MRI REPORT

Appendices for Catalog No. 8990082

Data

For U.S. Fish and Wildlife Service
Patuxent Analytical Control Facility
10211 Beech Forest Road
Laurel, Maryland 20708-4041

Purchase Order No. 8PXSA70144
MRI Project No. 4661-A

May 20, 1998

MIDWEST RESEARCH INSTITUTE 425 Volker Boulevard, Kansas City, MO 64110-2299 • (816) 753-7600

Appendix A

Tissue Sample Analysis Data Forms
Catalog No. 8990082

USEPA - ITD

FORM 1A
METALS ANALYSIS DATA SHEET

Lab Name: MRI Episode No.: 1T EPA SAMPLE NO.

Contract No.: 8990082 SAS No.: 4661

FM1

Matrix (aqueous/solid/leachate): solid % solids: 25.6

Receipt date: 04/16/98 Analysis Date: 04/30/98

Concentration Units (ug/L or mg/Kg dry weight): mg/Kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	2.20			P
7440-38-2	Arsenic	1.49	U		P
7440-39-3	Barium	9.41			P
7440-41-7	Beryllium	0.02	U		P
7440-42-8	Boron	1.93			P
7440-43-9	Cadmium	0.38			P
7440-47-3	Chromium	12.44			P
7440-50-8	Copper	4.90			P
7439-89-6	Iron	128.95			P
7439-92-1	Lead	1.10	U		P
7439-95-4	Magnesium	1158.00			P
7439-96-5	Manganese	3.23			P
7439-97-6	Mercury	0.13			CV
7439-98-7	Molybdenum	1.09			P
7440-02-0	Nickel	8.24			P
7782-49-2	Selenium	1.52			HY
7440-24-6	Strontium	34.29			P
7440-62-2	Vanadium	0.63			P
7440-66-6	Zinc	171.90			P

Color before: COLORLESS Clarity before: CLEAR Texture: NA

Color after: COLORLESS Clarity after: CLEAR Artifacts: No

Comments:
LAB SAMPLE ID 1067

SAMPLE COLOR, CLARITY, TEXTURE, AND ARTIFACT COMMENTS ARE NOT REQUIRED FOR THIS PROJECT.

USEPA - ITD

FORM 1A
METALS ANALYSIS DATA SHEET

Lab Name: MRI Episode No.: 1T EPA SAMPLE NO.

Contract No.: 8990082 SAS No.: 4661

FM2

Matrix (aqueous/solid/leachate): solid % solids: 26.3

Receipt date: 04/16/98 Analysis Date: 04/30/98

Concentration Units (ug/L or mg/Kg dry weight): mg/Kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	1.62			P
7440-38-2	Arsenic	1.45	U		P
7440-39-3	Barium	8.82			P
7440-41-7	Beryllium	0.02	U		P
7440-42-8	Boron	1.30	U		P
7440-43-9	Cadmium	0.36			P
7440-47-3	Chromium	2.81			P
7440-50-8	Copper	4.23			P
7439-89-6	Iron	90.02			P
7439-92-1	Lead	1.07	U		P
7439-95-4	Magnesium	1133.50			P
7439-96-5	Manganese	2.82			P
7439-97-6	Mercury	0.08			CV
7439-98-7	Molybdenum	0.27	U		P
7440-02-0	Nickel	1.86			P
7782-49-2	Selenium	1.45			HY
7440-24-6	Strontium	36.05			P
7440-62-2	Vanadium	0.59			P
7440-66-6	Zinc	169.11			P

Color before: COLORLESS Clarity before: CLEAR Texture: NA

Color after: COLORLESS Clarity after: CLEAR Artifacts: No

Comments:
LAB SAMPLE ID 1068

SAMPLE COLOR, CLARITY, TEXTURE, AND ARTIFACT COMMENTS ARE NOT REQUIRED FOR THIS PROJECT.

USEPA - ITD

FORM 1A
METALS ANALYSIS DATA SHEET

Lab Name: MRI Episode No.: 1T EPA SAMPLE NO.

Contract No.: 8990082 SAS No.: 4661 FM3

Matrix (aqueous/solid/leachate): solid % solids: 25.8

Receipt date: 04/16/98 Analysis Date: 04/30/98

Concentration Units (ug/L or mg/Kg dry weight): mg/Kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	1.56	U		P
7440-38-2	Arsenic	1.56	U		P
7440-39-3	Barium	9.67			P
7440-41-7	Beryllium	0.02	U		P
7440-42-8	Boron	2.22			P
7440-43-9	Cadmium	0.34			P
7440-47-3	Chromium	6.86			P
7440-50-8	Copper	3.99			P
7439-89-6	Iron	110.86			P
7439-92-1	Lead	1.15	U		P
7439-95-4	Magnesium	1177.60			P
7439-96-5	Manganese	3.38			P
7439-97-6	Mercury	0.06			CV
7439-98-7	Molybdenum	0.56			P
7440-02-0	Nickel	4.19			P
7782-49-2	Selenium	1.51			HY
7440-24-6	Strontium	37.78			P
7440-62-2	Vanadium	0.51			P
7440-66-6	Zinc	152.26			P

Color before: COLORLESS Clarity before: CLEAR Texture: NA

Color after: COLORLESS Clarity after: CLEAR Artifacts: No

Comments:
LAB SAMPLE ID 1069

SAMPLE COLOR, CLARITY, TEXTURE, AND ARTIFACT COMMENTS ARE NOT REQUIRED FOR THIS PROJECT.

11/89

USEPA - ITD

FORM 1A
METALS ANALYSIS DATA SHEET

Lab Name: MRI Episode No.: 1T EPA SAMPLE NO.

Contract No.: 8990082 SAS No.: 4661

FM4

Matrix (aqueous/solid/leachate): solid % solids: 24.7

Receipt date: 04/16/98 Analysis Date: 04/30/98

Concentration Units (ug/L or mg/Kg dry weight): mg/Kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	2.08			P
7440-38-2	Arsenic	1.60	U		P
7440-39-3	Barium	13.70			P
7440-41-7	Beryllium	0.03	U		P
7440-42-8	Boron	1.56			P
7440-43-9	Cadmium	0.43			P
7440-47-3	Chromium	4.65			P
7440-50-8	Copper	4.72			P
7439-89-6	Iron	102.71			P
7439-92-1	Lead	1.18	U		P
7439-95-4	Magnesium	1238.10			P
7439-96-5	Manganese	2.94			P
7439-97-6	Mercury	0.09			CV
7439-98-7	Molybdenum	0.33			P
7440-02-0	Nickel	2.82			P
7782-49-2	Selenium	1.25			HY
7440-24-6	Strontium	34.71			P
7440-62-2	Vanadium	0.66			P
7440-66-6	Zinc	159.06			P

Color before: COLORLESS Clarity before: CLEAR Texture: NA

Color after: COLORLESS Clarity after: CLEAR Artifacts: No

Comments:
LAB SAMPLE ID 1070

SAMPLE COLOR, CLARITY, TEXTURE, AND ARTIFACT COMMENTS ARE NOT REQUIRED FOR THIS PROJECT.

USEPA - ITD

FORM 1A
METALS ANALYSIS DATA SHEET

Lab Name: MRI Episode No.: 1T EPA SAMPLE NO.

Contract No.: 8990082 SAS No.: 4661 FM5

Matrix (aqueous/solid/leachate): solid % solids: 22.3

Receipt date: 04/16/98 Analysis Date: 04/30/98

Concentration Units (ug/L or mg/Kg dry weight): mg/Kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	217.01			P
7440-38-2	Arsenic	1.67	U		P
7440-39-3	Barium	12.83			P
7440-41-7	Beryllium	0.03	U		P
7440-42-8	Boron	2.45			P
7440-43-9	Cadmium	0.49			P
7440-47-3	Chromium	6.98			P
7440-50-8	Copper	5.09			P
7439-89-6	Iron	195.78			P
7439-92-1	Lead	1.23	U		P
7439-95-4	Magnesium	1272.30			P
7439-96-5	Manganese	9.17			P
7439-97-6	Mercury	0.09			CV
7439-98-7	Molybdenum	0.65			P
7440-02-0	Nickel	4.18			P
7782-49-2	Selenium	2.55			HY
7440-24-6	Strontium	33.60			P
7440-62-2	Vanadium	1.06			P
7440-66-6	Zinc	169.13			P

Color before: COLORLESS Clarity before: CLEAR Texture: NA

Color after: COLORLESS Clarity after: CLEAR Artifacts: No

Comments:
LAB SAMPLE ID 1071

SAMPLE COLOR, CLARITY, TEXTURE, AND ARTIFACT COMMENTS ARE NOT REQUIRED FOR THIS PROJECT.

11/89

USEPA - ITD

FORM 1A
METALS ANALYSIS DATA SHEET

Lab Name: MRI Episode No.: 1T EPA SAMPLE NO.

Contract No.: 8990082 SAS No.: 4661

FM6

Matrix (aqueous/solid/leachate): solid % solids: 21.2

Receipt date: 04/16/98 Analysis Date: 04/30/98

Concentration Units (ug/L or mg/Kg dry weight): mg/Kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	201.51			P
7440-38-2	Arsenic	1.83	U		P
7440-39-3	Barium	14.99			P
7440-41-7	Beryllium	0.03	U		P
7440-42-8	Boron	2.99			P
7440-43-9	Cadmium	0.41			P
7440-47-3	Chromium	6.24			P
7440-50-8	Copper	5.15			P
7439-89-6	Iron	194.35			P
7439-92-1	Lead	1.35	U		P
7439-95-4	Magnesium	1380.80			P
7439-96-5	Manganese	10.17			P
7439-97-6	Mercury	0.09			CV
7439-98-7	Molybdenum	0.34	U		P
7440-02-0	Nickel	3.92			P
7782-49-2	Selenium	2.01			HY
7440-24-6	Strontium	47.36			P
7440-62-2	Vanadium	0.91			P
7440-66-6	Zinc	169.45			P

Color before: COLORLESS Clarity before: CLEAR Texture: NA

Color after: COLORLESS Clarity after: CLEAR Artifacts: No

Comments:
LAB SAMPLE ID 1072

SAMPLE COLOR, CLARITY, TEXTURE, AND ARTIFACT COMMENTS ARE NOT REQUIRED FOR THIS PROJECT.

USEPA - ITD

FORM 1A
METALS ANALYSIS DATA SHEET

Lab Name: MRI Episode No.: 1T EPA SAMPLE NO.

Contract No.: 8990082 SAS No.: 4661

FM7

Matrix (aqueous/solid/leachate): solid % solids: 22.7

Receipt date: 04/16/98 Analysis Date: 04/30/98

Concentration Units (ug/L or mg/Kg dry weight): mg/Kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	132.54			P
7440-38-2	Arsenic	1.84	U		P
7440-39-3	Barium	12.73			P
7440-41-7	Beryllium	0.03	U		P
7440-42-8	Boron	2.73			P
7440-43-9	Cadmium	0.44			P
7440-47-3	Chromium	4.59			P
7440-50-8	Copper	4.64			P
7439-89-6	Iron	141.89			P
7439-92-1	Lead	1.35	U		P
7439-95-4	Magnesium	1263.90			P
7439-96-5	Manganese	7.40			P
7439-97-6	Mercury	0.11			CV
7439-98-7	Molybdenum	0.34	U		P
7440-02-0	Nickel	2.77			P
7782-49-2	Selenium	1.65			HY
7440-24-6	Strontium	37.90			P
7440-62-2	Vanadium	0.88			P
7440-66-6	Zinc	151.29			P

Color before: COLORLESS Clarity before: CLEAR Texture: NA

Color after: COLORLESS Clarity after: CLEAR Artifacts: No

Comments:
LAB SAMPLE ID 1073

SAMPLE COLOR, CLARITY, TEXTURE, AND ARTIFACT COMMENTS ARE NOT REQUIRED FOR THIS PROJECT.

USEPA - ITD

FORM 1A
METALS ANALYSIS DATA SHEET

Lab Name: MRI Episode No.: 1T EPA SAMPLE NO.

Contract No.: 8990082 SAS No.: 4661

FM8

Matrix (aqueous/solid/leachate): solid % solids: 24.1

Receipt date: 04/16/98 Analysis Date: 04/30/98

Concentration Units (ug/L or mg/Kg dry weight): mg/Kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	64.35			P
7440-38-2	Arsenic	1.58	U		P
7440-39-3	Barium	12.04			P
7440-41-7	Beryllium	0.02	U		P
7440-42-8	Boron	2.73			P
7440-43-9	Cadmium	0.86			P
7440-47-3	Chromium	4.18			P
7440-50-8	Copper	4.91			P
7439-89-6	Iron	112.42			P
7439-92-1	Lead	1.16	U		P
7439-95-4	Magnesium	1225.40			P
7439-96-5	Manganese	7.17			P
7439-97-6	Mercury	0.09			CV
7439-98-7	Molybdenum	0.29	U		P
7440-02-0	Nickel	2.51			P
7782-49-2	Selenium	1.55			HY
7440-24-6	Strontium	37.04			P
7440-62-2	Vanadium	0.96			P
7440-66-6	Zinc	175.31			P

Color before: COLORLESS Clarity before: CLEAR Texture: NA

Color after: COLORLESS Clarity after: CLEAR Artifacts: No

Comments:
LAB SAMPLE ID 1074

SAMPLE COLOR, CLARITY, TEXTURE, AND ARTIFACT COMMENTS ARE NOT REQUIRED FOR THIS PROJECT.

USEPA - ITD

FORM 1A
METALS ANALYSIS DATA SHEET

Lab Name: MRI Episode No.: 1T EPA SAMPLE NO.

Contract No.: 8990082 SAS No.: 4661 FM9

Matrix (aqueous/solid/leachate): solid % solids: 24.7

Receipt date: 04/16/98 Analysis Date: 04/30/98

Concentration Units (ug/L or mg/Kg dry weight): mg/Kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	187.18			P
7440-38-2	Arsenic	1.55	U		P
7440-39-3	Barium	60.06			P
7440-41-7	Beryllium	0.02	U		P
7440-42-8	Boron	1.86			P
7440-43-9	Cadmium	0.61			P
7440-47-3	Chromium	9.05			P
7440-50-8	Copper	5.65			P
7439-89-6	Iron	220.08			P
7439-92-1	Lead	1.14	U		P
7439-95-4	Magnesium	1187.00			P
7439-96-5	Manganese	25.21			P
7439-97-6	Mercury	0.07			CV
7439-98-7	Molybdenum	0.94			P
7440-02-0	Nickel	5.65			P
7782-49-2	Selenium	2.45			HY
7440-24-6	Strontium	31.67			P
7440-62-2	Vanadium	1.05			P
7440-66-6	Zinc	144.03			P

Color before: COLORLESS Clarity before: CLEAR Texture: NA

Color after: COLORLESS Clarity after: CLEAR Artifacts: No

Comments:
LAB SAMPLE ID 1075

SAMPLE COLOR, CLARITY, TEXTURE, AND ARTIFACT COMMENTS ARE NOT REQUIRED FOR THIS PROJECT.

USEPA - ITD

FORM 1A
METALS ANALYSIS DATA SHEET

Lab Name: MRI Episode No.: 1T EPA SAMPLE NO.

Contract No.: 8990082 SAS No.: 4661

FM10

Matrix (aqueous/solid/leachate): solid % solids: 23.2

Receipt date: 04/16/98 Analysis Date: 04/30/98

Concentration Units (ug/L or mg/Kg dry weight): mg/Kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	132.27			P
7440-38-2	Arsenic	1.64	U		P
7440-39-3	Barium	14.23			P
7440-41-7	Beryllium	0.03	U		P
7440-42-8	Boron	1.84			P
7440-43-9	Cadmium	0.53			P
7440-47-3	Chromium	14.36			P
7440-50-8	Copper	5.75			P
7439-89-6	Iron	207.67			P
7439-92-1	Lead	1.21	U		P
7439-95-4	Magnesium	1253.80			P
7439-96-5	Manganese	11.43			P
7439-97-6	Mercury	0.06	U		CV
7439-98-7	Molybdenum	1.09			P
7440-02-0	Nickel	8.08			P
7782-49-2	Selenium	2.67			HY
7440-24-6	Strontium	33.17			P
7440-62-2	Vanadium	0.79			P
7440-66-6	Zinc	162.86			P

Color before: COLORLESS Clarity before: CLEAR Texture: NA

Color after: COLORLESS Clarity after: CLEAR Artifacts: No

Comments:
LAB SAMPLE ID 1076

SAMPLE COLOR, CLARITY, TEXTURE, AND ARTIFACT COMMENTS ARE NOT REQUIRED FOR THIS PROJECT.

USEPA - ITD

FORM 1A
METALS ANALYSIS DATA SHEET

Lab Name: MRI Episode No.: 1T EPA SAMPLE NO.

Contract No.: 8990082 SAS No.: 4661

FM12

Matrix (aqueous/solid/leachate): solid % solids: 24.7

Receipt date: 04/16/98 Analysis Date: 04/30/98

Concentration Units (ug/L or mg/Kg dry weight): mg/Kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	57.11			P
7440-38-2	Arsenic	2.89	U		P
7440-39-3	Barium	9.93			P
7440-41-7	Beryllium	0.05	U		P
7440-42-8	Boron	2.59	U		P
7440-43-9	Cadmium	0.60			P
7440-47-3	Chromium	4.59			P
7440-50-8	Copper	6.54			P
7439-89-6	Iron	129.34			P
7439-92-1	Lead	2.13	U		P
7439-95-4	Magnesium	1350.40			P
7439-96-5	Manganese	20.12			P
7439-97-6	Mercury	0.18			CV
7439-98-7	Molybdenum	0.53	U		P
7440-02-0	Nickel	2.12			P
7782-49-2	Selenium	2.47			HY
7440-24-6	Strontium	28.25			P
7440-62-2	Vanadium	1.51			P
7440-66-6	Zinc	170.02			P

Color before: COLORLESS Clarity before: CLEAR Texture: NA

Color after: COLORLESS Clarity after: CLEAR Artifacts: No

Comments:
LAB SAMPLE ID 1077

SAMPLE COLOR, CLARITY, TEXTURE, AND ARTIFACT COMMENTS ARE NOT REQUIRED FOR THIS PROJECT.

USEPA - ITD

FORM 1A
METALS ANALYSIS DATA SHEET

Lab Name: MRI Episode No.: 1T EPA SAMPLE NO.

Contract No.: 8990082 SAS No.: 4661 FM13

Matrix (aqueous/solid/leachate): solid % solids: 22.8

Receipt date: 04/16/98 Analysis Date: 04/30/98

Concentration Units (ug/L or mg/Kg dry weight): mg/Kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	175.45			P
7440-38-2	Arsenic	5.59	U		P
7440-39-3	Barium	15.36			P
7440-41-7	Beryllium	0.09	U		P
7440-42-8	Boron	7.93			P
7440-43-9	Cadmium	0.71			P
7440-47-3	Chromium	10.14			P
7440-50-8	Copper	8.19			P
7439-89-6	Iron	241.37			P
7439-92-1	Lead	4.12	U		P
7439-95-4	Magnesium	1644.20			P
7439-96-5	Manganese	44.70			P
7439-97-6	Mercury	0.40			CV
7439-98-7	Molybdenum	1.03	U		P
7440-02-0	Nickel	3.00			P
7782-49-2	Selenium	1.99			HY
7440-24-6	Strontium	47.14			P
7440-62-2	Vanadium	2.48			P
7440-66-6	Zinc	197.70			P

Color before: COLORLESS Clarity before: CLEAR Texture: NA

Color after: COLORLESS Clarity after: CLEAR Artifacts: No

Comments:
LAB SAMPLE ID 1078

SAMPLE COLOR, CLARITY, TEXTURE, AND ARTIFACT COMMENTS ARE NOT REQUIRED FOR THIS PROJECT.

USEPA - ITD

FORM 1A
METALS ANALYSIS DATA SHEET

Lab Name: MRI Episode No.: 1T EPA SAMPLE NO.

Contract No.: 8990082 SAS No.: 4661

FM14

Matrix (aqueous/solid/leachate): solid % solids: 23.3

Receipt date: 04/16/98 Analysis Date: 04/30/98

Concentration Units (ug/L or mg/Kg dry weight): mg/Kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	121.77			P
7440-38-2	Arsenic	2.52	U		P
7440-39-3	Barium	10.89			P
7440-41-7	Beryllium	0.04	U		P
7440-42-8	Boron	2.26	U		P
7440-43-9	Cadmium	0.60			P
7440-47-3	Chromium	6.58			P
7440-50-8	Copper	6.49			P
7439-89-6	Iron	203.74			P
7439-92-1	Lead	1.86	U		P
7439-95-4	Magnesium	1411.60			P
7439-96-5	Manganese	36.31			P
7439-97-6	Mercury	0.17			CV
7439-98-7	Molybdenum	0.50			P
7440-02-0	Nickel	1.98			P
7782-49-2	Selenium	2.38			HY
7440-24-6	Strontium	39.93			P
7440-62-2	Vanadium	1.31			P
7440-66-6	Zinc	176.68			P

Color before: COLORLESS Clarity before: CLEAR Texture: NA

Color after: COLORLESS Clarity after: CLEAR Artifacts: No

Comments:
LAB SAMPLE ID 1079

SAMPLE COLOR, CLARITY, TEXTURE, AND ARTIFACT COMMENTS ARE NOT REQUIRED FOR THIS PROJECT.

USEPA - ITD

FORM 1A
METALS ANALYSIS DATA SHEET

Lab Name: MRI Episode No.: 1T

EPA SAMPLE NO.

FM15

Contract No.: 8990082 SAS No.: 4661

Matrix (aqueous/solid/leachate): solid % solids: 22.3

Receipt date: 04/16/98 Analysis Date: 04/30/98

Concentration Units (ug/L or mg/Kg dry weight): mg/Kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	161.03			P
7440-38-2	Arsenic	3.69	U		P
7440-39-3	Barium	313.85			P
7440-41-7	Beryllium	0.06	U		P
7440-42-8	Boron	7.02			P
7440-43-9	Cadmium	0.43			P
7440-47-3	Chromium	8.23			P
7440-50-8	Copper	7.67			P
7439-89-6	Iron	233.90			P
7439-92-1	Lead	2.72	U		P
7439-95-4	Magnesium	1547.20			P
7439-96-5	Manganese	25.49			P
7439-97-6	Mercury	0.11			CV
7439-98-7	Molybdenum	0.68	U		P
7440-02-0	Nickel	5.05			P
7782-49-2	Selenium	2.38			HY
7440-24-6	Strontium	51.28			P
7440-62-2	Vanadium	1.62			P
7440-66-6	Zinc	228.77			P

Color before: COLORLESS Clarity before: CLEAR Texture: NA

Color after: COLORLESS Clarity after: CLEAR Artifacts: No

Comments:
LAB SAMPLE ID 1080

SAMPLE COLOR, CLARITY, TEXTURE, AND ARTIFACT COMMENTS ARE NOT REQUIRED FOR THIS PROJECT.

USEPA - ITD

FORM 1A
METALS ANALYSIS DATA SHEET

Lab Name: MRI Episode No.: 1T EPA SAMPLE NO.

Contract No.: 8990082 SAS No.: 4661

FM16

Matrix (aqueous/solid/leachate): solid % solids: 21.9

Receipt date: 04/16/98 Analysis Date: 04/30/98

Concentration Units (ug/L or mg/Kg dry weight): mg/Kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	549.58			P
7440-38-2	Arsenic	1.72	U		P
7440-39-3	Barium	370.49			P
7440-41-7	Beryllium	0.03	U		P
7440-42-8	Boron	2.23			P
7440-43-9	Cadmium	0.46			P
7440-47-3	Chromium	18.99			P
7440-50-8	Copper	8.10			P
7439-89-6	Iron	565.34			P
7439-92-1	Lead	1.27	U		P
7439-95-4	Magnesium	1469.60			P
7439-96-5	Manganese	40.21			P
7439-97-6	Mercury	0.11			CV
7439-98-7	Molybdenum	2.06			P
7440-02-0	Nickel	12.36			P
7782-49-2	Selenium	1.79			HY
7440-24-6	Strontium	43.57			P
7440-62-2	Vanadium	1.30			P
7440-66-6	Zinc	192.51			P

Color before: COLORLESS Clarity before: CLEAR Texture: NA

Color after: COLORLESS Clarity after: CLEAR Artifacts: No

Comments:
LAB SAMPLE ID 1081

SAMPLE COLOR, CLARITY, TEXTURE, AND ARTIFACT COMMENTS ARE NOT REQUIRED FOR THIS PROJECT.

USEPA - ITD

FORM 1A
METALS ANALYSIS DATA SHEET

Lab Name: MRI Episode No.: 1T EPA SAMPLE NO.

Contract No.: 8990082 SAS No.: 4661

FM17

Matrix (aqueous/solid/leachate): solid % solids: 21.0

Receipt date: 04/16/98 Analysis Date: 04/30/98

Concentration Units (ug/L or mg/Kg dry weight): mg/Kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	287.64			P
7440-38-2	Arsenic	1.78	U		P
7440-39-3	Barium	300.70			P
7440-41-7	Beryllium	0.03	U		P
7440-42-8	Boron	3.11			P
7440-43-9	Cadmium	0.47			P
7440-47-3	Chromium	13.55			P
7440-50-8	Copper	7.07			P
7439-89-6	Iron	354.03			P
7439-92-1	Lead	1.31	U		P
7439-95-4	Magnesium	1371.20			P
7439-96-5	Manganese	19.80			P
7439-97-6	Mercury	0.06	U		CV
7439-98-7	Molybdenum	1.33			P
7440-02-0	Nickel	8.43			P
7782-49-2	Selenium	2.03			HY
7440-24-6	Strontium	40.18			P
7440-62-2	Vanadium	0.99			P
7440-66-6	Zinc	169.00			P

Color before: COLORLESS Clarity before: CLEAR Texture: NA

Color after: COLORLESS Clarity after: CLEAR Artifacts: No

Comments:
LAB SAMPLE ID 1082

SAMPLE COLOR, CLARITY, TEXTURE, AND ARTIFACT COMMENTS ARE NOT REQUIRED FOR THIS PROJECT.

USEPA - ITD

FORM 1A
METALS ANALYSIS DATA SHEET

Lab Name: MRI Episode No.: 1T EPA SAMPLE NO.

Contract No.: 8990082 SAS No.: 4661

FM18

Matrix (aqueous/solid/leachate): solid % solids: 19.5

Receipt date: 04/16/98 Analysis Date: 04/30/98

Concentration Units (ug/L or mg/Kg dry weight): mg/Kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	442.32			P
7440-38-2	Arsenic	1.93	U		P
7440-39-3	Barium	603.89			P
7440-41-7	Beryllium	0.03	U		P
7440-42-8	Boron	2.73			P
7440-43-9	Cadmium	0.51			P
7440-47-3	Chromium	18.44			P
7440-50-8	Copper	7.08			P
7439-89-6	Iron	454.60			P
7439-92-1	Lead	1.42	U		P
7439-95-4	Magnesium	1472.00			P
7439-96-5	Manganese	65.06			P
7439-97-6	Mercury	0.14			CV
7439-98-7	Molybdenum	2.10			P
7440-02-0	Nickel	11.91			P
7782-49-2	Selenium	1.77			HY
7440-24-6	Strontium	47.30			P
7440-62-2	Vanadium	1.56			P
7440-66-6	Zinc	198.94			P

Color before: COLORLESS Clarity before: CLEAR Texture: NA

Color after: COLORLESS Clarity after: CLEAR Artifacts: No

Comments:
LAB SAMPLE ID 1083

SAMPLE COLOR, CLARITY, TEXTURE, AND ARTIFACT COMMENTS ARE NOT REQUIRED FOR THIS PROJECT.

USEPA - ITD

FORM 1A
METALS ANALYSIS DATA SHEET

Lab Name: MRI Episode No.: 1T EPA SAMPLE NO.

Contract No.: 8990082 SAS No.: 4661

FM19

Matrix (aqueous/solid/leachate): solid % solids: 19.6

Receipt date: 04/16/98 Analysis Date: 04/30/98

Concentration Units (ug/L or mg/Kg dry weight): mg/Kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	665.82			P
7440-38-2	Arsenic	1.93	U		P
7440-39-3	Barium	819.49			P
7440-41-7	Beryllium	0.03	U		P
7440-42-8	Boron	3.35			P
7440-43-9	Cadmium	0.53			P
7440-47-3	Chromium	9.81			P
7440-50-8	Copper	7.45			P
7439-89-6	Iron	555.64			P
7439-92-1	Lead	1.42	U		P
7439-95-4	Magnesium	1654.80			P
7439-96-5	Manganese	50.99			P
7439-97-6	Mercury	0.07	U		CV
7439-98-7	Molybdenum	1.04			P
7440-02-0	Nickel	6.71			P
7782-49-2	Selenium	2.52			HY
7440-24-6	Strontium	54.22			P
7440-62-2	Vanadium	1.56			P
7440-66-6	Zinc	192.42			P

Color before: COLORLESS Clarity before: CLEAR Texture: NA

Color after: COLORLESS Clarity after: CLEAR Artifacts: No

Comments:
LAB SAMPLE ID 1084

SAMPLE COLOR, CLARITY, TEXTURE, AND ARTIFACT COMMENTS ARE NOT REQUIRED FOR THIS PROJECT.

11/89

USEPA - ITD

FORM 1A
METALS ANALYSIS DATA SHEET

Lab Name: MRI Episode No.: 1T EPA SAMPLE NO.

Contract No.: 8990082 SAS No.: 4661

FM20

Matrix (aqueous/solid/leachate): solid % solids: 18.0

Receipt date: 04/16/98 Analysis Date: 04/30/98

Concentration Units (ug/L or mg/Kg dry weight): mg/Kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	455.84			P
7440-38-2	Arsenic	2.11	U		P
7440-39-3	Barium	828.45			P
7440-41-7	Beryllium	0.03	U		P
7440-42-8	Boron	4.16			P
7440-43-9	Cadmium	0.71			P
7440-47-3	Chromium	39.53			P
7440-50-8	Copper	9.00			P
7439-89-6	Iron	617.18			P
7439-92-1	Lead	1.56	U		P
7439-95-4	Magnesium	1780.80			P
7439-96-5	Manganese	80.64			P
7439-97-6	Mercury	0.18			CV
7439-98-7	Molybdenum	4.65			P
7440-02-0	Nickel	25.59			P
7782-49-2	Selenium	2.80			HY
7440-24-6	Strontium	72.64			P
7440-62-2	Vanadium	1.79			P
7440-66-6	Zinc	252.28			P

Color before: COLORLESS Clarity before: CLEAR Texture: NA

Color after: COLORLESS Clarity after: CLEAR Artifacts: No

Comments:
LAB SAMPLE ID 1085

SAMPLE COLOR, CLARITY, TEXTURE, AND ARTIFACT COMMENTS ARE NOT REQUIRED FOR THIS PROJECT.

11/89

USEPA - ITD

FORM 1A
METALS ANALYSIS DATA SHEET

Lab Name: MRI Episode No.: 1T EPA SAMPLE NO.

Contract No.: 8990082 SAS No.: 4661 FM21

Matrix (aqueous/solid/leachate): solid % solids: 21.3

Receipt date: 04/16/98 Analysis Date: 04/30/98

Concentration Units (ug/L or mg/Kg dry weight): mg/Kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	134.23			P
7440-38-2	Arsenic	1.77	U		P
7440-39-3	Barium	14.92			P
7440-41-7	Beryllium	0.03	U		P
7440-42-8	Boron	2.83			P
7440-43-9	Cadmium	0.58			P
7440-47-3	Chromium	7.21			P
7440-50-8	Copper	5.31			P
7439-89-6	Iron	156.63			P
7439-92-1	Lead	1.31	U		P
7439-95-4	Magnesium	1345.20			P
7439-96-5	Manganese	7.73			P
7439-97-6	Mercury	0.09			CV
7439-98-7	Molybdenum	0.33	U		P
7440-02-0	Nickel	4.01			P
7782-49-2	Selenium	2.62			HY
7440-24-6	Strontium	39.41			P
7440-62-2	Vanadium	0.91			P
7440-66-6	Zinc	170.49			P

Color before: COLORLESS Clarity before: CLEAR Texture: NA

Color after: COLORLESS Clarity after: CLEAR Artifacts: No

Comments:
LAB SAMPLE ID 1086

SAMPLE COLOR, CLARITY, TEXTURE, AND ARTIFACT COMMENTS ARE NOT REQUIRED FOR THIS PROJECT.

USEPA - ITD

FORM 1A
METALS ANALYSIS DATA SHEET

Lab Name: MRI Episode No.: 1T EPA SAMPLE NO.

Contract No.: 8990082 SAS No.: 4661 FM22

Matrix (aqueous/solid/leachate): solid % solids: 20.3

Receipt date: 04/16/98 Analysis Date: 04/30/98

Concentration Units (ug/L or mg/Kg dry weight): mg/Kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	100.61			P
7440-38-2	Arsenic	1.82	U		P
7440-39-3	Barium	15.37			P
7440-41-7	Beryllium	0.03	U		P
7440-42-8	Boron	2.96			P
7440-43-9	Cadmium	0.44			P
7440-47-3	Chromium	6.07			P
7440-50-8	Copper	5.13			P
7439-89-6	Iron	138.71			P
7439-92-1	Lead	1.34	U		P
7439-95-4	Magnesium	1398.20			P
7439-96-5	Manganese	6.29			P
7439-97-6	Mercury	0.10			CV
7439-98-7	Molybdenum	0.56			P
7440-02-0	Nickel	3.83			P
7782-49-2	Selenium	3.00			HY
7440-24-6	Strontium	43.09			P
7440-62-2	Vanadium	0.90			P
7440-66-6	Zinc	189.07			P

Color before: COLORLESS Clarity before: CLEAR Texture: NA

Color after: COLORLESS Clarity after: CLEAR Artifacts: No

Comments:
LAB SAMPLE ID 1087

SAMPLE COLOR, CLARITY, TEXTURE, AND ARTIFACT COMMENTS ARE NOT REQUIRED FOR THIS PROJECT.

USEPA - ITD

FORM 1A
METALS ANALYSIS DATA SHEET

Lab Name: MRI Episode No.: 1T EPA SAMPLE NO.

Contract No.: 8990082 SAS No.: 4661

FM23

Matrix (aqueous/solid/leachate): solid % solids: 21.2

Receipt date: 04/16/98 Analysis Date: 04/30/98

Concentration Units (ug/L or mg/Kg dry weight): mg/Kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	91.41			P
7440-38-2	Arsenic	1.74	U		P
7440-39-3	Barium	15.01			P
7440-41-7	Beryllium	0.03	U		P
7440-42-8	Boron	2.40			P
7440-43-9	Cadmium	0.35			P
7440-47-3	Chromium	8.11			P
7440-50-8	Copper	4.97			P
7439-89-6	Iron	135.87			P
7439-92-1	Lead	1.28	U		P
7439-95-4	Magnesium	1325.50			P
7439-96-5	Manganese	6.06			P
7439-97-6	Mercury	0.12			CV
7439-98-7	Molybdenum	0.44			P
7440-02-0	Nickel	4.61			P
7782-49-2	Selenium	1.74			HY
7440-24-6	Strontium	39.75			P
7440-62-2	Vanadium	0.74			P
7440-66-6	Zinc	172.18			P

Color before: COLORLESS Clarity before: CLEAR Texture: NA

Color after: COLORLESS Clarity after: CLEAR Artifacts: No

Comments:
LAB SAMPLE ID 1088

SAMPLE COLOR, CLARITY, TEXTURE, AND ARTIFACT COMMENTS ARE NOT REQUIRED FOR THIS PROJECT.

USEPA - ITD

FORM 1A
METALS ANALYSIS DATA SHEET

Lab Name: MRI Episode No.: 1T EPA SAMPLE NO.

Contract No.: 8990082 SAS No.: 4661

FM24

Matrix (aqueous/solid/leachate): solid % solids: 21.8

Receipt date: 04/16/98 Analysis Date: 04/30/98

Concentration Units (ug/L or mg/Kg dry weight): mg/Kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	93.24			P
7440-38-2	Arsenic	2.19	U		P
7440-39-3	Barium	17.29			P
7440-41-7	Beryllium	0.03	U		P
7440-42-8	Boron	1.96	U		P
7440-43-9	Cadmium	0.31			P
7440-47-3	Chromium	11.59			P
7440-50-8	Copper	5.61			P
7439-89-6	Iron	202.81			P
7439-92-1	Lead	1.61	U		P
7439-95-4	Magnesium	1533.00			P
7439-96-5	Manganese	40.95			P
7439-97-6	Mercury	0.15			CV
7439-98-7	Molybdenum	1.30			P
7440-02-0	Nickel	5.66			P
7782-49-2	Selenium	1.98			HY
7440-24-6	Strontium	38.57			P
7440-62-2	Vanadium	1.21			P
7440-66-6	Zinc	149.93			P

Color before: COLORLESS Clarity before: CLEAR Texture: NA

Color after: COLORLESS Clarity after: CLEAR Artifacts: No

Comments:
LAB SAMPLE ID 1089

SAMPLE COLOR, CLARITY, TEXTURE, AND ARTIFACT COMMENTS ARE NOT REQUIRED FOR THIS PROJECT.

USEPA - ITD

FORM 1A
METALS ANALYSIS DATA SHEET

Lab Name: MRI Episode No.: 1T EPA SAMPLE NO.

Contract No.: 8990082 SAS No.: 4661

FM25

Matrix (aqueous/solid/leachate): solid % solids: 22.3

Receipt date: 04/16/98 Analysis Date: 04/30/98

Concentration Units (ug/L or mg/Kg dry weight): mg/Kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	219.73			P
7440-38-2	Arsenic	2.99	U		P
7440-39-3	Barium	18.95			P
7440-41-7	Beryllium	0.05	U		P
7440-42-8	Boron	9.84			P
7440-43-9	Cadmium	0.42			P
7440-47-3	Chromium	11.95			P
7440-50-8	Copper	7.58			P
7439-89-6	Iron	334.15			P
7439-92-1	Lead	2.20	U		P
7439-95-4	Magnesium	1595.00			P
7439-96-5	Manganese	76.86			P
7439-97-6	Mercury	0.14			CV
7439-98-7	Molybdenum	1.08			P
7440-02-0	Nickel	3.44			P
7782-49-2	Selenium	1.72			HY
7440-24-6	Strontium	40.18			P
7440-62-2	Vanadium	1.63			P
7440-66-6	Zinc	162.03			P

Color before: COLORLESS Clarity before: CLEAR Texture: NA

Color after: COLORLESS Clarity after: CLEAR Artifacts: No

Comments:
LAB SAMPLE ID 1090

SAMPLE COLOR, CLARITY, TEXTURE, AND ARTIFACT COMMENTS ARE NOT REQUIRED FOR THIS PROJECT.

USEPA - ITD

FORM 1A
METALS ANALYSIS DATA SHEET

Lab Name: MRI Episode No.: 1T EPA SAMPLE NO.

Contract No.: 8990082 SAS No.: 4661 FM26R7

Matrix (aqueous/solid/leachate): solid % solids: 23.0

Receipt date: 04/16/98 Analysis Date: 04/30/98

Concentration Units (ug/L or mg/Kg dry weight): mg/Kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	86.23			P
7440-38-2	Arsenic	1.72	U		P
7440-39-3	Barium	15.60			P
7440-41-7	Beryllium	0.03	U		P
7440-42-8	Boron	2.94			P
7440-43-9	Cadmium	0.62			P
7440-47-3	Chromium	4.15			P
7440-50-8	Copper	5.78			P
7439-89-6	Iron	127.86			P
7439-92-1	Lead	1.27	U		P
7439-95-4	Magnesium	1306.80			P
7439-96-5	Manganese	9.69			P
7439-97-6	Mercury	0.10			CV
7439-98-7	Molybdenum	0.33			P
7440-02-0	Nickel	2.49			P
7782-49-2	Selenium	2.78			HY
7440-24-6	Strontium	40.29			P
7440-62-2	Vanadium	0.62			P
7440-66-6	Zinc	152.21			P

Color before: COLORLESS Clarity before: CLEAR Texture: NA

Color after: COLORLESS Clarity after: CLEAR Artifacts: No

Comments:
LAB SAMPLE ID 1091

SAMPLE COLOR, CLARITY, TEXTURE, AND ARTIFACT COMMENTS ARE NOT REQUIRED FOR THIS PROJECT.

11/89

USEPA - ITD

FORM 1A
METALS ANALYSIS DATA SHEET

Lab Name: MRI Episode No.: 1T

EPA SAMPLE NO.

FM27

Contract No.: 8990082 SAS No.: 4661

Matrix (aqueous/solid/leachate): solid % solids: 21.7

Receipt date: 04/16/98 Analysis Date: 04/30/98

Concentration Units (ug/L or mg/Kg dry weight): mg/Kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	78.86			P
7440-38-2	Arsenic	1.69	U		P
7440-39-3	Barium	16.43			P
7440-41-7	Beryllium	0.03	U		P
7440-42-8	Boron	1.72			P
7440-43-9	Cadmium	1.03			P
7440-47-3	Chromium	4.41			P
7440-50-8	Copper	6.02			P
7439-89-6	Iron	129.80			P
7439-92-1	Lead	1.24	U		P
7439-95-4	Magnesium	1334.60			P
7439-96-5	Manganese	9.87			P
7439-97-6	Mercury	0.06	U		CV
7439-98-7	Molybdenum	0.31	U		P
7440-02-0	Nickel	2.49			P
7782-49-2	Selenium	1.32			HY
7440-24-6	Strontium	39.88			P
7440-62-2	Vanadium	0.68			P
7440-66-6	Zinc	173.89			P

Color before: COLORLESS Clarity before: CLEAR Texture: NA

Color after: COLORLESS Clarity after: CLEAR Artifacts: No

Comments:
LAB SAMPLE ID 1092

SAMPLE COLOR, CLARITY, TEXTURE, AND ARTIFACT COMMENTS ARE NOT REQUIRED FOR THIS PROJECT.

USEPA - ITD

FORM 1A
METALS ANALYSIS DATA SHEET

Lab Name: MRI Episode No.: 1T EPA SAMPLE NO.

Contract No.: 8990082 SAS No.: 4661 FM28R8

Matrix (aqueous/solid/leachate): solid % solids: 22.2

Receipt date: 04/16/98 Analysis Date: 04/30/98

Concentration Units (ug/L or mg/Kg dry weight): mg/Kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	69.21			P
7440-38-2	Arsenic	1.73	U		P
7440-39-3	Barium	16.47			P
7440-41-7	Beryllium	0.03	U		P
7440-42-8	Boron	2.13			P
7440-43-9	Cadmium	1.13			P
7440-47-3	Chromium	5.33			P
7440-50-8	Copper	5.79			P
7439-89-6	Iron	127.43			P
7439-92-1	Lead	1.27	U		P
7439-95-4	Magnesium	1288.90			P
7439-96-5	Manganese	10.02			P
7439-97-6	Mercury	0.17			CV
7439-98-7	Molybdenum	0.32	U		P
7440-02-0	Nickel	3.32			P
7782-49-2	Selenium	3.44			HY
7440-24-6	Strontium	40.44			P
7440-62-2	Vanadium	0.75			P
7440-66-6	Zinc	151.53			P

Color before: COLORLESS Clarity before: CLEAR Texture: NA

Color after: COLORLESS Clarity after: CLEAR Artifacts: No

Comments:
LAB SAMPLE ID 1093

SAMPLE COLOR, CLARITY, TEXTURE, AND ARTIFACT COMMENTS ARE NOT REQUIRED FOR THIS PROJECT.

USEPA - ITD

FORM 1A
METALS ANALYSIS DATA SHEET

Lab Name: MRI Episode No.: 1T EPA SAMPLE NO.

Contract No.: 8990082 SAS No.: 4661 IM1

Matrix (aqueous/solid/leachate): solid % solids: 67.7

Receipt date: 04/16/98 Analysis Date: 04/30/98

Concentration Units (ug/L or mg/Kg dry weight): mg/Kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	2046.30			P
7440-38-2	Arsenic	0.80			P
7440-39-3	Barium	78.67			P
7440-41-7	Beryllium	0.12			P
7440-42-8	Boron	1.51			P
7440-43-9	Cadmium	0.33			P
7440-47-3	Chromium	32.74			P
7440-50-8	Copper	5.59			P
7439-89-6	Iron	3460.70			P
7439-92-1	Lead	3.69			P
7439-95-4	Magnesium	595.90			P
7439-96-5	Manganese	1486.90			P
7439-97-6	Mercury	0.02	U		CV
7439-98-7	Molybdenum	4.14			P
7440-02-0	Nickel	3.33			P
7782-49-2	Selenium	0.05	U		HY
7440-24-6	Strontium	8.40			P
7440-62-2	Vanadium	5.76			P
7440-66-6	Zinc	84.66			P

Color before: COLORLESS Clarity before: CLEAR Texture: NA

Color after: COLORLESS Clarity after: CLEAR Artifacts: No

Comments:
LAB SAMPLE ID 1094

SAMPLE COLOR, CLARITY, TEXTURE, AND ARTIFACT COMMENTS ARE NOT REQUIRED FOR THIS PROJECT.

USEPA - ITD

FORM 1A
METALS ANALYSIS DATA SHEET

Lab Name: MRI Episode No.: 1T EPA SAMPLE NO.

Contract No.: 8990082 SAS No.: 4661 IM2R1

Matrix (aqueous/solid/leachate): solid % solids: 68.6

Receipt date: 04/16/98 Analysis Date: 04/30/98

Concentration Units (ug/L or mg/Kg dry weight): mg/Kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	1181.50			P
7440-38-2	Arsenic	0.70			P
7440-39-3	Barium	62.88			P
7440-41-7	Beryllium	0.09			P
7440-42-8	Boron	1.04			P
7440-43-9	Cadmium	0.27			P
7440-47-3	Chromium	22.02			P
7440-50-8	Copper	4.67			P
7439-89-6	Iron	1916.10			P
7439-92-1	Lead	3.17			P
7439-95-4	Magnesium	328.52			P
7439-96-5	Manganese	1343.50			P
7439-97-6	Mercury	0.02	U		CV
7439-98-7	Molybdenum	3.25			P
7440-02-0	Nickel	2.75			P
7782-49-2	Selenium	0.07	U		HY
7440-24-6	Strontium	5.49			P
7440-62-2	Vanadium	4.63			P
7440-66-6	Zinc	70.84			P

Color before: COLORLESS Clarity before: CLEAR Texture: NA

Color after: COLORLESS Clarity after: CLEAR Artifacts: No

Comments:
LAB SAMPLE ID 1095

SAMPLE COLOR, CLARITY, TEXTURE, AND ARTIFACT COMMENTS ARE NOT REQUIRED FOR THIS PROJECT.

11/89

USEPA - ITD

FORM 1A
METALS ANALYSIS DATA SHEET

Lab Name: MRI Episode No.: 1T EPA SAMPLE NO.

Contract No.: 8990082 SAS No.: 4661

IM301

Matrix (aqueous/solid/leachate): solid % solids: 19.7

Receipt date: 04/16/98 Analysis Date: 04/30/98

Concentration Units (ug/L or mg/Kg dry weight): mg/Kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	165.78			P
7440-38-2	Arsenic	1.89	U		P
7440-39-3	Barium	101.52			P
7440-41-7	Beryllium	0.03	U		P
7440-42-8	Boron	3.42			P
7440-43-9	Cadmium	0.67			P
7440-47-3	Chromium	32.69			P
7440-50-8	Copper	18.40			P
7439-89-6	Iron	504.54			P
7439-92-1	Lead	2.58			P
7439-95-4	Magnesium	1555.10			P
7439-96-5	Manganese	939.99			P
7439-97-6	Mercury	0.07	U		CV
7439-98-7	Molybdenum	45.53			P
7440-02-0	Nickel	19.15			P
7782-49-2	Selenium	0.75			HY
7440-24-6	Strontium	17.49			P
7440-62-2	Vanadium	1.40			P
7440-66-6	Zinc	200.82			P

Color before: COLORLESS Clarity before: CLEAR Texture: NA

Color after: COLORLESS Clarity after: CLEAR Artifacts: No

Comments:
LAB SAMPLE ID 1096

SAMPLE COLOR, CLARITY, TEXTURE, AND ARTIFACT COMMENTS ARE NOT REQUIRED FOR THIS PROJECT.

USEPA - ITD

FORM 1A
METALS ANALYSIS DATA SHEET

Lab Name: MRI Episode No.: 1T EPA SAMPLE NO.

Contract No.: 8990082 SAS No.: 4661

IM4

Matrix (aqueous/solid/leachate): solid % solids: 19.6

Receipt date: 04/16/98 Analysis Date: 04/30/98

Concentration Units (ug/L or mg/Kg dry weight): mg/Kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	153.58			P
7440-38-2	Arsenic	1.92	U		P
7440-39-3	Barium	93.74			P
7440-41-7	Beryllium	0.03	U		P
7440-42-8	Boron	3.14			P
7440-43-9	Cadmium	0.65			P
7440-47-3	Chromium	9.84			P
7440-50-8	Copper	18.46			P
7439-89-6	Iron	344.72			P
7439-92-1	Lead	1.42	U		P
7439-95-4	Magnesium	1569.90			P
7439-96-5	Manganese	784.81			P
7439-97-6	Mercury	0.06	U		CV
7439-98-7	Molybdenum	43.05			P
7440-02-0	Nickel	3.98			P
7782-49-2	Selenium	0.88			HY
7440-24-6	Strontium	17.36			P
7440-62-2	Vanadium	1.40			P
7440-66-6	Zinc	187.79			P

Color before: COLORLESS Clarity before: CLEAR Texture: NA

Color after: COLORLESS Clarity after: CLEAR Artifacts: No

Comments:
LAB SAMPLE ID 1097

SAMPLE COLOR, CLARITY, TEXTURE, AND ARTIFACT COMMENTS ARE NOT REQUIRED FOR THIS PROJECT.

USEPA - ITD

FORM 1A
METALS ANALYSIS DATA SHEET

Lab Name: MRI Episode No.: 1T EPA SAMPLE NO.

Contract No.: 8990082 SAS No.: 4661

IM502

Matrix (aqueous/solid/leachate): solid % solids: 19.9

Receipt date: 04/16/98 Analysis Date: 04/30/98

Concentration Units (ug/L or mg/Kg dry weight): mg/Kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	155.31			P
7440-38-2	Arsenic	1.80	U		P
7440-39-3	Barium	95.63			P
7440-41-7	Beryllium	0.03	U		P
7440-42-8	Boron	2.54			P
7440-43-9	Cadmium	0.60			P
7440-47-3	Chromium	11.63			P
7440-50-8	Copper	17.73			P
7439-89-6	Iron	419.83			P
7439-92-1	Lead	1.32	U		P
7439-95-4	Magnesium	1519.60	U		P
7439-96-5	Manganese	857.14			P
7439-97-6	Mercury	0.05			CV
7439-98-7	Molybdenum	41.77			P
7440-02-0	Nickel	4.94			P
7782-49-2	Selenium	0.63			HY
7440-24-6	Strontium	16.56			P
7440-62-2	Vanadium	1.29			P
7440-66-6	Zinc	188.08			P

Color before: COLORLESS Clarity before: CLEAR Texture: NA

Color after: COLORLESS Clarity after: CLEAR Artifacts: No

Comments:
LAB SAMPLE ID 1098

SAMPLE COLOR, CLARITY, TEXTURE, AND ARTIFACT COMMENTS ARE NOT REQUIRED FOR THIS PROJECT.

USEPA - ITD

FORM 1A
METALS ANALYSIS DATA SHEET

Lab Name: MRI Episode No.: 1T EPA SAMPLE NO.

Contract No.: 8990082 SAS No.: 4661

IM6

Matrix (aqueous/solid/leachate): solid % solids: 69.3

Receipt date: 04/16/98 Analysis Date: 04/30/98

Concentration Units (ug/L or mg/Kg dry weight): mg/Kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	2526.50			P
7440-38-2	Arsenic	0.90			P
7440-39-3	Barium	32.87			P
7440-41-7	Beryllium	0.51			P
7440-42-8	Boron	1.54			P
7440-43-9	Cadmium	0.17			P
7440-47-3	Chromium	8.09			P
7440-50-8	Copper	5.00			P
7439-89-6	Iron	3270.90			P
7439-92-1	Lead	13.52			P
7439-95-4	Magnesium	642.51			P
7439-96-5	Manganese	194.48			P
7439-97-6	Mercury	0.02	U		CV
7439-98-7	Molybdenum	0.41			P
7440-02-0	Nickel	6.80			P
7782-49-2	Selenium	0.07	U		HY
7440-24-6	Strontium	14.84			P
7440-62-2	Vanadium	7.14			P
7440-66-6	Zinc	42.88			P

Color before: COLORLESS Clarity before: CLEAR Texture: NA

Color after: COLORLESS Clarity after: CLEAR Artifacts: No

Comments:
LAB SAMPLE ID 1099

SAMPLE COLOR, CLARITY, TEXTURE, AND ARTIFACT COMMENTS ARE NOT REQUIRED FOR THIS PROJECT.

11/89

USEPA - ITD

FORM 1A
METALS ANALYSIS DATA SHEET

Lab Name: MRI Episode No.: 1T EPA SAMPLE NO.

Contract No.: 8990082 SAS No.: 4661 IM7

Matrix (aqueous/solid/leachate): solid % solids: 20.7

Receipt date: 04/16/98 Analysis Date: 04/30/98

Concentration Units (ug/L or mg/Kg dry weight): mg/Kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	145.35			P
7440-38-2	Arsenic	1.83	U		P
7440-39-3	Barium	50.99			P
7440-41-7	Beryllium	0.03	U		P
7440-42-8	Boron	4.18			P
7440-43-9	Cadmium	0.39			P
7440-47-3	Chromium	3.67			P
7440-50-8	Copper	15.08			P
7439-89-6	Iron	170.56			P
7439-92-1	Lead	1.35	U		P
7439-95-4	Magnesium	1498.00			P
7439-96-5	Manganese	153.91			P
7439-97-6	Mercury	0.07	U		CV
7439-98-7	Molybdenum	0.80			P
7440-02-0	Nickel	2.63			P
7782-49-2	Selenium	1.37			HY
7440-24-6	Strontium	8.59			P
7440-62-2	Vanadium	0.55			P
7440-66-6	Zinc	190.20			P

Color before: COLORLESS Clarity before: CLEAR Texture: NA

Color after: COLORLESS Clarity after: CLEAR Artifacts: No

Comments:
LAB SAMPLE ID 1100

SAMPLE COLOR, CLARITY, TEXTURE, AND ARTIFACT COMMENTS ARE NOT REQUIRED FOR THIS PROJECT.

USEPA - ITD

FORM 1A
METALS ANALYSIS DATA SHEET

Lab Name: MRI Episode No.: 1T EPA SAMPLE NO.

Contract No.: 8990082 SAS No.: 4661

IM8

Matrix (aqueous/solid/leachate): solid % solids: 20.6

Receipt date: 04/16/98 Analysis Date: 04/30/98

Concentration Units (ug/L or mg/Kg dry weight): mg/Kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	221.34			P
7440-38-2	Arsenic	1.83	U		P
7440-39-3	Barium	51.74			P
7440-41-7	Beryllium	0.03	U		P
7440-42-8	Boron	2.67			P
7440-43-9	Cadmium	0.37			P
7440-47-3	Chromium	10.72			P
7440-50-8	Copper	15.63			P
7439-89-6	Iron	246.42			P
7439-92-1	Lead	1.35	U		P
7439-95-4	Magnesium	1472.30			P
7439-96-5	Manganese	140.03			P
7439-97-6	Mercury	0.06	U		CV
7439-98-7	Molybdenum	1.19			P
7440-02-0	Nickel	6.64			P
7782-49-2	Selenium	1.13			HY
7440-24-6	Strontium	5.81			P
7440-62-2	Vanadium	0.65			P
7440-66-6	Zinc	188.63			P

Color before: COLORLESS Clarity before: CLEAR Texture: NA

Color after: COLORLESS Clarity after: CLEAR Artifacts: No

Comments:
LAB SAMPLE ID 1101

SAMPLE COLOR, CLARITY, TEXTURE, AND ARTIFACT COMMENTS ARE NOT REQUIRED FOR THIS PROJECT.

USEPA - ITD

FORM 1A
METALS ANALYSIS DATA SHEET

Lab Name: MRI Episode No.: 1T EPA SAMPLE NO.

Contract No.: 8990082 SAS No.: 4661 IM9R2

Matrix (aqueous/solid/leachate): solid % solids: 74.7

Receipt date: 04/16/98 Analysis Date: 04/30/98

Concentration Units (ug/L or mg/Kg dry weight): mg/Kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	2700.70			P
7440-38-2	Arsenic	0.94			P
7440-39-3	Barium	27.29			P
7440-41-7	Beryllium	0.42			P
7440-42-8	Boron	1.32			P
7440-43-9	Cadmium	0.14			P
7440-47-3	Chromium	6.68			P
7440-50-8	Copper	4.92			P
7439-89-6	Iron	3717.50			P
7439-92-1	Lead	7.32			P
7439-95-4	Magnesium	692.22			P
7439-96-5	Manganese	168.91			P
7439-97-6	Mercury	0.02	U		CV
7439-98-7	Molybdenum	0.50			P
7440-02-0	Nickel	6.30			P
7782-49-2	Selenium	0.07	U		HY
7440-24-6	Strontium	8.36			P
7440-62-2	Vanadium	7.58			P
7440-66-6	Zinc	40.10			P

Color before: COLORLESS Clarity before: CLEAR Texture: NA

Color after: COLORLESS Clarity after: CLEAR Artifacts: No

Comments:
LAB SAMPLE ID 1102

SAMPLE COLOR, CLARITY, TEXTURE, AND ARTIFACT COMMENTS ARE NOT REQUIRED FOR THIS PROJECT.

USEPA - ITD

FORM 1A
METALS ANALYSIS DATA SHEET

Lab Name: MRI Episode No.: 1T EPA SAMPLE NO.

Contract No.: 8990082 SAS No.: 4661

IM1003

Matrix (aqueous/solid/leachate): solid % solids: 21.5

Receipt date: 04/16/98 Analysis Date: 04/30/98

Concentration Units (ug/L or mg/Kg dry weight): mg/Kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	305.03			P
7440-38-2	Arsenic	1.72	U		P
7440-39-3	Barium	49.73			P
7440-41-7	Beryllium	0.03			P
7440-42-8	Boron	2.88			P
7440-43-9	Cadmium	0.45			P
7440-47-3	Chromium	36.17			P
7440-50-8	Copper	15.06			P
7439-89-6	Iron	542.55			P
7439-92-1	Lead	3.85			P
7439-95-4	Magnesium	1429.60			P
7439-96-5	Manganese	148.55			P
7439-97-6	Mercury	0.06	U		CV
7439-98-7	Molybdenum	4.05			P
7440-02-0	Nickel	24.92			P
7782-49-2	Selenium	1.63			HY
7440-24-6	Strontium	7.22			P
7440-62-2	Vanadium	1.12			P
7440-66-6	Zinc	179.65			P

Color before: COLORLESS Clarity before: CLEAR Texture: NA

Color after: COLORLESS Clarity after: CLEAR Artifacts: No

Comments:
LAB SAMPLE ID 1103

SAMPLE COLOR, CLARITY, TEXTURE, AND ARTIFACT COMMENTS ARE NOT REQUIRED FOR THIS PROJECT.

USEPA - ITD

FORM 1A
METALS ANALYSIS DATA SHEET

Lab Name: MRI Episode No.: 1T EPA SAMPLE NO.

Contract No.: 8990082 SAS No.: 4661

IM11R3

Matrix (aqueous/solid/leachate): solid % solids: 72.1

Receipt date: 04/16/98 Analysis Date: 04/30/98

Concentration Units (ug/L or mg/Kg dry weight): mg/Kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	3566.80			P
7440-38-2	Arsenic	3.26			P
7440-39-3	Barium	60.16			P
7440-41-7	Beryllium	0.35			P
7440-42-8	Boron	1.55			P
7440-43-9	Cadmium	0.29			P
7440-47-3	Chromium	6.02			P
7440-50-8	Copper	3.85			P
7439-89-6	Iron	8951.70			P
7439-92-1	Lead	10.22			P
7439-95-4	Magnesium	693.94			P
7439-96-5	Manganese	624.86			P
7439-97-6	Mercury	0.01	U		CV
7439-98-7	Molybdenum	0.70			P
7440-02-0	Nickel	4.67			P
7782-49-2	Selenium	0.07	U		HY
7440-24-6	Strontium	8.51			P
7440-62-2	Vanadium	17.81			P
7440-66-6	Zinc	24.93			P

Color before: COLORLESS Clarity before: CLEAR Texture: NA

Color after: COLORLESS Clarity after: CLEAR Artifacts: No

Comments:
LAB SAMPLE ID 1104

SAMPLE COLOR, CLARITY, TEXTURE, AND ARTIFACT COMMENTS ARE NOT REQUIRED FOR THIS PROJECT.

USEPA - ITD

FORM 1A
METALS ANALYSIS DATA SHEET

Lab Name: MRI Episode No.: 1T

EPA SAMPLE NO.

IM12

Contract No.: 8990082 SAS No.: 4661

Matrix (aqueous/solid/leachate): solid % solids: 17.3

Receipt date: 04/16/98 Analysis Date: 04/30/98

Concentration Units (ug/L or mg/Kg dry weight): mg/Kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	204.61			P
7440-38-2	Arsenic	2.18	U		P
7440-39-3	Barium	82.08			P
7440-41-7	Beryllium	0.03	U		P
7440-42-8	Boron	2.66			P
7440-43-9	Cadmium	0.39			P
7440-47-3	Chromium	8.38			P
7440-50-8	Copper	15.90			P
7439-89-6	Iron	337.56			P
7439-92-1	Lead	1.61	U		P
7439-95-4	Magnesium	1797.50			P
7439-96-5	Manganese	204.44			P
7439-97-6	Mercury	0.06	U		CV
7439-98-7	Molybdenum	0.88			P
7440-02-0	Nickel	5.95			P
7782-49-2	Selenium	1.42			HY
7440-24-6	Strontium	29.29			P
7440-62-2	Vanadium	1.07			P
7440-66-6	Zinc	125.69			P

Color before: COLORLESS Clarity before: CLEAR Texture: NA

Color after: COLORLESS Clarity after: CLEAR Artifacts: No

Comments:
LAB SAMPLE ID 1105

SAMPLE COLOR, CLARITY, TEXTURE, AND ARTIFACT COMMENTS ARE NOT REQUIRED FOR THIS PROJECT.

USEPA - ITD

FORM 1A
METALS ANALYSIS DATA SHEET

Lab Name: MRI Episode No.: 1T EPA SAMPLE NO.

Contract No.: 8990082 SAS No.: 4661

IM1304

Matrix (aqueous/solid/leachate): solid % solids: 19.3

Receipt date: 04/16/98 Analysis Date: 04/30/98

Concentration Units (ug/L or mg/Kg dry weight): mg/Kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	792.57			P
7440-38-2	Arsenic	1.96	U		P
7440-39-3	Barium	79.02			P
7440-41-7	Beryllium	0.10			P
7440-42-8	Boron	3.65			P
7440-43-9	Cadmium	0.33			P
7440-47-3	Chromium	31.33			P
7440-50-8	Copper	15.23			P
7439-89-6	Iron	2171.50			P
7439-92-1	Lead	3.41			P
7439-95-4	Magnesium	1618.50			P
7439-96-5	Manganese	251.99			P
7439-97-6	Mercury	0.07	U		CV
7439-98-7	Molybdenum	4.14			P
7440-02-0	Nickel	20.88			P
7782-49-2	Selenium	0.55			HY
7440-24-6	Strontium	23.21			P
7440-62-2	Vanadium	5.50			P
7440-66-6	Zinc	120.58			P

Color before: COLORLESS Clarity before: CLEAR Texture: NA

Color after: COLORLESS Clarity after: CLEAR Artifacts: No

Comments:
LAB SAMPLE ID 1106

SAMPLE COLOR, CLARITY, TEXTURE, AND ARTIFACT COMMENTS ARE NOT REQUIRED FOR THIS PROJECT.

USEPA - ITD

FORM 1A
METALS ANALYSIS DATA SHEET

Lab Name: MRI Episode No.: 1T EPA SAMPLE NO.

Contract No.: 8990082 SAS No.: 4661 IM14

Matrix (aqueous/solid/leachate): solid % solids: 16.9

Receipt date: 04/16/98 Analysis Date: 04/30/98

Concentration Units (ug/L or mg/Kg dry weight): mg/Kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	219.99			P
7440-38-2	Arsenic	2.29	U		P
7440-39-3	Barium	99.59			P
7440-41-7	Beryllium	0.04	U		P
7440-42-8	Boron	3.61			P
7440-43-9	Cadmium	0.33			P
7440-47-3	Chromium	15.98			P
7440-50-8	Copper	17.12			P
7439-89-6	Iron	348.43			P
7439-92-1	Lead	1.69	U		P
7439-95-4	Magnesium	1851.30			P
7439-96-5	Manganese	248.35			P
7439-97-6	Mercury	0.08	U		CV
7439-98-7	Molybdenum	2.04			P
7440-02-0	Nickel	10.33			P
7782-49-2	Selenium	1.15			HY
7440-24-6	Strontium	29.54			P
7440-62-2	Vanadium	1.05			P
7440-66-6	Zinc	146.07			P

Color before: COLORLESS Clarity before: CLEAR Texture: NA

Color after: COLORLESS Clarity after: CLEAR Artifacts: No

Comments:
LAB SAMPLE ID 1107

SAMPLE COLOR, CLARITY, TEXTURE, AND ARTIFACT COMMENTS ARE NOT REQUIRED FOR THIS PROJECT.

USEPA - ITD

FORM 1A
METALS ANALYSIS DATA SHEET

Lab Name: MRI Episode No.: 1T

EPA SAMPLE NO.

IM15R4

Contract No.: 8990082 SAS No.: 4661

Matrix (aqueous/solid/leachate): solid % solids: 69.5

Receipt date: 04/16/98 Analysis Date: 04/30/98

Concentration Units (ug/L or mg/Kg dry weight): mg/Kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	5100.90			P
7440-38-2	Arsenic	3.67			P
7440-39-3	Barium	105.72			P
7440-41-7	Beryllium	0.49			P
7440-42-8	Boron	1.94			P
7440-43-9	Cadmium	0.35			P
7440-47-3	Chromium	6.81			P
7440-50-8	Copper	5.18			P
7439-89-6	Iron	9673.00			P
7439-92-1	Lead	13.89			P
7439-95-4	Magnesium	1229.40			P
7439-96-5	Manganese	938.23			P
7439-97-6	Mercury	0.01	U		CV
7439-98-7	Molybdenum	0.77			P
7440-02-0	Nickel	7.41			P
7782-49-2	Selenium	0.07	U		HY
7440-24-6	Strontium	10.10			P
7440-62-2	Vanadium	20.04			P
7440-66-6	Zinc	28.23			P

Color before: COLORLESS Clarity before: CLEAR Texture: NA

Color after: COLORLESS Clarity after: CLEAR Artifacts: No

Comments:
LAB SAMPLE ID 1108

SAMPLE COLOR, CLARITY, TEXTURE, AND ARTIFACT COMMENTS ARE NOT REQUIRED FOR THIS PROJECT.

USEPA - ITD

FORM 1A
METALS ANALYSIS DATA SHEET

Lab Name: MRI Episode No.: 1T

EPA SAMPLE NO.

IM17

Contract No.: 8990082 SAS No.: 4661

Matrix (aqueous/solid/leachate): solid % solids: 54.7

Receipt date: 04/16/98 Analysis Date: 04/30/98

Concentration Units (ug/L or mg/Kg dry weight): mg/Kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	2522.60			P
7440-38-2	Arsenic	2.13			P
7440-39-3	Barium	1242.70			P
7440-41-7	Beryllium	0.23			P
7440-42-8	Boron	2.55			P
7440-43-9	Cadmium	0.43			P
7440-47-3	Chromium	4.42			P
7440-50-8	Copper	10.59			P
7439-89-6	Iron	5603.30			P
7439-92-1	Lead	11.54			P
7439-95-4	Magnesium	1013.20			P
7439-96-5	Manganese	2009.30			P
7439-97-6	Mercury	0.03	U		CV
7439-98-7	Molybdenum	0.98			P
7440-02-0	Nickel	6.11			P
7782-49-2	Selenium	0.09	U		HY
7440-24-6	Strontium	11.06			P
7440-62-2	Vanadium	11.99			P
7440-66-6	Zinc	53.53			P

Color before: COLORLESS Clarity before: CLEAR Texture: NA

Color after: COLORLESS Clarity after: CLEAR Artifacts: No

Comments:
LAB SAMPLE ID 1109

SAMPLE COLOR, CLARITY, TEXTURE, AND ARTIFACT COMMENTS ARE NOT REQUIRED FOR THIS PROJECT.

11/89

USEPA - ITD

FORM 1A
METALS ANALYSIS DATA SHEET

Lab Name: MRI Episode No.: 1T EPA SAMPLE NO.

Contract No.: 8990082 SAS No.: 4661 IM1805

Matrix (aqueous/solid/leachate): solid % solids: 17.9

Receipt date: 04/16/98 Analysis Date: 04/30/98

Concentration Units (ug/L or mg/Kg dry weight): mg/Kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	128.89			P
7440-38-2	Arsenic	4.56	U		P
7440-39-3	Barium	3117.00			P
7440-41-7	Beryllium	0.07	U		P
7440-42-8	Boron	4.86			P
7440-43-9	Cadmium	0.54			P
7440-47-3	Chromium	7.42			P
7440-50-8	Copper	23.26			P
7439-89-6	Iron	243.34			P
7439-92-1	Lead	3.36	U		P
7439-95-4	Magnesium	1773.00			P
7439-96-5	Manganese	385.96			P
7439-97-6	Mercury	0.07	U		CV
7439-98-7	Molybdenum	3.63			P
7440-02-0	Nickel	6.82			P
7782-49-2	Selenium	4.08			HY
7440-24-6	Strontium	22.66			P
7440-62-2	Vanadium	1.70			P
7440-66-6	Zinc	140.49			P

Color before: COLORLESS Clarity before: CLEAR Texture: NA

Color after: COLORLESS Clarity after: CLEAR Artifacts: No

Comments:
LAB SAMPLE ID 1110

SAMPLE COLOR, CLARITY, TEXTURE, AND ARTIFACT COMMENTS ARE NOT REQUIRED FOR THIS PROJECT.

Appendix B

Tissue Quality Control Data Forms
Catalog No. 8990082

Glossary of flags and code for data forms

Episode No.:	Batch preparation identification
Contract No.:	Catalog number
SAS No.:	MRI contract number
Matrix:	solid (tissue)
% solids:	percent solid
Receipt date:	
Analysis date:	Date of ICP analysis
Concentration Units:	mg/Kg
"C" column	data qualifier flag- "U" = result below detection limit
"Q" column	not used
"M" column	instrumental method used (P = ICP, CV = cold vapor, HY = hydride generation atomic absorption

Sample color, clarity, texture, and artifact comments are not required for this project.

USEPA - ITD

FORM 5A

~~MATRIX SPIKE~~ RECOVERY

STANDARD REFERENCE MATERIAL DW 5/12/93

Lab Name: MRI Episode No.: 1T

EPA SAMPLE NO.

NIST 1566a

Contract No.: 8990082 SAS No.: 4661

Matrix (aqueous/solid/leachate): solid

Concentration Units (ug/L or mg/Kg dry weight): mg/Kg

CAS No.	Analyte	Sample Concentration (SR)	Spike Added (SA1)	SRM ~~MS~~ Concentration (MSSR) DW 5/12/93	SRM ~~MS~~ %R(1) (S)	Q	M
7429-90-5	Aluminum		202.50	77.1370	38.1		P
7440-38-2	Arsenic		14.00	13.4650	96.2		P
7440-39-3	Barium		0.00	1.6616			P
7440-41-7	Beryllium		0.00	0.0296			P
7440-42-8	Boron		0.00	10.2200			P
7440-43-9	Cadmium		4.15	4.4210	106.5		P
7440-47-3	Chromium		1.43	1.2920	90.3		P
7440-50-8	Copper		66.30	64.4140	97.2		P
7439-89-6	Iron		539.00	497.5800	92.3		P
7439-92-1	Lead		0.00	1.3797			P
7439-95-4	Magnesium		1180.00	1180.5000	100.0		P
7439-96-5	Manganese		12.30	11.5050	93.5		P
7439-97-6	Mercury						CV
7439-98-7	Molybdenum		0.00	0.3449			P
7440-02-0	Nickel		2.25	2.6510	117.8		P
7782-49-2	Selenium		2.21	1.73	78.1		HY
7440-24-6	Strontium		11.10	10.1210	91.2		P
7440-62-2	Vanadium		4.68	4.8753	104.2		P
7440-66-6	Zinc		830.00	853.4200	102.8		P

(1) Contract-recommended control limits: ~~75-125%~~.

Comments:
LAB SAMPLE ID 17685 NIST SRM REPLICATE 1
LEAD WAS NOT DETECTED IN THIS SAMPLE BECAUSE THE CERTIFIED VALUE FOR LEAD WAS LESS THAN THE METHOD DETECTION LIMIT. THE PERCENT RECOVERY FOR LEAD WAS NOT REPORTED BECAUSE OF THIS SITUATION.

USEPA - ITD

FORM 5A

~~MATRIX SPIKE~~ RECOVERY

STANDARD REFERENCE MATERIAL

Lab Name: MRI Episode No.: 1T

EPA SAMPLE NO.

NIST 1566a

Contract No.: 8990082 SAS No.: 4661

Matrix (aqueous/solid/leachate): solid

Concentration Units (ug/L or mg/Kg dry weight): mg/Kg

CAS No.	Analyte	Sample Concentration (SR)	Spike Added (SA1)	~~MS~~ SRM Concentration (MSSR)	~~MS~~ SRM %R(1) (S)	Q	M
7429-90-5	Aluminum		202.50	77.9470	38.5		P
7440-38-2	Arsenic		14.00	12.7290	90.9		P
7440-39-3	Barium		0.00	1.6778			P
7440-41-7	Beryllium		0.00	0.0294			P
7440-42-8	Boron		0.00	10.1110			P
7440-43-9	Cadmium		4.15	4.4074	106.2		P
7440-47-3	Chromium		1.43	1.2723	89.0		P
7440-50-8	Copper		66.30	64.4020	97.1		P
7439-89-6	Iron		539.00	484.5800	89.9		P
7439-92-1	Lead		0.00	1.3712			P
7439-95-4	Magnesium		1180.00	1177.7000	99.8		P
7439-96-5	Manganese		12.30	11.4530	93.1		P
7439-97-6	Mercury						CV
7439-98-7	Molybdenum		0.00	0.3428			P
7440-02-0	Nickel		2.25	3.8815	172.5		P
7782-49-2	Selenium		2.21	1.67	75.4		HY
7440-24-6	Strontium		11.10	10.1040	91.0		P
7440-62-2	Vanadium		4.68	4.7414	101.3		P
7440-66-6	Zinc		830.00	850.1500	102.4		P

(1) Contract-recommended control limits: ~~75-125%~~.

Comments:
LAB SAMPLE ID 17686 NIST SRM REPLICATE 2
LEAD WAS NOT DETECTED IN THIS SAMPLE BECAUSE THE CERTIFIED VALUE FOR LEAD WAS LESS THAN THE METHOD DETECTION LIMIT. THE PERCENT RECOVERY FOR LEAD WAS NOT REPORTED BECAUSE OF THIS SITUATION.

USEPA - ITD

FORM 5A

~~MATRIX SPIKE~~ RECOVERY

STANDARD REFERENCE MATERIAL 2/15/98

Lab Name: MRI Episode No.: 1T EPA SAMPLE NO.

Contract No.: 8990082 SAS No.: 4661

NIST 1566a

Matrix (aqueous/solid/leachate): solid

Concentration Units (ug/L or mg/Kg dry weight): mg/Kg

CAS No.	Analyte	Sample Concentration (SR)	Spike Added (SA1)	SRM ~~MS~~ Concentration (MSSR)	SRM ~~MS~~ %R(1) (S)	Q	M
7429-90-5	Aluminum		202.50	64.0030	31.6		P
7440-38-2	Arsenic		14.00	13.5050	96.5		P
7440-39-3	Barium		0.00	1.6338			P
7440-41-7	Beryllium		0.00	0.0295			P
7440-42-8	Boron		0.00	9.8217			P
7440-43-9	Cadmium		4.15	4.3510	104.8		P
7440-47-3	Chromium		1.43	1.2113	84.7		P
7440-50-8	Copper		66.30	64.3220	97.0		P
7439-89-6	Iron		539.00	484.7400	89.9		P
7439-92-1	Lead		0.00	1.3788			P
7439-95-4	Magnesium		1180.00	1174.6000	99.5		P
7439-96-5	Manganese		12.30	11.4090	92.8		P
7439-97-6	Mercury						CV
7439-98-7	Molybdenum		0.00	0.3447			P
7440-02-0	Nickel		2.25	2.5044	111.3		P
7782-49-2	Selenium		2.21	1.61	72.8		HY
7440-24-6	Strontium		11.10	10.2400	92.3		P
7440-62-2	Vanadium		4.68	4.7045	100.5		P
7440-66-6	Zinc		830.00	849.2400	102.3		P

(1) Contract-recommended control limits: ~~75-125%.~~

Comments:
LAB SAMPLE ID 17687 NIST SRM REPLICATE 3
LEAD WAS NOT DETECTED IN THIS SAMPLE BECAUSE THE CERTIFIED VALUE FOR LEAD WAS LESS THAN THE METHOD DETECTION LIMIT. THE PERCENT RECOVERY FOR LEAD WAS NOT REPORTED BECAUSE OF THIS SITUATION.

USEPA - ITD

FORM 5A
MATRIX SPIKE RECOVERY

Lab Name: MRI Episode No.: 1T

EPA SAMPLE NO.

FM9S

Contract No.: 8990082 SAS No.: 4661

Matrix (aqueous/solid/leachate): solid

Concentration Units (ug/L or mg/Kg dry weight): mg/Kg

CAS No.	Analyte	Sample Concentration (SR)	C	Spike Added (SA1)	MS Concentration (MSSR)	MS %R(1) (S)	Q	M
7429-90-5	Aluminum	187.1800		161.97	348.2700	99.5		P
7440-38-2	Arsenic	0.7766		16.20	16.8740	104.2		P
7440-39-3	Barium	60.0640		16.20	76.1900	99.5		P
7440-41-7	Beryllium	0.0123		8.10	7.5737	93.5		P
7440-42-8	Boron	1.8558		32.39	35.0920	102.6		P
7440-43-9	Cadmium	0.6115		8.10	8.6103	98.8		P
7440-47-3	Chromium	9.0470		16.20	24.4970	95.4		P
7440-50-8	Copper	5.6476		16.20	21.7090	99.1		P
7439-89-6	Iron	220.0800		161.97	363.5900	88.6		P
7439-92-1	Lead	0.5723		16.20	16.4090	101.3		P
7439-95-4	Magnesium	1187.0000		161.97	1393.2000	127.3		P
7439-96-5	Manganese	25.2070		40.49	63.5280	94.6		P
7439-97-6	Mercury	0.0700		7.71	7.39	95.0		CV
7439-98-7	Molybdenum	0.9418		16.20	16.9700	98.9		P
7440-02-0	Nickel	5.6468		16.20	21.7550	99.4		P
7782-49-2	Selenium	2.4500		16.20	16.34	85.7		HY
7440-24-6	Strontium	31.6730		16.20	50.6180	116.9		P
7440-62-2	Vanadium	1.0530		16.20	17.0890	99.0		P
7440-66-6	Zinc	144.0300		161.97	305.1900	99.5		P

(1) Contract-recommended control limits: ~~75-125%~~. 80 to 120% AW 3/14/98

Comments:
LAB SAMPLE ID 1075 AND 1075S

USEPA - ITD

FORM 5A
MATRIX SPIKE RECOVERY

Lab Name: MRI Episode No.: 1T EPA SAMPLE NO.

Contract No.: 8990082 SAS No.: 4661

FM18S

Matrix (aqueous/solid/leachate): solid

Concentration Units (ug/L or mg/Kg dry weight): mg/Kg

CAS No.	Analyte	Sample Concentration (SR)	Spike Added (SA1)	MS Concentration (MSSR)	MS %R(1) (S)	Q	M
7429-90-5	Aluminum	442.3200	202.34	628.1400	91.8		P
7440-38-2	Arsenic	0.9650	20.23	22.0570	109.0		P
7440-39-3	Barium	603.8900	20.23	628.3000	120.7		P
7440-41-7	Beryllium	0.0152	10.12	9.5361	94.2		P
7440-42-8	Boron	2.7333	40.47	43.1300	99.8		P
7440-43-9	Cadmium	0.5099	10.12	10.5030	98.7		P
7440-47-3	Chromium	18.4440	20.23	34.2750	78.3		P
7440-50-8	Copper	7.0756	20.23	27.3170	100.1		P
7439-89-6	Iron	454.6000	202.34	622.6000	83.0		P
7439-92-1	Lead	0.7110	20.23	19.9030	98.4		P
7439-95-4	Magnesium	1472.0000	202.34	1697.3000	111.3		P
7439-96-5	Manganese	65.0560	50.58	113.9200	96.6		P
7439-97-6	Mercury	0.14	10.08	10.48	102.7		CV
7439-98-7	Molybdenum	2.1046	20.23	21.5930	96.3		P
7440-02-0	Nickel	11.9100	20.23	29.3480	86.2		P
7782-49-2	Selenium	1.77	20.23	18.61	83.2		HY
7440-24-6	Strontium	47.3020	20.23	68.1130	102.9		P
7440-62-2	Vanadium	1.5612	20.23	21.8250	100.2		P
7440-66-6	Zinc	198:9400	202.34	400.5500	99.6		P

(1) Contract-recommended control limits: ~~75-125%~~. 80-120% AW 5/14/98

Comments:
LAB SAMPLE ID 1083 AND 1083S

USEPA - ITD

FORM 5A
MATRIX SPIKE RECOVERY

Lab Name: MRI Episode No.: 1T

EPA SAMPLE NO.

IM301S

Contract No.: 8990082 SAS No.: 4661

Matrix (aqueous/solid/leachate): solid

Concentration Units (ug/L or mg/Kg dry weight): mg/Kg

CAS No.	Analyte	Sample Concentration (SR)	Spike Added (SA1)	MS Concentration (MSSR)	MS %R(1) (S)	Q	M
7429-90-5	Aluminum	165.7800	202.80	373.0000	102.2		P
7440-38-2	Arsenic	0.9462	20.28	19.9240	98.2		P
7440-39-3	Barium	101.5200	20.28	120.3400	92.8		P
7440-41-7	Beryllium	0.0149	10.14	9.7031	95.7		P
7440-42-8	Boron	3.4181	40.56	43.7840	99.5		P
7440-43-9	Cadmium	0.6743	10.14	10.8940	100.8		P
7440-47-3	Chromium	32.6940	20.28	48.4270	77.6		P
7440-50-8	Copper	18.3950	20.28	38.3060	98.2		P
7439-89-6	Iron	504.5400	202.80	669.9000	81.5		P
7439-92-1	Lead	2.5765	20.28	22.0740	96.1		P
7439-95-4	Magnesium	1555.1000	202.80	1740.7000	91.5		P
7439-96-5	Manganese	939.9900	50.70	981.7200	82.3		P
7439-97-6	Mercury	0.035	9.42	9.72	102.8		CV
7439-98-7	Molybdenum	45.5320	20.28	64.5870	94.0		P
7440-02-0	Nickel	19.1490	20.28	36.7420	86.8		P
7782-49-2	Selenium	0.75	20.28	16.25	76.4		HY
7440-24-6	Strontium	17.4860	20.28	37.3880	98.1		P
7440-62-2	Vanadium	1.4003	20.28	22.4170	103.6		P
7440-66-6	Zinc	200.8200	202.80	402.4000	99.4		P

(1) Contract-recommended control limits: ~~75-125%~~ 80-120% JW 9/14/98

Comments:
LAB SAMPLE ID 1096 AND 1096S

11/89

USEPA - ITD

SAMPLE FORM 5B PRECISION
~~MATRIX SPIKE~~ DUPLICATE ~~RECOVERY~~
RF/5-7-95 RF/5-7-95

Lab Name: MRI_____ Episode No.: 1T____ EPA SAMPLE NO.

Contract No.: 8990082____ SAS No.: 4661__

FM9D

Matrix (aqueous/solid/leachate): solid___

Concentration Units (ug/L or mg/Kg dry weight): mg/Kg

CAS No.	Analyte	NATIVE SAMPLE ~~Spike Added~~ (SA2) CONCENTRATION	C	Sample Dup ~~MSD~~ RF/5-7-95 Concentration (MSDSR)	MSD %R (D)	RPD (1)	Q	M
7429-90-5	Aluminum	187.18		169.7400		9.8		P
7440-38-2	Arsenic	1.55	U	1.6501		6.0		P
7440-39-3	Barium	60.06		61.7800		2.8		P
7440-41-7	Beryllium	0.02	U	0.0261		6.0		P
7440-42-8	Boron	1.86		2.3249		22.4		P
7440-43-9	Cadmium	0.61		0.5723		6.6		P
7440-47-3	Chromium	9.05		7.7519		15.4		P
7440-50-8	Copper	5.65		5.4748		3.1		P
7439-89-6	Iron	220.08		208.0000		5.6		P
7439-92-1	Lead	1.14	U	1.6214		34.5		P
7439-95-4	Magnesium	1187.00		1211.8000		2.1		P
7439-96-5	Manganese	25.21		25.1400		0.3		P
7439-97-6	Mercury	0.07		0.08		19.6		CV
7439-98-7	Molybdenum	0.94		0.6635		34.7		P
7440-02-0	Nickel	5.65		5.0362		11.4		P
7782-49-2	Selenium	2.45		2.55		3.9		HY
7440-24-6	Strontium	31.67		33.5460		5.7		P
7440-62-2	Vanadium	1.05		0.8659		19.5		P
7440-66-6	Zinc	144.03		145.5200		1.0		P

(1) Contract-recommended control limit: ~~≤20%~~. BASED ON A FUNCTION OF DETECTION LIMIT.

Comments:
LAB SAMPLE ID 1075 AND 1075D

USEPA - ITD

FORM 5B

~~MATRIX SPIKE~~ SAMPLE DUPLICATE ~~RECOVERY~~ PRECISION

RF 15-7-98 RF 15-7-98

Lab Name: MRI Episode No.: 1T EPA SAMPLE NO.

Contract No.: 8990082 SAS No.: 4661

Matrix (aqueous/solid/leachate): solid

FM18D

Concentration Units (ug/L or mg/Kg dry weight): mg/Kg

CAS No.	Analyte	~~Spike Added~~ (SA2) CONCENTRATION	C	~~MSD~~ Sample Duplicate Concentration (MSDSR)	MSD %R (D)	RPD (1)	Q	M
7429-90-5	Aluminum	442.32		416.0200		6.1		P
7440-38-2	Arsenic	1.93	U	1.9432		0.7		P
7440-39-3	Barium	603.89		605.0900		0.2		P
7440-41-7	Beryllium	0.03	U	0.0307		0.7		P
7440-42-8	Boron	2.73		2.1948		21.9		P
7440-43-9	Cadmium	0.51		0.4807		5.9		P
7440-47-3	Chromium	18.44		16.6310		10.3		P
7440-50-8	Copper	7.08		6.7594		4.6		P
7439-89-6	Iron	454.60		439.6600		3.3		P
7439-92-1	Lead	1.42	U	1.4319		0.7		P
7439-95-4	Magnesium	1472.00		1474.3000		0.2		P
7439-96-5	Manganese	65.06		65.0740		0.0		P
7439-97-6	Mercury	0.14		0.19		31.7		CV
7439-98-7	Molybdenum	2.10		1.9074		9.8		P
7440-02-0	Nickel	11.91		10.7380		10.3		P
7782-49-2	Selenium	1.77		1.62		9.3		HY
7440-24-6	Strontium	47.30		48.1570		1.8		P
7440-62-2	Vanadium	1.56		1.4881		4.8		P
7440-66-6	Zinc	198.94		198.3600		0.3		P

(1) Contract-recommended control limit: ~~≤20%~~. BASED ON A FUNCTION OF DETECTION LIMIT

Comments:
LAB SAMPLE ID 1083 AND 1083D

11/89

USEPA - ITD

SAMPLE FORM 5B PRECISION
~~MATRIX SPIKE~~ DUPLICATE ~~RECOVERY~~
RF15-7-98 RF15-7-98

Lab Name: MRI Episode No.: 1T EPA SAMPLE NO.

Contract No.: 8990082 SAS No.: 4661

IM301D

Matrix (aqueous/solid/leachate): solid

Concentration Units (ug/L or mg/Kg dry weight): mg/Kg

CAS No.	Analyte	NATIVE SAMPLE ~~Spike Added~~ (SA2) CONCENTRATION	C	Sample Duplicate ~~MSD~~ RF15-7-98 Concentration (MSDSR)	MSD %R (D)	RPD (1)	Q	M
7429-90-5	Aluminum	165.78		170.9300		3.1		P
7440-38-2	Arsenic	1.89	U	1.9897		5.0		P
7440-39-3	Barium	101.52		100.8600		0.7		P
7440-41-7	Beryllium	0.03	U	0.0314		5.0		P
7440-42-8	Boron	3.42		2.7626		21.2		P
7440-43-9	Cadmium	0.67		0.7373		8.9		P
7440-47-3	Chromium	32.69		35.6400		8.6		P
7440-50-8	Copper	18.40		18.4100		0.1		P
7439-89-6	Iron	504.54		518.0200		2.6		P
7439-92-1	Lead	2.58		1.4661		54.9		P
7439-95-4	Magnesium	1555.10		1553.7000		0.1		P
7439-96-5	Manganese	939.99		946.9100		0.7		P
7439-97-6	Mercury	0.07	U	0.07		0.0		CV
7439-98-7	Molybdenum	45.53		46.0740		1.2		P
7440-02-0	Nickel	19.15		20.8400		8.5		P
7782-49-2	Selenium	0.75		0.70 ~~0.79~~ RF15-7-98		5.8 ~~0~~ RF15-7-98		HY
7440-24-6	Strontium	17.49		17.4390		0.3		P
7440-62-2	Vanadium	1.40		1.7038		19.6		P
7440-66-6	Zinc	200.82		202.3800		0.8		P

(1) Contract-recommended control limit: ~~≤20%~~. BASED ON A FUNCTION OF THE DETECTION LIMIT

Comments:
LAB SAMPLE ID 1096 AND 1096D

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