0998160003 / FA X 11C
Cavus Chemical 146334
S.F. Tech

ARDL Inc. applied research & development laboratory

CHEMISTRY • BIOLOGY • PHYSIOLOGY
ENGINEERING • ENVIRONMENTAL ANALYSIS

18 December 1991

Mr. Ron Turpin
Division of Laboratories #4
Illinois Environmental Protection Agency
2200 Churchill Road
Springfield, IL 62706

SUBJECT: Data Package Submittal
Facility: Cavus Chemical Company
ARDL ID: 200250
Site Inventory No.: 0998160003
Due Date: 12/22/91

Dear Mr. Turpin:

Enclosed please find ARDL's data package for analyses performed on samples delivered to our laboratory on 11/22/91. The data package consists of the following:

1. Letter of Transmittal
2. Tabulated Analytical Results
3. Chain-of-Custody Documentation
4. Data Package - Paginated and submitted in the following order:

    a. Volume 1 - Inorganic Analysis Data Package
    b. Volume 2 - Organic Sample Data Summary Package
    c. Volume 3 - Volatiles Analysis Data Package
    d. Volume 4 - Semi-Volatiles Analysis Data Package
    e. Volume 5 - Pesticide/PCB Analysis Data Package

I have forwarded one (1) copy of the sample results for this package to Sue Doubet, IEPA.

We appreciate the opportunity to be of service to the IEPA.

Thank you.

Sincerely yours,

Daniel J. Gillespie
Technical Services Manager

DJG/jcm

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IEPA/DLPC

P.O. Box 1566 • 1801 W. Forest Street • Mt. Vernon, Illinois 62864 • (618) 244-3235 FAX (618) 244-1149
"Test Everything - Keep The Good" 1 Thes. 5:21

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

G101

Lab Name: ARDL, INC. Contract: 200249

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: G101

Matrix (soil/water): WATER Lab Sample ID: 200249-5

Level (low/med): LOW Date Received: 11/21/91

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	48300			P
7440-36-0	Antimony	25.0	U	N	P
7440-38-2	Arsenic	21.1		S	F
7440-39-3	Barium	362		E	P
7440-41-7	Beryllium	2.0	B		P
7440-43-9	Cadmium	37.0			P
7440-70-2	Calcium	303	B	E	P
7440-47-3	Chromium	57.0			P
7440-48-4	Cobalt	47.0	B		P
7440-50-8	Copper	100			P
7439-89-6	Iron	33800		E	P
7439-92-1	Lead	614		N	P
7439-95-4	Magnesium	119000			P
7439-96-5	Manganese	3700		N *	P
7439-97-6	Mercury	1.6			CV
7440-02-0	Nickel	75.0			P
7440-09-7	Potassium	33800			P
7782-49-2	Selenium	20.0	U	W N	F
7440-22-4	Silver	9.0	U	N	P
7440-23-5	Sodium	278000			P
7440-28-0	Thallium	3.0	U	W N	F
7440-62-2	Vanadium	62.0			P
7440-66-6	Zinc	3320		*	P
	Cyanide	8.3	U		C
	Sulfide	1000	U		T
	Sulfate	1060000			C

Color Before: BROWN Clarity Before: CLOUDY Texture: _____

Color After: YELLOW Clarity After: CLEAR Artifacts: _____

Comments:

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U.S. EPA - CLP

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

G103

Lab Name: ARDL, INC. Contract: 200249

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: G101

Matrix (soil/water): WATER Lab Sample ID: 200249-6

Level (low/med): LOW Date Received: 11/21/91

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	123000			P
7440-36-0	Antimony	25.0	U	N	P
7440-38-2	Arsenic	7.1	B		F
7440-39-3	Barium	2530		E	P
7440-41-7	Beryllium	13.0			P
7440-43-9	Cadmium	19.0			P
7440-70-2	Calcium	655000		E	P
7440-47-3	Chromium	248			P
7440-48-4	Cobalt	71.1			P
7440-50-8	Copper	249			P
7439-89-6	Iron	208000		E	P
7439-92-1	Lead	20.0	U		F
7439-95-4	Magnesium	195000			P
7439-96-5	Manganese	14400		N *	P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	207			P
7440-09-7	Potassium	46100			P
7782-49-2	Selenium	20.0	U	E N	F
7440-22-4	Silver	9.0	U	N	P
7440-23-5	Sodium	2002000			P
7440-28-0	Thallium	3.0	U	N	F
7440-62-2	Vanadium	253			P
7440-66-6	Zinc	3640		*	P
	Cyanide	5.0	U		C
	Sulfide	1000	U		T
	Sulfate	1680000			C

Color Before: BROWN Clarity Before: CLOUDY Texture: _____

Color After: YELLOW Clarity After: CLEAR Artifacts: _____

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

G106

Lab Name: ARDL, INC. Contract: 200249

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: G101

Matrix (soil/water): WATER Lab Sample ID: 200249-7

Level (low/med): LOW Date Received: 11/21/91

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	55000			P
7440-36-0	Antimony	25.0	U	N	P
7440-38-2	Arsenic	8.4	B	+	F
7440-39-3	Barium	384		E	P
7440-41-7	Beryllium	5.0	B		P
7440-43-9	Cadmium	35.0			P
7440-70-2	Calcium	654000		E	P
7440-47-3	Chromium	121			P
7440-48-4	Cobalt	74.0			P
7440-50-8	Copper	385			P
7439-89-6	Iron	84600		E	P
7439-92-1	Lead	605		N	P
7439-95-4	Magnesium	120000			P
7439-96-5	Manganese	9110		N *	P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	116			P
7440-09-7	Potassium	133000			P
7782-49-2	Selenium	20.0	U	E N	F
7440-22-4	Silver	9.0	U	N	P
7440-23-5	Sodium	215000			P
7440-28-0	Thallium	30.0	U	N	F
7440-62-2	Vanadium	19.0	B		P
7440-66-6	Zinc	17100		*	P
	Cyanide	5.0	U		C
	Sulfide	1000	U		T
	Sulfate	2080000			C

Color Before: BROWN Clarity Before: CLOUDY Texture: _____

Color After: YELLOW Clarity After: CLEAR Artifacts: _____

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

G112

Lab Name: ARDL, INC. Contract: 200249

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: G101

Matrix (soil/water): WATER Lab Sample ID: 200249-8

Level (low/med): LOW Date Received: 11/21/91

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	3400			P
7440-36-0	Antimony	81.0		N	P
7440-38-2	Arsenic	2.8	B	W	F
7440-39-3	Barium	166		E	P
7440-41-7	Beryllium	1.0	B		P
7440-43-9	Cadmium	2.0	B		P
7440-70-2	Calcium	200	U	E	P
7440-47-3	Chromium	7.0	B		P
7440-48-4	Cobalt	10.0	B		P
7440-50-8	Copper	27.0			P
7439-89-6	Iron	6110		E	P
7439-92-1	Lead	20.0	U	W	F
7439-95-4	Magnesium	61000			P
7439-96-5	Manganese	143		N *	P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	24.0	B		P
7440-09-7	Potassium	8360			P
7782-49-2	Selenium	20.0	U	E N	F
7440-22-4	Silver	9.0	U	N	P
7440-23-5	Sodium	16500			P
7440-28-0	Thallium	3.0	U	N	F
7440-62-2	Vanadium	15.0	U		P
7440-66-6	Zinc	22.0	B	*	P
	Cyanide	5.0	U		C
	Sulfide	1000	U		T
	Sulfate	174000			C

Color Before: BROWN Clarity Before: CLOUDY Texture: _____

Color After: YELLOW Clarity After: CLEAR Artifacts: _____

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

X101

Lab Name: ARDL, INC. Contract: 200249

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: G101

Matrix (soil/water): SOIL Lab Sample ID: 200249-1

Level (low/med): LOW Date Received: 11/21/91

% Solids: 78.3

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	17600			P
7440-36-0	Antimony	5.5	U	N	P
7440-38-2	Arsenic	5.2		N	F
7440-39-3	Barium	148			P
7440-41-7	Beryllium	1.1			P
7440-43-9	Cadmium	13.4			P
7440-70-2	Calcium	4600		E	P
7440-47-3	Chromium	29.7			P
7440-48-4	Cobalt	13.9			P
7440-50-8	Copper	28.6			P
7439-89-6	Iron	18700		E	P
7439-92-1	Lead	138		N	P
7439-95-4	Magnesium	2580			P
7439-96-5	Manganese	934		E	P
7439-97-6	Mercury	0.095	U		CV
7440-02-0	Nickel	14.1			P
7440-09-7	Potassium	6060			P
7782-49-2	Selenium	4.4	U	E N	F
7440-22-4	Silver	2.0	U	N	P
7440-23-5	Sodium	7600			P
7440-28-0	Thallium	0.66	U	N W	F
7440-62-2	Vanadium	40.3			P
7440-66-6	Zinc	1200		E	P
	Cyanide	0.32	U		C
	Sulfide	1.0	U		T
	Sulfate	10.0			C

Color Before: BROWN Clarity Before: OPAQUE Texture: MEDIUM

Color After: YELLOW Clarity After: CLEAR Artifacts: YES

Comments:

ROOTS, LEAVES

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

X102

Lab Name: ARDL, INC. Contract: 200249

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: G101

Matrix (soil/water): SOIL Lab Sample ID: 200249-2

Level (low/med): LOW Date Received: 11/21/91

% Solids: 76.7

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	3430			P
7440-36-0	Antimony	5.3	U	N	P
7440-38-2	Arsenic	20.6		N S	F
7440-39-3	Barium	288			P
7440-41-7	Beryllium	0.21	U		P
7440-43-9	Cadmium	4.0			P
7440-70-2	Calcium	59100		E	P
7440-47-3	Chromium	31.2			P
7440-48-4	Cobalt	13.1			P
7440-50-8	Copper	409			P
7439-89-6	Iron	23100		E	P
7439-92-1	Lead	84.8		W	F
7439-95-4	Magnesium	35600			P
7439-96-5	Manganese	443000		E	P
7439-97-6	Mercury	0.078	U		CV
7440-02-0	Nickel	44.7			P
7440-09-7	Potassium	4410			P
7782-49-2	Selenium	4.1	U	E N	F
7440-22-4	Silver	1.9	U	N	P
7440-23-5	Sodium	2140			P
7440-28-0	Thallium	0.62	U	W N	F
7440-62-2	Vanadium	29.5			P
7440-66-6	Zinc	513		E	P
	Cyanide	0.31	U		C
	Sulfide	1.0	U		T
	Sulfate	254			C

Color Before: BLACK&BROWN Clarity Before: OPAQUE Texture: COARSE

Color After: YELLOW Clarity After: CLEAR Artifacts: YES

Comments:

ROCKS

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U.S. EPA - CLP

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

X103

Lab Name: ARDL, INC. Contract: 200250

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: X103

Matrix (soil/water): SOIL Lab Sample ID: 200250-1

Level (low/med): LOW Date Received: 11/22/91

% Solids: 81.8

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	9360			P
7440-36-0	Antimony	30.4			P
7440-38-2	Arsenic	245			F
7440-39-3	Barium	820		N *	P
7440-41-7	Beryllium	1.6			P
7440-43-9	Cadmium	40.5			P
7440-70-2	Calcium	32200			P
7440-47-3	Chromium	46.7			P
7440-48-4	Cobalt	3.6		*	P
7440-50-8	Copper	278			P
7439-89-6	Iron	40000			P
7439-92-1	Lead	38700			P
7439-95-4	Magnesium	1220			P
7439-96-5	Manganese	287		E N	P
7439-97-6	Mercury	0.074	U		CV
7440-02-0	Nickel	4.0	B	*	P
7440-09-7	Potassium	5090			P
7782-49-2	Selenium	4.4	U	E N	F
7440-22-4	Silver	2.0	U	N	P
7440-23-5	Sodium	916	B		P
7440-28-0	Thallium	0.66	U	W N	F
7440-62-2	Vanadium	33.6			P
7440-66-6	Zinc	3490		*	P
	Cyanide	0.29	U		C
	Sulfide	1.0	U		T
	Sulfate	274			C

Color Before: BROWN Clarity Before: OPAQUE Texture: COARSE

Color After: YELLOW Clarity After: CLEAR Artifacts: YES

Comments:

ROCKS

U.S. EPA - CLP

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

X104

Lab Name: ARDL, INC. Contract: 200250

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: X103

Matrix (soil/water): SOIL Lab Sample ID: 200250-2

Level (low/med): LOW Date Received: 11/22/91

% Solids: 87.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	13600			P
7440-36-0	Antimony	4.8	U		P
7440-38-2	Arsenic	20.6		S	F
7440-39-3	Barium	259		* N	P
7440-41-7	Beryllium	1.5			P
7440-43-9	Cadmium	70.7			P
7440-70-2	Calcium	12400			P
7440-47-3	Chromium	35.0			P
7440-48-4	Cobalt	14.3		*	P
7440-50-8	Copper	417			P
7439-89-6	Iron	29400			P
7439-92-1	Lead	730			P
7439-95-4	Magnesium	1520			P
7439-96-5	Manganese	2510		E N	P
7439-97-6	Mercury	1.3			CV
7440-02-0	Nickel	39.0		*	P
7440-09-7	Potassium	1380			P
7782-49-2	Selenium	4.1	U	W N	F
7440-22-4	Silver	1.7	U	N	P
7440-23-5	Sodium	815	B		P
7440-28-0	Thallium	0.62	U	W N	F
7440-62-2	Vanadium	27.6			P
7440-66-6	Zinc	43700		*	P
	Cyanide	0.27			C
	Sulfide	1.0	U		T
	Sulfate	89.5			C

Color Before: BROWN Clarity Before: OPAQUE Texture: COARSE

Color After: YELLOW Clarity After: CLEAR Artifacts: YES

Comments:

ROCKS

U.S. EPA - CLP

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

X105

Lab Name: ARDL, INC. Contract: 200249

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: G101

Matrix (soil/water): SOIL Lab Sample ID: 200249-3

Level (low/med): LOW Date Received: 11/21/91

% Solids: 78.2

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	10900			P
7440-36-0	Antimony	5.5	U	N	P
7440-38-2	Arsenic	27.1		N S	F
7440-39-3	Barium	159			P
7440-41-7	Beryllium	0.88	B		P
7440-43-9	Cadmium	10.6			P
7440-70-2	Calcium	48900		E	P
7440-47-3	Chromium	24.7			P
7440-48-4	Cobalt	20.9			P
7440-50-8	Copper	42.3			P
7439-89-6	Iron	18800		E	P
7439-92-1	Lead	324		N	P
7439-95-4	Magnesium	19700			P
7439-96-5	Manganese	10500		E	P
7439-97-6	Mercury	0.19			CV
7440-02-0	Nickel	37.5			P
7440-09-7	Potassium	13500			P
7782-49-2	Selenium	4.5	U	E N	F
7440-22-4	Silver	2.0	U	N	P
7440-23-5	Sodium	5670			P
7440-28-0	Thallium	0.67	U	W N	F
7440-62-2	Vanadium	15.7			P
7440-66-6	Zinc	1700		E	P
	Cyanide	0.26	U		C
	Sulfide	1.0	U		T
	Sulfate	296			C

Color Before: GRAY Clarity Before: OPAQUE Texture: COARSE

Color After: YELLOW Clarity After: CLEAR Artifacts: YES

Comments:

ROCKS

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

X201

Lab Name: ARDL, INC. Contract: 200250

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: X103

Matrix (soil/water): SOIL Lab Sample ID: 200250-3

Level (low/med): LOW Date Received: 11/22/91

% Solids: 69.7

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	7980			P
7440-36-0	Antimony	5.8	U		P
7440-38-2	Arsenic	3.3		+	F
7440-39-3	Barium	72.0		* N	P
7440-41-7	Beryllium	0.69	B		P
7440-43-9	Cadmium	36.8			P
7440-70-2	Calcium	24500			P
7440-47-3	Chromium	19.9			P
7440-48-4	Cobalt	9.7	B	*	P
7440-50-8	Copper	102			P
7439-89-6	Iron	15000			P
7439-92-1	Lead	594			P
7439-95-4	Magnesium	8190			P
7439-96-5	Manganese	500		E N	P
7439-97-6	Mercury	0.53			CV
7440-02-0	Nickel	19.9		*	P
7440-09-7	Potassium	1490			P
7782-49-2	Selenium	4.7	U	W N	F
7440-22-4	Silver	2.1	U	N	P
7440-23-5	Sodium	175	B		P
7440-28-0	Thallium	0.71	U	W N	F
7440-62-2	Vanadium	25.7			P
7440-66-6	Zinc	6500		*	P
	Cyanide	0.32	U		C
	Sulfide	1.0	U		T
	Sulfate	125			C

Color Before: BROWN Clarity Before: OPAQUE Texture: MEDIUM

Color After: COLORLESS Clarity After: CLEAR Artifacts: YES

Comments:

SMALL ROCKS

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

X202

Lab Name: ARDL, INC. Contract: 200250

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: X103

Matrix (soil/water): SOIL Lab Sample ID: 200250-4

Level (low/med): LOW Date Received: 11/22/91

% Solids: 51.7

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	20000			P
7440-36-0	Antimony	7.6	U		P
7440-38-2	Arsenic	8.6		+	F
7440-39-3	Barium	157		* N	P
7440-41-7	Beryllium	1.5			P
7440-43-9	Cadmium	22.8			P
7440-70-2	Calcium	25100			P
7440-47-3	Chromium	39.3			P
7440-48-4	Cobalt	18.6		*	P
7440-50-8	Copper	46.3			P
7439-89-6	Iron	23100			P
7439-92-1	Lead	1050			P
7439-95-4	Magnesium	8290			P
7439-96-5	Manganese	758		E N	P
7439-97-6	Mercury	0.15	U		CV
7440-02-0	Nickel	28.9		*	P
7440-09-7	Potassium	3350			P
7782-49-2	Selenium	6.2	U	W N	F
7440-22-4	Silver	2.7	U	N	P
7440-23-5	Sodium	302	B		P
7440-28-0	Thallium	0.94	U	W N	F
7440-62-2	Vanadium	43.9			P
7440-66-6	Zinc	4630		*	P
	Cyanide	1.3			C
	Sulfide	16.0			T
	Sulfate	250			C

Color Before: BROWN/GRAY Clarity Before: OPAQUE Texture: MEDIUM

Color After: YELLOW Clarity After: CLEAR Artifacts: YES

Comments:

SMALL ROCKS

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U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

X203

Lab Name: ARDL, INC. Contract: 200250

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: X103

Matrix (soil/water): SOIL Lab Sample ID: 200250-5

Level (low/med): LOW Date Received: 11/22/91

% Solids: 75.7

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	6200			P
7440-36-0	Antimony	5.3	U		P
7440-38-2	Arsenic	0.44	U	W	F
7440-39-3	Barium	111		* N	P
7440-41-7	Beryllium	2.3			P
7440-43-9	Cadmium	15.3			P
7440-70-2	Calcium	27100			P
7440-47-3	Chromium	37.5			P
7440-48-4	Cobalt	11.1		*	P
7440-50-8	Copper	186			P
7439-89-6	Iron	46000			P
7439-92-1	Lead	733			P
7439-95-4	Magnesium	9160			P
7439-96-5	Manganese	1580		E N	P
7439-97-6	Mercury	0.35			CV
7440-02-0	Nickel	85.4		*	P
7440-09-7	Potassium	812	B		P
7782-49-2	Selenium	0.44	U	W N	F
7440-22-4	Silver	1.9	U	N	P
7440-23-5	Sodium	358	B		P
7440-28-0	Thallium	0.67	U	W N	F
7440-62-2	Vanadium	68.8			P
7440-66-6	Zinc	6290		*	P
	Cyanide	0.48			C
	Sulfide	1.0	U		T
	Sulfate	267			C

Color Before: BROWN Clarity Before: OPAQUE Texture: MEDIUM

Color After: YELLOW Clarity After: CLEAR Artifacts: YES

Comments:

SMALL ROCKS

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

X204

Lab Name: ARDL, INC. Contract: 200250

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: X103

Matrix (soil/water): SOIL Lab Sample ID: 200250-6

Level (low/med): LOW Date Received: 11/22/91

% Solids: 61.3

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	6810			P
7440-36-0	Antimony	7.1	U		P
7440-38-2	Arsenic	7.7			F
7440-39-3	Barium	226		* N	P
7440-41-7	Beryllium	1.1	B		P
7440-43-9	Cadmium	5.1			P
7440-70-2	Calcium	75800			P
7440-47-3	Chromium	21.3			P
7440-48-4	Cobalt	11.6	B	*	P
7440-50-8	Copper	49.1			P
7439-89-6	Iron	15400			P
7439-92-1	Lead	262			P
7439-95-4	Magnesium	9360			P
7439-96-5	Manganese	1210		E N	P
7439-97-6	Mercury	0.18			CV
7440-02-0	Nickel	16.7		*	P
7440-09-7	Potassium	1280	B		P
7782-49-2	Selenium	5.5	U	W N	F
7440-22-4	Silver	2.6	U	N	P
7440-23-5	Sodium	304	B		P
7440-28-0	Thallium	0.82	U	W N	F
7440-62-2	Vanadium	19.9			P
7440-66-6	Zinc	1570		*	P
	Cyanide	0.32	U		C
	Sulfide	1.0	U		T
	Sulfate	238			C

Color Before: BROWN Clarity Before: OPAQUE Texture: MEDIUM

Color After: COLORLESS Clarity After: CLEAR Artifacts: YES

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

X205

Lab Name: ARDL, INC. Contract: 200250

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: X103

Matrix (soil/water): SOIL Lab Sample ID: 200250-7

Level (low/med): LOW Date Received: 11/22/91

% Solids: 32.6

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	4160			P
7440-36-0	Antimony	52.3			P
7440-38-2	Arsenic	31.5			F
7440-39-3	Barium	361		* N	P
7440-41-7	Beryllium	0.48	U		P
7440-43-9	Cadmium	2.9			P
7440-70-2	Calcium	243000			P
7440-47-3	Chromium	57.1			P
7440-48-4	Cobalt	11.9	B	*	P
7440-50-8	Copper	185			P
7439-89-6	Iron	3890			P
7439-92-1	Lead	69.8		+ *	F
7439-95-4	Magnesium	15600			P
7439-96-5	Manganese	17000		E N	P
7439-97-6	Mercury	0.27			CV
7440-02-0	Nickel	50.4		*	P
7440-09-7	Potassium	942	B		P
7782-49-2	Selenium	9.4	U	W N	F
7440-22-4	Silver	4.3	U	N	P
7440-23-5	Sodium	808	B		P
7440-28-0	Thallium	1.4	U	W N	F
7440-62-2	Vanadium	57.5			P
7440-66-6	Zinc	609		*	P
	Cyanide	0.61	U		C
	Sulfide	140			T
	Sulfate	161			C

Color Before: GRAY Clarity Before: OPAQUE Texture: MEDIUM

Color After: COLORLESS Clarity After: CLEAR Artifacts: YES

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

X206

Lab Name: ARDL, INC. Contract: 200250

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: X103

Matrix (soil/water): SOIL Lab Sample ID: 200250-8

Level (low/med): LOW Date Received: 11/22/91

% Solids: 41.8

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	5810			P
7440-36-0	Antimony	30.8			P
7440-38-2	Arsenic	37.7			F
7440-39-3	Barium	867		* N	P
7440-41-7	Beryllium	0.43	U		P
7440-43-9	Cadmium	10.3			P
7440-70-2	Calcium	194000			P
7440-47-3	Chromium	41.9			P
7440-48-4	Cobalt	18.4	B	*	P
7440-50-8	Copper	383			P
7439-89-6	Iron	10200			P
7439-92-1	Lead	326			P
7439-95-4	Magnesium	17400			P
7439-96-5	Manganese	28900		E N	P
7439-97-6	Mercury	0.29			CV
7440-02-0	Nickel	91.0		*	P
7440-09-7	Potassium	1280	B		P
7782-49-2	Selenium	7.7	U	E N	F
7440-22-4	Silver	3.8	U	N	P
7440-23-5	Sodium	842	B		P
7440-28-0	Thallium	1.1	U	W N	F
7440-62-2	Vanadium	49.6			P
7440-66-6	Zinc	2790		*	P
	Cyanide	0.54	U		C
	Sulfide	1.0	U		T
	Sulfate	191			C

Color Before: BROWN Clarity Before: OPAQUE Texture: MEDIUM

Color After: YELLOW Clarity After: CLEAR Artifacts: YES

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

X207

Lab Name: ARDL, INC. Contract: 200249

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: G101

Matrix (soil/water): SOIL Lab Sample ID: 200249-4

Level (low/med): LOW Date Received: 11/21/91

% Solids: 80.4

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	5580			P
7440-36-0	Antimony	19.9		N	P
7440-38-2	Arsenic	6.8		N	F
7440-39-3	Barium	99.5			P
7440-41-7	Beryllium	1.0	B		P
7440-43-9	Cadmium	5.4			P
7440-70-2	Calcium	67400		E	P
7440-47-3	Chromium	19.5			P
7440-48-4	Cobalt	8.5	B		P
7440-50-8	Copper	73.4			P
7439-89-6	Iron	14100		E	P
7439-92-1	Lead	363		N	P
7439-95-4	Magnesium	34400			P
7439-96-5	Manganese	2030		E	P
7439-97-6	Mercury	0.10			CV
7440-02-0	Nickel	21.1			P
7440-09-7	Potassium	6570			P
7782-49-2	Selenium	4.4	U	E N	F
7440-22-4	Silver	1.9	U	N	P
7440-23-5	Sodium	3960			P
7440-28-0	Thallium	0.67	U	W N	F
7440-62-2	Vanadium	17.0			P
7440-66-6	Zinc	1810		E	P
	Cyanide	0.28	U		C
	Sulfide	1.0	U		T
	Sulfate	87.5			C

Color Before: BROWN Clarity Before: OPAQUE Texture: MEDIUM

Color After: YELLOW Clarity After: CLEAR Artifacts: YES

Comments:

ROCKS

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

X208

Lab Name: ARDL, INC. Contract: 200250

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: X103

Matrix (soil/water): SOIL Lab Sample ID: 200250-9

Level (low/med): LOW Date Received: 11/22/91

% Solids: 81.9

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	3430			P
7440-36-0	Antimony	58.4			P
7440-38-2	Arsenic	4.5			F
7440-39-3	Barium	33.5	U	* N	P
7440-41-7	Beryllium	0.50	B		P
7440-43-9	Cadmium	1.3			P
7440-70-2	Calcium	87500			P
7440-47-3	Chromium	6.0			P
7440-48-4	Cobalt	5.5	B	*	P
7440-50-8	Copper	7.7			P
7439-89-6	Iron	8600			P
7439-92-1	Lead	7.6		*	F
7439-95-4	Magnesium	34600			P
7439-96-5	Manganese	520		E N	P
7439-97-6	Mercury	0.074	U		CV
7440-02-0	Nickel	7.4		*	P
7440-09-7	Potassium	733	B		P
7782-49-2	Selenium	3.5	U	E N	F
7440-22-4	Silver	1.5	U	N	P
7440-23-5	Sodium	171	B		P
7440-28-0	Thallium	0.52	U	W N	F
7440-62-2	Vanadium	8.7			P
7440-66-6	Zinc	60.2		*	P
	Cyanide	0.26	U		C
	Sulfide	1.0	U		T
	Sulfate	265			C

Color Before: BROWN Clarity Before: OPAQUE Texture: MEDIUM

Color After: COLORLESS Clarity After: CLEAR Artifacts: YES

Comments:

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