Rep: 0						
SPI02	Q685869	A407861	SODIUM	107.	100	213.	mg/L	106	
DPS02	Q685870	A407861	SODIUM	107.	100	206.	mg/L	99	7
CCV	Q687196	INORGAN	SODIUM	50		52.9	mg/L	106	
BLA01	Q687197	NA	SODIUM			< 0.0800	mg/L		
SAMPLE	A407859		See Cert. of Analysis, Rep: 0						
CCV	Q687198	INORGAN	SODIUM	50		53.9	mg/L	108	
BLA01	Q687199	NA	SODIUM			< 0.0800	mg/L		

Run: R322769 Analyst.: A STOCKBURGER Run Date...: 21-MAY-97 Instrument: ICP
ANALYTICAL Reviewer: S ENDERSON Review Date: 22-MAY-97

CCV	Q688846	INORGAN	SODIUM	50		49.0	mg/L	98	
BLA01	Q688847	NA	SODIUM			< 0.0800	mg/L		
ICV01	Q688851	PERKIN	SODIUM	1		1.02	mg/L	102	
ICV01	Q688853	SPEX	SODIUM	20		20.2	mg/L	101	
BLA02	Q687230	NA	SODIUM			< 0.0800	mg/L		
LCS	Q687229	SPEX	SODIUM	100		97.3	mg/L	97	
SPI02	Q687231	A408106	SODIUM	103.	100	207.	mg/L	104	
DPS02	Q687232	A408106	SODIUM	103.	100	206.	mg/L	103	1
SAMPLE	A408108		See Cert. of Analysis, Rep: 0						
SAMPLE	A408110		See Cert. of Analysis, Rep: 0						
CCV	Q688901	INORGAN	SODIUM	50		50.1	mg/L	100	
BLA01	Q688902	NA	SODIUM			< 0.0800	mg/L		
BLA02	Q687708	NA	SODIUM			0.152	mg/L		
LCS	Q687707	SPEX	SODIUM	100		93.6	mg/L	94	
SPI02	Q687709	A408117	SODIUM	258.	100	356.	mg/L	98	
DPS02	Q687710	A408117	SODIUM	258.	100	357.	mg/L	99	1
SAMPLE	A408112		See Cert. of Analysis, Rep: 0						
SAMPLE	A408113		See Cert. of Analysis, Rep: 0						
SAMPLE	A408118		See Cert. of Analysis, Rep: 0						
CCV	Q688915	INORGAN	SODIUM	50		51.5	mg/L	103	
BLA01	Q688916	NA	SODIUM			0.145	mg/L		

Run: R323482 Analyst.: A STOCKBURGER Run Date...: 29-MAY-97 Instrument: ICP
ANALYTICAL Reviewer: S ENDERSON Review Date: 30-MAY-97

CCV	Q691995	INORGAN	SODIUM	50		49.5	mg/L	99	
BLA01	Q691996	NA	SODIUM			< 0.0800	mg/L		
ICV01	Q691998	PERKIN	SODIUM	1		1.04	mg/L	104	
ICV01	Q692001	SPEX	SODIUM	20		20.1	mg/L	101	
SAMPLE	A408105		See Cert. of Analysis, Rep: 0						
CCV	Q692029	INORGAN	SODIUM	50		48.9	mg/L	98	
BLA01	Q692030	NA	SODIUM			< 0.0800	mg/L		

HERITAGE ENVIRONMENTAL SERVICES, INC.

Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOU SW846-3005A

Run: R322424 Analyst.: A HILSCHER Run Date...: 16-MAY-97 Instrument: ICP
YTICAL Reviewer: S ENDERSON Review Date: 19-MAY-97

QC Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
CCV	Q687119	INORGAN	SODIUM	50		50.7	mg/L	101	
BLA01	Q687120	NA	SODIUM			< 0.0800	mg/L		
ICV01	Q687122	PERKIN	SODIUM	1		1.00	mg/L	100	
ICV01	Q687123	SPEX	SODIUM	20		20.3	mg/L	102	
BLA02	Q685859	NA	SODIUM			0.0983	mg/L		
LCS	Q685858	SPEX	SODIUM	100		90.7	mg/L	91	
SAMPLE	A407830		See Cert. of Analysis, Rep: 1						
SAMPLE	A407861		See Cert. of Analysis, Rep: 1						
SAMPLE	A407862		See Cert. of Analysis, Rep: 1						
SAMPLE	A407859		See Cert. of Analysis, Rep: 1						
SPI02	Q685860	A407859	SODIUM	92.4	100	179	mg/L	87	
CCV	Q687152	INORGAN	SODIUM	50		50.6	mg/L	101	
BLA01	Q687153	NA	SODIUM			< 0.0800	mg/L		
DPS02	Q685861	A407859	SODIUM	92.4	100	193	mg/L	101	14

Run: R322648 Analyst.: A STOCKBURGER Run Date...: 20-MAY-97 Instrument: ICP
ANALYTICAL Reviewer: S ENDERSON Review Date: 21-MAY-97

CCV	Q688232	INORGAN	SODIUM	50		50.4	mg/L	101	
BLA01	Q688233	NA	SODIUM			< 0.0800	mg/L		
ICV01	Q688235	PERKIN	SODIUM	1		1.03	mg/L	103	
ICV01	Q688237	SPEX	SODIUM	20		20.7	mg/L	104	
BLA02	Q686488	NA	SODIUM			0.219	mg/L		
LCS	Q686487	SPEX	SODIUM	100		108.	mg/L	108	
SAMPLE	A407961		See Cert. of Analysis, Rep: 1						
02	Q686489	A407961	SODIUM	31.1	100	133	mg/L	102	
2	Q686490	A407961	SODIUM	31.1	100	135	mg/L	104	2
CCV	Q688247	INORGAN	SODIUM	50		52.3	mg/L	105	
BLA01	Q688248	NA	SODIUM			< 0.0800	mg/L		
SAMPLE	A407957		See Cert. of Analysis, Rep: 1						
SAMPLE	A407958		See Cert. of Analysis, Rep: 1						
SAMPLE	A407959		See Cert. of Analysis, Rep: 1						
SAMPLE	A407960		See Cert. of Analysis, Rep: 1						
SAMPLE	A407962		See Cert. of Analysis, Rep: 1						
CCV	Q688249	INORGAN	SODIUM	50		52.3	mg/L	105	
BLA01	Q688250	NA	SODIUM			< 0.0800	mg/L		

Run: R322769 Analyst.: A STOCKBURGER Run Date...: 21-MAY-97 Instrument: ICP
ANALYTICAL Reviewer: S ENDERSON Review Date: 22-MAY-97

CCV	Q688846	INORGAN	SODIUM	50		49.0	mg/L	98	
BLA01	Q688847	NA	SODIUM			< 0.0800	mg/L		
ICV01	Q688851	PERKIN	SODIUM	1		1.02	mg/L	102	
ICV01	Q688853	SPEX	SODIUM	20		20.2	mg/L	101	
BLA02	Q687280	NA	SODIUM			0.0898	mg/L		
LCS	Q687279	SPEX	SODIUM	100		96.2	mg/L	96	
SPI02	Q687281	A408114	SODIUM	43.4	100	145	mg/L	102	
DPS02	Q687282	A408114	SODIUM	43.4	100	143	mg/L	100	2
SAMPLE	A408104		See Cert. of Analysis, Rep: 1						
SAMPLE	A408106		See Cert. of Analysis, Rep: 1						
SAMPLE	A408107		See Cert. of Analysis, Rep: 1						
SAMPLE	A408108		See Cert. of Analysis, Rep: 1						
MPLE	A408109		See Cert. of Analysis, Rep: 1						
LE	A408110		See Cert. of Analysis, Rep: 1						

HERITAGE ENVIRONMENTAL SERVICES, INC.

QC Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
SAMPLE	A408112		See Cert. of Analysis, Rep: 1						
SAMPLE	A408113		See Cert. of Analysis, Rep: 1						
CCV	Q688878	INORGAN	SODIUM	50		49.6	mg/L	99	
BLA01	Q688882	NA	SODIUM			< 0.0800	mg/L		

Run: R322888 Analyst.: A STOCKBURGER Run Date...: 23-MAY-97 Instrument: ICP
ANALYTICAL Reviewer: S ENDERSON Review Date: 23-MAY-97

CCV	Q689571	INORGAN	SODIUM	50		49.2	mg/L	98	
ICV01	Q689574	PERKIN	SODIUM	1		1.04	mg/L	104	
ICV01	Q689575	SPEX	SODIUM	20		19.7	mg/L	99	
BLA01	Q689576	NA	SODIUM			< 0.0800	mg/L		
SAMPLE	A408105		See Cert. of Analysis, Rep: 1						
CCV	Q689593	INORGAN	SODIUM	50		49.5	mg/L	99	
BLA01	Q689594	NA	SODIUM			< 0.0800	mg/L		

Comments

*Q686489 * Spike is NA; Sample concentration is greater than four times the spike concentration. (Fe)*

*Q686490 * Spike is NA; Sample concentration is greater than four times the spike concentration. (Fe)*

ZINC ICP SW846-6010A M139.3

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A

Run: R322536 Analyst.: R DALAL Run Date...: 20-MAY-97
PREP Reviewer: W WATNESS Review Date: 20-MAY-97

QC Type	Lab ID	Source	Anal Run
LCS	Q687707	SPEX	R322769
BLA02	Q687708	NA	R322769
SPI02	Q687709	A408117	R322769
DPS02	Q687710	A408117	R322769
SAMPLE	A408118	Rep: 0	R322769

Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOU SW846-3005A

Run: R322211 Analyst.: R DALAL Run Date...: 15-MAY-97
PREP Reviewer: W WATNESS Review Date: 15-MAY-97

LCS	Q685858	SPEX	R322424
BLA02	Q685859	NA	R322424
SPI02	Q685860	A407859	R322424
DPS02	Q685861	A407859	R322424
SAMPLE	A407830	Rep: 1	R322424
SAMPLE	A407859	Rep: 1	R322424
SAMPLE	A407861	Rep: 1	R322424
SAMPLE	A407862	Rep: 1	R322424

Run: R322308 Analyst.: B GRAVES Run Date...: 16-MAY-97
PREP Reviewer: W WATNESS Review Date: 16-MAY-97

LCS	Q686487	SPEX	R322648
BLA02	Q686488	NA	R322648
SPI02	Q686489	A407961	R322648
DPS02	Q686490	A407961	R322648
SAMPLE	A407957	Rep: 1	R322648
SAMPLE	A407958	Rep: 1	R322648
SAMPLE	A407959	Rep: 1	R322648
SAMPLE	A407960	Rep: 1	R322648

HERITAGE ENVIRONMENTAL SERVICES, INC.

QC Type	Lab ID	Source	Anal Run
SAMPLE	A407961	Rep: 1	R322648
SAMPLE	A407962	Rep: 1	R322648

.: R322441 Analyst.: B GRAVES Run Date...: 19-MAY-97
PREP Reviewer: W WATNESS Review Date: 20-MAY-97

LCS	Q687279	SPEX	R322769
BLA02	Q687280	NA	R322769
SPI02	Q687281	A408114	R322769
DPS02	Q687282	A408114	R322769
SAMPLE	A408104	Rep: 1	R322769
SAMPLE	A408105	Rep: 1	R322769
SAMPLE	A408106	Rep: 1	R322769
SAMPLE	A408107	Rep: 1	R322769
SAMPLE	A408108	Rep: 1	R322769
SAMPLE	A408109	Rep: 1	R322769
SAMPLE	A408110	Rep: 1	R322769
SAMPLE	A408112	Rep: 1	R322769
SAMPLE	A408113	Rep: 1	R322769

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES SW846-3005A

Run: R322769 Analyst.: A STOCKBURGER Run Date...: 21-MAY-97 Instrument: ICP
ANALYTICAL Reviewer: S ENDERSON Review Date: 22-MAY-97

QC Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
CCV	Q688846	INORGAN	ZINC	5.00		4.95	mg/L	99	
BLA01	Q688847	NA	ZINC			< 0.00800	mg/L		
ICV01	Q688849	PERKIN	ZINC	1		1.03	mg/L	103	
CDL01	Q688855	PERKIN	ZINC	0.040		0.0393	mg/L	98	
ICS-A	Q688859	PERKIN	ZINC	1.00		0.935	mg/L	94	
02	Q687708	NA	ZINC			0.00876	mg/L		
	Q687707	SPEX	ZINC	5.00		4.68	mg/L	94	
SPI02	Q687709	A408117	ZINC	0	0.500	0.520	mg/L	104	
DPS02	Q687710	A408117	ZINC	0	0.500	0.526	mg/L	105	1
SAMPLE	A408118		See Cert. of Analysis, Rep: 0						
CCV	Q688915	INORGAN	ZINC	5.00		5.14	mg/L	103	
BLA01	Q688916	NA	ZINC			< 0.00800	mg/L		
CDL01	Q688955	PERKIN	ZINC	0.040		0.0411	mg/L	103	
ICS-A	Q688966	PERKIN	ZINC	1.00		0.962	mg/L	96	

Prep: FAA OR ICP ACID DIGESTION (DISSOLVED METALS) AQUEOU SW846-3005A

Run: R322424 Analyst.: A HILSCHER Run Date...: 16-MAY-97 Instrument: ICP
ANALYTICAL Reviewer: S ENDERSON Review Date: 19-MAY-97

CCV	Q687119	INORGAN	ZINC	5.00		5.07	mg/L	101	
BLA01	Q687120	NA	ZINC			< 0.00800	mg/L		
ICV01	Q687121	PERKIN	ZINC	1		1.03	mg/L	103	
CDL01	Q687125	PERKIN	ZINC	0.040		0.0399	mg/L	100	
ICS-A	Q687128	PERKIN	ZINC	1.00		0.939	mg/L	94	
BLA02	Q685859	NA	ZINC			< 0.00800	mg/L		
LCS	Q685858	SPEX	ZINC	5.00		4.51	mg/L	90	
SAMPLE	A407830		See Cert. of Analysis, Rep: 1						
SAMPLE	A407861		See Cert. of Analysis, Rep: 1						
SAMPLE	A407862		See Cert. of Analysis, Rep: 1						
SAMPLE	A407859		See Cert. of Analysis, Rep: 1						
SPI02	Q685860	A407859	ZINC	0	0.5	0.467	mg/L	93	
V	Q687152	INORGAN	ZINC	5.00		5.02	mg/L	100	
01	Q687153	NA	ZINC			0.00856	mg/L		

HERITAGE ENVIRONMENTAL SERVICES, INC.

QC Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
DPS02	Q685861	A407859	ZINC	0	0.5	0.491	mg/L	98	5
CDL01	Q687210	PERKIN	ZINC	0.040		0.0475	mg/L	119	
ICS-A	Q687212	PERKIN	ZINC	1.00		1.03	mg/L	103	
Run: R322648 ANALYTICAL		Analyst.: A STOCKBURGER Reviewer: S ENDERSON	Run Date...: 20-MAY-97 Review Date: 21-MAY-97		Instrument: ICP				
CCV	Q688232	INORGAN	ZINC	5.00		5.04	mg/L	101	
BLA01	Q688233	NA	ZINC			< 0.00800	mg/L		
ICV01	Q688234	PERKIN	ZINC	1		1.03	mg/L	103	
CDL01	Q688239	PERKIN	ZINC	0.040		0.0416	mg/L	104	
ICS-A	Q688244	PERKIN	ZINC	1.00		0.964	mg/L	96	
BLA02	Q686488	NA	ZINC			0.0104	mg/L		
LCS	Q686487	SPEX	ZINC	5.00		5.38	mg/L	108	
SAMPLE	A407961		See Cert. of Analysis, Rep: 1						
SPI02	Q686489	A407961	ZINC	0	0.5	0.511	mg/L	102	
DPS02	Q686490	A407961	ZINC	0	0.5	0.536	mg/L	107	5
CCV	Q688247	INORGAN	ZINC	5.00		5.15	mg/L	103	
BLA01	Q688248	NA	ZINC			< 0.00800	mg/L		
SAMPLE	A407957		See Cert. of Analysis, Rep: 1						
SAMPLE	A407958		See Cert. of Analysis, Rep: 1						
SAMPLE	A407959		See Cert. of Analysis, Rep: 1						
SAMPLE	A407960		See Cert. of Analysis, Rep: 1						
SAMPLE	A407962		See Cert. of Analysis, Rep: 1						
CCV	Q688249	INORGAN	ZINC	5.00		5.12	mg/L	102	
BLA01	Q688250	NA	ZINC			< 0.00800	mg/L		
CDL01	Q688264	PERKIN	ZINC	0.040		0.0478	mg/L	120	
ICS-A	Q688266	PERKIN	ZINC	1.00		0.994	mg/L	99	
Run: R322769 ANALYTICAL		Analyst.: A STOCKBURGER Reviewer: S ENDERSON	Run Date...: 21-MAY-97 Review Date: 22-MAY-97		Instrument: ICP				
CCV	Q688846	INORGAN	ZINC	5.00		4.95	mg/L	99	
BLA01	Q688847	NA	ZINC			< 0.00800	mg/L		
ICV01	Q688849	PERKIN	ZINC	1		1.03	mg/L	103	
CDL01	Q688855	PERKIN	ZINC	0.040		0.0393	mg/L	98	
ICS-A	Q688859	PERKIN	ZINC	1.00		0.935	mg/L	94	
BLA02	Q687280	NA	ZINC			0.00968	mg/L		
LCS	Q687279	SPEX	ZINC	5.00		4.86	mg/L	97	
SPI02	Q687281	A408114	ZINC	0	0.500	0.510	mg/L	102	
DPS02	Q687282	A408114	ZINC	0	0.500	0.514	mg/L	103	1
SAMPLE	A408104		See Cert. of Analysis, Rep: 1						
SAMPLE	A408105		See Cert. of Analysis, Rep: 1						
SAMPLE	A408106		See Cert. of Analysis, Rep: 1						
SAMPLE	A408107		See Cert. of Analysis, Rep: 1						
SAMPLE	A408108		See Cert. of Analysis, Rep: 1						
SAMPLE	A408109		See Cert. of Analysis, Rep: 1						
SAMPLE	A408110		See Cert. of Analysis, Rep: 1						
SAMPLE	A408112		See Cert. of Analysis, Rep: 1						
SAMPLE	A408113		See Cert. of Analysis, Rep: 1						
CCV	Q688878	INORGAN	ZINC	5.00		5.10	mg/L	102	
BLA01	Q688882	NA	ZINC			< 0.00800	mg/L		
CDL01	Q688955	PERKIN	ZINC	0.040		0.0411	mg/L	103	
ICS-A	Q688966	PERKIN	ZINC	1.00		0.962	mg/L	96	

Comments

*Q686489 * Spike is NA; Sample concentration is greater than four times the spike concentration. (Fe)*

HERITAGE ENVIRONMENTAL SERVICES, INC.

Comments

*Q686490 * Spike is NA; Sample concentration is greater than four times the spike concentration. (Fe)*

VOLATILE ORGANICS (CAPILLARY COLUMN) SW846-8260A 0510.6

Run: R322889 Analyst.: H WILLIAMS Run Date...: 22-MAY-97 Instrument: GC/MS VOA
ANALYTICAL Reviewer: A BRADBURN Review Date: 23-MAY-97

QC Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
CCV	Q689583		See Attached Report: g1440r.ind						
BLA01	Q689584		See Attached Report: x1441r.ind						
LCS01	Q689586		TRICHLOROETHENE	10		10.1	ug/L	101	
LCS01	Q689586		TETRACHLOROETHENE	10		9.23	ug/L	92.3	
SAMPLE	A407859		See Cert. of Analysis, Rep: 0						
SPI01	Q689591	A408259	BENZENE	0	10	11.2	ug/L	112	
SPI01	Q689591	A408259	CARBON TETRACHLORIDE	0	10	11.9	ug/L	119	
SPI01	Q689591	A408259	1,4-DICHLOROBENZENE (P-DICHLOROBENZE	0	10	10.5	ug/L	105	
SPI01	Q689591	A408259	1,2-DICHLOROETHANE	0	10	12.7	ug/L	127	
SPI01	Q689591	A408259	1,1-DICHLOROETHENE	27	10	36.2	ug/L	92	
SPI01	Q689591	A408259	1,1,1-TRICHLOROETHANE	84	10	95.1	ug/L	111	
SPI01	Q689591	A408259	TRICHLOROETHENE	1000	10	!* 926	ug/L		
SPI01	Q689591	A408259	VINYL CHLORIDE	0	10	12.3	ug/L	123	
SPI01	Q689591	A408259	BROMOMETHANE	0	10	11.9	ug/L	119	
SPI01	Q689591	A408259	CHLOROBENZENE	0	10	10.7	ug/L	107	
SPI01	Q689591	A408259	CHLOROETHANE	0	10	13.5	ug/L	135	
SPI01	Q689591	A408259	CHLOROFORM	1.3	10	11.8	ug/L	105	
SPI01	Q689591	A408259	CHLOROMETHANE	0	10	10.3	ug/L	103	
[illegible]01	Q689591	A408259	1,2-DICHLOROBENZENE (O-DICHLOROBENZE	0	10	10.3	ug/L	103	
[illegible]J1	Q689591	A408259	TRANS-1,2-DICHLOROETHENE	0	10	10.4	ug/L	104	
SPI01	Q689591	A408259	CIS-1,2-DICHLOROETHENE	40	10	50.6	ug/L	106	
SPI01	Q689591	A408259	DICHLOROMETHANE (METHYLENE CHLORIDE)	1.4	10	13	ug/L	116	
SPI01	Q689591	A408259	1,1-DICHLOROETHANE	4.8	10	15.9	ug/L	111	
SPI01	Q689591	A408259	1,2-DICHLOROPROPANE	0	10	9.94	ug/L	99.4	
SPI01	Q689591	A408259	CIS-1,3-DICHLOROPROPENE	0	10	9.79	ug/L	97.9	
SPI01	Q689591	A408259	TRANS-1,3-DICHLOROPROPENE	0	10	10.1	ug/L	101	
SPI01	Q689591	A408259	ETHYL BENZENE	0	10	11.5	ug/L	115	
SPI01	Q689591	A408259	STYRENE	0	10	10.5	ug/L	105	
SPI01	Q689591	A408259	1,1,2-TRICHLOROETHANE	0	10	9.47	ug/L	94.7	
SPI01	Q689591	A408259	1,1,1,2-TETRACHLOROETHANE	0	10	11.3	ug/L	113	
SPI01	Q689591	A408259	1,1,2,2-TETRACHLOROETHANE	0	10	9.97	ug/L	99.7	
SPI01	Q689591	A408259	TETRACHLOROETHENE	480	10	!* 445	ug/L		
SPI01	Q689591	A408259	TOLUENE	0	10	9.07	ug/L	90.7	
SPI01	Q689591	A408259	TRICHLOROFLUOROMETHANE	0	10	13	ug/L	130	
DPS01	Q689592	A408259	BENZENE	0	10	11.5	ug/L	115	2.6
DPS01	Q689592	A408259	CARBON TETRACHLORIDE	0	10	11.6	ug/L	116	2.6
DPS01	Q689592	A408259	1,4-DICHLOROBENZENE (P-DICHLOROBENZE	0	10	11.6	ug/L	116	10
DPS01	Q689592	A408259	1,2-DICHLOROETHANE	0	10	13.2	ug/L	132	3.9
DPS01	Q689592	A408259	1,1-DICHLOROETHENE	27	10	36	ug/L	90	2.2
DPS01	Q689592	A408259	1,1,1-TRICHLOROETHANE	84	10	91.5	ug/L	75	38.7
DPS01	Q689592	A408259	TRICHLOROETHENE	1000	10	!* 930	ug/L		
DPS01	Q689592	A408259	VINYL CHLORIDE	0	10	12.8	ug/L	128	4
DPS01	Q689592	A408259	BROMOMETHANE	0	10	12.2	ug/L	122	2.5
[illegible]S01	Q689592	A408259	CHLOROBENZENE	0	10	11.1	ug/L	111	3.7
[illegible]01	Q689592	A408259	CHLOROETHANE	0	10	13.4	ug/L	134	.7

HERITAGE ENVIRONMENTAL SERVICES, INC.

QC Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
DPS01	Q689592	A408259	CHLOROFORM	1.3	10	11.9	ug/L	106	.9
DPS01	Q689592	A408259	CHLOROMETHANE	0	10	11.5	ug/L	115	11
DPS01	Q689592	A408259	1,2-DICHLOROBENZENE (O-DICHLOROBENZE	0	10	11.4	ug/L	114	10.
DPS01	Q689592	A408259	TRANS-1,2-DICHLOROETHENE	0	10	10.6	ug/L	106	1.9
DPS01	Q689592	A408259	CIS-1,2-DICHLOROETHENE	40	10	50.4	ug/L	104	1.9
DPS01	Q689592	A408259	DICHLOROMETHANE (METHYLENE CHLORIDE)	1.4	10	13	ug/L	116	0
DPS01	Q689592	A408259	1,1-DICHLOROETHANE	4.8	10	16.3	ug/L	115	3.5
DPS01	Q689592	A408259	1,2-DICHLOROPROPANE	0	10	10.6	ug/L	106	6.4
DPS01	Q689592	A408259	CIS-1,3-DICHLOROPROPENE	0	10	10.7	ug/L	107	8.9
DPS01	Q689592	A408259	TRANS-1,3-DICHLOROPROPENE	0	10	11.6	ug/L	116	13.8
DPS01	Q689592	A408259	ETHYL BENZENE	0	10	11.7	ug/L	117	1.7
DPS01	Q689592	A408259	STYRENE	0	10	11.1	ug/L	111	5.6
DPS01	Q689592	A408259	1,1,2-TRICHLOROETHANE	0	10	9.94	ug/L	99.4	4.8
DPS01	Q689592	A408259	1,1,1,2-TETRACHLOROETHANE	0	10	11.5	ug/L	115	1.8
DPS01	Q689592	A408259	1,1,2,2-TETRACHLOROETHANE	0	10	11.6	ug/L	116	15.1
DPS01	Q689592	A408259	TETRACHLOROETHENE	480	10	I* 434	ug/L		
DPS01	Q689592	A408259	TOLUENE	0	10	9.91	ug/L	99.1	8.9
DPS01	Q689592	A408259	TRICHLOROFLUOROMETHANE	0	10	12.5	ug/L	125	3.9

Run: R322895 Analyst.: H WILLIAMS Run Date...: 21-MAY-97 Instrument: GC/MS VOA
ANALYTICAL Reviewer: A BRADBURN Review Date: 22-MAY-97

CCV	Q689655		See Attached Report: g1420r.ind						
BLA01	Q689656		See Attached Report: g1421r.ind						
LCS01	Q689657		CHLOROETHANE	10		13	ug/L	130	
SAMPLE	A407830		See Cert. of Analysis, Rep: 0						
SAMPLE	A407861		See Cert. of Analysis, Rep: 0						
SAMPLE	A407862		See Cert. of Analysis, Rep: 0						
SAMPLE	A407863		See Cert. of Analysis, Rep: 0						
SAMPLE	A407957		See Cert. of Analysis, Rep: 0						
SAMPLE	A407958		See Cert. of Analysis, Rep: 0						
SAMPLE	A407959		See Cert. of Analysis, Rep: 0						
SPI01	Q689658	A407959	BENZENE	0	10	10.9	ug/L	109	
SPI01	Q689658	A407959	CARBON TETRACHLORIDE	0	10	11.5	ug/L	115	
SPI01	Q689658	A407959	1,4-DICHLOROBENZENE (P-DICHLOROBENZE	0	10	7.84	ug/L	78.4	
SPI01	Q689658	A407959	1,2-DICHLOROETHANE	0	10	12.7	ug/L	127	
SPI01	Q689658	A407959	1,1-DICHLOROETHENE	0	10	10.1	ug/L	101	
SPI01	Q689658	A407959	1,1,1-TRICHLOROETHANE	0	10	10.9	ug/L	109	
SPI01	Q689658	A407959	TRICHLOROETHENE	0	10	11	ug/L	110	
SPI01	Q689658	A407959	VINYL CHLORIDE	0	10	10.9	ug/L	109	
SPI01	Q689658	A407959	BROMOMETHANE	0	10	10.4	ug/L	104	
SPI01	Q689658	A407959	CHLOROBENZENE	0	10	10.1	ug/L	101	
SPI01	Q689658	A407959	CHLOROETHANE	0	10	12.2	ug/L	122	
SPI01	Q689658	A407959	CHLOROFORM	0	10	9.85	ug/L	98.5	
SPI01	Q689658	A407959	CHLOROMETHANE	0	10	10.4	ug/L	104	
SPI01	Q689658	A407959	1,2-DICHLOROBENZENE (O-DICHLOROBENZE	0	10	7.38	ug/L	73.8	
SPI01	Q689658	A407959	TRANS-1,2-DICHLOROETHENE	0	10	10.4	ug/L	104	
SPI01	Q689658	A407959	CIS-1,2-DICHLOROETHENE	0	10	10.1	ug/L	101	
SPI01	Q689658	A407959	DICHLOROMETHANE (METHYLENE CHLORIDE)	1.5	10	12.4	ug/L	109	
SPI01	Q689658	A407959	1,1-DICHLOROETHANE	0	10	10.8	ug/L	108	
SPI01	Q689658	A407959	1,2-DICHLOROPROPANE	0	10	11.1	ug/L	111	
SPI01	Q689658	A407959	CIS-1,3-DICHLOROPROPENE	0	10	10.4	ug/L	104	
SPI01	Q689658	A407959	TRANS-1,3-DICHLOROPROPENE	0	10	10.7	ug/L	107	
SPI01	Q689658	A407959	ETHYL BENZENE	0	10	10.4	ug/L	104	
SPI01	Q689658	A407959	STYRENE	0	10	9.77	ug/L	97.7	
SPI01	Q689658	A407959	1,1,2-TRICHLOROETHANE	0	10	10.6	ug/L	106	

HERITAGE ENVIRONMENTAL SERVICES, INC.

QC Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
SPI01	Q689658	A407959	1,1,1,2-TETRACHLOROETHANE	0	10	10.5	ug/L	105	
SPI01	Q689658	A407959	1,1,2,2-TETRACHLOROETHANE	0	10	9.52	ug/L	95.2	
SPI01	Q689658	A407959	TETRACHLOROETHENE	0	10	10.5	ug/L	105	
SPI01	Q689658	A407959	TOLUENE	0	10	10.2	ug/L	102	
SPI01	Q689658	A407959	TRICHLOROFLUOROMETHANE	0	10	12.2	ug/L	122	
DPS01	Q689659	A407959	BENZENE	0	10	11.4	ug/L	114	4.5
DPS01	Q689659	A407959	CARBON TETRACHLORIDE	0	10	10.9	ug/L	109	5.4
DPS01	Q689659	A407959	1,4-DICHLOROBENZENE (P-DICHLOROBENZE	0	10	10.1	ug/L	101	25.2
DPS01	Q689659	A407959	1,2-DICHLOROETHANE	0	10	13.9	ug/L	139	9
DPS01	Q689659	A407959	1,1-DICHLOROETHENE	0	10	11.1	ug/L	111	9.4
DPS01	Q689659	A407959	1,1,1-TRICHLOROETHANE	0	10	11.5	ug/L	115	5.4
DPS01	Q689659	A407959	TRICHLOROETHENE	0	10	11.1	ug/L	111	.9
DPS01	Q689659	A407959	VINYL CHLORIDE	0	10	13.4	ug/L	134	20.6
DPS01	Q689659	A407959	BROMOMETHANE	0	10	11.1	ug/L	111	6.5
DPS01	Q689659	A407959	CHLOROBENZENE	0	10	10.8	ug/L	108	6.7
DPS01	Q689659	A407959	CHLOROETHANE	0	10	! 14.5	ug/L	145	17.2
DPS01	Q689659	A407959	CHLOROFORM	0	10	11.2	ug/L	112	12.8
DPS01	Q689659	A407959	CHLOROMETHANE	0	10	11.9	ug/L	119	13.5
DPS01	Q689659	A407959	1,2-DICHLOROBENZENE (O-DICHLOROBENZE	0	10	10.9	ug/L	109	38.5
DPS01	Q689659	A407959	TRANS-1,2-DICHLOROETHENE	0	10	11.3	ug/L	113	8.3
DPS01	Q689659	A407959	CIS-1,2-DICHLOROETHENE	0	10	11	ug/L	110	8.5
DPS01	Q689659	A407959	DICHLOROMETHANE (METHYLENE CHLORIDE)	1.5	10	14.2	ug/L	127	15.3
DPS01	Q689659	A407959	1,1-DICHLOROETHANE	0	10	11.7	ug/L	117	8
DPS01	Q689659	A407959	1,2-DICHLOROPROPANE	0	10	12	ug/L	120	7.8
DPS01	Q689659	A407959	CIS-1,3-DICHLOROPROPENE	0	10	11.2	ug/L	112	7.4
DPS01	Q689659	A407959	TRANS-1,3-DICHLOROPROPENE	0	10	11.9	ug/L	119	10.6
DPS01	Q689659	A407959	ETHYL BENZENE	0	10	11	ug/L	110	5.6
DPS01	Q689659	A407959	STYRENE	0	10	11.6	ug/L	116	17.1
DPS01	Q689659	A407959	1,1,2-TRICHLOROETHANE	0	10	11.4	ug/L	114	7.3
DPS01	Q689659	A407959	1,1,1,2-TETRACHLOROETHANE	0	10	11.5	ug/L	115	9.1
DPS01	Q689659	A407959	1,1,2,2-TETRACHLOROETHANE	0	10	9.54	ug/L	95.4	.2
DPS01	Q689659	A407959	TETRACHLOROETHENE	0	10	11.2	ug/L	112	6.5
DPS01	Q689659	A407959	TOLUENE	0	10	10.9	ug/L	109	6.6
DPS01	Q689659	A407959	TRICHLOROFLUOROMETHANE	0	10	12.6	ug/L	126	3.2

Run: R323361 Analyst.: H WILLIAMS Run Date...: 23-MAY-97 Instrument: GC/MS VOA
ANALYTICAL Reviewer: B MAZUR Review Date: 27-MAY-97

CCV	Q691269		See Attached Report: g1460r.ind						
BLA01	Q691270		See Attached Report: g1461r.ind						
LCS01	Q691271		1,4-DICHLOROBENZENE (P-DICHLOROBENZE	10		11.2	ug/L	112	
LCS01	Q691271		1,2-DICHLOROBENZENE (O-DICHLOROBENZE	10		11.7	ug/L	117	
SAMPLE	A408110		See Cert. of Analysis, Rep: 0						
SAMPLE	A408112		See Cert. of Analysis, Rep: 0						
SAMPLE	A408113		See Cert. of Analysis, Rep: 0						
SAMPLE	A408114		See Cert. of Analysis, Rep: 0						
SAMPLE	A408115		See Cert. of Analysis, Rep: 0						
SAMPLE	A408116		See Cert. of Analysis, Rep: 0						
SAMPLE	A408118		See Cert. of Analysis, Rep: 0						
SPI01	Q691272	A407117	BENZENE	0	10	11	ug/L	110	
SPI01	Q691272	A407117	CARBON TETRACHLORIDE	0	10	11.5	ug/L	115	
SPI01	Q691272	A407117	1,4-DICHLOROBENZENE (P-DICHLOROBENZE	0	10	! 5.58	ug/L	55.8	
SPI01	Q691272	A407117	1,2-DICHLOROETHANE	0	10	12.6	ug/L	126	
SPI01	Q691272	A407117	1,1-DICHLOROETHENE	0	10	11.2	ug/L	112	
SPI01	Q691272	A407117	1,1,1-TRICHLOROETHANE	0	10	11.4	ug/L	114	
SPI01	Q691272	A407117	TRICHLOROETHENE	0	10	11.1	ug/L	111	

HERITAGE ENVIRONMENTAL SERVICES, INC.

QC Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
SPI01	Q691272	A407117	VINYL CHLORIDE	0	10	12.7	ug/L	127	
SPI01	Q691272	A407117	BROMOMETHANE	0	10	12.4	ug/L	124	
SPI01	Q691272	A407117	CHLOROBENZENE	0	10	9.95	ug/L	99.5	
SPI01	Q691272	A407117	CHLOROETHANE	0	10	14.4	ug/L	144	
SPI01	Q691272	A407117	CHLOROFORM	0	10	10.5	ug/L	105	
SPI01	Q691272	A407117	CHLOROMETHANE	0	10	10.6	ug/L	106	
SPI01	Q691272	A407117	1,2-DICHLOROBENZENE (O-DICHLOROBENZE	0	10	5.33	ug/L	53.3	
SPI01	Q691272	A407117	TRANS-1,2-DICHLOROETHENE	0	10	10.9	ug/L	109	
SPI01	Q691272	A407117	CIS-1,2-DICHLOROETHENE	0	10	10.1	ug/L	101	
SPI01	Q691272	A407117	DICHLOROMETHANE (METHYLENE CHLORIDE)	0.84	10	12.9	ug/L	120.6	
SPI01	Q691272	A407117	1,1-DICHLOROETHANE	0	10	11.4	ug/L	114	
SPI01	Q691272	A407117	1,2-DICHLOROPROPANE	0	10	11.1	ug/L	111	
SPI01	Q691272	A407117	CIS-1,3-DICHLOROPROPENE	0	10	10.2	ug/L	102	
SPI01	Q691272	A407117	TRANS-1,3-DICHLOROPROPENE	0	10	10.9	ug/L	109	
SPI01	Q691272	A407117	ETHYL BENZENE	0	10	9.73	ug/L	97.3	
SPI01	Q691272	A407117	STYRENE	0	10	8.87	ug/L	88.7	
SPI01	Q691272	A407117	1,1,2-TRICHLOROETHANE	0	10	10.9	ug/L	109	
SPI01	Q691272	A407117	1,1,1,2-TETRACHLOROETHANE	0	10	10.8	ug/L	108	
SPI01	Q691272	A407117	1,1,2,2-TETRACHLOROETHANE	0	10	11.1	ug/L	111	
SPI01	Q691272	A407117	TETRACHLOROETHENE	0	10	10.9	ug/L	109	
SPI01	Q691272	A407117	TOLUENE	0	10	9.98	ug/L	99.8	
SPI01	Q691272	A407117	TRICHLOROFLUOROMETHANE	0	10	13.7	ug/L	137	
DPS01	Q691273	A407117	BENZENE	0	10	10.7	ug/L	107	2.8
DPS01	Q691273	A407117	CARBON TETRACHLORIDE	0	10	10.5	ug/L	105	9.1
DPS01	Q691273	A407117	1,4-DICHLOROBENZENE (P-DICHLOROBENZE	0	10	9.8	ug/L	98	54.9
DPS01	Q691273	A407117	1,2-DICHLOROETHANE	0	10	13.1	ug/L	131	3.9
DPS01	Q691273	A407117	1,1-DICHLOROETHENE	0	10	10.4	ug/L	104	7.4
DPS01	Q691273	A407117	1,1,1-TRICHLOROETHANE	0	10	11.5	ug/L	115	.9
DPS01	Q691273	A407117	TRICHLOROETHENE	0	10	10.7	ug/L	107	3.7
DPS01	Q691273	A407117	VINYL CHLORIDE	0	10	11	ug/L	110	14.3
DPS01	Q691273	A407117	BROMOMETHANE	0	10	10.3	ug/L	103	18.5
DPS01	Q691273	A407117	CHLOROBENZENE	0	10	10.4	ug/L	104	4.4
DPS01	Q691273	A407117	CHLOROETHANE	0	10	12.2	ug/L	122	16.5
DPS01	Q691273	A407117	CHLOROFORM	0	10	10.9	ug/L	109	3.7
DPS01	Q691273	A407117	CHLOROMETHANE	0	10	10.4	ug/L	104	1.9
DPS01	Q691273	A407117	1,2-DICHLOROBENZENE (O-DICHLOROBENZE	0	10	10.3	ug/L	103	63.6
DPS01	Q691273	A407117	TRANS-1,2-DICHLOROETHENE	0	10	10.2	ug/L	102	6.6
DPS01	Q691273	A407117	CIS-1,2-DICHLOROETHENE	0	10	10.7	ug/L	107	5.8
DPS01	Q691273	A407117	DICHLOROMETHANE (METHYLENE CHLORIDE)	0.84	10	13.1	ug/L	122.6	1.6
DPS01	Q691273	A407117	1,1-DICHLOROETHANE	0	10	10.9	ug/L	109	4.5
DPS01	Q691273	A407117	1,2-DICHLOROPROPANE	0	10	11.4	ug/L	114	2.7
DPS01	Q691273	A407117	CIS-1,3-DICHLOROPROPENE	0	10	10.5	ug/L	105	2.9
DPS01	Q691273	A407117	TRANS-1,3-DICHLOROPROPENE	0	10	10.9	ug/L	109	0
DPS01	Q691273	A407117	ETHYL BENZENE	0	10	10.5	ug/L	105	7.6
DPS01	Q691273	A407117	STYRENE	0	10	11.1	ug/L	111	22.3
DPS01	Q691273	A407117	1,1,2-TRICHLOROETHANE	0	10	10.4	ug/L	104	4.7
DPS01	Q691273	A407117	1,1,1,2-TETRACHLOROETHANE	0	10	11.3	ug/L	113	4.5
DPS01	Q691273	A407117	1,1,2,2-TETRACHLOROETHANE	0	10	9.36	ug/L	93.6	17
DPS01	Q691273	A407117	TETRACHLOROETHENE	0	10	9.94	ug/L	99.4	9.2
DPS01	Q691273	A407117	TOLUENE	0	10	9.75	ug/L	97.5	2.3
DPS01	Q691273	A407117	TRICHLOROFLUOROMETHANE	0	10	11.8	ug/L	118	14.9

HERITAGE ENVIRONMENTAL SERVICES, INC.

Run: R323365 Analyst.: B MAZUR Run Date...: 27-MAY-97 Instrument: GC/MS VOA
ANALYTICAL Reviewer: A BRADBURN Review Date: 28-MAY-97

Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
	Q691301		See Attached Report: g0000l.ind						
BLA01	Q691302		See Attached Report: g0001l.ind						
LCS01	Q691303		1,1,2,2-TETRACHLOROETHANE	20		21.8	ug/L	109	
SAMPLE	A408108		See Cert. of Analysis, Rep: 0						
SPI01	Q691304	A408108	BENZENE	0	50	52.1	ug/L	104.2	
SPI01	Q691304	A408108	CARBON TETRACHLORIDE	0	50	54.3	ug/L	108.6	
SPI01	Q691304	A408108	1,4-DICHLOROBENZENE (P-DICHLOROBENZE	0	50	48.5	ug/L	97	
SPI01	Q691304	A408108	1,2-DICHLOROETHANE	0	50	57.6	ug/L	115.2	
SPI01	Q691304	A408108	1,1-DICHLOROETHENE	0	50	47.9	ug/L	95.8	
SPI01	Q691304	A408108	1,1,1-TRICHLOROETHANE	0	50	51.8	ug/L	103.6	
SPI01	Q691304	A408108	TRICHLOROETHENE	0	50	51.8	ug/L	103.6	
SPI01	Q691304	A408108	VINYL CHLORIDE	0	50	45.2	ug/L	90.4	
SPI01	Q691304	A408108	BROMOMETHANE	0	50	52.7	ug/L	105.4	
SPI01	Q691304	A408108	CHLOROBENZENE	0	50	50.7	ug/L	101.4	
SPI01	Q691304	A408108	CHLOROETHANE	0	50	45.3	ug/L	90.6	
SPI01	Q691304	A408108	CHLOROFORM	0	50	51.7	ug/L	103.4	
SPI01	Q691304	A408108	CHLOROMETHANE	0	50	44.9	ug/L	89.8	
SPI01	Q691304	A408108	1,2-DICHLOROBENZENE (O-DICHLOROBENZE	0	50	57.2	ug/L	114.4	
SPI01	Q691304	A408108	TRANS-1,2-DICHLOROETHENE	0	50	53.1	ug/L	106.2	
SPI01	Q691304	A408108	CIS-1,2-DICHLOROETHENE	0	50	51.7	ug/L	103.4	
SPI01	Q691304	A408108	DICHLOROMETHANE (METHYLENE CHLORIDE)	0	50	52.7	ug/L	105.4	
SPI01	Q691304	A408108	1,1-DICHLOROETHANE	0	50	52.4	ug/L	104.8	
SPI01	Q691304	A408108	1,2-DICHLOROPROPANE	0	50	53.2	ug/L	106.4	
SPI01	Q691304	A408108	CIS-1,3-DICHLOROPROPENE	0	50	53.6	ug/L	107.2	
SPI01	Q691304	A408108	TRANS-1,3-DICHLOROPROPENE	0	50	53.5	ug/L	107	
01	Q691304	A408108	ETHYL BENZENE	0	50	53.3	ug/L	106.6	
01	Q691304	A408108	STYRENE	0	50	43.4	ug/L	86.8	
SPI01	Q691304	A408108	1,1,2-TRICHLOROETHANE	0	50	53.2	ug/L	106.4	
SPI01	Q691304	A408108	1,1,1,2-TETRACHLOROETHANE	0	50	52.5	ug/L	105	
SPI01	Q691304	A408108	1,1,2,2-TETRACHLOROETHANE	0	50	1 69.7	ug/L	139.4	
SPI01	Q691304	A408108	TETRACHLOROETHENE	0	50	52.2	ug/L	104.4	
SPI01	Q691304	A408108	TOLUENE	0	50	51	ug/L	102	
SPI01	Q691304	A408108	TRICHLOROFLUOROMETHANE	0	50	47.8	ug/L	95.6	
DPS01	Q691305	A408108	BENZENE	0	50	51.5	ug/L	103	1.2
DPS01	Q691305	A408108	CARBON TETRACHLORIDE	0	50	53.7	ug/L	107.4	1.1
DPS01	Q691305	A408108	1,4-DICHLOROBENZENE (P-DICHLOROBENZE	0	50	49.2	ug/L	98.4	1.4
DPS01	Q691305	A408108	1,2-DICHLOROETHANE	0	50	56.2	ug/L	112.4	2.5
DPS01	Q691305	A408108	1,1-DICHLOROETHENE	0	50	49.5	ug/L	99	3.3
DPS01	Q691305	A408108	1,1,1-TRICHLOROETHANE	0	50	52.7	ug/L	105.4	1.7
DPS01	Q691305	A408108	TRICHLOROETHENE	0	50	51.1	ug/L	102.2	1.4
DPS01	Q691305	A408108	VINYL CHLORIDE	0	50	46.8	ug/L	93.6	3.5
DPS01	Q691305	A408108	BROMOMETHANE	0	50	59.7	ug/L	119.4	12.5
DPS01	Q691305	A408108	CHLOROBENZENE	0	50	50.4	ug/L	100.8	.6
DPS01	Q691305	A408108	CHLOROETHANE	0	50	46.9	ug/L	93.8	3.5
DPS01	Q691305	A408108	CHLOROFORM	0	50	52.3	ug/L	104.6	1.2
DPS01	Q691305	A408108	CHLOROMETHANE	0	50	44.7	ug/L	89.4	.4
DPS01	Q691305	A408108	1,2-DICHLOROBENZENE (O-DICHLOROBENZE	0	50	48.1	ug/L	96.2	17.3
DPS01	Q691305	A408108	TRANS-1,2-DICHLOROETHENE	0	50	54.9	ug/L	109.8	3.3
DPS01	Q691305	A408108	CIS-1,2-DICHLOROETHENE	0	50	51.6	ug/L	103.2	.2
DPS01	Q691305	A408108	DICHLOROMETHANE (METHYLENE CHLORIDE)	0	50	51.5	ug/L	103	2.3
PS01	Q691305	A408108	1,1-DICHLOROETHANE	0	50	52.4	ug/L	104.8	0
01	Q691305	A408108	1,2-DICHLOROPROPANE	0	50	52.2	ug/L	104.4	1.9

HERITAGE ENVIRONMENTAL SERVICES, INC.

QC Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
DPS01	Q691305	A408108	CIS-1,3-DICHLOROPROPENE	0	50	51.2	ug/L	102.4	4.6
DPS01	Q691305	A408108	TRANS-1,3-DICHLOROPROPENE	0	50	51.1	ug/L	102.2	4.6
DPS01	Q691305	A408108	ETHYL BENZENE	0	50	52.6	ug/L	105.2	1.3
DPS01	Q691305	A408108	STYRENE	0	50	52.2	ug/L	104.4	18.4
DPS01	Q691305	A408108	1,1,2-TRICHLOROETHANE	0	50	50.1	ug/L	100.2	6
DPS01	Q691305	A408108	1,1,1,2-TETRACHLOROETHANE	0	50	51.7	ug/L	103.4	1.5
DPS01	Q691305	A408108	1,1,2,2-TETRACHLOROETHANE	0	50	47.7	ug/L	95.4	37.5
DPS01	Q691305	A408108	TETRACHLOROETHENE	0	50	51.3	ug/L	102.6	1.7
DPS01	Q691305	A408108	TOLUENE	0	50	50.1	ug/L	100.2	1.8
DPS01	Q691305	A408108	TRICHLOROFLUOROMETHANE	0	50	48.3	ug/L	96.6	1
SAMPLE	A408109		See Cert. of Analysis, Rep: 0						
SAMPLE	A408107		See Cert. of Analysis, Rep: 0						
SAMPLE	A407960		See Cert. of Analysis, Rep: 0						
SAMPLE	A407961		See Cert. of Analysis, Rep: 0						
SAMPLE	A407962		See Cert. of Analysis, Rep: 0						
SAMPLE	A408104		See Cert. of Analysis, Rep: 0						

Run: R323480 Analyst.: H WILLIAMS Run Date...: 27-MAY-97 Instrument: GC/MS VOA
ANALYTICAL Reviewer: A BRADBURN Review Date: 29-MAY-97

CCV	Q691990		See Attached Report: g1481r.ind						
BLA01	Q691991		See Attached Report: g1482r.ind						
SAMPLE	A408117		See Cert. of Analysis, Rep: 0						
SPI01	Q691993	A408527	BENZENE	0	10	10.8	ug/L	108	
SPI01	Q691993	A408527	TRICHLOROETHENE	0	10	10.4	ug/L	104	
SPI01	Q691993	A408527	TRANS-1,2-DICHLOROETHENE	0	10	10.4	ug/L	104	
SPI01	Q691993	A408527	CIS-1,2-DICHLOROETHENE	0	10	10.7	ug/L	107	
SPI01	Q691993	A408527	DICHLOROMETHANE (METHYLENE CHLORIDE)	0.57	10	13.2	ug/L	126.3	
SPI01	Q691993	A408527	1,1-DICHLOROETHANE	0	10	11.7	ug/L	117	
SPI01	Q691993	A408527	TETRACHLOROETHENE	0	10	9.44	ug/L	94.4	
DPS01	Q691994	A408527	BENZENE	0	10	11.5	ug/L	115	6.3
DPS01	Q691994	A408527	TRICHLOROETHENE	0	10	11.1	ug/L	111	6.5
DPS01	Q691994	A408527	TRANS-1,2-DICHLOROETHENE	0	10	11.3	ug/L	113	8.3
DPS01	Q691994	A408527	CIS-1,2-DICHLOROETHENE	0	10	10.9	ug/L	109	1.9
DPS01	Q691994	A408527	DICHLOROMETHANE (METHYLENE CHLORIDE)	0.57	10	13.2	ug/L	126.3	0
DPS01	Q691994	A408527	1,1-DICHLOROETHANE	0	10	12	ug/L	120	2.5
DPS01	Q691994	A408527	TETRACHLOROETHENE	0	10	9.8	ug/L	98	3.7

Run: R323764 Analyst.: B MAZUR Run Date...: 29-MAY-97 Instrument: GC/MS VOA
ANALYTICAL Reviewer: A BRADBURN Review Date: 30-MAY-97

CCV	Q693273		See Attached Report: g0040l.ind						
BLA01	Q693274		See Attached Report: g0041l.ind						
SAMPLE	A408105		See Cert. of Analysis, Rep: 0						
LCS01	Q693275		BENZENE	20		22.7	ug/L	113.5	
LCS01	Q693275		CARBON TETRACHLORIDE	20		23.6	ug/L	118	
LCS01	Q693275		1,4-DICHLOROBENZENE (P-DICHLOROBENZE	20		18.8	ug/L	94	
LCS01	Q693275		1,2-DICHLOROETHANE	20		24.7	ug/L	123.5	
LCS01	Q693275		1,1-DICHLOROETHENE	20		24.5	ug/L	122.5	
LCS01	Q693275		1,1,1-TRICHLOROETHANE	20		22.7	ug/L	113.5	
LCS01	Q693275		TRICHLOROETHENE	20		22.6	ug/L	113	
LCS01	Q693275		VINYL CHLORIDE	20		26.2	ug/L	131	
LCS01	Q693275		BROMOMETHANE	20		24.8	ug/L	124	
LCS01	Q693275		CHLOROBENZENE	20		19.8	ug/L	99	
LCS01	Q693275		CHLOROETHANE	20		25	ug/L	125	
LCS01	Q693275		CHLOROFORM	20		23	ug/L	115	
LCS01	Q693275		CHLOROMETHANE	20		16.9	ug/L	84.5	
LCS01	Q693275		1,2-DICHLOROBENZENE (O-DICHLOROBENZE	20		19.2	ug/L	96	

HERITAGE ENVIRONMENTAL SERVICES, INC.

QC Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
LCS01	Q693275		TRANS-1,2-DICHLOROETHENE	20		24.9	ug/L	124.5	
LCS01	Q693275		CIS-1,2-DICHLOROETHENE	20		23.4	ug/L	117	
LCS01	Q693275		DICHLOROMETHANE (METHYLENE CHLORIDE)	20		22.8	ug/L	114	
LCS01	Q693275		1,1-DICHLOROETHANE	20		22.7	ug/L	113.5	
LCS01	Q693275		1,2-DICHLOROPROPANE	20		23.6	ug/L	118	
LCS01	Q693275		CIS-1,3-DICHLOROPROPENE	20		18.7	ug/L	93.5	
LCS01	Q693275		TRANS-1,3-DICHLOROPROPENE	20		20.2	ug/L	101	
LCS01	Q693275		ETHYL BENZENE	20		22.2	ug/L	111	
LCS01	Q693275		STYRENE	20		19.6	ug/L	98	
LCS01	Q693275		1,1,2-TRICHLOROETHANE	20		21.8	ug/L	109	
LCS01	Q693275		1,1,1,2-TETRACHLOROETHANE	20		21.7	ug/L	108.5	
LCS01	Q693275		1,1,2,2-TETRACHLOROETHANE	20		22	ug/L	110	
LCS01	Q693275		TETRACHLOROETHENE	20		22.2	ug/L	111	
LCS01	Q693275		TOLUENE	20		21.9	ug/L	109.5	
LCS01	Q693275		TRICHLOROFLUOROMETHANE	20		24	ug/L	120	

Run: R323785 Analyst.: B MAZUR Run Date...: 21-MAY-97 Instrument: GC/MS VOA
ANALYTICAL Reviewer: A BRADBURN Review Date: 30-MAY-97

CCV	Q693297		See Attached Report: g9960l.ind						
BLA01	Q693298		See Attached Report: g9961l.ind						
LCS01	Q693299		BROMOMETHANE	20		12.7	ug/L	63.5	
SPI01	Q693300	A407960	BENZENE	0	50	46.5	ug/L	93	
SPI01	Q693300	A407960	CARBON TETRACHLORIDE	0	50	46.5	ug/L	93	
SPI01	Q693300	A407960	1,4-DICHLOROBENZENE (P-DICHLOROBENZE	0	50	48.9	ug/L	97.8	
SPI01	Q693300	A407960	1,2-DICHLOROETHANE	0	50	47.8	ug/L	95.6	
SPI01	Q693300	A407960	1,1-DICHLOROETHENE	0	50	42.8	ug/L	85.6	
SPI01	Q693300	A407960	1,1,1-TRICHLOROETHANE	0	50	51.4	ug/L	102.8	
SPI01	Q693300	A407960	TRICHLOROETHENE	0	50	47.1	ug/L	94.2	
SPI01	Q693300	A407960	VINYL CHLORIDE	0	50	43.8	ug/L	87.6	
SPI01	Q693300	A407960	BROMOMETHANE	0	50	23	ug/L	46	
SPI01	Q693300	A407960	CHLOROBENZENE	0	50	46.5	ug/L	93	
SPI01	Q693300	A407960	CHLOROETHANE	0	50	48.5	ug/L	97	
SPI01	Q693300	A407960	CHLOROFORM	0	50	49.8	ug/L	99.6	
SPI01	Q693300	A407960	CHLOROMETHANE	0	50	59.4	ug/L	118.8	
SPI01	Q693300	A407960	1,2-DICHLOROBENZENE (O-DICHLOROBENZE	0	50	50	ug/L	100	
SPI01	Q693300	A407960	TRANS-1,2-DICHLOROETHENE	0	50	42.6	ug/L	85.2	
SPI01	Q693300	A407960	CIS-1,2-DICHLOROETHENE	0	50	47.1	ug/L	94.2	
SPI01	Q693300	A407960	DICHLOROMETHANE (METHYLENE CHLORIDE)	0	50	43.9	ug/L	87.8	
SPI01	Q693300	A407960	1,1-DICHLOROETHANE	0	50	50.6	ug/L	101.2	
SPI01	Q693300	A407960	1,2-DICHLOROPROPANE	0	50	47.7	ug/L	95.4	
SPI01	Q693300	A407960	CIS-1,3-DICHLOROPROPENE	0	50	46.9	ug/L	93.8	
SPI01	Q693300	A407960	TRANS-1,3-DICHLOROPROPENE	0	50	46.5	ug/L	93	
SPI01	Q693300	A407960	ETHYL BENZENE	0	50	47.6	ug/L	95.2	
SPI01	Q693300	A407960	STYRENE	0	50	43.5	ug/L	87	
SPI01	Q693300	A407960	1,1,2-TRICHLOROETHANE	0	50	51.6	ug/L	103.2	
SPI01	Q693300	A407960	1,1,1,2-TETRACHLOROETHANE	0	50	46.4	ug/L	92.8	
SPI01	Q693300	A407960	1,1,2,2-TETRACHLOROETHANE	0	50	63.7	ug/L	127.4	
SPI01	Q693300	A407960	TETRACHLOROETHENE	0	50	47.9	ug/L	95.8	
SPI01	Q693300	A407960	TOLUENE	0	50	46.4	ug/L	92.8	
SPI01	Q693300	A407960	TRICHLOROFLUOROMETHANE	0	50	48.1	ug/L	96.2	
DPS01	Q693301	A407960	BENZENE	0	50	48.6	ug/L	97.2	4.4
DPS01	Q693301	A407960	CARBON TETRACHLORIDE	0	50	48	ug/L	96	3.2
DPS01	Q693301	A407960	1,4-DICHLOROBENZENE (P-DICHLOROBENZE	0	50	51.1	ug/L	102.2	4.4
DPS01	Q693301	A407960	1,2-DICHLOROETHANE	0	50	49.2	ug/L	98.4	2.9
DPS01	Q693301	A407960	1,1-DICHLOROETHENE	0	50	46.5	ug/L	93	8.3

HERITAGE ENVIRONMENTAL SERVICES, INC.

QC Type	Lab ID	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
DPS01	Q693301	A407960	1,1,1-TRICHLOROETHANE	0	50	54.2	ug/L	108.4	5.3
DPS01	Q693301	A407960	TRICHLOROETHENE	0	50	48.5	ug/L	97	2.9
DPS01	Q693301	A407960	VINYL CHLORIDE	0	50	47.9	ug/L	95.8	8.9
DPS01	Q693301	A407960	BROMOMETHANE	0	50	! 29.4	ug/L	58.8	24.4
DPS01	Q693301	A407960	CHLOROBENZENE	0	50	48.1	ug/L	96.2	3.4
DPS01	Q693301	A407960	CHLOROETHANE	0	50	52.6	ug/L	105.2	8.1
DPS01	Q693301	A407960	CHLOROFORM	0	50	52.2	ug/L	104.4	4.7
DPS01	Q693301	A407960	CHLOROMETHANE	0	50	62.3	ug/L	124.6	4.8
DPS01	Q693301	A407960	1,2-DICHLOROBENZENE (O-DICHLOROBENZE	0	50	51.8	ug/L	103.6	3.5
DPS01	Q693301	A407960	TRANS-1,2-DICHLOROETHENE	0	50	46.1	ug/L	92.2	7.9
DPS01	Q693301	A407960	CIS-1,2-DICHLOROETHENE	0	50	49.8	ug/L	99.6	5.6
DPS01	Q693301	A407960	DICHLOROMETHANE (METHYLENE CHLORIDE)	0	50	46.7	ug/L	93.4	6.2
DPS01	Q693301	A407960	1,1-DICHLOROETHANE	0	50	53.3	ug/L	106.6	5.2
DPS01	Q693301	A407960	1,2-DICHLOROPROPANE	0	50	49.4	ug/L	98.8	3.5
DPS01	Q693301	A407960	CIS-1,3-DICHLOROPROPENE	0	50	46.8	ug/L	93.6	.2
DPS01	Q693301	A407960	TRANS-1,3-DICHLOROPROPENE	0	50	47.2	ug/L	94.4	1.5
DPS01	Q693301	A407960	ETHYL BENZENE	0	50	41.5	ug/L	83	13.7
DPS01	Q693301	A407960	STYRENE	0	50	47.1	ug/L	94.2	7.9
DPS01	Q693301	A407960	1,1,2-TRICHLOROETHANE	0	50	49.6	ug/L	99.2	4
DPS01	Q693301	A407960	1,1,1,2-TETRACHLOROETHANE	0	50	48.7	ug/L	97.4	4.8
DPS01	Q693301	A407960	1,1,2,2-TETRACHLOROETHANE	0	50	57.8	ug/L	115.6	9.7
DPS01	Q693301	A407960	TETRACHLOROETHENE	0	50	49.9	ug/L	99.8	4.1
DPS01	Q693301	A407960	TOLUENE	0	50	47.5	ug/L	95	2.3
DPS01	Q693301	A407960	TRICHLOROFLUOROMETHANE	0	50	52.6	ug/L	105.2	8.9
SAMPLE	A408106		See Cert. of Analysis, Rep: 0						

Comments

Q689591 ! Advisory limits from laboratory generated data.
** Concentration in sample exceeds linear range.*
Q689592 ! Advisory limits from laboratory generated data.
** Concentration in sample exceeds linear range.*
Q689658 ! Advisory limits from laboratory generated data.
Q689659 ! Advisory limits from laboratory generated data.
Q691272 ! Advisory limits from laboratory generated data.
Q691273 ! Advisory limits from laboratory generated data.
Q691304 ! Advisory limits from laboratory generated data.
Q691994 ! Advisory limits from laboratory generated data.
Q693275 LCS IS THE WATER QC FOR THIS ANALYTICAL RUN.
QC PASSES FOR TARGETS.
Q693300 ! Advisory limits from laboratory generated data.
Q693301 ! Advisory limits from laboratory generated data.

Approved by: P.K. Spence

Continuing Calibration Report

Data File : C:\HPCHEM\L052797\0000L.D Vial: 1
Acq On : 27 May 97 9:08 Operator: bethm
Sample : VSTD050 8260 Inst : GC/MS #11
Misc : Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\HPCHEM\1\METHODS\8260L.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Fri Apr 25 10:23:26 1997
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

cal 10 = 9993L.D cal 20 = 9994L.D cal 50 = 9995L.D
cal100 = 9996L.D cal200 = 9997L.D

		Compound	AvgRF	CCRF	%Dev
1	I	PENTAFLUOROBENZENE	1.00000	1.00000	0.0
2		Dichlorodifluoromethane	0.29062	0.22395	22.9#
3	P	Chloromethane	0.32669	0.32167	1.5
4	C	VINYL CHLORIDE	0.19141	0.17369	9.3
5		Bromomethane	0.08054	0.08062	0.1
6		Chloroethane	0.16443	0.15749	4.2
7		Trichlorofluoromethane	0.61279	0.58371	4.7
8		Acrolein	0.00948	0.01135	19.7
[illegible]		Diethyl Ether	0.18433	0.18387	0.2
[illegible]		Acetone	0.09859	0.18612	88.8#
11	CM	1,1-DICHLOROETHENE	0.28560	0.29043	1.7
12		Methylene Chloride	0.34544	0.35771	3.6
13		Acrylonitrile	0.02912	0.04124	41.6#
14		Carbon Disulfide	0.76024	0.78454	3.2
15		Vinyl Acetate	0.15394	0.15454	0.4
16		trans-1,2-Dichloroethene	0.31484	0.28922	8.1
17	P	1,1-Dichloroethane	0.65089	0.66880	2.8
18		Methyl-t-butyl Ether	0.83738	0.88489	5.7
19		Diispropyl Ether	1.08779	1.12507	3.4
20		2-Butanone	0.17777	0.26840	51.0#
21		cis-1,2-Dichloroethene	0.35776	0.37631	5.2
22	C	CHLOROFORM	0.76410	0.77049	0.8
23		Bromochloromethane	0.26553	0.27455	3.4
24		2,2-Dichloropropane	0.52913	0.56248	6.3
25		Tetrahyrofuran	0.06307	0.07783	23.4#
26		1,1,1-Trichloroethane	0.61028	0.61779	1.2
27		Iodomethane	0.03614	0.02575	28.7#
28	I	1,4-DIFLUOROBENZENE	1.00000	1.00000	0.0
29		1,1-Dichloropropene	0.47347	0.50546	6.8
30	S	1,2-Dichloroethane-d4	0.42718	0.44442	4.0
31		Carbon Tetrachloride	0.48190	0.53721	11.5
32		1,2-Dichloroethane	0.47468	0.53084	11.8
[illegible]	M	Benzene	0.84667	0.86978	2.7
[illegible]	M	Trichloroethene	0.43785	0.47906	9.4
[illegible]	[illegible]	1,2-DICHLOROPROPANE	0.39342	0.40891	3.9
36		Bromodichloromethane	0.72242	0.78193	8.2
37		Dibromomethane	0.41554	0.45213	8.8
38		4-Methyl-2-Pentanone	0.43518	0.62231	43.0#
39		2-Chloroethylvinylether	0.15971	0.22508	40.9#

Continuing Calibration Report

Data File : C:\HPCHEM\L052797\0000L.D
Acq On : 27 May 97 9:08
Sample : VSTD050 8260
Misc :
MS Integration Params: rteint.p

Vial: 1
Operator: bethm
Inst : GC/MS #11
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260L.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Fri Apr 25 10:23:26 1997
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

cal 10 = 9993L.D cal 20 = 9994L.D cal 50 = 9995L.D
cal100 = 9996L.D cal200 = 9997L.D

		Compound	AvgRF	CCRF	%Dev
40		cis-1,3-Dichloropropene	0.43060	0.49576	15.1
41	S	Toluene-d8	0.99270	0.97984	1.3
42	CM	TOLUENE	0.97134	1.00623	3.6
43		trans-1,3-Dichloropropene	0.51319	0.55786	8.7
44		1,1,2-Trichloroethane	0.38778	0.43823	13.0
45		1,2-Dibromoethane	0.60240	0.68633	13.9
46	I	CHLOROBENZENE-d5	1.00000	1.00000	0.0
	S	4-Bromofluorobenzene	0.76769	0.79401	3.4
48		2-Hexanone	0.37588	0.57551	53.1#
49		1,3-Dichloropropane	0.70427	0.77530	10.1
50		Tetrachloroethene	0.64088	0.69321	8.2
51		Dibromochloromethane	0.79028	0.88524	12.0
52	PM	Chlorobenzene	1.01711	1.07510	5.7
53		1,1,1,2-Tetrachloroethane	0.52275	0.58176	11.3
54	C	ETHYL BENZENE	0.41654	0.45296	8.7
55		m,p-Xylene	0.56249	0.56298	0.1
56		o-Xylene	0.60072	0.59777	0.5
57		Styrene	0.78485	0.84234	7.3
58	P	Bromoform	0.64095	0.75446	17.7
59	I	1,4-Dichlorobenzene-d4	1.00000	1.00000	0.0
60		Isopropylbenzene	3.15607	3.16427	0.3
61		trans-1,4-Dichloro-2-butene	0.26916	0.37146	38.0#
62	P	1,1,2,2-Tetrachloroethane	1.90224	2.12712	11.8
63		Bromobenzene	2.00559	1.97405	1.6
64		1,2,3-Trichloropropane	0.48400	0.56159	16.0
65		n-Propylbenzene	0.46479	0.46216	0.6
66		1,3,5-Trimethylbenzene	2.53955	2.54198	0.1
67		2-Chlorotoluene	0.90904	0.86828	4.5
68		4-Chlorotoluene	0.76483	0.80135	4.8
69		t-Butylbenzene	2.97429	2.88556	3.0
70		1,2,4-Trimethylbenzene	2.32509	2.34828	1.0
		sec-Butylbenzene	3.62530	3.76054	3.7
		p-Isopropyltoluene	2.59061	2.63753	1.8
73		1,3-Dichlorobenzene	1.78461	1.84689	3.5
74		1,4-Dichlorobenzene	1.61342	1.61859	0.3
75		n-Butylbenzene	1.37650	1.32823	3.5
76		1,2-Dichlorobenzene	1.79611	1.80128	0.3
77		1,2-Dibromo-3-chloropropane	0.51381	0.61855	20.4#
78		1,2,4-Trichlorobenzene	1.29794	1.26553	2.5

Continuing Calibration Report

Data File : C:\HPCHEM\L052797\0000L.D Vial: 1
Acq On : 27 May 97 9:08 Operator: bethm
Sample : VSTD050 8260 Inst : GC/MS #11
Misc : Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\HPCHEM\1\METHODS\8260L.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Fri Apr 25 10:23:26 1997
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

cal 10 = 9993L.D cal 20 = 9994L.D cal 50 = 9995L.D
cal100 = 9996L.D cal200 = 9997L.D

	Compound	AvgRF	CCRF	%Dev
79	Naphthalene	2.05672	1.99389	3.1
80	Hexachlorobutadiene	0.98745	1.03162	4.5
81	1,2,3-Trichlorobenzene	1.28410	1.27701	0.6

(#) = Out of Range SPCC's out = 0 CCC's out = 0

8503J.D 8260L.M Wed May 28 09:31:50 1997 GCMS11

Heritage
Volatile Analysis - Water Method Blank
Analysis Method: SW846-8260

GC/MS VOA Data File: 0001L
Analysis Date/Time: 5/27/97 10:30

Analyte List	Result	DL	Units
Benzene	BDL	5	uG/L
Bromobenzene	BDL	5	uG/L
Bromochloromethane	BDL	5	uG/L
Bromodichloromethane	BDL	5	uG/L
Bromoform	BDL	5	uG/L
Bromomethane	BDL	5	uG/L
n-Butylbenzene	BDL	5	uG/L
tert-Butylbenzene	BDL	5	uG/L
Carbon tetrachloride	BDL	5	uG/L
Chlorobenzene	BDL	5	uG/L
Chloroethane	BDL	5	uG/L
Chloroform	BDL	5	uG/L
Chloromethane	BDL	5	uG/L
2-Chlorotoluene	BDL	5	uG/L
4-Chlorotoluene	BDL	5	uG/L
Dibromochloromethane	BDL	5	uG/L
1,2-Dibromo-3-Chloropropane	BDL	5	uG/L
1,2-Dibromoethane	BDL	5	uG/L
Dibromomethane	BDL	5	uG/L
1,2-Dichlorobenzene	BDL	5	uG/L
1,3-Dichlorobenzene	BDL	5	uG/L
1,4-Dichlorobenzene	BDL	5	uG/L
Dichlorodifluoromethane	BDL	5	uG/L
1,1-Dichloroethane	BDL	5	uG/L
1,2-Dichloroethane	BDL	5	uG/L
1,1-Dichloroethene	BDL	5	uG/L
cis-1,2-Dichloroethene	BDL	5	uG/L
trans-1,2-Dichloroethene	BDL	5	uG/L
1,2-Dichloropropane	BDL	5	uG/L
1,3-Dichloropropane	BDL	5	uG/L
2,2-Dichloropropane	BDL	5	uG/L
1,1-Dichloropropene	BDL	5	uG/L
cis-1,3-Dichloropropene	BDL	5	uG/L
trans-1,3-Dichloropropene	BDL	5	uG/L
Ethyl Benzene	BDL	5	uG/L
Hexachlorobutadiene	BDL	5	uG/L
Isopropylbenzene	BDL	5	uG/L
Dichloromethane	BDL	5	uG/L
Naphthalene	BDL	5	uG/L
N-Propylbenzene	BDL	5	uG/L
Styrene	BDL	5	uG/L
1,1,1,2-Tetrachloroethane	BDL	5	uG/L
1,1,2,2-Tetrachloroethane	BDL	5	uG/L
Tetrachloroethane	BDL	5	uG/L
Toluene	BDL	5	uG/L
1,2,3-Trichloropropane	BDL	5	uG/L
1,2,4-Trichlorobenzene	BDL	5	uG/L

Heritage
Volatile Analysis - Water Method Blank
Analysis Method: SW846-8260

GC/MS VOA Data File: 0001L
Analysis Date/Time: 5/27/97 10:30

Analyte List	Result	DL	Units
1,1,1-Trichloroethane.....	BDL	5	uG/L
1,1,2-Trichloroethane.....	BDL	5	uG/L
Trichloroethene.....	BDL	5	uG/L
Trichlorofluoromethane.....	BDL	5	uG/L
1,2,3-Trichloropropane.....	BDL	5	uG/L
1,2,4-Trimethylbenzene.....	BDL	5	uG/L
1,3,5-Trimethylbenzene.....	BDL	5	uG/L
Vinyl Chloride.....	BDL	5	uG/L
Xylenes (o/m/p-xylene).....	BDL	5	uG/L
Hexane.....	BDL	10	uG/L
Methyl-t-butyl benzene.....	BDL	5	uG/L
Methyl-2-Pentanone.....	BDL	10	uG/L

Surrogate Recovery		
Dichloroethane-d4.....	108	% Recovery
Toluene-d8.....	98	% Recovery
4-Bromofluorobenzene.....	93	% Recovery

Continuing Calibration Report

Data File : C:\HPCHEM\L052997\0040L.D Vial: 1
Acq On : 29 May 97 8:54 Operator: bethm
Sample : VSTD050 8260 Inst : GC/MS #11
Misc : Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\HPCHEM\1\METHODS\8260L.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Fri Apr 25 10:23:26 1997
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

cal 10 = 9993L.D cal 20 = 9994L.D cal 50 = 9995L.D
cal100 = 9996L.D cal200 = 9997L.D

		Compound	AvgRF	CCRF	%Dev
1	I	PENTAFLUOROBENZENE	1.00000	1.00000	0.0
2		Dichlorodifluoromethane	0.29062	0.17853	38.6#
3	P	Chloromethane	0.32669	0.23996	26.5#
4	C	VINYL CHLORIDE	0.19141	0.17318	9.5
5		Bromomethane	0.08054	0.08467	5.1
6		Chloroethane	0.16443	0.15805	3.9
7		Trichlorofluoromethane	0.61279	0.64189	4.7
8		Acrolein	0.00948	0.00731	22.9#
9		Diethyl Ether	0.18433	0.20029	8.7
10		Acetone	0.09859	0.15549	57.7#
11	CM	1,1-DICHLOROETHENE	0.28560	0.30890	8.2
12		Methylene Chloride	0.34544	0.37929	9.8
13		Acrylonitrile	0.02912	0.03007	3.3
14		Carbon Disulfide	0.76024	0.83372	9.7
15		Vinyl Acetate	0.15394	0.17557	14.1
16		trans-1,2-Dichloroethene	0.31484	0.37968	20.6#
17	P	1,1-Dichloroethane	0.65089	0.74532	14.5
18		Methyl-t-butyl Ether	0.83738	0.97772	16.8
19		Diispropyl Ether	1.08779	1.24122	14.1
20		2-Butanone	0.17777	0.27026	52.0#
21		cis-1,2-Dichloroethene	0.35776	0.40823	14.1
22	C	CHLOROFORM	0.76410	0.86635	13.4
23		Bromochloromethane	0.26553	0.30257	13.9
24		2,2-Dichloropropane	0.52913	0.61230	15.7
25		Tetrahyrofuran	0.06307	0.08016	27.1#
26		1,1,1-Trichloroethane	0.61028	0.68941	13.0
27		Iodomethane	0.03614	0.05350	48.0#
28	I	1,4-DIFLUOROBENZENE	1.00000	1.00000	0.0
29		1,1-Dichloropropene	0.47347	0.56478	19.3
30	S	1,2-Dichloroethane-d4	0.42718	0.46964	9.9
31		Carbon Tetrachloride	0.48190	0.56762	17.8
32		1,2-Dichloroethane	0.47468	0.60334	27.1#
33	M	Benzene	0.84667	0.95447	12.7
34	M	Trichloroethene	0.43785	0.49856	13.9
35	C	1,2-DICHLOROPROPANE	0.39342	0.45286	15.1
36		Bromodichloromethane	0.72242	0.86690	20.0
37		Dibromomethane	0.41554	0.02439	94.1#
38		4-Methyl-2-Pentanone	0.43518	0.68038	56.3#
39		2-Chloroethylvinylether	0.15971	0.21413	34.1#

Continuing Calibration Report

Data File : C:\HPCHEM\L052997\0040L.D
Acq On : 29 May 97 8:54
Sample : VSTD050 8260
Misc :
MS Integration Params: rteint.p

Vial: 1
Operator: bethm
Inst : GC/MS #11
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260L.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Fri Apr 25 10:23:26 1997
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

cal 10 = 9993L.D cal 20 = 9994L.D cal 50 = 9995L.D
cal100 = 9996L.D cal200 = 9997L.D

		Compound	AvgRF	CCRF	%Dev
40		cis-1,3-Dichloropropene	0.43060	0.49608	15.2
41	S	Toluene-d8	0.99270	0.97501	1.8
42	CM	TOLUENE	0.97134	1.05134	8.2
43		trans-1,3-Dichloropropene	0.51319	0.59058	15.1
44		1,1,2-Trichloroethane	0.38778	0.45883	18.3
45		1,2-Dibromoethane	0.60240	0.72445	20.3#
46	I	CHLOROBENZENE-d5	1.00000	1.00000	0.0
[illegible]	S	4-Bromofluorobenzene	0.76769	0.75268	2.0
[illegible]		2-Hexanone	0.37588	0.59229	57.6#
49		1,3-Dichloropropane	0.70427	0.82613	17.3
50		Tetrachloroethene	0.64088	0.72890	13.7
51		Dibromochloromethane	0.79028	0.94252	19.3
52	PM	Chlorobenzene	1.01711	1.11714	9.8
53		1,1,1,2-Tetrachloroethane	0.52275	0.61782	18.2
54	C	ETHYL BENZENE	0.41654	0.47654	14.4
55		m,p-Xylene	0.56249	0.59669	6.1
56		o-Xylene	0.60072	0.63822	6.2
57		Styrene	0.78485	0.84285	7.4
58	P	Bromoform	0.64095	0.77211	20.5#
59	I	1,4-Dichlorobenzene-d4	1.00000	1.00000	0.0
60		Isopropylbenzene	3.15607	3.66527	16.1
61		trans-1,4-Dichloro-2-butene	0.26916	0.38654	43.6#
62	P	1,1,2,2-Tetrachloroethane	1.90224	2.46025	29.3#
63		Bromobenzene	2.00559	2.20791	10.1
64		1,2,3-Trichloropropane	0.48400	0.64103	32.4#
65		n-Propylbenzene	0.46479	0.52758	13.5
66		1,3,5-Trimethylbenzene	2.53955	2.93094	15.4
67		2-Chlorotoluene	0.90904	0.99784	9.8
68		4-Chlorotoluene	0.76483	0.86696	13.4
69		t-Butylbenzene	2.97429	3.30281	11.0
70		1,2,4-Trimethylbenzene	2.32509	2.69474	15.9
[illegible]		sec-Butylbenzene	3.62530	4.29326	18.4
[illegible]		p-Isopropyltoluene	2.59061	3.01529	16.4
[illegible]		1,3-Dichlorobenzene	1.78461	1.99260	11.7
74		1,4-Dichlorobenzene	1.61342	1.72992	7.2
75		n-Butylbenzene	1.37650	1.48489	7.9
76		1,2-Dichlorobenzene	1.79611	2.00696	11.7
77		1,2-Dibromo-3-chloropropane	0.51381	0.67867	32.1#
78		1,2,4-Trichlorobenzene	1.29794	1.34896	3.9

Continuing Calibration Report

Data File : C:\HPCHEM\L052997\0040L.D
Acq On : 29 May 97 8:54
Sample : VSTD050 8260
Misc :
MS Integration Params: rteint.p

Vial: 1
Operator: bethm
Inst : GC/MS #11
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260L.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Fri Apr 25 10:23:26 1997
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

cal 10 = 9993L.D cal 20 = 9994L.D cal 50 = 9995L.D
cal100 = 9996L.D cal200 = 9997L.D

	Compound	AvgRF	CCRF	%Dev
79	Naphthalene	2.05672	2.15936	5.0
80	Hexachlorobutadiene	0.98745	1.12198	13.6
81	1,2,3-Trichlorobenzene	1.28410	1.41567	10.2

(#) = Out of Range SPCC's out = 0 CCC's out = 0

8503J.D 8260L.M Fri May 30 11:57:53 1997 GCMS11

Heritage
Volatile Analysis - Water Method Blank
Analysis Method: SW846-8260

GC/MS VOA Data File: 0041L
Analysis Date/Time: 5/29/97 10:05

Analyte List	Result	DL	Units
Benzene	BDL	5	uG/L
Bromobenzene	BDL	5	uG/L
Bromochloromethane	BDL	5	uG/L
Bromodichloromethane	BDL	5	uG/L
Bromoform	BDL	5	uG/L
Bromomethane	BDL	5	uG/L
n-Butylbenzene	BDL	5	uG/L
tert-Butylbenzene	BDL	5	uG/L
Carbon tetrachloride	BDL	5	uG/L
Chlorobenzene	BDL	5	uG/L
Chloroethane	BDL	5	uG/L
Chloroform	BDL	5	uG/L
Chloromethane	BDL	5	uG/L
2-Chlorotoluene	BDL	5	uG/L
4-Chlorotoluene	BDL	5	uG/L
Dibromochloromethane	BDL	5	uG/L
1,2-Dibromo-3-Chloropropane	BDL	5	uG/L
1,2-Dibromoethane	BDL	5	uG/L
Dibromomethane	BDL	5	uG/L
1,2-Dichlorobenzene	BDL	5	uG/L
1,3-Dichlorobenzene	BDL	5	uG/L
1,4-Dichlorobenzene	BDL	5	uG/L
Dichlorodifluoromethane	BDL	5	uG/L
1,1-Dichloroethane	BDL	5	uG/L
1,2-Dichloroethane	BDL	5	uG/L
1,1-Dichloroethene	BDL	5	uG/L
cis-1,2-Dichloroethene	BDL	5	uG/L
trans-1,2-Dichloroethene	BDL	5	uG/L
1,2-Dichloropropane	BDL	5	uG/L
1,3-Dichloropropane	BDL	5	uG/L
2,2-Dichloropropane	BDL	5	uG/L
1,1-Dichloropropene	BDL	5	uG/L
cis-1,3-Dichloropropene	BDL	5	uG/L
trans-1,3-Dichloropropene	BDL	5	uG/L
Ethyl Benzene	BDL	5	uG/L
Hexachlorobutadiene	BDL	5	uG/L
Isopropylbenzene	BDL	5	uG/L
Dichloromethane	BDL	5	uG/L
Naphthalene	BDL	5	uG/L
N-Propylbenzene	BDL	5	uG/L
Styrene	BDL	5	uG/L
1,1,1,2-Tetrachloroethane	BDL	5	uG/L
1,1,2,2-Tetrachloroethane	BDL	5	uG/L
Tetrachloroethane	BDL	5	uG/L
Toluene	BDL	5	uG/L
1,2,3-Trichloropropane	BDL	5	uG/L
1,2,4-Trichlorobenzene	BDL	5	uG/L

Heritage
Volatile Analysis - Water Method Blank
Analysis Method: SW846-8260

GC/MS VOA Data File: 0041L
Analysis Date/Time: 5/29/97 10:05

Analyte List	Result	DL	Units
1,1,1-Trichloroethane.....	BDL	5	uG/L
1,1,2-Trichloroethane.....	BDL	5	uG/L
Trichloroethene.....	BDL	5	uG/L
Trichlorofluoromethane.....	BDL	5	uG/L
1,2,3-Trichloropropane.....	BDL	5	uG/L
1,2,4-Trimethylbenzene.....	BDL	5	uG/L
1,3,5-Trimethylbenzene.....	BDL	5	uG/L
Vinyl Chloride.....	BDL	5	uG/L
Xylenes (o/m/p-xylene).....	BDL	5	uG/L
Hexane.....	BDL	10	uG/L
Methyl-t-butyl benzene.....	BDL	5	uG/L
Methyl-2-Pentanone.....	BDL	10	uG/L

Surrogate Recovery		
Dichloroethane-d4.....	106	% Recovery
Toluene-d8.....	95	% Recovery
4-Bromofluorobenzene.....	88	% Recovery

Continuing Calibration Report

Data File : C:\R052197\1420R.D
Acq On : 21 May 97 4:45
Sample : VSTD010
Misc : CALIBRATION CHECK 5/21/97

Vial: 16
Operator: HAROLD
Inst : INST-122
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\BFI8260.M
Title : SW-846 Method 8260 25mL water
Last Update : Wed May 14 04:28:41 1997
Response via : Multiple Level Calibration

Min. RRF : 0.100 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

cal 2 = 1320R.D cal 10 = 1332R.D cal 25 = 1312R.D
cal 50 = 1311R.D cal100 = 1310R.D

		Compound	AvgRF	CCRF	%Dev
1	I	PENTAFLUOROBENZENE	1.00000	1.00000	0.0
2	T	dichlorodifluoromethane	0.36904	0.47881	29.7#
3	P	chloromethane	0.37698	0.45648	21.1#
4	C	VINYL CHLORIDE	0.34873	0.41373	18.6
5	T	bromomethane	0.26701	0.33797	26.6#
6	T	chloroethane	0.22205	0.29525	33.0#
7	T	trichlorofluoromethane	0.78289	0.92588	18.3
8	T	acrolein	0.00305	0.00183	40.0#
9	C	1,1-DICHLOROETHENE	0.39946	0.44940	12.5
10	T	acetone	0.02899	0.04415	52.3#
[illegible]	[illegible]	iodomethane	0.38868	0.61415	58.0#
12	[illegible]	carbon disulfide	1.08346	1.22191	12.8
13	T	allyl chloride	0.68866	0.79853	16.0
14	T	methylene chloride	0.33359	0.39061	17.1
15	T	trans-1,2-dichloroethene	0.44683	0.47894	7.2
16	T	acrylonitrile	0.02070	0.01791	13.5
17	T	MTBE	0.38023	0.43149	13.5
18	P	1,1-dichloroethane	0.88207	0.92895	5.3
19	T	vinyl acetate	0.62848	0.67286	7.1
20	T	chloroprene	0.00095	0.00000	100.0#
21	T	2,2-dichloropropane	0.72269	0.77624	7.4
22	T	cis-1,2-dichloroethene	0.41962	0.43820	4.4
23	T	2-butanone	0.04743	0.05509	16.2
24	T	ethyl acetate	0.03275	0.03401	3.8
25	T	propionitrile	0.00755	0.00919	21.7#
26	T	bromochloromethane	0.17149	0.19086	11.3
27	T	methacrylonitrile	0.05920	0.06918	16.9
28	T	tetrahydrofuran	0.02605	0.03083	18.3
29	C	CHLOROFORM	0.99296	0.99125	0.2
30	T	1,1,1-trichloroethane	0.80455	0.86161	7.1
31	I	1,4-DIFLUOROBENZENE	1.00000	1.00000	0.0
32	T	carbon tetrachloride	0.53247	0.57684	8.3
33	T	1,1-dichloropropene	0.50864	0.57085	12.2
34	S	1,2-Dichloroethane-d4	0.25319	0.26927	6.4
[illegible]	T	benzene	0.94591	1.03530	9.5
[illegible]	[illegible]	1,2-dichloroethane	0.26507	0.31046	17.1
37	T	isobutanol	0.00621	0.01025	65.1#
38	T	trichloroethene	0.46696	0.51555	10.4
39	T	n-butanol	0.00222	0.00362	63.1#

(#) = Out of Range (Advisory for non CCC, SPCC)

Continuing Calibration Report

Data File : C:\R052197\1420R.D
Acq On : 21 May 97 4:45
Sample : VSTD010
Misc : CALIBRATION CHECK 5/21/97

Vial: 16
Operator: HAROLD
Inst : INST-122
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\BFI8260.M
Title : SW-846 Method 8260 25mL water
Last Update : Wed May 14 04:28:41 1997
Response via : Multiple Level Calibration

Min. RRF : 0.100 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

cal414 = 1320R.D cal1035 = 1332R.D cal2587 = 1312R.D
cal5175 = 1311R.D cal10350 = 1310R.D

		Compound	AvgRF	CCRF	%Dev
40	C	1,2-DICHLOROPROPANE	0.37868	0.40875	7.9
41	T	dibromomethane	0.18782	0.21628	15.2
42	T	1,4-dioxane	0.00058	0.00091	56.9#
43	T	methyl methacrylate	0.10487	0.13282	26.7#
44	T	bromodichloromethane	0.53018	0.59431	12.1
45	T	2-chloroethylvinylether	0.07123	0.07321	2.8
46	T	cis-1,3-dichloropropene	0.37950	0.40411	6.5
47	T	4-methyl-2-pentanone	0.08979	0.09552	6.4
48	S	toluene-d8	0.97932	0.88410	9.7
[illegible]	C	TOLUENE	0.59841	0.60781	1.6
50	T	trans-1,3-dichloropropene	0.24995	0.27505	10.0
51	T	1,1,2-trichloroethane	0.15764	0.16693	5.9
52	I	CHLOROBENZENE-D5	1.00000	1.00000	0.0
53	T	ethyl methacrylate	0.21550	0.26664	23.7#
54	T	tetrachloroethene	0.69983	0.77513	10.8
55	T	1,3-dichloropropane	0.38997	0.51782	32.8#
56	T	2-hexanone	0.13119	0.11599	11.6
57	T	dibromochloromethane	0.43885	0.56094	27.8#
58	T	1,2-dibromoethane	0.30837	0.38965	26.4#
59	P	chlorobenzene	0.99391	1.03577	4.2
60	T	1,1,1,2-tetrachloroethane	0.43864	0.47819	9.0
61	C	ETHYL BENZENE	1.77643	1.80877	1.8
62	T	m,p-xylene	0.64703	0.65230	0.8
63	T	o-xylene	0.55863	0.56037	0.3
64	T	styrene	0.81740	0.83701	2.4
65	P	bromoform	0.19421	0.25293	30.2#
66	I	1,4-DICHLOROBENZENE-D4	1.00000	1.00000	0.0
67	T	isopropylbenzene	5.34560	3.61973	32.3#
68	S	4-bromofluorobenzene	1.81479	1.36727	24.7#
69	P	1,1,2,2-tetrachloroethane	0.68003	0.47275	30.5#
70	T	bromobenzene	1.03461	0.50395	51.3#
71	T	1,2,3-trichloropropane	0.28606	0.71737	150.8#
[illegible]	T	trans-1,4-dichloro-2-butene	0.08953	0.09211	2.9
[illegible]	T	n-propylbenzene	6.12761	4.35751	28.9#
74	T	2-chlorotoluene	3.78834	2.90775	23.2#
75	T	1,3,5-trimethylbenzene	3.38089	2.41284	28.6#
76	T	4-chlorotoluene	3.77001	3.20288	15.0
77	T	t-Butylbenzene	2.85147	2.01364	29.4#
78	T	1,2,4-trimethylbenzene	2.91543	2.08622	28.4#

Continuing Calibration Report

Data File : C:\R052197\1420R.D
Acq On : 21 May 97 4:45
Sample : VSTD010
Misc : CALIBRATION CHECK 5/21/97

Vial: 16
Operator: HAROLD
Inst : INST-122
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\BFI8260.M
Title : SW-846 Method 8260 25mL water
Last Update : Wed May 14 04:28:41 1997
Response via : Multiple Level Calibration

Min. RRF : 0.100 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

cal 2 = 1320R.D cal 10 = 1332R.D cal 25 = 1312R.D
cal 50 = 1311R.D cal100 = 1310R.D

	Compound	AvgRF	CCRF	%Dev
79 T	sec-butylbenzene	5.26102	3.60597	31.5#
80 T	1,3-dichlorobenzene	1.57937	1.24863	20.9#
81 T	p-Isopropyltoluene	3.38340	2.37472	29.8#
82 T	1,4-dichlorobenzene	1.65420	1.26690	23.4#
83 T	n-butylbenzene	3.58506	2.64888	26.1#
84 T	1,2-dichlorobenzene	1.15635	0.94663	18.1
85 T	1,2-dibromo-3-chloropropane	0.10585	0.11406	7.8
86 T	1,2,4-trichlorobenzene	0.54185	0.59307	9.5
87 T	hexachlorobutadiene	0.59948	0.47850	20.2#
T	naphthalene	0.47239	0.51300	8.6
T	1,2,3-trichlorobenzene	0.39693	0.44653	12.5

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Heritage
Volatile Analysis - Water Method Blank
Analysis Method: SW846-8260

GC/MS VOA Data File: >1421R
Analysis Date/Time: 5/21/97 5:35

Analyte List	Result	DL	Units
Benzene	BDL	5	uG/L
Bromobenzene	BDL	5	uG/L
Bromochloromethane	BDL	5	uG/L
Bromodichloromethane	BDL	5	uG/L
Bromoform	BDL	5	uG/L
Bromomethane	BDL	5	uG/L
n-Butylbenzene	BDL	5	uG/L
tert-Butylbenzene	BDL	5	uG/L
Carbon tetrachloride	BDL	5	uG/L
Chlorobenzene	BDL	5	uG/L
Chloroethane	BDL	5	uG/L
Chloroform	BDL	5	uG/L
Chloromethane	BDL	5	uG/L
2-Chlorotoluene	BDL	5	uG/L
4-Chlorotoluene	BDL	5	uG/L
Dibromochloromethane	BDL	5	uG/L
1,2-Dibromo-3-Chloropropane	BDL	5	uG/L
1,2-Dibromoethane	BDL	5	uG/L
Dibromomethane	BDL	5	uG/L
1,2-Dichlorobenzene	BDL	5	uG/L
1,3-Dichlorobenzene	BDL	5	uG/L
1,4-Dichlorobenzene	BDL	5	uG/L
Dichlorodifluoromethane	BDL	5	uG/L
1,1-Dichloroethane	BDL	5	uG/L
1,2-Dichloroethane	BDL	5	uG/L
1,1-Dichloroethene	BDL	5	uG/L
cis-1,2-Dichloroethene	BDL	5	uG/L
trans-1,2-Dichloroethene	BDL	5	uG/L
1,2-Dichloropropane	BDL	5	uG/L
1,3-Dichloropropane	BDL	5	uG/L
2,2-Dichloropropane	BDL	5	uG/L
1,1-Dichloropropene	BDL	5	uG/L
cis-1,3-Dichloropropene	BDL	5	uG/L
trans-1,3-Dichloropropene	BDL	5	uG/L
Ethyl Benzene	BDL	5	uG/L
Hexachlorobutadiene	BDL	5	uG/L
Isopropylbenzene	BDL	5	uG/L
Dichloromethane	BDL	5	uG/L
Naphthalene	BDL	5	uG/L
N-Propylbenzene	BDL	5	uG/L
Styrene	BDL	5	uG/L
1,1,1,2-Tetrachloroethane	BDL	5	uG/L
1,1,2,2-Tetrachloroethane	BDL	5	uG/L
Tetrachloroethane	BDL	5	uG/L
Toluene	BDL	5	uG/L
1,2,3-Trichloropropane	BDL	5	uG/L
1,2,4-Trichlorobenzene	BDL	5	uG/L

Heritage
Volatile Analysis - Water Method Blank
Analysis Method: SW846-8260

GC/MS VOA Data File: >1421R
Analysis Date/Time: 5/21/97 5:35

Analyte List	Result	DL	Units
1,1,1-Trichloroethane.....	BDL	5	uG/L
1,1,2-Trichloroethane.....	BDL	5	uG/L
Trichloroethene.....	BDL	5	uG/L
Trichlorofluoromethane.....	BDL	5	uG/L
1,2,3-Trichloropropane.....	BDL	5	uG/L
1,2,4-Trimethylbenzene.....	BDL	5	uG/L
1,3,5-Trimethylbenzene.....	BDL	5	uG/L
Vinyl Chloride.....	BDL	5	uG/L
Xylenes (o/m/p-xylene).....	BDL	5	uG/L
Hexane.....	BDL	10	uG/L
Methyl-t-butyl benzene.....	BDL	5	uG/L
Methyl-2-Pentanone.....	BDL	10	uG/L

Surrogate Recovery		
Dichloroethane-d4.....	107	% Recovery
Toluene-d8.....	98	% Recovery
4-Bromofluorobenzene.....	90	% Recovery

Continuing Calibration Report

Data File : C:\R052297\1440R.D
Acq On : 22 May 97 3:23
Sample : VSTD010 #051597
Misc : CALIBRATION CHECK 5/22/97

Vial: 15
Operator: HAROLD
Inst : INST-122
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\BFI8260.M
Title : SW-846 Method 8260 25mL water
Last Update : Wed May 14 04:28:41 1997
Response via : Multiple Level Calibration

Min. RRF : 0.100 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

cal 2 = 1320R.D cal 10 = 1332R.D cal 25 = 1312R.D
cal 50 = 1311R.D cal100 = 1310R.D

		Compound	AvgRF	CCRF	%Dev
1	I	PENTAFLUOROBENZENE	1.00000	1.00000	0.0
2	T	dichlorodifluoromethane	0.36904	0.41390	12.2
3	P	chloromethane	0.37698	0.40332	7.0
4	C	VINYL CHLORIDE	0.34873	0.40776	16.9
5	T	bromomethane	0.26701	0.28401	6.4
6	T	chloroethane	0.22205	0.26837	20.9#
7	T	trichlorofluoromethane	0.78289	0.90173	15.2
8	T	acrolein	0.00305	0.00193	36.7#
9	C	1,1-DICHLOROETHENE	0.39946	0.40260	0.8
[illegible]	T	acetone	0.02899	0.04863	67.7#
[illegible]	T	iodomethane	0.38868	0.62677	61.3#
12	T	carbon disulfide	1.08346	1.13948	5.2
13	T	allyl chloride	0.68866	0.78775	14.4
14	T	methylene chloride	0.33359	0.37780	13.3
15	T	trans-1,2-dichloroethene	0.44683	0.46785	4.7
16	T	acrylonitrile	0.02070	0.01623	21.6#
17	T	MTBE	0.38023	0.42813	12.6
18	P	1,1-dichloroethane	0.88207	0.95123	7.8
19	T	vinyl acetate	0.62848	0.72314	15.1
20	T	chloroprene	0.00095	0.00000	100.0#
21	T	2,2-dichloropropane	0.72269	0.79332	9.8
22	T	cis-1,2-dichloroethene	0.41962	0.44081	5.0
23	T	2-butanone	0.04743	0.04664	1.7
24	T	ethyl acetate	0.03275	0.03879	18.4
25	T	propionitrile	0.00755	0.00862	14.2
26	T	bromochloromethane	0.17149	0.19379	13.0
27	T	methacrylonitrile	0.05920	0.07048	19.1
28	T	tetrahydrofuran	0.02605	0.02588	0.7
29	C	CHLOROFORM	0.99296	0.95906	3.4
30	T	1,1,1-trichloroethane	0.80455	0.88887	10.5
31	I	1,4-DIFLUOROBENZENE	1.00000	1.00000	0.0
32	T	carbon tetrachloride	0.53247	0.58557	10.0
33	T	1,1-dichloropropene	0.50864	0.55987	10.1
[illegible]	S	1,2-Dichloroethane-d4	0.25319	0.28645	13.1
[illegible]	T	benzene	0.94591	1.02983	8.9
36	T	1,2-dichloroethane	0.26507	0.33102	24.9#
37	T	isobutanol	0.00621	0.00911	46.7#
38	T	trichloroethene	0.46696	0.51439	10.2
39	T	n-butanol	0.00222	0.00306	37.8#

(#) = Out of Range (Advisory for non CCC, SPCC)

Continuing Calibration Report

Data File : C:\R052297\1440R.D
Acq On : 22 May 97 3:23
Sample : VSTD010 #051597
Misc : CALIBRATION CHECK 5/22/97

Vial: 15
Operator: HAROLD
Inst : INST-122
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\BFI8260.M
Title : SW-846 Method 8260 25mL water
Last Update : Wed May 14 04:28:41 1997
Response via : Multiple Level Calibration

Min. RRF : 0.100 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

cal414 = 1320R.D cal1035 = 1332R.D cal2587 = 1312R.D
cal5175 = 1311R.D cal10350 = 1310R.D

		Compound	AvgRF	CCRF	%Dev
40	C	1,2-DICHLOROPROPANE	0.37868	0.42075	11.1
41	T	dibromomethane	0.18782	0.21239	13.1
42	T	1,4-dioxane	0.00058	0.00068	17.2
43	T	methyl methacrylate	0.10487	0.12674	20.9#
44	T	bromodichloromethane	0.53018	0.61723	16.4
45	T	2-chloroethylvinylether	0.07123	0.04997	29.8#
46	T	cis-1,3-dichloropropene	0.37950	0.43843	15.5
47	T	4-methyl-2-pentanone	0.08979	0.10841	20.7#
48	S	toluene-d8	0.97932	0.96607	1.4
[illegible]	C	TOLUENE	0.59841	0.65028	8.7
[illegible]	T	trans-1,3-dichloropropene	0.24995	0.28345	13.4
51	T	1,1,2-trichloroethane	0.15764	0.16425	4.2
52	I	CHLOROBENZENE-D5	1.00000	1.00000	0.0
53	T	ethyl methacrylate	0.21550	0.24570	14.0
54	T	tetrachloroethene	0.69983	0.72923	4.2
55	T	1,3-dichloropropane	0.38997	0.44770	14.8
56	T	2-hexanone	0.13119	0.12865	1.9
57	T	dibromochloromethane	0.43885	0.50926	16.0
58	T	1,2-dibromoethane	0.30837	0.33359	8.2
59	P	chlorobenzene	0.99391	1.06166	6.8
60	T	1,1,1,2-tetrachloroethane	0.43864	0.51224	16.8
61	C	ETHYL BENZENE	1.77643	1.92797	8.5
62	T	m,p-xylene	0.64703	0.68769	6.3
63	T	o-xylene	0.55863	0.62156	11.3
64	T	styrene	0.81740	0.92026	12.6
65	P	bromoform	0.19421	0.23701	22.0#
66	I	1,4-DICHLOROBENZENE-D4	1.00000	1.00000	0.0
67	T	isopropylbenzene	5.34560	4.36652	18.3
68	S	4-bromofluorobenzene	1.81479	1.50964	16.8
69	P	1,1,2,2-tetrachloroethane	0.68003	0.67192	1.2
70	T	bromobenzene	1.03461	0.92801	10.3
71	T	1,2,3-trichloropropane	0.28606	0.15020	47.5#
[illegible]	T	trans-1,4-dichloro-2-butene	0.08953	0.09243	3.2
[illegible]	T	n-propylbenzene	6.12761	5.02971	17.9
[illegible]	T	2-chlorotoluene	3.78834	3.31090	12.6
75	T	1,3,5-trimethylbenzene	3.38089	3.06061	9.5
76	T	4-chlorotoluene	3.77001	3.60421	4.4
77	T	t-Butylbenzene	2.85147	2.78186	2.4
78	T	1,2,4-trimethylbenzene	2.91543	2.86006	1.9

Continuing Calibration Report

Data File : C:\R052297\1440R.D
Acq On : 22 May 97 3:23
)ample : VSTD010 #051597
Misc : CALIBRATION CHECK 5/22/97

Vial: 15
Operator: HAROLD
Inst : INST-122
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\BFI8260.M
Title : SW-846 Method 8260 25mL water
Last Update : Wed May 14 04:28:41 1997
Response via : Multiple Level Calibration

Min. RRF : 0.100 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

cal 2 = 1320R.D cal 10 = 1332R.D cal 25 = 1312R.D
cal 50 = 1311R.D cal100 = 1310R.D

	Compound	AvgRF	CCRF	%Dev
79 T	sec-butylbenzene	5.26102	4.86512	7.5
80 T	1,3-dichlorobenzene	1.57937	1.61264	2.1
81 T	p-Isopropyltoluene	3.38340	3.40047	0.5
82 T	1,4-dichlorobenzene	1.65420	1.68047	1.6
83 T	n-butylbenzene	3.58506	3.94783	10.1
84 T	1,2-dichlorobenzene	1.15635	1.28410	11.0
85 T	1,2-dibromo-3-chloropropane	0.10585	0.12027	13.6
86 T	1,2,4-trichlorobenzene	0.54185	0.67343	24.3#
87 T	hexachlorobutadiene	0.59948	0.80969	35.1#
[illegible] T	naphthalene	0.47239	0.55708	17.9
[illegible] T	1,2,3-trichlorobenzene	0.39693	0.48779	22.9#

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Continuing Calibration Report

Data File : C:\R052397\1460R.D
On : 23 May 97 2:25
Sample : VSTD010 #051597
Misc : CALIBRATION CHECK 5/23/97

Vial: 4
Operator: HAROLD
Inst : INST-122
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\BFI8260.M
Title : SW-846 Method 8260 25mL water
Last Update : Wed May 14 04:28:41 1997
Response via : Multiple Level Calibration

Min. RRF : 0.100 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

cal 2 = 1320R.D cal 10 = 1332R.D cal 25 = 1312R.D
cal 50 = 1311R.D cal100 = 1310R.D

		Compound	AvgRF	CCRF	%Dev
1	I	PENTAFLUOROBENZENE	1.00000	1.00000	0.0
2	T	dichlorodifluoromethane	0.36904	0.41524	12.5
3	P	chloromethane	0.37698	0.43359	15.0
4	C	VINYL CHLORIDE	0.34873	0.38167	9.4
5	T	bromomethane	0.26701	0.30067	12.6
6	T	chloroethane	0.22205	0.29790	34.2#
7	T	trichlorofluoromethane	0.78289	0.99130	26.6#
8	T	acrolein	0.00305	0.00207	32.1#
9	C	1,1-DICHLOROETHENE	0.39946	0.42686	6.9
10	T	acetone	0.02899	0.04641	60.1#
11	T	iodomethane	0.38868	0.52995	36.3#
12	T	carbon disulfide	1.08346	1.25318	15.7
13	T	allyl chloride	0.68866	0.79672	15.7
14	T	methylene chloride	0.33359	0.43368	30.0#
15	T	trans-1,2-dichloroethene	0.44683	0.45490	1.8
16	T	acrylonitrile	0.02070	0.01382	33.2#
17	T	MTBE	0.38023	0.41878	10.1
18	P	1,1-dichloroethane	0.88207	0.97129	10.1
19	T	vinyl acetate	0.62848	0.75319	19.8
20	T	chloroprene	0.00095	0.00000	100.0#
21	T	2,2-dichloropropane	0.72269	0.84583	17.0
22	T	cis-1,2-dichloroethene	0.41962	0.43175	2.9
23	T	2-butanone	0.04743	0.06704	41.3#
24	T	ethyl acetate	0.03275	0.04146	26.6#
25	T	propionitrile	0.00755	0.00983	30.2#
26	T	bromochloromethane	0.17149	0.19986	16.5
27	T	methacrylonitrile	0.05920	0.07034	18.8
28	T	tetrahydrofuran	0.02605	0.02981	14.4
29	C	CHLOROFORM	0.99296	1.01935	2.7
30	T	1,1,1-trichloroethane	0.80455	0.92901	15.5
31	I	1,4-DIFLUOROBENZENE	1.00000	1.00000	0.0
32	T	carbon tetrachloride	0.53247	0.59430	11.6
33	T	1,1-dichloropropene	0.50864	0.56532	11.1
34	S	1,2-Dichloroethane-d4	0.25319	0.29074	14.8
35	T	benzene	0.94591	1.05030	11.0
36	T	1,2-dichloroethane	0.26507	0.32596	23.0#
37	T	isobutanol	0.00621	0.01087	75.0#
38	T	trichloroethene	0.46696	0.52161	11.7
39	T	n-butanol	0.00222	0.00400	80.2#

Continuing Calibration Report

Data File : C:\R052397\1460R.D
Acq On : 23 May 97 2:25
Sample : VSTD010 #051597
Misc : CALIBRATION CHECK 5/23/97

Vial: 4
Operator: HAROLD
Inst : INST-122
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\BFI8260.M
Title : SW-846 Method 8260 25mL water
Last Update : Wed May 14 04:28:41 1997
Response via : Multiple Level Calibration

Min. RRF : 0.100 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

cal414 = 1320R.D cal1035 = 1332R.D cal2587 = 1312R.D
cal5175 = 1311R.D cal10350 = 1310R.D

		Compound	AvgRF	CCRF	%Dev
40	C	1,2-DICHLOROPROPANE	0.37868	0.42596	12.5
41	T	dibromomethane	0.18782	0.21305	13.4
42	T	1,4-dioxane	0.00058	0.00097	67.2#
43	T	methyl methacrylate	0.10487	0.13846	32.0#
44	T	bromodichloromethane	0.53018	0.63581	19.9
45	T	2-chloroethylvinylether	0.07123	0.05213	26.8#
46	T	cis-1,3-dichloropropene	0.37950	0.42432	11.8
47	T	4-methyl-2-pentanone	0.08979	0.10231	13.9
48	S	toluene-d8	0.97932	1.04438	6.6
[illegible]	C	TOLUENE	0.59841	0.68601	14.6
[illegible]	T	trans-1,3-dichloropropene	0.24995	0.30811	23.3#
51	T	1,1,2-trichloroethane	0.15764	0.17668	12.1
52	I	CHLOROBENZENE-D5	1.00000	1.00000	0.0
53	T	ethyl methacrylate	0.21550	0.23463	8.9
54	T	tetrachloroethene	0.69983	0.68589	2.0
55	T	1,3-dichloropropane	0.38997	0.43241	10.9
56	T	2-hexanone	0.13119	0.09571	27.0#
57	T	dibromochloromethane	0.43885	0.48022	9.4
58	T	1,2-dibromoethane	0.30837	0.32801	6.4
59	P	chlorobenzene	0.99391	1.05389	6.0
60	T	1,1,1,2-tetrachloroethane	0.43864	0.49018	11.7
61	C	ETHYL BENZENE	1.77643	1.95209	9.9
62	T	m,p-xylene	0.64703	0.69522	7.4
63	T	o-xylene	0.55863	0.63475	13.6
64	T	styrene	0.81740	0.94949	16.2
65	P	bromoform	0.19421	0.24241	24.8#
66	I	1,4-DICHLOROBENZENE-D4	1.00000	1.00000	0.0
67	T	isopropylbenzene	5.34560	4.32604	19.1
68	S	4-bromofluorobenzene	1.81479	1.52114	16.2
69	P	1,1,2,2-tetrachloroethane	0.68003	0.71021	4.4
70	T	bromobenzene	1.03461	0.95120	8.1
71	T	1,2,3-trichloropropane	0.28606	0.14544	49.2#
[illegible]	T	trans-1,4-dichloro-2-butene	0.08953	0.09350	4.4
[illegible]	T	n-propylbenzene	6.12761	5.16939	15.6
74	T	2-chlorotoluene	3.78834	3.52200	7.0
75	T	1,3,5-trimethylbenzene	3.38089	3.20655	5.2
76	T	4-chlorotoluene	3.77001	3.68329	2.3
77	T	t-Butylbenzene	2.85147	2.82373	1.0
78	T	1,2,4-trimethylbenzene	2.91543	2.92954	0.5

Continuing Calibration Report

Data File : C:\R052397\1460R.D
Acq On : 23 May 97 2:25
Sample : VSTD010 #051597
Misc : CALIBRATION CHECK 5/23/97

Vial: 4
Operator: HAROLD
Inst : INST-122
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\BFI8260.M
Title : SW-846 Method 8260 25mL water
Last Update : Wed May 14 04:28:41 1997
Response via : Multiple Level Calibration

Min. RRF : 0.100 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

cal 2 = 1320R.D cal 10 = 1332R.D cal 25 = 1312R.D
cal 50 = 1311R.D cal100 = 1310R.D

		Compound	AvgRF	CCRF	%Dev
79	T	sec-butylbenzene	5.26102	4.96290	5.7
80	T	1,3-dichlorobenzene	1.57937	1.61050	2.0
81	T	p-Isopropyltoluene	3.38340	3.44821	1.9
82	T	1,4-dichlorobenzene	1.65420	1.71229	3.5
83	T	n-butylbenzene	3.58506	3.97512	10.9
84	T	1,2-dichlorobenzene	1.15635	1.27764	10.5
85	T	1,2-dibromo-3-chloropropane	0.10585	0.11838	11.8
86	T	1,2,4-trichlorobenzene	0.54185	0.69508	28.3#
87	T	hexachlorobutadiene	0.59948	0.80656	34.5#
[illegible]	T	naphthalene	0.47239	0.53351	12.9
[illegible]	T	1,2,3-trichlorobenzene	0.39693	0.47447	19.5

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Heritage
Volatile Analysis - Water Method Blank
Analysis Method: SW846-8260

GC/MS VOA Data File: >1461R
Analysis Date/Time: 5/23/97 3:18

Analyte List	Result	DL	Units
Benzene	BDL	5	uG/L
Bromobenzene	BDL	5	uG/L
Bromochloromethane	BDL	5	uG/L
Bromodichloromethane	BDL	5	uG/L
Bromoform	BDL	5	uG/L
Bromomethane	BDL	5	uG/L
n-Butylbenzene	BDL	5	uG/L
tert-Butylbenzene	BDL	5	uG/L
Carbon tetrachloride	BDL	5	uG/L
Chlorobenzene	BDL	5	uG/L
Chloroethane	BDL	5	uG/L
Chloroform	BDL	5	uG/L
Chloromethane	BDL	5	uG/L
2-Chlorotoluene	BDL	5	uG/L
4-Chlorotoluene	BDL	5	uG/L
Dibromochloromethane	BDL	5	uG/L
1,2-Dibromo-3-Chloropropane	BDL	5	uG/L
1,2-Dibromoethane	BDL	5	uG/L
Dibromomethane	BDL	5	uG/L
1,2-Dichlorobenzene	BDL	5	uG/L
1,3-Dichlorobenzene	BDL	5	uG/L
1,4-Dichlorobenzene	BDL	5	uG/L
Dichlorodifluoromethane	BDL	5	uG/L
1,1-Dichloroethane	BDL	5	uG/L
1,2-Dichloroethane	BDL	5	uG/L
1,1-Dichloroethene	BDL	5	uG/L
cis-1,2-Dichloroethene	BDL	5	uG/L
trans-1,2-Dichloroethene	BDL	5	uG/L
1,2-Dichloropropane	BDL	5	uG/L
1,3-Dichloropropane	BDL	5	uG/L
2,2-Dichloropropane	BDL	5	uG/L
1,1-Dichloropropene	BDL	5	uG/L
cis-1,3-Dichloropropene	BDL	5	uG/L
trans-1,3-Dichloropropene	BDL	5	uG/L
Ethyl Benzene	BDL	5	uG/L
Hexachlorobutadiene	BDL	5	uG/L
Isopropylbenzene	BDL	5	uG/L
Dichloromethane	BDL	5	uG/L
Naphthalene	BDL	5	uG/L
N-Propylbenzene	BDL	5	uG/L
Styrene	BDL	5	uG/L
1,1,1,2-Tetrachloroethane	BDL	5	uG/L
1,1,2,2-Tetrachloroethane	BDL	5	uG/L
Tetrachloroethane	BDL	5	uG/L
Toluene	BDL	5	uG/L
1,2,3-Trichloropropane	BDL	5	uG/L
1,2,4-Trichlorobenzene	BDL	5	uG/L

Heritage
Volatile Analysis - Water Method Blank
Analysis Method: SW846-8260

GC/MS VOA Data File: >1461R
Analysis Date/Time: 5/23/97 3:18

Analyte List	Result	DL	Units
1,1,1-Trichloroethane.....	BDL	5	uG/L
1,1,2-Trichloroethane.....	BDL	5	uG/L
Trichloroethene.....	BDL	5	uG/L
Trichlorofluoromethane.....	BDL	5	uG/L
1,2,3-Trichloropropane.....	BDL	5	uG/L
1,2,4-Trimethylbenzene.....	BDL	5	uG/L
1,3,5-Trimethylbenzene.....	BDL	5	uG/L
Vinyl Chloride.....	BDL	5	uG/L
Xylenes (o/m/p-xylene).....	BDL	5	uG/L
Hexane.....	BDL	10	uG/L
Methyl-t-butyl benzene.....	BDL	5	uG/L
Methyl-2-Pentanone.....	BDL	10	uG/L

Surrogate Recovery		
Dichloroethane-d4.....	111	% Recovery
Toluene-d8.....	102	% Recovery
4-Bromofluorobenzene.....	90	% Recovery

Continuing Calibration Report

Data File : C:\R052797\1481R.D
Acq On : 27 May 97 4:21
Sample : VSTD010
Misc : CALIBRATION CHECK 5/27/97

Vial: 4
Operator: HAROLD
Inst : INST-122
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\BFI8260.M
Title : SW-846 Method 8260 25mL water
Last Update : Wed May 14 04:28:41 1997
Response via : Multiple Level Calibration

Min. RRF : 0.100 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

cal 2 = 1320R.D cal 10 = 1332R.D cal 25 = 1312R.D
cal 50 = 1311R.D cal100 = 1310R.D

		Compound	AvgRF	CCRF	%Dev
1	I	PENTAFLUOROBENZENE	1.00000	1.00000	0.0
2	T	dichlorodifluoromethane	0.36904	0.52206	41.5#
3	P	chloromethane	0.37698	0.52867	40.2#
4	C	VINYL CHLORIDE	0.34873	0.41988	20.4#
5	T	bromomethane	0.26701	0.31812	19.1
6	T	chloroethane	0.22205	0.33851	52.4#
7	T	trichlorofluoromethane	0.78289	1.00542	28.4#
8	T	acrolein	0.00305	0.00904	196.4#
9	C	1,1-DICHLOROETHENE	0.39946	0.45425	13.7
10	T	acetone	0.02899	0.04901	69.1#
11	T	iodomethane	0.38868	0.60234	55.0#
12	T	carbon disulfide	1.08346	1.38702	28.0#
13	T	allyl chloride	0.68866	0.89062	29.3#
14	T	methylene chloride	0.33359	0.46571	39.6#
15	T	trans-1,2-dichloroethene	0.44683	0.48382	8.3
16	T	acrylonitrile	0.02070	0.03633	75.5#
17	T	MTBE	0.38023	0.40422	6.3
18	P	1,1-dichloroethane	0.88207	0.94609	7.3
19	T	vinyl acetate	0.62848	0.67957	8.1
20	T	chloroprene	0.00095	0.00000	100.0#
21	T	2,2-dichloropropane	0.72269	0.82048	13.5
22	T	cis-1,2-dichloroethene	0.41962	0.41137	2.0
23	T	2-butanone	0.04743	0.03328	29.8#
24	T	ethyl acetate	0.03275	0.03027	7.6
25	T	propionitrile	0.00755	0.00856	13.4
26	T	bromochloromethane	0.17149	0.17779	3.7
27	T	methacrylonitrile	0.05920	0.06187	4.5
28	T	tetrahydrofuran	0.02605	0.02386	8.4
29	C	CHLOROFORM	0.99296	0.94610	4.7
30	T	1,1,1-trichloroethane	0.80455	0.88833	10.4
31	I	1,4-DIFLUOROBENZENE	1.00000	1.00000	0.0
32	T	carbon tetrachloride	0.53247	0.56951	7.0
33	T	1,1-dichloropropene	0.50864	0.54330	6.8
34	S	1,2-Dichloroethane-d4	0.25319	0.25849	2.1
35	T	benzene	0.94591	1.04214	10.2
36	T	1,2-dichloroethane	0.26507	0.29943	13.0
37	T	isobutanol	0.00621	0.00961	54.8#
38	T	trichloroethene	0.46696	0.51179	9.6
39	T	n-butanol	0.00222	0.00352	58.6#

(#) = Out of Range (Advisory for non CCC, SPCC)

Continuing Calibration Report

Data File : C:\R052797\1481R.D
Acq On : 27 May 97 4:21
Sample : VSTD010
Misc : CALIBRATION CHECK 5/27/97

Vial: 4
Operator: HAROLD
Inst : INST-122
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\BFI8260.M
Title : SW-846 Method 8260 25mL water
Last Update : Wed May 14 04:28:41 1997
Response via : Multiple Level Calibration

Min. RRF : 0.100 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

cal414 = 1320R.D cal1035 = 1332R.D cal2587 = 1312R.D
cal5175 = 1311R.D cal10350 = 1310R.D

		Compound	AvgRF	CCRF	%Dev
40	C	1,2-DICHLOROPROPANE	0.37868	0.41759	10.3
41	T	dibromomethane	0.18782	0.19972	6.3
42	T	1,4-dioxane	0.00058	0.00087	50.0#
43	T	methyl methacrylate	0.10487	0.11265	7.4
44	T	bromodichloromethane	0.53018	0.58364	10.1
45	T	2-chloroethylvinylether	0.07123	0.06352	10.8
46	T	cis-1,3-dichloropropene	0.37950	0.40457	6.6
47	T	4-methyl-2-pentanone	0.08979	0.09208	2.6
48	S	toluene-d8	0.97932	1.07765	10.0
[illegible]	C	TOLUENE	0.59841	0.68605	14.6
[illegible]	T	trans-1,3-dichloropropene	0.24995	0.27914	11.7
51	T	1,1,2-trichloroethane	0.15764	0.16943	7.5
52	I	CHLOROBENZENE-D5	1.00000	1.00000	0.0
53	T	ethyl methacrylate	0.21550	0.20852	3.2
54	T	tetrachloroethene	0.69983	0.70356	0.5
55	T	1,3-dichloropropane	0.38997	0.39282	0.7
56	T	2-hexanone	0.13119	0.01842	86.0#
57	T	dibromochloromethane	0.43885	0.45135	2.8
58	T	1,2-dibromoethane	0.30837	0.30502	1.1
59	P	chlorobenzene	0.99391	1.02740	3.4
60	T	1,1,1,2-tetrachloroethane	0.43864	0.44343	1.1
61	C	ETHYL BENZENE	1.77643	1.94367	9.4
62	T	m,p-xylene	0.64703	0.70122	8.4
63	T	o-xylene	0.55863	0.64443	15.4
64	T	styrene	0.81740	0.93940	14.9
65	P	bromoform	0.19421	0.20922	7.7
66	I	1,4-DICHLOROBENZENE-D4	1.00000	1.00000	0.0
67	T	isopropylbenzene	5.34560	4.52038	15.4
68	S	4-bromofluorobenzene	1.81479	1.53638	15.3
69	P	1,1,2,2-tetrachloroethane	0.68003	0.59991	11.8
70	T	bromobenzene	1.03461	0.86464	16.4
71	T	1,2,3-trichloropropane	0.28606	0.24121	15.7
[illegible]	T	trans-1,4-dichloro-2-butene	0.08953	0.07720	13.8
[illegible]	T	n-propylbenzene	6.12761	5.46194	10.9
[illegible]	T	2-chlorotoluene	3.78834	3.60483	4.8
75	T	1,3,5-trimethylbenzene	3.38089	3.24522	4.0
76	T	4-chlorotoluene	3.77001	3.71728	1.4
77	T	t-Butylbenzene	2.85147	2.95062	3.5
78	T	1,2,4-trimethylbenzene	2.91543	2.99610	2.8

Continuing Calibration Report

Data File : C:\R052797\1481R.D
Acq On : 27 May 97 4:21
Sample : VSTD010
Misc : CALIBRATION CHECK 5/27/97

Vial: 4
Operator: HAROLD
Inst : INST-122
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\BFI8260.M
Title : SW-846 Method 8260 25mL water
Last Update : Wed May 14 04:28:41 1997
Response via : Multiple Level Calibration

Min. RRF : 0.100 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

cal 2 = 1320R.D cal 10 = 1332R.D cal 25 = 1312R.D
cal 50 = 1311R.D cal100 = 1310R.D

	Compound	AvgRF	CCRF	%Dev
79 T	sec-butylbenzene	5.26102	5.24988	0.2
80 T	1,3-dichlorobenzene	1.57937	1.55853	1.3
81 T	p-Isopropyltoluene	3.38340	3.55477	5.1
82 T	1,4-dichlorobenzene	1.65420	1.70565	3.1
83 T	n-butylbenzene	3.58506	4.09296	14.2
84 T	1,2-dichlorobenzene	1.15635	1.21613	5.2
85 T	1,2-dibromo-3-chloropropane	0.10585	0.10876	2.7
86 T	1,2,4-trichlorobenzene	0.54185	0.66078	21.9#
87 T	hexachlorobutadiene	0.59948	0.67154	12.0
88 T	naphthalene	0.47239	0.55900	18.3
89 T	1,2,3-trichlorobenzene	0.39693	0.44440	12.0

(#) = Out of Range SPCC's out = 0 CCC's out = 1

Heritage
Volatile Analysis - Water Method Blank
Analysis Method: SW846-8260

GC/MS VOA Data File: >1482R
Analysis Date/Time: 5/27/97 5:13

Analyte List	Result	DL	Units
Benzene	BDL	1	uG/L
Bromobenzene	BDL	1	uG/L
Bromochloromethane	BDL	1	uG/L
Bromodichloromethane	BDL	1	uG/L
Bromoform	BDL	1	uG/L
Bromomethane	BDL	5	uG/L
n-Butylbenzene	BDL	1	uG/L
tert-Butylbenzene	BDL	1	uG/L
Carbon tetrachloride	BDL	1	uG/L
Chlorobenzene	BDL	1	uG/L
Chloroethane	BDL	5	uG/L
Chloroform	BDL	1	uG/L
Chloromethane	BDL	5	uG/L
2-Chlorotoluene	BDL	1	uG/L
4-Chlorotoluene	BDL	1	uG/L
Dibromochloromethane	BDL	1	uG/L
1,2-Dibromo-3-Chloropropane	BDL	1	uG/L
1,2-Dibromoethane	BDL	1	uG/L
Dibromomethane	BDL	1	uG/L
1,2-Dichlorobenzene	BDL	1	uG/L
1,3-Dichlorobenzene	BDL	1	uG/L
1,4-Dichlorobenzene	BDL	1	uG/L
Dichlorodifluoromethane	BDL	1	uG/L
1,1-Dichloroethane	BDL	1	uG/L
1,2-Dichloroethane	BDL	1	uG/L
1,1-Dichloroethene	BDL	1	uG/L
cis-1,2-Dichloroethene	BDL	1	uG/L
trans-1,2-Dichloroethene	BDL	1	uG/L
1,2-Dichloropropane	BDL	1	uG/L
1,3-Dichloropropane	BDL	1	uG/L
2,2-Dichloropropane	BDL	1	uG/L
1,1-Dichloropropene	BDL	1	uG/L
cis-1,3-Dichloropropene	BDL	1	uG/L
trans-1,3-Dichloropropene	BDL	1	uG/L
Ethyl Benzene	BDL	1	uG/L
Hexachlorobutadiene	BDL	1	uG/L
Isopropylbenzene	BDL	1	uG/L
Dichloromethane	BDL	5	uG/L
Naphthalene	BDL	1	uG/L
N-Propylbenzene	BDL	1	uG/L
Styrene	BDL	1	uG/L
1,1,1,2-Tetrachloroethane	BDL	1	uG/L
1,1,2,2-Tetrachloroethane	BDL	1	uG/L
Tetrachloroethane	BDL	1	uG/L
Toluene	BDL	1	uG/L
1,2,3-Trichloropropane	BDL	1	uG/L
1,2,4-Trichlorobenzene	BDL	1	uG/L

Heritage
Volatile Analysis - Water Method Blank
Analysis Method: SW846-8260

GC/MS VOA Data File: >1482R
Analysis Date/Time: 5/27/97 5:13

Analyte List	Result	DL	Units
1,1,1-Trichloroethane.....	BDL	1	uG/L
1,1,2-Trichloroethane.....	BDL	1	uG/L
Trichloroethene.....	BDL	1	uG/L
Trichlorofluoromethane.....	BDL	1	uG/L
1,2,3-Trichloropropane.....	BDL	1	uG/L
1,2,4-Trimethylbenzene.....	BDL	1	uG/L
1,3,5-Trimethylbenzene.....	BDL	1	uG/L
Vinyl Chloride.....	BDL	5	uG/L
Xylenes (o/m/p-xylene).....	BDL	1	uG/L
Methyl-2-Pentanone.....	BDL	5	uG/L
Acetone.....	BDL	25	uG/L
2-Butanone.....	BDL	5	uG/L
Acrylonitrile.....	BDL	5	uG/L
1,2-Dibromo-3-chloropropane...	BDL	5	uG/L
1,2-Dibromomethane.....	BDL	1	uG/L
trans-1,4-Dichloro-2-butene...	BDL	1	uG/L
2-Hexanone.....	BDL	5	uG/L
Vinyl Acetate.....	BDL	1	uG/L
Carbon Disulfide.....	BDL	5	uG/L
Iodomethane.....	BDL	1	uG/L

Surrogate Recovery

Dichloroethane-d4.....	118	% Recovery
Toluene-d8.....	99	% Recovery
4-Bromofluorobenzene.....	88	% Recovery

Continuing Calibration Report

Data File : C:\L052197\9960L.D
Acq On : 21 May 97 9:19
Sample : VSTD050 8260
Misc :
MS Integration Params: rteint.p

Vial: 1
Operator: bethm
Inst : GC/MS #11
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\82601L.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Fri Apr 25 10:23:26 1997
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

cal 10 = 9683L.D cal 20 = 9684L.D cal 50 = 9685L.D
cal100 = 9686L.D cal200 = 9687L.D

		Compound	AvgRF	CCRF	%Dev
1	I	PENTAFLUOROBENZENE	1.00000	1.00000	0.0
2		Dichlorodifluoromethane	0.34034	0.34091	0.2
3	P	Chloromethane	0.27964	0.35773	27.9#
4	C	VINYL CHLORIDE	0.22558	0.20172	10.6
5		Bromomethane	0.15562	0.06589	57.7#
6		Chloroethane	0.16046	0.16935	5.5
7		Trichlorofluoromethane	0.64380	0.67780	5.3
8		Acrolein	0.01032	0.00446	56.8#
[illegible]		Diethyl Ether	0.18136	0.18342	1.1
[illegible]		Acetone	0.08256	0.14336	73.6#
11	CM	1,1-DICHLOROETHENE	0.33046	0.30049	9.1
12		Methylene Chloride	0.39976	0.35304	11.7
13		Acrylonitrile	0.02576	0.01819	29.4#
14		Carbon Disulfide	0.84452	0.79601	5.7
15		Vinyl Acetate	0.14523	0.14944	2.9
16		trans-1,2-Dichloroethene	0.37395	0.31914	14.7
17	P	1,1-Dichloroethane	0.65978	0.66389	0.6
18		Methyl-t-butyl Ether	0.81735	0.85813	5.0
19		Diispropyl Ether	1.12483	1.07453	4.5
20		2-Butanone	0.13842	0.22798	64.7#
21		cis-1,2-Dichloroethene	0.38878	0.37076	4.6
22	C	CHLOROFORM	0.79302	0.79999	0.9
23		Bromochloromethane	0.27858	0.28068	0.8
24		2,2-Dichloropropane	0.55577	0.58289	4.9
25		Tetrahyrofuran	0.05078	0.06689	31.7#
26		1,1,1-Trichloroethane	0.62299	0.65571	5.3
27		Iodomethane	0.28717	0.04127	85.6#
28	I	1,4-DIFLUOROBENZENE	1.00000	1.00000	0.0
29		1,1-Dichloropropene	0.54958	0.52413	4.6
30	S	1,2-Dichloroethane-d4	0.43765	0.45183	3.2
31		Carbon Tetrachloride	0.56970	0.57732	1.3
32		1,2-Dichloroethane	0.54073	0.54076	0.0
[illegible]	M	Benzene	0.92188	0.90571	1.8
[illegible]	M	Trichloroethene	0.48597	0.50105	3.1
[illegible]	C	1,2-DICHLOROPROPANE	0.42257	0.41804	1.1
36		Bromodichloromethane	0.79673	0.83347	4.6
37		Dibromomethane	0.45225	0.47047	4.0
38		4-Methyl-2-Pentanone	0.39473	0.57504	45.7#
39		2-Chloroethylvinylether	0.15979	0.23369	46.2#

Continuing Calibration Report

Data File : C:\L052197\9960L.D
Acq On : 21 May 97 9:19
Sample : VSTD050 8260
Misc :
MS Integration Params: rteint.p

Vial: 1
Operator: bethm
Inst : GC/MS #11
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260IL.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Fri Apr 25 10:23:26 1997
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

cal 10 = 9683L.D cal 20 = 9684L.D cal 50 = 9685L.D
cal100 = 9686L.D cal200 = 9687L.D

		Compound	AvgRF	CCRF	%Dev
40		cis-1,3-Dichloropropene	0.48241	0.49885	3.4
41	S	Toluene-d8	1.01773	0.97962	3.7
42	CM	TOLUENE	1.05439	1.02791	2.5
43		trans-1,3-Dichloropropene	0.56498	0.57901	2.5
44		1,1,2-Trichloroethane	0.39800	0.43875	10.2
45		1,2-Dibromoethane	0.61568	0.69155	12.3
46	S	4-Bromofluorobenzene	0.72037	0.64463	10.5
	I	CHLOROBENZENE-d5	1.00000	1.00000	0.0
		2-Hexanone	0.32164	0.53644	66.8#
49		1,3-Dichloropropane	0.69257	0.76513	10.5
50		Tetrachloroethene	0.69810	0.72749	4.2
51		Dibromochloromethane	0.83305	0.93872	12.7
52	PM	Chlorobenzene	1.11559	1.11023	0.5
53		1,1,1,2-Tetrachloroethane	0.56820	0.60227	6.0
54	C	ETHYL BENZENE	0.46900	0.44868	4.3
55		m,p-Xylene	0.59689	0.58641	1.8
56		o-Xylene	0.63885	0.63304	0.9
57		Styrene	0.92123	0.84118	8.7
58	P	Bromoform	0.65903	0.82206	24.7#
59	I	1,4-Dichlorobenzene-d4	1.00000	1.00000	0.0
60		Isopropylbenzene	2.94384	3.32002	12.8
61		trans-1,4-Dichloro-2-butene	0.25516	0.36450	42.9#
62	P	1,1,2,2-Tetrachloroethane	1.49390	2.14835	43.8#
63		Bromobenzene	1.76186	2.04970	16.3
64		1,2,3-Trichloropropane	0.36745	0.57904	57.6#
65		n-Propylbenzene	0.44619	0.49417	10.8
66		1,3,5-Trimethylbenzene	2.34626	2.64990	12.9
67		2-Chlorotoluene	0.82046	0.94225	14.8
68		4-Chlorotoluene	0.79945	0.81735	2.2
69		t-Butylbenzene	2.72056	3.15587	16.0
70		1,2,4-Trimethylbenzene	2.23914	2.43633	8.8
71		sec-Butylbenzene	3.64976	4.04045	10.7
		p-Isopropyltoluene	2.57498	2.72266	5.7
73		1,3-Dichlorobenzene	1.82739	1.94536	6.5
74		1,4-Dichlorobenzene	1.68082	1.74425	3.8
75		n-Butylbenzene	1.34123	1.31770	1.8
76		1,2-Dichlorobenzene	1.77038	1.95761	10.6
77		1,2-Dibromo-3-chloropropane	0.39920	0.62630	56.9#
78		1,2,4-Trichlorobenzene	1.26554	1.29017	1.9

Continuing Calibration Report

Data File : C:\L052197\9960L.D
Acq On : 21 May 97 9:19
Sample : VSTD050 8260
Misc :
MS Integration Params: rteint.p

Vial: 1
Operator: bethm
Inst : GC/MS #11
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\82601L.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Fri Apr 25 10:23:26 1997
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

cal 10 = 9683L.D cal 20 = 9684L.D cal 50 = 9685L.D
cal100 = 9686L.D cal200 = 9687L.D

	Compound	AvgRF	CCRF	%Dev
79	Naphthalene	1.53850	1.93534	25.8#
80	Hexachlorobutadiene	1.05586	1.09325	3.5
81	1,2,3-Trichlorobenzene	1.22277	1.28966	5.5

(#) = Out of Range SPCC's out = 0 CCC's out = 0

8503J.D 82601L.M Fri May 30 15:20:03 1997 GCMS#11

Heritage
Volatile Analysis - Water Method Blank
Analysis Method: SW846-8260

GC/MS VOA Data File: 9961L
Analysis Date/Time: 5/21/97 10:44

Analyte List	Result	DL	Units
Benzene	BDL	5	uG/L
Bromobenzene	BDL	5	uG/L
Bromochloromethane	BDL	5	uG/L
Bromodichloromethane	BDL	5	uG/L
Bromoform	BDL	5	uG/L
Bromomethane	BDL	5	uG/L
n-Butylbenzene	BDL	5	uG/L
tert-Butylbenzene	BDL	5	uG/L
Carbon tetrachloride	BDL	5	uG/L
Chlorobenzene	BDL	5	uG/L
Chloroethane	BDL	5	uG/L
Chloroform	BDL	5	uG/L
Chloromethane	BDL	5	uG/L
2-Chlorotoluene	BDL	5	uG/L
4-Chlorotoluene	BDL	5	uG/L
Dibromochloromethane	BDL	5	uG/L
1,2-Dibromo-3-Chloropropane	BDL	5	uG/L
1,2-Dibromoethane	BDL	5	uG/L
Dibromomethane	BDL	5	uG/L
1,2-Dichlorobenzene	BDL	5	uG/L
1,3-Dichlorobenzene	BDL	5	uG/L
1,4-Dichlorobenzene	BDL	5	uG/L
Dichlorodifluoromethane	BDL	5	uG/L
1,1-Dichloroethane	BDL	5	uG/L
1,2-Dichloroethane	BDL	5	uG/L
1,1-Dichloroethene	BDL	5	uG/L
cis-1,2-Dichloroethene	BDL	5	uG/L
trans-1,2-Dichloroethene	BDL	5	uG/L
1,2-Dichloropropane	BDL	5	uG/L
1,3-Dichloropropane	BDL	5	uG/L
2,2-Dichloropropane	BDL	5	uG/L
1,1-Dichloropropene	BDL	5	uG/L
cis-1,3-Dichloropropene	BDL	5	uG/L
trans-1,3-Dichloropropene	BDL	5	uG/L
Ethyl Benzene	BDL	5	uG/L
Hexachlorobutadiene	BDL	5	uG/L
Isopropylbenzene	BDL	5	uG/L
Dichloromethane	BDL	5	uG/L
Naphthalene	BDL	5	uG/L
N-Propylbenzene	BDL	5	uG/L
Styrene	BDL	5	uG/L
1,1,1,2-Tetrachloroethane	BDL	5	uG/L
1,1,2,2-Tetrachloroethane	BDL	5	uG/L
Tetrachloroethane	BDL	5	uG/L
Toluene	BDL	5	uG/L
1,2,3-Trichloropropane	BDL	5	uG/L
1,2,4-Trichlorobenzene	BDL	5	uG/L

Heritage
Volatile Analysis - Water Method Blank
Analysis Method: SW846-8260

GC/MS VOA Data File: 9961L
Analysis Date/Time: 5/21/97 10:44

Analyte List	Result	DL	Units
1,1,1-Trichloroethane.....	BDL	5	uG/L
1,1,2-Trichloroethane.....	BDL	5	uG/L
Trichloroethene.....	BDL	5	uG/L
Trichlorofluoromethane.....	BDL	5	uG/L
1,2,3-Trichloropropane.....	BDL	5	uG/L
1,2,4-Trimethylbenzene.....	BDL	5	uG/L
1,3,5-Trimethylbenzene.....	BDL	5	uG/L
Vinyl Chloride.....	BDL	5	uG/L
Xylenes (o/m/p-xylene).....	BDL	5	uG/L
Hexane.....	BDL	10	uG/L
Methyl-t-butyl benzene.....	BDL	5	uG/L
Methyl-2-Pentanone.....	BDL	10	uG/L

Surrogate Recovery		
Dichloroethane-d4.....	107	% Recovery
Toluene-d8.....	99	% Recovery
4-Bromofluorobenzene.....	86	% Recovery

Heritage
Volatile Analysis - Water Method Blank
Analysis Method: SW846-8260

GC/MS VOA Data File: >1441R
Analysis Date/Time: 5/22/97 4:20

Analyte List	Result	DL	Units
Benzene	BDL	5	uG/L
Bromobenzene	BDL	5	uG/L
Bromochloromethane	BDL	5	uG/L
Bromodichloromethane	BDL	5	uG/L
Bromoform	BDL	5	uG/L
Bromomethane	BDL	5	uG/L
n-Butylbenzene	BDL	5	uG/L
tert-Butylbenzene	BDL	5	uG/L
Carbon tetrachloride	BDL	5	uG/L
Chlorobenzene	BDL	5	uG/L
Chloroethane	BDL	5	uG/L
Chloroform	BDL	5	uG/L
Chloromethane	BDL	5	uG/L
2-Chlorotoluene	BDL	5	uG/L
4-Chlorotoluene	BDL	5	uG/L
Dibromochloromethane	BDL	5	uG/L
1,2-Dibromo-3-Chloropropane	BDL	5	uG/L
1,2-Dibromoethane	BDL	5	uG/L
Dibromomethane	BDL	5	uG/L
1,2-Dichlorobenzene	BDL	5	uG/L
1,3-Dichlorobenzene	BDL	5	uG/L
1,4-Dichlorobenzene	BDL	5	uG/L
Dichlorodifluoromethane	BDL	5	uG/L
1,1-Dichloroethane	BDL	5	uG/L
1,2-Dichloroethane	BDL	5	uG/L
1,1-Dichloroethene	BDL	5	uG/L
cis-1,2-Dichloroethene	BDL	5	uG/L
trans-1,2-Dichloroethene	BDL	5	uG/L
1,2-Dichloropropane	BDL	5	uG/L
1,3-Dichloropropane	BDL	5	uG/L
2,2-Dichloropropane	BDL	5	uG/L
1,1-Dichloropropene	BDL	5	uG/L
cis-1,3-Dichloropropene	BDL	5	uG/L
trans-1,3-Dichloropropene	BDL	5	uG/L
Ethyl Benzene	BDL	5	uG/L
Hexachlorobutadiene	BDL	5	uG/L
Isopropylbenzene	BDL	5	uG/L
Dichloromethane	BDL	5	uG/L
Naphthalene	BDL	5	uG/L
N-Propylbenzene	BDL	5	uG/L
Styrene	BDL	5	uG/L
1,1,1,2-Tetrachloroethane	BDL	5	uG/L
1,1,2,2-Tetrachloroethane	BDL	5	uG/L
Tetrachloroethane	BDL	5	uG/L
Toluene	BDL	5	uG/L
1,2,3-Trichloropropane	BDL	5	uG/L
1,2,4-Trichlorobenzene	BDL	5	uG/L

Heritage
Volatile Analysis - Water Method Blank
Analysis Method: SW846-8260

GC/MS VOA Data File: >1441R
Analysis Date/Time: 5/22/97 4:20

Analyte List	Result	DL	Units
1,1,1-Trichloroethane.....	BDL	5	uG/L
1,1,2-Trichloroethane.....	BDL	5	uG/L
Trichloroethene.....	BDL	5	uG/L
Trichlorofluoromethane.....	BDL	5	uG/L
1,2,3-Trichloropropane.....	BDL	5	uG/L
1,2,4-Trimethylbenzene.....	BDL	5	uG/L
1,3,5-Trimethylbenzene.....	BDL	5	uG/L
Vinyl Chloride.....	BDL	5	uG/L
Xylenes (o/m/p-xylene).....	BDL	5	uG/L
Hexane.....	BDL	10	uG/L
Methyl-t-butyl benzene.....	BDL	5	uG/L
Methyl-2-Pentanone.....	BDL	10	uG/L

Surrogate Recovery		
Dichloroethane-d4.....	107	% Recovery
Toluene-d8.....	98	% Recovery
4-Bromofluorobenzene.....	88	% Recovery